**COMMONWEALTH OF KENTUCKY**
**BEFORE THE PUBLIC SERVICE COMMISSION**

IN THE MATTER OF THE ADJUSTMENT
OF ELECTRIC RATES OF DUKE ENERGY KENTUCKY, INC.

CASE NO. 2024-00354

FILING REQUIREMENTS

**VOLUME 14**

# Duke Energy Kentucky, Inc.
# Case No. 2024-00354
# Forecasted Test Period Filing Requirements
# Table of Contents

| Vol. # | Tab # | Filing Requirement | Description | Sponsoring Witness |
|---|---|---|---|---|
| 1 | 1 | KRS 278.180 | 30 days' notice of rates to PSC. | Amy B. Spiller |
| 1 | 2 | 807 KAR 5:001 Section 7(1) | The original and 10 copies of application plus copy for anyone named as interested party. | Amy B. Spiller |
| 1 | 3 | 807 KAR 5:001 Section 12(2) | (a) Amount and kinds of stock authorized.<br>(b) Amount and kinds of stock issued and outstanding.<br>(c) Terms of preference of preferred stock whether cumulative or participating, or on dividends or assets or otherwise.<br>(d) Brief description of each mortgage on property of applicant, giving date of execution, name of mortgagor, name of mortgagee, or trustee, amount of indebtedness authorized to be secured thereby, and the amount of indebtedness actually secured, together with any sinking fund provisions.<br>(e) Amount of bonds authorized, and amount issued, giving the name of the public utility which issued the same, describing each class separately, and giving date of issue, face value, rate of interest, date of maturity and how secured, together with amount of interest paid thereon during the last fiscal year.<br>(f) Each note outstanding, giving date of issue, amount, date of maturity, rate of interest, in whose favor, together with amount of interest paid thereon during the last fiscal year.<br>(g) Other indebtedness, giving same by classes and describing security, if any, with a brief statement of the devolution or assumption of any portion of such indebtedness upon or by person or corporation if the original liability has been transferred, together with amount of interest paid thereon during the last fiscal year.<br>(h) Rate and amount of dividends paid during the five (5) previous fiscal years, and the amount of capital stock on which dividends were paid each year.<br>(i) Detailed income statement and balance sheet. | Thomas J. Heath, Jr.<br>Danielle L. Weatherston |
| 1 | 4 | 807 KAR 5:001 Section 14(1) | Full name, mailing address, and electronic mail address of applicant and reference to the particular provision of law requiring PSC approval. | Amy B. Spiller |
| 1 | 5 | 807 KAR 5:001 Section 14(2) | If a corporation, the applicant shall identify in the application the state in which it is incorporated and the date of its incorporation, attest that it is currently in good standing in the state in which it is incorporated, and, if it is not a Kentucky corporation, state if it is authorized to transact business in Kentucky. | Amy B. Spiller |

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| 1 | 6 | 807 KAR 5:001 Section 14(3) | If a limited liability company, the applicant shall identify in the application the state in which it is organized and the date on which it was organized, attest that it is in good standing in the state in which it is organized, and, if it is not a Kentucky limited liability company, state if it is authorized to transact business in Kentucky. | Amy B. Spiller |
| 1 | 7 | 807 KAR 5:001 Section 14(4) | If the applicant is a limited partnership, a certified copy of its limited partnership agreement and all amendments, if any, shall be annexed to the application, or a written statement attesting that its partnership agreement and all amendments have been filed with the commission in a prior proceeding and referencing the case number of the prior proceeding. | Amy B. Spiller |
| 1 | 8 | 807 KAR 5:001 Section 16 (1)(b)(1) | Reason adjustment is required. | Amy B. Spiller<br>Sarah E. Lawler |
| 1 | 9 | 807 KAR 5:001 Section 16 (1)(b)(2) | Certified copy of certificate of assumed name required by KRS 365.015 or statement that certificate not necessary. | Amy B. Spiller |
| 1 | 10 | 807 KAR 5:001 Section 16 (1)(b)(3) | New or revised tariff sheets, if applicable in a format that complies with 807 KAR 5:011 with an effective date not less than thirty (30) days from the date the application is filed | Bruce L. Sailers |
| 1 | 11 | 807 KAR 5:001 Section 16 (1)(b)(4) | Proposed tariff changes shown by present and proposed tariffs in comparative form or by indicating additions in italics or by underscoring and striking over deletions in current tariff. | Bruce L. Sailers |
| 1 | 12 | 807 KAR 5:001 Section 16 (1)(b)(5) | A statement that notice has been given in compliance with Section 17 of this administrative regulation with a copy of the notice. | Amy B. Spiller |
| 1 | 13 | 807 KAR 5:001 Section 16(2) | If gross annual revenues exceed $5,000,000, written notice of intent filed at least 30 days, but not more than 60 days prior to application. Notice shall state whether application will be supported by historical or fully forecasted test period. | Amy B. Spiller |
| 1 | 14 | 807 KAR 5:001 Section 16(3) | Notice given pursuant to Section 17 of this administrative regulation shall satisfy the requirements of 807 KAR 5:051, Section 2. | Amy B. Spiller |
| 1 | 15 | 807 KAR 5:001 Section 16(6)(a) | The financial data for the forecasted period shall be presented in the form of pro forma adjustments to the base period. | Grady "Tripp" S. Carpenter |
| 1 | 16 | 807 KAR 5:001 Section 16(6)(b) | Forecasted adjustments shall be limited to the twelve (12) months immediately following the suspension period. | Lisa D. Steinkuhl<br>Grady "Tripp" S. Carpenter<br>Sharif S. Mitchell<br>Jacob S. Colley |
| 1 | 17 | 807 KAR 5:001 Section 16(6)(c) | Capitalization and net investment rate base shall be based on a thirteen (13) month average for the forecasted period. | Lisa D. Steinkuhl |
| 1 | 18 | 807 KAR 5:001 Section 16(6)(d) | After an application based on a forecasted test period is filed, there shall be no revisions to the forecast, except for the correction of mathematical errors, unless the revisions reflect statutory or regulatory enactments that could not, with reasonable diligence, have been included in the forecast on the date it was filed. There shall be no revisions filed within thirty (30) days of a scheduled hearing on the rate application. | Grady "Tripp" S. Carpenter |

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| 1 | 19 | 807 KAR 5:001 Section 16(6)(e) | The commission may require the utility to prepare an alternative forecast based on a reasonable number of changes in the variables, assumptions, and other factors used as the basis for the utility's forecast. | Grady "Tripp" S. Carpenter |
| 1 | 20 | 807 KAR 5:001 Section 16(6)(f) | The utility shall provide a reconciliation of the rate base and capital used to determine its revenue requirements. | Lisa D. Steinkuhl |
| 1 | 21 | 807 KAR 5:001 Section 16(7)(a) | Prepared testimony of each witness supporting its application including testimony from chief officer in charge of Kentucky operations on the existing programs to achieve improvements in efficiency and productivity, including an explanation of the purpose of the program. | All Witnesses |
| 1 | 22 | 807 KAR 5:001 Section 16(7)(b) | Most recent capital construction budget containing at minimum 3 year forecast of construction expenditures. | Grady "Tripp" S. Carpenter<br>William C. Luke<br>Marc W. Arnold |
| 1 | 23 | 807 KAR 5:001 Section 16(7)(c) | Complete description, which may be in prefiled testimony form, of all factors used to prepare forecast period. All econometric models, variables, assumptions, escalation factors, contingency provisions, and changes in activity levels shall be quantified, explained, and properly supported. | Grady "Tripp" S. Carpenter |
| 1 | 24 | 807 KAR 5:001 Section 16(7)(d) | Annual and monthly budget for the 12 months preceding filing date, base period and forecasted period. | Grady "Tripp" S. Carpenter |
| 1 | 25 | 807 KAR 5:001 Section 16(7)(e) | Attestation signed by utility's chief officer in charge of Kentucky operations providing:<br>1. That forecast is reasonable, reliable, made in good faith and that all basic assumptions used have been identified and justified; and<br>2. That forecast contains same assumptions and methodologies used in forecast prepared for use by management, or an identification and explanation for any differences; and<br>3. That productivity and efficiency gains are included in the forecast. | Amy B. Spiller |
| 1 | 26 | 807 KAR 5:001 Section 16(7)(f) | For each major construction project constituting 5% or more of annual construction budget within 3 year forecast, following information shall be filed:<br>1. Date project began or estimated starting date;<br>2. Estimated completion date;<br>3. Total estimated cost of construction by year exclusive and inclusive of Allowance for Funds Used During construction ("AFUDC") or Interest During construction Credit; and<br>4. Most recent available total costs incurred exclusive and inclusive of AFUDC or Interest During Construction Credit. | Grady "Tripp" S. Carpenter<br>William C. Luke<br>Marc W. Arnold |
| 1 | 27 | 807 KAR 5:001 Section 16(7)(g) | For all construction projects constituting less than 5% of annual construction budget within 3 year forecast, file aggregate of information requested in paragraph (f) 3 and 4 of this subsection. | Grady "Tripp" S. Carpenter<br>William C. Luke<br>Marc W. Arnold |

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| 1 | 28 | 807 KAR 5:001 Section 16(7)(h) | Financial forecast for each of 3 forecasted years included in capital construction budget supported by underlying assumptions made in projecting results of operations and including the following information:<br>1. Operating income statement (exclusive of dividends per share or earnings per share);<br>2. Balance sheet;<br>3. Statement of cash flows;<br>4. Revenue requirements necessary to support the forecasted rate of return;<br>5. Load forecast including energy and demand (electric);<br>6. Access line forecast (telephone);<br>7. Mix of generation (electric);<br>8. Mix of gas supply (gas);<br>9. Employee level;<br>10.Labor cost changes;<br>11.Capital structure requirements;<br>12.Rate base;<br>13.Gallons of water projected to be sold (water);<br>14.Customer forecast (gas, water);<br>15.MCF sales forecasts (gas);<br>16.Toll and access forecast of number of calls and number of minutes (telephone); and<br>17.A detailed explanation of any other information provided. | Grady "Tripp" S. Carpenter<br>John D. Swez<br>Ibrar A. Khera |
| 1 | 29 | 807 KAR 5:001 Section 16(7)(i) | Most recent FERC or FCC audit reports. | Danielle L. Weatherston |
| 1 | 30 | 807 KAR 5:001 Section 16(7)(j) | Prospectuses of most recent stock or bond offerings. | Thomas J. Heath, Jr. |
| 1 | 31 | 807 KAR 5:001 Section 16(7)(k) | Most recent FERC Form 1 (electric), FERC Form 2 (gas), or PSC Form T (telephone). | Danielle L. Weatherston |
| 2 | 32 | 807 KAR 5:001 Section 16(7)(l) | Annual report to shareholders or members and statistical supplements for the most recent 2 years prior to application filing date. | Thomas J. Heath, Jr. |
| 3 | 33 | 807 KAR 5:001 Section 16(7)(m) | Current chart of accounts if more detailed than Uniform System of Accounts charts. | Danielle L. Weatherston |
| 3 | 34 | 807 KAR 5:001 Section 16(7)(n) | Latest 12 months of the monthly managerial reports providing financial results of operations in comparison to forecast. | Danielle L. Weatherston |
| 3 | 35 | 807 KAR 5:001 Section 16(7)(o) | Complete monthly budget variance reports, with narrative explanations, for the 12 months prior to base period, each month of base period, and subsequent months, as available. | Danielle L. Weatherston<br>Grady "Tripp" S. Carpenter |
| 3-9 | 36 | 807 KAR 5:001 Section 16(7)(p) | SEC's annual report for most recent 2 years, Form 10-Ks and any Form 8-Ks issued during prior 2 years and any Form 10-Qs issued during past 6 quarters. | Danielle L. Weatherston |
| 9 | 37 | 807 KAR 5:001 Section 16(7)(q) | Independent auditor's annual opinion report, with any written communication which indicates the existence of a material weakness in internal controls. | Danielle L. Weatherston |
| 9 | 38 | 807 KAR 5:001 Section 16(7)(r) | Quarterly reports to the stockholders for the most recent 5 quarters. | Thomas J. Heath, Jr. |

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| 9 | 39 | 807 KAR 5:001 Section 16(7)(s) | Summary of latest depreciation study with schedules itemized by major plant accounts, except that telecommunications utilities adopting PSC's average depreciation rates shall identify current and base period depreciation rates used by major plant accounts. If information has been filed in another PSC case, refer to that case's number and style. | John J. Spanos |
| 9 | 40 | 807 KAR 5:001 Section 16(7)(t) | List all commercial or in-house computer software, programs, and models used to develop schedules and work papers associated with application. Include each software, program, or model; its use; identify the supplier of each; briefly describe software, program, or model; specifications for computer hardware and operating system required to run program | Lisa D. Steinkuhl |
| 9 | 41 | 807 KAR 5:001 Section 16(7)(u) | If utility had any amounts charged or allocated to it by affiliate or general or home office or paid any monies to affiliate or general or home office during the base period or during previous 3 calendar years, file:<br>1. Detailed description of method of calculation and amounts allocated or charged to utility by affiliate or general or home office for each allocation or payment;<br>2. method and amounts allocated during base period and method and estimated amounts to be allocated during forecasted test period;<br>3. Explain how allocator for both base and forecasted test period was determined; and<br>4. All facts relied upon, including other regulatory approval, to demonstrate that each amount charged, allocated or paid during base period is reasonable. | Rebekah E. Buck |
| 10 | 42 | 807 KAR 5:001 Section 16(7)(v) | If gas, electric or water utility with annual gross revenues greater than $5,000,000, cost of service study based on methodology generally accepted in industry and based on current and reliable data from single time period. | James E. Ziolkowski |
| 10 | 43 | 807 KAR 5:001 Section 16(7)(w) | Local exchange carriers with fewer than 50,000 access lines need not file cost of service studies, except as specifically directed by PSC. Local exchange carriers with more than 50,000 access lines shall file:<br>1. Jurisdictional separations study consistent with Part 36 of the FCC's rules and regulations; and<br>2. Service specific cost studies supporting pricing of services generating annual revenue greater than $1,000,000 except local exchange access:<br>a. Based on current and reliable data from single time period; and<br>b. Using generally recognized fully allocated, embedded, or incremental cost principles. | N/A |
| 10 | 44 | 807 KAR 5:001 Section 16(8)(a) | Jurisdictional financial summary for both base and forecasted periods detailing how utility derived amount of requested revenue increase. | Lisa D. Steinkuhl |

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| 10 | 45 | 807 KAR 5:001 Section 16(8)(b) | Jurisdictional rate base summary for both base and forecasted periods with supporting schedules which include detailed analyses of each component of the rate base. | Lisa D. Steinkuhl<br>Sharif S. Mitchell<br>Grady "Tripp" S. Carpenter<br>John R. Panizza<br>James E. Ziolkowski<br>Danielle L. Weatherston |
| 10 | 46 | 807 KAR 5:001 Section 16(8)(c) | Jurisdictional operating income summary for both base and forecasted periods with supporting schedules which provide breakdowns by major account group and by individual account. | Lisa D. Steinkuhl |
| 10 | 47 | 807 KAR 5:001 Section 16(8)(d) | Summary of jurisdictional adjustments to operating income by major account with supporting schedules for individual adjustments and jurisdictional factors. | Lisa D. Steinkuhl<br>Sharif S. Mitchell<br>Grady "Tripp" S. Carpenter<br>Jacob S. Colley<br>James E. Ziolkowski |
| 10 | 48 | 807 KAR 5:001 Section 16(8)(e) | Jurisdictional federal and state income tax summary for both base and forecasted periods with all supporting schedules of the various components of jurisdictional income taxes. | John R. Panizza |
| 10 | 49 | 807 KAR 5:001 Section 16(8)(f) | Summary schedules for both base and forecasted periods (utility may also provide summary segregating items it proposes to recover in rates) of organization membership dues; initiation fees; expenditures for country club; charitable contributions; marketing, sales, and advertising; professional services; civic and political activities; employee parties and outings; employee gifts; and rate cases. | Lisa D. Steinkuhl |
| 10 | 50 | 807 KAR 5:001 Section 16(8)(g) | Analyses of payroll costs including schedules for wages and salaries, employee benefits, payroll taxes, straight time and overtime hours, and executive compensation by title. | Lisa D. Steinkuhl<br>Shannon A. Caldwell |
| 10 | 51 | 807 KAR 5:001 Section 16(8)(h) | Computation of gross revenue conversion factor for forecasted period. | Lisa D. Steinkuhl |
| 10 | 52 | 807 KAR 5:001 Section 16(8)(i) | Comparative income statements (exclusive of dividends per share or earnings per share), revenue statistics and sales statistics for 5 calendar years prior to application filing date, base period, forecasted period, and 2 calendar years beyond forecast period. | Danielle L. Weatherston<br>Grady "Tripp" S. Carpenter |
| 10 | 53 | 807 KAR 5:001 Section 16(8)(j) | Cost of capital summary for both base and forecasted periods with supporting schedules providing details on each component of the capital structure. | Thomas J. Heath, Jr. |
| 10 | 54 | 807 KAR 5:001 Section 16(8)(k) | Comparative financial data and earnings measures for the 10 most recent calendar years, base period, and forecast period. | Sharif S. Mitchell<br>Grady "Tripp" S. Carpenter<br>Thomas J. Heath, Jr.<br>Danielle L. Weatherston |
| 10 | 55 | 807 KAR 5:001 Section 16(8)(l) | Narrative description and explanation of all proposed tariff changes. | Bruce L. Sailers |
| 10 | 56 | 807 KAR 5:001 Section 16(8)(m) | Revenue summary for both base and forecasted periods with supporting schedules which provide detailed billing analyses for all customer classes. | Bruce L. Sailers |
| 10 | 57 | 807 KAR 5:001 Section 16(8)(n) | Typical bill comparison under present and proposed rates for all customer classes. | Bruce L. Sailers |
| 10 | 58 | 807 KAR 5:001 Section 16(9) | The commission shall notify the applicant of any deficiencies in the application within thirty (30) days of the application's submission. An application shall not be accepted for filing until the utility has cured all noted deficiencies. | Sarah E. Lawler |

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| 10 | 59 | 807 KAR 5:001 Section 16(10) | Request for waivers from the requirements of this section shall include the specific reasons for the request. The commission shall grant the request upon good cause shown by the utility. | Legal |
| 10 | 60 | 807 KAR 5:001 Section (17)(1) | (1) Public postings.<br>(a) A utility shall post at its place of business a copy of the notice no later than the date the application is submitted to the commission.<br>(b) A utility that maintains a Web site shall, within five (5) business days of the date the application is submitted to the commission, post on its Web sites:<br>1. A copy of the public notice; and<br>2. A hyperlink to the location on the commission's Web site where the case documents are available.<br>(c) The information required in paragraphs (a) and (b) of this subsection shall not be removed until the commission issues a final decision on the application. | Amy B. Spiller |
| 10 | 61 | 807 KAR 5:001 Section 17(2) | (2) Customer Notice.<br>(a) If a utility has twenty (20) or fewer customers, the utility shall mail a written notice to each customer no later than the date on which the application is submitted to the commission.<br>(b) If a utility has more than twenty (20) customers, it shall provide notice by:<br>1. Including notice with customer bills mailed no later than the date the application is submitted to the commission;<br>2. Mailing a written notice to each customer no later than the date the application is submitted to the commission;<br>3. Publishing notice once a week for three (3) consecutive weeks in a prominent manner in a newspaper of general circulation in the utility's service area, the first publication to be made no later than the date the application is submitted to the commission; or<br>4. Publishing notice in a trade publication or newsletter delivered to all customers no later than the date the application is submitted to the commission.<br>(c) A utility that provides service in more than one (1) county may use a combination of the notice methods listed in paragraph (b) of this subsection. | Amy B. Spiller |

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| 10 | 62 | 807 KAR 5:001 Section 17(3) | (3) Proof of Notice. A utility shall file with the commission no later than forty-five (45) days from the date the application was initially submitted to the commission:<br>(a) If notice is mailed to its customers, an affidavit from an authorized representative of the utility verifying the contents of the notice, that notice was mailed to all customers, and the date of the mailing;<br>(b) If notice is published in a newspaper of general circulation in the utility's service area, an affidavit from the publisher verifying the contents of the notice, that the notice was published, and the dates of the notice's publication; or<br>(c) If notice is published in a trade publication or newsletter delivered to all customers, an affidavit from an authorized representative of the utility verifying the contents of the notice, the mailing of the trade publication or newsletter, that notice was included in the publication or newsletter, and the date of mailing. | Amy B. Spiller |

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| 10 | 63 | 807 KAR 5:001 Section 17(4) | (4) Notice Content. Each notice issued in accordance with this section shall contain:<br>(a) The proposed effective date and the date the proposed rates are expected to be filed with the commission;<br>(b) The present rates and proposed rates for each customer classification to which the proposed rates will apply;<br>(c) The amount of the change requested in both dollar amounts and percentage change for each customer classification to which the proposed rates will apply;<br>(d) The amount of the average usage and the effect upon the average bill for each customer classification to which the proposed rates will apply, except for local exchange companies, which shall include the effect upon the average bill for each customer classification for the proposed rate change in basic local service;<br>(e) A statement that a person may examine this application at the offices of (utility name) located at (utility address);<br>(f) A statement that a person may examine this application at the commission's offices located at 211 Sower Boulevard, Frankfort, Kentucky, Monday through Friday, 8:00 a.m. to 4:30 p.m., or through the commission's Web site at http://psc.ky.gov;<br>(g) A statement that comments regarding the application may be submitted to the Public Service Commission through its Web site or by mail to Public Service Commission, Post Office Box 615, Frankfort, Kentucky 40602;<br>(h) A statement that the rates contained in this notice are the rates proposed by (utility name) but that the Public Service Commission may order rates to be charged that differ from the proposed rates contained in this notice;<br>(i) A statement that a person may submit a timely written request for intervention to the Public Service Commission, Post Office Box 615, Frankfort, Kentucky 40602, establishing the grounds for the request including the status and interest of the party; and<br>(j) A statement that if the commission does not receive a written request for intervention within thirty (30) days of initial publication or mailing of the notice, the commission may take final action on the application. | Bruce L. Sailers |
| 10 | 64 | 807 KAR 5:001 Section 17(5) | (5) Abbreviated form of notice. Upon written request, the commission may grant a utility permission to use an abbreviated form of published notice of the proposed rates, provided the notice includes a coupon that may be used to obtain all the required information. | N/A |

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| 11 | - | 807 KAR 5:001 Section 16(8)(a) through (k) | Schedule Book (Schedules A-K) | Various |
| 12 | - | 807 KAR 5:001 Section 16(8)(l) through (n) | Schedule Book (Schedules L-N) | Bruce L. Sailers |
| 13 | - | - | Work Papers | Various |
| 14 | - | 807 KAR 5:001 Section 16(7)(a) | Testimony (Volume 1 of 4) | Various |
| 15 | - | 807 KAR 5:001 Section 16(7)(a) | Testimony (Volume 2 of 4) | Various |
| 16 | - | 807 KAR 5:001 Section 16(7)(a) | Testimony (Volume 3 of 4) | Various |
| 17 | - | 807 KAR 5:001 Section 16(7)(a) | Testimony (Volume 4 of 4) | Various |
| 18-19 | - | KRS 278.2205(6) | Cost Allocation Manual | Legal |

# TESTIMONY

## VOLUME 1 OF 4

**AMY B. SPILLER**
**MICHAEL J. ADAMS**
**MARC W. ARNOLD**

**COMMONWEALTH OF KENTUCKY**

**BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

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| THE ELECTRONIC APPLICATION OF DUKE ENERGY KENTUCKY, INC., FOR: 1) AN ADJUSTMENT OF THE ELECTRIC RATES; 2) APPROVAL OF NEW TARIFFS; 3) APPROVAL OF ACCOUNTING PRACTICES TO ESTABLISH REGULATORY ASSETS AND LIABILITIES; AND 4) ALL OTHER REQUIRED APPROVALS AND RELIEF. | ) | CASE NO. 2024-00354 |

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**DIRECT TESTIMONY OF**

**AMY B. SPILLER**

**ON BEHALF OF**

**DUKE ENERGY KENTUCKY, INC.**

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December 2, 2024

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ATTACHMENTS:


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| Attachment ABS-2 | 2023 J.D. Power Electric Utility Residential Study Summary |
| Attachment ABS-3 | CONFIDENTIAL 2023 Fastrack Report Summary |

## I. INTRODUCTION

**Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

A. My name is Amy B. Spiller, and my business address is 139 East Fourth Street, Cincinnati, Ohio 45202.

**Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

A. I am employed by Duke Energy Business Services LLC (DEBS), as State President of Duke Energy Kentucky, Inc., (Duke Energy Kentucky or the Company) and its parent, Duke Energy Ohio, Inc. (Duke Energy Ohio). DEBS provides various administrative and other services to Duke Energy Kentucky and other affiliated companies of Duke Energy Corporation (Duke Energy).

**Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.**

A. I received a bachelor's degree in economics and management from Albion College in Michigan and a law degree from Wake Forest University in Winston-Salem, N.C. Following law school, I spent two years working for Business Laws, Inc., a legal publishing company in northeast Ohio. Then, from 1993 to 2003, I rose from associate to partner at Wilson & Markesbery Co., L.P.A., a small insurance defense law firm in Cincinnati, Ohio.

I joined Cinergy Corp., (Cinergy) in 2003 as an associate general counsel, focusing on litigation matters. In 2008, following the 2006 merger between Cinergy and Duke Energy, I was promoted to deputy general counsel, assuming responsibility relative to Duke Energy's strategic planning in Ohio and Kentucky. I was also responsible for advancing Duke Energy's rate and regulatory initiatives before the Public Utilities Commission of Ohio and the Kentucky Public Service

Commission (Commission). In January 2018, I was named Vice President of Government and Community Affairs for Duke Energy Ohio, where I was responsible for managing state government and regulatory policies, strategies, and relationships affecting Duke Energy Ohio's interests and those of our Ohio customers. On June 1, 2018, I was named to my current position of State President, Duke Energy Ohio, and Duke Energy Kentucky.

**Q. PLEASE DESCRIBE YOUR DUTIES AS STATE PRESIDENT, DUKE ENERGY KENTUCKY.**

A. As State President, Duke Energy Kentucky, I am responsible for ensuring that our customers continue to have access to adequate, efficient, and reasonable electric and natural gas service at a fair, just, and reasonable rate and that these services are provided in accordance with applicable federal and state laws and regulations. I am also involved in external efforts relating to governmental and regulatory affairs, interacting with state and community leaders and regulators on matters relevant to Duke Energy Kentucky's business and presence in the Commonwealth. Finally, I am responsible for the Company's community relations and economic development efforts, as well as Duke Energy's charitable contributions in the Northern Kentucky and southwest Ohio.

**Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION?**

A. Yes. I have previously testified before the Commission.

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

A. My testimony provides an overview of Duke Energy Kentucky's electric business operations and community involvement in our Northern Kentucky service territory. I discuss Duke Energy Kentucky's levels of customer satisfaction and how the constructive regulatory treatment sought in this proceeding will enable the Company to meet our customers' ever-changing expectations for adequate, efficient, and reasonable service at a fair, just, and reasonable rate.

I next provide an overview of Duke Energy Kentucky's need for an increase in electric rates and the reasonableness of this request. In this regard, I address proposals in our Application that support regional development and growth, while acknowledging – and responding to – our customers' expectations around the services we provide and adapting to a changing energy landscape. Through our Application, the Company is also proposing to: (1) update depreciation rates to align the depreciable lives of our generating plants with their service lives based upon the most recently filed Integrated Resource Plan (IRP); and, (2) reestablish two accounting deferrals for planned outage operation and maintenance (O&M) expense and forced outage purchased power expense.

I introduce the other witnesses testifying on the Company's behalf and, in doing so, provide an overview of their testimony. I also sponsor several Filing Requirements (FR), including those mandated under 807 KAR 5:001: FR 7(1), FR 14(1) through FR 14(4), FR 16(1)(b)(1), FR 16(1)(b)(2), FR 16(1)(b)(5), FR 16(2), and FR 16(3). I discuss the existing programs designed to improve

efficiency and productivity and the purpose of each program, as required by FR 16(7)(a). I provide the management statement of attestation, required by FR 16(7)(e), concerning the forecasted financial data. Additionally, I sponsor the affidavit in support of the notice requirements under FR 17(1) through (3). Finally, I sponsor the pre-filing notice as required by KRS 278.180.

## II. OVERVIEW OF KENTUCKY OPERATIONS

### A. Company Overview

**Q. PLEASE DESCRIBE DUKE ENERGY KENTUCKY'S UTILITY OPERATIONS IN NORTHERN KENTUCKY.**

A. Duke Energy Kentucky provides electric service to approximately 155,000 customers and natural gas service to approximately 105,000 customers in Bracken (gas only), Boone, Campbell, Gallatin (gas only), Grant, Kenton, and Pendleton counties in Northern Kentucky.[1]

From our Cincinnati headquarters, Duke Energy Kentucky directs the planning, construction, operation, and maintenance of our electric transmission and distribution systems. The Company's electric customers are served via an electric transmission and distribution system operated in accordance with good utility practice as further described by Duke Energy Kentucky witness Marc W. Arnold. Most customers continue to be served via overhead transmission and distribution lines; however, the Company is increasingly serving customers with underground facilities.

[1] As of October 1, 2024

The Company's local electric operations are as follows:

- Cincinnati, Ohio – the headquarters for Duke Energy Kentucky
- Union, Kentucky – the East Bend Generating Station
- Trenton, Ohio – the Woodsdale Generating Station
- Erlanger, Kentucky – Duke Energy Kentucky's Operations Center
- Harrison, Ohio – Duke Energy Kentucky and Ohio's Electric System Operations Facility

From these locations, Duke Energy Kentucky generates electricity; provides for the construction, operation, and maintenance of our electric delivery system; and conducts our business operations.

**Q. PLEASE PROVIDE AN OVERVIEW OF THE DUKE ENERGY CORPORATE AND BUSINESS STRUCTURE.**

A. Duke Energy is one of the largest utility companies in the United States. Through a series of mergers and acquisitions, including the 2006 merger with Cinergy, the 2012 merger with Progress Energy, and the more recent merger with Piedmont Natural Gas Company, Duke Energy now serves approximately 8.4 million electric customers and over 1.7 million natural gas customers in seven states, comprising Kentucky, Ohio, Indiana, Florida, North Carolina, South Carolina, and Tennessee.

Duke Energy Kentucky is a wholly owned subsidiary of Duke Energy Ohio. Duke Energy Ohio is a wholly owned subsidiary of Cinergy, which is wholly owned by Duke Energy.

**Q. PLEASE DESCRIBE HOW BEING A PART OF THE DUKE ENERGY FAMILY OF COMPANIES ASSISTS DUKE ENERGY KENTUCKY IN PROVIDING ADEQUATE, EFFICIENT, AND REASONABLE SERVICE AT A FAIR, JUST, AND REASONABLE RATE FOR ITS KENTUCKY CUSTOMERS.**

A. As further explained by Duke Energy Kentucky witness Rebekah E. Buck, Duke Energy Kentucky is a party to multiple affiliate service agreements that provide the Company with access to a vast level of resources, experience, and expertise beyond what Duke Energy Kentucky could achieve as a stand-alone utility.[2] These various agreements include, among other things, a service company/operating company agreement and an operating company agreement. Under the former, Duke Energy Kentucky and, by extension, our customers, benefit from the defined pool of highly skilled attorneys, accountants, engineers, customer service representatives, and other professionals whose time and cost are shared among all utility affiliates within Duke Energy. Under the latter agreement, Duke Energy Kentucky and our customers benefit from the services provided by affiliated utility companies that furnish natural gas and electric service in seven states.

Consequently, Duke Energy Kentucky's customers have access to resources, including a highly trained and dedicated workforce from multiple jurisdictions, that are familiar with the Company's systems and are experienced in

[2] The Commission approved these services agreements in Case No. 2005-00228, involving the Duke Energy/Cinergy merger, again in Case No. 2011-00124 involving the merger between Duke Energy and Progress Energy, and most recently in Case No. 2016-00312 to incorporate Piedmont as an affiliate party to these agreements.

the safe operation of the Company's utility infrastructure, thereby enabling the continued and efficient operation of Duke Energy Kentucky's utility system. Pursuant to Commission-approved service agreements, Duke Energy Kentucky is allocated only a portion of these costs. Although this structure affords significant benefit to our customers, it is not a structure with which they have reason to take notice. Indeed, the legal entity structure and relationships discussed above are essentially invisible to and seamless for our Kentucky customers, who receive all their utility services from Duke Energy Kentucky. This corporate structure is designed such that our Kentucky customers will continue to receive adequate, efficient, and reasonable service at a fair, just, and reasonable rate without regard to corporate structure or organization.

## B. Community Engagement

**Q. PLEASE GIVE AN OVERVIEW OF DUKE ENERGY KENTUCKY'S ECONOMIC DEVELOPMENT ACTIVITIES.**

A. Duke Energy Kentucky embraces our responsibility to promote economic development in the communities in which we do business. We appreciate that access to affordable, reliable utility service is a critical factor in a company's decision about where to locate or expand its facilities. Duke Energy Kentucky is well positioned to meet our customers' energy needs and attract job-creating industries and capital investment to our service territory. However, business clients need more than reliable utility service. They also need readily available building sites, access to state and local incentives, flexible workforce training programs, and proximity to a community of customers and business partners.

Duke Energy Kentucky assists in meeting these needs through partnerships with our local communities and the Commonwealth of Kentucky.

In 2024, Site Selection magazine named Duke Energy one of its Top Utilities in Site Selection for North America, marking the twenty-first consecutive year that Duke Energy has received this honor.  t To facilitate regional development, Duke Energy launched our Site Readiness Program in 2010 . This program is designed to identify, assess, and improve large tracts of industrial land in the service territory, moving them closer to being fully marketable. Under the program, the Company pays for a national site consultant to conduct the site evaluation and due diligence to prepare a robust, comprehensive report that provides recommendations on site improvements and target industries, along with labor statistics tied to the region. A local engineering firm hired by Duke Energy Kentucky provides a detailed desktop analysis of the site's wetlands, topography, and soils and creates conceptual drawings based on the developable acres. The program also helps the local economic development professionals hone their skills for the highly competitive process of responding to requests for information and showcasing their site and community.

The Duke Energy Site Readiness Program has evaluated eighteen sites in our Duke Energy Kentucky footprint; five of which have seen substantial development or additional funding to further site readiness, including the Amazon Air Hub facility in Boone County, Niagara Bottling and Diversey in Kenton County, and the Southern Campbell County Industrial Site in Campbell County.

Thirteen of the eighteen sites are being actively marketed by BE NKY (Build + Elevate Northern Kentucky).

In addition to this successful program, our economic development team collaborates with local, regional, and state economic development professionals in attracting new business and jobs to our communities, whether in the field of Advanced Manufacturing, Food and Beverage, Life Sciences, Automotive, Aerospace and Defense, Batteries, Healthcare, Data Centers, or Logistics.

Duke Energy Kentucky's strategic partnerships and board memberships with local and regional economic development efforts such as the Regional Economic Development Initiative (REDI) Cincinnati and BE NKY, combined with Duke Energy Kentucky's competitive rates, have resulted in a number of economic development successes in Northern Kentucky.

We estimate that our cooperative efforts, along with those of state and local economic development officials, have contributed to the creation of nearly 5,552 jobs and more than $2.956 billion of capital investment in Northern Kentucky since 2012.

In addition to these partnerships, Duke Energy Kentucky advances economic development and community vibrancy through our Urban Revitalization Initiative. Since its inception in 2011, this initiative has provided over $3.4 million to support over 110 projects in our Duke Energy Kentucky and Ohio service areas. These projects, located in the urban core, are designed to restore blighted, vacant properties, thereby enabling, among other things, commercial redevelopment, and job creation. Around half of the funding over the

past thirteen years has supported projects in the Northern Kentucky River Cities of Bellevue, Covington, Dayton, Ludlow, and Newport.

Along with other Company leaders, I serve on various regional boards and organizations focused on promoting economic development as well as the related topics of workforce, transportation, and community vibrancy. This participation allows Duke Energy Kentucky to effectively support growth in the region and better understand the challenges and opportunities facing our customers. Some of the organizations in which Duke Energy Kentucky leaders have recently been or are currently involved include:

- BE NKY (formerly known as NKY Tri-ED)
- Catalytic Funding Corp. of Northern Kentucky;
- Cincinnati Regional Business Committee;
- Cincinnati Center City Development Corporation;
- Cincinnati USA Regional Chamber of Commerce;
- Cintrifuse;
- Covington Business Council;
- European American Chamber of Commerce;
- Gateway Community & Technical College;
- Kentucky Association of Economic Development;
- Kentucky Chamber of Commerce;
- NKU Foundation;
- 1NKY Alliance;
- NKY Education Council;

- NKY Workforce Investment Board;
- NKY Works (formerly known as GROW NKY)
- Northern Kentucky Chamber of Commerce;
- Ohio Business Roundtable;
- Ohio Chamber of Commerce;
- REDI Cincinnati;
- The Port of Greater Cincinnati Development Authority; and
- The Workforce Council of SW Ohio (formerly known as SW Ohio Regional Workforce Investment Board)

**Q. DESCRIBE DUKE ENERGY KENTUCKY'S CHARITABLE GIVING PHILOSOPHY.**

A. Duke Energy Kentucky has made good corporate citizenship a priority by giving back to the communities we serve. Since 2016 alone, the Duke Energy Foundation has contributed over $6.6 million in shareholder dollars to Kentucky charitable organizations. In addition to our Urban Revitalization Initiative, these contributions have historically supported initiatives that help create vibrant economies, climate resiliency and support opportunity and inclusion. Increasingly, however, over the last several years, financial support has also been directed to victims of extreme weather events as well as relief for small businesses as they continue to recover from the pandemic and economic challenges. Our philanthropic engagement is not only financial in nature. Rather, consistent with Duke Energy's culture of caring, our employees and retirees and their families regularly give back to our communities by volunteering their time.

Indeed, from 2016 through this year, over 500 employees and retirees and their families volunteered over 18,000 hours of their time to help our local neighbors. Whether through playground renovation, cemetery improvements, tree planting, or painting, our employees, and retirees, as well as their families, are continually giving back to our communities.

**Q. DESCRIBE THE DUKE ENERGY KENTUCKY CUSTOMER SERVICE FUNCTIONS AND HOW THE COMPANY ENGAGES WITH CUSTOMERS.**

A. Duke Energy Kentucky strives to provide superior customer service to our diverse customer base. From the front lines – the customer care call centers and field technicians – to the technology that makes customer service interactions possible, we are investing and improving to meet increasing customer expectations. On the technology front, these digital channels enable real-time communication and interactions between customers and Duke Energy. Of these digital channels, the mobile app and web portal are increasingly critical channels for customers to interact with the Company. Duke Energy Kentucky continues to develop and deploy technologies via its digital channels, such as live agent chat which is available on the web.

In addition to technology advancements, the Company continues to explore ways to serve diverse customer needs by establishing dedicated support roles such as Account Managers who are assigned to our large, complex customer accounts to answer questions, provide solutions, and resolve issues. The role of

Account Managers and other support roles that are employed by the Company are further discussed in Company witness Jacob S. Colley's testimony.

**Q. DOES DUKE ENERGY KENTUCKY HAVE OPTIONS TO ASSIST FINANCIALLY VULNERABLE CUSTOMERS?**

A. Duke Energy Kentucky has a long history of Company, customer, and employee support for low-income customers, some of which I describe herein, and as further detailed in the direct testimony of Company witness Colley:

1. Share the Light Fund: Duke Energy continues to aid qualifying customers who are struggling to pay their energy bills through Share the Light Fund contributions that are received from the Company and our employees and customers, as well as Duke Energy shareholders. Each year, Duke Energy contributes $25,000 and will match, dollar for dollar, up to $25,000 in customer contributions. The Share the Light Fund is administered in partnership with the Northern Kentucky Community Action Commission (NKCAC) using federal low-income guidelines, as well as need, to determine program eligibility. Residential customers who are eligible may receive assistance of up to $300 per program year;
2. Home Energy Assistance: This program provides another source of monthly bill assistance for eligible customers (up to 200 percent of the federal poverty level). Electric or combination electric and natural gas customers can receive up to $99 per month between January-April and July-September through the subsidy component

and up to $400 is available for immediate assistance through the crisis component for customers who have a past-due balance and/or are in danger of disconnection. This program is funded through a combination of customer charges and shareholder contributions, and is managed by Community Action Kentucky, Inc., and locally, its subcontractor, the NKCAC.

3. Neighborhood Energy Saver Program (NES): This program is an energy efficiency initiative for lower income customers and program measures include attic insulation, air sealing, duct sealing, and smart thermostats. NES resulted in installations of energy efficient upgrades in more than 480 homes in the 2023-2024 program fiscal year.

Additionally, the Payment Plus program is available to qualifying residential customers and provides the opportunity to receive a $500 reduction of their utility bill. This program is coordinated by the NKCAC and customers are able to earn the reduction on their utility bill by participating in three activities at no cost to them. Through participation in the program, customers will learn how to control their energy bills, receive money-saving tips for balancing their budget and can have their home weatherized. The Company partners with People Working Cooperatively (PWC) to aid in its Weatherization Program that aims to help qualifying customers save energy and decrease expenses through the implementation of energy-saving measures in their homes. In the 2023-2024

program year, nearly 100 Duke Energy Kentucky customers' homes received weatherization services.

Lastly, to improve efficiency and effectiveness in applying pledges to customer accounts, we established the Centralized Agency Team as a single contact point for utility assistance agencies. A digital self-service portal was created for agencies to securely access customer account information, process commitments, and make payments. This allows agencies to easily track pledge history and receive notifications for pledge deadlines, leading to better pledge decisions.

### C. <u>Customer Satisfaction</u>

**Q. HOW DOES DUKE ENERGY KENTUCKY MEASURE PERFORMANCE FOR PROVIDING HIGH QUALITY CUSTOMER SERVICE?**

A. Duke Energy Kentucky recognizes that customer expectations continuously evolve and that it is critical for the Company to hear and understand the "Voice of the Customer" to improve overall customer satisfaction (CSAT). To that end, the Company operates a robust CSAT program that measures customer satisfaction performance through three primary tools: the Customer Experience Monitor (CX Monitor) survey; the annual J.D. Power Electric Utility Residential Customer Satisfaction Study (J.D. Power Study); and Duke Energy's proprietary transaction survey – Fastrack. This ecosystem of measurement tools used to measure overall customer satisfaction and perceptions is discussed further by Company witness Colley.

**Q. PLEASE DESCRIBE THE CX MONITOR SURVEY AND DUKE ENERGY KENTUCKY'S PERFORMANCE IN THIS SURVEY.**

A. In 2018, the Company launched the CX Monitor, a randomized, census-based survey that measures overall customer sentiment and the ongoing perceptions of the customer experience via an email invitation with an embedded online survey link. The CX Monitor survey is sent annually to all residential, small and medium business customers, and large business customers for whom the Company has a valid email address. Customers are asked to provide feedback regarding their overall sentiment as well as satisfaction with key experiences they have had with the Company over the past 12 months. Examples of these experiences include billing and payment and power quality and reliability. Customers rate overall sentiment and key experience satisfaction on a '0-10' scale while also providing open-end verbatim comments detailing the primary reason(s) for their score. Scores are reported on a 'Net' basis – shown as the share of Promoters (customers providing a score of '9' or '10') minus the share of Detractors (customers providing a score of '0-6'). Since the CX Monitor survey launched in 2018, Duke Energy Kentucky alone has collected more than 59,000 residential electric customer surveys through June 2024. Duke Energy Kentucky measured an initial score of +15.5 in January 2018 and improved our NPS score to +43.0 in June 2024. This means that the Company has seen strong improvement in overall customer sentiment in the commonwealth.

Confidential Attachment ABS-1 is a copy of the Duke Energy Kentucky Electric Residential CX Monitor customer sentiment results from 2018 through 2024 Midpoint (June 2024 YTD).

**Q. PLEASE DESCRIBE THE J.D. POWER STUDIES AND DUKE ENERGY KENTUCKY'S PERFORMANCE UNDER THOSE STUDIES.**

A. J.D. Power is a well-known measure of consumer opinion and customer satisfaction in many key industries. J.D. Power annually surveys electric utilities' residential customers regarding their overall satisfaction with their utility, as well as key areas of their relationship. Duke Energy Midwest participates in these annual utility studies.

The J.D. Power Study calculates overall customer satisfaction based on six performance areas: (1) power quality and reliability; (2) billing and payment; (3) price and value; (4) corporate citizenship; (5) communications; and (6) customer service. J.D. Power published the final results of its most recent study – the 2023 J.D. Power Electric Utility Residential Customer Satisfaction Study – on December 13, 2023.[3] While the utility industry and Midwest Large Region saw sharp declining average scores in 2023, Duke Energy's Midwest score declined only 8 points, gaining ground on both the Midwest Large Region and the industry, finishing the year in the 2nd quartile among large utilities nationally. We are proud of the improvement in these scores and believe they reflect our commitment to improving our customers' experience across several key areas.

[3] The 2023 J.D. Power Electric Utility Residential Customer Satisfaction Study is comprised of four waves of interviews: (1) January/February 2023; (2) April/May 2023; (3) July/August 2023; and (4) October/November 2023.

Attachment ABS-2 is an excerpt from this recent publication that provides a relevant summary of residential customer satisfaction for Midwest Large utilities.

**Q. PLEASE DESCRIBE FASTRACK AND THE COMPANY'S FASTRACK PERFORMANCE.**

A. In addition to the independent J.D. Power Study, the Company uses "Fastrack," a proprietary, post-transaction CSAT measurement program. Fastrack measures customer satisfaction with recent interactions customers have had with the Company. Fastrack was intentionally designed to complement the CX Monitor survey and provide greater insight into experiences that matter to our customers and near real-time feedback to our front line, customer-facing employees. The survey questions cover the customer's experience regarding completed field work, including requests to "move in" (start and transfer electric service), restore outages, and repair outdoor lights. Analysis of these ratings helps to identify specific service strengths and opportunities that drive overall satisfaction and to provide guidance for the implementation of process and performance improvement efforts. In 2023 alone, Duke Energy Kentucky collected more than 1,500 Residential Fastrack surveys.

Duke Energy Kentucky's customer satisfaction scores indicate that, overall, customer satisfaction with these experiences is relatively high. Throughout 2023, customers provided the following ratings:

- **Start/Transfer Electric Service:** On average, 65 percent of Duke Energy Kentucky residential customers were Promoters – reporting

high levels of satisfaction with their overall start/transfer service experience – with especially strong performance noted regarding the 'timeliness' of their connection;

- **Outage/Restoration:** On average, 65 percent of Duke Energy Kentucky residential customers were Promoters – reporting high levels of satisfaction with their overall outage experience. Still, some customers were Detractors, citing opportunities to improve the accuracy of estimated restoration times during their outage; and
- **Outdoor Lighting Repair:** With a Net Satisfaction score exceeding 84 percent and an average share of Promoters topping 91 percent, Duke Energy Kentucky residential customers reported significantly high levels of satisfaction with their overall outdoor lighting repair experience. Customers were especially pleased with the timeliness of repairing their light(s), ease of reporting/completing their request, and the technician's performance respecting their property.

Confidential Attachment ABS-3 is a copy of the 2023 Duke Energy Kentucky Fastrack results by module.

**D. <u>Developments Since the Company's Last Electric Base Rate Case</u>**

**Q. PLEASE SUMMARIZE THE SIGNIFICANT OPERATIONAL DEVELOPMENTS AND INVESTMENTS THAT HAVE OCCURRED SINCE THE COMPANY'S LAST ELECTRIC BASE RATE CASE.**

A. Duke Energy Kentucky continues to make prudent operational decisions and investments in our electric generation and delivery system. Since the Company's

last electric base rate case filed in 2022, Duke Energy Kentucky has invested $250 million in additional electric infrastructure to enhance the safety, reliability, and resiliency of our electric system and to support localized economic development through adequate infrastructure and capacity in areas where growth is occurring. Duke Energy Kentucky is experiencing significant development in specific areas of our service territory in Northern Kentucky where additional capacity and facilities are necessary to provide safe, reliable, and adequate service. Moreover, the Company continues to make necessary investments to our existing facilities to maintain reliability. Company witnesses Arnold and William Luke discuss this and other necessary infrastructure investments further in their testimonies.

Looking forward, the Company continues to explore strategies to improve the service we provide to customers and the overall performance of our electric delivery system. The Company continues to evaluate opportunities to make prudent investments in new technologies that provide value to our customers.

## III. <u>OVERVIEW OF DUKE ENERGY KENTUCKY'S RATE CASE</u>

**Q. PLEASE EXPLAIN WHY DUKE ENERGY KENTUCKY PROPOSES TO INCREASE ITS RETAIL ELECTRIC RATES.**

A. The Company proposes new rates because our present base rates are no longer sufficient to enable the Company to furnish adequate, efficient, and reasonable service or have the opportunity to earn a fair rate of return on investments. Duke Energy Kentucky also needs to reflect the costs of service related to our capital investments and the operations and maintenance of our electric generation, transmission, and distribution systems that have occurred since our last rate case.

Other drivers for this case include aligning depreciation rates with the estimated useful life of the East Bend generating station. The Company is proposing in this case to adjust depreciation rates to reflect a December 31, 2038, retirement of East Bend as outlined in our 2024 IRP. The Company is also requesting inclusion of terminal net salvage in depreciation expense for East Bend and Woodsdale, consistent with established utility ratemaking principles. Company witness Sarah Lawler further discusses these topics in her testimony.

**Q. PLEASE GENERALLY DESCRIBE DUKE ENERGY KENTUCKY'S PROPOSED RATE INCREASE.**

A. Duke Energy Kentucky proposes to increase our annual electric base rate revenues by approximately $70 million or approximately 14.7 percent across all customer classes. This rate increase is necessary to allow Duke Energy Kentucky to recover our costs for providing reliable electric service and have the opportunity to earn a fair return on shareholders' investment in electric generation, transmission and distribution facilities.

Additionally, through this case, the Company is also proposing several enhancements for customers, including, but not limited to:

- A fee-free electronic payment process for customers;
- A new power hedging program to manage customer exposure to market prices; and
- A proposal to manage natural gas surplus for generation.

**Q. WHAT TEST PERIOD IS THE COMPANY USING IN THIS PROCEEDING?**

A. Duke Energy Kentucky is using a forecasted test period that spans the twelve months beginning July 1, 2025 and ending June 30, 2026.

## IV. INTRODUCTION OF WITNESSES

**Q. PLEASE INTRODUCE THE OTHER WITNESSES IN THIS PROCEEDING.**

A. I identify below the other individuals who will present testimony on behalf of Duke Energy Kentucky, as well as the subject matters of their respective testimony:

- Michael J. Adams, Senior Vice President, Concentric Energy Advisors, supports the Company's Lead-Lag Study;
- Marc W. Arnold, Vice President Zone Operations, discusses the Company's distribution and transmission system and how it provides safe, adequate, efficient, and reasonable service;
- Rebekah E. Buck, Director of Allocations and Reporting, supports the Company's various service agreements and associated allocations;
- Shannon A. Caldwell, Director, Compensation, supports the Company's compensation and benefits programs;
- Grady "Tripp" S. Carpenter, Director Regional Financial Forecasting, offers testimony supporting Duke Energy Kentucky's budgeting and forecasting processes and sponsors certain forecast information used for the test period financial data;

- Thomas "TK" Christie, Director Transmission & Distribution Vegetation Management, offers testimony on Duke Energy Kentucky's vegetation management practices;
- Jacob S. Colley, Director of Customer Regulatory Planning, Support and Compliance, discusses the Company's current customer satisfaction initiatives to further improve the customers' experience;
- Thomas J. Heath Jr., Corporate Finance Director, discusses the Company's credit ratings, financial objectives, cash requirements, capital structure and discusses the Company's dissolution of Cinergy Receivables;
- Matthew Kalemba, Vice President, Integrated Resource Planning, supports the analysis that support the retirement dates for the Company's fossil generation portfolio;
- Ibrar A. Khera, Lead Load Forecasting Analyst, performed and supports the Company's electric load forecast;
- Sarah E. Lawler, Vice President, Rates and Regulatory Strategy OH/KY, provides a detailed overview of the filing;
- William C. Luke, Vice President Midwest Generation, discusses the Company's generation portfolio;
- James J. McClay, Managing Director Natural Gas Trading, discusses the Company's proposals to implement a comprehensive power hedging program and to manage the natural gas fuel commodity;

- Sharif S. Mitchell, Manager Accounting II, offers testimony on Duke Energy Kentucky's capital accounting processes and supports the actual net plant-in service included in proposed rate base and other actual plant-related information;
- Joshua C. Nowak, Assistant Vice President, Concentric Energy Advisors, offers testimony supporting Duke Energy Kentucky's requested rate of return;
- John R. Panizza, Director, Tax Operations, addresses the Company's tax expense in the test period revenue requirement;
- Bruce L. Sailers, Director Jurisdictional Rate Administration, offers testimony as to rate design and tariff language;
- John J. Spanos, Gannet Fleming Valuation and Rate Consultants, LLC, provides testimony on Duke Energy Kentucky's 2022 depreciation study and necessary updates;
- Lisa D. Steinkuhl, Director Rates, and Regulatory Planning, provides testimony supporting Duke Energy Kentucky's overall revenue requirement for the test period and certain adjustments to the test period financial data;
- John D. Swez, Managing Director, Trading and Dispatch, discusses the Company's participation in the wholesale electric markets, updates to the billing line items recovered through applicable recovery mechanisms, and supports the operational life of the Company's coal-fired generating assets for purposes of depreciation;

- Danielle L. Weatherston, Manager Accounting II, offers testimony regarding the Company's accounting policies, the accounting treatment requested in this case, and supports other actual financial data included in this application; and
- James E. Ziolkowski, Director, Rates and Regulatory Planning, provides testimony regarding Duke Energy Kentucky's cost of service study.

## V. ATTACHMENTS SPONSORED BY WITNESS

**Q. PLEASE DESCRIBE FR 7(1).**

A. FR 7(1) requires the original and 10 copies of the Application to be filed plus a copy for anyone named as an interested party. Duke Energy Kentucky elected, and was approved for, the use of electronic filing procedures in this matter, in accordance with 801 KAR 5:001, Section 8. Furthermore, in a July 22, 2021, Order in Case No. 2020-00085, the Commission granted a "permanent deviation from the filing requirement in that section that requires a paper copy be filed with the Commission or other parties to that case." In accordance with the aforementioned rules and orders, Duke Energy Kentucky will retain the original filing in paper medium.

**Q. PLEASE DESCRIBE FR 14(1) THROUGH FR 14(4).**

A. These filing requirements provide for the Company to seek proposed new rates through a written Application addressing various matters, including the full name, address, and electronic mail address of the Company, and set forth the facts upon which the Application is based, with a request for the order, authorization,

permission, or certificate desired and a reference to the particular law requiring or providing the same. FR 14(2) applies to Duke Energy Kentucky because it is a corporation, registered to do business, and is in good standing in the Commonwealth of Kentucky. The Application submitted in this proceeding includes this information and was prepared at my direction. FR 14(3) and FR 14(4) are not applicable to Duke Energy Kentucky because it is neither a limited liability company nor a limited partnership.

**Q. PLEASE DESCRIBE FR 16(1)(b)(1).**

A. FR 16(1)(b)(1) is a statement for the reason for the adjustment. As I explained above and as further explained by Ms. Lawler, the Company is proposing new electric base rates because the present rates reflect the cost of service from the Company's last base electric rate case filed in 2022 and updated depreciation rates filed in 2022, which are no longer sufficient to enable the Company to furnish adequate, efficient, and reasonable service at a fair, just, and reasonable rate. Duke Energy Kentucky also needs to reflect the costs of service related to capital investments and the operation and maintenance of our electric generation, transmission, and distribution systems that have occurred since the 2022 rate case.

**Q. PLEASE DESCRIBE FR 16(1)(b)(2).**

A. FR 16(1)(b)(2) is the certificate of assumed name. Duke Energy Kentucky's actual legal name is "Duke Energy Kentucky, Inc." The Company has filed for the assumed name of "Duke Energy." The certificate of assumed name is provided with our filing.

**Q. PLEASE DESCRIBE FR 16(1)(b)(5).**

A. FR 16(1)(b)(5) is a statement that customer notice has been given in accordance with the Commission's rules. The Company is publishing notice in accordance with the Commission's regulations.

**Q. PLEASE DESCRIBE FR 16(2).**

A. FR 16(2) is the notice of intent submitted to the Commission at least 30, but no more than 60, days prior to filing the Application. The notice was filed on November 1, 2024, at my direction.

**Q. PLEASE DESCRIBE FR 16(3).**

A. FR 16(3) states that notice given in accordance with 807 KAR 5:001 Section 17 will satisfy notice requirements of 807 KAR 5:051, Section 2. The Company provided notice to customers in accordance with 807 KAR 5:001 Section 17.

**Q. PLEASE DESCRIBE FR 16(7)(a).**

A. FR 16(7)(a) is a statement of attestation from me, the utility's chief officer in charge of Kentucky operations on the existing programs to achieve improvements in efficiency and productivity, including an explanation of the purpose of each program. The efficiency and productivity benefits that have resulted from these programs have occurred over time and thus are reflected in the Company's budgets included in the forecasted test period in this proceeding. These programs are described below:

- Service outage management systems: We manage electric outages using the following systems designed to enhance efficiency and productivity: Supervisory Control and Data Acquisition, the

Distribution Outage Management System, and the Distribution Management System. Mr. Arnold describes our outage management process and systems in more detail.

- Electric distribution system maintenance programs: Our major programs to achieve efficiency and productivity in maintaining our distribution system are the substation inspection program, the line inspection program, the vegetation management program, the ground-line inspection and treatment program, underground cable replacement program, the capacitor maintenance program, and dissolved gas analysis in substations program. These programs are all designed to keep our distribution systems in good working order through efficient use of our resources. These programs are part of our distribution maintenance practices, which Mr. Arnold discusses.
- Plant maintenance and pollution control improvements: Mr. Luke discusses various maintenance schedules and capital improvements, which have or will enhance the efficiency and productivity of the plants.

The cost savings impacts of these programs are reflected in the forecasted test period.

**Q. PLEASE DESCRIBE FR 16(7)(e).**

A. FR 16(7)(e) is a statement of attestation signed by me, the utility's chief officer in charge of Kentucky operations, that the forecast is reasonable, reliable, and made in good faith and all basic assumptions used in the forecast have been identified

and justified and the forecast contains the same assumptions and methodologies as used in the forecast for use by management or an explanation for differences that exist, if applicable, and that productivity and efficiency gains are included.

**Q. PLEASE DESCRIBE FR 17(1)**

A. FR 17(1) relates to public postings. Duke Energy Kentucky will post a copy of the notice and Application at our place of business and will also make available on the Company's website a copy of the public notice and a hyperlink to the Commission's website where the case documents will be available.

**Q. PLEASE DESCRIBE FR 17(2).**

A. FR 17(2) is the customer notice.

**Q. PLEASE DESCRIBE FR 17(3).**

A. FR 17(3) includes the method of notice. Duke Energy Kentucky has published notice in newspapers of general circulation. Company witness Sailers supports FR 17(4), which describes required content of the notice. Duke Energy Kentucky has included all content listed in FR 17(4) in its notice.

**Q. PLEASE DESCRIBE FR KRS 278.180.**

A. FR KRS 278.180 is the pre-filing notice.

## VI. CONCLUSION

**Q. WERE FR 7(1), FR 14(1), FR 14(2), 14(3), 14(4), FR 16(1)(b)(1), FR 16(1)(b)(2), FR 16(1)(b)(5), FR 16(2), FR 16(3), FR 16(7)(a), FR 16(7)(e), FR 17(1), FR 17(2), FR 17(3), FR KRS 278.180, AND ATTACHMENTS ABS-1 THROUGH 3 PREPARED BY YOU OR UNDER YOUR SUPERVISION?**

A. Yes.

**Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

A. Yes.

**VERIFICATION**

**STATE OF OHIO** )
) **SS:**
**COUNTY OF HAMILTON** )

The undersigned, Amy B. Spiller, State President of Duke Energy Ohio, Inc. and its subsidiary, Duke Energy Kentucky, Inc., being duly sworn, deposes and says that she has personal knowledge of the matters set forth in the foregoing testimony and that it is true and correct to the best of her knowledge, information and belief.

Amy B. Spiller

Amy B. Spiller, Affiant

Subscribed and sworn to before me by Amy B. Spiller, on this 2ND day of DECEMBER, 2024.

ADELE M. FRISCH, NOTARY PUBLIC
COMM. EXP. JANUARY 5, 2029
STATE OF OHIO

Adele M. Frisch

NOTARY PUBLIC

My Commission Expires: 1/5/2029

# CONFIDENTIAL PROPRIETARY TRADE SECRET

# CONFIDENTIAL ATTACHMENT ABS-1

# FILED UNDER SEAL

POWER

# 2023 Electric Utility Residential Customer Satisfaction Study

## Final Industry Topline

December 2023

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# 2023 J.D. Power Electric Utility Residential Customer Satisfaction Study

PRESS RELEASE

## Higher Monthly Bills Contribute to Decline in Customer Satisfaction with Electric Utilities, J.D. Power Finds

13 December 2023

Overall satisfaction among electric utility residential customers declines 18 points to 713 (on a 1,000-point scale) from a year ago, marking the third consecutive year of decreasing satisfaction, according to the J.D. Power 2023 Electric Utility Residential Customer Satisfaction Study, released today. More than half (58%) of electric utility customers say they were not aware of rate increases and as the average electric utility bill is up to $178 per month, satisfaction with price decreased 33 points to 627.

"Utilities need to communicate why a rate increase is necessary and what the benefit is to customers to help mitigate some of the negative perceptions behind the rising costs," said John Hazen, managing director of utility intelligence at J.D. Power. "Energy efficiency awareness, reliability improvements, community outreach and participation in local events are the feel-good stories utility providers should lead with to help increase overall satisfaction."

**Study Results**

- **East Large** Segment: **PSE&G** *(for a second consecutive year)*
- **Midwest Large** Segment: **MidAmerican Energy** *(for a second consecutive year)*
- **South Large** Segment: **Georgia Power** *(for a second consecutive year)*
- **West Large** Segment: **SRP** *(for a 22nd consecutive year)*

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*The 2023 Electric Utility Residential Customer Satisfaction Study is based on responses from 104,801 online interviews conducted from January 2023 through November 2023 among residential customers of the 149 largest electric utility brands across the United States, which represent more than 105 million households.*

For more information about the 2023 Electric Utility Residential Customer Satisfaction Study, visit https://www.jdpower.com/business/press-releases/2023-electric-utility-residential-customer-satisfaction-study

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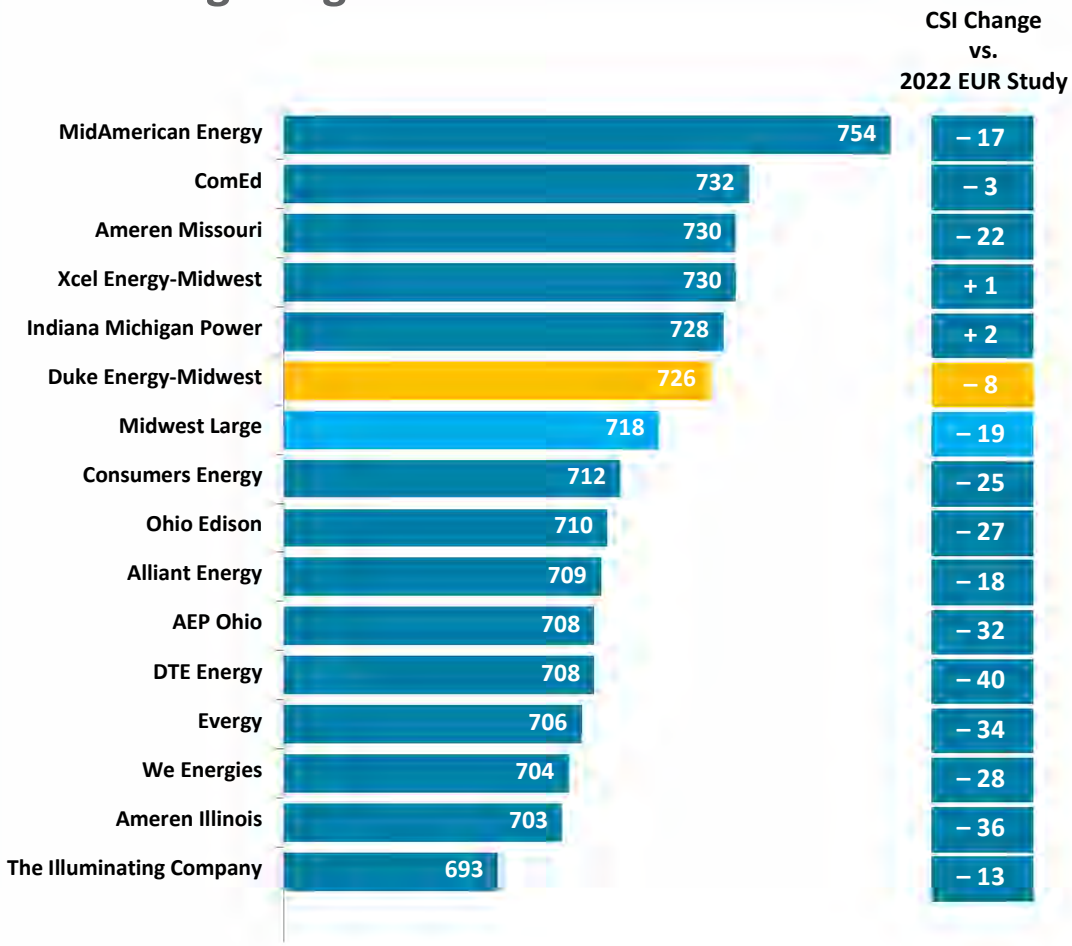
# Midwest Large Region – Final Result

- While the industry and Midwest Large Region saw declining average scores in 2023, **DEMW is down only 8 points vs. 2022, gaining ground on both the Midwest Large Region and the industry – while finishing the year in the 2nd quartile among large utilities nationally**

## 2023 J.D. Power Electric Utility Residential Study CSI: Midwest Large Region

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# CONFIDENTIAL PROPRIETARY TRADE SECRET

# CONFIDENTIAL ATTACHMENT ABS-3

# FILED UNDER SEAL

**COMMONWEALTH OF KENTUCKY**

**BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

| | | |
|---|---|---|
| THE ELECTRONIC APPLICATION OF DUKE ENERGY KENTUCKY, INC., FOR: 1) AN ADJUSTMENT OF THE ELECTRIC RATES; 2) APPROVAL OF NEW TARIFFS; 3) APPROVAL OF ACCOUNTING PRACTICES TO ESTABLISH REGULATORY ASSETS AND LIABILITIES; AND 4) ALL OTHER REQUIRED APPROVALS AND RELIEF. | ) | CASE NO. 2024-00354 |

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**DIRECT TESTIMONY OF**

**MICHAEL J. ADAMS**

**ON BEHALF OF**

**DUKE ENERGY KENTUCKY, INC.**

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December 2, 2024

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ATTACHMENTS:


Attachment MJA-1 Resume of Michael J. Adams

Attachment MJA-2 Calculated lead and lag days

## I. INTRODUCTION AND BACKGROUND

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Michael J. Adams. My business address is 293 Boston Post Road West,
3 Suite 500, Marlborough, Massachusetts 01752.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?**

5 A. I am a Senior Vice President with Concentric Energy Advisors, Inc. (Concentric).

6 **Q. PLEASE DESCRIBE CONCENTRIC.**

7 A. Concentric is a management consulting and economic advisory firm focused on the
8 North American energy and water industries. Concentric specializes in regulatory
9 and litigation support, transaction-related financial advisory services, energy
10 market strategies, market assessments, energy commodity contracting and
11 procurement, economic feasibility studies, and capital market analyses and
12 negotiations.

13 **Q. WHAT ARE YOUR RESPONSIBILITIES IN YOUR CURRENT**
14 **POSITION?**

15 A. As a consultant, my responsibilities include assisting clients in identifying and
16 addressing business issues. My primary areas of focus have been regulatory,
17 financial and accounting related issues.

18 **Q. PLEASE DESCRIBE YOUR EDUCATION.**

19 A. I have a Master of Business Administration in Finance from the University of
20 Illinois – Springfield and a Bachelor of Science in Accounting from Illinois
21 College. I am a certified public accountant and a member of the American Institute

of Certified Public Accountants and the Illinois Society of Certified Public Accountants.

**Q. PLEASE DESCRIBE YOUR WORK EXPERIENCE.**

A. I have worked for an investor-owned utility, a regulatory agency, and most recently as a consultant to the energy industry. I have managed and/or participated in a wide variety of consulting engagements. Please see Attachment MJA-1 for a statement of my background and qualifications.

**Q. HAVE YOU EVER TESTIFIED IN A REGULATORY PROCEEDING?**

A. Yes. I have provided expert testimony or reports before the Arizona Corporation Commission; the Arkansas Public Service Commission; the City of El Paso; the Connecticut Public Utilities Regulatory Authority, the Federal Energy Regulatory Commission (FERC); the Georgia Public Service Commission; the Hawaii Public Utility Commission; the Idaho Public Utilities Commission; the Illinois Commerce Commission; the Maine Public Utilities Commission; the Maryland Public Service Commission; the Massachusetts Department of Telecommunications and Energy; the Missouri Public Service Commission; the Public Service Commission of the State of Montana; the New Hampshire Public Utilities Commission; the New Mexico Public Regulation Commission; the State of New Jersey Board of Public Utilities; the Oklahoma Corporation Commission; the Ontario Energy Board; the Pennsylvania Public Utility Commission; the Tennessee Public Utility Commission; the Public Utility Commission of Texas; the State Corporation Commission of Virginia; and the Public Service Commission of West Virginia.

## II. PURPOSE OF TESTIMONY

1 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

2 A. I prepared and support the lead-lag study used to develop cash working capital
3 (CWC) factors and ultimately to calculate the Company's CWC requirements. The
4 CWC revenue lags and expense leads are set forth in Attachment MJA-2.

5 **Q. ARE YOU SPONSORING ANY ATTACHMENTS TO YOUR DIRECT**
6 **TESTIMONY?**

7 A. Yes. I am sponsoring Attachment MJA-1, which is a statement of my background
8 and qualifications and Attachment MJA-2 which contains the calculated lead and
9 lag days.

10 **Q. DID YOU CALCULATE THE COMPANY'S CWC REQUIREMENT?**

11 A. Yes, I have calculated the Company's CWC requirement. Attachment MJA-2
12 summarizes the results of the electric base period and forecasted period lead lag
13 studies. As shown in the attachment, the CWC allowance for the base period is
14 $7,495,342 and the CWC allowance for the forecasted test period is $4,507,797.

## III. CASH WORKING CAPITAL

### A. Overview

15 **Q. WHAT IS "CASH WORKING CAPITAL"?**

16 A. CWC is the amount of funds required to finance the day-to-day operations of the
17 Company.

18 **Q. HOW WAS THE COMPANY'S CWC AMOUNT DETERMINED?**

19 A. The CWC allowance was determined by a lead-lag study that was used to analyze
20 the lag time between the date customers receive service and the date customers'

1 payments are received, processed, and available to the Company. The lag is offset
2 by a lead time during which the Company receives goods and services but pays for
3 them at a later date. The "leads" and "lags" are both measured in days. The lead
4 and lag days are then divided by 365 to determine the daily CWC factors. These
5 CWC factors are then multiplied by the annual test year revenues and expenses to
6 determine the amount of CWC required for operations. The resulting amount of
7 cash working capital is then included as part of the Company's rate base.

8 **Q. WHAT IS A LEAD-LAG STUDY?**

9 A. A lead-lag study is an analysis of the timing of applicable cash inflows to a utility
10 in conjunction with an analysis of the timing of cash outflows from the utility. I
11 will discuss cash inflows and outflows at various points throughout my testimony,
12 but in brief they primarily involve operational expenses and revenue items. Leads
13 and lags are measured in days and are dollar-weighted, where appropriate, to reflect
14 the flow of funds.

15 **Q. IS THE COMPANY REQUIRED TO PERFORM A LEAD-LAG STUDY?**

16 A. Yes. The Commission ordered the Company to perform a lead-lag study to justify
17 a cash working capital allowance in rate base.[1]

18 **Q. DID THE LEAD-LAG STUDY EXCLUDE NONCASH ITEMS AND**
19 **BALANCE SHEET ADJUSTMENTS?**

20 A. Yes.

[1] *In the Matter of the Electronic Application of Duke Energy Kentucky, Inc. for (1) An Adjustment of Electric Rates; (2) Approval of New Tariffs; (3) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; and (4) All Other Required Approvals and Relief,* Case No. 2022-00372, Order (Oct. 12, 2023).

**Q. IS THE METHODOLOGY EMPLOYED TO DETERMINE THE COMPANY'S CWC ALLOWANCE CONSISTENT WITH THE APPROACH HISTORICALLY ACCEPTED BY UTILITY REGULATORY COMMISSIONS?**

A. Yes. The methodology employed to determine the Company's CWC allowance is consistent with the methodology used by the Company in the past and has been reviewed and adopted by numerous regulatory commissions across the country.

**Q. FOR WHAT PERIOD WAS THE LEAD-LAG STUDY PERFORMED?**

A. The lead-lag study analyzed Duke Energy Kentucky's electric business cash transactions and invoices for the twelve months ended December 31, 2023. (Study Period). The period examined appropriately reflects the current practices and timing of the provisioning/receipt of goods and services and the payment for such goods and services. The leads and lags were applied to the Company's level of expenses and revenues for the forecasted test period (twelve months ending June 30, 2026).

**Q. HAVE THERE BEEN ANY MATERIAL CHANGES IN THE COMPANY'S PROCESSES THAT YOU REVIEWED SINCE THE END OF CALENDAR YEAR 2023?**

A. No, there have not.

**Q. IN GENERAL, HOW DID YOU QUANTIFY THE LEADS AND LAGS IN THE STUDY?**

A. Study period data was used as the basis of the study and data extracts and other forms of information from various functional areas including accounting, payroll, customer service, human resources, accounts payable and tax were analyzed.

**Q. WHAT WAS THE SOURCE OF INFORMATION YOU UTILIZED TO DETERMINE THE LEADS AND LAGS IN THE CWC ANALYSIS?**

A. Data from the Company's Accounts Payable, Customer Service, Human Resources, Payroll, and Tax systems was used to calculate the revenue lag and expense leads. The information derived from these sources, together with analyses of specific transactions, led to the determination of the appropriate lead-lag days for Duke Energy Kentucky.

**Q. HOW WERE THE RESULTS OF THE LEAD-LAG STUDY USED TO DETERMINE DUKE ENERGY KENTUCKY'S CWC ALLOWANCE?**

A. I used what is called a gross lag methodology to determine the Company's CWC requirement to be included in the Company's rate base. Under the gross lag methodology, the revenue lag is divided by 365 days to calculate a CWC factor for revenues. This factor is then applied to total revenues to determine the CWC allowance for revenues. This same methodology was used to calculate the CWC factor for expense leads, which were also divided by 365 to calculate a CWC factor. The resulting factors were applied to expense amounts to determine the CWC allowance for these items.

## B. Revenue Lag

1 **Q. WHAT IS A REVENUE LAG AND HOW IS IT DETERMINED?**

2 A. The revenue lag measures the number of days from the date service was rendered
3 until the date the payment was received and such funds were available to the
4 Company.

5 **Q. WHAT ARE THE COMPONENTS OF THE REVENUE LAG?**

6 A. The revenue lag consists of the following components: 1) service lag; 2) billing lag;
7 3) collection lag; and 4) payment processing lag.

8 **Q. WHAT IS MEANT BY SERVICE LAG?**

9 A. Service lag refers to the period of time from when service is rendered to customers
10 until the time the customers' meters are read. The average service lag was
11 determined to be 15.21 days (i.e., 365 days of the year divided by 12 months divided
12 by 2). Twelve months was appropriate to use for the purpose of determining the
13 service lag given that Duke Energy Kentucky bills its customers monthly.

14 **Q. WHAT IS THE MID-POINT METHODOLOGY?**

15 A. To determine the service lead or lag, it was assumed that service was provided (or
16 received) ratably over a given period (i.e., a month). For example, with the revenue
17 lag, it was assumed that a customer received electric service ratably over an entire
18 month and not just at the end of a month. Adding the one-half month to the
19 derivation of the lead or lag is referred to as the mid-point methodology.

20 **Q. WHAT IS MEANT BY "BILLING LAG"?**

21 A. Billing lag refers to the average number of days from the date on which the
22 customers' meters were read until the date the customers are billed. Based on

information provided by the Company, customers are billed shortly after the meter reading occurs. Based on this information, a billing lag of 2.83 days was determined.

**Q. WHAT IS MEANT BY "COLLECTION LAG"?**

A. The collection lag refers to the average amount of time from the date Duke Energy Kentucky issues a bill to the customer to the date that the Company receives payment from that customer. The collection lag was calculated using accounts receivable aging data for the Study Period. Based on the analysis of this data, Duke Energy Kentucky's average collections lag was determined to be 26.66 days.

**Q. WHAT IS THE PAYMENT PROCESSING LAG?**

A. The payment processing lag reflects the time between the receipt of a customer's payment and the payment being processed and deposited into the Company's bank account. Based on Company information, approximately 17 percent of payments are deposited on the same day as received, and 83 percent are deposited the following day. Using this information, a payment processing lag of 0.83 days was calculated.

**Q. PLEASE SUMMARIZE DUKE KENTUCKY'S REVENUE LAG.**

A. Duke Kentucky's revenue lag, by lag component, is summarized as follows:

| | |
|---|---|
| Service Lag | 15.21 |
| Billing Lag | 2.83 |
| Collections Lag | 26.66 |
| Payment Processing Lag | 0.83 |
| Total Revenue Lag | 45.52 |

### C. Leads and Lags for Taxes Other Than Income Taxes

1 **Q. WHAT TAXES OTHER THAN INCOME TAXES WERE ANALYZED IN**
2 **THE CWC STUDY?**
3 A. The following taxes and charges have been included in the study: (1) Regulatory
4 Fees; (2) Kentucky Sales/Use Tax; (3) Utility Gross Receipts License Tax; (4)
5 Local Franchise Fees; (5) Property/ Real Estate Tax; (6) Federal Unemployment
6 Taxes; and (7) Kentucky Unemployment Taxes.
7 **Q. WHAT ARE THE LEADS ASSOCIATED WITH EACH TYPE OF TAXES**
8 **OTHER THAN INCOME TAXES THAT YOU CONSIDERED IN THE**
9 **CASH WORKING CAPITAL ANALYSIS?**
10 A. The treatment of each category of taxes and fees included in the study is described
11 below:
12 • Regulatory Fees: The Company is required to pay these fees annually for
13 the twelve month period ending June 30th of each year. Based on statutory
14 filing and payment dates in the Study Period, a lead time of (172.00) days
15 was calculated.
16 • Kentucky Sales and Use Tax: The Company is required to file an annual
17 energy exemption return and report the calculated estimate for energy
18 purchases on the sales and use tax return monthly. Based on the statutory
19 filing and payment dates in the Study Period, a lead time of 35.09 days was
20 calculated.
21 • Utility Gross Receipts License Tax: The Company pays the Gross Receipts
22 License Tax on a monthly basis to fund local schools. Based on the statutory

filing and payment dates in the Study Period, a lead time of 35.08 days was calculated.

- Local Franchise Fee: The Company is required to pay franchise fees to various cities throughout Kentucky on either a monthly or quarterly basis. The payment frequency is determined by the ordinance approved by each locality. Based on statutory filing and payment dates in the Study Period, a lead time of 35.54 days was calculated.
- Property/ Real Estate Taxes: The State of Kentucky taxes all property which is not specifically exempted by the State Constitution. Duke Kentucky pays property/real estate taxes to multiple Kentucky counties. The payment frequency is determined by the ordinance approved by each locality. Based on statutory filing and payment dates in the Study Period, a lead time of 265.35 days was calculated.
- Federal Unemployment Taxes: These taxes are remitted based on schedules provided by the Internal Revenue Service. Based on statutory filing and payment dates in the Study Period, a lead time of 105.65 days was calculated.
- State Unemployment Taxes: These taxes are remitted based on schedules provided by the Kentucky Department of Revenue. Based on statutory filing and payment dates in the Study Period, a lead time of 105.58 days was calculated.

1 **Q. HOW DID YOU ANALYZE FEDERAL AND STATE INCOME TAXES**
2 **FOR THE LEAD-LAG STUDY?**
3 A. The Company is required to pay its federal and state income taxes four times a year,
4 on April 15th, June 15th, September 15th, and December 15th for the current year.
5 Using those payment dates for the Study Period, a lead time of 37.50 days was
6 determined. This lead was applied to the current income taxes payable.
7 **Q. DOES THE COMPANY TRACK THE COLLECTION OF FUNDS**
8 **ASSOCIATED WITH VARIOUS TAXES SEPARATELY?**
9 A. No, the funds are included on customers' bills and the funds are part of customers'
10 overall payments.

**D. <u>Expense Leads</u>**

11 **Q. WHAT IS AN EXPENSE LEAD?**
12 A. An expense lead is the time difference between when a good or service is provided
13 to Duke Energy Kentucky and when the Company pays for that good or service.
14 **Q. HOW IS AN EXPENSE LEAD DETERMINED?**
15 A. An expense lead consists of two components: (1) a service lead, and (2) a payment
16 lead. The service lead assumes that the goods and services are received ratably over
17 the service period, which in many cases is a month. The payment lead represents
18 the elapsed time from the end of the service period until the payment is made. Check
19 float reflects the elapsed time between the date the payment is made and the date
20 the cash leaves the Company's bank account.

**Q. WHAT EXPENSE-RELATED LEADS WERE CONSIDERED IN THE LEAD-LAG ANALYSIS?**

A. Lead times associated with the following expense categories were considered in the study: (1) Payroll and Withholdings, (2) Employee Benefits, (3) Gas Purchases, (4) Purchased Power, (5) Intercompany Transactions, (6) Other Operation and Maintenance Expenses, (7) Lime Purchases, (8) Coal Purchases, (9) Oil Purchases, (10) Emissions Fees, and (11) Insurance Expenses.

**Q. PLEASE EXPLAIN THE LEAD ASSOCIATED WITH DUKE ENERGY KENTUCKY'S PAYROLL AND WITHHOLDING EXPENSES.**

A. As part of the study, the payroll leads for Duke Energy Kentucky and Duke Energy Business Services (DEBS) were analyzed separately and combined for a total payroll lead. For biweekly payroll periods ending on a Sunday, employees are normally paid the following Friday. For semi-monthly payroll periods ending on the 15$^{th}$ or the end of the month, employees are normally paid on the 15$^{th}$ and the last day of the month. The net lead for labor-related costs, including deductions, and withholding taxes was determined to be 10.56 days.

**Q. WHAT IS THE EXPENSE LEAD TIME ASSOCIATED WITH LONG TERM INCENTIVE PAY?**

A. Utilizing Study Period pay information, a weighted lead time of 600 days was determined.

**Q. WHAT IS THE EXPENSE LEAD TIME ASSOCIATED WITH SHORT TERM INCENTIVE PAY?**

A. Utilizing Study Period pay information, a weighted lead time of 252.17 days was determined.

**Q. WHAT IS THE EXPENSE LEAD TIME ASSOCIATED WITH PAYROLL TAXES?**

A. Utilizing Study Period pay period information, a weighted lead time of 25.63 days was determined.

**Q. WHAT EMPLOYEE BENEFITS DOES THE COMPANY PROVIDE TO ITS EMPLOYEES?**

A. Company witness Caldwell describes the Company's employee compensation and benefits in his testimony. Utilizing Study Period pay information, a weighted lead time of 13.64 days was determined.

**Q. HOW WAS THE EXPENSE LEAD TIME ASSOCIATED WITH GAS PURCHASES DETERMINED?**

A. The Company purchases commodity, pipeline, and transportation services from various suppliers on a monthly basis to support electric generation assets. Typically, the Company receives invoices for these services around the middle of the following month. Based on actual amounts and payment dates during the Study Period, a dollar-weighted lead of 40.63 days was determined.

1 **Q. WHAT IS THE EXPENSE LEAD TIME ASSOCIATED WITH**
2 **PURCHASED POWER?**
3 A. The Company purchases power through contracted power purchase agreements.
4 Based on the purchased power records during the Study Period provided by the
5 Company, a lead time of 12.48 days was determined.
6 **Q. HOW WAS THE EXPENSE LEAD TIME ASSOCIATED WITH**
7 **INTERCOMPANY BILLINGS DETERMINED?**
8 A. Duke Energy Kentucky is a subsidiary of Duke Energy Ohio and receives and is
9 billed for the various services from its parent company and other affiliated
10 companies. Duke Energy Kentucky pays its affiliates when services are provided,
11 or when an affiliate company pays an invoice that should be borne by multiple Duke
12 Energy affiliate companies. The billing for both the services received and the
13 services provided is done monthly and settlement is routinely done by the end of
14 the month following the month of service. The payments are made electronically.
15 Based on a review and analysis of Study Period data, a lead time of 41.31 days was
16 determined.
17 **Q. WHAT ARE THE LEAD TIMES ASSOCIATED WITH OTHER O&M**
18 **EXPENSES?**
19 A. The Company engages in transactions with various vendors for a variety of
20 services. These transactions include such items as parts, supplies, facility and
21 system maintenance, customer service, and legal services. A random sample of
22 these transactions and invoices were reviewed to determine the service periods

1 covered and the payment terms. Using this sample set of data and actual payment
2 dates, a dollar-weighted lead time of 80.94 days was determined.

3 **Q. HOW WAS THE EXPENSE LEAD TIME ASSOCIATED WITH LIME**
4 **PURCHASES DETERMINED?**

5 A. The Company purchases commodity services from various suppliers on a routine
6 basis. Payments for these purchases are typically due within 15 days. Based on
7 actual amounts paid and payment dates during the Study Period, a dollar-weighted
8 lead of 20.53 days was determined.

9 **Q. HOW WAS THE EXPENSE LEAD TIME ASSOCIATED WITH COAL**
10 **PURCHASES DETERMINED?**

11 A. The Company purchases coal from various suppliers on a monthly basis. Typically,
12 the Company receives invoices for these services around the middle of the
13 following month. Payments for these purchases are typically due within 15 days.
14 Based on actual amounts and payment dates during the Study Period, a dollar-
15 weighted lead of 13.28 days was determined.

16 **Q. HOW WAS THE EXPENSE LEAD TIME ASSOCIATED WITH OIL**
17 **PURCHASES DETERMINED?**

18 A. The Company purchases oil from various suppliers on a monthly basis. Typically,
19 the Company receives invoices for these services around a week after receipt.
20 Payments for these purchases are typically due within 10 days. Based on actual
21 amounts and payment dates during the Study Period, a dollar-weighted lead of 9.26
22 days was determined.

**Q. HOW WAS THE EXPENSE LEAD TIME ASSOCIATED WITH EMISSIONS FEES DETERMINED?**

A. The Company pays an annual emissions fee to the State of Kentucky Treasurer. The emissions fee from 2021 was paid in January 2023. Based on actual amounts and payment dates during the Study Period, a dollar-weighted lead of 577.50 days was determined.

**Q. HOW WAS THE EXPENSE LEAD TIME ASSOCIATED WITH INSURANCE EXPENSES DETERMINED?**

A. The Company pays for property and liability insurance from various brokers. Based on actual amounts and payment dates during the Study Period, a dollar-weighted lead of (128.90) days was determined.

## IV. CONCLUSION

**Q. HAVE YOU PREPARED AN ATTACHMENT THAT SUMMARIZES THE LEADS AND LAGS RESULTING FROM THE CASH WORKING CAPITAL ANALYSIS?**

A. Yes. Attachment MJA-2 summarizes the leads and lags derived from the CWC study prepared by Concentric.

**Q. HOW SHOULD THE RESULTS OF THE CWC STUDY BE REFLECTED IN THE COMPANY'S RATE FILING?**

A. The CWC allowance determined by the lead-lag study should be included as a component of the Company's rate base.

**Q. IS IT YOUR RECOMMENDATION THAT THE CWC ALLOWANCE BE INCLUDED IN THE COMPANY'S RATE BASE?**

A. Yes. It is my recommendation that the cash working capital allowance be included in the Company's rate base.

**Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

A. Yes, it does.

## VERIFICATION

| | | |
|---|---|---|
| **STATE OF ILLINOIS** | ) | |
| | ) | **SS:** |
| **COUNTY OF SANGAMON** | ) | |

The undersigned, Michael Adams, Senior Vice President, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing testimony and that it is true and correct to the best of his knowledge, information and belief.

Michael Adams

Michael Adams Affiant

Subscribed and sworn to before me by Michael Adams on this 27th day of November 2024.

Shelby Graham

NOTARY PUBLIC

OFFICIAL SEAL
SHELBY GRAHAM
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES: 3/31/2025

My Commission Expires: 3/31/2025

**MICHAEL J. ADAMS**
Senior Vice President

Mr. Adams has over thirty-five years of direct experience in the public utility industry. He has worked for an investor-owned utility, a regulatory agency, and most recently as a consultant to the utility industry.

While employed by Illinois Power Company, Mr. Adams monitored project expenditures associated with gas and electric distribution, transmission, and generation capital projects.

While employed by the Illinois Commerce Commission, Mr. Adams initially evaluated the rate filings of regulated utilities and provided expert testimony regarding the reasonableness of the requests. Mr. Adams was subsequently charged with developing and managing a management and operations audit program to evaluate company management policies, procedures and performance, as well as operational efficiency and effectiveness. Mr. Adams served as the Deputy Executive Director of the agency at the time of his departure. As a consultant, Mr. Adams has provided consulting services to regulatory agencies and regulated utilities on an array of operational and financial issues since 1995.

Prior to joining Concentric, Mr. Adams was a Managing Director of Navigant Consulting, Inc. Mr. Adams is a Certified Public Accountant, a graduate of Illinois College and holds an M.B.A. from the University of Illinois, Springfield.

Mr. Adams provides financial, regulatory, strategic, operational and litigation support to his energy clients. He has assisted clients with regulatory/legislative initiatives related to the approval and implementation of alternative regulation plans as well as the preparation and support of regulatory filings under alternative rate plans. Mr. Adams also provides advisory services in the areas of mergers and acquisitions. As a consultant, Mr. Adams has provided expert testimony or reports before State and Federal regulatory agencies.

**PROFESSIONAL HISTORY**

**Concentric Energy Advisors, Inc. (2007 – Present)**
Senior Vice President
Vice President

**Navigant Consulting, Inc. (1999 – 2007)**
Managing Director

**L.E. Burgess Consultants, Inc. (1995 – 1999)**

**Illinois Commerce Commission (1983 – 1995)**
Accounting/Rate Case Staff
Director, Management Audit/Studies
Deputy Executive Director

**Illinois Power Company (1981 – 1983)**
Accounting/Auditing Department

**EDUCATION**

**University of Illinois at Springfield**
M.B.A., Finance

**Illinois College**
B.S., Accounting

**REPRESENTATIVE PROJECT EXPERIENCE**

**Audits/Special Studies**

- Management audits
- Regulatory reviews/audits
- Project performance monitoring/reviews
- Prudence reviews
- Commission ordered studies
- Audit prep and support
- Project controls and assessments

**Affiliate Transactions**

- Code of Conduct
- Shared Services reviews
- Cost controls

**Benchmarking**

- O&M costs
- Capital expenditures
- Shared Services
- Operational performance
- Customer service
- Reliability

**Due Diligence/Litigation/Special Projects**

- Assessment of cost controls
- Financial outlook
- Historical/future performance assessment
- Merger Synergies
- Regulatory environment/assessment

**Expert Witness**

- **Regulatory proceedings**
- Civil litigation

**Litigation Support**

- Data review and analyses
- Position development and review
- Research
- Expert testimony and reports

**Regulatory Proceedings**

- Revenue Requirement
- Cash working capital
- Benchmarking
    - O&M
    - Capital
    - Shared Services
- Case development/management
- Multi-year rate plans
- Research
- Performance based regulation

**DESIGNATIONS AND PROFESSIONAL AFFILIATIONS**

Certified Public Accountant

American Institute of Public Accountants

Illinois Society of Certified Public Accountants

**AVAILABLE UPON REQUEST**

Extensive client and project listings, and specific references.

| SPONSOR | DATE | CASE/APPLICANT | DOCKET NO. | SUBJECT |
|---|---|---|---|---|
| **Arkansas Public Service Commission** | | | | |
| Arkansas Oklahoma Gas Corporation | 2002 | Arkansas Oklahoma Gas Corporation | 02-024-U | Reasonableness of ratemaking adjustments |
| Centerpoint Energy Arkla | 2005 | Centerpoint Energy Arkla | 04-121-U | Cash Working Capital |
| **Arizona Corporation Commission** | | | | |
| Liberty Utilities (Entrada Del Oro Sewer Company and Gold Canyon Sewer Company | 2022 | Liberty Utilities | SW-02519A-0235, SW-0362+A-21-0236, SW-04316A-21-0359 | Indirect Overhead/Capitalization Rates |
| **Connecticut Public Utilities Regulatory Authority** | | | | |
| Connecticut Natural Gas | 2013 | Connecticut Natural Gas | 13-06-08 | Cash Working Capital |
| United Illuminating Company | 2022 | United Illuminating Company | 22-08-08 | Cash Working Capital |
| **Federal Energy Regulatory Commission** | | | | |
| Granite State Gas Transmission | 2010 | Granite State Gas Transmission | RP10-896 | Revenue Requirement |
| **Georgia Public Service Commission** | | | | |
| Atlanta Gas Light Company | 2019 | Granite State Gas Transmission | 42315 | Cash Working Capital |
| **Hawaii Public Utilities Commission** | | | | |
| Hawaii Electric Light Company, Inc. | 2005 | Hawaii Electric Light Company, Inc. | 05-0315 | Allowance for Funds Used During Construction |
| **Idaho Public Utilities Commission** | | | | |
| Intermountain Gas Company | 2016 | Intermountain Gas Company | INT-G-16-2 | Cash working capital, prepared/supported benchmarking for client |
| **Illinois Commerce Commission** | | | | |
| Illinois Power Company | 1999 | Illinois Power Company | 99-0120/99-0134 (Cons.) | Functionalization/Unbundling of General and Intangible Assets and Administrative and General expenses. |
| Illinois Power Company | 2004 | Illinois Power Company | 04-0476 | Cash working capital and asset separation |

| SPONSOR | DATE | CASE/APPLICANT | DOCKET NO. | SUBJECT |
|---|---|---|---|---|
| Ameren Illinois Utilities | 2006 | Ameren Illinois Utilities | 06-0070/06-0071/06-0072 (Cons.) | Functionalization of Assets, Cash Working Capital, Shared Services Costs, Benchmarking |
| Ameren Illinois Utilities | 2007 | Ameren Illinois Utilities | 07-0585/07-0586/07-0587/ 07-0588/07-0589/07-0590 (Cons.) | Shared Services Costs, Asset Separation, Cash Working Capital |
| The Peoples Gas Light and Coke Company, Inc. and North Shore Gas Company | 2007 | The Peoples Gas Light and Coke Company, Inc. and North Shore Gas Company | 07-0241/07-0242 (Cons.) | Cash working capital |
| Northern Illinois Gas Company | 2008 | Northern Illinois Gas Company | 08-0363 | Cash working capital |
| Ameren Illinois | 2015 | Ameren Illinois | 16-0262 | Benchmarking of Utility Performance |
| Commonwealth Edison Company | 2022 | Commonwealth Edison Company | 22-0645 | Rider ZEA Reconciliation |
| Commonwealth Edison Company | 2022 | Commonwealth Edison Company | 22-0103 | Rider PE Reconciliation |
| **Maine Public Utilities Commission** | | | | |
| Emera Maine | 2017 | Emera Maine | Docket No. 2017-00198 | Cash working capital |
| Versant Power | 2020 | Versant Power | Docket No. 2020-00316 | Cash working capital |
| Versant Power | 2022 | Versant Power | Docket No. 2022-00255 | Cash working capital |
| **Maryland Public Service Commission** | | | | |
| Constellation Energy | 2009 | Constellation Energy | Case No. 9173, Phase II | Shared Services, Benchmarking |
| **Massachusetts Department of Public Utilities** | | | | |
| Massachusetts Distribution Companies | 2002 | Massachusetts Distribution Companies | DTE-99-84 | Reliability standards and the appropriateness of utilizing data for benchmarking purposes |
| **Missouri Public Service Commission** | | | | |
| AmerenUE (Union Electric Company) | 2002 | AmerenUE (Union Electric Company) | EC-2002-001 | Cash working capital |

| SPONSOR | DATE | CASE/APPLICANT | DOCKET NO. | SUBJECT |
|---|---|---|---|---|
| AmerenUE | 2003 | AmerenUE | GR-2003-0517 | Cash working capital |
| AmerenUE | 2007 | AmerenUE | ER-2007-0002 | Cash working capital |
| AmerenUE | 2008 | AmerenUE | ER-2008-0318 | Cash working capital |
| Missouri Gas Energy | 2006 | Missouri Gas Energy | GR-2006-0422 | Cash working capital |
| Ameren Missouri Gas | 2010 | Ameren Missouri Gas | GR-2010-0363 | Cash working capital |
| Ameren Missouri Electric | 2010 | Ameren Missouri Electric | ER-2011-0028 | Cash working capital |
| Ameren Missouri | 2012 | Ameren Missouri | ER-2012-0166 | Cash working capital |
| Ameren Missouri | 2014 | Ameren Missouri | ER-2014-0258 | Affiliate transactions, Benchmarking |
| Evergy Metro, Inc. | 2022 | Evergy Metro, Inc. | ER-2022-0129 | Cash working capital, Property Tax Tracker |
| Evergy Missouri West, Inc. | 2022 | Evergy Missouri West, Inc. | ER-2022-0130 | Cash working capital, Property Tax Tracker |
| **Public Service Commission of Montana** | | | | |
| Montana-Dakota Utilities | 2022 | Montana-Dakota Utilities | 2022.11.XXXX | Cash working capital |
| **New Hampshire Public Utilities Commission** | | | | |
| National Grid Energy North | 2010 | National Grid Energy North | DG 10-017 | Revenue Requirement |
| **New Mexico Public Regulation Commission** | | | | |
| New Mexico Gas Company | 2019 | New Mexico Gas Company | No. 19-00317-UT | Future Test Year Model / Revenue Requirement |
| **State of New Jersey Board of Public Utilities** | | | | |
| PSEG | 2018 | PSEG | ER18010029 & GR18010030 | Benchmarking |
| **Oklahoma Corporation Commission** | | | | |
| Arkansas Oklahoma Gas Corporation | 2003 | Arkansas Oklahoma Gas Corporation | PUD200300088 | Cash working capital |
| **Ontario Energy Board** | | | | |
| Hydro One Distribution Business | 2005 | Hydro One Distribution Business | - | Cash working capital |

| SPONSOR | DATE | CASE/APPLICANT | DOCKET NO. | SUBJECT |
|---|---|---|---|---|
| Hydro One Transmission Business | 2006 | Hydro One Transmission Business | - | Cash working capital |
| Toronto Hydro | 2006 | Toronto Hydro | - | Cash working capital |
| **Pennsylvania Public Utility Commission** | | | | |
| Allegheny Power | 2004 | Allegheny Power | M-00991220 | Reliability data and reasonableness of established standards |
| T.W. Phillips Gas and Oil Company, Inc. | 2006 | T.W. Phillips Gas and Oil Company, Inc. | R-00051178 | Cash working capital |
| **Public Utility Commission of Texas** | | | | |
| Texas-New Mexico Power Company | 2008 | Texas-New Mexico Power Company | 36025 | Revenue Requirement |
| El Paso Electric Company | 2012 | El Paso Electric Company | 40094 | O&M Benchmarking |
| El Paso Electric Company | 2014 | El Paso Electric Company | - | Benchmarking of New Generation Costs |
| El Paso Electric Company | 2015 | El Paso Electric Company | 44941 | Benchmarking of costs of new generation units |
| **Public Service Commission of West Virginia** | | | | |
| Appalachian Power Company | 2018 | Appalachian Power Company | 18-0646-E-42T | Cash working capital |
| **Tennessee Public Utility Commission** | | | | |
| Chattanooga Gas Company | 2018 | Chattanooga Gas Company | 18-00017 | Cash working capital |
| **Virginia State Corporation Commission** | | | | |
| Virginia Natural Gas | 2012 | Virginia Natural Gas | PUE-2010-00142 | Cash Working Capital |
| Virginia Natural Gas | 2017 | Virginia Natural Gas | - | Shared Services Review, Benchmarking, Cash Working Capital |
| Virginia Natural Gas | 2022 | Virginia Natural Gas | PUR-2022-00052 | Cash working capital |

Duke Kentucky Electric
Cash Working Capital Requirements
Base Period 12 Months Ended February 28, 2025
Lead Lag Summary

| Line No | | Test Period Annual Expense | (Lead) Lag Days | Day Weighted Amount | Source |
|---|---|---|---|---|---|
| | **Revenues** | (1) | (2) | (3) | (4) |
| 1 | Sales and Transportation Revenue | $456,173,835 | 45.52 | $20,767,038,786 | Revenues - Line 16 |
| 2 | Other Revenues | $2,950,883 | 45.52 | $134,337,169 | Revenues - Line 22 |
| 3 | **Total Revenue Lag** | $459,124,718 | 45.52 | $20,901,375,955 | |
| 4 | | | | | |
| 5 | **Operation & Maintenance Expense** | | | | |
| 6 | Natural Gas | $5,737,512 | 40.63 | $233,123,798 | Expenses - Line 2 |
| 7 | Oil | $1,474,304 | 9.26 | $13,650,528 | Expenses - Line 3 |
| 8 | Coal | $76,450,496 | 13.28 | $1,015,422,207 | Expenses - Line 4 |
| 9 | Purchased Power | $75,545,688 | 12.48 | $942,465,866 | Expenses - Line 5 |
| 10 | Lime | $23,451,582 | 20.53 | $481,564,413 | Expenses - Line 6 |
| 11 | Emission Fee | $450,656 | 577.50 | $260,253,840 | Expenses - Line 7 |
| 12 | Transm of Elec By Others | $24,452,046 | 12.48 | $305,050,087 | Expenses - Line 8 |
| 13 | Labor | $23,577,358 | 10.56 | $248,880,113 | Expenses - Line 9 |
| 14 | Incentive Pay STIP | $3,760,586 | 252.17 | $948,305,717 | Expenses - Line 10 |
| 15 | Incentive Pay LTIP | $0 | 600.00 | $0 | Expenses - Line 11 |
| 16 | Employee Pensions & Benefits - Acct 926 | $4,631,538 | 13.64 | $63,174,178 | Expenses - Line 12 |
| 17 | Prepaid Expenses | | | | |
| 18 | KY PSC Assesment Acct 928006 | $818,132 | (172.00) | -$140,718,704 | Expenses - Line 14 |
| 19 | Insurance - Property & Liability | $1,513,175 | (128.90) | -$195,052,188 | Expenses - Line 15 |
| 20 | Intercompany Transactions | $5,912,170 | 41.31 | $244,253,712 | Expenses - Line 16 |
| 21 | Other O&M Expenses | $31,629,298 | 80.94 | $2,560,038,411 | Expenses - Line 17 |
| 22 | Total Operating & Maintenance Exp Excl Acc 904 | $279,404,541 | 24.98 | $6,980,411,978 | |
| 23 | | | | | |
| 24 | **Other Taxes** | | | | |
| 25 | Franchise Tax | $2,585 | 35.54 | $91,871 | Expenses - Line 21 |
| 26 | Property Taxes | $14,289,628 | 265.35 | $3,791,716,442 | Expenses - Line 22 |
| 27 | Payroll Taxes | $1,789,178 | 25.63 | $45,860,365 | Expenses - Line 23 |
| 28 | Federal Unemployment Taxes | -$1,342 | 105.65 | -$141,789 | Expenses - Line 24 |
| 29 | State Unemployment Taxes | $557 | 105.58 | $58,806 | Expenses - Line 25 |
| 30 | Gross Receipts License Tax | $0 | 35.08 | $0 | Expenses - Line 26 |
| 31 | Sales & Use Taxes | -$1,464 | 35.09 | -$51,367 | Expenses - Line 27 |
| 32 | Total Other Taxes | $16,079,142 | 242.69 | $3,837,534,329 | |
| 33 | | | | | |
| 34 | **Income Taxes** | | | | |
| 35 | Federal Income Taxes | $9,500,525 | 37.50 | $356,269,688 | Expenses - Line 31 |
| 36 | State Income Taxes | $3,214,397 | 37.50 | $120,539,888 | Expenses - Line 32 |
| 37 | Total Income Taxes | $12,714,922 | 37.50 | $476,809,575 | |
| 38 | | | | | |
| 39 | **Total Expenses** | $308,198,605 | 36.65 | $11,294,755,882 | |
| 40 | | | | | |
| 41 | **Total Working Capital Expenses** | $308,198,605 | 36.65 | **$11,294,755,882** | |
| 42 | | | | | |
| 43 | Revenue Lag Days | | 45.52 | | |
| 44 | Expense Lag Days | | 36.65 | | |
| 45 | Net Lag Days | | 8.88 | | |
| 46 | | | | | |
| 47 | Average Daily Expense | | | $844,380 | |
| 48 | | | | | |
| 49 | **Cash Working Capital Requirement** | | | $7,495,342 | |
| 50 | | | | | |
| 51 | | | | | |
| 52 | | | | | |

Duke Kentucky Electric
Revenue Lag Summary
Base Period 12 Months Ended February 28, 2025

| Line No | Revenue Lag | Revenues Billed | (Lead) Lag Days | Source | Day Weighted Amount |
|---|---|---|---|---|---|
| 1 | Service Lag | | 15.21 | See Note 1 | |
| 2 | | | | | |
| 3 | Billing Lag | | 2.83 | | |
| 4 | | | | | |
| 6 | Collection Lag | | 26.66 | | |
| 7 | | | | | |
| 8 | Payment Processing Lag | | 0.83 | | |
| 9 | | | | | |
| 10 | Electric Sales | $453,390,796 | 45.52 | | $20,640,342,614 |
| 11 | | | | | |
| 12 | Other Transmission Revenues | $2,783,039 | 45.52 | | $126,696,172 |
| 13 | | | | | |
| 14 | PJM Reactive Revenue | $0 | | See Note 2 | $0 |
| 15 | | | | | |
| 16 | Total Sales & Transportation Revenues | $456,173,835 | 45.52 | | $20,767,038,786 |
| 17 | | | | | |
| 18 | Other Electric Rents | $1,216,743 | 45.52 | Line 10 | $55,391,491 |
| 19 | | | | | |
| 20 | Other Miscellaneous Revenues | $1,734,140 | 45.52 | Line 10 | $78,945,678 |
| 21 | | | | | |
| 22 | Total Other Revenues | $2,950,883 | | | $134,337,169 |
| 23 | | | | | |
| 24 | Total Revenues | $459,124,718 | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | Total Rev Lag Excl Non Rev Req Items | $459,124,718 | 45.52 | | $20,901,375,956 |
| 28 | | | | | |
| 29 | Notes: | | | | |
| 30 | 1. Computed as 365/12/2 | | | | |
| 31 | 2. Excluded from Revenue Requirements and Revenue lag calculation. | | | | |

Duke Kentucky Electric
Expense Lag Summary
Base Period 12 Months Ended February 28, 2025

| Line No | | Revenue Req Amount | (Lead) Lag Days | Source | Day Weighted Amount | |
|---|---|---|---|---|---|---|
| 1 | **Operation & Maintenance Expense** | | | | | |
| 2 | Natural Gas | $5,737,512 | 40.63 | | $233,123,798 | 2.06% |
| 3 | Oil | $1,474,304 | 9.26 | | $13,650,528 | 0.12% |
| 4 | Coal | $76,450,496 | 13.28 | | $1,015,422,207 | 8.99% |
| 5 | Purchased Power | $75,545,688 | 12.48 | | $942,465,866 | 8.34% |
| 6 | Lime | $23,451,582 | 20.53 | | $481,564,413 | 4.26% |
| 7 | Emission Fee | $450,656 | 577.50 | | $260,253,840 | 2.30% |
| 8 | Transm of Elec By Others | $24,452,046 | 12.48 | | $305,050,087 | 2.70% |
| 9 | Labor | $23,577,358 | 10.56 | | $248,880,113 | 2.20% |
| 10 | Incentive Pay STIP | $3,760,586 | 252.17 | | $948,305,717 | 8.40% |
| 11 | Incentive Pay LTIP | $0 | 600.00 | | $0 | 0.00% |
| 12 | Employee Pensions & Benefits - Acct 926 | $4,631,538 | 13.64 | | $63,174,178 | 0.56% |
| 13 | Prepaid Expenses | $0 | | | | |
| 14 | KY PSC Assesment Acct 928006 | $818,132 | (172.00) | | -$140,718,704 | -1.25% |
| 15 | Insurance - Property & Liability | $1,513,175 | (128.90) | | -$195,052,188 | -1.73% |
| 16 | Intercompany Transactions | $5,912,170 | 41.31 | | $244,253,712 | 2.16% |
| 17 | Other O&M Expenses | $31,629,298 | 80.94 | | $2,560,038,411 | 22.67% |
| 18 | Total Operating & Maintenance Exp Excl Acc 904 | $279,404,541 | 24.98 | | $6,980,411,978 | 61.80% |
| 19 | | | | | | |
| 20 | **Other Taxes** | | | | | |
| 21 | Franchise Tax | $2,585 | 35.54 | | $91,871 | 0.00% |
| 22 | Property Taxes | $14,289,628 | 265.35 | | $3,791,716,442 | 33.57% |
| 23 | Payroll Taxes | $1,789,178 | 25.63 | | $45,860,365 | 0.41% |
| 24 | Federal Unemployment Taxes | -$1,342 | 105.65 | | -$141,789 | 0.00% |
| 25 | State Unemployment Taxes | $557 | 105.58 | | $58,806 | 0.00% |
| 26 | Gross Receipts License Tax | $0 | 35.08 | | $0 | 0.00% |
| 27 | Sales & Use Taxes | -$1,464 | 35.09 | | -$51,367 | 0.00% |
| 28 | Total Other Taxes | $16,079,142 | 238.67 | | $3,837,534,329 | 33.98% |
| 29 | | | | | | |
| 30 | **Income Taxes** | | | | | |
| 31 | Federal Income Taxes | $9,500,525 | 37.50 | | $356,269,688 | 3.15% |
| 32 | State Income Taxes | $3,214,397 | 37.50 | | $120,539,888 | 1.07% |
| 33 | Total Income Taxes | $12,714,922 | 37.50 | | $476,809,575 | 4.22% |
| 34 | | | | | | |
| 35 | **Total Expenses** | $308,198,605 | 36.65 | | $11,294,755,882 | 100.00% |
| 36 | | | | | | |
| 37 | Notes: | | | | | |
| 38 | | | | | | |
| 39 | | | | | | |
| 40 | | | | | | |
| 41 | | | | | | |
| 42 | | | | | | |
| 43 | | | | | | |
| 44 | | | | | | |
| 45 | | | | | | |
| 46 | | | | | | |
| 47 | | | | | | |

Duke Kentucky Electric
Cash Working Capital Requirements
Forecasted Period 12 Months Ended June 30, 2026
Lead Lag Summary

| Line No | | Test Period Annual Expense | (Lead) Lag Days | Day Weighted Amount | Source |
|---|---|---|---|---|---|
| | **Revenues** | (1) | (2) | (3) | (4) |
| 1 | Sales and Transportation Revenue | $449,303,309 | 45.52 | $20,454,262,233 | Revenues - Line 16 |
| 2 | Other Revenues | $3,405,048 | 45.52 | $155,012,757 | Revenues - Line 22 |
| 3 | **Total Revenue Lag** | $452,708,357 | 45.52 | $20,609,274,990 | |
| 4 | | | | | |
| 5 | **Operation & Maintenance Expense** | | | | |
| 6 | Natural Gas | $0 | 40.63 | $0 | Expenses - Line 2 |
| 7 | Oil | $0 | 9.26 | $0 | Expenses - Line 3 |
| 8 | Coal | $48,545,844 | 13.28 | $644,790,167 | Expenses - Line 4 |
| 9 | Purchased Power | $99,073,890 | 12.48 | $1,235,990,590 | Expenses - Line 5 |
| 10 | Lime | $13,133,400 | 20.53 | $269,686,627 | Expenses - Line 6 |
| 11 | Emission Fee | $450,656 | 577.50 | $260,253,840 | Expenses - Line 7 |
| 12 | Transm of Elec By Others | $29,352,086 | 12.48 | $366,180,253 | Expenses - Line 8 |
| 13 | Labor | $26,398,176 | 10.56 | $278,656,371 | Expenses - Line 9 |
| 14 | Incentive Pay STIP | $1,342,964 | 252.17 | $338,654,784 | Expenses - Line 10 |
| 15 | Incentive Pay LTIP | $92,791 | 600.00 | $55,674,600 | Expenses - Line 11 |
| 16 | Employee Pensions & Benefits - Acct 926 | $5,682,962 | 13.64 | $77,515,602 | Expenses - Line 12 |
| 17 | Prepaid Expenses | | | | |
| 18 | KY PSC Assesment Acct 928006 | $755,244 | (172.00) | -$129,901,968 | Expenses - Line 14 |
| 19 | Insurance - Property & Liability | $206,377 | (128.90) | -$26,602,531 | Expenses - Line 15 |
| 20 | Intercompany Transactions | $5,912,170 | 41.31 | $244,253,712 | Expenses - Line 16 |
| 21 | Other O&M Expenses | $47,583,150 | 80.94 | $3,851,324,545 | Expenses - Line 17 |
| 22 | Total Operating & Maintenance Exp Excl Acc 904 | $278,529,710 | 26.81 | $7,466,476,591 | |
| 23 | | | | | |
| 24 | **Other Taxes** | | | | |
| 25 | Franchise Tax | $0 | 35.54 | $0 | Expenses - Line 21 |
| 26 | Property Taxes | $16,578,684 | 265.35 | $4,399,111,629 | Expenses - Line 22 |
| 27 | Payroll Taxes | $1,730,362 | 25.63 | $44,352,788 | Expenses - Line 23 |
| 28 | Federal Unemployment Taxes | $0 | 105.65 | $0 | Expenses - Line 24 |
| 29 | State Unemployment Taxes | $0 | 105.58 | $0 | Expenses - Line 25 |
| 30 | Gross Receipts License Tax | $0 | 35.08 | $0 | Expenses - Line 26 |
| 31 | Sales & Use Taxes | $0 | 35.09 | $0 | Expenses - Line 27 |
| 32 | Total Other Taxes | $18,309,046 | 242.69 | $4,443,464,417 | |
| 33 | | | | | |
| 34 | **Income Taxes** | | | | |
| 35 | Federal Income Taxes | $4,850,656 | 37.50 | $181,899,600 | Expenses - Line 31 |
| 36 | State Income Taxes | $368,613 | 37.50 | $13,822,988 | Expenses - Line 32 |
| 37 | Total Income Taxes | $5,219,269 | 37.50 | $195,722,588 | |
| 38 | | | | | |
| 39 | **Total Expenses** | $302,058,025 | 40.08 | $12,105,663,596 | |
| 40 | | | | | |
| 41 | **Total Working Capital Expenses** | $302,058,025 | 40.08 | **$12,105,663,596** | |
| 42 | | | | | |
| 43 | Revenue Lag Days | | 45.52 | | |
| 44 | Expense Lag Days | | 40.08 | | |
| 45 | Net Lag Days | | 5.45 | | |
| 46 | | | | | |
| 47 | Average Daily Expense | | | $827,556 | |
| 48 | | | | | |
| 49 | **Cash Working Capital Requirement** | | | $4,507,797 | |
| 50 | | | | | |
| 51 | | | | | |
| 52 | | | | | |

Duke Kentucky Electric
Revenue Lag Summary
Forecasted Period 12 Months Ended June 30, 2026

| Line No | Revenue Lag | Revenues Billed | (Lead) Lag Days | Source | Day Weighted Amount |
|---|---|---|---|---|---|
| 1 | Service Lag | | 15.21 | See Note 1 | |
| 2 | | | | | |
| 3 | Billing Lag | | 2.83 | | |
| 4 | | | | | |
| 6 | Collection Lag | | 26.66 | | |
| 7 | | | | | |
| 8 | Payment Processing Lag | | 0.83 | | |
| 9 | | | | | |
| 10 | Electric Sales | $449,133,809 | 45.52 | | $20,446,545,848 |
| 11 | | | | | |
| 12 | Other Transmission Revenues | $169,500 | 45.52 | | $7,716,385 |
| 13 | | | | | |
| 14 | PJM Reactive Revenue | $0 | | See Note 2 | $0 |
| 15 | | | | | |
| 16 | Total Sales & Transportation Revenues | $449,303,309 | 45.52 | | $20,454,262,233 |
| 17 | | | | | |
| 18 | Other Electric Rents | $1,299,996 | 45.52 | Line 10 | $59,181,534 |
| 19 | | | | | |
| 20 | Other Miscellaneous Revenues | $2,105,052 | 45.52 | Line 10 | $95,831,223 |
| 21 | | | | | |
| 22 | Total Other Revenues | $3,405,048 | | | $155,012,757 |
| 23 | | | | | |
| 24 | Total Revenues | $452,708,357 | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | Total Rev Lag Excl Non Rev Req Items | $452,708,357 | 45.52 | | $20,609,274,990 |
| 28 | | | | | |
| 29 | Notes: | | | | |
| 30 | 1. Computed as 365/12/2 | | | | |
| 31 | 2. Excluded from Revenue Requirements and Revenue lag calculation. | | | | |

Duke Kentucky Electric
Expense Lag Summary
Forecasted Period 12 Months Ended June 30, 2026

| Line No | | Revenue Req Amount | (Lead) Lag Days | Source | Day Weighted Amount | |
|---|---|---|---|---|---|---|
| 1 | **Operation & Maintenance Expense** | | | | | |
| 2 | Natural Gas | $0 | 40.63 | | $0 | 0.00% |
| 3 | Oil | $0 | 9.26 | | $0 | 0.00% |
| 4 | Coal | $48,545,844 | 13.28 | | $644,790,167 | 5.33% |
| 5 | Purchased Power | $99,073,890 | 12.48 | | $1,235,990,590 | 10.21% |
| 6 | Lime | $13,133,400 | 20.53 | | $269,686,627 | 2.23% |
| 7 | Emission Fee | $450,656 | 577.50 | | $260,253,840 | 2.15% |
| 8 | Transm of Elec By Others | $29,352,086 | 12.48 | | $366,180,253 | 3.02% |
| 9 | Labor | $26,398,176 | 10.56 | | $278,656,371 | 2.30% |
| 10 | Incentive Pay STIP | $1,342,964 | 252.17 | | $338,654,784 | 2.80% |
| 11 | Incentive Pay LTIP | $92,791 | 600.00 | | $55,674,600 | 0.46% |
| 12 | Employee Pensions & Benefits - Acct 926 | $5,682,962 | 13.64 | | $77,515,602 | 0.64% |
| 13 | Prepaid Expenses | | | | | |
| 14 | KY PSC Assesment Acct 928006 | $755,244 | (172.00) | | -$129,901,968 | -1.07% |
| 15 | Insurance - Property & Liability | $206,377 | (128.90) | | -$26,602,531 | -0.22% |
| 16 | Intercompany Transactions | $5,912,170 | 41.31 | | $244,253,712 | 2.02% |
| 17 | Other O&M Expenses | $47,583,150 | 80.94 | | $3,851,324,545 | 31.81% |
| 18 | Total Operating & Maintenance Exp Excl Acc 904 | $278,529,710 | 26.81 | | $7,466,476,591 | 61.68% |
| 19 | | | | | | |
| 20 | **Other Taxes** | | | | | |
| 21 | Franchise Tax | $0 | 35.54 | | $0 | 0.00% |
| 22 | Property Taxes | $16,578,684 | 265.35 | | $4,399,111,629 | 36.34% |
| 23 | Payroll Taxes | $1,730,362 | 25.63 | | $44,352,788 | 0.37% |
| 24 | Federal Unemployment Taxes | $0 | 105.65 | | $0 | 0.00% |
| 25 | State Unemployment Taxes | $0 | 105.58 | | $0 | 0.00% |
| 26 | Gross Receipts License Tax | $0 | 35.08 | | $0 | 0.00% |
| 27 | Sales & Use Taxes | $0 | 35.09 | | $0 | 0.00% |
| 28 | Total Other Taxes | $18,309,046 | 242.69 | | $4,443,464,417 | 36.71% |
| 29 | | | | | | |
| 30 | **Income Taxes** | | | | | |
| 31 | Federal Income Taxes | $4,850,656 | 37.50 | | $181,899,600 | 1.50% |
| 32 | State Income Taxes | $368,613 | 37.50 | | $13,822,988 | 0.11% |
| 33 | Total Income Taxes | $5,219,269 | 37.50 | | $195,722,588 | 1.62% |
| 34 | | | | | | |
| 35 | **Total Expenses** | $302,058,025 | 40.08 | | $12,105,663,596 | 100.00% |
| 36 | | | | | | |
| 37 | | | | | | |
| 38 | | | | | | |
| 39 | | | | | | |
| 40 | | | | | | |
| 41 | | | | | | |
| 42 | | | | | | |
| 43 | | | | | | |
| 44 | | | | | | |
| 45 | | | | | | |
| 46 | | | | | | |
| 47 | | | | | | |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**REVENUE LAG**

| | Lag Time |
|---|---|
| Service Lag | 15.21 |
| Billing Lag | 2.83 |
| Collection Lag | 26.66 |
| Payment Processing Lag | 0.83 |
| | 45.52 |

**SERVICE LAG**

| | | |
|---|---|---|
| Number of Days in Year: | 365.00 | |
| Average Number of Days in Month: | 30.42 | |
| Midpoint of Average Number of Days in Month: | 15.21 | days |

**PAYMENT PROCESSING LAG**

| | | Amount | Weight | Lag | Weighted Lead |
|---|---|---|---|---|---|
| Electronic ACH | $ | 102,161,958.00 | 17.22% | 0 | 0.000 |
| EFT | | 122,314,462.00 | 20.61% | 1 | 0.206 |
| Speedpay | | 93,326,756.00 | 15.73% | 1 | 0.157 |
| Collection | | 217,306.00 | 0.04% | 1 | 0.000 |
| Ebill/ACH | | 93,801,151.00 | 15.81% | 1 | 0.158 |
| Mail | | 174,143,572.00 | 29.35% | 1 | 0.293 |
| Walk-In | | 5,487,291.00 | 0.92% | 1 | 0.009 |
| Manual | | 1,918,752.00 | 0.32% | 1 | 0.003 |
| | $ | 593,371,248.00 | 100.00% | | 0.83 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) |
| 1/1/2023 | 1/5/2023 | 5.00 | 1/5/2023 | 4.00 | Residential Sales | $133.16 | 532.64 |
| 1/1/2023 | 1/6/2023 | 6.00 | 1/6/2023 | 5.00 | Commercial Sales | $107.15 | 535.75 |
| 1/1/2023 | 1/6/2023 | 6.00 | 1/6/2023 | 5.00 | Residential Sales | $774.57 | 3,872.85 |
| 1/1/2023 | 3/24/2023 | 83.00 | 3/24/2023 | 82.00 | Residential Sales | $439.85 | 36,067.70 |
| 1/1/2023 | 2/1/2023 | 32.00 | 2/1/2023 | 31.00 | Commercial Sales | $879.39 | 27,261.09 |
| 1/1/2023 | 1/9/2023 | 9.00 | 1/9/2023 | 8.00 | Residential Sales | $18.27 | 146.16 |
| 1/1/2023 | 1/11/2023 | 11.00 | 1/11/2023 | 10.00 | Commercial Sales | $148.09 | 1,480.90 |
| 1/1/2023 | 1/11/2023 | 11.00 | 1/11/2023 | 10.00 | Residential Sales | $498.42 | 4,984.20 |
| 1/1/2023 | 2/6/2023 | 37.00 | 2/6/2023 | 36.00 | Commercial Sales | $18.67 | 672.12 |
| 1/1/2023 | 1/12/2023 | 12.00 | 1/12/2023 | 11.00 | Commercial Sales | $13.95 | 153.45 |
| 1/1/2023 | 2/7/2023 | 38.00 | 2/7/2023 | 37.00 | Commercial Sales | $21.84 | 808.08 |
| 1/1/2023 | 1/31/2023 | 31.00 | 1/31/2023 | 30.00 | Commercial Sales | $1,162.11 | 34,863.30 |
| 1/1/2023 | 1/3/2023 | 3.00 | 1/3/2023 | 2.00 | Commercial Sales | $953.63 | 1,907.26 |
| 1/1/2023 | 1/3/2023 | 3.00 | 1/3/2023 | 2.00 | Residential Sales | $3,898.59 | 7,797.18 |
| 1/1/2023 | 1/4/2023 | 4.00 | 1/4/2023 | 3.00 | Commercial Sales | $302.96 | 908.88 |
| 1/1/2023 | 1/4/2023 | 4.00 | 1/4/2023 | 3.00 | Residential Sales | $737.11 | 2,211.33 |
| 1/1/2023 | 1/5/2023 | 5.00 | 1/5/2023 | 4.00 | Commercial Sales | $190.69 | 762.76 |
| 1/2/2023 | 1/3/2023 | 2.00 | 1/3/2023 | 1.00 | Commercial Sales | $296.73 | 296.73 |
| 1/2/2023 | 1/19/2023 | 18.00 | 1/19/2023 | 17.00 | Residential Sales | $44.37 | 754.29 |
| 1/2/2023 | 1/3/2023 | 2.00 | 1/3/2023 | 1.00 | Residential Sales | $10,278.68 | 10,278.68 |
| 1/2/2023 | 1/4/2023 | 3.00 | 1/4/2023 | 2.00 | Residential Sales | $71.68 | 143.36 |
| 1/2/2023 | 1/5/2023 | 4.00 | 1/5/2023 | 3.00 | Commercial Sales | $38.22 | 114.66 |
| 1/2/2023 | 1/5/2023 | 4.00 | 1/5/2023 | 3.00 | Residential Sales | $311.52 | 934.56 |
| 1/2/2023 | 1/6/2023 | 5.00 | 1/6/2023 | 4.00 | Residential Sales | $214.17 | 856.68 |
| 1/2/2023 | 1/23/2023 | 22.00 | 1/23/2023 | 21.00 | Residential Sales | $33.43 | 702.03 |
| 1/2/2023 | 1/11/2023 | 10.00 | 1/11/2023 | 9.00 | Commercial Sales | $217.63 | 1,958.67 |
| 1/2/2023 | 1/11/2023 | 10.00 | 1/11/2023 | 9.00 | Residential Sales | $148.18 | 1,333.62 |
| 1/2/2023 | 1/12/2023 | 11.00 | 1/12/2023 | 10.00 | Commercial Sales | $153.74 | 1,537.40 |
| 1/3/2023 | 1/12/2023 | 10.00 | 1/12/2023 | 9.00 | Residential Sales | $578.19 | 5,203.71 |
| 1/3/2023 | 1/13/2023 | 11.00 | 1/13/2023 | 10.00 | Commercial Sales | $246.72 | 2,467.20 |
| 1/3/2023 | 1/12/2023 | 10.00 | 1/12/2023 | 9.00 | Other Sales to Public Authority | $12,065.45 | 108,589.05 |
| 1/3/2023 | 2/8/2023 | 37.00 | 2/8/2023 | 36.00 | Commercial Sales | $20.59 | 741.24 |
| 1/3/2023 | 2/8/2023 | 37.00 | 2/8/2023 | 36.00 | Residential Sales | $375.38 | 13,513.68 |
| 1/3/2023 | 1/13/2023 | 11.00 | 1/13/2023 | 10.00 | Other Sales to Public Authority | $31,805.80 | 318,058.00 |
| 1/3/2023 | 2/9/2023 | 38.00 | 2/9/2023 | 37.00 | Commercial Sales | $211.55 | 7,827.35 |
| 1/3/2023 | 2/9/2023 | 38.00 | 2/9/2023 | 37.00 | Residential Sales | $179.17 | 6,629.29 |
| 1/3/2023 | 1/16/2023 | 14.00 | 1/16/2023 | 13.00 | Residential Sales | $475.07 | 6,175.91 |
| 1/3/2023 | 1/31/2023 | 29.00 | 1/31/2023 | 28.00 | Commercial Sales | $18.29 | 512.12 |
| 1/3/2023 | 1/17/2023 | 15.00 | 1/17/2023 | 14.00 | Residential Sales | $102.21 | 1,430.94 |
| 1/3/2023 | 1/4/2023 | 2.00 | 1/4/2023 | 1.00 | Industrial Service | $483,523.55 | 483,523.55 |
| 1/3/2023 | 1/3/2023 | 1.00 | 1/3/2023 | 0.00 | Commercial Sales | $1,597.52 | - |
| 1/3/2023 | 1/4/2023 | 2.00 | 1/4/2023 | 1.00 | Commercial Sales | $272,053.05 | 272,053.05 |
| 1/3/2023 | 1/5/2023 | 3.00 | 1/5/2023 | 2.00 | Industrial Service | $12,989.44 | 25,978.88 |
| 1/3/2023 | 3/6/2023 | 63.00 | 3/6/2023 | 62.00 | Commercial Sales | $70.09 | 4,345.58 |
| 1/3/2023 | 1/3/2023 | 1.00 | 1/3/2023 | 0.00 | Residential Sales | $570.50 | - |
| 1/3/2023 | 4/14/2023 | 102.00 | 4/14/2023 | 101.00 | Commercial Sales | $527.80 | 53,307.80 |
| 1/3/2023 | 1/4/2023 | 2.00 | 1/4/2023 | 1.00 | Residential Sales | $944,377.78 | 944,377.78 |
| 1/3/2023 | 1/5/2023 | 3.00 | 1/5/2023 | 2.00 | Commercial Sales | $118,617.19 | 237,234.38 |
| 1/3/2023 | 1/3/2023 | 1.00 | 1/3/2023 | 0.00 | Other Sales to Public Authority | $453.34 | - |
| 1/3/2023 | 3/6/2023 | 63.00 | 3/6/2023 | 62.00 | Residential Sales | $149.49 | 9,268.38 |
| 1/3/2023 | 3/20/2024 | 443.00 | 3/20/2024 | 442.00 | Commercial Sales | $18.02 | 7,964.84 |
| 1/3/2023 | 1/6/2023 | 4.00 | 1/6/2023 | 3.00 | Industrial Service | $8,239.99 | 24,719.97 |
| 1/3/2023 | 3/7/2023 | 64.00 | 3/7/2023 | 63.00 | Commercial Sales | $59.86 | 3,771.18 |
| 1/3/2023 | 1/5/2023 | 3.00 | 1/5/2023 | 2.00 | Residential Sales | $20,084.95 | 40,169.90 |
| 1/3/2023 | 1/6/2023 | 4.00 | 1/6/2023 | 3.00 | Commercial Sales | $53,363.87 | 160,091.61 |
| 1/3/2023 | 1/4/2023 | 2.00 | 1/4/2023 | 1.00 | Other Sales to Public Authority | $295,713.85 | 295,713.85 |
| 1/3/2023 | 3/7/2023 | 64.00 | 3/7/2023 | 63.00 | Residential Sales | $132.80 | 8,366.40 |
| 1/3/2023 | 1/6/2023 | 4.00 | 1/6/2023 | 3.00 | Residential Sales | $3,710.16 | 11,130.48 |
| 1/3/2023 | 1/3/2023 | 1.00 | 1/3/2023 | 0.00 | Public Street & Highway Lighting | $130.01 | - |
| 1/3/2023 | 1/5/2023 | 3.00 | 1/5/2023 | 2.00 | Other Sales to Public Authority | $12,195.69 | 24,391.38 |
| 1/3/2023 | 1/20/2023 | 18.00 | 1/20/2023 | 17.00 | Residential Sales | $68.10 | 1,157.70 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 1/3/2023 | 2/14/2023 | 43.00 | 2/14/2023 | 42.00 | Residential Sales | $94.68 | 3,976.56 |
| 1/3/2023 | 1/13/2023 | 11.00 | 1/13/2023 | 10.00 | Company Use | $0.00 | - |
| 1/3/2023 | 1/9/2023 | 7.00 | 1/9/2023 | 6.00 | Commercial Sales | $672.41 | 4,034.46 |
| 1/3/2023 | 1/9/2023 | 7.00 | 1/9/2023 | 6.00 | Residential Sales | $3,976.62 | 23,859.72 |
| 1/3/2023 | 1/24/2023 | 22.00 | 1/24/2023 | 21.00 | Residential Sales | $54.70 | 1,148.70 |
| 1/3/2023 | 1/25/2023 | 23.00 | 1/25/2023 | 22.00 | Residential Sales | $134.41 | 2,957.02 |
| 1/3/2023 | 2/2/2023 | 31.00 | 2/2/2023 | 30.00 | Residential Sales | $232.80 | 6,984.00 |
| 1/3/2023 | 1/26/2023 | 24.00 | 1/26/2023 | 23.00 | Commercial Sales | $23.15 | 532.45 |
| 1/3/2023 | 1/11/2023 | 9.00 | 1/11/2023 | 8.00 | Industrial Service | $177,101.24 | 1,416,809.92 |
| 1/3/2023 | 1/12/2023 | 10.00 | 1/12/2023 | 9.00 | Industrial Service | $2,137.86 | 19,240.74 |
| 1/3/2023 | 1/11/2023 | 9.00 | 1/11/2023 | 8.00 | Commercial Sales | $43,142.87 | 345,142.96 |
| 1/3/2023 | 1/27/2023 | 25.00 | 1/27/2023 | 24.00 | Residential Sales | $69.80 | 1,675.20 |
| 1/3/2023 | 1/12/2023 | 10.00 | 1/12/2023 | 9.00 | Commercial Sales | $10,839.59 | 97,556.31 |
| 1/3/2023 | 1/11/2023 | 9.00 | 1/11/2023 | 8.00 | Residential Sales | $820.07 | 6,560.56 |
| 1/4/2023 | 1/25/2023 | 22.00 | 1/25/2023 | 21.00 | Commercial Sales | $67.20 | 1,411.20 |
| 1/4/2023 | 1/10/2023 | 7.00 | 1/10/2023 | 6.00 | Residential Sales | $847.62 | 5,085.72 |
| 1/4/2023 | 1/11/2023 | 8.00 | 1/11/2023 | 7.00 | Commercial Sales | $551.09 | 3,857.63 |
| 1/4/2023 | 1/11/2023 | 8.00 | 1/11/2023 | 7.00 | Residential Sales | $1,396.42 | 9,774.94 |
| 1/4/2023 | 1/12/2023 | 9.00 | 1/12/2023 | 8.00 | Commercial Sales | $26,179.23 | 209,433.84 |
| 1/4/2023 | 1/13/2023 | 10.00 | 1/13/2023 | 9.00 | Commercial Sales | $765.62 | 6,890.58 |
| 1/4/2023 | 1/12/2023 | 9.00 | 1/12/2023 | 8.00 | Residential Sales | $738.59 | 5,908.72 |
| 1/4/2023 | 1/11/2023 | 8.00 | 1/11/2023 | 7.00 | Other Sales to Public Authority | $39,769.68 | 278,387.76 |
| 1/4/2023 | 1/12/2023 | 9.00 | 1/12/2023 | 8.00 | Other Sales to Public Authority | $223.89 | 1,791.12 |
| 1/4/2023 | 1/13/2023 | 10.00 | 1/13/2023 | 9.00 | Residential Sales | $150.60 | 1,355.40 |
| 1/4/2023 | 2/7/2023 | 35.00 | 2/7/2023 | 34.00 | Residential Sales | $28.66 | 974.44 |
| 1/4/2023 | 2/8/2023 | 36.00 | 2/8/2023 | 35.00 | Residential Sales | $622.06 | 21,772.10 |
| 1/4/2023 | 1/16/2023 | 13.00 | 1/16/2023 | 12.00 | Residential Sales | $2,198.05 | 26,376.60 |
| 1/4/2023 | 1/18/2023 | 15.00 | 1/18/2023 | 14.00 | Industrial Service | $20.37 | 285.18 |
| 1/4/2023 | 1/31/2023 | 28.00 | 1/31/2023 | 27.00 | Residential Sales | $197.25 | 5,325.75 |
| 1/4/2023 | 1/17/2023 | 14.00 | 1/17/2023 | 13.00 | Residential Sales | $111.18 | 1,445.34 |
| 1/4/2023 | 1/18/2023 | 15.00 | 1/18/2023 | 14.00 | Residential Sales | $413.41 | 5,787.74 |
| 1/4/2023 | 1/19/2023 | 16.00 | 1/19/2023 | 15.00 | Residential Sales | $222.34 | 3,335.10 |
| 1/4/2023 | 1/5/2023 | 2.00 | 1/5/2023 | 1.00 | Industrial Service | $1,907.89 | 1,907.89 |
| 1/4/2023 | 1/4/2023 | 1.00 | 1/4/2023 | 0.00 | Commercial Sales | $2,447.76 | - |
| 1/4/2023 | 1/5/2023 | 2.00 | 1/5/2023 | 1.00 | Commercial Sales | $103,616.33 | 103,616.33 |
| 1/4/2023 | 1/4/2023 | 1.00 | 1/4/2023 | 0.00 | Residential Sales | $2,570.78 | - |
| 1/4/2023 | 1/6/2023 | 3.00 | 1/6/2023 | 2.00 | Industrial Service | $1,429.99 | 2,859.98 |
| 1/4/2023 | 1/5/2023 | 2.00 | 1/5/2023 | 1.00 | Residential Sales | $958,349.56 | 958,349.56 |
| 1/4/2023 | 1/6/2023 | 3.00 | 1/6/2023 | 2.00 | Commercial Sales | $26,942.72 | 53,885.44 |
| 1/4/2023 | 3/7/2023 | 63.00 | 3/7/2023 | 62.00 | Residential Sales | $297.75 | 18,460.50 |
| 1/4/2023 | 1/4/2023 | 1.00 | 1/4/2023 | 0.00 | Other Sales to Public Authority | $293.40 | - |
| 1/4/2023 | 2/13/2023 | 41.00 | 2/13/2023 | 40.00 | Residential Sales | $46.20 | 1,848.00 |
| 1/4/2023 | 2/14/2023 | 42.00 | 2/14/2023 | 41.00 | Commercial Sales | $65.27 | 2,676.07 |
| 1/4/2023 | 1/6/2023 | 3.00 | 1/6/2023 | 2.00 | Residential Sales | $11,045.85 | 22,091.70 |
| 1/4/2023 | 1/5/2023 | 2.00 | 1/5/2023 | 1.00 | Other Sales to Public Authority | $10,885.89 | 10,885.89 |
| 1/4/2023 | 1/6/2023 | 3.00 | 1/6/2023 | 2.00 | Other Sales to Public Authority | $1,573.30 | 3,146.60 |
| 1/4/2023 | 1/9/2023 | 6.00 | 1/9/2023 | 5.00 | Commercial Sales | $3.34 | 16.70 |
| 1/4/2023 | 1/9/2023 | 6.00 | 1/9/2023 | 5.00 | Residential Sales | $7,261.98 | 36,309.90 |
| 1/4/2023 | 2/1/2023 | 29.00 | 2/1/2023 | 28.00 | Commercial Sales | $46.50 | 1,302.00 |
| 1/4/2023 | 4/19/2023 | 106.00 | 4/19/2023 | 105.00 | Residential Sales | $36.43 | 3,825.15 |
| 1/5/2023 | 1/6/2023 | 2.00 | 1/6/2023 | 1.00 | Commercial Sales | $193,009.97 | 193,009.97 |
| 1/5/2023 | 1/5/2023 | 1.00 | 1/5/2023 | 0.00 | Residential Sales | $154.96 | - |
| 1/5/2023 | 3/7/2023 | 62.00 | 3/7/2023 | 61.00 | Residential Sales | $134.77 | 8,220.97 |
| 1/5/2023 | 2/13/2023 | 40.00 | 2/13/2023 | 39.00 | Residential Sales | $41.75 | 1,628.25 |
| 1/5/2023 | 1/6/2023 | 2.00 | 1/6/2023 | 1.00 | Residential Sales | $1,021,165.97 | 1,021,165.97 |
| 1/5/2023 | 1/5/2023 | 1.00 | 1/5/2023 | 0.00 | Other Sales to Public Authority | $155.70 | - |
| 1/5/2023 | 1/20/2023 | 16.00 | 1/20/2023 | 15.00 | Residential Sales | $59.32 | 889.80 |
| 1/5/2023 | 1/6/2023 | 2.00 | 1/6/2023 | 1.00 | Other Sales to Public Authority | $45,372.73 | 45,372.73 |
| 1/5/2023 | 1/9/2023 | 5.00 | 1/9/2023 | 4.00 | Commercial Sales | $167,147.14 | 668,588.56 |
| 1/5/2023 | 4/18/2023 | 104.00 | 4/18/2023 | 103.00 | Residential Sales | $65.14 | 6,709.42 |
| 1/5/2023 | 2/16/2023 | 43.00 | 2/16/2023 | 42.00 | Residential Sales | $55.57 | 2,333.94 |
| 1/5/2023 | 1/9/2023 | 5.00 | 1/9/2023 | 4.00 | Residential Sales | $14,157.10 | 56,628.40 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 1/5/2023 | 3/25/2024 | 446.00 | 3/25/2024 | 445.00 | Residential Sales | $24.59 | 10,942.55 |
| 1/5/2023 | 1/9/2023 | 5.00 | 1/9/2023 | 4.00 | Other Sales to Public Authority | $507.11 | 2,028.44 |
| 1/5/2023 | 1/24/2023 | 20.00 | 1/24/2023 | 19.00 | Residential Sales | $151.52 | 2,878.88 |
| 1/5/2023 | 8/22/2023 | 230.00 | 8/22/2023 | 229.00 | Residential Sales | $39.73 | 9,098.17 |
| 1/5/2023 | 2/2/2023 | 29.00 | 2/2/2023 | 28.00 | Residential Sales | $14.23 | 398.44 |
| 1/5/2023 | 1/25/2023 | 21.00 | 1/25/2023 | 20.00 | Residential Sales | $156.61 | 3,132.20 |
| 1/5/2023 | 1/26/2023 | 22.00 | 1/26/2023 | 21.00 | Residential Sales | $115.64 | 2,428.44 |
| 1/5/2023 | 1/11/2023 | 7.00 | 1/11/2023 | 6.00 | Industrial Service | $11,352.17 | 68,113.02 |
| 1/5/2023 | 1/11/2023 | 7.00 | 1/11/2023 | 6.00 | Commercial Sales | $51,929.10 | 311,574.60 |
| 1/5/2023 | 1/10/2023 | 6.00 | 1/10/2023 | 5.00 | Residential Sales | $389.35 | 1,946.75 |
| 1/5/2023 | 1/11/2023 | 7.00 | 1/11/2023 | 6.00 | Residential Sales | $2,636.91 | 15,821.46 |
| 1/5/2023 | 1/12/2023 | 8.00 | 1/12/2023 | 7.00 | Commercial Sales | $759.74 | 5,318.18 |
| 1/5/2023 | 1/13/2023 | 9.00 | 1/13/2023 | 8.00 | Industrial Service | $350.56 | 2,804.48 |
| 1/5/2023 | 3/13/2023 | 68.00 | 3/13/2023 | 67.00 | Residential Sales | $90.63 | 6,072.21 |
| 1/5/2023 | 1/13/2023 | 9.00 | 1/13/2023 | 8.00 | Commercial Sales | $3,332.81 | 26,662.48 |
| 1/5/2023 | 2/20/2023 | 47.00 | 2/20/2023 | 46.00 | Residential Sales | $197.21 | 9,071.66 |
| 1/5/2023 | 1/12/2023 | 8.00 | 1/12/2023 | 7.00 | Residential Sales | $404.40 | 2,830.80 |
| 1/5/2023 | 2/6/2023 | 33.00 | 2/6/2023 | 32.00 | Residential Sales | $427.55 | 13,681.60 |
| 1/5/2023 | 1/13/2023 | 9.00 | 1/13/2023 | 8.00 | Residential Sales | $2.79 | 22.32 |
| 1/5/2023 | 2/8/2023 | 35.00 | 2/8/2023 | 34.00 | Commercial Sales | $228.50 | 7,769.00 |
| 1/5/2023 | 1/16/2023 | 12.00 | 1/16/2023 | 11.00 | Commercial Sales | $37.10 | 408.10 |
| 1/5/2023 | 1/16/2023 | 12.00 | 1/16/2023 | 11.00 | Residential Sales | $650.62 | 7,156.82 |
| 1/5/2023 | 1/17/2023 | 13.00 | 1/17/2023 | 12.00 | Commercial Sales | $39.46 | 473.52 |
| 1/5/2023 | 1/17/2023 | 13.00 | 1/17/2023 | 12.00 | Residential Sales | $27.62 | 331.44 |
| 1/5/2023 | 1/18/2023 | 14.00 | 1/18/2023 | 13.00 | Residential Sales | $1,033.21 | 13,431.73 |
| 1/5/2023 | 7/21/2023 | 198.00 | 7/21/2023 | 197.00 | Residential Sales | $126.15 | 24,851.55 |
| 1/5/2023 | 4/13/2023 | 99.00 | 4/13/2023 | 98.00 | Residential Sales | $414.04 | 40,575.92 |
| 1/5/2023 | 1/5/2023 | 1.00 | 1/5/2023 | 0.00 | Commercial Sales | $167.78 | - |
| 1/6/2023 | 1/17/2023 | 12.00 | 1/17/2023 | 11.00 | Residential Sales | $333.17 | 3,664.87 |
| 1/6/2023 | 1/31/2023 | 26.00 | 1/31/2023 | 25.00 | Residential Sales | $96.92 | 2,423.00 |
| 1/6/2023 | 1/18/2023 | 13.00 | 1/18/2023 | 12.00 | Commercial Sales | $89.03 | 1,068.36 |
| 1/6/2023 | 1/18/2023 | 13.00 | 1/18/2023 | 12.00 | Residential Sales | $341.84 | 4,102.08 |
| 1/6/2023 | 1/17/2023 | 12.00 | 1/17/2023 | 11.00 | Other Sales to Public Authority | $20,284.96 | 223,134.56 |
| 1/6/2023 | 7/21/2023 | 197.00 | 7/21/2023 | 196.00 | Residential Sales | $85.51 | 16,759.96 |
| 1/6/2023 | 1/19/2023 | 14.00 | 1/19/2023 | 13.00 | Residential Sales | $150.42 | 1,955.46 |
| 1/6/2023 | 2/10/2023 | 36.00 | 2/10/2023 | 35.00 | Residential Sales | $24.59 | 860.65 |
| 1/6/2023 | 2/28/2023 | 54.00 | 2/28/2023 | 53.00 | Commercial Sales | $244.38 | 12,952.14 |
| 1/6/2023 | 3/6/2023 | 60.00 | 3/6/2023 | 59.00 | Residential Sales | $60.62 | 3,576.58 |
| 1/6/2023 | 3/21/2023 | 75.00 | 3/21/2023 | 74.00 | Commercial Sales | $143.24 | 10,599.76 |
| 1/6/2023 | 1/6/2023 | 1.00 | 1/6/2023 | 0.00 | Commercial Sales | $1,773.69 | - |
| 1/6/2023 | 3/7/2023 | 61.00 | 3/7/2023 | 60.00 | Residential Sales | $40.59 | 2,435.40 |
| 1/6/2023 | 2/13/2023 | 39.00 | 2/13/2023 | 38.00 | Residential Sales | $63.11 | 2,398.18 |
| 1/6/2023 | 1/6/2023 | 1.00 | 1/6/2023 | 0.00 | Residential Sales | $1,606.33 | - |
| 1/6/2023 | 1/9/2023 | 4.00 | 1/9/2023 | 3.00 | Industrial Service | $1,513.47 | 4,540.41 |
| 1/6/2023 | 1/6/2023 | 1.00 | 1/6/2023 | 0.00 | Other Sales to Public Authority | $35.38 | - |
| 1/6/2023 | 3/9/2023 | 63.00 | 3/9/2023 | 62.00 | Residential Sales | $25.37 | 1,572.94 |
| 1/6/2023 | 1/9/2023 | 4.00 | 1/9/2023 | 3.00 | Commercial Sales | $182,439.25 | 547,317.75 |
| 1/6/2023 | 2/17/2023 | 43.00 | 2/17/2023 | 42.00 | Commercial Sales | $187.03 | 7,855.26 |
| 1/6/2023 | 1/23/2023 | 18.00 | 1/23/2023 | 17.00 | Commercial Sales | $294.53 | 5,007.01 |
| 1/6/2023 | 2/15/2023 | 41.00 | 2/15/2023 | 40.00 | Other Sales to Public Authority | $14,701.47 | 588,058.80 |
| 1/6/2023 | 1/9/2023 | 4.00 | 1/9/2023 | 3.00 | Residential Sales | $1,554,078.68 | 4,662,236.04 |
| 1/6/2023 | 2/17/2023 | 43.00 | 2/17/2023 | 42.00 | Residential Sales | $36.63 | 1,538.46 |
| 1/6/2023 | 4/19/2023 | 104.00 | 4/19/2023 | 103.00 | Residential Sales | $122.33 | 12,599.99 |
| 1/6/2023 | 1/9/2023 | 4.00 | 1/9/2023 | 3.00 | Other Sales to Public Authority | $22,404.03 | 67,212.09 |
| 1/6/2023 | 1/25/2023 | 20.00 | 1/25/2023 | 19.00 | Commercial Sales | $299.28 | 5,686.32 |
| 1/6/2023 | 1/24/2023 | 19.00 | 1/24/2023 | 18.00 | Residential Sales | $179.27 | 3,226.86 |
| 1/6/2023 | 4/4/2023 | 89.00 | 4/4/2023 | 88.00 | Commercial Sales | $87.39 | 7,690.32 |
| 1/6/2023 | 2/2/2023 | 28.00 | 2/2/2023 | 27.00 | Residential Sales | $136.23 | 3,678.21 |
| 1/6/2023 | 1/10/2023 | 5.00 | 1/10/2023 | 4.00 | Commercial Sales | $2,427.78 | 9,711.12 |
| 1/6/2023 | 1/11/2023 | 6.00 | 1/11/2023 | 5.00 | Industrial Service | $274.82 | 1,374.10 |
| 1/6/2023 | 4/5/2023 | 90.00 | 4/5/2023 | 89.00 | Residential Sales | $29.84 | 2,655.76 |
| 1/6/2023 | 1/26/2023 | 21.00 | 1/26/2023 | 20.00 | Residential Sales | $85.56 | 1,711.20 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 1/6/2023 | 1/11/2023 | 6.00 | 1/11/2023 | 5.00 | Commercial Sales | $44,666.16 | 223,330.80 |
| 1/6/2023 | 1/10/2023 | 5.00 | 1/10/2023 | 4.00 | Residential Sales | $1,482.73 | 5,930.92 |
| 1/6/2023 | 8/24/2023 | 231.00 | 8/24/2023 | 230.00 | Residential Sales | $202.28 | 46,524.40 |
| 1/6/2023 | 1/27/2023 | 22.00 | 1/27/2023 | 21.00 | Residential Sales | $177.77 | 3,733.17 |
| 1/6/2023 | 1/11/2023 | 6.00 | 1/11/2023 | 5.00 | Residential Sales | $2,834.12 | 14,170.60 |
| 1/6/2023 | 1/11/2023 | 6.00 | 1/11/2023 | 5.00 | Other Sales to Public Authority | $1,748.28 | 8,741.40 |
| 1/6/2023 | 1/13/2023 | 8.00 | 1/13/2023 | 7.00 | Commercial Sales | $33,848.56 | 236,939.92 |
| 1/6/2023 | 1/12/2023 | 7.00 | 1/12/2023 | 6.00 | Residential Sales | $1,254.40 | 7,526.40 |
| 1/6/2023 | 2/6/2023 | 32.00 | 2/6/2023 | 31.00 | Residential Sales | $205.35 | 6,365.85 |
| 1/6/2023 | 1/13/2023 | 8.00 | 1/13/2023 | 7.00 | Residential Sales | $2,230.76 | 15,615.32 |
| 1/6/2023 | 2/7/2023 | 33.00 | 2/7/2023 | 32.00 | Residential Sales | $327.19 | 10,470.08 |
| 1/6/2023 | 2/8/2023 | 34.00 | 2/8/2023 | 33.00 | Commercial Sales | $287.20 | 9,477.60 |
| 1/6/2023 | 2/8/2023 | 34.00 | 2/8/2023 | 33.00 | Residential Sales | $147.11 | 4,854.63 |
| 1/6/2023 | 1/13/2023 | 8.00 | 1/13/2023 | 7.00 | Other Sales to Public Authority | $11,115.35 | 77,807.45 |
| 1/6/2023 | 1/16/2023 | 11.00 | 1/16/2023 | 10.00 | Commercial Sales | $106.05 | 1,060.50 |
| 1/6/2023 | 1/16/2023 | 11.00 | 1/16/2023 | 10.00 | Residential Sales | $3,914.18 | 39,141.80 |
| 1/6/2023 | 1/30/2023 | 25.00 | 1/30/2023 | 24.00 | Residential Sales | $62.72 | 1,505.28 |
| 1/7/2023 | 1/12/2023 | 6.00 | 1/12/2023 | 5.00 | Residential Sales | $14.23 | 71.15 |
| 1/7/2023 | 1/9/2023 | 3.00 | 1/9/2023 | 2.00 | Residential Sales | $1,219.70 | 2,439.40 |
| 1/7/2023 | 1/11/2023 | 5.00 | 1/11/2023 | 4.00 | Residential Sales | $474.27 | 1,897.08 |
| 1/8/2023 | 1/10/2023 | 3.00 | 1/10/2023 | 2.00 | Residential Sales | $99.17 | 198.34 |
| 1/8/2023 | 1/11/2023 | 4.00 | 1/11/2023 | 3.00 | Commercial Sales | $304.03 | 912.09 |
| 1/8/2023 | 1/11/2023 | 4.00 | 1/11/2023 | 3.00 | Residential Sales | $306.70 | 920.10 |
| 1/8/2023 | 1/13/2023 | 6.00 | 1/13/2023 | 5.00 | Commercial Sales | $203.95 | 1,019.75 |
| 1/8/2023 | 1/12/2023 | 5.00 | 1/12/2023 | 4.00 | Residential Sales | $137.93 | 551.72 |
| 1/8/2023 | 2/6/2023 | 30.00 | 2/6/2023 | 29.00 | Residential Sales | $32.83 | 952.07 |
| 1/8/2023 | 1/16/2023 | 9.00 | 1/16/2023 | 8.00 | Commercial Sales | $3.75 | 30.00 |
| 1/8/2023 | 1/16/2023 | 9.00 | 1/16/2023 | 8.00 | Residential Sales | $9.75 | 78.00 |
| 1/8/2023 | 1/9/2023 | 2.00 | 1/9/2023 | 1.00 | Commercial Sales | $1,986.13 | 1,986.13 |
| 1/8/2023 | 1/9/2023 | 2.00 | 1/9/2023 | 1.00 | Residential Sales | $3,216.04 | 3,216.04 |
| 1/9/2023 | 1/20/2023 | 12.00 | 1/20/2023 | 11.00 | Residential Sales | $206.33 | 2,269.63 |
| 1/9/2023 | 3/23/2023 | 74.00 | 3/23/2023 | 73.00 | Commercial Sales | $80.95 | 5,909.35 |
| 1/9/2023 | 1/9/2023 | 1.00 | 1/9/2023 | 0.00 | Commercial Sales | $1,678.53 | - |
| 1/9/2023 | 3/24/2023 | 75.00 | 3/24/2023 | 74.00 | Residential Sales | $72.58 | 5,370.92 |
| 1/9/2023 | 2/17/2023 | 40.00 | 2/17/2023 | 39.00 | Commercial Sales | $81.47 | 3,177.33 |
| 1/9/2023 | 1/9/2023 | 1.00 | 1/9/2023 | 0.00 | Residential Sales | $1,028.54 | - |
| 1/9/2023 | 3/25/2024 | 442.00 | 3/25/2024 | 441.00 | Commercial Sales | $36.05 | 15,898.05 |
| 1/9/2023 | 2/1/2023 | 24.00 | 2/1/2023 | 23.00 | Commercial Sales | $51.08 | 1,174.84 |
| 1/9/2023 | 1/24/2023 | 16.00 | 1/24/2023 | 15.00 | Residential Sales | $348.78 | 5,231.70 |
| 1/9/2023 | 2/1/2023 | 24.00 | 2/1/2023 | 23.00 | Residential Sales | $50.61 | 1,164.03 |
| 1/9/2023 | 1/25/2023 | 17.00 | 1/25/2023 | 16.00 | Commercial Sales | $255.24 | 4,083.84 |
| 1/9/2023 | 1/10/2023 | 2.00 | 1/10/2023 | 1.00 | Industrial Service | $8,338.32 | 8,338.32 |
| 1/9/2023 | 1/10/2023 | 2.00 | 1/10/2023 | 1.00 | Commercial Sales | $302,104.67 | 302,104.67 |
| 1/9/2023 | 2/3/2023 | 26.00 | 2/3/2023 | 25.00 | Residential Sales | $20.96 | 524.00 |
| 1/9/2023 | 1/11/2023 | 3.00 | 1/11/2023 | 2.00 | Industrial Service | $988.23 | 1,976.46 |
| 1/9/2023 | 1/9/2023 | 1.00 | 1/9/2023 | 0.00 | Public Street & Highway Lighting | $65.20 | - |
| 1/9/2023 | 12/6/2023 | 332.00 | 12/6/2023 | 331.00 | Residential Sales | $147.37 | 48,779.47 |
| 1/9/2023 | 1/26/2023 | 18.00 | 1/26/2023 | 17.00 | Residential Sales | $164.78 | 2,801.26 |
| 1/9/2023 | 1/10/2023 | 2.00 | 1/10/2023 | 1.00 | Residential Sales | $1,159,897.51 | 1,159,897.51 |
| 1/9/2023 | 1/11/2023 | 3.00 | 1/11/2023 | 2.00 | Commercial Sales | $173,987.27 | 347,974.54 |
| 1/9/2023 | 1/11/2023 | 3.00 | 1/11/2023 | 2.00 | Residential Sales | $156,934.85 | 313,869.70 |
| 1/9/2023 | 1/10/2023 | 2.00 | 1/10/2023 | 1.00 | Other Sales to Public Authority | $9,212.36 | 9,212.36 |
| 1/9/2023 | 1/12/2023 | 4.00 | 1/12/2023 | 3.00 | Commercial Sales | $93,525.87 | 280,577.61 |
| 1/9/2023 | 5/15/2023 | 127.00 | 5/15/2023 | 126.00 | Residential Sales | $100.60 | 12,675.60 |
| 1/9/2023 | 1/12/2023 | 4.00 | 1/12/2023 | 3.00 | Residential Sales | $9,838.69 | 29,516.07 |
| 1/9/2023 | 1/11/2023 | 3.00 | 1/11/2023 | 2.00 | Other Sales to Public Authority | $2,631.49 | 5,262.98 |
| 1/9/2023 | 1/13/2023 | 5.00 | 1/13/2023 | 4.00 | Commercial Sales | $33,365.19 | 133,460.76 |
| 1/9/2023 | 2/21/2023 | 44.00 | 2/21/2023 | 43.00 | Commercial Sales | $453.63 | 19,506.09 |
| 1/9/2023 | 2/7/2023 | 30.00 | 2/7/2023 | 29.00 | Residential Sales | $192.14 | 5,572.06 |
| 1/9/2023 | 2/8/2023 | 31.00 | 2/8/2023 | 30.00 | Commercial Sales | $14,223.37 | 426,701.10 |
| 1/9/2023 | 1/13/2023 | 5.00 | 1/13/2023 | 4.00 | Residential Sales | $2,399.85 | 9,599.40 |
| 1/9/2023 | 1/13/2023 | 5.00 | 1/13/2023 | 4.00 | Other Sales to Public Authority | $444.84 | 1,779.36 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 1/9/2023 | 5/1/2023 | 113.00 | 5/1/2023 | 112.00 | Residential Sales | $14.23 | 1,593.76 |
| 1/9/2023 | 1/16/2023 | 8.00 | 1/16/2023 | 7.00 | Industrial Service | $273.48 | 1,914.36 |
| 1/9/2023 | 2/8/2023 | 31.00 | 2/8/2023 | 30.00 | Residential Sales | $55.80 | 1,674.00 |
| 1/9/2023 | 1/16/2023 | 8.00 | 1/16/2023 | 7.00 | Commercial Sales | $54,333.32 | 380,333.24 |
| 1/9/2023 | 3/17/2023 | 68.00 | 3/17/2023 | 67.00 | Residential Sales | $18.69 | 1,252.23 |
| 1/9/2023 | 1/16/2023 | 8.00 | 1/16/2023 | 7.00 | Residential Sales | $3,153.00 | 22,071.00 |
| 1/9/2023 | 1/17/2023 | 9.00 | 1/17/2023 | 8.00 | Commercial Sales | $59,708.71 | 477,669.68 |
| 1/9/2023 | 1/17/2023 | 9.00 | 1/17/2023 | 8.00 | Residential Sales | $1,600.03 | 12,800.24 |
| 1/9/2023 | 7/7/2023 | 180.00 | 7/7/2023 | 179.00 | Commercial Sales | $43.13 | 7,720.27 |
| 1/9/2023 | 1/16/2023 | 8.00 | 1/16/2023 | 7.00 | Other Sales to Public Authority | $2,525.45 | 17,678.15 |
| 1/9/2023 | 1/18/2023 | 10.00 | 1/18/2023 | 9.00 | Residential Sales | $853.13 | 7,678.17 |
| 1/9/2023 | 1/17/2023 | 9.00 | 1/17/2023 | 8.00 | Other Sales to Public Authority | $23,022.23 | 184,177.84 |
| 1/9/2023 | 1/18/2023 | 10.00 | 1/18/2023 | 9.00 | Other Sales to Public Authority | $2,994.58 | 26,951.22 |
| 1/9/2023 | 1/19/2023 | 11.00 | 1/19/2023 | 10.00 | Residential Sales | $232.07 | 2,320.70 |
| 1/9/2023 | 5/23/2023 | 135.00 | 5/23/2023 | 134.00 | Commercial Sales | $281.69 | 37,746.46 |
| 1/10/2023 | 1/18/2023 | 9.00 | 1/18/2023 | 8.00 | Other Sales to Public Authority | $26,412.15 | 211,297.20 |
| 1/10/2023 | 1/20/2023 | 11.00 | 1/20/2023 | 10.00 | Residential Sales | $324.49 | 3,244.90 |
| 1/10/2023 | 1/12/2023 | 3.00 | 1/12/2023 | 2.00 | Company Use | $0.00 | - |
| 1/10/2023 | 1/19/2023 | 10.00 | 1/19/2023 | 9.00 | Other Sales to Public Authority | $13,280.49 | 119,524.41 |
| 1/10/2023 | 1/23/2023 | 14.00 | 1/23/2023 | 13.00 | Commercial Sales | $25,318.76 | 329,143.88 |
| 1/10/2023 | 1/25/2023 | 16.00 | 1/25/2023 | 15.00 | Commercial Sales | $37,039.50 | 555,592.50 |
| 1/10/2023 | 1/24/2023 | 15.00 | 1/24/2023 | 14.00 | Residential Sales | $192.88 | 2,700.32 |
| 1/10/2023 | 1/25/2023 | 16.00 | 1/25/2023 | 15.00 | Residential Sales | $102.56 | 1,538.40 |
| 1/10/2023 | 1/11/2023 | 2.00 | 1/11/2023 | 1.00 | Industrial Service | $61,751.46 | 61,751.46 |
| 1/10/2023 | 1/10/2023 | 1.00 | 1/10/2023 | 0.00 | Commercial Sales | $552.60 | - |
| 1/10/2023 | 1/11/2023 | 2.00 | 1/11/2023 | 1.00 | Commercial Sales | $308,930.27 | 308,930.27 |
| 1/10/2023 | 1/10/2023 | 1.00 | 1/10/2023 | 0.00 | Residential Sales | $1,566.85 | - |
| 1/10/2023 | 11/14/2023 | 309.00 | 11/14/2023 | 308.00 | Commercial Sales | $1,785.26 | 549,860.08 |
| 1/10/2023 | 1/12/2023 | 3.00 | 1/12/2023 | 2.00 | Industrial Service | $26,194.61 | 52,389.22 |
| 1/10/2023 | 1/11/2023 | 2.00 | 1/11/2023 | 1.00 | Residential Sales | $505,518.77 | 505,518.77 |
| 1/10/2023 | 1/12/2023 | 3.00 | 1/12/2023 | 2.00 | Commercial Sales | $38,619.70 | 77,239.40 |
| 1/10/2023 | 1/12/2023 | 3.00 | 1/12/2023 | 2.00 | Residential Sales | $13,008.17 | 26,016.34 |
| 1/10/2023 | 1/13/2023 | 4.00 | 1/13/2023 | 3.00 | Commercial Sales | $25,724.36 | 77,173.08 |
| 1/10/2023 | 1/13/2023 | 4.00 | 1/13/2023 | 3.00 | Residential Sales | $5,349.50 | 16,048.50 |
| 1/10/2023 | 1/10/2023 | 1.00 | 1/10/2023 | 0.00 | Public Street & Highway Lighting | $24.40 | - |
| 1/10/2023 | 1/16/2023 | 7.00 | 1/16/2023 | 6.00 | Industrial Service | $23,298.76 | 139,792.56 |
| 1/10/2023 | 1/16/2023 | 7.00 | 1/16/2023 | 6.00 | Commercial Sales | $215,973.88 | 1,295,843.28 |
| 1/10/2023 | 1/27/2023 | 18.00 | 1/27/2023 | 17.00 | Other Sales to Public Authority | $97,691.78 | 1,660,760.26 |
| 1/10/2023 | 1/16/2023 | 7.00 | 1/16/2023 | 6.00 | Residential Sales | $3,707.54 | 22,245.24 |
| 1/10/2023 | 1/11/2023 | 2.00 | 1/11/2023 | 1.00 | Other Sales to Public Authority | $41,441.76 | 41,441.76 |
| 1/10/2023 | 1/17/2023 | 8.00 | 1/17/2023 | 7.00 | Commercial Sales | $20,605.46 | 144,238.22 |
| 1/10/2023 | 1/30/2023 | 21.00 | 1/30/2023 | 20.00 | Residential Sales | $195.14 | 3,902.80 |
| 1/10/2023 | 1/18/2023 | 9.00 | 1/18/2023 | 8.00 | Industrial Service | $86.19 | 689.52 |
| 1/10/2023 | 1/12/2023 | 3.00 | 1/12/2023 | 2.00 | Other Sales to Public Authority | $23,847.84 | 47,695.68 |
| 1/10/2023 | 1/18/2023 | 9.00 | 1/18/2023 | 8.00 | Commercial Sales | $33,126.54 | 265,012.32 |
| 1/10/2023 | 1/17/2023 | 8.00 | 1/17/2023 | 7.00 | Residential Sales | $788.66 | 5,520.62 |
| 1/10/2023 | 1/18/2023 | 9.00 | 1/18/2023 | 8.00 | Residential Sales | $405.85 | 3,246.80 |
| 1/10/2023 | 1/13/2023 | 4.00 | 1/13/2023 | 3.00 | Other Sales to Public Authority | $19.85 | 59.55 |
| 1/10/2023 | 1/19/2023 | 10.00 | 1/19/2023 | 9.00 | Residential Sales | $369.78 | 3,328.02 |
| 1/10/2023 | 2/10/2023 | 32.00 | 2/10/2023 | 31.00 | Residential Sales | $14.23 | 441.13 |
| 1/11/2023 | 1/17/2023 | 7.00 | 1/17/2023 | 6.00 | Residential Sales | $4,840.76 | 29,044.56 |
| 1/11/2023 | 1/12/2023 | 2.00 | 1/12/2023 | 1.00 | Other Sales to Public Authority | $40,291.42 | 40,291.42 |
| 1/11/2023 | 1/18/2023 | 8.00 | 1/18/2023 | 7.00 | Commercial Sales | $7,956.96 | 55,698.72 |
| 1/11/2023 | 10/10/2023 | 273.00 | 10/10/2023 | 272.00 | Commercial Sales | $1,486.30 | 404,273.60 |
| 1/11/2023 | 1/18/2023 | 8.00 | 1/18/2023 | 7.00 | Residential Sales | $568.97 | 3,982.79 |
| 1/11/2023 | 1/13/2023 | 3.00 | 1/13/2023 | 2.00 | Other Sales to Public Authority | $2,113.87 | 4,227.74 |
| 1/11/2023 | 1/19/2023 | 9.00 | 1/19/2023 | 8.00 | Commercial Sales | $9,177.54 | 73,420.32 |
| 1/11/2023 | 1/19/2023 | 9.00 | 1/19/2023 | 8.00 | Residential Sales | $1,127.69 | 9,021.52 |
| 1/11/2023 | 1/16/2023 | 6.00 | 1/16/2023 | 5.00 | Other Sales to Public Authority | $24.11 | 120.55 |
| 1/11/2023 | 3/7/2023 | 56.00 | 3/7/2023 | 55.00 | Commercial Sales | $262.53 | 14,439.15 |
| 1/11/2023 | 1/17/2023 | 7.00 | 1/17/2023 | 6.00 | Other Sales to Public Authority | $184.94 | 1,109.64 |
| 1/11/2023 | 1/31/2023 | 21.00 | 1/31/2023 | 20.00 | Other Sales to Public Authority | $3,130.00 | 62,600.00 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 1/11/2023 | 1/19/2023 | 9.00 | 1/19/2023 | 8.00 | Other Sales to Public Authority | $209.00 | 1,672.00 |
| 1/11/2023 | 2/16/2023 | 37.00 | 2/16/2023 | 36.00 | Commercial Sales | $38.34 | 1,380.24 |
| 1/11/2023 | 1/23/2023 | 13.00 | 1/23/2023 | 12.00 | Commercial Sales | $383.93 | 4,607.16 |
| 1/11/2023 | 2/17/2023 | 38.00 | 2/17/2023 | 37.00 | Commercial Sales | $25.23 | 933.51 |
| 1/11/2023 | 2/17/2023 | 38.00 | 2/17/2023 | 37.00 | Residential Sales | $181.58 | 6,718.46 |
| 1/11/2023 | 1/25/2023 | 15.00 | 1/25/2023 | 14.00 | Residential Sales | $264.28 | 3,699.92 |
| 1/11/2023 | 2/3/2023 | 24.00 | 2/3/2023 | 23.00 | Residential Sales | $15.60 | 358.80 |
| 1/11/2023 | 1/11/2023 | 1.00 | 1/11/2023 | 0.00 | Commercial Sales | $2,930.99 | - |
| 1/11/2023 | 1/12/2023 | 2.00 | 1/12/2023 | 1.00 | Industrial Service | $83,984.73 | 83,984.73 |
| 1/11/2023 | 1/27/2023 | 17.00 | 1/27/2023 | 16.00 | Residential Sales | $63.62 | 1,017.92 |
| 1/11/2023 | 1/11/2023 | 1.00 | 1/11/2023 | 0.00 | Residential Sales | $2,533.89 | - |
| 1/11/2023 | 1/12/2023 | 2.00 | 1/12/2023 | 1.00 | Commercial Sales | $344,784.05 | 344,784.05 |
| 1/11/2023 | 1/13/2023 | 3.00 | 1/13/2023 | 2.00 | Industrial Service | $827.87 | 1,655.74 |
| 1/11/2023 | 1/12/2023 | 2.00 | 1/12/2023 | 1.00 | Residential Sales | $524,482.84 | 524,482.84 |
| 1/11/2023 | 1/13/2023 | 3.00 | 1/13/2023 | 2.00 | Commercial Sales | $108,128.08 | 216,256.16 |
| 1/11/2023 | 2/20/2023 | 41.00 | 2/20/2023 | 40.00 | Residential Sales | $77.78 | 3,111.20 |
| 1/11/2023 | 2/6/2023 | 27.00 | 2/6/2023 | 26.00 | Residential Sales | $466.27 | 12,123.02 |
| 1/11/2023 | 1/13/2023 | 3.00 | 1/13/2023 | 2.00 | Residential Sales | $10,981.60 | 21,963.20 |
| 1/11/2023 | 2/8/2023 | 29.00 | 2/8/2023 | 28.00 | Residential Sales | $5.80 | 162.40 |
| 1/11/2023 | 1/11/2023 | 1.00 | 1/11/2023 | 0.00 | Public Street & Highway Lighting | $59.03 | - |
| 1/11/2023 | 2/9/2023 | 30.00 | 2/9/2023 | 29.00 | Commercial Sales | $19.02 | 551.58 |
| 1/11/2023 | 1/16/2023 | 6.00 | 1/16/2023 | 5.00 | Commercial Sales | $113,263.51 | 566,317.55 |
| 1/11/2023 | 3/1/2023 | 50.00 | 3/1/2023 | 49.00 | Commercial Sales | $11.05 | 541.45 |
| 1/11/2023 | 1/17/2023 | 7.00 | 1/17/2023 | 6.00 | Industrial Service | $26,398.70 | 158,392.20 |
| 1/11/2023 | 1/11/2023 | 1.00 | 1/11/2023 | 0.00 | Other Sales to Public Authority | $272.71 | - |
| 1/11/2023 | 1/17/2023 | 7.00 | 1/17/2023 | 6.00 | Commercial Sales | $18,471.50 | 110,829.00 |
| 1/11/2023 | 1/16/2023 | 6.00 | 1/16/2023 | 5.00 | Residential Sales | $10,413.14 | 52,065.70 |
| 1/11/2023 | 1/30/2023 | 20.00 | 1/30/2023 | 19.00 | Residential Sales | $694.49 | 13,195.31 |
| 1/11/2023 | 4/10/2023 | 90.00 | 4/10/2023 | 89.00 | Commercial Sales | $49.78 | 4,430.42 |
| 1/11/2023 | 1/31/2023 | 21.00 | 1/31/2023 | 20.00 | Commercial Sales | $18,307.60 | 366,152.00 |
| 1/12/2023 | 1/13/2023 | 2.00 | 1/13/2023 | 1.00 | Commercial Sales | $312,579.31 | 312,579.31 |
| 1/12/2023 | 5/15/2024 | 490.00 | 5/15/2024 | 489.00 | Residential Sales | $436.84 | 213,614.76 |
| 1/12/2023 | 1/12/2023 | 1.00 | 1/12/2023 | 0.00 | Residential Sales | $3,127.81 | - |
| 1/12/2023 | 11/15/2023 | 308.00 | 11/15/2023 | 307.00 | Residential Sales | $111.34 | 34,181.38 |
| 1/12/2023 | 2/6/2023 | 26.00 | 2/6/2023 | 25.00 | Residential Sales | $374.20 | 9,355.00 |
| 1/12/2023 | 1/13/2023 | 2.00 | 1/13/2023 | 1.00 | Residential Sales | $899,046.06 | 899,046.06 |
| 1/12/2023 | 2/8/2023 | 28.00 | 2/8/2023 | 27.00 | Commercial Sales | $182.91 | 4,938.57 |
| 1/12/2023 | 2/21/2023 | 41.00 | 2/21/2023 | 40.00 | Residential Sales | $24.22 | 968.80 |
| 1/12/2023 | 2/7/2023 | 27.00 | 2/7/2023 | 26.00 | Residential Sales | $137.03 | 3,562.78 |
| 1/12/2023 | 1/16/2023 | 5.00 | 1/16/2023 | 4.00 | Industrial Service | $66,321.98 | 265,287.92 |
| 1/12/2023 | 2/8/2023 | 28.00 | 2/8/2023 | 27.00 | Residential Sales | $194.94 | 5,263.38 |
| 1/12/2023 | 1/12/2023 | 1.00 | 1/12/2023 | 0.00 | Public Street & Highway Lighting | $55,684.03 | - |
| 1/12/2023 | 1/16/2023 | 5.00 | 1/16/2023 | 4.00 | Commercial Sales | $77,161.55 | 308,646.20 |
| 1/12/2023 | 1/17/2023 | 6.00 | 1/17/2023 | 5.00 | Industrial Service | $588,383.43 | 2,941,917.15 |
| 1/12/2023 | 2/9/2023 | 29.00 | 2/9/2023 | 28.00 | Residential Sales | $333.30 | 9,332.40 |
| 1/12/2023 | 1/16/2023 | 5.00 | 1/16/2023 | 4.00 | Residential Sales | $14,063.01 | 56,252.04 |
| 1/12/2023 | 1/18/2023 | 7.00 | 1/18/2023 | 6.00 | Industrial Service | $44,427.61 | 266,565.66 |
| 1/12/2023 | 1/17/2023 | 6.00 | 1/17/2023 | 5.00 | Commercial Sales | $37,020.92 | 185,104.60 |
| 1/12/2023 | 1/13/2023 | 2.00 | 1/13/2023 | 1.00 | Public Street & Highway Lighting | $1,429.15 | 1,429.15 |
| 1/12/2023 | 1/30/2023 | 19.00 | 1/30/2023 | 18.00 | Residential Sales | $32.46 | 584.28 |
| 1/12/2023 | 1/31/2023 | 20.00 | 1/31/2023 | 19.00 | Commercial Sales | $1,615.58 | 30,696.02 |
| 1/12/2023 | 1/17/2023 | 6.00 | 1/17/2023 | 5.00 | Residential Sales | $3,854.72 | 19,273.60 |
| 1/12/2023 | 1/18/2023 | 7.00 | 1/18/2023 | 6.00 | Commercial Sales | $100,573.50 | 603,441.00 |
| 1/12/2023 | 1/12/2023 | 1.00 | 1/12/2023 | 0.00 | Other Sales to Public Authority | $21.78 | - |
| 1/12/2023 | 1/18/2023 | 7.00 | 1/18/2023 | 6.00 | Residential Sales | $1,445.16 | 8,670.96 |
| 1/12/2023 | 1/13/2023 | 2.00 | 1/13/2023 | 1.00 | Other Sales to Public Authority | $24,093.57 | 24,093.57 |
| 1/12/2023 | 1/19/2023 | 8.00 | 1/19/2023 | 7.00 | Commercial Sales | $1,769.93 | 12,389.51 |
| 1/12/2023 | 1/19/2023 | 8.00 | 1/19/2023 | 7.00 | Residential Sales | $309.94 | 2,169.58 |
| 1/12/2023 | 1/17/2023 | 6.00 | 1/17/2023 | 5.00 | Public Street & Highway Lighting | $65,354.87 | 326,774.35 |
| 1/12/2023 | 1/16/2023 | 5.00 | 1/16/2023 | 4.00 | Other Sales to Public Authority | $1,146.19 | 4,584.76 |
| 1/12/2023 | 1/20/2023 | 9.00 | 1/20/2023 | 8.00 | Industrial Service | $13,814.07 | 110,512.56 |
| 1/12/2023 | 1/18/2023 | 7.00 | 1/18/2023 | 6.00 | Public Street & Highway Lighting | $10,693.99 | 64,163.94 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 1/12/2023 | 3/6/2023 | 54.00 | 3/6/2023 | 53.00 | Residential Sales | $173.84 | 9,213.52 |
| 1/12/2023 | 1/17/2023 | 6.00 | 1/17/2023 | 5.00 | Other Sales to Public Authority | $5,525.34 | 27,626.70 |
| 1/12/2023 | 2/13/2023 | 33.00 | 2/13/2023 | 32.00 | Residential Sales | $86.96 | 2,782.72 |
| 1/12/2023 | 1/20/2023 | 9.00 | 1/20/2023 | 8.00 | Residential Sales | $606.00 | 4,848.00 |
| 1/12/2023 | 2/14/2023 | 34.00 | 2/14/2023 | 33.00 | Residential Sales | $139.77 | 4,612.41 |
| 1/12/2023 | 1/18/2023 | 7.00 | 1/18/2023 | 6.00 | Other Sales to Public Authority | $37,222.24 | 223,333.44 |
| 1/12/2023 | 1/23/2023 | 12.00 | 1/23/2023 | 11.00 | Commercial Sales | $35,515.79 | 390,673.69 |
| 1/12/2023 | 3/8/2023 | 56.00 | 3/8/2023 | 55.00 | Public Street & Highway Lighting | $491.16 | 27,013.80 |
| 1/12/2023 | 1/23/2023 | 12.00 | 1/23/2023 | 11.00 | Residential Sales | $483.00 | 5,313.00 |
| 1/12/2023 | 1/24/2023 | 13.00 | 1/24/2023 | 12.00 | Residential Sales | $502.92 | 6,035.04 |
| 1/12/2023 | 3/27/2023 | 75.00 | 3/27/2023 | 74.00 | Commercial Sales | $2,076.15 | 153,635.10 |
| 1/12/2023 | 1/16/2023 | 5.00 | 1/16/2023 | 4.00 | Company Use | $0.00 | - |
| 1/12/2023 | 1/26/2023 | 15.00 | 1/26/2023 | 14.00 | Industrial Service | $37,164.00 | 520,296.00 |
| 1/12/2023 | 1/25/2023 | 14.00 | 1/25/2023 | 13.00 | Commercial Sales | $19,552.99 | 254,188.87 |
| 1/12/2023 | 2/2/2023 | 22.00 | 2/2/2023 | 21.00 | Residential Sales | $180.13 | 3,782.73 |
| 1/12/2023 | 2/3/2023 | 23.00 | 2/3/2023 | 22.00 | Residential Sales | $209.18 | 4,601.96 |
| 1/12/2023 | 1/26/2023 | 15.00 | 1/26/2023 | 14.00 | Residential Sales | $159.54 | 2,233.56 |
| 1/12/2023 | 1/27/2023 | 16.00 | 1/27/2023 | 15.00 | Residential Sales | $375.20 | 5,628.00 |
| 1/12/2023 | 1/12/2023 | 1.00 | 1/12/2023 | 0.00 | Commercial Sales | $850.09 | - |
| 1/12/2023 | 1/13/2023 | 2.00 | 1/13/2023 | 1.00 | Industrial Service | $217,652.34 | 217,652.34 |
| 1/12/2023 | 11/15/2023 | 308.00 | 11/15/2023 | 307.00 | Commercial Sales | $398.18 | 122,241.26 |
| 1/13/2023 | 1/26/2023 | 14.00 | 1/26/2023 | 13.00 | Industrial Service | $1,440.81 | 18,730.53 |
| 1/13/2023 | 1/24/2023 | 12.00 | 1/24/2023 | 11.00 | Residential Sales | $366.81 | 4,034.91 |
| 1/13/2023 | 11/27/2023 | 319.00 | 11/27/2023 | 318.00 | Residential Sales | $211.71 | 67,323.78 |
| 1/13/2023 | 1/25/2023 | 13.00 | 1/25/2023 | 12.00 | Commercial Sales | $833.13 | 9,997.56 |
| 1/13/2023 | 6/5/2023 | 144.00 | 6/5/2023 | 143.00 | Residential Sales | $59.57 | 8,518.51 |
| 1/13/2023 | 2/1/2023 | 20.00 | 2/1/2023 | 19.00 | Residential Sales | $145.80 | 2,770.20 |
| 1/13/2023 | 1/26/2023 | 14.00 | 1/26/2023 | 13.00 | Commercial Sales | $12,949.64 | 168,345.32 |
| 1/13/2023 | 1/26/2023 | 14.00 | 1/26/2023 | 13.00 | Residential Sales | $467.05 | 6,071.65 |
| 1/13/2023 | 2/3/2023 | 22.00 | 2/3/2023 | 21.00 | Residential Sales | $191.57 | 4,022.97 |
| 1/13/2023 | 1/13/2023 | 1.00 | 1/13/2023 | 0.00 | Commercial Sales | $339.78 | - |
| 1/13/2023 | 2/6/2023 | 25.00 | 2/6/2023 | 24.00 | Residential Sales | $511.79 | 12,282.96 |
| 1/13/2023 | 2/20/2023 | 39.00 | 2/20/2023 | 38.00 | Residential Sales | $233.46 | 8,871.48 |
| 1/13/2023 | 1/13/2023 | 1.00 | 1/13/2023 | 0.00 | Residential Sales | $1,775.75 | - |
| 1/13/2023 | 2/8/2023 | 27.00 | 2/8/2023 | 26.00 | Commercial Sales | $17,915.36 | 465,799.36 |
| 1/13/2023 | 1/16/2023 | 4.00 | 1/16/2023 | 3.00 | Industrial Service | $277,601.90 | 832,805.70 |
| 1/13/2023 | 2/8/2023 | 27.00 | 2/8/2023 | 26.00 | Residential Sales | $2,011.69 | 52,303.94 |
| 1/13/2023 | 1/16/2023 | 4.00 | 1/16/2023 | 3.00 | Commercial Sales | $696,590.57 | 2,089,771.71 |
| 1/13/2023 | 1/17/2023 | 5.00 | 1/17/2023 | 4.00 | Industrial Service | $111,196.91 | 444,787.64 |
| 1/13/2023 | 2/9/2023 | 28.00 | 2/9/2023 | 27.00 | Residential Sales | $276.65 | 7,469.55 |
| 1/13/2023 | 1/16/2023 | 4.00 | 1/16/2023 | 3.00 | Residential Sales | $1,337,225.55 | 4,011,676.65 |
| 1/13/2023 | 1/17/2023 | 5.00 | 1/17/2023 | 4.00 | Commercial Sales | $250,768.31 | 1,003,073.24 |
| 1/13/2023 | 1/30/2023 | 18.00 | 1/30/2023 | 17.00 | Residential Sales | $14.23 | 241.91 |
| 1/13/2023 | 1/13/2023 | 1.00 | 1/13/2023 | 0.00 | Public Street & Highway Lighting | $14.38 | - |
| 1/13/2023 | 1/18/2023 | 6.00 | 1/18/2023 | 5.00 | Industrial Service | $50,961.79 | 254,808.95 |
| 1/13/2023 | 1/17/2023 | 5.00 | 1/17/2023 | 4.00 | Residential Sales | $14,238.71 | 56,954.84 |
| 1/13/2023 | 1/31/2023 | 19.00 | 1/31/2023 | 18.00 | Residential Sales | $1,189.98 | 21,419.64 |
| 1/13/2023 | 1/18/2023 | 6.00 | 1/18/2023 | 5.00 | Commercial Sales | $4,547.44 | 22,737.20 |
| 1/13/2023 | 3/2/2023 | 49.00 | 3/2/2023 | 48.00 | Residential Sales | $130.08 | 6,243.84 |
| 1/13/2023 | 1/19/2023 | 7.00 | 1/19/2023 | 6.00 | Industrial Service | $9,178.42 | 55,070.52 |
| 1/13/2023 | 1/19/2023 | 7.00 | 1/19/2023 | 6.00 | Commercial Sales | $5,058.04 | 30,348.24 |
| 1/13/2023 | 1/18/2023 | 6.00 | 1/18/2023 | 5.00 | Residential Sales | $7,240.81 | 36,204.05 |
| 1/13/2023 | 1/13/2023 | 1.00 | 1/13/2023 | 0.00 | Other Sales to Public Authority | $21.78 | - |
| 1/13/2023 | 2/27/2023 | 46.00 | 2/27/2023 | 45.00 | Residential Sales | $510.23 | 22,960.35 |
| 1/13/2023 | 1/19/2023 | 7.00 | 1/19/2023 | 6.00 | Residential Sales | $7,741.38 | 46,448.28 |
| 1/13/2023 | 8/30/2023 | 230.00 | 8/30/2023 | 229.00 | Residential Sales | $29.44 | 6,741.76 |
| 1/13/2023 | 2/10/2023 | 29.00 | 2/10/2023 | 28.00 | Residential Sales | $160.88 | 4,504.64 |
| 1/13/2023 | 2/13/2023 | 32.00 | 2/13/2023 | 31.00 | Industrial Service | $1,672.00 | 51,832.00 |
| 1/13/2023 | 2/28/2023 | 47.00 | 2/28/2023 | 46.00 | Residential Sales | $65.86 | 3,029.56 |
| 1/13/2023 | 5/6/2024 | 480.00 | 5/6/2024 | 479.00 | Residential Sales | $30.02 | 14,379.58 |
| 1/13/2023 | 1/16/2023 | 4.00 | 1/16/2023 | 3.00 | Other Sales to Public Authority | $2,404.94 | 7,214.82 |
| 1/13/2023 | 3/7/2023 | 54.00 | 3/7/2023 | 53.00 | Commercial Sales | $24,480.84 | 1,297,484.52 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 1/13/2023 | 3/21/2023 | 68.00 | 3/21/2023 | 67.00 | Commercial Sales | $389.76 | 26,113.92 |
| 1/13/2023 | 2/13/2023 | 32.00 | 2/13/2023 | 31.00 | Commercial Sales | $38.24 | 1,185.44 |
| 1/13/2023 | 1/17/2023 | 5.00 | 1/17/2023 | 4.00 | Other Sales to Public Authority | $1,594.77 | 6,379.08 |
| 1/13/2023 | 1/20/2023 | 8.00 | 1/20/2023 | 7.00 | Residential Sales | $1,740.54 | 12,183.78 |
| 1/13/2023 | 2/14/2023 | 33.00 | 2/14/2023 | 32.00 | Residential Sales | $378.93 | 12,125.76 |
| 1/13/2023 | 3/8/2023 | 55.00 | 3/8/2023 | 54.00 | Residential Sales | $123.01 | 6,642.54 |
| 1/13/2023 | 12/18/2023 | 340.00 | 12/18/2023 | 339.00 | Commercial Sales | $1,412.06 | 478,688.34 |
| 1/13/2023 | 1/23/2023 | 11.00 | 1/23/2023 | 10.00 | Industrial Service | $87,020.41 | 870,204.10 |
| 1/13/2023 | 2/17/2023 | 36.00 | 2/17/2023 | 35.00 | Commercial Sales | $66.98 | 2,344.30 |
| 1/13/2023 | 1/23/2023 | 11.00 | 1/23/2023 | 10.00 | Commercial Sales | $179.20 | 1,792.00 |
| 1/13/2023 | 1/23/2023 | 11.00 | 1/23/2023 | 10.00 | Residential Sales | $192.01 | 1,920.10 |
| 1/13/2023 | 1/24/2023 | 12.00 | 1/24/2023 | 11.00 | Commercial Sales | $18.10 | 199.10 |
| 1/13/2023 | 2/17/2023 | 36.00 | 2/17/2023 | 35.00 | Residential Sales | $16.55 | 579.25 |
| 1/13/2023 | 2/1/2023 | 20.00 | 2/1/2023 | 19.00 | Commercial Sales | $66.06 | 1,255.14 |
| 1/14/2023 | 2/8/2023 | 26.00 | 2/8/2023 | 25.00 | Residential Sales | $119.47 | 2,986.75 |
| 1/14/2023 | 1/16/2023 | 3.00 | 1/16/2023 | 2.00 | Commercial Sales | $66.26 | 132.52 |
| 1/14/2023 | 1/16/2023 | 3.00 | 1/16/2023 | 2.00 | Residential Sales | $4,994.84 | 9,989.68 |
| 1/14/2023 | 1/17/2023 | 4.00 | 1/17/2023 | 3.00 | Residential Sales | $234.20 | 702.60 |
| 1/15/2023 | 1/17/2023 | 3.00 | 1/17/2023 | 2.00 | Residential Sales | $256.45 | 512.90 |
| 1/15/2023 | 1/19/2023 | 5.00 | 1/19/2023 | 4.00 | Commercial Sales | $42.28 | 169.12 |
| 1/15/2023 | 1/18/2023 | 4.00 | 1/18/2023 | 3.00 | Residential Sales | $14.23 | 42.69 |
| 1/15/2023 | 1/19/2023 | 5.00 | 1/19/2023 | 4.00 | Residential Sales | $14.23 | 56.92 |
| 1/15/2023 | 1/20/2023 | 6.00 | 1/20/2023 | 5.00 | Residential Sales | $148.03 | 740.15 |
| 1/15/2023 | 1/25/2023 | 11.00 | 1/25/2023 | 10.00 | Residential Sales | $23.93 | 239.30 |
| 1/15/2023 | 2/2/2023 | 19.00 | 2/2/2023 | 18.00 | Residential Sales | $150.90 | 2,716.20 |
| 1/15/2023 | 1/16/2023 | 2.00 | 1/16/2023 | 1.00 | Commercial Sales | $20.87 | 20.87 |
| 1/15/2023 | 1/16/2023 | 2.00 | 1/16/2023 | 1.00 | Residential Sales | $1,256.77 | 1,256.77 |
| 1/16/2023 | 2/6/2023 | 22.00 | 2/6/2023 | 21.00 | Residential Sales | $103.21 | 2,167.41 |
| 1/16/2023 | 2/20/2023 | 36.00 | 2/20/2023 | 35.00 | Residential Sales | $83.69 | 2,929.15 |
| 1/16/2023 | 2/7/2023 | 23.00 | 2/7/2023 | 22.00 | Residential Sales | $756.18 | 16,635.96 |
| 1/16/2023 | 2/8/2023 | 24.00 | 2/8/2023 | 23.00 | Commercial Sales | $242.90 | 5,586.70 |
| 1/16/2023 | 1/20/2023 | 5.00 | 1/20/2023 | 4.00 | Company Use | $0.00 | - |
| 1/16/2023 | 2/8/2023 | 24.00 | 2/8/2023 | 23.00 | Residential Sales | $108.06 | 2,485.38 |
| 1/16/2023 | 1/16/2023 | 1.00 | 1/16/2023 | 0.00 | Commercial Sales | $612.59 | - |
| 1/16/2023 | 1/17/2023 | 2.00 | 1/17/2023 | 1.00 | Industrial Service | $43,728.67 | 43,728.67 |
| 1/16/2023 | 2/17/2023 | 33.00 | 2/17/2023 | 32.00 | Other Public Authority Transportation On | $41.68 | 1,333.76 |
| 1/16/2023 | 1/17/2023 | 2.00 | 1/17/2023 | 1.00 | Commercial Sales | $426,609.42 | 426,609.42 |
| 1/16/2023 | 1/16/2023 | 1.00 | 1/16/2023 | 0.00 | Residential Sales | $1,065.09 | - |
| 1/16/2023 | 1/18/2023 | 3.00 | 1/18/2023 | 2.00 | Industrial Service | $22,770.89 | 45,541.78 |
| 1/16/2023 | 1/17/2023 | 2.00 | 1/17/2023 | 1.00 | Residential Sales | $1,054,147.38 | 1,054,147.38 |
| 1/16/2023 | 1/18/2023 | 3.00 | 1/18/2023 | 2.00 | Commercial Sales | $107,540.65 | 215,081.30 |
| 1/16/2023 | 1/19/2023 | 4.00 | 1/19/2023 | 3.00 | Industrial Service | $8,006.26 | 24,018.78 |
| 1/16/2023 | 1/18/2023 | 3.00 | 1/18/2023 | 2.00 | Residential Sales | $15,976.50 | 31,953.00 |
| 1/16/2023 | 1/19/2023 | 4.00 | 1/19/2023 | 3.00 | Commercial Sales | $8,290.97 | 24,872.91 |
| 1/16/2023 | 2/10/2023 | 26.00 | 2/10/2023 | 25.00 | Commercial Sales | $29.70 | 742.50 |
| 1/16/2023 | 10/27/2023 | 285.00 | 10/27/2023 | 284.00 | Residential Sales | $317.99 | 90,309.16 |
| 1/16/2023 | 1/19/2023 | 4.00 | 1/19/2023 | 3.00 | Residential Sales | $1,668.96 | 5,006.88 |
| 1/16/2023 | 1/16/2023 | 1.00 | 1/16/2023 | 0.00 | Public Street & Highway Lighting | $364.71 | - |
| 1/16/2023 | 2/27/2023 | 43.00 | 2/27/2023 | 42.00 | Residential Sales | $48.69 | 2,044.98 |
| 1/16/2023 | 1/17/2023 | 2.00 | 1/17/2023 | 1.00 | Other Sales to Public Authority | $21,704.63 | 21,704.63 |
| 1/16/2023 | 1/20/2023 | 5.00 | 1/20/2023 | 4.00 | Commercial Sales | $45,300.33 | 181,201.32 |
| 1/16/2023 | 1/18/2023 | 3.00 | 1/18/2023 | 2.00 | Other Sales to Public Authority | $2,192.26 | 4,384.52 |
| 1/16/2023 | 1/20/2023 | 5.00 | 1/20/2023 | 4.00 | Residential Sales | $121.39 | 485.56 |
| 1/16/2023 | 2/15/2023 | 31.00 | 2/15/2023 | 30.00 | Residential Sales | $42.76 | 1,282.80 |
| 1/16/2023 | 10/30/2023 | 288.00 | 10/30/2023 | 287.00 | Residential Sales | $82.25 | 23,605.75 |
| 1/16/2023 | 2/16/2023 | 32.00 | 2/16/2023 | 31.00 | Residential Sales | $159.96 | 4,958.76 |
| 1/16/2023 | 1/23/2023 | 8.00 | 1/23/2023 | 7.00 | Commercial Sales | $468.29 | 3,278.03 |
| 1/16/2023 | 1/24/2023 | 9.00 | 1/24/2023 | 8.00 | Commercial Sales | $30,454.68 | 243,637.44 |
| 1/16/2023 | 1/23/2023 | 8.00 | 1/23/2023 | 7.00 | Residential Sales | $2,446.89 | 17,128.23 |
| 1/16/2023 | 1/16/2023 | 1.00 | 1/16/2023 | 0.00 | Company Use | $19.73 | - |
| 1/16/2023 | 1/25/2023 | 10.00 | 1/25/2023 | 9.00 | Commercial Sales | $563.44 | 5,070.96 |
| 1/16/2023 | 4/3/2023 | 78.00 | 4/3/2023 | 77.00 | Residential Sales | $98.62 | 7,593.74 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 1/16/2023 | 1/24/2023 | 9.00 | 1/24/2023 | 8.00 | Residential Sales | $9.57 | 76.56 |
| 1/16/2023 | 1/17/2023 | 2.00 | 1/17/2023 | 1.00 | Company Use | $0.00 | - |
| 1/16/2023 | 1/25/2023 | 10.00 | 1/25/2023 | 9.00 | Residential Sales | $153.67 | 1,383.03 |
| 1/16/2023 | 1/18/2023 | 3.00 | 1/18/2023 | 2.00 | Company Use | -$5,494.80 | (10,989.60) |
| 1/16/2023 | 8/23/2023 | 220.00 | 8/23/2023 | 219.00 | Residential Sales | $43.98 | 9,631.62 |
| 1/16/2023 | 1/27/2023 | 12.00 | 1/27/2023 | 11.00 | Commercial Sales | $49,421.41 | 543,635.51 |
| 1/16/2023 | 1/19/2023 | 4.00 | 1/19/2023 | 3.00 | Company Use | $0.00 | - |
| 1/16/2023 | 1/27/2023 | 12.00 | 1/27/2023 | 11.00 | Residential Sales | $44.93 | 494.23 |
| 1/16/2023 | 11/15/2023 | 304.00 | 11/15/2023 | 303.00 | Commercial Sales | $36.05 | 10,923.15 |
| 1/17/2023 | 2/1/2023 | 16.00 | 2/1/2023 | 15.00 | Residential Sales | $51.33 | 769.95 |
| 1/17/2023 | 1/25/2023 | 9.00 | 1/25/2023 | 8.00 | Commercial Sales | $22.39 | 179.12 |
| 1/17/2023 | 1/26/2023 | 10.00 | 1/26/2023 | 9.00 | Residential Sales | $14.94 | 134.46 |
| 1/17/2023 | 2/3/2023 | 18.00 | 2/3/2023 | 17.00 | Residential Sales | $219.97 | 3,739.49 |
| 1/17/2023 | 1/24/2023 | 8.00 | 1/24/2023 | 7.00 | Other Sales to Public Authority | $13,226.21 | 92,583.47 |
| 1/17/2023 | 2/6/2023 | 21.00 | 2/6/2023 | 20.00 | Residential Sales | $140.94 | 2,818.80 |
| 1/17/2023 | 2/8/2023 | 23.00 | 2/8/2023 | 22.00 | Commercial Sales | $263.11 | 5,788.42 |
| 1/17/2023 | 2/7/2023 | 22.00 | 2/7/2023 | 21.00 | Residential Sales | $357.44 | 7,506.24 |
| 1/17/2023 | 2/8/2023 | 23.00 | 2/8/2023 | 22.00 | Residential Sales | $1,017.42 | 22,383.24 |
| 1/17/2023 | 2/9/2023 | 24.00 | 2/9/2023 | 23.00 | Residential Sales | $68.61 | 1,578.03 |
| 1/17/2023 | 1/17/2023 | 1.00 | 1/17/2023 | 0.00 | Commercial Sales | $302.01 | - |
| 1/17/2023 | 1/18/2023 | 2.00 | 1/18/2023 | 1.00 | Industrial Service | $913.29 | 913.29 |
| 1/17/2023 | 1/17/2023 | 1.00 | 1/17/2023 | 0.00 | Residential Sales | $1,381.01 | - |
| 1/17/2023 | 1/18/2023 | 2.00 | 1/18/2023 | 1.00 | Commercial Sales | $108,243.37 | 108,243.37 |
| 1/17/2023 | 1/19/2023 | 3.00 | 1/19/2023 | 2.00 | Industrial Service | $298.11 | 596.22 |
| 1/17/2023 | 1/31/2023 | 15.00 | 1/31/2023 | 14.00 | Residential Sales | $842.41 | 11,793.74 |
| 1/17/2023 | 1/18/2023 | 2.00 | 1/18/2023 | 1.00 | Residential Sales | $991,781.90 | 991,781.90 |
| 1/17/2023 | 1/19/2023 | 3.00 | 1/19/2023 | 2.00 | Commercial Sales | $25,283.57 | 50,567.14 |
| 1/17/2023 | 2/27/2023 | 42.00 | 2/27/2023 | 41.00 | Commercial Sales | $0.64 | 26.24 |
| 1/17/2023 | 1/19/2023 | 3.00 | 1/19/2023 | 2.00 | Residential Sales | $19,047.99 | 38,095.98 |
| 1/17/2023 | 2/27/2023 | 42.00 | 2/27/2023 | 41.00 | Residential Sales | $96.92 | 3,973.72 |
| 1/17/2023 | 1/17/2023 | 1.00 | 1/17/2023 | 0.00 | Public Street & Highway Lighting | $3.66 | - |
| 1/17/2023 | 1/20/2023 | 4.00 | 1/20/2023 | 3.00 | Commercial Sales | $11,944.33 | 35,832.99 |
| 1/17/2023 | 3/7/2023 | 50.00 | 3/7/2023 | 49.00 | Residential Sales | $123.01 | 6,027.49 |
| 1/17/2023 | 1/17/2023 | 1.00 | 1/17/2023 | 0.00 | Other Sales to Public Authority | $100.16 | - |
| 1/17/2023 | 1/20/2023 | 4.00 | 1/20/2023 | 3.00 | Residential Sales | $2,690.47 | 8,071.41 |
| 1/17/2023 | 1/18/2023 | 2.00 | 1/18/2023 | 1.00 | Other Sales to Public Authority | $7,506.19 | 7,506.19 |
| 1/17/2023 | 2/14/2023 | 29.00 | 2/14/2023 | 28.00 | Residential Sales | $288.11 | 8,067.08 |
| 1/17/2023 | 1/19/2023 | 3.00 | 1/19/2023 | 2.00 | Other Sales to Public Authority | $31,215.00 | 62,430.00 |
| 1/17/2023 | 1/23/2023 | 7.00 | 1/23/2023 | 6.00 | Industrial Service | $43,473.11 | 260,838.66 |
| 1/17/2023 | 4/17/2023 | 91.00 | 4/17/2023 | 90.00 | Residential Sales | $132.31 | 11,907.90 |
| 1/17/2023 | 1/23/2023 | 7.00 | 1/23/2023 | 6.00 | Commercial Sales | $962.93 | 5,777.58 |
| 1/17/2023 | 1/23/2023 | 7.00 | 1/23/2023 | 6.00 | Residential Sales | $2,864.98 | 17,189.88 |
| 1/17/2023 | 2/17/2023 | 32.00 | 2/17/2023 | 31.00 | Residential Sales | $13.36 | 414.16 |
| 1/18/2023 | 1/20/2023 | 3.00 | 1/20/2023 | 2.00 | Commercial Sales | $134,232.41 | 268,464.82 |
| 1/18/2023 | 1/20/2023 | 3.00 | 1/20/2023 | 2.00 | Residential Sales | $51,884.46 | 103,768.92 |
| 1/18/2023 | 1/18/2023 | 1.00 | 1/18/2023 | 0.00 | Other Sales to Public Authority | $46.44 | - |
| 1/18/2023 | 1/19/2023 | 2.00 | 1/19/2023 | 1.00 | Other Sales to Public Authority | $8,580.75 | 8,580.75 |
| 1/18/2023 | 2/15/2023 | 29.00 | 2/15/2023 | 28.00 | Residential Sales | $46.30 | 1,296.40 |
| 1/18/2023 | 1/23/2023 | 6.00 | 1/23/2023 | 5.00 | Commercial Sales | $40,037.78 | 200,188.90 |
| 1/18/2023 | 3/24/2023 | 66.00 | 3/24/2023 | 65.00 | Residential Sales | $22.91 | 1,489.15 |
| 1/18/2023 | 1/23/2023 | 6.00 | 1/23/2023 | 5.00 | Residential Sales | $8,364.64 | 41,823.20 |
| 1/18/2023 | 1/24/2023 | 7.00 | 1/24/2023 | 6.00 | Commercial Sales | $39,093.85 | 234,563.10 |
| 1/18/2023 | 2/17/2023 | 31.00 | 2/17/2023 | 30.00 | Residential Sales | $43.86 | 1,315.80 |
| 1/18/2023 | 2/1/2023 | 15.00 | 2/1/2023 | 14.00 | Commercial Sales | $22.55 | 315.70 |
| 1/18/2023 | 1/24/2023 | 7.00 | 1/24/2023 | 6.00 | Residential Sales | $1,861.91 | 11,171.46 |
| 1/18/2023 | 1/25/2023 | 8.00 | 1/25/2023 | 7.00 | Commercial Sales | $4,332.14 | 30,324.98 |
| 1/18/2023 | 1/26/2023 | 9.00 | 1/26/2023 | 8.00 | Industrial Service | $20,006.50 | 160,052.00 |
| 1/18/2023 | 1/25/2023 | 8.00 | 1/25/2023 | 7.00 | Residential Sales | $1,586.26 | 11,103.82 |
| 1/18/2023 | 1/20/2023 | 3.00 | 1/20/2023 | 2.00 | Other Sales to Public Authority | $2,997.53 | 5,995.06 |
| 1/18/2023 | 1/26/2023 | 9.00 | 1/26/2023 | 8.00 | Residential Sales | $654.73 | 5,237.84 |
| 1/18/2023 | 1/27/2023 | 10.00 | 1/27/2023 | 9.00 | Residential Sales | $227.51 | 2,047.59 |
| 1/18/2023 | 2/6/2023 | 20.00 | 2/6/2023 | 19.00 | Residential Sales | $4.93 | 93.67 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 1/18/2023 | 2/7/2023 | 21.00 | 2/7/2023 | 20.00 | Residential Sales | $39.23 | 784.60 |
| 1/18/2023 | 2/8/2023 | 22.00 | 2/8/2023 | 21.00 | Residential Sales | $549.73 | 11,544.33 |
| 1/18/2023 | 2/9/2023 | 23.00 | 2/9/2023 | 22.00 | Residential Sales | $191.87 | 4,221.14 |
| 1/18/2023 | 1/30/2023 | 13.00 | 1/30/2023 | 12.00 | Residential Sales | $267.74 | 3,212.88 |
| 1/18/2023 | 1/31/2023 | 14.00 | 1/31/2023 | 13.00 | Commercial Sales | $18.32 | 238.16 |
| 1/18/2023 | 1/19/2023 | 2.00 | 1/19/2023 | 1.00 | Industrial Service | $119,148.75 | 119,148.75 |
| 1/18/2023 | 1/18/2023 | 1.00 | 1/18/2023 | 0.00 | Commercial Sales | $997.48 | - |
| 1/18/2023 | 1/19/2023 | 2.00 | 1/19/2023 | 1.00 | Commercial Sales | $244,160.90 | 244,160.90 |
| 1/18/2023 | 1/18/2023 | 1.00 | 1/18/2023 | 0.00 | Residential Sales | $1,614.20 | - |
| 1/18/2023 | 1/19/2023 | 2.00 | 1/19/2023 | 1.00 | Residential Sales | $1,412,005.32 | 1,412,005.32 |
| 1/18/2023 | 2/10/2023 | 24.00 | 2/10/2023 | 23.00 | Residential Sales | $4.21 | 96.83 |
| 1/18/2023 | 1/18/2023 | 1.00 | 1/18/2023 | 0.00 | Public Street & Highway Lighting | $165.36 | - |
| 1/18/2023 | 1/20/2023 | 3.00 | 1/20/2023 | 2.00 | Industrial Service | $23,087.84 | 46,175.68 |
| 1/19/2023 | 1/31/2023 | 13.00 | 1/31/2023 | 12.00 | Residential Sales | $454.62 | 5,455.44 |
| 1/19/2023 | 1/19/2023 | 1.00 | 1/19/2023 | 0.00 | Commercial Sales | $3,840.90 | - |
| 1/19/2023 | 1/19/2023 | 1.00 | 1/19/2023 | 0.00 | Residential Sales | $5,643.24 | - |
| 1/19/2023 | 1/25/2023 | 7.00 | 1/25/2023 | 6.00 | Company Use | $0.00 | - |
| 1/19/2023 | 2/27/2023 | 40.00 | 2/27/2023 | 39.00 | Residential Sales | $21.65 | 844.35 |
| 1/19/2023 | 1/20/2023 | 2.00 | 1/20/2023 | 1.00 | Industrial Service | $12,426.22 | 12,426.22 |
| 1/19/2023 | 1/20/2023 | 2.00 | 1/20/2023 | 1.00 | Commercial Sales | $168,627.32 | 168,627.32 |
| 1/19/2023 | 1/19/2023 | 1.00 | 1/19/2023 | 0.00 | Public Street & Highway Lighting | $387.40 | - |
| 1/19/2023 | 9/28/2023 | 253.00 | 9/28/2023 | 252.00 | Commercial Sales | $147.77 | 37,238.04 |
| 1/19/2023 | 1/20/2023 | 2.00 | 1/20/2023 | 1.00 | Residential Sales | $871,400.97 | 871,400.97 |
| 1/19/2023 | 2/14/2023 | 27.00 | 2/14/2023 | 26.00 | Residential Sales | $33.90 | 881.40 |
| 1/19/2023 | 1/23/2023 | 5.00 | 1/23/2023 | 4.00 | Industrial Service | $7,377.73 | 29,510.92 |
| 1/19/2023 | 1/23/2023 | 5.00 | 1/23/2023 | 4.00 | Commercial Sales | $78,469.63 | 313,878.52 |
| 1/19/2023 | 1/23/2023 | 5.00 | 1/23/2023 | 4.00 | Residential Sales | $19,888.44 | 79,553.76 |
| 1/19/2023 | 1/24/2023 | 6.00 | 1/24/2023 | 5.00 | Commercial Sales | $78,567.59 | 392,837.95 |
| 1/19/2023 | 1/25/2023 | 7.00 | 1/25/2023 | 6.00 | Industrial Service | $111.84 | 671.04 |
| 1/19/2023 | 1/24/2023 | 6.00 | 1/24/2023 | 5.00 | Residential Sales | $2,232.61 | 11,163.05 |
| 1/19/2023 | 1/25/2023 | 7.00 | 1/25/2023 | 6.00 | Commercial Sales | $1,261.81 | 7,570.86 |
| 1/19/2023 | 1/25/2023 | 7.00 | 1/25/2023 | 6.00 | Residential Sales | $1,493.30 | 8,959.80 |
| 1/19/2023 | 1/20/2023 | 2.00 | 1/20/2023 | 1.00 | Other Sales to Public Authority | $9,445.68 | 9,445.68 |
| 1/19/2023 | 1/26/2023 | 8.00 | 1/26/2023 | 7.00 | Commercial Sales | $388.07 | 2,716.49 |
| 1/19/2023 | 1/26/2023 | 8.00 | 1/26/2023 | 7.00 | Residential Sales | $1,457.76 | 10,204.32 |
| 1/19/2023 | 1/27/2023 | 9.00 | 1/27/2023 | 8.00 | Residential Sales | $273.63 | 2,189.04 |
| 1/19/2023 | 4/6/2023 | 78.00 | 4/6/2023 | 77.00 | Residential Sales | $124.18 | 9,561.86 |
| 1/19/2023 | 1/23/2023 | 5.00 | 1/23/2023 | 4.00 | Other Sales to Public Authority | $5,768.93 | 23,075.72 |
| 1/19/2023 | 2/6/2023 | 19.00 | 2/6/2023 | 18.00 | Residential Sales | $190.00 | 3,420.00 |
| 1/19/2023 | 8/10/2023 | 204.00 | 8/10/2023 | 203.00 | Residential Sales | $219.97 | 44,653.91 |
| 1/19/2023 | 2/8/2023 | 21.00 | 2/8/2023 | 20.00 | Commercial Sales | $92.69 | 1,853.80 |
| 1/19/2023 | 2/8/2023 | 21.00 | 2/8/2023 | 20.00 | Residential Sales | $795.51 | 15,910.20 |
| 1/19/2023 | 10/23/2023 | 278.00 | 10/23/2023 | 277.00 | Residential Sales | $132.95 | 36,827.15 |
| 1/19/2023 | 3/31/2023 | 72.00 | 3/31/2023 | 71.00 | Residential Sales | $83.56 | 5,932.76 |
| 1/19/2023 | 1/30/2023 | 12.00 | 1/30/2023 | 11.00 | Residential Sales | $45.72 | 502.92 |
| 1/19/2023 | 1/31/2023 | 13.00 | 1/31/2023 | 12.00 | Commercial Sales | $29.27 | 351.24 |
| 1/19/2023 | 2/24/2023 | 37.00 | 2/24/2023 | 36.00 | Residential Sales | $42.79 | 1,540.44 |
| 1/20/2023 | 1/31/2023 | 12.00 | 1/31/2023 | 11.00 | Residential Sales | $308.69 | 3,395.59 |
| 1/20/2023 | 7/20/2023 | 182.00 | 7/20/2023 | 181.00 | Residential Sales | $21.41 | 3,875.21 |
| 1/20/2023 | 7/21/2023 | 183.00 | 7/21/2023 | 182.00 | Residential Sales | $103.86 | 18,902.52 |
| 1/20/2023 | 1/20/2023 | 1.00 | 1/20/2023 | 0.00 | Industrial Service | $476.25 | - |
| 1/20/2023 | 1/20/2023 | 1.00 | 1/20/2023 | 0.00 | Commercial Sales | $107.79 | - |
| 1/20/2023 | 1/20/2023 | 1.00 | 1/20/2023 | 0.00 | Residential Sales | $7,422.54 | - |
| 1/20/2023 | 2/16/2023 | 28.00 | 2/16/2023 | 27.00 | Commercial Sales | $14.58 | 393.66 |
| 1/20/2023 | 3/9/2023 | 49.00 | 3/9/2023 | 48.00 | Residential Sales | $55.74 | 2,675.52 |
| 1/20/2023 | 1/23/2023 | 4.00 | 1/23/2023 | 3.00 | Industrial Service | $1,891.82 | 5,675.46 |
| 1/20/2023 | 1/23/2023 | 4.00 | 1/23/2023 | 3.00 | Commercial Sales | $98,970.72 | 296,912.16 |
| 1/20/2023 | 2/16/2023 | 28.00 | 2/16/2023 | 27.00 | Residential Sales | $244.65 | 6,605.55 |
| 1/20/2023 | 1/23/2023 | 4.00 | 1/23/2023 | 3.00 | Residential Sales | $1,264,338.90 | 3,793,016.70 |
| 1/20/2023 | 1/24/2023 | 5.00 | 1/24/2023 | 4.00 | Commercial Sales | $32,688.91 | 130,755.64 |
| 1/20/2023 | 2/17/2023 | 29.00 | 2/17/2023 | 28.00 | Residential Sales | $288.90 | 8,089.20 |
| 1/20/2023 | 1/20/2023 | 1.00 | 1/20/2023 | 0.00 | Public Street & Highway Lighting | $106.26 | - |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 1/20/2023 | 1/24/2023 | 5.00 | 1/24/2023 | 4.00 | Residential Sales | $16,444.87 | 65,779.48 |
| 1/20/2023 | 1/25/2023 | 6.00 | 1/25/2023 | 5.00 | Commercial Sales | $44,099.71 | 220,498.55 |
| 1/20/2023 | 2/2/2023 | 14.00 | 2/2/2023 | 13.00 | Commercial Sales | $29.92 | 388.96 |
| 1/20/2023 | 3/27/2023 | 67.00 | 3/27/2023 | 66.00 | Residential Sales | $10.44 | 689.04 |
| 1/20/2023 | 1/25/2023 | 6.00 | 1/25/2023 | 5.00 | Residential Sales | $611.93 | 3,059.65 |
| 1/20/2023 | 1/26/2023 | 7.00 | 1/26/2023 | 6.00 | Commercial Sales | $139.97 | 839.82 |
| 1/20/2023 | 1/26/2023 | 7.00 | 1/26/2023 | 6.00 | Residential Sales | $2,396.72 | 14,380.32 |
| 1/20/2023 | 1/27/2023 | 8.00 | 1/27/2023 | 7.00 | Residential Sales | $685.66 | 4,799.62 |
| 1/20/2023 | 1/23/2023 | 4.00 | 1/23/2023 | 3.00 | Other Sales to Public Authority | $8,645.82 | 25,937.46 |
| 1/20/2023 | 1/24/2023 | 5.00 | 1/24/2023 | 4.00 | Other Sales to Public Authority | $28,896.35 | 115,585.40 |
| 1/20/2023 | 2/6/2023 | 18.00 | 2/6/2023 | 17.00 | Residential Sales | $152.81 | 2,597.77 |
| 1/20/2023 | 3/15/2023 | 55.00 | 3/15/2023 | 54.00 | Commercial Sales | $187.85 | 10,143.90 |
| 1/20/2023 | 2/21/2023 | 33.00 | 2/21/2023 | 32.00 | Residential Sales | $35.01 | 1,120.32 |
| 1/20/2023 | 2/8/2023 | 20.00 | 2/8/2023 | 19.00 | Residential Sales | $418.72 | 7,955.68 |
| 1/20/2023 | 2/23/2023 | 35.00 | 2/23/2023 | 34.00 | Residential Sales | $153.30 | 5,212.20 |
| 1/20/2023 | 1/30/2023 | 11.00 | 1/30/2023 | 10.00 | Residential Sales | $120.24 | 1,202.40 |
| 1/21/2023 | 1/23/2023 | 3.00 | 1/23/2023 | 2.00 | Residential Sales | $2,052.10 | 4,104.20 |
| 1/21/2023 | 1/24/2023 | 4.00 | 1/24/2023 | 3.00 | Residential Sales | $58.25 | 174.75 |
| 1/22/2023 | 1/24/2023 | 3.00 | 1/24/2023 | 2.00 | Residential Sales | $271.13 | 542.26 |
| 1/22/2023 | 1/26/2023 | 5.00 | 1/26/2023 | 4.00 | Commercial Sales | $32.41 | 129.64 |
| 1/22/2023 | 1/26/2023 | 5.00 | 1/26/2023 | 4.00 | Residential Sales | $277.27 | 1,109.08 |
| 1/22/2023 | 2/8/2023 | 18.00 | 2/8/2023 | 17.00 | Residential Sales | $11.46 | 194.82 |
| 1/22/2023 | 2/27/2023 | 37.00 | 2/27/2023 | 36.00 | Residential Sales | $197.23 | 7,100.28 |
| 1/22/2023 | 2/13/2023 | 23.00 | 2/13/2023 | 22.00 | Residential Sales | $90.92 | 2,000.24 |
| 1/22/2023 | 2/14/2023 | 24.00 | 2/14/2023 | 23.00 | Residential Sales | $197.07 | 4,532.61 |
| 1/22/2023 | 1/23/2023 | 2.00 | 1/23/2023 | 1.00 | Residential Sales | $2,857.14 | 2,857.14 |
| 1/23/2023 | 6/1/2023 | 130.00 | 6/1/2023 | 129.00 | Residential Sales | $413.12 | 53,292.48 |
| 1/23/2023 | 2/15/2023 | 24.00 | 2/15/2023 | 23.00 | Residential Sales | $23.49 | 540.27 |
| 1/23/2023 | 12/13/2023 | 325.00 | 12/13/2023 | 324.00 | Other Sales to Public Authority | $88.78 | 28,764.72 |
| 1/23/2023 | 1/23/2023 | 1.00 | 1/23/2023 | 0.00 | Commercial Sales | $3,443.92 | - |
| 1/23/2023 | 1/24/2023 | 2.00 | 1/24/2023 | 1.00 | Industrial Service | $8,664.97 | 8,664.97 |
| 1/23/2023 | 2/16/2023 | 25.00 | 2/16/2023 | 24.00 | Residential Sales | $60.32 | 1,447.68 |
| 1/23/2023 | 1/23/2023 | 1.00 | 1/23/2023 | 0.00 | Residential Sales | $2,224.47 | - |
| 1/23/2023 | 1/24/2023 | 2.00 | 1/24/2023 | 1.00 | Commercial Sales | $336,981.64 | 336,981.64 |
| 1/23/2023 | 1/25/2023 | 3.00 | 1/25/2023 | 2.00 | Industrial Service | $3,047.32 | 6,094.64 |
| 1/23/2023 | 1/24/2023 | 2.00 | 1/24/2023 | 1.00 | Residential Sales | $1,289,415.76 | 1,289,415.76 |
| 1/23/2023 | 1/25/2023 | 3.00 | 1/25/2023 | 2.00 | Commercial Sales | $63,233.23 | 126,466.46 |
| 1/23/2023 | 1/26/2023 | 4.00 | 1/26/2023 | 3.00 | Industrial Service | $32,602.02 | 97,806.06 |
| 1/23/2023 | 1/25/2023 | 3.00 | 1/25/2023 | 2.00 | Residential Sales | $24,897.86 | 49,795.72 |
| 1/23/2023 | 1/26/2023 | 4.00 | 1/26/2023 | 3.00 | Commercial Sales | $48,904.19 | 146,712.57 |
| 1/23/2023 | 2/2/2023 | 11.00 | 2/2/2023 | 10.00 | Residential Sales | $941.54 | 9,415.40 |
| 1/23/2023 | 1/26/2023 | 4.00 | 1/26/2023 | 3.00 | Residential Sales | $1,922.45 | 5,767.35 |
| 1/23/2023 | 1/23/2023 | 1.00 | 1/23/2023 | 0.00 | Public Street & Highway Lighting | $22.54 | - |
| 1/23/2023 | 1/27/2023 | 5.00 | 1/27/2023 | 4.00 | Residential Sales | $985.09 | 3,940.36 |
| 1/23/2023 | 2/20/2023 | 29.00 | 2/20/2023 | 28.00 | Commercial Sales | $189.96 | 5,318.88 |
| 1/23/2023 | 1/23/2023 | 1.00 | 1/23/2023 | 0.00 | Other Sales to Public Authority | $1,225.01 | - |
| 1/23/2023 | 1/24/2023 | 2.00 | 1/24/2023 | 1.00 | Other Sales to Public Authority | $12,267.57 | 12,267.57 |
| 1/23/2023 | 2/6/2023 | 15.00 | 2/6/2023 | 14.00 | Residential Sales | $78.71 | 1,101.94 |
| 1/23/2023 | 1/25/2023 | 3.00 | 1/25/2023 | 2.00 | Other Sales to Public Authority | $1,627.14 | 3,254.28 |
| 1/23/2023 | 2/8/2023 | 17.00 | 2/8/2023 | 16.00 | Commercial Sales | $141.82 | 2,269.12 |
| 1/23/2023 | 2/22/2023 | 31.00 | 2/22/2023 | 30.00 | Commercial Sales | $485.66 | 14,569.80 |
| 1/23/2023 | 2/22/2023 | 31.00 | 2/22/2023 | 30.00 | Residential Sales | $25.92 | 777.60 |
| 1/23/2023 | 1/26/2023 | 4.00 | 1/26/2023 | 3.00 | Other Sales to Public Authority | $12,578.51 | 37,735.53 |
| 1/23/2023 | 1/27/2023 | 5.00 | 1/27/2023 | 4.00 | Other Sales to Public Authority | $17,709.57 | 70,838.28 |
| 1/23/2023 | 2/9/2023 | 18.00 | 2/9/2023 | 17.00 | Residential Sales | $1,384.74 | 23,540.58 |
| 1/23/2023 | 1/30/2023 | 8.00 | 1/30/2023 | 7.00 | Commercial Sales | $31,477.89 | 220,345.23 |
| 1/23/2023 | 1/31/2023 | 9.00 | 1/31/2023 | 8.00 | Commercial Sales | $91.45 | 731.60 |
| 1/23/2023 | 1/30/2023 | 8.00 | 1/30/2023 | 7.00 | Residential Sales | $1,373.62 | 9,615.34 |
| 1/23/2023 | 1/31/2023 | 9.00 | 1/31/2023 | 8.00 | Residential Sales | $87.69 | 701.52 |
| 1/23/2023 | 12/13/2023 | 325.00 | 12/13/2023 | 324.00 | Commercial Sales | $309.63 | 100,320.12 |
| 1/23/2023 | 2/27/2023 | 36.00 | 2/27/2023 | 35.00 | Residential Sales | $309.58 | 10,835.30 |
| 1/23/2023 | 12/14/2023 | 326.00 | 12/14/2023 | 325.00 | Commercial Sales | $187.25 | 60,856.25 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 1/23/2023 | 2/10/2023 | 19.00 | 2/10/2023 | 18.00 | Residential Sales | $353.37 | 6,360.66 |
| 1/24/2023 | 1/31/2023 | 8.00 | 1/31/2023 | 7.00 | Residential Sales | $813.88 | 5,697.16 |
| 1/24/2023 | 2/27/2023 | 35.00 | 2/27/2023 | 34.00 | Residential Sales | $89.19 | 3,032.46 |
| 1/24/2023 | 3/5/2024 | 407.00 | 3/5/2024 | 406.00 | Residential Sales | $71.58 | 29,061.48 |
| 1/24/2023 | 2/13/2023 | 21.00 | 2/13/2023 | 20.00 | Residential Sales | $861.09 | 17,221.80 |
| 1/24/2023 | 2/17/2023 | 25.00 | 2/17/2023 | 24.00 | Commercial Sales | $42.51 | 1,020.24 |
| 1/24/2023 | 2/16/2023 | 24.00 | 2/16/2023 | 23.00 | Residential Sales | $77.23 | 1,776.29 |
| 1/24/2023 | 1/24/2023 | 1.00 | 1/24/2023 | 0.00 | Commercial Sales | $1,159.97 | - |
| 1/24/2023 | 1/25/2023 | 2.00 | 1/25/2023 | 1.00 | Industrial Service | $57,791.32 | 57,791.32 |
| 1/24/2023 | 2/1/2023 | 9.00 | 2/1/2023 | 8.00 | Commercial Sales | $239.01 | 1,912.08 |
| 1/24/2023 | 1/25/2023 | 2.00 | 1/25/2023 | 1.00 | Commercial Sales | $402,698.12 | 402,698.12 |
| 1/24/2023 | 1/24/2023 | 1.00 | 1/24/2023 | 0.00 | Residential Sales | $6,401.03 | - |
| 1/24/2023 | 1/26/2023 | 3.00 | 1/26/2023 | 2.00 | Industrial Service | $301.44 | 602.88 |
| 1/24/2023 | 2/1/2023 | 9.00 | 2/1/2023 | 8.00 | Residential Sales | $65.66 | 525.28 |
| 1/24/2023 | 2/2/2023 | 10.00 | 2/2/2023 | 9.00 | Commercial Sales | $926.38 | 8,337.42 |
| 1/24/2023 | 1/25/2023 | 2.00 | 1/25/2023 | 1.00 | Residential Sales | $944,566.63 | 944,566.63 |
| 1/24/2023 | 1/26/2023 | 3.00 | 1/26/2023 | 2.00 | Commercial Sales | $168,826.35 | 337,652.70 |
| 1/24/2023 | 2/2/2023 | 10.00 | 2/2/2023 | 9.00 | Residential Sales | $116.57 | 1,049.13 |
| 1/24/2023 | 1/26/2023 | 3.00 | 1/26/2023 | 2.00 | Residential Sales | $15,777.76 | 31,555.52 |
| 1/24/2023 | 1/27/2023 | 4.00 | 1/27/2023 | 3.00 | Commercial Sales | $96,078.10 | 288,234.30 |
| 1/24/2023 | 2/3/2023 | 11.00 | 2/3/2023 | 10.00 | Residential Sales | $135.07 | 1,350.70 |
| 1/24/2023 | 1/27/2023 | 4.00 | 1/27/2023 | 3.00 | Residential Sales | $3,584.17 | 10,752.51 |
| 1/24/2023 | 1/24/2023 | 1.00 | 1/24/2023 | 0.00 | Public Street & Highway Lighting | $11.85 | - |
| 1/24/2023 | 2/20/2023 | 28.00 | 2/20/2023 | 27.00 | Commercial Sales | $184.15 | 4,972.05 |
| 1/24/2023 | 1/25/2023 | 2.00 | 1/25/2023 | 1.00 | Other Sales to Public Authority | $28,288.58 | 28,288.58 |
| 1/24/2023 | 2/8/2023 | 16.00 | 2/8/2023 | 15.00 | Commercial Sales | $1,149.76 | 17,246.40 |
| 1/24/2023 | 2/7/2023 | 15.00 | 2/7/2023 | 14.00 | Residential Sales | $49.07 | 686.98 |
| 1/24/2023 | 1/26/2023 | 3.00 | 1/26/2023 | 2.00 | Other Sales to Public Authority | $3,828.24 | 7,656.48 |
| 1/24/2023 | 2/8/2023 | 16.00 | 2/8/2023 | 15.00 | Residential Sales | $1,306.78 | 19,601.70 |
| 1/24/2023 | 2/9/2023 | 17.00 | 2/9/2023 | 16.00 | Commercial Sales | $22,879.97 | 366,079.52 |
| 1/24/2023 | 2/9/2023 | 17.00 | 2/9/2023 | 16.00 | Residential Sales | $23.46 | 375.36 |
| 1/24/2023 | 1/30/2023 | 7.00 | 1/30/2023 | 6.00 | Commercial Sales | $16,878.10 | 101,268.60 |
| 1/24/2023 | 1/27/2023 | 4.00 | 1/27/2023 | 3.00 | Other Sales to Public Authority | $13,124.81 | 39,374.43 |
| 1/24/2023 | 1/30/2023 | 7.00 | 1/30/2023 | 6.00 | Residential Sales | $1,392.68 | 8,356.08 |
| 1/24/2023 | 1/31/2023 | 8.00 | 1/31/2023 | 7.00 | Commercial Sales | $39.57 | 276.99 |
| 1/25/2023 | 1/26/2023 | 2.00 | 1/26/2023 | 1.00 | Public Street & Highway Lighting | $11,140.46 | 11,140.46 |
| 1/25/2023 | 2/1/2023 | 8.00 | 2/1/2023 | 7.00 | Other Sales to Public Authority | $88.52 | 619.64 |
| 1/25/2023 | 2/8/2023 | 15.00 | 2/8/2023 | 14.00 | Commercial Sales | $813.68 | 11,391.52 |
| 1/25/2023 | 1/25/2023 | 1.00 | 1/25/2023 | 0.00 | Other Sales to Public Authority | $75.75 | - |
| 1/25/2023 | 2/7/2023 | 14.00 | 2/7/2023 | 13.00 | Residential Sales | $117.35 | 1,525.55 |
| 1/25/2023 | 2/8/2023 | 15.00 | 2/8/2023 | 14.00 | Residential Sales | $494.82 | 6,927.48 |
| 1/25/2023 | 1/26/2023 | 2.00 | 1/26/2023 | 1.00 | Other Sales to Public Authority | $34,852.60 | 34,852.60 |
| 1/25/2023 | 2/22/2023 | 29.00 | 2/22/2023 | 28.00 | Residential Sales | $174.64 | 4,889.92 |
| 1/25/2023 | 1/30/2023 | 6.00 | 1/30/2023 | 5.00 | Commercial Sales | $35,027.48 | 175,137.40 |
| 1/25/2023 | 1/27/2023 | 3.00 | 1/27/2023 | 2.00 | Other Sales to Public Authority | $3,307.99 | 6,615.98 |
| 1/25/2023 | 3/1/2023 | 36.00 | 3/1/2023 | 35.00 | Commercial Sales | $45.64 | 1,597.40 |
| 1/25/2023 | 2/9/2023 | 16.00 | 2/9/2023 | 15.00 | Residential Sales | $225.22 | 3,378.30 |
| 1/25/2023 | 1/30/2023 | 6.00 | 1/30/2023 | 5.00 | Residential Sales | $3,528.28 | 17,641.40 |
| 1/25/2023 | 1/31/2023 | 7.00 | 1/31/2023 | 6.00 | Commercial Sales | $11,389.36 | 68,336.16 |
| 1/25/2023 | 3/1/2024 | 402.00 | 3/1/2024 | 401.00 | Commercial Sales | $461.88 | 185,213.88 |
| 1/25/2023 | 1/31/2023 | 7.00 | 1/31/2023 | 6.00 | Residential Sales | $944.93 | 5,669.58 |
| 1/25/2023 | 12/28/2023 | 338.00 | 12/28/2023 | 337.00 | Residential Sales | $16.30 | 5,493.10 |
| 1/25/2023 | 2/27/2023 | 34.00 | 2/27/2023 | 33.00 | Residential Sales | $246.18 | 8,123.94 |
| 1/25/2023 | 1/30/2023 | 6.00 | 1/30/2023 | 5.00 | Other Sales to Public Authority | $136.95 | 684.75 |
| 1/25/2023 | 3/8/2023 | 43.00 | 3/8/2023 | 42.00 | Commercial Sales | $158.34 | 6,650.28 |
| 1/25/2023 | 2/13/2023 | 20.00 | 2/13/2023 | 19.00 | Residential Sales | $206.43 | 3,922.17 |
| 1/25/2023 | 1/31/2023 | 7.00 | 1/31/2023 | 6.00 | Other Sales to Public Authority | $10.09 | 60.54 |
| 1/25/2023 | 12/13/2023 | 323.00 | 12/13/2023 | 322.00 | Other Sales to Public Authority | $385.77 | 124,217.94 |
| 1/25/2023 | 2/1/2023 | 8.00 | 2/1/2023 | 7.00 | Commercial Sales | $640.94 | 4,486.58 |
| 1/25/2023 | 1/25/2023 | 1.00 | 1/25/2023 | 0.00 | Commercial Sales | $20,867.34 | - |
| 1/25/2023 | 1/26/2023 | 2.00 | 1/26/2023 | 1.00 | Industrial Service | $87,526.50 | 87,526.50 |
| 1/25/2023 | 2/2/2023 | 9.00 | 2/2/2023 | 8.00 | Commercial Sales | $626.25 | 5,010.00 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 1/25/2023 | 2/1/2023 | 8.00 | 2/1/2023 | 7.00 | Residential Sales | $58.12 | 406.84 |
| 1/25/2023 | 1/26/2023 | 2.00 | 1/26/2023 | 1.00 | Commercial Sales | $796,023.23 | 796,023.23 |
| 1/25/2023 | 1/25/2023 | 1.00 | 1/25/2023 | 0.00 | Residential Sales | $2,910.47 | - |
| 1/25/2023 | 1/27/2023 | 3.00 | 1/27/2023 | 2.00 | Industrial Service | $229.61 | 459.22 |
| 1/25/2023 | 2/2/2023 | 9.00 | 2/2/2023 | 8.00 | Residential Sales | $512.45 | 4,099.60 |
| 1/25/2023 | 1/26/2023 | 2.00 | 1/26/2023 | 1.00 | Residential Sales | $899,707.91 | 899,707.91 |
| 1/25/2023 | 1/27/2023 | 3.00 | 1/27/2023 | 2.00 | Commercial Sales | $406,523.01 | 813,046.02 |
| 1/25/2023 | 2/3/2023 | 10.00 | 2/3/2023 | 9.00 | Residential Sales | $361.97 | 3,257.73 |
| 1/25/2023 | 1/27/2023 | 3.00 | 1/27/2023 | 2.00 | Residential Sales | $24,131.84 | 48,263.68 |
| 1/25/2023 | 1/25/2023 | 1.00 | 1/25/2023 | 0.00 | Public Street & Highway Lighting | $8,802.14 | - |
| 1/26/2023 | 2/2/2023 | 8.00 | 2/2/2023 | 7.00 | Commercial Sales | $378.88 | 2,652.16 |
| 1/26/2023 | 2/1/2023 | 7.00 | 2/1/2023 | 6.00 | Residential Sales | $639.96 | 3,839.76 |
| 1/26/2023 | 1/26/2023 | 1.00 | 1/26/2023 | 0.00 | Commercial Sales | $46,537.68 | - |
| 1/26/2023 | 2/3/2023 | 9.00 | 2/3/2023 | 8.00 | Commercial Sales | $81.77 | 654.16 |
| 1/26/2023 | 1/27/2023 | 2.00 | 1/27/2023 | 1.00 | Industrial Service | $195,683.58 | 195,683.58 |
| 1/26/2023 | 2/2/2023 | 8.00 | 2/2/2023 | 7.00 | Residential Sales | $556.98 | 3,898.86 |
| 1/26/2023 | 1/27/2023 | 2.00 | 1/27/2023 | 1.00 | Commercial Sales | $502,061.45 | 502,061.45 |
| 1/26/2023 | 1/26/2023 | 1.00 | 1/26/2023 | 0.00 | Residential Sales | $1,386.40 | - |
| 1/26/2023 | 2/3/2023 | 9.00 | 2/3/2023 | 8.00 | Residential Sales | $326.37 | 2,610.96 |
| 1/26/2023 | 1/27/2023 | 2.00 | 1/27/2023 | 1.00 | Residential Sales | $825,608.24 | 825,608.24 |
| 1/26/2023 | 3/29/2023 | 63.00 | 3/29/2023 | 62.00 | Residential Sales | $142.92 | 8,861.04 |
| 1/26/2023 | 2/20/2023 | 26.00 | 2/20/2023 | 25.00 | Commercial Sales | $41.46 | 1,036.50 |
| 1/26/2023 | 1/26/2023 | 1.00 | 1/26/2023 | 0.00 | Public Street & Highway Lighting | $2,366.16 | - |
| 1/26/2023 | 1/31/2023 | 6.00 | 1/31/2023 | 5.00 | Company Use | $145.93 | 729.65 |
| 1/26/2023 | 2/8/2023 | 14.00 | 2/8/2023 | 13.00 | Commercial Sales | $781.64 | 10,161.32 |
| 1/26/2023 | 2/7/2023 | 13.00 | 2/7/2023 | 12.00 | Residential Sales | $137.76 | 1,653.12 |
| 1/26/2023 | 2/8/2023 | 14.00 | 2/8/2023 | 13.00 | Residential Sales | $618.28 | 8,037.64 |
| 1/26/2023 | 1/30/2023 | 5.00 | 1/30/2023 | 4.00 | Industrial Service | $27,118.55 | 108,474.20 |
| 1/26/2023 | 1/30/2023 | 5.00 | 1/30/2023 | 4.00 | Commercial Sales | $85,815.72 | 343,262.88 |
| 1/26/2023 | 1/27/2023 | 2.00 | 1/27/2023 | 1.00 | Other Sales to Public Authority | $23,207.43 | 23,207.43 |
| 1/26/2023 | 1/31/2023 | 6.00 | 1/31/2023 | 5.00 | Industrial Service | $10,718.53 | 53,592.65 |
| 1/26/2023 | 1/31/2023 | 6.00 | 1/31/2023 | 5.00 | Commercial Sales | $265,158.07 | 1,325,790.35 |
| 1/26/2023 | 1/30/2023 | 5.00 | 1/30/2023 | 4.00 | Residential Sales | $12,101.00 | 48,404.00 |
| 1/26/2023 | 2/24/2023 | 30.00 | 2/24/2023 | 29.00 | Residential Sales | $67.78 | 1,965.62 |
| 1/26/2023 | 1/31/2023 | 6.00 | 1/31/2023 | 5.00 | Residential Sales | $2,932.28 | 14,661.40 |
| 1/26/2023 | 3/3/2023 | 37.00 | 3/3/2023 | 36.00 | Residential Sales | $129.68 | 4,668.48 |
| 1/26/2023 | 2/27/2023 | 33.00 | 2/27/2023 | 32.00 | Residential Sales | $205.59 | 6,578.88 |
| 1/26/2023 | 2/8/2023 | 14.00 | 2/8/2023 | 13.00 | Other Sales to Public Authority | $89.04 | 1,157.52 |
| 1/26/2023 | 3/21/2023 | 55.00 | 3/21/2023 | 54.00 | Commercial Sales | $2,485.17 | 134,199.18 |
| 1/26/2023 | 1/30/2023 | 5.00 | 1/30/2023 | 4.00 | Other Sales to Public Authority | $1,546.90 | 6,187.60 |
| 1/26/2023 | 2/14/2023 | 20.00 | 2/14/2023 | 19.00 | Commercial Sales | $294.21 | 5,589.99 |
| 1/26/2023 | 1/31/2023 | 6.00 | 1/31/2023 | 5.00 | Other Sales to Public Authority | $29,346.78 | 146,733.90 |
| 1/26/2023 | 3/7/2023 | 41.00 | 3/7/2023 | 40.00 | Residential Sales | $52.30 | 2,092.00 |
| 1/26/2023 | 2/13/2023 | 19.00 | 2/13/2023 | 18.00 | Residential Sales | $98.48 | 1,772.64 |
| 1/26/2023 | 7/10/2023 | 166.00 | 7/10/2023 | 165.00 | Residential Sales | $105.69 | 17,438.85 |
| 1/26/2023 | 12/13/2023 | 322.00 | 12/13/2023 | 321.00 | Other Sales to Public Authority | $377.34 | 121,126.14 |
| 1/26/2023 | 2/15/2023 | 21.00 | 2/15/2023 | 20.00 | Residential Sales | $181.06 | 3,621.20 |
| 1/26/2023 | 2/17/2023 | 23.00 | 2/17/2023 | 22.00 | Commercial Sales | $227.26 | 4,999.72 |
| 1/26/2023 | 1/2/2024 | 342.00 | 1/2/2024 | 341.00 | Other Sales to Public Authority | $184.36 | 62,866.76 |
| 1/26/2023 | 2/1/2023 | 7.00 | 2/1/2023 | 6.00 | Commercial Sales | $13,707.19 | 82,243.14 |
| 1/26/2023 | 2/2/2023 | 8.00 | 2/2/2023 | 7.00 | Industrial Service | $204,819.75 | 1,433,738.25 |
| 1/27/2023 | 1/31/2023 | 5.00 | 1/31/2023 | 4.00 | Other Sales to Public Authority | $2,116.32 | 8,465.28 |
| 1/27/2023 | 3/22/2023 | 55.00 | 3/22/2023 | 54.00 | Commercial Sales | $36.94 | 1,994.76 |
| 1/27/2023 | 2/14/2023 | 19.00 | 2/14/2023 | 18.00 | Residential Sales | $35.72 | 642.96 |
| 1/27/2023 | 3/22/2023 | 55.00 | 3/22/2023 | 54.00 | Residential Sales | $66.39 | 3,585.06 |
| 1/27/2023 | 2/15/2023 | 20.00 | 2/15/2023 | 19.00 | Residential Sales | $227.43 | 4,321.17 |
| 1/27/2023 | 2/1/2023 | 6.00 | 2/1/2023 | 5.00 | Industrial Service | $31.02 | 155.10 |
| 1/27/2023 | 2/1/2023 | 6.00 | 2/1/2023 | 5.00 | Commercial Sales | $27,864.10 | 139,320.50 |
| 1/27/2023 | 2/1/2023 | 6.00 | 2/1/2023 | 5.00 | Residential Sales | $4,424.87 | 22,124.35 |
| 1/27/2023 | 2/2/2023 | 7.00 | 2/2/2023 | 6.00 | Commercial Sales | $411.24 | 2,467.44 |
| 1/27/2023 | 2/2/2023 | 7.00 | 2/2/2023 | 6.00 | Residential Sales | $1,449.07 | 8,694.42 |
| 1/27/2023 | 1/27/2023 | 1.00 | 1/27/2023 | 0.00 | Commercial Sales | $932.24 | - |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 1/27/2023 | 2/3/2023 | 8.00 | 2/3/2023 | 7.00 | Residential Sales | $4,512.60 | 31,588.20 |
| 1/27/2023 | 1/27/2023 | 1.00 | 1/27/2023 | 0.00 | Residential Sales | $1,698.74 | - |
| 1/27/2023 | 2/6/2023 | 11.00 | 2/6/2023 | 10.00 | Commercial Sales | $4,326.72 | 43,267.20 |
| 1/27/2023 | 2/20/2023 | 25.00 | 2/20/2023 | 24.00 | Commercial Sales | $141.79 | 3,402.96 |
| 1/27/2023 | 4/21/2024 | 451.00 | 4/21/2024 | 450.00 | Commercial Sales | $33.84 | 15,228.00 |
| 1/27/2023 | 2/7/2023 | 12.00 | 2/7/2023 | 11.00 | Commercial Sales | $102.39 | 1,126.29 |
| 1/27/2023 | 2/1/2023 | 6.00 | 2/1/2023 | 5.00 | Other Sales to Public Authority | $11,600.37 | 58,001.85 |
| 1/27/2023 | 2/6/2023 | 11.00 | 2/6/2023 | 10.00 | Residential Sales | $124.72 | 1,247.20 |
| 1/27/2023 | 2/7/2023 | 12.00 | 2/7/2023 | 11.00 | Residential Sales | $485.84 | 5,344.24 |
| 1/27/2023 | 1/27/2023 | 1.00 | 1/27/2023 | 0.00 | Public Street & Highway Lighting | $1,129.84 | - |
| 1/27/2023 | 2/8/2023 | 13.00 | 2/8/2023 | 12.00 | Commercial Sales | $118.20 | 1,418.40 |
| 1/27/2023 | 1/30/2023 | 4.00 | 1/30/2023 | 3.00 | Industrial Service | $598,974.30 | 1,796,922.90 |
| 1/27/2023 | 2/8/2023 | 13.00 | 2/8/2023 | 12.00 | Residential Sales | $148.80 | 1,785.60 |
| 1/27/2023 | 1/30/2023 | 4.00 | 1/30/2023 | 3.00 | Commercial Sales | $239,107.58 | 717,322.74 |
| 1/27/2023 | 2/9/2023 | 14.00 | 2/9/2023 | 13.00 | Residential Sales | $491.89 | 6,394.57 |
| 1/27/2023 | 1/31/2023 | 5.00 | 1/31/2023 | 4.00 | Industrial Service | $66.44 | 265.76 |
| 1/27/2023 | 3/1/2023 | 34.00 | 3/1/2023 | 33.00 | Commercial Sales | $161.51 | 5,329.83 |
| 1/27/2023 | 1/30/2023 | 4.00 | 1/30/2023 | 3.00 | Residential Sales | $991,864.79 | 2,975,594.37 |
| 1/27/2023 | 1/31/2023 | 5.00 | 1/31/2023 | 4.00 | Commercial Sales | $78,698.12 | 314,792.48 |
| 1/27/2023 | 1/31/2023 | 5.00 | 1/31/2023 | 4.00 | Residential Sales | $11,419.19 | 45,676.76 |
| 1/27/2023 | 3/3/2023 | 36.00 | 3/3/2023 | 35.00 | Residential Sales | $132.95 | 4,653.25 |
| 1/27/2023 | 2/10/2023 | 15.00 | 2/10/2023 | 14.00 | Residential Sales | $158.12 | 2,213.68 |
| 1/27/2023 | 2/27/2023 | 32.00 | 2/27/2023 | 31.00 | Residential Sales | $183.14 | 5,677.34 |
| 1/27/2023 | 2/28/2023 | 33.00 | 2/28/2023 | 32.00 | Residential Sales | $45.37 | 1,451.84 |
| 1/27/2023 | 1/30/2023 | 4.00 | 1/30/2023 | 3.00 | Other Sales to Public Authority | $5,441.29 | 16,323.87 |
| 1/28/2023 | 2/2/2023 | 6.00 | 2/2/2023 | 5.00 | Residential Sales | $503.70 | 2,518.50 |
| 1/28/2023 | 2/8/2023 | 12.00 | 2/8/2023 | 11.00 | Residential Sales | $124.96 | 1,374.56 |
| 1/28/2023 | 1/30/2023 | 3.00 | 1/30/2023 | 2.00 | Residential Sales | $9,881.32 | 19,762.64 |
| 1/29/2023 | 2/7/2023 | 10.00 | 2/7/2023 | 9.00 | Residential Sales | $21.48 | 193.32 |
| 1/29/2023 | 2/22/2023 | 25.00 | 2/22/2023 | 24.00 | Residential Sales | $65.19 | 1,564.56 |
| 1/29/2023 | 1/30/2023 | 2.00 | 1/30/2023 | 1.00 | Commercial Sales | $375.07 | 375.07 |
| 1/29/2023 | 1/30/2023 | 2.00 | 1/30/2023 | 1.00 | Residential Sales | $4,719.96 | 4,719.96 |
| 1/29/2023 | 1/31/2023 | 3.00 | 1/31/2023 | 2.00 | Commercial Sales | $433.53 | 867.06 |
| 1/29/2023 | 1/31/2023 | 3.00 | 1/31/2023 | 2.00 | Residential Sales | $286.25 | 572.50 |
| 1/29/2023 | 2/27/2023 | 30.00 | 2/27/2023 | 29.00 | Residential Sales | $1.80 | 52.20 |
| 1/29/2023 | 2/1/2023 | 4.00 | 2/1/2023 | 3.00 | Commercial Sales | $18.07 | 54.21 |
| 1/29/2023 | 2/1/2023 | 4.00 | 2/1/2023 | 3.00 | Residential Sales | $40.40 | 121.20 |
| 1/30/2023 | 2/1/2023 | 3.00 | 2/1/2023 | 2.00 | Other Sales to Public Authority | $72,189.32 | 144,378.64 |
| 1/30/2023 | 2/6/2023 | 8.00 | 2/6/2023 | 7.00 | Residential Sales | $603.46 | 4,224.22 |
| 1/30/2023 | 3/28/2023 | 58.00 | 3/28/2023 | 57.00 | Commercial Sales | $303.23 | 17,284.11 |
| 1/30/2023 | 2/20/2023 | 22.00 | 2/20/2023 | 21.00 | Residential Sales | $1,624.55 | 34,115.55 |
| 1/30/2023 | 2/21/2023 | 23.00 | 2/21/2023 | 22.00 | Residential Sales | $217.02 | 4,774.44 |
| 1/30/2023 | 2/7/2023 | 9.00 | 2/7/2023 | 8.00 | Residential Sales | $542.77 | 4,342.16 |
| 1/30/2023 | 2/2/2023 | 4.00 | 2/2/2023 | 3.00 | Other Sales to Public Authority | $18.02 | 54.06 |
| 1/30/2023 | 2/8/2023 | 10.00 | 2/8/2023 | 9.00 | Residential Sales | $481.99 | 4,337.91 |
| 1/30/2023 | 5/31/2024 | 488.00 | 5/31/2024 | 487.00 | Residential Sales | $109.77 | 53,457.99 |
| 1/30/2023 | 2/20/2023 | 22.00 | 2/20/2023 | 21.00 | Industrial Service | $184.04 | 3,864.84 |
| 1/30/2023 | 2/6/2023 | 8.00 | 2/6/2023 | 7.00 | Industrial Service | $7,696.23 | 53,873.61 |
| 1/30/2023 | 3/13/2023 | 43.00 | 3/13/2023 | 42.00 | Commercial Sales | $10,113.19 | 424,753.98 |
| 1/30/2023 | 2/6/2023 | 8.00 | 2/6/2023 | 7.00 | Commercial Sales | $311.45 | 2,180.15 |
| 1/30/2023 | 2/23/2023 | 25.00 | 2/23/2023 | 24.00 | Residential Sales | $5.22 | 125.28 |
| 1/30/2023 | 2/9/2023 | 11.00 | 2/9/2023 | 10.00 | Residential Sales | $178.03 | 1,780.30 |
| 1/30/2023 | 2/20/2023 | 22.00 | 2/20/2023 | 21.00 | Commercial Sales | $46.63 | 979.23 |
| 1/30/2023 | 1/30/2023 | 1.00 | 1/30/2023 | 0.00 | Residential Sales | $255.27 | - |
| 1/30/2023 | 3/1/2023 | 31.00 | 3/1/2023 | 30.00 | Residential Sales | $21.84 | 655.20 |
| 1/30/2023 | 1/31/2023 | 2.00 | 1/31/2023 | 1.00 | Residential Sales | $852,736.58 | 852,736.58 |
| 1/30/2023 | 2/8/2023 | 10.00 | 2/8/2023 | 9.00 | Commercial Sales | $520.38 | 4,683.42 |
| 1/30/2023 | 3/3/2023 | 33.00 | 3/3/2023 | 32.00 | Residential Sales | $538.07 | 17,218.24 |
| 1/30/2023 | 1/31/2023 | 2.00 | 1/31/2023 | 1.00 | Industrial Service | $230,998.77 | 230,998.77 |
| 1/30/2023 | 1/30/2023 | 1.00 | 1/30/2023 | 0.00 | Commercial Sales | $126.99 | - |
| 1/30/2023 | 2/10/2023 | 12.00 | 2/10/2023 | 11.00 | Residential Sales | $58.59 | 644.49 |
| 1/30/2023 | 1/30/2023 | 1.00 | 1/30/2023 | 0.00 | Public Street & Highway Lighting | $567.54 | - |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 1/30/2023 | 2/27/2023 | 29.00 | 2/27/2023 | 28.00 | Residential Sales | $45.59 | 1,276.52 |
| 1/30/2023 | 2/24/2023 | 26.00 | 2/24/2023 | 25.00 | Commercial Sales | $356.43 | 8,910.75 |
| 1/30/2023 | 3/1/2023 | 31.00 | 3/1/2023 | 30.00 | Commercial Sales | $483.95 | 14,518.50 |
| 1/30/2023 | 1/31/2023 | 2.00 | 1/31/2023 | 1.00 | Commercial Sales | $395,358.98 | 395,358.98 |
| 1/30/2023 | 4/10/2023 | 71.00 | 4/10/2023 | 70.00 | Commercial Sales | $76.16 | 5,331.20 |
| 1/30/2023 | 3/2/2023 | 32.00 | 3/2/2023 | 31.00 | Commercial Sales | $14,484.09 | 449,006.79 |
| 1/30/2023 | 5/4/2023 | 95.00 | 5/4/2023 | 94.00 | Commercial Sales | $4,042.41 | 379,986.54 |
| 1/30/2023 | 3/6/2023 | 36.00 | 3/6/2023 | 35.00 | Residential Sales | $46.99 | 1,644.65 |
| 1/30/2023 | 1/30/2023 | 1.00 | 1/30/2023 | 0.00 | Other Sales to Public Authority | $74.90 | - |
| 1/30/2023 | 2/27/2023 | 29.00 | 2/27/2023 | 28.00 | Industrial Service | $69,144.44 | 1,936,044.32 |
| 1/30/2023 | 1/31/2023 | 2.00 | 1/31/2023 | 1.00 | Other Sales to Public Authority | $59,119.24 | 59,119.24 |
| 1/30/2023 | 2/13/2023 | 15.00 | 2/13/2023 | 14.00 | Residential Sales | $428.60 | 6,000.40 |
| 1/30/2023 | 3/7/2023 | 37.00 | 3/7/2023 | 36.00 | Residential Sales | $320.27 | 11,529.72 |
| 1/30/2023 | 2/10/2023 | 12.00 | 2/10/2023 | 11.00 | Commercial Sales | $18.02 | 198.22 |
| 1/30/2023 | 3/2/2023 | 32.00 | 3/2/2023 | 31.00 | Other Sales to Public Authority | $455.13 | 14,109.03 |
| 1/30/2023 | 3/22/2023 | 52.00 | 3/22/2023 | 51.00 | Residential Sales | $363.46 | 18,536.46 |
| 1/30/2023 | 2/14/2023 | 16.00 | 2/14/2023 | 15.00 | Residential Sales | $32.51 | 487.65 |
| 1/30/2023 | 3/6/2023 | 36.00 | 3/6/2023 | 35.00 | Commercial Sales | $808.99 | 28,314.65 |
| 1/30/2023 | 2/15/2023 | 17.00 | 2/15/2023 | 16.00 | Residential Sales | $20.39 | 326.24 |
| 1/30/2023 | 5/23/2023 | 114.00 | 5/23/2023 | 113.00 | Industrial Service | $67.27 | 7,601.51 |
| 1/30/2023 | 2/13/2023 | 15.00 | 2/13/2023 | 14.00 | Commercial Sales | $36.76 | 514.64 |
| 1/30/2023 | 2/17/2023 | 19.00 | 2/17/2023 | 18.00 | Residential Sales | $218.52 | 3,933.36 |
| 1/30/2023 | 2/1/2023 | 3.00 | 2/1/2023 | 2.00 | Residential Sales | $30,249.88 | 60,499.76 |
| 1/30/2023 | 2/2/2023 | 4.00 | 2/2/2023 | 3.00 | Residential Sales | $4,422.55 | 13,267.65 |
| 1/30/2023 | 2/17/2023 | 19.00 | 2/17/2023 | 18.00 | Industrial Service | $21,491.67 | 386,850.06 |
| 1/30/2023 | 2/1/2023 | 3.00 | 2/1/2023 | 2.00 | Industrial Service | $240,361.08 | 480,722.16 |
| 1/30/2023 | 2/3/2023 | 5.00 | 2/3/2023 | 4.00 | Residential Sales | $2,323.04 | 9,292.16 |
| 1/30/2023 | 2/17/2023 | 19.00 | 2/17/2023 | 18.00 | Commercial Sales | $18.75 | 337.50 |
| 1/30/2023 | 2/1/2023 | 3.00 | 2/1/2023 | 2.00 | Commercial Sales | $86,006.52 | 172,013.04 |
| 1/30/2023 | 2/2/2023 | 4.00 | 2/2/2023 | 3.00 | Commercial Sales | $50,053.89 | 150,161.67 |
| 1/31/2023 | 2/1/2023 | 2.00 | 2/1/2023 | 1.00 | Residential Sales | $17,396.21 | 17,396.21 |
| 1/31/2023 | 2/2/2023 | 3.00 | 2/2/2023 | 2.00 | Residential Sales | $560.27 | 1,120.54 |
| 1/31/2023 | 2/21/2023 | 22.00 | 2/21/2023 | 21.00 | Company Use | $0.00 | - |
| 1/31/2023 | 2/3/2023 | 4.00 | 2/3/2023 | 3.00 | Residential Sales | $562.57 | 1,687.71 |
| 1/31/2023 | 2/1/2023 | 2.00 | 2/1/2023 | 1.00 | Commercial Sales | $12,275.72 | 12,275.72 |
| 1/31/2023 | 2/2/2023 | 3.00 | 2/2/2023 | 2.00 | Commercial Sales | $10,885.09 | 21,770.18 |
| 1/31/2023 | 2/1/2023 | 2.00 | 2/1/2023 | 1.00 | Other Sales to Public Authority | $167.35 | 167.35 |
| 1/31/2023 | 2/3/2023 | 4.00 | 2/3/2023 | 3.00 | Commercial Sales | $65.91 | 197.73 |
| 1/31/2023 | 2/8/2023 | 9.00 | 2/8/2023 | 8.00 | Residential Sales | $16.26 | 130.08 |
| 1/31/2023 | 2/9/2023 | 10.00 | 2/9/2023 | 9.00 | Residential Sales | $1.90 | 17.10 |
| 1/31/2023 | 2/7/2023 | 8.00 | 2/7/2023 | 7.00 | Commercial Sales | $2.96 | 20.72 |
| 1/31/2023 | 1/31/2023 | 1.00 | 1/31/2023 | 0.00 | Residential Sales | $1,486.78 | - |
| 1/31/2023 | 2/8/2023 | 9.00 | 2/8/2023 | 8.00 | Commercial Sales | $78.16 | 625.28 |
| 1/31/2023 | 2/10/2023 | 11.00 | 2/10/2023 | 10.00 | Residential Sales | $73.11 | 731.10 |
| 1/31/2023 | 1/31/2023 | 1.00 | 1/31/2023 | 0.00 | Commercial Sales | $495.79 | - |
| 1/31/2023 | 2/14/2023 | 15.00 | 2/14/2023 | 14.00 | Residential Sales | $23.29 | 326.06 |
| 1/31/2023 | 2/15/2023 | 16.00 | 2/15/2023 | 15.00 | Residential Sales | $16.20 | 243.00 |
| 2/1/2023 | 2/17/2023 | 17.00 | 2/17/2023 | 16.00 | Commercial Sales | $26.49 | 423.84 |
| 2/1/2023 | 2/1/2023 | 1.00 | 2/1/2023 | 0.00 | Commercial Sales | $704.23 | - |
| 2/1/2023 | 2/2/2023 | 2.00 | 2/2/2023 | 1.00 | Industrial Service | $391,679.15 | 391,679.15 |
| 2/1/2023 | 2/2/2023 | 2.00 | 2/2/2023 | 1.00 | Commercial Sales | $213,773.20 | 213,773.20 |
| 2/1/2023 | 2/3/2023 | 3.00 | 2/3/2023 | 2.00 | Industrial Service | $227,854.43 | 455,708.86 |
| 2/1/2023 | 2/1/2023 | 1.00 | 2/1/2023 | 0.00 | Residential Sales | $503.87 | - |
| 2/1/2023 | 4/3/2023 | 62.00 | 4/3/2023 | 61.00 | Residential Sales | $77.47 | 4,725.67 |
| 2/1/2023 | 2/2/2023 | 2.00 | 2/2/2023 | 1.00 | Residential Sales | $638,132.29 | 638,132.29 |
| 2/1/2023 | 2/3/2023 | 3.00 | 2/3/2023 | 2.00 | Commercial Sales | $91,703.41 | 183,406.82 |
| 2/1/2023 | 2/3/2023 | 3.00 | 2/3/2023 | 2.00 | Residential Sales | $18,588.79 | 37,177.58 |
| 2/1/2023 | 6/22/2023 | 142.00 | 6/22/2023 | 141.00 | Commercial Sales | $612.61 | 86,378.01 |
| 2/1/2023 | 2/1/2023 | 1.00 | 2/1/2023 | 0.00 | Public Street & Highway Lighting | $107.71 | - |
| 2/1/2023 | 2/6/2023 | 6.00 | 2/6/2023 | 5.00 | Industrial Service | $6,155.21 | 30,776.05 |
| 2/1/2023 | 3/29/2023 | 57.00 | 3/29/2023 | 56.00 | Residential Sales | $161.64 | 9,051.84 |
| 2/1/2023 | 2/6/2023 | 6.00 | 2/6/2023 | 5.00 | Commercial Sales | $25,726.02 | 128,630.10 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 2/1/2023 | 2/6/2023 | 6.00 | 2/6/2023 | 5.00 | Residential Sales | $1,885.97 | 9,429.85 |
| 2/1/2023 | 2/20/2023 | 20.00 | 2/20/2023 | 19.00 | Residential Sales | $199.92 | 3,798.48 |
| 2/1/2023 | 2/1/2023 | 1.00 | 2/1/2023 | 0.00 | Other Sales to Public Authority | $403.22 | - |
| 2/1/2023 | 2/8/2023 | 8.00 | 2/8/2023 | 7.00 | Industrial Service | $104.17 | 729.19 |
| 2/1/2023 | 2/7/2023 | 7.00 | 2/7/2023 | 6.00 | Commercial Sales | $52.27 | 313.62 |
| 2/1/2023 | 2/2/2023 | 2.00 | 2/2/2023 | 1.00 | Other Sales to Public Authority | $237,923.53 | 237,923.53 |
| 2/1/2023 | 2/7/2023 | 7.00 | 2/7/2023 | 6.00 | Residential Sales | $1,248.75 | 7,492.50 |
| 2/1/2023 | 2/8/2023 | 8.00 | 2/8/2023 | 7.00 | Commercial Sales | $3,501.79 | 24,512.53 |
| 2/1/2023 | 2/21/2023 | 21.00 | 2/21/2023 | 20.00 | Residential Sales | $23.28 | 465.60 |
| 2/1/2023 | 2/8/2023 | 8.00 | 2/8/2023 | 7.00 | Residential Sales | $2,364.77 | 16,553.39 |
| 2/1/2023 | 2/3/2023 | 3.00 | 2/3/2023 | 2.00 | Other Sales to Public Authority | $5,000.10 | 10,000.20 |
| 2/1/2023 | 2/9/2023 | 9.00 | 2/9/2023 | 8.00 | Commercial Sales | $222.99 | 1,783.92 |
| 2/1/2023 | 2/24/2023 | 24.00 | 2/24/2023 | 23.00 | Commercial Sales | $18.45 | 424.35 |
| 2/1/2023 | 2/9/2023 | 9.00 | 2/9/2023 | 8.00 | Residential Sales | $1,700.14 | 13,601.12 |
| 2/1/2023 | 9/21/2023 | 233.00 | 9/21/2023 | 232.00 | Commercial Sales | $333.44 | 77,358.08 |
| 2/1/2023 | 3/1/2023 | 29.00 | 3/1/2023 | 28.00 | Commercial Sales | $7,311.00 | 204,708.00 |
| 2/1/2023 | 2/6/2023 | 6.00 | 2/6/2023 | 5.00 | Other Sales to Public Authority | $13,808.66 | 69,043.30 |
| 2/1/2023 | 2/10/2023 | 10.00 | 2/10/2023 | 9.00 | Commercial Sales | $163.09 | 1,467.81 |
| 2/1/2023 | 4/14/2023 | 73.00 | 4/14/2023 | 72.00 | Commercial Sales | $2,982.67 | 214,752.24 |
| 2/1/2023 | 3/20/2024 | 414.00 | 3/20/2024 | 413.00 | Commercial Sales | $18.42 | 7,607.46 |
| 2/1/2023 | 3/8/2023 | 36.00 | 3/8/2023 | 35.00 | Industrial Service | $57.11 | 1,998.85 |
| 2/1/2023 | 3/6/2023 | 34.00 | 3/6/2023 | 33.00 | Residential Sales | $145.71 | 4,808.43 |
| 2/1/2023 | 3/7/2023 | 35.00 | 3/7/2023 | 34.00 | Commercial Sales | $46.17 | 1,569.78 |
| 2/1/2023 | 2/13/2023 | 13.00 | 2/13/2023 | 12.00 | Commercial Sales | $26.32 | 315.84 |
| 2/1/2023 | 3/7/2023 | 35.00 | 3/7/2023 | 34.00 | Residential Sales | $105.39 | 3,583.26 |
| 2/1/2023 | 2/13/2023 | 13.00 | 2/13/2023 | 12.00 | Residential Sales | $171.88 | 2,062.56 |
| 2/1/2023 | 2/14/2023 | 14.00 | 2/14/2023 | 13.00 | Residential Sales | $215.90 | 2,806.70 |
| 2/1/2023 | 2/15/2023 | 15.00 | 2/15/2023 | 14.00 | Residential Sales | $160.17 | 2,242.38 |
| 2/2/2023 | 3/1/2023 | 28.00 | 3/1/2023 | 27.00 | Other Sales to Public Authority | $247.79 | 6,690.33 |
| 2/2/2023 | 2/14/2023 | 13.00 | 2/14/2023 | 12.00 | Commercial Sales | $51.95 | 623.40 |
| 2/2/2023 | 2/13/2023 | 12.00 | 2/13/2023 | 11.00 | Residential Sales | $204.29 | 2,247.19 |
| 2/2/2023 | 3/7/2023 | 34.00 | 3/7/2023 | 33.00 | Residential Sales | $170.96 | 5,641.68 |
| 2/2/2023 | 2/15/2023 | 14.00 | 2/15/2023 | 13.00 | Commercial Sales | $64.42 | 837.46 |
| 2/2/2023 | 2/14/2023 | 13.00 | 2/14/2023 | 12.00 | Residential Sales | $58.61 | 703.32 |
| 2/2/2023 | 2/15/2023 | 14.00 | 2/15/2023 | 13.00 | Residential Sales | $12,784.00 | 166,192.00 |
| 2/2/2023 | 2/3/2023 | 2.00 | 2/3/2023 | 1.00 | Industrial Service | $1,174.55 | 1,174.55 |
| 2/2/2023 | 2/2/2023 | 1.00 | 2/2/2023 | 0.00 | Commercial Sales | $1,288.94 | - |
| 2/2/2023 | 2/3/2023 | 2.00 | 2/3/2023 | 1.00 | Commercial Sales | $72,152.60 | 72,152.60 |
| 2/2/2023 | 2/2/2023 | 1.00 | 2/2/2023 | 0.00 | Residential Sales | $1,623.67 | - |
| 2/2/2023 | 2/3/2023 | 2.00 | 2/3/2023 | 1.00 | Residential Sales | $652,625.72 | 652,625.72 |
| 2/2/2023 | 2/6/2023 | 5.00 | 2/6/2023 | 4.00 | Industrial Service | $10,053.56 | 40,214.24 |
| 2/2/2023 | 2/6/2023 | 5.00 | 2/6/2023 | 4.00 | Commercial Sales | $25,582.05 | 102,328.20 |
| 2/2/2023 | 2/6/2023 | 5.00 | 2/6/2023 | 4.00 | Residential Sales | $10,262.45 | 41,049.80 |
| 2/2/2023 | 2/7/2023 | 6.00 | 2/7/2023 | 5.00 | Commercial Sales | $18,913.97 | 94,569.85 |
| 2/2/2023 | 2/8/2023 | 7.00 | 2/8/2023 | 6.00 | Commercial Sales | $240.01 | 1,440.06 |
| 2/2/2023 | 2/7/2023 | 6.00 | 2/7/2023 | 5.00 | Residential Sales | $4,234.68 | 21,173.40 |
| 2/2/2023 | 2/2/2023 | 1.00 | 2/2/2023 | 0.00 | Other Sales to Public Authority | $227.87 | - |
| 2/2/2023 | 2/8/2023 | 7.00 | 2/8/2023 | 6.00 | Residential Sales | $984.47 | 5,906.82 |
| 2/2/2023 | 2/3/2023 | 2.00 | 2/3/2023 | 1.00 | Other Sales to Public Authority | $35,854.04 | 35,854.04 |
| 2/2/2023 | 2/22/2023 | 21.00 | 2/22/2023 | 20.00 | Residential Sales | $76.45 | 1,529.00 |
| 2/2/2023 | 2/9/2023 | 8.00 | 2/9/2023 | 7.00 | Residential Sales | $516.96 | 3,618.72 |
| 2/2/2023 | 2/6/2023 | 5.00 | 2/6/2023 | 4.00 | Other Sales to Public Authority | $1,402.98 | 5,611.92 |
| 2/2/2023 | 2/27/2023 | 26.00 | 2/27/2023 | 25.00 | Residential Sales | $136.48 | 3,412.00 |
| 2/2/2023 | 2/10/2023 | 9.00 | 2/10/2023 | 8.00 | Residential Sales | $219.78 | 1,758.24 |
| 2/3/2023 | 2/9/2023 | 7.00 | 2/9/2023 | 6.00 | Residential Sales | $695.33 | 4,171.98 |
| 2/3/2023 | 2/6/2023 | 4.00 | 2/6/2023 | 3.00 | Other Sales to Public Authority | $33,199.37 | 99,598.11 |
| 2/3/2023 | 2/7/2023 | 5.00 | 2/7/2023 | 4.00 | Other Sales to Public Authority | $270.43 | 1,081.72 |
| 2/3/2023 | 7/21/2023 | 169.00 | 7/21/2023 | 168.00 | Residential Sales | $104.56 | 17,566.08 |
| 2/3/2023 | 2/10/2023 | 8.00 | 2/10/2023 | 7.00 | Commercial Sales | $188.03 | 1,316.21 |
| 2/3/2023 | 2/10/2023 | 8.00 | 2/10/2023 | 7.00 | Residential Sales | $259.64 | 1,817.48 |
| 2/3/2023 | 2/8/2023 | 6.00 | 2/8/2023 | 5.00 | Other Sales to Public Authority | $154.05 | 770.25 |
| 2/3/2023 | 4/13/2023 | 70.00 | 4/13/2023 | 69.00 | Residential Sales | $331.01 | 22,839.69 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 2/3/2023 | 2/13/2023 | 11.00 | 2/13/2023 | 10.00 | Residential Sales | $309.88 | 3,098.80 |
| 2/3/2023 | 3/7/2023 | 33.00 | 3/7/2023 | 32.00 | Residential Sales | $127.35 | 4,075.20 |
| 2/3/2023 | 2/15/2023 | 13.00 | 2/15/2023 | 12.00 | Industrial Service | $409.69 | 4,916.28 |
| 2/3/2023 | 3/8/2023 | 34.00 | 3/8/2023 | 33.00 | Residential Sales | $106.51 | 3,514.83 |
| 2/3/2023 | 3/23/2023 | 49.00 | 3/23/2023 | 48.00 | Commercial Sales | $194.42 | 9,332.16 |
| 2/3/2023 | 2/15/2023 | 13.00 | 2/15/2023 | 12.00 | Residential Sales | $20,902.73 | 250,832.76 |
| 2/3/2023 | 2/17/2023 | 15.00 | 2/17/2023 | 14.00 | Commercial Sales | $123.02 | 1,722.28 |
| 2/3/2023 | 4/18/2023 | 75.00 | 4/18/2023 | 74.00 | Residential Sales | $59.00 | 4,366.00 |
| 2/3/2023 | 2/16/2023 | 14.00 | 2/16/2023 | 13.00 | Residential Sales | $61.38 | 797.94 |
| 2/3/2023 | 3/25/2024 | 417.00 | 3/25/2024 | 416.00 | Residential Sales | $21.76 | 9,052.16 |
| 2/3/2023 | 2/3/2023 | 1.00 | 2/3/2023 | 0.00 | Commercial Sales | $140.40 | - |
| 2/3/2023 | 8/22/2023 | 201.00 | 8/22/2023 | 200.00 | Residential Sales | $70.72 | 14,144.00 |
| 2/3/2023 | 2/3/2023 | 1.00 | 2/3/2023 | 0.00 | Residential Sales | $55.79 | - |
| 2/3/2023 | 4/6/2023 | 63.00 | 4/6/2023 | 62.00 | Residential Sales | $43.20 | 2,678.40 |
| 2/3/2023 | 2/6/2023 | 4.00 | 2/6/2023 | 3.00 | Commercial Sales | $166,537.55 | 499,612.65 |
| 2/3/2023 | 3/13/2023 | 39.00 | 3/13/2023 | 38.00 | Residential Sales | $74.92 | 2,846.96 |
| 2/3/2023 | 2/7/2023 | 5.00 | 2/7/2023 | 4.00 | Industrial Service | $8,576.94 | 34,307.76 |
| 2/3/2023 | 2/6/2023 | 4.00 | 2/6/2023 | 3.00 | Residential Sales | $743,141.57 | 2,229,424.71 |
| 2/3/2023 | 2/7/2023 | 5.00 | 2/7/2023 | 4.00 | Commercial Sales | $77,078.78 | 308,315.12 |
| 2/3/2023 | 2/20/2023 | 18.00 | 2/20/2023 | 17.00 | Residential Sales | $186.86 | 3,176.62 |
| 2/3/2023 | 2/8/2023 | 6.00 | 2/8/2023 | 5.00 | Commercial Sales | $70,657.96 | 353,289.80 |
| 2/3/2023 | 2/7/2023 | 5.00 | 2/7/2023 | 4.00 | Residential Sales | $787.66 | 3,150.64 |
| 2/3/2023 | 2/3/2023 | 1.00 | 2/3/2023 | 0.00 | Other Sales to Public Authority | $125.68 | - |
| 2/3/2023 | 2/8/2023 | 6.00 | 2/8/2023 | 5.00 | Residential Sales | $2,189.25 | 10,946.25 |
| 2/3/2023 | 2/9/2023 | 7.00 | 2/9/2023 | 6.00 | Commercial Sales | $9,380.50 | 56,283.00 |
| 2/4/2023 | 2/6/2023 | 3.00 | 2/6/2023 | 2.00 | Residential Sales | $632.87 | 1,265.74 |
| 2/4/2023 | 2/7/2023 | 4.00 | 2/7/2023 | 3.00 | Residential Sales | $15.15 | 45.45 |
| 2/4/2023 | 2/9/2023 | 6.00 | 2/9/2023 | 5.00 | Residential Sales | $131.65 | 658.25 |
| 2/4/2023 | 2/15/2023 | 12.00 | 2/15/2023 | 11.00 | Residential Sales | $173.63 | 1,909.93 |
| 2/5/2023 | 2/7/2023 | 3.00 | 2/7/2023 | 2.00 | Industrial Service | $586.16 | 1,172.32 |
| 2/5/2023 | 2/6/2023 | 2.00 | 2/6/2023 | 1.00 | Residential Sales | $2,798.55 | 2,798.55 |
| 2/5/2023 | 2/7/2023 | 3.00 | 2/7/2023 | 2.00 | Residential Sales | $269.74 | 539.48 |
| 2/5/2023 | 2/8/2023 | 4.00 | 2/8/2023 | 3.00 | Commercial Sales | $7.98 | 23.94 |
| 2/5/2023 | 2/8/2023 | 4.00 | 2/8/2023 | 3.00 | Residential Sales | $387.69 | 1,163.07 |
| 2/5/2023 | 2/6/2023 | 2.00 | 2/6/2023 | 1.00 | Public Street & Highway Lighting | $6.30 | 6.30 |
| 2/5/2023 | 2/9/2023 | 5.00 | 2/9/2023 | 4.00 | Residential Sales | $29.72 | 118.88 |
| 2/5/2023 | 2/24/2023 | 20.00 | 2/24/2023 | 19.00 | Residential Sales | $57.23 | 1,087.37 |
| 2/5/2023 | 2/10/2023 | 6.00 | 2/10/2023 | 5.00 | Residential Sales | $75.84 | 379.20 |
| 2/5/2023 | 3/6/2023 | 30.00 | 3/6/2023 | 29.00 | Residential Sales | $12.62 | 365.98 |
| 2/5/2023 | 2/13/2023 | 9.00 | 2/13/2023 | 8.00 | Residential Sales | $190.83 | 1,526.64 |
| 2/5/2023 | 2/15/2023 | 11.00 | 2/15/2023 | 10.00 | Residential Sales | $29.53 | 295.30 |
| 2/6/2023 | 2/13/2023 | 8.00 | 2/13/2023 | 7.00 | Industrial Service | $482.44 | 3,377.08 |
| 2/6/2023 | 2/13/2023 | 8.00 | 2/13/2023 | 7.00 | Commercial Sales | $532.75 | 3,729.25 |
| 2/6/2023 | 3/6/2023 | 29.00 | 3/6/2023 | 28.00 | Residential Sales | $52.14 | 1,459.92 |
| 2/6/2023 | 3/21/2023 | 44.00 | 3/21/2023 | 43.00 | Commercial Sales | $100.80 | 4,334.40 |
| 2/6/2023 | 2/13/2023 | 8.00 | 2/13/2023 | 7.00 | Residential Sales | $604.32 | 4,230.24 |
| 2/6/2023 | 3/7/2023 | 30.00 | 3/7/2023 | 29.00 | Residential Sales | $70.81 | 2,053.49 |
| 2/6/2023 | 2/14/2023 | 9.00 | 2/14/2023 | 8.00 | Commercial Sales | $77.40 | 619.20 |
| 2/6/2023 | 2/14/2023 | 9.00 | 2/14/2023 | 8.00 | Residential Sales | $414.88 | 3,319.04 |
| 2/6/2023 | 2/15/2023 | 10.00 | 2/15/2023 | 9.00 | Residential Sales | $25,848.61 | 232,637.49 |
| 2/6/2023 | 3/9/2023 | 32.00 | 3/9/2023 | 31.00 | Residential Sales | $23.08 | 715.48 |
| 2/6/2023 | 6/19/2023 | 134.00 | 6/19/2023 | 133.00 | Residential Sales | $82.58 | 10,983.14 |
| 2/6/2023 | 2/16/2023 | 11.00 | 2/16/2023 | 10.00 | Commercial Sales | $11,116.66 | 111,166.60 |
| 2/6/2023 | 2/16/2023 | 11.00 | 2/16/2023 | 10.00 | Residential Sales | $56.43 | 564.30 |
| 2/6/2023 | 2/17/2023 | 12.00 | 2/17/2023 | 11.00 | Commercial Sales | $13,160.06 | 144,760.66 |
| 2/6/2023 | 2/17/2023 | 12.00 | 2/17/2023 | 11.00 | Residential Sales | $31.41 | 345.51 |
| 2/6/2023 | 4/19/2023 | 73.00 | 4/19/2023 | 72.00 | Residential Sales | $80.75 | 5,814.00 |
| 2/6/2023 | 4/4/2023 | 58.00 | 4/4/2023 | 57.00 | Commercial Sales | $111.55 | 6,358.35 |
| 2/6/2023 | 4/5/2023 | 59.00 | 4/5/2023 | 58.00 | Residential Sales | $26.59 | 1,542.22 |
| 2/6/2023 | 2/15/2023 | 10.00 | 2/15/2023 | 9.00 | Other Sales to Public Authority | $11,399.25 | 102,593.25 |
| 2/6/2023 | 8/24/2023 | 200.00 | 8/24/2023 | 199.00 | Residential Sales | $136.28 | 27,119.72 |
| 2/6/2023 | 2/6/2023 | 1.00 | 2/6/2023 | 0.00 | Commercial Sales | $1,702.90 | - |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 2/6/2023 | 2/20/2023 | 15.00 | 2/20/2023 | 14.00 | Commercial Sales | $214.17 | 2,998.38 |
| 2/6/2023 | 2/7/2023 | 2.00 | 2/7/2023 | 1.00 | Industrial Service | $883.50 | 883.50 |
| 2/6/2023 | 2/7/2023 | 2.00 | 2/7/2023 | 1.00 | Commercial Sales | $135,306.43 | 135,306.43 |
| 2/6/2023 | 2/6/2023 | 1.00 | 2/6/2023 | 0.00 | Residential Sales | $1,563.07 | - |
| 2/6/2023 | 2/8/2023 | 3.00 | 2/8/2023 | 2.00 | Industrial Service | $203.36 | 406.72 |
| 2/6/2023 | 2/7/2023 | 2.00 | 2/7/2023 | 1.00 | Residential Sales | $1,172,636.29 | 1,172,636.29 |
| 2/6/2023 | 2/8/2023 | 3.00 | 2/8/2023 | 2.00 | Commercial Sales | $55,948.47 | 111,896.94 |
| 2/6/2023 | 8/10/2023 | 186.00 | 8/10/2023 | 185.00 | Residential Sales | $63.04 | 11,662.40 |
| 2/6/2023 | 2/21/2023 | 16.00 | 2/21/2023 | 15.00 | Residential Sales | $88.76 | 1,331.40 |
| 2/6/2023 | 2/8/2023 | 3.00 | 2/8/2023 | 2.00 | Residential Sales | $16,884.67 | 33,769.34 |
| 2/6/2023 | 2/9/2023 | 4.00 | 2/9/2023 | 3.00 | Commercial Sales | $3,050.65 | 9,151.95 |
| 2/6/2023 | 2/23/2023 | 18.00 | 2/23/2023 | 17.00 | Commercial Sales | $10.47 | 177.99 |
| 2/6/2023 | 2/9/2023 | 4.00 | 2/9/2023 | 3.00 | Residential Sales | $4,957.68 | 14,873.04 |
| 2/6/2023 | 3/1/2023 | 24.00 | 3/1/2023 | 23.00 | Commercial Sales | $68.17 | 1,567.91 |
| 2/6/2023 | 2/24/2023 | 19.00 | 2/24/2023 | 18.00 | Residential Sales | $52.19 | 939.42 |
| 2/6/2023 | 3/1/2023 | 24.00 | 3/1/2023 | 23.00 | Residential Sales | $68.51 | 1,575.73 |
| 2/6/2023 | 2/6/2023 | 1.00 | 2/6/2023 | 0.00 | Other Sales to Public Authority | $30.00 | - |
| 2/6/2023 | 2/7/2023 | 2.00 | 2/7/2023 | 1.00 | Other Sales to Public Authority | $18,472.07 | 18,472.07 |
| 2/6/2023 | 2/10/2023 | 5.00 | 2/10/2023 | 4.00 | Commercial Sales | $473.14 | 1,892.56 |
| 2/6/2023 | 2/27/2023 | 22.00 | 2/27/2023 | 21.00 | Commercial Sales | $1,807.14 | 37,949.94 |
| 2/6/2023 | 7/21/2023 | 166.00 | 7/21/2023 | 165.00 | Residential Sales | $70.08 | 11,563.20 |
| 2/6/2023 | 2/8/2023 | 3.00 | 2/8/2023 | 2.00 | Other Sales to Public Authority | $29,630.52 | 59,261.04 |
| 2/6/2023 | 2/27/2023 | 22.00 | 2/27/2023 | 21.00 | Residential Sales | $1,537.88 | 32,295.48 |
| 2/6/2023 | 2/10/2023 | 5.00 | 2/10/2023 | 4.00 | Residential Sales | $594.60 | 2,378.40 |
| 2/6/2023 | 2/28/2023 | 23.00 | 2/28/2023 | 22.00 | Commercial Sales | $323.63 | 7,119.86 |
| 2/7/2023 | 2/9/2023 | 3.00 | 2/9/2023 | 2.00 | Residential Sales | $11,318.77 | 22,637.54 |
| 2/7/2023 | 3/1/2023 | 23.00 | 3/1/2023 | 22.00 | Commercial Sales | $37.83 | 832.26 |
| 2/7/2023 | 3/17/2023 | 39.00 | 3/17/2023 | 38.00 | Residential Sales | $18.88 | 717.44 |
| 2/7/2023 | 2/7/2023 | 1.00 | 2/7/2023 | 0.00 | Public Street & Highway Lighting | $55.63 | - |
| 2/7/2023 | 7/7/2023 | 151.00 | 7/7/2023 | 150.00 | Commercial Sales | $42.11 | 6,316.50 |
| 2/7/2023 | 6/29/2023 | 143.00 | 6/29/2023 | 142.00 | Residential Sales | $21.52 | 3,055.84 |
| 2/7/2023 | 2/10/2023 | 4.00 | 2/10/2023 | 3.00 | Industrial Service | $162.43 | 487.29 |
| 2/7/2023 | 2/10/2023 | 4.00 | 2/10/2023 | 3.00 | Commercial Sales | $27,257.04 | 81,771.12 |
| 2/7/2023 | 2/7/2023 | 1.00 | 2/7/2023 | 0.00 | Other Sales to Public Authority | $17.41 | - |
| 2/7/2023 | 2/27/2023 | 21.00 | 2/27/2023 | 20.00 | Commercial Sales | $48.99 | 979.80 |
| 2/7/2023 | 3/3/2023 | 25.00 | 3/3/2023 | 24.00 | Residential Sales | $14.84 | 356.16 |
| 2/7/2023 | 2/8/2023 | 2.00 | 2/8/2023 | 1.00 | Other Sales to Public Authority | $7,743.48 | 7,743.48 |
| 2/7/2023 | 2/10/2023 | 4.00 | 2/10/2023 | 3.00 | Residential Sales | $5,338.64 | 16,015.92 |
| 2/7/2023 | 2/28/2023 | 22.00 | 2/28/2023 | 21.00 | Commercial Sales | $22,160.30 | 465,366.30 |
| 2/7/2023 | 2/27/2023 | 21.00 | 2/27/2023 | 20.00 | Residential Sales | $165.92 | 3,318.40 |
| 2/7/2023 | 2/9/2023 | 3.00 | 2/9/2023 | 2.00 | Other Sales to Public Authority | $7,445.40 | 14,890.80 |
| 2/7/2023 | 2/13/2023 | 7.00 | 2/13/2023 | 6.00 | Commercial Sales | $12,764.82 | 76,588.92 |
| 2/7/2023 | 4/14/2023 | 67.00 | 4/14/2023 | 66.00 | Residential Sales | $9.32 | 615.12 |
| 2/7/2023 | 3/7/2023 | 29.00 | 3/7/2023 | 28.00 | Commercial Sales | $717.96 | 20,102.88 |
| 2/7/2023 | 5/23/2023 | 106.00 | 5/23/2023 | 105.00 | Commercial Sales | $246.02 | 25,832.10 |
| 2/7/2023 | 2/13/2023 | 7.00 | 2/13/2023 | 6.00 | Residential Sales | $3,235.30 | 19,411.80 |
| 2/7/2023 | 3/23/2023 | 45.00 | 3/23/2023 | 44.00 | Commercial Sales | $73.52 | 3,234.88 |
| 2/7/2023 | 2/14/2023 | 8.00 | 2/14/2023 | 7.00 | Residential Sales | $129.81 | 908.67 |
| 2/7/2023 | 2/15/2023 | 9.00 | 2/15/2023 | 8.00 | Residential Sales | $21,978.36 | 175,826.88 |
| 2/7/2023 | 2/16/2023 | 10.00 | 2/16/2023 | 9.00 | Commercial Sales | $12,562.86 | 113,065.74 |
| 2/7/2023 | 2/17/2023 | 11.00 | 2/17/2023 | 10.00 | Commercial Sales | $506.01 | 5,060.10 |
| 2/7/2023 | 2/16/2023 | 10.00 | 2/16/2023 | 9.00 | Residential Sales | $32.84 | 295.56 |
| 2/7/2023 | 3/25/2024 | 413.00 | 3/25/2024 | 412.00 | Commercial Sales | $36.83 | 15,173.96 |
| 2/7/2023 | 12/6/2023 | 303.00 | 12/6/2023 | 302.00 | Residential Sales | $111.65 | 33,718.30 |
| 2/7/2023 | 2/16/2023 | 10.00 | 2/16/2023 | 9.00 | Other Sales to Public Authority | $15,576.48 | 140,188.32 |
| 2/7/2023 | 2/20/2023 | 14.00 | 2/20/2023 | 13.00 | Commercial Sales | $15,870.40 | 206,315.20 |
| 2/7/2023 | 5/15/2023 | 98.00 | 5/15/2023 | 97.00 | Residential Sales | $73.17 | 7,097.49 |
| 2/7/2023 | 2/7/2023 | 1.00 | 2/7/2023 | 0.00 | Commercial Sales | $981.71 | - |
| 2/7/2023 | 2/8/2023 | 2.00 | 2/8/2023 | 1.00 | Industrial Service | $6,295.03 | 6,295.03 |
| 2/7/2023 | 2/20/2023 | 14.00 | 2/20/2023 | 13.00 | Residential Sales | $12.05 | 156.65 |
| 2/7/2023 | 2/21/2023 | 15.00 | 2/21/2023 | 14.00 | Commercial Sales | $260.84 | 3,651.76 |
| 2/7/2023 | 2/8/2023 | 2.00 | 2/8/2023 | 1.00 | Commercial Sales | $283,867.66 | 283,867.66 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 2/7/2023 | 2/7/2023 | 1.00 | 2/7/2023 | 0.00 | Residential Sales | $834.18 | - |
| 2/7/2023 | 2/9/2023 | 3.00 | 2/9/2023 | 2.00 | Industrial Service | $957.16 | 1,914.32 |
| 2/7/2023 | 2/8/2023 | 2.00 | 2/8/2023 | 1.00 | Residential Sales | $879,598.47 | 879,598.47 |
| 2/7/2023 | 2/9/2023 | 3.00 | 2/9/2023 | 2.00 | Commercial Sales | $128,466.73 | 256,933.46 |
| 2/7/2023 | 5/1/2023 | 84.00 | 5/1/2023 | 83.00 | Residential Sales | $14.37 | 1,192.71 |
| 2/7/2023 | 2/22/2023 | 16.00 | 2/22/2023 | 15.00 | Residential Sales | $176.07 | 2,641.05 |
| 2/8/2023 | 2/16/2023 | 9.00 | 2/16/2023 | 8.00 | Other Sales to Public Authority | $11,712.15 | 93,697.20 |
| 2/8/2023 | 2/10/2023 | 3.00 | 2/10/2023 | 2.00 | Company Use | $0.00 | - |
| 2/8/2023 | 11/14/2023 | 280.00 | 11/14/2023 | 279.00 | Commercial Sales | $1,387.72 | 387,173.88 |
| 2/8/2023 | 2/9/2023 | 2.00 | 2/9/2023 | 1.00 | Industrial Service | $121,293.38 | 121,293.38 |
| 2/8/2023 | 2/8/2023 | 1.00 | 2/8/2023 | 0.00 | Commercial Sales | $923.20 | - |
| 2/8/2023 | 2/9/2023 | 2.00 | 2/9/2023 | 1.00 | Commercial Sales | $256,929.88 | 256,929.88 |
| 2/8/2023 | 2/8/2023 | 1.00 | 2/8/2023 | 0.00 | Residential Sales | $1,490.19 | - |
| 2/8/2023 | 2/22/2023 | 15.00 | 2/22/2023 | 14.00 | Residential Sales | $132.75 | 1,858.50 |
| 2/8/2023 | 2/9/2023 | 2.00 | 2/9/2023 | 1.00 | Residential Sales | $362,121.55 | 362,121.55 |
| 2/8/2023 | 3/1/2023 | 22.00 | 3/1/2023 | 21.00 | Commercial Sales | $551.79 | 11,587.59 |
| 2/8/2023 | 5/2/2023 | 84.00 | 5/2/2023 | 83.00 | Residential Sales | $15.47 | 1,284.01 |
| 2/8/2023 | 3/2/2023 | 23.00 | 3/2/2023 | 22.00 | Residential Sales | $80.84 | 1,778.48 |
| 2/8/2023 | 2/8/2023 | 1.00 | 2/8/2023 | 0.00 | Public Street & Highway Lighting | $19.30 | - |
| 2/8/2023 | 2/10/2023 | 3.00 | 2/10/2023 | 2.00 | Industrial Service | $18,719.23 | 37,438.46 |
| 2/8/2023 | 3/3/2023 | 24.00 | 3/3/2023 | 23.00 | Commercial Sales | $12,510.37 | 287,738.51 |
| 2/8/2023 | 2/10/2023 | 3.00 | 2/10/2023 | 2.00 | Commercial Sales | $48,789.19 | 97,578.38 |
| 2/8/2023 | 3/3/2023 | 24.00 | 3/3/2023 | 23.00 | Residential Sales | $12.39 | 284.97 |
| 2/8/2023 | 4/28/2023 | 80.00 | 4/28/2023 | 79.00 | Residential Sales | $17.13 | 1,353.27 |
| 2/8/2023 | 2/10/2023 | 3.00 | 2/10/2023 | 2.00 | Residential Sales | $7,603.67 | 15,207.34 |
| 2/8/2023 | 2/27/2023 | 20.00 | 2/27/2023 | 19.00 | Residential Sales | $1,520.67 | 28,892.73 |
| 2/8/2023 | 2/9/2023 | 2.00 | 2/9/2023 | 1.00 | Other Sales to Public Authority | $38,385.21 | 38,385.21 |
| 2/8/2023 | 2/13/2023 | 6.00 | 2/13/2023 | 5.00 | Industrial Service | $20,236.93 | 101,184.65 |
| 2/8/2023 | 2/13/2023 | 6.00 | 2/13/2023 | 5.00 | Commercial Sales | $53,978.22 | 269,891.10 |
| 2/8/2023 | 3/1/2023 | 22.00 | 3/1/2023 | 21.00 | Other Sales to Public Authority | $56,199.86 | 1,180,197.06 |
| 2/8/2023 | 2/13/2023 | 6.00 | 2/13/2023 | 5.00 | Residential Sales | $3,134.68 | 15,673.40 |
| 2/8/2023 | 2/14/2023 | 7.00 | 2/14/2023 | 6.00 | Commercial Sales | $84,717.30 | 508,303.80 |
| 2/8/2023 | 2/15/2023 | 8.00 | 2/15/2023 | 7.00 | Commercial Sales | $24,245.49 | 169,718.43 |
| 2/8/2023 | 2/14/2023 | 7.00 | 2/14/2023 | 6.00 | Residential Sales | $265.83 | 1,594.98 |
| 2/8/2023 | 2/15/2023 | 8.00 | 2/15/2023 | 7.00 | Residential Sales | $4,900.34 | 34,302.38 |
| 2/8/2023 | 2/10/2023 | 3.00 | 2/10/2023 | 2.00 | Other Sales to Public Authority | $27,258.51 | 54,517.02 |
| 2/8/2023 | 3/9/2023 | 30.00 | 3/9/2023 | 29.00 | Residential Sales | $2.90 | 84.10 |
| 2/8/2023 | 2/17/2023 | 10.00 | 2/17/2023 | 9.00 | Commercial Sales | $17,671.53 | 159,043.77 |
| 2/8/2023 | 2/16/2023 | 9.00 | 2/16/2023 | 8.00 | Residential Sales | $8.64 | 69.12 |
| 2/8/2023 | 2/17/2023 | 10.00 | 2/17/2023 | 9.00 | Residential Sales | $183.33 | 1,649.97 |
| 2/9/2023 | 2/16/2023 | 8.00 | 2/16/2023 | 7.00 | Residential Sales | $698.77 | 4,891.39 |
| 2/9/2023 | 2/17/2023 | 9.00 | 2/17/2023 | 8.00 | Commercial Sales | $404.56 | 3,236.48 |
| 2/9/2023 | 2/17/2023 | 9.00 | 2/17/2023 | 8.00 | Residential Sales | $704.38 | 5,635.04 |
| 2/9/2023 | 2/13/2023 | 5.00 | 2/13/2023 | 4.00 | Other Sales to Public Authority | $8,623.46 | 34,493.84 |
| 2/9/2023 | 2/20/2023 | 12.00 | 2/20/2023 | 11.00 | Commercial Sales | $7,000.93 | 77,010.23 |
| 2/9/2023 | 2/20/2023 | 12.00 | 2/20/2023 | 11.00 | Residential Sales | $101.47 | 1,116.17 |
| 2/9/2023 | 2/21/2023 | 13.00 | 2/21/2023 | 12.00 | Residential Sales | $57.57 | 690.84 |
| 2/9/2023 | 2/9/2023 | 1.00 | 2/9/2023 | 0.00 | Commercial Sales | $2,094.66 | - |
| 2/9/2023 | 2/22/2023 | 14.00 | 2/22/2023 | 13.00 | Residential Sales | $34.41 | 447.33 |
| 2/9/2023 | 2/9/2023 | 1.00 | 2/9/2023 | 0.00 | Residential Sales | $2,300.02 | - |
| 2/9/2023 | 3/1/2023 | 21.00 | 3/1/2023 | 20.00 | Commercial Sales | $129.05 | 2,581.00 |
| 2/9/2023 | 4/10/2023 | 61.00 | 4/10/2023 | 60.00 | Commercial Sales | $33.50 | 2,010.00 |
| 2/9/2023 | 10/10/2023 | 244.00 | 10/10/2023 | 243.00 | Commercial Sales | $1,239.31 | 301,152.33 |
| 2/9/2023 | 2/10/2023 | 2.00 | 2/10/2023 | 1.00 | Industrial Service | $64,882.48 | 64,882.48 |
| 2/9/2023 | 3/3/2023 | 23.00 | 3/3/2023 | 22.00 | Commercial Sales | $7,883.32 | 173,433.04 |
| 2/9/2023 | 2/10/2023 | 2.00 | 2/10/2023 | 1.00 | Commercial Sales | $235,770.89 | 235,770.89 |
| 2/9/2023 | 2/9/2023 | 1.00 | 2/9/2023 | 0.00 | Public Street & Highway Lighting | $54.17 | - |
| 2/9/2023 | 7/21/2023 | 163.00 | 7/21/2023 | 162.00 | Residential Sales | $87.11 | 14,111.82 |
| 2/9/2023 | 2/10/2023 | 2.00 | 2/10/2023 | 1.00 | Residential Sales | $357,806.73 | 357,806.73 |
| 2/9/2023 | 2/27/2023 | 19.00 | 2/27/2023 | 18.00 | Residential Sales | $91.50 | 1,647.00 |
| 2/9/2023 | 2/9/2023 | 1.00 | 2/9/2023 | 0.00 | Other Sales to Public Authority | $221.69 | - |
| 2/9/2023 | 2/13/2023 | 5.00 | 2/13/2023 | 4.00 | Industrial Service | $368.61 | 1,474.44 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 2/9/2023 | 2/13/2023 | 5.00 | 2/13/2023 | 4.00 | Commercial Sales | $110,934.80 | 443,739.20 |
| 2/9/2023 | 3/6/2023 | 26.00 | 3/6/2023 | 25.00 | Residential Sales | $308.57 | 7,714.25 |
| 2/9/2023 | 3/7/2023 | 27.00 | 3/7/2023 | 26.00 | Commercial Sales | $215.72 | 5,608.72 |
| 2/9/2023 | 2/13/2023 | 5.00 | 2/13/2023 | 4.00 | Residential Sales | $8,125.23 | 32,500.92 |
| 2/9/2023 | 2/14/2023 | 6.00 | 2/14/2023 | 5.00 | Commercial Sales | $82,386.62 | 411,933.10 |
| 2/9/2023 | 2/15/2023 | 7.00 | 2/15/2023 | 6.00 | Industrial Service | $20,132.23 | 120,793.38 |
| 2/9/2023 | 2/14/2023 | 6.00 | 2/14/2023 | 5.00 | Residential Sales | $2,303.66 | 11,518.30 |
| 2/9/2023 | 2/15/2023 | 7.00 | 2/15/2023 | 6.00 | Commercial Sales | $8,773.60 | 52,641.60 |
| 2/9/2023 | 2/15/2023 | 7.00 | 2/15/2023 | 6.00 | Residential Sales | $7,458.33 | 44,749.98 |
| 2/9/2023 | 2/10/2023 | 2.00 | 2/10/2023 | 1.00 | Other Sales to Public Authority | $23,313.96 | 23,313.96 |
| 2/9/2023 | 2/16/2023 | 8.00 | 2/16/2023 | 7.00 | Commercial Sales | $340.60 | 2,384.20 |
| 2/10/2023 | 2/16/2023 | 7.00 | 2/16/2023 | 6.00 | Residential Sales | $606.39 | 3,638.34 |
| 2/10/2023 | 2/13/2023 | 4.00 | 2/13/2023 | 3.00 | Public Street & Highway Lighting | $1,233.53 | 3,700.59 |
| 2/10/2023 | 3/21/2023 | 40.00 | 3/21/2023 | 39.00 | Public Street & Highway Lighting | $32,989.59 | 1,286,594.01 |
| 2/10/2023 | 2/17/2023 | 8.00 | 2/17/2023 | 7.00 | Commercial Sales | $1,368.72 | 9,581.04 |
| 2/10/2023 | 3/8/2023 | 27.00 | 3/8/2023 | 26.00 | Public Street & Highway Lighting | $405.68 | 10,547.68 |
| 2/10/2023 | 2/17/2023 | 8.00 | 2/17/2023 | 7.00 | Residential Sales | $453.53 | 3,174.71 |
| 2/10/2023 | 2/13/2023 | 4.00 | 2/13/2023 | 3.00 | Other Sales to Public Authority | $22,508.08 | 67,524.24 |
| 2/10/2023 | 3/7/2023 | 26.00 | 3/7/2023 | 25.00 | Other Sales to Public Authority | $21,501.57 | 537,539.25 |
| 2/10/2023 | 2/14/2023 | 5.00 | 2/14/2023 | 4.00 | Other Sales to Public Authority | $5,605.94 | 22,423.76 |
| 2/10/2023 | 3/28/2023 | 47.00 | 3/28/2023 | 46.00 | Commercial Sales | $2,946.08 | 135,519.68 |
| 2/10/2023 | 2/17/2023 | 8.00 | 2/17/2023 | 7.00 | Public Street & Highway Lighting | $20,610.09 | 144,270.63 |
| 2/10/2023 | 2/15/2023 | 6.00 | 2/15/2023 | 5.00 | Other Sales to Public Authority | $349.85 | 1,749.25 |
| 2/10/2023 | 2/20/2023 | 11.00 | 2/20/2023 | 10.00 | Industrial Service | $27,216.99 | 272,169.90 |
| 2/10/2023 | 11/15/2023 | 279.00 | 11/15/2023 | 278.00 | Commercial Sales | $240.43 | 66,839.54 |
| 2/10/2023 | 2/20/2023 | 11.00 | 2/20/2023 | 10.00 | Commercial Sales | $584.44 | 5,844.40 |
| 2/10/2023 | 2/20/2023 | 11.00 | 2/20/2023 | 10.00 | Residential Sales | $604.22 | 6,042.20 |
| 2/10/2023 | 11/15/2023 | 279.00 | 11/15/2023 | 278.00 | Residential Sales | $17.95 | 4,990.10 |
| 2/10/2023 | 3/14/2023 | 33.00 | 3/14/2023 | 32.00 | Residential Sales | $66.32 | 2,122.24 |
| 2/10/2023 | 5/15/2024 | 461.00 | 5/15/2024 | 460.00 | Residential Sales | $310.39 | 142,779.40 |
| 2/10/2023 | 2/21/2023 | 12.00 | 2/21/2023 | 11.00 | Residential Sales | $44.16 | 485.76 |
| 2/10/2023 | 2/22/2023 | 13.00 | 2/22/2023 | 12.00 | Residential Sales | $202.44 | 2,429.28 |
| 2/10/2023 | 2/20/2023 | 11.00 | 2/20/2023 | 10.00 | Public Street & Highway Lighting | $5,072.37 | 50,723.70 |
| 2/10/2023 | 2/24/2023 | 15.00 | 2/24/2023 | 14.00 | Residential Sales | $89.58 | 1,254.12 |
| 2/10/2023 | 3/3/2023 | 22.00 | 3/3/2023 | 21.00 | Commercial Sales | $62.68 | 1,316.28 |
| 2/10/2023 | 2/10/2023 | 1.00 | 2/10/2023 | 0.00 | Commercial Sales | $690.60 | - |
| 2/10/2023 | 2/14/2023 | 5.00 | 2/14/2023 | 4.00 | Company Use | $0.00 | - |
| 2/10/2023 | 2/10/2023 | 1.00 | 2/10/2023 | 0.00 | Residential Sales | $1,784.51 | - |
| 2/10/2023 | 2/27/2023 | 18.00 | 2/27/2023 | 17.00 | Residential Sales | $1,092.11 | 18,565.87 |
| 2/10/2023 | 2/13/2023 | 4.00 | 2/13/2023 | 3.00 | Industrial Service | $566,163.68 | 1,698,491.04 |
| 2/10/2023 | 2/28/2023 | 19.00 | 2/28/2023 | 18.00 | Residential Sales | $100.84 | 1,815.12 |
| 2/10/2023 | 2/13/2023 | 4.00 | 2/13/2023 | 3.00 | Commercial Sales | $247,983.58 | 743,950.74 |
| 2/10/2023 | 2/14/2023 | 5.00 | 2/14/2023 | 4.00 | Industrial Service | $107,569.19 | 430,276.76 |
| 2/10/2023 | 3/7/2023 | 26.00 | 3/7/2023 | 25.00 | Commercial Sales | $186.00 | 4,650.00 |
| 2/10/2023 | 3/6/2023 | 25.00 | 3/6/2023 | 24.00 | Residential Sales | $155.95 | 3,742.80 |
| 2/10/2023 | 2/13/2023 | 4.00 | 2/13/2023 | 3.00 | Residential Sales | $615,556.02 | 1,846,668.06 |
| 2/10/2023 | 2/10/2023 | 1.00 | 2/10/2023 | 0.00 | Public Street & Highway Lighting | $60,838.33 | - |
| 2/10/2023 | 2/14/2023 | 5.00 | 2/14/2023 | 4.00 | Commercial Sales | $108,255.90 | 433,023.60 |
| 2/10/2023 | 2/15/2023 | 6.00 | 2/15/2023 | 5.00 | Industrial Service | $156,301.82 | 781,509.10 |
| 2/10/2023 | 2/14/2023 | 5.00 | 2/14/2023 | 4.00 | Residential Sales | $3,669.49 | 14,677.96 |
| 2/10/2023 | 2/16/2023 | 7.00 | 2/16/2023 | 6.00 | Industrial Service | $15,578.31 | 93,469.86 |
| 2/10/2023 | 2/15/2023 | 6.00 | 2/15/2023 | 5.00 | Commercial Sales | $89,339.36 | 446,696.80 |
| 2/10/2023 | 2/15/2023 | 6.00 | 2/15/2023 | 5.00 | Residential Sales | $17,339.51 | 86,697.55 |
| 2/10/2023 | 2/17/2023 | 8.00 | 2/17/2023 | 7.00 | Industrial Service | $27,750.15 | 194,251.05 |
| 2/10/2023 | 2/16/2023 | 7.00 | 2/16/2023 | 6.00 | Commercial Sales | $1,867.16 | 11,202.96 |
| 2/10/2023 | 2/10/2023 | 1.00 | 2/10/2023 | 0.00 | Other Sales to Public Authority | $17.41 | - |
| 2/11/2023 | 2/13/2023 | 3.00 | 2/13/2023 | 2.00 | Residential Sales | $1,122.03 | 2,244.06 |
| 2/11/2023 | 2/14/2023 | 4.00 | 2/14/2023 | 3.00 | Commercial Sales | $5.86 | 17.58 |
| 2/11/2023 | 2/15/2023 | 5.00 | 2/15/2023 | 4.00 | Residential Sales | $258.06 | 1,032.24 |
| 2/12/2023 | 3/3/2023 | 20.00 | 3/3/2023 | 19.00 | Residential Sales | $34.51 | 655.69 |
| 2/12/2023 | 2/13/2023 | 2.00 | 2/13/2023 | 1.00 | Residential Sales | $2,267.07 | 2,267.07 |
| 2/12/2023 | 2/14/2023 | 3.00 | 2/14/2023 | 2.00 | Commercial Sales | $31.69 | 63.38 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 2/12/2023 | 2/14/2023 | 3.00 | 2/14/2023 | 2.00 | Residential Sales | $117.86 | 235.72 |
| 2/12/2023 | 2/15/2023 | 4.00 | 2/15/2023 | 3.00 | Commercial Sales | $4.36 | 13.08 |
| 2/12/2023 | 2/15/2023 | 4.00 | 2/15/2023 | 3.00 | Residential Sales | $14.37 | 43.11 |
| 2/12/2023 | 2/16/2023 | 5.00 | 2/16/2023 | 4.00 | Residential Sales | $20.89 | 83.56 |
| 2/12/2023 | 3/13/2023 | 30.00 | 3/13/2023 | 29.00 | Residential Sales | $41.90 | 1,215.10 |
| 2/12/2023 | 2/20/2023 | 9.00 | 2/20/2023 | 8.00 | Residential Sales | $27.43 | 219.44 |
| 2/13/2023 | 2/16/2023 | 4.00 | 2/16/2023 | 3.00 | Other Sales to Public Authority | $159.80 | 479.40 |
| 2/13/2023 | 2/20/2023 | 8.00 | 2/20/2023 | 7.00 | Commercial Sales | $20,079.25 | 140,554.75 |
| 2/13/2023 | 2/20/2023 | 8.00 | 2/20/2023 | 7.00 | Residential Sales | $628.37 | 4,398.59 |
| 2/13/2023 | 2/21/2023 | 9.00 | 2/21/2023 | 8.00 | Commercial Sales | $282.24 | 2,257.92 |
| 2/13/2023 | 2/22/2023 | 10.00 | 2/22/2023 | 9.00 | Commercial Sales | $179.55 | 1,615.95 |
| 2/13/2023 | 2/21/2023 | 9.00 | 2/21/2023 | 8.00 | Residential Sales | $198.39 | 1,587.12 |
| 2/13/2023 | 3/16/2023 | 32.00 | 3/16/2023 | 31.00 | Commercial Sales | $3,522.65 | 109,202.15 |
| 2/13/2023 | 3/15/2023 | 31.00 | 3/15/2023 | 30.00 | Residential Sales | $34.58 | 1,037.40 |
| 2/13/2023 | 2/22/2023 | 10.00 | 2/22/2023 | 9.00 | Residential Sales | $368.18 | 3,313.62 |
| 2/13/2023 | 2/24/2023 | 12.00 | 2/24/2023 | 11.00 | Commercial Sales | $23,639.03 | 260,029.33 |
| 2/13/2023 | 2/23/2023 | 11.00 | 2/23/2023 | 10.00 | Residential Sales | $59.21 | 592.10 |
| 2/13/2023 | 2/24/2023 | 12.00 | 2/24/2023 | 11.00 | Residential Sales | $54.02 | 594.22 |
| 2/13/2023 | 3/1/2023 | 17.00 | 3/1/2023 | 16.00 | Residential Sales | $1,113.78 | 17,820.48 |
| 2/13/2023 | 2/27/2023 | 15.00 | 2/27/2023 | 14.00 | Industrial Service | $16,093.21 | 225,304.94 |
| 2/13/2023 | 3/2/2023 | 18.00 | 3/2/2023 | 17.00 | Residential Sales | $115.33 | 1,960.61 |
| 2/13/2023 | 2/27/2023 | 15.00 | 2/27/2023 | 14.00 | Commercial Sales | $56,788.69 | 795,041.66 |
| 2/13/2023 | 4/11/2023 | 58.00 | 4/11/2023 | 57.00 | Residential Sales | $66.35 | 3,781.95 |
| 2/13/2023 | 2/27/2023 | 15.00 | 2/27/2023 | 14.00 | Residential Sales | $1,330.06 | 18,620.84 |
| 2/13/2023 | 8/30/2023 | 199.00 | 8/30/2023 | 198.00 | Residential Sales | $25.56 | 5,060.88 |
| 2/13/2023 | 2/28/2023 | 16.00 | 2/28/2023 | 15.00 | Residential Sales | $77.53 | 1,162.95 |
| 2/13/2023 | 3/20/2023 | 36.00 | 3/20/2023 | 35.00 | Commercial Sales | $43.23 | 1,513.05 |
| 2/13/2023 | 5/6/2024 | 449.00 | 5/6/2024 | 448.00 | Residential Sales | $25.81 | 11,562.88 |
| 2/13/2023 | 2/14/2023 | 2.00 | 2/14/2023 | 1.00 | Industrial Service | $211,225.00 | 211,225.00 |
| 2/13/2023 | 3/7/2023 | 23.00 | 3/7/2023 | 22.00 | Commercial Sales | $18,455.31 | 406,016.82 |
| 2/13/2023 | 2/13/2023 | 1.00 | 2/13/2023 | 0.00 | Commercial Sales | $266.94 | - |
| 2/13/2023 | 3/21/2023 | 37.00 | 3/21/2023 | 36.00 | Commercial Sales | $446.97 | 16,090.92 |
| 2/13/2023 | 3/8/2023 | 24.00 | 3/8/2023 | 23.00 | Commercial Sales | $2,740.94 | 63,041.62 |
| 2/13/2023 | 2/14/2023 | 2.00 | 2/14/2023 | 1.00 | Commercial Sales | $512,779.72 | 512,779.72 |
| 2/13/2023 | 2/13/2023 | 1.00 | 2/13/2023 | 0.00 | Residential Sales | $1,581.83 | - |
| 2/13/2023 | 2/15/2023 | 3.00 | 2/15/2023 | 2.00 | Industrial Service | $169,153.71 | 338,307.42 |
| 2/13/2023 | 3/7/2023 | 23.00 | 3/7/2023 | 22.00 | Residential Sales | $5.27 | 115.94 |
| 2/13/2023 | 2/14/2023 | 2.00 | 2/14/2023 | 1.00 | Residential Sales | $980,108.47 | 980,108.47 |
| 2/13/2023 | 2/15/2023 | 3.00 | 2/15/2023 | 2.00 | Commercial Sales | $162,052.78 | 324,105.56 |
| 2/13/2023 | 2/16/2023 | 4.00 | 2/16/2023 | 3.00 | Industrial Service | $328,330.32 | 984,990.96 |
| 2/13/2023 | 12/18/2023 | 309.00 | 12/18/2023 | 308.00 | Commercial Sales | $837.14 | 257,839.12 |
| 2/13/2023 | 3/8/2023 | 24.00 | 3/8/2023 | 23.00 | Residential Sales | $80.25 | 1,845.75 |
| 2/13/2023 | 2/15/2023 | 3.00 | 2/15/2023 | 2.00 | Residential Sales | $44,070.80 | 88,141.60 |
| 2/13/2023 | 2/16/2023 | 4.00 | 2/16/2023 | 3.00 | Commercial Sales | $50,717.79 | 152,153.37 |
| 2/13/2023 | 2/17/2023 | 5.00 | 2/17/2023 | 4.00 | Industrial Service | $11,142.31 | 44,569.24 |
| 2/13/2023 | 4/17/2023 | 64.00 | 4/17/2023 | 63.00 | Residential Sales | $389.09 | 24,512.67 |
| 2/13/2023 | 2/16/2023 | 4.00 | 2/16/2023 | 3.00 | Residential Sales | $7,239.60 | 21,718.80 |
| 2/13/2023 | 2/17/2023 | 5.00 | 2/17/2023 | 4.00 | Commercial Sales | $4,375.38 | 17,501.52 |
| 2/13/2023 | 2/13/2023 | 1.00 | 2/13/2023 | 0.00 | Public Street & Highway Lighting | $12.26 | - |
| 2/13/2023 | 2/17/2023 | 5.00 | 2/17/2023 | 4.00 | Residential Sales | $2,292.70 | 9,170.80 |
| 2/13/2023 | 2/13/2023 | 1.00 | 2/13/2023 | 0.00 | Other Sales to Public Authority | $17.41 | - |
| 2/13/2023 | 11/27/2023 | 288.00 | 11/27/2023 | 287.00 | Residential Sales | $134.54 | 38,612.98 |
| 2/13/2023 | 6/5/2023 | 113.00 | 6/5/2023 | 112.00 | Residential Sales | $36.94 | 4,137.28 |
| 2/13/2023 | 3/10/2023 | 26.00 | 3/10/2023 | 25.00 | Residential Sales | $52.95 | 1,323.75 |
| 2/13/2023 | 2/14/2023 | 2.00 | 2/14/2023 | 1.00 | Other Sales to Public Authority | $2,091.10 | 2,091.10 |
| 2/13/2023 | 2/15/2023 | 3.00 | 2/15/2023 | 2.00 | Other Sales to Public Authority | $1,111.65 | 2,223.30 |
| 2/14/2023 | 2/16/2023 | 3.00 | 2/16/2023 | 2.00 | Residential Sales | $9,012.51 | 18,025.02 |
| 2/14/2023 | 2/17/2023 | 4.00 | 2/17/2023 | 3.00 | Commercial Sales | $35,283.00 | 105,849.00 |
| 2/14/2023 | 2/17/2023 | 4.00 | 2/17/2023 | 3.00 | Residential Sales | $5,571.54 | 16,714.62 |
| 2/14/2023 | 2/14/2023 | 1.00 | 2/14/2023 | 0.00 | Public Street & Highway Lighting | $346.88 | - |
| 2/14/2023 | 4/3/2023 | 49.00 | 4/3/2023 | 48.00 | Residential Sales | $80.04 | 3,841.92 |
| 2/14/2023 | 2/20/2023 | 7.00 | 2/20/2023 | 6.00 | Company Use | $0.00 | - |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 2/14/2023 | 2/15/2023 | 2.00 | 2/15/2023 | 1.00 | Other Sales to Public Authority | $16,422.22 | 16,422.22 |
| 2/14/2023 | 8/23/2023 | 191.00 | 8/23/2023 | 190.00 | Residential Sales | $102.51 | 19,476.90 |
| 2/14/2023 | 2/16/2023 | 3.00 | 2/16/2023 | 2.00 | Other Sales to Public Authority | $470.95 | 941.90 |
| 2/14/2023 | 2/20/2023 | 7.00 | 2/20/2023 | 6.00 | Industrial Service | $19,589.63 | 117,537.78 |
| 2/14/2023 | 2/20/2023 | 7.00 | 2/20/2023 | 6.00 | Commercial Sales | $34,559.74 | 207,358.44 |
| 2/14/2023 | 11/15/2023 | 275.00 | 11/15/2023 | 274.00 | Commercial Sales | $36.83 | 10,091.42 |
| 2/14/2023 | 2/21/2023 | 8.00 | 2/21/2023 | 7.00 | Commercial Sales | $40,343.74 | 282,406.18 |
| 2/14/2023 | 2/20/2023 | 7.00 | 2/20/2023 | 6.00 | Residential Sales | $987.54 | 5,925.24 |
| 2/14/2023 | 2/21/2023 | 8.00 | 2/21/2023 | 7.00 | Residential Sales | $26.28 | 183.96 |
| 2/14/2023 | 2/22/2023 | 9.00 | 2/22/2023 | 8.00 | Commercial Sales | $12,758.85 | 102,070.80 |
| 2/14/2023 | 2/23/2023 | 10.00 | 2/23/2023 | 9.00 | Commercial Sales | $299.39 | 2,694.51 |
| 2/14/2023 | 3/16/2023 | 31.00 | 3/16/2023 | 30.00 | Residential Sales | $30.89 | 926.70 |
| 2/14/2023 | 2/22/2023 | 9.00 | 2/22/2023 | 8.00 | Residential Sales | $43.78 | 350.24 |
| 2/14/2023 | 3/1/2023 | 16.00 | 3/1/2023 | 15.00 | Residential Sales | $373.97 | 5,609.55 |
| 2/14/2023 | 3/2/2023 | 17.00 | 3/2/2023 | 16.00 | Commercial Sales | $320.81 | 5,132.96 |
| 2/14/2023 | 2/17/2023 | 4.00 | 2/17/2023 | 3.00 | Other Public Authority Transportation On | $33.10 | 99.30 |
| 2/14/2023 | 3/7/2023 | 22.00 | 3/7/2023 | 21.00 | Company Use | $0.00 | - |
| 2/14/2023 | 2/27/2023 | 14.00 | 2/27/2023 | 13.00 | Commercial Sales | $57.64 | 749.32 |
| 2/14/2023 | 10/27/2023 | 256.00 | 10/27/2023 | 255.00 | Residential Sales | $220.30 | 56,176.50 |
| 2/14/2023 | 2/14/2023 | 1.00 | 2/14/2023 | 0.00 | Company Use | $15.77 | - |
| 2/14/2023 | 2/15/2023 | 2.00 | 2/15/2023 | 1.00 | Company Use | $0.00 | - |
| 2/14/2023 | 2/28/2023 | 15.00 | 2/28/2023 | 14.00 | Commercial Sales | $14,088.09 | 197,233.26 |
| 2/14/2023 | 2/27/2023 | 14.00 | 2/27/2023 | 13.00 | Residential Sales | $186.37 | 2,422.81 |
| 2/14/2023 | 2/16/2023 | 3.00 | 2/16/2023 | 2.00 | Company Use | -$3,905.26 | (7,810.52) |
| 2/14/2023 | 2/28/2023 | 15.00 | 2/28/2023 | 14.00 | Residential Sales | $423.57 | 5,929.98 |
| 2/14/2023 | 2/17/2023 | 4.00 | 2/17/2023 | 3.00 | Company Use | $0.00 | - |
| 2/14/2023 | 3/7/2023 | 22.00 | 3/7/2023 | 21.00 | Commercial Sales | $49.50 | 1,039.50 |
| 2/14/2023 | 2/15/2023 | 2.00 | 2/15/2023 | 1.00 | Industrial Service | $9,397.61 | 9,397.61 |
| 2/14/2023 | 2/14/2023 | 1.00 | 2/14/2023 | 0.00 | Commercial Sales | $512.18 | - |
| 2/14/2023 | 2/14/2023 | 1.00 | 2/14/2023 | 0.00 | Residential Sales | $1,399.01 | - |
| 2/14/2023 | 2/15/2023 | 2.00 | 2/15/2023 | 1.00 | Commercial Sales | $215,601.91 | 215,601.91 |
| 2/14/2023 | 2/16/2023 | 3.00 | 2/16/2023 | 2.00 | Industrial Service | $24,103.11 | 48,206.22 |
| 2/14/2023 | 2/15/2023 | 2.00 | 2/15/2023 | 1.00 | Residential Sales | $695,616.88 | 695,616.88 |
| 2/14/2023 | 2/16/2023 | 3.00 | 2/16/2023 | 2.00 | Commercial Sales | $135,355.08 | 270,710.16 |
| 2/14/2023 | 3/9/2023 | 24.00 | 3/9/2023 | 23.00 | Residential Sales | $52.19 | 1,200.37 |
| 2/14/2023 | 2/17/2023 | 4.00 | 2/17/2023 | 3.00 | Industrial Service | $6,659.32 | 19,977.96 |
| 2/14/2023 | 10/30/2023 | 259.00 | 10/30/2023 | 258.00 | Residential Sales | $63.21 | 16,308.18 |
| 2/15/2023 | 2/28/2023 | 14.00 | 2/28/2023 | 13.00 | Residential Sales | $0.68 | 8.84 |
| 2/15/2023 | 2/24/2023 | 10.00 | 2/24/2023 | 9.00 | Other Sales to Public Authority | $21,824.25 | 196,418.25 |
| 2/15/2023 | 3/7/2023 | 21.00 | 3/7/2023 | 20.00 | Residential Sales | $123.82 | 2,476.40 |
| 2/15/2023 | 2/15/2023 | 1.00 | 2/15/2023 | 0.00 | Commercial Sales | $262.81 | - |
| 2/15/2023 | 2/16/2023 | 2.00 | 2/16/2023 | 1.00 | Industrial Service | $709.43 | 709.43 |
| 2/15/2023 | 2/16/2023 | 2.00 | 2/16/2023 | 1.00 | Commercial Sales | $85,509.07 | 85,509.07 |
| 2/15/2023 | 2/15/2023 | 1.00 | 2/15/2023 | 0.00 | Residential Sales | $1,004.27 | - |
| 2/15/2023 | 2/17/2023 | 3.00 | 2/17/2023 | 2.00 | Industrial Service | $37,314.36 | 74,628.72 |
| 2/15/2023 | 4/17/2023 | 62.00 | 4/17/2023 | 61.00 | Residential Sales | $89.69 | 5,471.09 |
| 2/15/2023 | 2/16/2023 | 2.00 | 2/16/2023 | 1.00 | Residential Sales | $643,443.28 | 643,443.28 |
| 2/15/2023 | 2/17/2023 | 3.00 | 2/17/2023 | 2.00 | Commercial Sales | $18,105.95 | 36,211.90 |
| 2/15/2023 | 2/17/2023 | 3.00 | 2/17/2023 | 2.00 | Residential Sales | $23,159.62 | 46,319.24 |
| 2/15/2023 | 2/15/2023 | 1.00 | 2/15/2023 | 0.00 | Public Street & Highway Lighting | $3.03 | - |
| 2/15/2023 | 2/15/2023 | 1.00 | 2/15/2023 | 0.00 | Other Sales to Public Authority | $84.61 | - |
| 2/15/2023 | 2/16/2023 | 2.00 | 2/16/2023 | 1.00 | Other Sales to Public Authority | $14,369.22 | 14,369.22 |
| 2/15/2023 | 2/20/2023 | 6.00 | 2/20/2023 | 5.00 | Commercial Sales | $2,490.27 | 12,451.35 |
| 2/15/2023 | 2/17/2023 | 3.00 | 2/17/2023 | 2.00 | Other Sales to Public Authority | $980.62 | 1,961.24 |
| 2/15/2023 | 2/20/2023 | 6.00 | 2/20/2023 | 5.00 | Residential Sales | $6,047.11 | 30,235.55 |
| 2/15/2023 | 2/21/2023 | 7.00 | 2/21/2023 | 6.00 | Commercial Sales | $5,046.22 | 30,277.32 |
| 2/15/2023 | 3/15/2023 | 29.00 | 3/15/2023 | 28.00 | Commercial Sales | $1.23 | 34.44 |
| 2/15/2023 | 2/21/2023 | 7.00 | 2/21/2023 | 6.00 | Residential Sales | $905.26 | 5,431.56 |
| 2/15/2023 | 2/23/2023 | 9.00 | 2/23/2023 | 8.00 | Residential Sales | $274.94 | 2,199.52 |
| 2/15/2023 | 3/1/2023 | 15.00 | 3/1/2023 | 14.00 | Commercial Sales | $18.42 | 257.88 |
| 2/15/2023 | 2/24/2023 | 10.00 | 2/24/2023 | 9.00 | Residential Sales | $162.66 | 1,463.94 |
| 2/15/2023 | 3/1/2023 | 15.00 | 3/1/2023 | 14.00 | Residential Sales | $366.83 | 5,135.62 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 2/15/2023 | 3/3/2023 | 17.00 | 3/3/2023 | 16.00 | Commercial Sales | $47.50 | 760.00 |
| 2/15/2023 | 2/27/2023 | 13.00 | 2/27/2023 | 12.00 | Residential Sales | $1,424.70 | 17,096.40 |
| 2/16/2023 | 2/23/2023 | 8.00 | 2/23/2023 | 7.00 | Residential Sales | $302.23 | 2,115.61 |
| 2/16/2023 | 3/1/2023 | 14.00 | 3/1/2023 | 13.00 | Commercial Sales | $51.71 | 672.23 |
| 2/16/2023 | 3/17/2023 | 30.00 | 3/17/2023 | 29.00 | Residential Sales | $6.67 | 193.43 |
| 2/16/2023 | 2/24/2023 | 9.00 | 2/24/2023 | 8.00 | Commercial Sales | $3,129.36 | 25,034.88 |
| 2/16/2023 | 3/1/2023 | 14.00 | 3/1/2023 | 13.00 | Residential Sales | $683.85 | 8,890.05 |
| 2/16/2023 | 2/24/2023 | 9.00 | 2/24/2023 | 8.00 | Residential Sales | $1,070.95 | 8,567.60 |
| 2/16/2023 | 2/20/2023 | 5.00 | 2/20/2023 | 4.00 | Other Sales to Public Authority | $3,967.66 | 15,870.64 |
| 2/16/2023 | 3/3/2023 | 16.00 | 3/3/2023 | 15.00 | Commercial Sales | $344.50 | 5,167.50 |
| 2/16/2023 | 2/27/2023 | 12.00 | 2/27/2023 | 11.00 | Industrial Service | $15,720.37 | 172,924.07 |
| 2/16/2023 | 2/27/2023 | 12.00 | 2/27/2023 | 11.00 | Commercial Sales | $11,061.88 | 121,680.68 |
| 2/16/2023 | 2/27/2023 | 12.00 | 2/27/2023 | 11.00 | Residential Sales | $528.98 | 5,818.78 |
| 2/16/2023 | 3/6/2023 | 19.00 | 3/6/2023 | 18.00 | Commercial Sales | $177.27 | 3,190.86 |
| 2/16/2023 | 3/6/2023 | 19.00 | 3/6/2023 | 18.00 | Residential Sales | $145.92 | 2,626.56 |
| 2/16/2023 | 3/20/2023 | 33.00 | 3/20/2023 | 32.00 | Residential Sales | $17.86 | 571.52 |
| 2/16/2023 | 3/8/2023 | 21.00 | 3/8/2023 | 20.00 | Residential Sales | $6.14 | 122.80 |
| 2/16/2023 | 2/16/2023 | 1.00 | 2/16/2023 | 0.00 | Commercial Sales | $687.36 | - |
| 2/16/2023 | 2/17/2023 | 2.00 | 2/17/2023 | 1.00 | Industrial Service | $84,628.60 | 84,628.60 |
| 2/16/2023 | 2/17/2023 | 2.00 | 2/17/2023 | 1.00 | Commercial Sales | $178,057.27 | 178,057.27 |
| 2/16/2023 | 3/24/2023 | 37.00 | 3/24/2023 | 36.00 | Residential Sales | $97.33 | 3,503.88 |
| 2/16/2023 | 2/16/2023 | 1.00 | 2/16/2023 | 0.00 | Residential Sales | $691.81 | - |
| 2/16/2023 | 2/17/2023 | 2.00 | 2/17/2023 | 1.00 | Residential Sales | $916,960.16 | 916,960.16 |
| 2/16/2023 | 2/16/2023 | 1.00 | 2/16/2023 | 0.00 | Public Street & Highway Lighting | $142.94 | - |
| 2/16/2023 | 3/27/2023 | 40.00 | 3/27/2023 | 39.00 | Residential Sales | $12.20 | 475.80 |
| 2/16/2023 | 2/20/2023 | 5.00 | 2/20/2023 | 4.00 | Industrial Service | $18,149.09 | 72,596.36 |
| 2/16/2023 | 3/13/2023 | 26.00 | 3/13/2023 | 25.00 | Commercial Sales | $67.33 | 1,683.25 |
| 2/16/2023 | 2/16/2023 | 1.00 | 2/16/2023 | 0.00 | Other Sales to Public Authority | $34.82 | - |
| 2/16/2023 | 2/20/2023 | 5.00 | 2/20/2023 | 4.00 | Commercial Sales | $126,507.63 | 506,030.52 |
| 2/16/2023 | 2/17/2023 | 2.00 | 2/17/2023 | 1.00 | Other Sales to Public Authority | $5,007.08 | 5,007.08 |
| 2/16/2023 | 3/13/2023 | 26.00 | 3/13/2023 | 25.00 | Residential Sales | $167.36 | 4,184.00 |
| 2/16/2023 | 2/20/2023 | 5.00 | 2/20/2023 | 4.00 | Residential Sales | $40,619.35 | 162,477.40 |
| 2/16/2023 | 2/21/2023 | 6.00 | 2/21/2023 | 5.00 | Commercial Sales | $20,431.82 | 102,159.10 |
| 2/16/2023 | 2/21/2023 | 6.00 | 2/21/2023 | 5.00 | Residential Sales | $4,456.19 | 22,280.95 |
| 2/16/2023 | 2/22/2023 | 7.00 | 2/22/2023 | 6.00 | Commercial Sales | $18.86 | 113.16 |
| 2/16/2023 | 3/15/2023 | 28.00 | 3/15/2023 | 27.00 | Residential Sales | $17.24 | 465.48 |
| 2/16/2023 | 2/22/2023 | 7.00 | 2/22/2023 | 6.00 | Residential Sales | $1,921.11 | 11,526.66 |
| 2/16/2023 | 2/23/2023 | 8.00 | 2/23/2023 | 7.00 | Commercial Sales | $3,523.29 | 24,663.03 |
| 2/17/2023 | 2/20/2023 | 4.00 | 2/20/2023 | 3.00 | Industrial Service | $14,846.06 | 44,538.18 |
| 2/17/2023 | 4/6/2023 | 49.00 | 4/6/2023 | 48.00 | Residential Sales | $111.13 | 5,334.24 |
| 2/17/2023 | 2/20/2023 | 4.00 | 2/20/2023 | 3.00 | Residential Sales | $629,523.34 | 1,888,570.02 |
| 2/17/2023 | 2/21/2023 | 5.00 | 2/21/2023 | 4.00 | Residential Sales | $2,689.10 | 10,756.40 |
| 2/17/2023 | 3/15/2023 | 27.00 | 3/15/2023 | 26.00 | Residential Sales | $13.00 | 338.00 |
| 2/17/2023 | 2/23/2023 | 7.00 | 2/23/2023 | 6.00 | Industrial Service | $1,726.97 | 10,361.82 |
| 2/17/2023 | 2/22/2023 | 6.00 | 2/22/2023 | 5.00 | Residential Sales | $1,252.30 | 6,261.50 |
| 2/17/2023 | 10/23/2023 | 249.00 | 10/23/2023 | 248.00 | Residential Sales | $81.37 | 20,179.76 |
| 2/17/2023 | 3/13/2023 | 25.00 | 3/13/2023 | 24.00 | Commercial Sales | $30.58 | 733.92 |
| 2/17/2023 | 2/20/2023 | 4.00 | 2/20/2023 | 3.00 | Commercial Sales | $139,134.51 | 417,403.53 |
| 2/17/2023 | 2/23/2023 | 7.00 | 2/23/2023 | 6.00 | Residential Sales | $539.90 | 3,239.40 |
| 2/17/2023 | 3/31/2023 | 43.00 | 3/31/2023 | 42.00 | Residential Sales | $58.70 | 2,465.40 |
| 2/17/2023 | 2/21/2023 | 5.00 | 2/21/2023 | 4.00 | Commercial Sales | $32,065.59 | 128,262.36 |
| 2/17/2023 | 2/24/2023 | 8.00 | 2/24/2023 | 7.00 | Residential Sales | $111.95 | 783.65 |
| 2/17/2023 | 2/22/2023 | 6.00 | 2/22/2023 | 5.00 | Commercial Sales | $35,430.72 | 177,153.60 |
| 2/17/2023 | 2/20/2023 | 4.00 | 2/20/2023 | 3.00 | Other Sales to Public Authority | $7,673.76 | 23,021.28 |
| 2/17/2023 | 2/23/2023 | 7.00 | 2/23/2023 | 6.00 | Commercial Sales | $1,441.28 | 8,647.68 |
| 2/17/2023 | 2/21/2023 | 5.00 | 2/21/2023 | 4.00 | Other Sales to Public Authority | $375.56 | 1,502.24 |
| 2/17/2023 | 3/3/2023 | 15.00 | 3/3/2023 | 14.00 | Residential Sales | $24.02 | 336.28 |
| 2/17/2023 | 2/27/2023 | 11.00 | 2/27/2023 | 10.00 | Residential Sales | $660.65 | 6,606.50 |
| 2/17/2023 | 3/1/2023 | 13.00 | 3/1/2023 | 12.00 | Commercial Sales | $236.41 | 2,836.92 |
| 2/17/2023 | 2/24/2023 | 8.00 | 2/24/2023 | 7.00 | Commercial Sales | $813.85 | 5,696.95 |
| 2/17/2023 | 2/28/2023 | 12.00 | 2/28/2023 | 11.00 | Residential Sales | $224.20 | 2,466.20 |
| 2/17/2023 | 3/2/2023 | 14.00 | 3/2/2023 | 13.00 | Commercial Sales | $13,878.71 | 180,423.23 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 2/17/2023 | 3/6/2023 | 18.00 | 3/6/2023 | 17.00 | Residential Sales | $136.16 | 2,314.72 |
| 2/17/2023 | 3/7/2023 | 19.00 | 3/7/2023 | 18.00 | Residential Sales | $15.87 | 285.66 |
| 2/17/2023 | 2/27/2023 | 11.00 | 2/27/2023 | 10.00 | Commercial Sales | $27,238.27 | 272,382.70 |
| 2/17/2023 | 2/27/2023 | 11.00 | 2/27/2023 | 10.00 | Other Sales to Public Authority | $3,039.01 | 30,390.10 |
| 2/17/2023 | 3/9/2023 | 21.00 | 3/9/2023 | 20.00 | Residential Sales | $56.95 | 1,139.00 |
| 2/17/2023 | 2/17/2023 | 1.00 | 2/17/2023 | 0.00 | Residential Sales | $2,242.85 | - |
| 2/17/2023 | 9/28/2023 | 224.00 | 9/28/2023 | 223.00 | Commercial Sales | $115.87 | 25,839.01 |
| 2/17/2023 | 3/9/2023 | 21.00 | 3/9/2023 | 20.00 | Commercial Sales | $28.80 | 576.00 |
| 2/17/2023 | 2/17/2023 | 1.00 | 2/17/2023 | 0.00 | Commercial Sales | $3,552.26 | - |
| 2/17/2023 | 2/17/2023 | 1.00 | 2/17/2023 | 0.00 | Public Street & Highway Lighting | $334.19 | - |
| 2/18/2023 | 2/20/2023 | 3.00 | 2/20/2023 | 2.00 | Industrial Service | $5.78 | 11.56 |
| 2/18/2023 | 2/20/2023 | 3.00 | 2/20/2023 | 2.00 | Residential Sales | $975.26 | 1,950.52 |
| 2/19/2023 | 2/28/2023 | 10.00 | 2/28/2023 | 9.00 | Commercial Sales | $3.92 | 35.28 |
| 2/19/2023 | 2/20/2023 | 2.00 | 2/20/2023 | 1.00 | Residential Sales | $2,308.97 | 2,308.97 |
| 2/19/2023 | 2/21/2023 | 3.00 | 2/21/2023 | 2.00 | Residential Sales | $401.35 | 802.70 |
| 2/19/2023 | 3/17/2023 | 27.00 | 3/17/2023 | 26.00 | Residential Sales | $22.51 | 585.26 |
| 2/19/2023 | 2/23/2023 | 5.00 | 2/23/2023 | 4.00 | Residential Sales | $159.83 | 639.32 |
| 2/19/2023 | 2/21/2023 | 3.00 | 2/21/2023 | 2.00 | Commercial Sales | $71.28 | 142.56 |
| 2/19/2023 | 3/1/2023 | 11.00 | 3/1/2023 | 10.00 | Residential Sales | $4.90 | 49.00 |
| 2/19/2023 | 2/24/2023 | 6.00 | 2/24/2023 | 5.00 | Commercial Sales | $12.23 | 61.15 |
| 2/19/2023 | 2/27/2023 | 9.00 | 2/27/2023 | 8.00 | Residential Sales | $234.78 | 1,878.24 |
| 2/20/2023 | 2/28/2023 | 9.00 | 2/28/2023 | 8.00 | Residential Sales | $14.37 | 114.96 |
| 2/20/2023 | 2/23/2023 | 4.00 | 2/23/2023 | 3.00 | Other Sales to Public Authority | $94.64 | 283.92 |
| 2/20/2023 | 3/20/2023 | 29.00 | 3/20/2023 | 28.00 | Residential Sales | $33.42 | 935.76 |
| 2/20/2023 | 3/6/2023 | 15.00 | 3/6/2023 | 14.00 | Residential Sales | $86.91 | 1,216.74 |
| 2/20/2023 | 2/27/2023 | 8.00 | 2/27/2023 | 7.00 | Commercial Sales | $6,012.21 | 42,085.47 |
| 2/20/2023 | 3/7/2023 | 16.00 | 3/7/2023 | 15.00 | Residential Sales | $51.11 | 766.65 |
| 2/20/2023 | 3/8/2023 | 17.00 | 3/8/2023 | 16.00 | Residential Sales | $146.63 | 2,346.08 |
| 2/20/2023 | 3/23/2023 | 32.00 | 3/23/2023 | 31.00 | Residential Sales | $26.30 | 815.30 |
| 2/20/2023 | 3/9/2023 | 18.00 | 3/9/2023 | 17.00 | Residential Sales | $220.78 | 3,753.26 |
| 2/20/2023 | 3/24/2023 | 33.00 | 3/24/2023 | 32.00 | Residential Sales | $226.08 | 7,234.56 |
| 2/20/2023 | 3/27/2023 | 36.00 | 3/27/2023 | 35.00 | Residential Sales | $17.46 | 611.10 |
| 2/20/2023 | 3/10/2023 | 19.00 | 3/10/2023 | 18.00 | Residential Sales | $78.74 | 1,417.32 |
| 2/20/2023 | 2/20/2023 | 1.00 | 2/20/2023 | 0.00 | Residential Sales | $6,899.38 | - |
| 2/20/2023 | 2/21/2023 | 2.00 | 2/21/2023 | 1.00 | Residential Sales | $914,223.36 | 914,223.36 |
| 2/20/2023 | 2/22/2023 | 3.00 | 2/22/2023 | 2.00 | Residential Sales | $22,310.50 | 44,621.00 |
| 2/20/2023 | 2/23/2023 | 4.00 | 2/23/2023 | 3.00 | Residential Sales | $2,274.92 | 6,824.76 |
| 2/20/2023 | 2/21/2023 | 2.00 | 2/21/2023 | 1.00 | Industrial Service | $1,407.52 | 1,407.52 |
| 2/20/2023 | 2/20/2023 | 1.00 | 2/20/2023 | 0.00 | Commercial Sales | $41.25 | - |
| 2/20/2023 | 2/20/2023 | 1.00 | 2/20/2023 | 0.00 | Public Street & Highway Lighting | $103.41 | - |
| 2/20/2023 | 2/24/2023 | 5.00 | 2/24/2023 | 4.00 | Residential Sales | $372.58 | 1,490.32 |
| 2/20/2023 | 2/21/2023 | 2.00 | 2/21/2023 | 1.00 | Commercial Sales | $83,540.39 | 83,540.39 |
| 2/20/2023 | 3/15/2023 | 24.00 | 3/15/2023 | 23.00 | Commercial Sales | $149.72 | 3,443.56 |
| 2/20/2023 | 2/22/2023 | 3.00 | 2/22/2023 | 2.00 | Commercial Sales | $26,351.47 | 52,702.94 |
| 2/20/2023 | 2/23/2023 | 4.00 | 2/23/2023 | 3.00 | Industrial Service | $895.35 | 2,686.05 |
| 2/20/2023 | 3/2/2023 | 11.00 | 3/2/2023 | 10.00 | Residential Sales | $429.48 | 4,294.80 |
| 2/20/2023 | 7/20/2023 | 151.00 | 7/20/2023 | 150.00 | Residential Sales | $36.85 | 5,527.50 |
| 2/20/2023 | 2/21/2023 | 2.00 | 2/21/2023 | 1.00 | Other Sales to Public Authority | $6,548.89 | 6,548.89 |
| 2/20/2023 | 2/23/2023 | 4.00 | 2/23/2023 | 3.00 | Commercial Sales | $5,831.68 | 17,495.04 |
| 2/20/2023 | 7/21/2023 | 152.00 | 7/21/2023 | 151.00 | Residential Sales | $76.34 | 11,527.34 |
| 2/20/2023 | 3/3/2023 | 12.00 | 3/3/2023 | 11.00 | Residential Sales | $123.75 | 1,361.25 |
| 2/20/2023 | 2/27/2023 | 8.00 | 2/27/2023 | 7.00 | Residential Sales | $1,154.18 | 8,079.26 |
| 2/20/2023 | 2/24/2023 | 5.00 | 2/24/2023 | 4.00 | Commercial Sales | $375.41 | 1,501.64 |
| 2/20/2023 | 2/22/2023 | 3.00 | 2/22/2023 | 2.00 | Other Sales to Public Authority | $21,073.87 | 42,147.74 |
| 2/21/2023 | 2/23/2023 | 3.00 | 2/23/2023 | 2.00 | Residential Sales | $11,346.29 | 22,692.58 |
| 2/21/2023 | 4/25/2023 | 64.00 | 4/25/2023 | 63.00 | Residential Sales | $21.85 | 1,376.55 |
| 2/21/2023 | 2/24/2023 | 4.00 | 2/24/2023 | 3.00 | Residential Sales | $2,728.63 | 8,185.89 |
| 2/21/2023 | 3/1/2023 | 9.00 | 3/1/2023 | 8.00 | Residential Sales | $334.26 | 2,674.08 |
| 2/21/2023 | 2/21/2023 | 1.00 | 2/21/2023 | 0.00 | Commercial Sales | $1,987.12 | - |
| 2/21/2023 | 2/22/2023 | 2.00 | 2/22/2023 | 1.00 | Industrial Service | $7,351.69 | 7,351.69 |
| 2/21/2023 | 2/21/2023 | 1.00 | 2/21/2023 | 0.00 | Public Street & Highway Lighting | $18.75 | - |
| 2/21/2023 | 2/22/2023 | 2.00 | 2/22/2023 | 1.00 | Commercial Sales | $234,873.37 | 234,873.37 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 2/21/2023 | 2/23/2023 | 3.00 | 2/23/2023 | 2.00 | Industrial Service | $47,284.02 | 94,568.04 |
| 2/21/2023 | 3/2/2023 | 10.00 | 3/2/2023 | 9.00 | Residential Sales | $118.54 | 1,066.86 |
| 2/21/2023 | 2/23/2023 | 3.00 | 2/23/2023 | 2.00 | Commercial Sales | $43,630.55 | 87,261.10 |
| 2/21/2023 | 3/3/2023 | 11.00 | 3/3/2023 | 10.00 | Residential Sales | $84.42 | 844.20 |
| 2/21/2023 | 2/21/2023 | 1.00 | 2/21/2023 | 0.00 | Other Sales to Public Authority | $869.29 | - |
| 2/21/2023 | 2/24/2023 | 4.00 | 2/24/2023 | 3.00 | Industrial Service | $24,310.89 | 72,932.67 |
| 2/21/2023 | 2/24/2023 | 4.00 | 2/24/2023 | 3.00 | Commercial Sales | $40,486.03 | 121,458.09 |
| 2/21/2023 | 2/22/2023 | 2.00 | 2/22/2023 | 1.00 | Other Sales to Public Authority | $9,207.77 | 9,207.77 |
| 2/21/2023 | 2/27/2023 | 7.00 | 2/27/2023 | 6.00 | Residential Sales | $1,203.28 | 7,219.68 |
| 2/21/2023 | 3/1/2023 | 9.00 | 3/1/2023 | 8.00 | Commercial Sales | $247.19 | 1,977.52 |
| 2/21/2023 | 2/23/2023 | 3.00 | 2/23/2023 | 2.00 | Other Sales to Public Authority | $11,356.98 | 22,713.96 |
| 2/21/2023 | 2/28/2023 | 8.00 | 2/28/2023 | 7.00 | Residential Sales | $384.61 | 2,692.27 |
| 2/21/2023 | 3/2/2023 | 10.00 | 3/2/2023 | 9.00 | Commercial Sales | $386.70 | 3,480.30 |
| 2/21/2023 | 3/1/2023 | 9.00 | 3/1/2023 | 8.00 | Other Sales to Public Authority | $13,051.86 | 104,414.88 |
| 2/21/2023 | 3/6/2023 | 14.00 | 3/6/2023 | 13.00 | Residential Sales | $171.57 | 2,230.41 |
| 2/21/2023 | 3/3/2023 | 11.00 | 3/3/2023 | 10.00 | Commercial Sales | $492.80 | 4,928.00 |
| 2/21/2023 | 4/11/2023 | 50.00 | 4/11/2023 | 49.00 | Commercial Sales | $95.77 | 4,692.73 |
| 2/21/2023 | 2/27/2023 | 7.00 | 2/27/2023 | 6.00 | Commercial Sales | $2,579.67 | 15,478.02 |
| 2/21/2023 | 12/13/2023 | 296.00 | 12/13/2023 | 295.00 | Commercial Sales | $320.03 | 94,408.85 |
| 2/21/2023 | 6/1/2023 | 101.00 | 6/1/2023 | 100.00 | Residential Sales | $239.80 | 23,980.00 |
| 2/21/2023 | 2/28/2023 | 8.00 | 2/28/2023 | 7.00 | Commercial Sales | $2,977.20 | 20,840.40 |
| 2/21/2023 | 12/14/2023 | 297.00 | 12/14/2023 | 296.00 | Commercial Sales | $193.55 | 57,290.80 |
| 2/21/2023 | 3/22/2023 | 30.00 | 3/22/2023 | 29.00 | Residential Sales | $8.38 | 243.02 |
| 2/21/2023 | 3/9/2023 | 17.00 | 3/9/2023 | 16.00 | Residential Sales | $137.98 | 2,207.68 |
| 2/21/2023 | 2/27/2023 | 7.00 | 2/27/2023 | 6.00 | Other Sales to Public Authority | $272.45 | 1,634.70 |
| 2/21/2023 | 12/13/2023 | 296.00 | 12/13/2023 | 295.00 | Other Sales to Public Authority | $91.76 | 27,069.20 |
| 2/21/2023 | 3/22/2023 | 30.00 | 3/22/2023 | 29.00 | Commercial Sales | $259.75 | 7,532.75 |
| 2/21/2023 | 3/8/2023 | 16.00 | 3/8/2023 | 15.00 | Commercial Sales | $66.85 | 1,002.75 |
| 2/21/2023 | 3/10/2023 | 18.00 | 3/10/2023 | 17.00 | Residential Sales | $1.20 | 20.40 |
| 2/21/2023 | 8/10/2023 | 171.00 | 8/10/2023 | 170.00 | Residential Sales | $200.09 | 34,015.30 |
| 2/21/2023 | 2/21/2023 | 1.00 | 2/21/2023 | 0.00 | Residential Sales | $1,438.62 | - |
| 2/21/2023 | 5/31/2023 | 100.00 | 5/31/2023 | 99.00 | Residential Sales | $0.59 | 58.41 |
| 2/21/2023 | 2/22/2023 | 2.00 | 2/22/2023 | 1.00 | Residential Sales | $849,368.81 | 849,368.81 |
| 2/21/2023 | 3/13/2023 | 21.00 | 3/13/2023 | 20.00 | Commercial Sales | $158.03 | 3,160.60 |
| 2/22/2023 | 11/14/2023 | 266.00 | 11/14/2023 | 265.00 | Residential Sales | $171.57 | 45,466.05 |
| 2/22/2023 | 2/22/2023 | 1.00 | 2/22/2023 | 0.00 | Residential Sales | $4,445.45 | - |
| 2/22/2023 | 2/23/2023 | 2.00 | 2/23/2023 | 1.00 | Residential Sales | $625,519.35 | 625,519.35 |
| 2/22/2023 | 3/14/2023 | 21.00 | 3/14/2023 | 20.00 | Commercial Sales | $103.97 | 2,079.40 |
| 2/22/2023 | 2/24/2023 | 3.00 | 2/24/2023 | 2.00 | Residential Sales | $10,165.90 | 20,331.80 |
| 2/22/2023 | 2/22/2023 | 1.00 | 2/22/2023 | 0.00 | Commercial Sales | $965.20 | - |
| 2/22/2023 | 3/2/2023 | 9.00 | 3/2/2023 | 8.00 | Residential Sales | $76.70 | 613.60 |
| 2/22/2023 | 2/23/2023 | 2.00 | 2/23/2023 | 1.00 | Industrial Service | $47,938.91 | 47,938.91 |
| 2/22/2023 | 2/22/2023 | 1.00 | 2/22/2023 | 0.00 | Public Street & Highway Lighting | $9.95 | - |
| 2/22/2023 | 2/23/2023 | 2.00 | 2/23/2023 | 1.00 | Commercial Sales | $320,099.21 | 320,099.21 |
| 2/22/2023 | 2/24/2023 | 3.00 | 2/24/2023 | 2.00 | Industrial Service | $226.58 | 453.16 |
| 2/22/2023 | 3/3/2023 | 10.00 | 3/3/2023 | 9.00 | Residential Sales | $59.28 | 533.52 |
| 2/22/2023 | 2/24/2023 | 3.00 | 2/24/2023 | 2.00 | Commercial Sales | $108,380.38 | 216,760.76 |
| 2/22/2023 | 2/27/2023 | 6.00 | 2/27/2023 | 5.00 | Residential Sales | $3,698.33 | 18,491.65 |
| 2/22/2023 | 3/1/2023 | 8.00 | 3/1/2023 | 7.00 | Commercial Sales | $23,636.75 | 165,457.25 |
| 2/22/2023 | 2/28/2023 | 7.00 | 2/28/2023 | 6.00 | Residential Sales | $1,212.74 | 7,276.44 |
| 2/22/2023 | 2/23/2023 | 2.00 | 2/23/2023 | 1.00 | Other Sales to Public Authority | $29,163.59 | 29,163.59 |
| 2/22/2023 | 3/3/2023 | 10.00 | 3/3/2023 | 9.00 | Industrial Service | $13,189.73 | 118,707.57 |
| 2/22/2023 | 3/2/2023 | 9.00 | 3/2/2023 | 8.00 | Commercial Sales | $188.71 | 1,509.68 |
| 2/22/2023 | 2/24/2023 | 3.00 | 2/24/2023 | 2.00 | Other Sales to Public Authority | $2,101.69 | 4,203.38 |
| 2/22/2023 | 3/20/2023 | 27.00 | 3/20/2023 | 26.00 | Residential Sales | $6.57 | 170.82 |
| 2/22/2023 | 3/5/2024 | 378.00 | 3/5/2024 | 377.00 | Residential Sales | $31.10 | 11,724.70 |
| 2/22/2023 | 3/3/2023 | 10.00 | 3/3/2023 | 9.00 | Commercial Sales | $11,995.03 | 107,955.27 |
| 2/22/2023 | 2/27/2023 | 6.00 | 2/27/2023 | 5.00 | Commercial Sales | $3,282.27 | 16,411.35 |
| 2/22/2023 | 3/7/2023 | 14.00 | 3/7/2023 | 13.00 | Residential Sales | $114.89 | 1,493.57 |
| 2/22/2023 | 2/28/2023 | 7.00 | 2/28/2023 | 6.00 | Commercial Sales | $33,801.87 | 202,811.22 |
| 2/22/2023 | 3/8/2023 | 15.00 | 3/8/2023 | 14.00 | Residential Sales | $42.92 | 600.88 |
| 2/22/2023 | 3/6/2023 | 13.00 | 3/6/2023 | 12.00 | Commercial Sales | $97.24 | 1,166.88 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 2/22/2023 | 3/9/2023 | 16.00 | 3/9/2023 | 15.00 | Residential Sales | $153.00 | 2,295.00 |
| 2/22/2023 | 3/22/2023 | 29.00 | 3/22/2023 | 28.00 | Commercial Sales | $207.17 | 5,800.76 |
| 2/22/2023 | 3/27/2023 | 34.00 | 3/27/2023 | 33.00 | Residential Sales | $18.91 | 624.03 |
| 2/22/2023 | 3/10/2023 | 17.00 | 3/10/2023 | 16.00 | Residential Sales | $65.23 | 1,043.68 |
| 2/23/2023 | 3/8/2023 | 14.00 | 3/8/2023 | 13.00 | Commercial Sales | $142.27 | 1,849.51 |
| 2/23/2023 | 3/9/2023 | 15.00 | 3/9/2023 | 14.00 | Commercial Sales | $34.99 | 489.86 |
| 2/23/2023 | 3/28/2023 | 34.00 | 3/28/2023 | 33.00 | Residential Sales | $197.46 | 6,516.18 |
| 2/23/2023 | 3/10/2023 | 16.00 | 3/10/2023 | 15.00 | Commercial Sales | $133.68 | 2,005.20 |
| 2/23/2023 | 2/23/2023 | 1.00 | 2/23/2023 | 0.00 | Residential Sales | $2,363.73 | - |
| 2/23/2023 | 3/14/2023 | 20.00 | 3/14/2023 | 19.00 | Commercial Sales | $4,882.03 | 92,758.57 |
| 2/23/2023 | 2/24/2023 | 2.00 | 2/24/2023 | 1.00 | Residential Sales | $725,048.37 | 725,048.37 |
| 2/23/2023 | 3/1/2023 | 7.00 | 3/1/2023 | 6.00 | Residential Sales | $231.69 | 1,390.14 |
| 2/23/2023 | 3/2/2023 | 8.00 | 3/2/2023 | 7.00 | Residential Sales | $240.42 | 1,682.94 |
| 2/23/2023 | 12/28/2023 | 309.00 | 12/28/2023 | 308.00 | Residential Sales | $45.06 | 13,878.48 |
| 2/23/2023 | 2/23/2023 | 1.00 | 2/23/2023 | 0.00 | Public Street & Highway Lighting | $7,982.96 | - |
| 2/23/2023 | 2/23/2023 | 1.00 | 2/23/2023 | 0.00 | Commercial Sales | $16,516.27 | - |
| 2/23/2023 | 2/24/2023 | 2.00 | 2/24/2023 | 1.00 | Industrial Service | $76,214.94 | 76,214.94 |
| 2/23/2023 | 3/1/2023 | 7.00 | 3/1/2023 | 6.00 | Industrial Service | $240.16 | 1,440.96 |
| 2/23/2023 | 3/3/2023 | 9.00 | 3/3/2023 | 8.00 | Residential Sales | $60.55 | 484.40 |
| 2/23/2023 | 2/24/2023 | 2.00 | 2/24/2023 | 1.00 | Commercial Sales | $671,439.22 | 671,439.22 |
| 2/23/2023 | 2/27/2023 | 5.00 | 2/27/2023 | 4.00 | Residential Sales | $19,532.30 | 78,129.20 |
| 2/23/2023 | 3/1/2023 | 7.00 | 3/1/2023 | 6.00 | Commercial Sales | $42,514.51 | 255,087.06 |
| 2/23/2023 | 2/24/2023 | 2.00 | 2/24/2023 | 1.00 | Public Street & Highway Lighting | $3,454.50 | 3,454.50 |
| 2/23/2023 | 3/2/2023 | 8.00 | 3/2/2023 | 7.00 | Commercial Sales | $9,523.83 | 66,666.81 |
| 2/23/2023 | 2/28/2023 | 6.00 | 2/28/2023 | 5.00 | Residential Sales | $2,526.10 | 12,630.50 |
| 2/23/2023 | 2/23/2023 | 1.00 | 2/23/2023 | 0.00 | Other Sales to Public Authority | $63.34 | - |
| 2/23/2023 | 3/1/2024 | 373.00 | 3/1/2024 | 372.00 | Commercial Sales | $374.41 | 139,280.52 |
| 2/23/2023 | 3/3/2023 | 9.00 | 3/3/2023 | 8.00 | Commercial Sales | $27,790.48 | 222,323.84 |
| 2/23/2023 | 3/1/2023 | 7.00 | 3/1/2023 | 6.00 | Other Sales to Public Authority | $568.66 | 3,411.96 |
| 2/23/2023 | 2/24/2023 | 2.00 | 2/24/2023 | 1.00 | Other Sales to Public Authority | $37,255.99 | 37,255.99 |
| 2/23/2023 | 3/3/2023 | 9.00 | 3/3/2023 | 8.00 | Public Street & Highway Lighting | $6,117.02 | 48,936.16 |
| 2/23/2023 | 2/27/2023 | 5.00 | 2/27/2023 | 4.00 | Commercial Sales | $106,682.85 | 426,731.40 |
| 2/23/2023 | 3/7/2023 | 13.00 | 3/7/2023 | 12.00 | Residential Sales | $14.19 | 170.28 |
| 2/23/2023 | 2/28/2023 | 6.00 | 2/28/2023 | 5.00 | Commercial Sales | $109,407.31 | 547,036.55 |
| 2/23/2023 | 3/3/2023 | 9.00 | 3/3/2023 | 8.00 | Other Sales to Public Authority | $40.17 | 321.36 |
| 2/23/2023 | 3/8/2023 | 14.00 | 3/8/2023 | 13.00 | Residential Sales | $10.44 | 135.72 |
| 2/23/2023 | 12/13/2023 | 294.00 | 12/13/2023 | 293.00 | Other Sales to Public Authority | $360.76 | 105,702.68 |
| 2/23/2023 | 3/6/2023 | 12.00 | 3/6/2023 | 11.00 | Commercial Sales | $75,090.10 | 825,991.10 |
| 2/23/2023 | 2/27/2023 | 5.00 | 2/27/2023 | 4.00 | Other Sales to Public Authority | $8,672.52 | 34,690.08 |
| 2/23/2023 | 3/9/2023 | 15.00 | 3/9/2023 | 14.00 | Residential Sales | $352.42 | 4,933.88 |
| 2/24/2023 | 3/2/2023 | 7.00 | 3/2/2023 | 6.00 | Commercial Sales | $16,817.49 | 100,904.94 |
| 2/24/2023 | 2/28/2023 | 5.00 | 2/28/2023 | 4.00 | Residential Sales | $3,289.77 | 13,159.08 |
| 2/24/2023 | 3/3/2023 | 8.00 | 3/3/2023 | 7.00 | Commercial Sales | $21,608.41 | 151,258.87 |
| 2/24/2023 | 3/6/2023 | 11.00 | 3/6/2023 | 10.00 | Residential Sales | $300.39 | 3,003.90 |
| 2/24/2023 | 2/27/2023 | 4.00 | 2/27/2023 | 3.00 | Industrial Service | $152,361.80 | 457,085.40 |
| 2/24/2023 | 2/27/2023 | 4.00 | 2/27/2023 | 3.00 | Commercial Sales | $741,882.42 | 2,225,647.26 |
| 2/24/2023 | 3/7/2023 | 12.00 | 3/7/2023 | 11.00 | Residential Sales | $86.50 | 951.50 |
| 2/24/2023 | 2/28/2023 | 5.00 | 2/28/2023 | 4.00 | Industrial Service | $159,214.61 | 636,858.44 |
| 2/24/2023 | 3/2/2023 | 7.00 | 3/2/2023 | 6.00 | Other Sales to Public Authority | $22.51 | 135.06 |
| 2/24/2023 | 2/28/2023 | 5.00 | 2/28/2023 | 4.00 | Commercial Sales | $127,491.45 | 509,965.80 |
| 2/24/2023 | 2/24/2023 | 1.00 | 2/24/2023 | 0.00 | Public Street & Highway Lighting | $1,765.37 | - |
| 2/24/2023 | 3/6/2023 | 11.00 | 3/6/2023 | 10.00 | Industrial Service | $4,200.46 | 42,004.60 |
| 2/24/2023 | 3/3/2023 | 8.00 | 3/3/2023 | 7.00 | Other Sales to Public Authority | $4,193.16 | 29,352.12 |
| 2/24/2023 | 3/22/2023 | 27.00 | 3/22/2023 | 26.00 | Residential Sales | $322.59 | 8,387.34 |
| 2/24/2023 | 3/6/2023 | 11.00 | 3/6/2023 | 10.00 | Commercial Sales | $28,511.73 | 285,117.30 |
| 2/24/2023 | 2/27/2023 | 4.00 | 2/27/2023 | 3.00 | Other Sales to Public Authority | $19,492.79 | 58,478.37 |
| 2/24/2023 | 7/10/2023 | 137.00 | 7/10/2023 | 136.00 | Residential Sales | $100.97 | 13,731.92 |
| 2/24/2023 | 12/13/2023 | 293.00 | 12/13/2023 | 292.00 | Other Sales to Public Authority | $336.80 | 98,345.60 |
| 2/24/2023 | 2/28/2023 | 5.00 | 2/28/2023 | 4.00 | Other Sales to Public Authority | $11,638.53 | 46,554.12 |
| 2/24/2023 | 3/7/2023 | 12.00 | 3/7/2023 | 11.00 | Commercial Sales | $18,776.42 | 206,540.62 |
| 2/24/2023 | 3/21/2023 | 26.00 | 3/21/2023 | 25.00 | Commercial Sales | $2,059.10 | 51,477.50 |
| 2/24/2023 | 1/2/2024 | 313.00 | 1/2/2024 | 312.00 | Other Sales to Public Authority | $164.57 | 51,345.84 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 2/24/2023 | 3/22/2023 | 27.00 | 3/22/2023 | 26.00 | Commercial Sales | $22.04 | 573.04 |
| 2/24/2023 | 3/8/2023 | 13.00 | 3/8/2023 | 12.00 | Commercial Sales | $13,597.94 | 163,175.28 |
| 2/24/2023 | 3/10/2023 | 15.00 | 3/10/2023 | 14.00 | Residential Sales | $288.04 | 4,032.56 |
| 2/24/2023 | 3/29/2023 | 34.00 | 3/29/2023 | 33.00 | Residential Sales | $164.70 | 5,435.10 |
| 2/24/2023 | 3/10/2023 | 15.00 | 3/10/2023 | 14.00 | Commercial Sales | $97.53 | 1,365.42 |
| 2/24/2023 | 3/13/2023 | 18.00 | 3/13/2023 | 17.00 | Residential Sales | $116.57 | 1,981.69 |
| 2/24/2023 | 7/18/2023 | 145.00 | 7/18/2023 | 144.00 | Residential Sales | $34.90 | 5,025.60 |
| 2/24/2023 | 7/19/2023 | 146.00 | 7/19/2023 | 145.00 | Residential Sales | $33.39 | 4,841.55 |
| 2/24/2023 | 3/3/2023 | 8.00 | 3/3/2023 | 7.00 | Company Use | $150.41 | 1,052.87 |
| 2/24/2023 | 3/30/2023 | 35.00 | 3/30/2023 | 34.00 | Residential Sales | $355.95 | 12,102.30 |
| 2/24/2023 | 3/13/2023 | 18.00 | 3/13/2023 | 17.00 | Commercial Sales | $175.75 | 2,987.75 |
| 2/24/2023 | 3/16/2023 | 21.00 | 3/16/2023 | 20.00 | Residential Sales | $271.40 | 5,428.00 |
| 2/24/2023 | 3/31/2023 | 36.00 | 3/31/2023 | 35.00 | Residential Sales | $37.34 | 1,306.90 |
| 2/24/2023 | 2/24/2023 | 1.00 | 2/24/2023 | 0.00 | Residential Sales | $1,122.73 | - |
| 2/24/2023 | 3/1/2023 | 6.00 | 3/1/2023 | 5.00 | Residential Sales | $2,915.89 | 14,579.45 |
| 2/24/2023 | 3/13/2023 | 18.00 | 3/13/2023 | 17.00 | Other Sales to Public Authority | $10,678.95 | 181,542.15 |
| 2/24/2023 | 3/2/2023 | 7.00 | 3/2/2023 | 6.00 | Residential Sales | $1,067.85 | 6,407.10 |
| 2/24/2023 | 3/1/2023 | 6.00 | 3/1/2023 | 5.00 | Industrial Service | $158,751.06 | 793,755.30 |
| 2/24/2023 | 3/3/2023 | 8.00 | 3/3/2023 | 7.00 | Residential Sales | $101.28 | 708.96 |
| 2/24/2023 | 2/27/2023 | 4.00 | 2/27/2023 | 3.00 | Residential Sales | $656,859.04 | 1,970,577.12 |
| 2/24/2023 | 3/1/2023 | 6.00 | 3/1/2023 | 5.00 | Commercial Sales | $115,883.11 | 579,415.55 |
| 2/24/2023 | 2/24/2023 | 1.00 | 2/24/2023 | 0.00 | Commercial Sales | $34,056.63 | - |
| 2/25/2023 | 2/27/2023 | 3.00 | 2/27/2023 | 2.00 | Residential Sales | $1,536.14 | 3,072.28 |
| 2/25/2023 | 2/27/2023 | 3.00 | 2/27/2023 | 2.00 | Commercial Sales | $20.05 | 40.10 |
| 2/26/2023 | 3/15/2023 | 18.00 | 3/15/2023 | 17.00 | Residential Sales | $70.43 | 1,197.31 |
| 2/26/2023 | 3/2/2023 | 5.00 | 3/2/2023 | 4.00 | Residential Sales | $35.33 | 141.32 |
| 2/26/2023 | 2/27/2023 | 2.00 | 2/27/2023 | 1.00 | Residential Sales | $2,770.85 | 2,770.85 |
| 2/26/2023 | 2/28/2023 | 3.00 | 2/28/2023 | 2.00 | Residential Sales | $714.48 | 1,428.96 |
| 2/26/2023 | 3/3/2023 | 6.00 | 3/3/2023 | 5.00 | Commercial Sales | $7.98 | 39.90 |
| 2/26/2023 | 3/6/2023 | 9.00 | 3/6/2023 | 8.00 | Residential Sales | $131.11 | 1,048.88 |
| 2/26/2023 | 2/28/2023 | 3.00 | 2/28/2023 | 2.00 | Commercial Sales | $7.98 | 15.96 |
| 2/26/2023 | 3/9/2023 | 12.00 | 3/9/2023 | 11.00 | Residential Sales | $41.22 | 453.42 |
| 2/26/2023 | 3/10/2023 | 13.00 | 3/10/2023 | 12.00 | Residential Sales | $52.30 | 627.60 |
| 2/27/2023 | 2/28/2023 | 2.00 | 2/28/2023 | 1.00 | Other Sales to Public Authority | $4,545.51 | 4,545.51 |
| 2/27/2023 | 3/6/2023 | 8.00 | 3/6/2023 | 7.00 | Residential Sales | $1,217.01 | 8,519.07 |
| 2/27/2023 | 2/27/2023 | 1.00 | 2/27/2023 | 0.00 | Public Street & Highway Lighting | $965.95 | - |
| 2/27/2023 | 3/7/2023 | 9.00 | 3/7/2023 | 8.00 | Residential Sales | $427.16 | 3,417.28 |
| 2/27/2023 | 3/8/2023 | 10.00 | 3/8/2023 | 9.00 | Commercial Sales | $23,796.35 | 214,167.15 |
| 2/27/2023 | 3/9/2023 | 11.00 | 3/9/2023 | 10.00 | Commercial Sales | $52.67 | 526.70 |
| 2/27/2023 | 3/8/2023 | 10.00 | 3/8/2023 | 9.00 | Residential Sales | $217.75 | 1,959.75 |
| 2/27/2023 | 3/22/2023 | 24.00 | 3/22/2023 | 23.00 | Residential Sales | $72.44 | 1,666.12 |
| 2/27/2023 | 3/23/2023 | 25.00 | 3/23/2023 | 24.00 | Commercial Sales | $54.60 | 1,310.40 |
| 2/27/2023 | 3/9/2023 | 11.00 | 3/9/2023 | 10.00 | Residential Sales | $17.56 | 175.60 |
| 2/27/2023 | 3/10/2023 | 12.00 | 3/10/2023 | 11.00 | Residential Sales | $49.73 | 547.03 |
| 2/27/2023 | 3/13/2023 | 15.00 | 3/13/2023 | 14.00 | Industrial Service | $46,497.75 | 650,968.50 |
| 2/27/2023 | 3/13/2023 | 15.00 | 3/13/2023 | 14.00 | Commercial Sales | $7,481.65 | 104,743.10 |
| 2/27/2023 | 3/29/2023 | 31.00 | 3/29/2023 | 30.00 | Residential Sales | $8.27 | 248.10 |
| 2/27/2023 | 4/21/2024 | 420.00 | 4/21/2024 | 419.00 | Commercial Sales | $32.30 | 13,533.70 |
| 2/27/2023 | 5/17/2023 | 80.00 | 5/17/2023 | 79.00 | Residential Sales | $89.44 | 7,065.76 |
| 2/27/2023 | 3/1/2023 | 3.00 | 3/1/2023 | 2.00 | Industrial Service | $828.97 | 1,657.94 |
| 2/27/2023 | 3/16/2023 | 18.00 | 3/16/2023 | 17.00 | Residential Sales | $64.81 | 1,101.77 |
| 2/27/2023 | 3/1/2023 | 3.00 | 3/1/2023 | 2.00 | Commercial Sales | $45,481.21 | 90,962.42 |
| 2/27/2023 | 3/1/2023 | 3.00 | 3/1/2023 | 2.00 | Residential Sales | $16,323.03 | 32,646.06 |
| 2/27/2023 | 3/2/2023 | 4.00 | 3/2/2023 | 3.00 | Commercial Sales | $8,309.85 | 24,929.55 |
| 2/27/2023 | 3/3/2023 | 5.00 | 3/3/2023 | 4.00 | Industrial Service | $53.81 | 215.24 |
| 2/27/2023 | 3/3/2023 | 5.00 | 3/3/2023 | 4.00 | Commercial Sales | $12,739.24 | 50,956.96 |
| 2/27/2023 | 3/2/2023 | 4.00 | 3/2/2023 | 3.00 | Residential Sales | $6,832.71 | 20,498.13 |
| 2/27/2023 | 3/1/2023 | 3.00 | 3/1/2023 | 2.00 | Other Sales to Public Authority | $1,531.60 | 3,063.20 |
| 2/27/2023 | 2/28/2023 | 2.00 | 2/28/2023 | 1.00 | Industrial Service | $472,483.54 | 472,483.54 |
| 2/27/2023 | 3/2/2023 | 4.00 | 3/2/2023 | 3.00 | Other Sales to Public Authority | $10,617.63 | 31,852.89 |
| 2/27/2023 | 3/3/2023 | 5.00 | 3/3/2023 | 4.00 | Residential Sales | $2,382.55 | 9,530.20 |
| 2/27/2023 | 2/27/2023 | 1.00 | 2/27/2023 | 0.00 | Commercial Sales | $941.86 | - |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 2/27/2023 | 2/28/2023 | 2.00 | 2/28/2023 | 1.00 | Commercial Sales | $195,646.37 | 195,646.37 |
| 2/27/2023 | 2/27/2023 | 1.00 | 2/27/2023 | 0.00 | Residential Sales | $1,490.71 | - |
| 2/27/2023 | 2/28/2023 | 2.00 | 2/28/2023 | 1.00 | Residential Sales | $799,973.76 | 799,973.76 |
| 2/27/2023 | 3/6/2023 | 8.00 | 3/6/2023 | 7.00 | Commercial Sales | $5,404.66 | 37,832.62 |
| 2/28/2023 | 3/1/2023 | 2.00 | 3/1/2023 | 1.00 | Residential Sales | $605,735.90 | 605,735.90 |
| 2/28/2023 | 3/2/2023 | 3.00 | 3/2/2023 | 2.00 | Commercial Sales | $189,209.46 | 378,418.92 |
| 2/28/2023 | 4/10/2023 | 42.00 | 4/10/2023 | 41.00 | Commercial Sales | $53.14 | 2,178.74 |
| 2/28/2023 | 3/3/2023 | 4.00 | 3/3/2023 | 3.00 | Industrial Service | $2,071.63 | 6,214.89 |
| 2/28/2023 | 5/4/2023 | 66.00 | 5/4/2023 | 65.00 | Commercial Sales | $2,883.62 | 187,435.30 |
| 2/28/2023 | 3/3/2023 | 4.00 | 3/3/2023 | 3.00 | Commercial Sales | $69,747.86 | 209,243.58 |
| 2/28/2023 | 3/2/2023 | 3.00 | 3/2/2023 | 2.00 | Residential Sales | $4,689.26 | 9,378.52 |
| 2/28/2023 | 3/1/2023 | 2.00 | 3/1/2023 | 1.00 | Other Sales to Public Authority | $42,059.79 | 42,059.79 |
| 2/28/2023 | 3/2/2023 | 3.00 | 3/2/2023 | 2.00 | Other Sales to Public Authority | $21,994.66 | 43,989.32 |
| 2/28/2023 | 3/3/2023 | 4.00 | 3/3/2023 | 3.00 | Residential Sales | $21,129.38 | 63,388.14 |
| 2/28/2023 | 2/28/2023 | 1.00 | 2/28/2023 | 0.00 | Commercial Sales | $108.72 | - |
| 2/28/2023 | 3/3/2023 | 4.00 | 3/3/2023 | 3.00 | Other Sales to Public Authority | $401.86 | 1,205.58 |
| 2/28/2023 | 2/28/2023 | 1.00 | 2/28/2023 | 0.00 | Residential Sales | $1,457.08 | - |
| 2/28/2023 | 3/6/2023 | 7.00 | 3/6/2023 | 6.00 | Commercial Sales | $829.82 | 4,978.92 |
| 2/28/2023 | 5/23/2023 | 85.00 | 5/23/2023 | 84.00 | Industrial Service | $60.67 | 5,096.28 |
| 2/28/2023 | 2/28/2023 | 1.00 | 2/28/2023 | 0.00 | Other Sales to Public Authority | $61.70 | - |
| 2/28/2023 | 3/8/2023 | 9.00 | 3/8/2023 | 8.00 | Industrial Service | $5,489.83 | 43,918.64 |
| 2/28/2023 | 3/6/2023 | 7.00 | 3/6/2023 | 6.00 | Residential Sales | $2,241.92 | 13,451.52 |
| 2/28/2023 | 3/7/2023 | 8.00 | 3/7/2023 | 7.00 | Commercial Sales | $1,014.95 | 7,104.65 |
| 2/28/2023 | 3/22/2023 | 23.00 | 3/22/2023 | 22.00 | Commercial Sales | $109.22 | 2,402.84 |
| 2/28/2023 | 3/7/2023 | 8.00 | 3/7/2023 | 7.00 | Residential Sales | $758.80 | 5,311.60 |
| 2/28/2023 | 3/9/2023 | 10.00 | 3/9/2023 | 9.00 | Industrial Service | $15,551.93 | 139,967.37 |
| 2/28/2023 | 3/8/2023 | 9.00 | 3/8/2023 | 8.00 | Commercial Sales | $33,536.18 | 268,289.44 |
| 2/28/2023 | 2/28/2023 | 1.00 | 2/28/2023 | 0.00 | Public Street & Highway Lighting | $530.79 | - |
| 2/28/2023 | 3/8/2023 | 9.00 | 3/8/2023 | 8.00 | Residential Sales | $1,822.14 | 14,577.12 |
| 2/28/2023 | 3/22/2023 | 23.00 | 3/22/2023 | 22.00 | Residential Sales | $346.07 | 7,613.54 |
| 2/28/2023 | 3/9/2023 | 10.00 | 3/9/2023 | 9.00 | Residential Sales | $192.58 | 1,733.22 |
| 2/28/2023 | 3/24/2023 | 25.00 | 3/24/2023 | 24.00 | Residential Sales | $123.04 | 2,952.96 |
| 2/28/2023 | 3/9/2023 | 10.00 | 3/9/2023 | 9.00 | Other Sales to Public Authority | $44,710.25 | 402,392.25 |
| 2/28/2023 | 3/28/2023 | 29.00 | 3/28/2023 | 28.00 | Commercial Sales | $207.57 | 5,811.96 |
| 2/28/2023 | 3/28/2023 | 29.00 | 3/28/2023 | 28.00 | Residential Sales | $63.93 | 1,790.04 |
| 2/28/2023 | 3/13/2023 | 14.00 | 3/13/2023 | 13.00 | Residential Sales | $41.04 | 533.52 |
| 2/28/2023 | 6/9/2023 | 102.00 | 6/9/2023 | 101.00 | Residential Sales | $44.23 | 4,467.23 |
| 2/28/2023 | 3/14/2023 | 15.00 | 3/14/2023 | 14.00 | Commercial Sales | $101.28 | 1,417.92 |
| 2/28/2023 | 3/14/2023 | 15.00 | 3/14/2023 | 14.00 | Residential Sales | $106.04 | 1,484.56 |
| 2/28/2023 | 3/15/2023 | 16.00 | 3/15/2023 | 15.00 | Commercial Sales | $360.43 | 5,406.45 |
| 2/28/2023 | 5/31/2024 | 459.00 | 5/31/2024 | 458.00 | Residential Sales | $84.35 | 38,632.30 |
| 2/28/2023 | 3/30/2023 | 31.00 | 3/30/2023 | 30.00 | Residential Sales | $116.56 | 3,496.80 |
| 2/28/2023 | 3/1/2023 | 2.00 | 3/1/2023 | 1.00 | Industrial Service | $174,843.93 | 174,843.93 |
| 2/28/2023 | 3/16/2023 | 17.00 | 3/16/2023 | 16.00 | Residential Sales | $56.44 | 903.04 |
| 2/28/2023 | 3/1/2023 | 2.00 | 3/1/2023 | 1.00 | Commercial Sales | $150,146.87 | 150,146.87 |
| 2/28/2023 | 3/2/2023 | 3.00 | 3/2/2023 | 2.00 | Industrial Service | $173,574.38 | 347,148.76 |
| 3/1/2023 | 3/10/2023 | 10.00 | 3/10/2023 | 9.00 | Residential Sales | $63.83 | 574.47 |
| 3/1/2023 | 4/4/2023 | 35.00 | 4/4/2023 | 34.00 | Residential Sales | $1.81 | 61.54 |
| 3/1/2023 | 3/13/2023 | 13.00 | 3/13/2023 | 12.00 | Commercial Sales | $173.77 | 2,085.24 |
| 3/1/2023 | 3/29/2023 | 29.00 | 3/29/2023 | 28.00 | Residential Sales | $119.72 | 3,352.16 |
| 3/1/2023 | 3/13/2023 | 13.00 | 3/13/2023 | 12.00 | Residential Sales | $42.46 | 509.52 |
| 3/1/2023 | 3/1/2023 | 1.00 | 3/1/2023 | 0.00 | Commercial Sales | $278.78 | - |
| 3/1/2023 | 3/1/2023 | 1.00 | 3/1/2023 | 0.00 | Residential Sales | $667.65 | - |
| 3/1/2023 | 3/2/2023 | 2.00 | 3/2/2023 | 1.00 | Commercial Sales | $287.35 | 287.35 |
| 3/1/2023 | 3/2/2023 | 2.00 | 3/2/2023 | 1.00 | Residential Sales | $5,041.46 | 5,041.46 |
| 3/1/2023 | 4/10/2023 | 41.00 | 4/10/2023 | 40.00 | Residential Sales | $827.14 | 33,085.60 |
| 3/1/2023 | 3/7/2023 | 7.00 | 3/7/2023 | 6.00 | Company Use | $0.00 | - |
| 3/1/2023 | 3/3/2023 | 3.00 | 3/3/2023 | 2.00 | Commercial Sales | $187.52 | 375.04 |
| 3/1/2023 | 3/3/2023 | 3.00 | 3/3/2023 | 2.00 | Residential Sales | $5,119.59 | 10,239.18 |
| 3/1/2023 | 3/6/2023 | 6.00 | 3/6/2023 | 5.00 | Commercial Sales | $105.00 | 525.00 |
| 3/1/2023 | 4/13/2023 | 44.00 | 4/13/2023 | 43.00 | Residential Sales | $29.72 | 1,277.96 |
| 3/1/2023 | 3/6/2023 | 6.00 | 3/6/2023 | 5.00 | Residential Sales | $220.27 | 1,101.35 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 3/1/2023 | 3/7/2023 | 7.00 | 3/7/2023 | 6.00 | Residential Sales | $234.13 | 1,404.78 |
| 3/1/2023 | 3/21/2023 | 21.00 | 3/21/2023 | 20.00 | Residential Sales | $144.24 | 2,884.80 |
| 3/1/2023 | 3/9/2023 | 9.00 | 3/9/2023 | 8.00 | Commercial Sales | $128.06 | 1,024.48 |
| 3/1/2023 | 3/8/2023 | 8.00 | 3/8/2023 | 7.00 | Residential Sales | $279.30 | 1,955.10 |
| 3/1/2023 | 3/9/2023 | 9.00 | 3/9/2023 | 8.00 | Residential Sales | $1,723.90 | 13,791.20 |
| 3/1/2023 | 6/19/2023 | 111.00 | 6/19/2023 | 110.00 | Residential Sales | $54.10 | 5,951.00 |
| 3/1/2023 | 3/10/2023 | 10.00 | 3/10/2023 | 9.00 | Commercial Sales | $18.61 | 167.49 |
| 3/1/2023 | 3/7/2023 | 7.00 | 3/7/2023 | 6.00 | Other Sales to Public Authority | $134.82 | 808.92 |
| 3/2/2023 | 3/8/2023 | 7.00 | 3/8/2023 | 6.00 | Residential Sales | $370.42 | 2,222.52 |
| 3/2/2023 | 3/3/2023 | 2.00 | 3/3/2023 | 1.00 | Other Sales to Public Authority | $215,507.89 | 215,507.89 |
| 3/2/2023 | 3/9/2023 | 8.00 | 3/9/2023 | 7.00 | Commercial Sales | $547.45 | 3,832.15 |
| 3/2/2023 | 3/22/2023 | 21.00 | 3/22/2023 | 20.00 | Residential Sales | $68.95 | 1,379.00 |
| 3/2/2023 | 3/9/2023 | 8.00 | 3/9/2023 | 7.00 | Residential Sales | $924.28 | 6,469.96 |
| 3/2/2023 | 3/23/2023 | 22.00 | 3/23/2023 | 21.00 | Residential Sales | $27.76 | 582.96 |
| 3/2/2023 | 5/10/2023 | 70.00 | 5/10/2023 | 69.00 | Commercial Sales | $24.67 | 1,702.23 |
| 3/2/2023 | 4/18/2023 | 48.00 | 4/18/2023 | 47.00 | Residential Sales | $15.00 | 705.00 |
| 3/2/2023 | 3/6/2023 | 5.00 | 3/6/2023 | 4.00 | Other Sales to Public Authority | $4,636.73 | 18,546.92 |
| 3/2/2023 | 5/11/2023 | 71.00 | 5/11/2023 | 70.00 | Residential Sales | $4.33 | 303.10 |
| 3/2/2023 | 3/10/2023 | 9.00 | 3/10/2023 | 8.00 | Commercial Sales | $165.69 | 1,325.52 |
| 3/2/2023 | 4/3/2023 | 33.00 | 4/3/2023 | 32.00 | Residential Sales | $59.84 | 1,914.88 |
| 3/2/2023 | 3/7/2023 | 6.00 | 3/7/2023 | 5.00 | Other Sales to Public Authority | $10,515.62 | 52,578.10 |
| 3/2/2023 | 3/10/2023 | 9.00 | 3/10/2023 | 8.00 | Residential Sales | $320.14 | 2,561.12 |
| 3/2/2023 | 6/22/2023 | 113.00 | 6/22/2023 | 112.00 | Commercial Sales | $129.76 | 14,533.12 |
| 3/2/2023 | 3/29/2023 | 28.00 | 3/29/2023 | 27.00 | Residential Sales | $16.95 | 457.65 |
| 3/2/2023 | 3/13/2023 | 12.00 | 3/13/2023 | 11.00 | Commercial Sales | $33.02 | 363.22 |
| 3/2/2023 | 3/13/2023 | 12.00 | 3/13/2023 | 11.00 | Residential Sales | $68.67 | 755.37 |
| 3/2/2023 | 5/16/2023 | 76.00 | 5/16/2023 | 75.00 | Residential Sales | $17.10 | 1,282.50 |
| 3/2/2023 | 3/14/2023 | 13.00 | 3/14/2023 | 12.00 | Residential Sales | $163.58 | 1,962.96 |
| 3/2/2023 | 3/15/2023 | 14.00 | 3/15/2023 | 13.00 | Commercial Sales | $55.53 | 721.89 |
| 3/2/2023 | 3/15/2023 | 14.00 | 3/15/2023 | 13.00 | Residential Sales | $74.04 | 962.52 |
| 3/2/2023 | 3/16/2023 | 15.00 | 3/16/2023 | 14.00 | Commercial Sales | $114.86 | 1,608.04 |
| 3/2/2023 | 3/30/2023 | 29.00 | 3/30/2023 | 28.00 | Residential Sales | $549.83 | 15,395.24 |
| 3/2/2023 | 3/16/2023 | 15.00 | 3/16/2023 | 14.00 | Residential Sales | $63.01 | 882.14 |
| 3/2/2023 | 9/21/2023 | 204.00 | 9/21/2023 | 203.00 | Commercial Sales | $286.51 | 58,161.53 |
| 3/2/2023 | 3/17/2023 | 16.00 | 3/17/2023 | 15.00 | Residential Sales | $142.39 | 2,135.85 |
| 3/2/2023 | 3/3/2023 | 2.00 | 3/3/2023 | 1.00 | Industrial Service | $334,924.87 | 334,924.87 |
| 3/2/2023 | 3/2/2023 | 1.00 | 3/2/2023 | 0.00 | Commercial Sales | $657.47 | - |
| 3/2/2023 | 3/3/2023 | 2.00 | 3/3/2023 | 1.00 | Commercial Sales | $187,159.23 | 187,159.23 |
| 3/2/2023 | 3/2/2023 | 1.00 | 3/2/2023 | 0.00 | Residential Sales | $503.73 | - |
| 3/2/2023 | 4/11/2023 | 41.00 | 4/11/2023 | 40.00 | Commercial Sales | $24.15 | 966.00 |
| 3/2/2023 | 3/3/2023 | 2.00 | 3/3/2023 | 1.00 | Residential Sales | $474,876.55 | 474,876.55 |
| 3/2/2023 | 3/6/2023 | 5.00 | 3/6/2023 | 4.00 | Industrial Service | $1,399.88 | 5,599.52 |
| 3/2/2023 | 3/6/2023 | 5.00 | 3/6/2023 | 4.00 | Commercial Sales | $84,039.76 | 336,159.04 |
| 3/2/2023 | 3/7/2023 | 6.00 | 3/7/2023 | 5.00 | Industrial Service | $124,584.45 | 622,922.25 |
| 3/2/2023 | 3/2/2023 | 1.00 | 3/2/2023 | 0.00 | Public Street & Highway Lighting | $94.05 | - |
| 3/2/2023 | 4/14/2023 | 44.00 | 4/14/2023 | 43.00 | Commercial Sales | $2,528.78 | 108,737.54 |
| 3/2/2023 | 3/6/2023 | 5.00 | 3/6/2023 | 4.00 | Residential Sales | $7,316.77 | 29,267.08 |
| 3/2/2023 | 3/7/2023 | 6.00 | 3/7/2023 | 5.00 | Commercial Sales | $9,702.90 | 48,514.50 |
| 3/2/2023 | 3/20/2023 | 19.00 | 3/20/2023 | 18.00 | Residential Sales | $207.29 | 3,731.22 |
| 3/2/2023 | 3/8/2023 | 7.00 | 3/8/2023 | 6.00 | Industrial Service | $42.26 | 253.56 |
| 3/2/2023 | 3/20/2024 | 385.00 | 3/20/2024 | 384.00 | Commercial Sales | $18.61 | 7,146.24 |
| 3/2/2023 | 3/7/2023 | 6.00 | 3/7/2023 | 5.00 | Residential Sales | $2,672.26 | 13,361.30 |
| 3/2/2023 | 3/8/2023 | 7.00 | 3/8/2023 | 6.00 | Commercial Sales | $16,177.39 | 97,064.34 |
| 3/2/2023 | 3/2/2023 | 1.00 | 3/2/2023 | 0.00 | Other Sales to Public Authority | $365.79 | - |
| 3/2/2023 | 3/21/2023 | 20.00 | 3/21/2023 | 19.00 | Residential Sales | $86.60 | 1,645.40 |
| 3/3/2023 | 3/3/2023 | 1.00 | 3/3/2023 | 0.00 | Residential Sales | $1,124.42 | - |
| 3/3/2023 | 3/6/2023 | 4.00 | 3/6/2023 | 3.00 | Industrial Service | $7,889.94 | 23,669.82 |
| 3/3/2023 | 3/6/2023 | 4.00 | 3/6/2023 | 3.00 | Commercial Sales | $64,053.22 | 192,159.66 |
| 3/3/2023 | 3/7/2023 | 5.00 | 3/7/2023 | 4.00 | Industrial Service | $1,308.52 | 5,234.08 |
| 3/3/2023 | 3/6/2023 | 4.00 | 3/6/2023 | 3.00 | Residential Sales | $449,978.71 | 1,349,936.13 |
| 3/3/2023 | 3/7/2023 | 5.00 | 3/7/2023 | 4.00 | Commercial Sales | $16,484.43 | 65,937.72 |
| 3/3/2023 | 3/8/2023 | 6.00 | 3/8/2023 | 5.00 | Industrial Service | $20.30 | 101.50 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 3/3/2023 | 3/8/2023 | 6.00 | 3/8/2023 | 5.00 | Commercial Sales | $329.03 | 1,645.15 |
| 3/3/2023 | 3/7/2023 | 5.00 | 3/7/2023 | 4.00 | Residential Sales | $1,717.67 | 6,870.68 |
| 3/3/2023 | 3/8/2023 | 6.00 | 3/8/2023 | 5.00 | Residential Sales | $2,621.21 | 13,106.05 |
| 3/3/2023 | 3/9/2023 | 7.00 | 3/9/2023 | 6.00 | Commercial Sales | $2.08 | 12.48 |
| 3/3/2023 | 3/3/2023 | 1.00 | 3/3/2023 | 0.00 | Other Sales to Public Authority | $187.80 | - |
| 3/3/2023 | 3/9/2023 | 7.00 | 3/9/2023 | 6.00 | Residential Sales | $516.49 | 3,098.94 |
| 3/3/2023 | 3/6/2023 | 4.00 | 3/6/2023 | 3.00 | Other Sales to Public Authority | $6,351.12 | 19,053.36 |
| 3/3/2023 | 3/7/2023 | 5.00 | 3/7/2023 | 4.00 | Other Sales to Public Authority | $23,240.96 | 92,963.84 |
| 3/3/2023 | 3/10/2023 | 8.00 | 3/10/2023 | 7.00 | Residential Sales | $56.76 | 397.32 |
| 3/3/2023 | 3/8/2023 | 6.00 | 3/8/2023 | 5.00 | Other Sales to Public Authority | $184.99 | 924.95 |
| 3/3/2023 | 3/28/2023 | 26.00 | 3/28/2023 | 25.00 | Commercial Sales | $46.19 | 1,154.75 |
| 3/3/2023 | 3/13/2023 | 11.00 | 3/13/2023 | 10.00 | Commercial Sales | $12,002.57 | 120,025.70 |
| 3/3/2023 | 3/29/2023 | 27.00 | 3/29/2023 | 26.00 | Residential Sales | $30.00 | 780.00 |
| 3/3/2023 | 3/13/2023 | 11.00 | 3/13/2023 | 10.00 | Residential Sales | $118.02 | 1,180.20 |
| 3/3/2023 | 3/14/2023 | 12.00 | 3/14/2023 | 11.00 | Commercial Sales | $59.62 | 655.82 |
| 3/3/2023 | 3/14/2023 | 12.00 | 3/14/2023 | 11.00 | Residential Sales | $218.10 | 2,399.10 |
| 3/3/2023 | 3/15/2023 | 13.00 | 3/15/2023 | 12.00 | Residential Sales | $166.34 | 1,996.08 |
| 3/3/2023 | 3/17/2023 | 15.00 | 3/17/2023 | 14.00 | Commercial Sales | $307.42 | 4,303.88 |
| 3/3/2023 | 3/16/2023 | 14.00 | 3/16/2023 | 13.00 | Residential Sales | $21.20 | 275.60 |
| 3/3/2023 | 5/2/2023 | 61.00 | 5/2/2023 | 60.00 | Residential Sales | $14.45 | 867.00 |
| 3/3/2023 | 3/3/2023 | 1.00 | 3/3/2023 | 0.00 | Commercial Sales | $931.27 | - |
| 3/4/2023 | 3/6/2023 | 3.00 | 3/6/2023 | 2.00 | Residential Sales | $24,305.76 | 48,611.52 |
| 3/4/2023 | 3/7/2023 | 4.00 | 3/7/2023 | 3.00 | Residential Sales | $45.26 | 135.78 |
| 3/4/2023 | 3/6/2023 | 3.00 | 3/6/2023 | 2.00 | Commercial Sales | $19.61 | 39.22 |
| 3/4/2023 | 3/7/2023 | 4.00 | 3/7/2023 | 3.00 | Commercial Sales | $9.39 | 28.17 |
| 3/5/2023 | 3/13/2023 | 9.00 | 3/13/2023 | 8.00 | Commercial Sales | $15.65 | 125.20 |
| 3/5/2023 | 3/16/2023 | 12.00 | 3/16/2023 | 11.00 | Commercial Sales | $10.55 | 116.05 |
| 3/5/2023 | 3/6/2023 | 2.00 | 3/6/2023 | 1.00 | Residential Sales | $3,040.55 | 3,040.55 |
| 3/5/2023 | 3/7/2023 | 3.00 | 3/7/2023 | 2.00 | Residential Sales | $76.92 | 153.84 |
| 3/5/2023 | 3/8/2023 | 4.00 | 3/8/2023 | 3.00 | Residential Sales | $106.14 | 318.42 |
| 3/5/2023 | 3/6/2023 | 2.00 | 3/6/2023 | 1.00 | Commercial Sales | $297.95 | 297.95 |
| 3/5/2023 | 3/9/2023 | 5.00 | 3/9/2023 | 4.00 | Residential Sales | $118.26 | 473.04 |
| 3/5/2023 | 7/10/2023 | 128.00 | 7/10/2023 | 127.00 | Residential Sales | $212.44 | 26,979.88 |
| 3/5/2023 | 3/7/2023 | 3.00 | 3/7/2023 | 2.00 | Commercial Sales | $93.26 | 186.52 |
| 3/5/2023 | 3/7/2023 | 3.00 | 3/7/2023 | 2.00 | Public Street & Highway Lighting | $466.09 | 932.18 |
| 3/6/2023 | 3/8/2023 | 3.00 | 3/8/2023 | 2.00 | Residential Sales | $6,726.92 | 13,453.84 |
| 3/6/2023 | 8/3/2023 | 151.00 | 8/3/2023 | 150.00 | Residential Sales | $51.88 | 7,782.00 |
| 3/6/2023 | 3/9/2023 | 4.00 | 3/9/2023 | 3.00 | Residential Sales | $2,713.04 | 8,139.12 |
| 3/6/2023 | 3/6/2023 | 1.00 | 3/6/2023 | 0.00 | Commercial Sales | $121.96 | - |
| 3/6/2023 | 3/20/2023 | 15.00 | 3/20/2023 | 14.00 | Commercial Sales | $10,855.03 | 151,970.42 |
| 3/6/2023 | 4/17/2023 | 43.00 | 4/17/2023 | 42.00 | Residential Sales | $154.43 | 6,486.06 |
| 3/6/2023 | 3/7/2023 | 2.00 | 3/7/2023 | 1.00 | Commercial Sales | $149,557.43 | 149,557.43 |
| 3/6/2023 | 3/21/2023 | 16.00 | 3/21/2023 | 15.00 | Commercial Sales | $114.60 | 1,719.00 |
| 3/6/2023 | 4/18/2023 | 44.00 | 4/18/2023 | 43.00 | Residential Sales | $53.18 | 2,286.74 |
| 3/6/2023 | 3/24/2023 | 19.00 | 3/24/2023 | 18.00 | Residential Sales | $27.40 | 493.20 |
| 3/6/2023 | 3/8/2023 | 3.00 | 3/8/2023 | 2.00 | Commercial Sales | $47,972.38 | 95,944.76 |
| 3/6/2023 | 3/22/2023 | 17.00 | 3/22/2023 | 16.00 | Commercial Sales | $97.74 | 1,563.84 |
| 3/6/2023 | 3/6/2023 | 1.00 | 3/6/2023 | 0.00 | Other Sales to Public Authority | $103.26 | - |
| 3/6/2023 | 3/7/2023 | 2.00 | 3/7/2023 | 1.00 | Other Sales to Public Authority | $27,506.92 | 27,506.92 |
| 3/6/2023 | 3/9/2023 | 4.00 | 3/9/2023 | 3.00 | Commercial Sales | $1,265.53 | 3,796.59 |
| 3/6/2023 | 3/23/2023 | 18.00 | 3/23/2023 | 17.00 | Commercial Sales | $166.95 | 2,838.15 |
| 3/6/2023 | 3/25/2024 | 386.00 | 3/25/2024 | 385.00 | Residential Sales | $20.83 | 8,019.55 |
| 3/6/2023 | 3/21/2023 | 16.00 | 3/21/2023 | 15.00 | Other Sales to Public Authority | $37.72 | 565.80 |
| 3/6/2023 | 3/10/2023 | 5.00 | 3/10/2023 | 4.00 | Residential Sales | $625.07 | 2,500.28 |
| 3/6/2023 | 3/8/2023 | 3.00 | 3/8/2023 | 2.00 | Other Sales to Public Authority | $1,760.54 | 3,521.08 |
| 3/6/2023 | 8/22/2023 | 170.00 | 8/22/2023 | 169.00 | Residential Sales | $55.78 | 9,426.82 |
| 3/6/2023 | 4/6/2023 | 32.00 | 4/6/2023 | 31.00 | Residential Sales | $39.47 | 1,223.57 |
| 3/6/2023 | 3/29/2023 | 24.00 | 3/29/2023 | 23.00 | Residential Sales | $6.97 | 160.31 |
| 3/6/2023 | 3/13/2023 | 8.00 | 3/13/2023 | 7.00 | Residential Sales | $612.62 | 4,288.34 |
| 3/6/2023 | 3/10/2023 | 5.00 | 3/10/2023 | 4.00 | Commercial Sales | $58.28 | 233.12 |
| 3/6/2023 | 3/14/2023 | 9.00 | 3/14/2023 | 8.00 | Residential Sales | $164.62 | 1,316.96 |
| 3/6/2023 | 3/15/2023 | 10.00 | 3/15/2023 | 9.00 | Residential Sales | $245.98 | 2,213.82 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 3/6/2023 | 3/30/2023 | 25.00 | 3/30/2023 | 24.00 | Residential Sales | $73.67 | 1,768.08 |
| 3/6/2023 | 3/13/2023 | 8.00 | 3/13/2023 | 7.00 | Commercial Sales | $162.88 | 1,140.16 |
| 3/6/2023 | 3/14/2023 | 9.00 | 3/14/2023 | 8.00 | Commercial Sales | $2,183.06 | 17,464.48 |
| 3/6/2023 | 3/15/2023 | 10.00 | 3/15/2023 | 9.00 | Commercial Sales | $57.09 | 513.81 |
| 3/6/2023 | 7/21/2023 | 138.00 | 7/21/2023 | 137.00 | Residential Sales | $98.72 | 13,524.64 |
| 3/6/2023 | 3/17/2023 | 12.00 | 3/17/2023 | 11.00 | Commercial Sales | $51,264.25 | 563,906.75 |
| 3/6/2023 | 4/13/2023 | 39.00 | 4/13/2023 | 38.00 | Residential Sales | $164.94 | 6,267.72 |
| 3/6/2023 | 3/8/2023 | 3.00 | 3/8/2023 | 2.00 | Industrial Service | $7,343.11 | 14,686.22 |
| 3/6/2023 | 3/6/2023 | 1.00 | 3/6/2023 | 0.00 | Residential Sales | $42.50 | - |
| 3/6/2023 | 3/7/2023 | 2.00 | 3/7/2023 | 1.00 | Residential Sales | $540,293.51 | 540,293.51 |
| 3/7/2023 | 4/11/2023 | 36.00 | 4/11/2023 | 35.00 | Residential Sales | $25.96 | 908.60 |
| 3/7/2023 | 4/28/2023 | 53.00 | 4/28/2023 | 52.00 | Residential Sales | $57.10 | 2,969.20 |
| 3/7/2023 | 3/7/2023 | 1.00 | 3/7/2023 | 0.00 | Residential Sales | $1,292.68 | - |
| 3/7/2023 | 3/21/2023 | 15.00 | 3/21/2023 | 14.00 | Residential Sales | $522.64 | 7,316.96 |
| 3/7/2023 | 3/8/2023 | 2.00 | 3/8/2023 | 1.00 | Residential Sales | $751,095.63 | 751,095.63 |
| 3/7/2023 | 11/6/2023 | 245.00 | 11/6/2023 | 244.00 | Commercial Sales | $167.58 | 40,889.52 |
| 3/7/2023 | 3/9/2023 | 3.00 | 3/9/2023 | 2.00 | Residential Sales | $7,109.32 | 14,218.64 |
| 3/7/2023 | 3/20/2023 | 14.00 | 3/20/2023 | 13.00 | Commercial Sales | $4,607.25 | 59,894.25 |
| 3/7/2023 | 3/21/2023 | 15.00 | 3/21/2023 | 14.00 | Industrial Service | $592.50 | 8,295.00 |
| 3/7/2023 | 3/23/2023 | 17.00 | 3/23/2023 | 16.00 | Residential Sales | $41.28 | 660.48 |
| 3/7/2023 | 3/21/2023 | 15.00 | 3/21/2023 | 14.00 | Commercial Sales | $46,804.57 | 655,263.98 |
| 3/7/2023 | 3/7/2023 | 1.00 | 3/7/2023 | 0.00 | Commercial Sales | $1,568.73 | - |
| 3/7/2023 | 4/18/2023 | 43.00 | 4/18/2023 | 42.00 | Residential Sales | $302.68 | 12,712.56 |
| 3/7/2023 | 3/8/2023 | 2.00 | 3/8/2023 | 1.00 | Commercial Sales | $101,706.77 | 101,706.77 |
| 3/7/2023 | 3/22/2023 | 16.00 | 3/22/2023 | 15.00 | Commercial Sales | $158.79 | 2,381.85 |
| 3/7/2023 | 4/19/2023 | 44.00 | 4/19/2023 | 43.00 | Residential Sales | $124.22 | 5,341.46 |
| 3/7/2023 | 3/20/2023 | 14.00 | 3/20/2023 | 13.00 | Other Sales to Public Authority | $617.52 | 8,027.76 |
| 3/7/2023 | 3/9/2023 | 3.00 | 3/9/2023 | 2.00 | Industrial Service | $252.33 | 504.66 |
| 3/7/2023 | 3/9/2023 | 3.00 | 3/9/2023 | 2.00 | Commercial Sales | $3,548.26 | 7,096.52 |
| 3/7/2023 | 3/21/2023 | 15.00 | 3/21/2023 | 14.00 | Other Sales to Public Authority | $13,297.11 | 186,159.54 |
| 3/7/2023 | 3/7/2023 | 1.00 | 3/7/2023 | 0.00 | Other Sales to Public Authority | $25.99 | - |
| 3/7/2023 | 3/10/2023 | 4.00 | 3/10/2023 | 3.00 | Residential Sales | $2,433.28 | 7,299.84 |
| 3/7/2023 | 3/8/2023 | 2.00 | 3/8/2023 | 1.00 | Other Sales to Public Authority | $21,365.75 | 21,365.75 |
| 3/7/2023 | 4/5/2023 | 30.00 | 4/5/2023 | 29.00 | Residential Sales | $26.95 | 781.55 |
| 3/7/2023 | 4/6/2023 | 31.00 | 4/6/2023 | 30.00 | Residential Sales | $7.11 | 213.30 |
| 3/7/2023 | 3/13/2023 | 7.00 | 3/13/2023 | 6.00 | Residential Sales | $696.10 | 4,176.60 |
| 3/7/2023 | 4/4/2023 | 29.00 | 4/4/2023 | 28.00 | Commercial Sales | $76.34 | 2,137.52 |
| 3/7/2023 | 3/10/2023 | 4.00 | 3/10/2023 | 3.00 | Commercial Sales | $11,666.19 | 34,998.57 |
| 3/7/2023 | 3/14/2023 | 8.00 | 3/14/2023 | 7.00 | Residential Sales | $51.52 | 360.64 |
| 3/7/2023 | 5/31/2023 | 86.00 | 5/31/2023 | 85.00 | Residential Sales | $15.03 | 1,277.55 |
| 3/7/2023 | 3/15/2023 | 9.00 | 3/15/2023 | 8.00 | Residential Sales | $582.80 | 4,662.40 |
| 3/7/2023 | 8/10/2023 | 157.00 | 8/10/2023 | 156.00 | Residential Sales | $26.54 | 4,140.24 |
| 3/7/2023 | 3/16/2023 | 10.00 | 3/16/2023 | 9.00 | Residential Sales | $1,709.27 | 15,383.43 |
| 3/7/2023 | 3/28/2023 | 22.00 | 3/28/2023 | 21.00 | Other Sales to Public Authority | $13,133.76 | 275,808.96 |
| 3/7/2023 | 3/13/2023 | 7.00 | 3/13/2023 | 6.00 | Commercial Sales | $145.05 | 870.30 |
| 3/7/2023 | 3/31/2023 | 25.00 | 3/31/2023 | 24.00 | Residential Sales | $28.16 | 675.84 |
| 3/7/2023 | 3/17/2023 | 11.00 | 3/17/2023 | 10.00 | Residential Sales | $47.05 | 470.50 |
| 3/7/2023 | 3/14/2023 | 8.00 | 3/14/2023 | 7.00 | Commercial Sales | $40.57 | 283.99 |
| 3/7/2023 | 3/15/2023 | 9.00 | 3/15/2023 | 8.00 | Commercial Sales | $379.76 | 3,038.08 |
| 3/8/2023 | 3/10/2023 | 3.00 | 3/10/2023 | 2.00 | Other Sales to Public Authority | $3,209.20 | 6,418.40 |
| 3/8/2023 | 3/13/2023 | 6.00 | 3/13/2023 | 5.00 | Industrial Service | $290.91 | 1,454.55 |
| 3/8/2023 | 3/15/2023 | 8.00 | 3/15/2023 | 7.00 | Residential Sales | $53.53 | 374.71 |
| 3/8/2023 | 3/13/2023 | 6.00 | 3/13/2023 | 5.00 | Commercial Sales | $39,940.44 | 199,702.20 |
| 3/8/2023 | 3/16/2023 | 9.00 | 3/16/2023 | 8.00 | Residential Sales | $384.47 | 3,075.76 |
| 3/8/2023 | 3/30/2023 | 23.00 | 3/30/2023 | 22.00 | Residential Sales | $21.55 | 474.10 |
| 3/8/2023 | 5/1/2023 | 55.00 | 5/1/2023 | 54.00 | Residential Sales | $14.45 | 780.30 |
| 3/8/2023 | 3/17/2023 | 10.00 | 3/17/2023 | 9.00 | Residential Sales | $101.35 | 912.15 |
| 3/8/2023 | 3/14/2023 | 7.00 | 3/14/2023 | 6.00 | Commercial Sales | $19,470.98 | 116,825.88 |
| 3/8/2023 | 6/29/2023 | 114.00 | 6/29/2023 | 113.00 | Residential Sales | $31.43 | 3,551.59 |
| 3/8/2023 | 3/16/2023 | 9.00 | 3/16/2023 | 8.00 | Commercial Sales | $57.82 | 462.56 |
| 3/8/2023 | 4/14/2023 | 38.00 | 4/14/2023 | 37.00 | Residential Sales | $20.41 | 755.17 |
| 3/8/2023 | 3/20/2023 | 13.00 | 3/20/2023 | 12.00 | Residential Sales | $107.75 | 1,293.00 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 3/8/2023 | 7/7/2023 | 122.00 | 7/7/2023 | 121.00 | Commercial Sales | $41.75 | 5,051.75 |
| 3/8/2023 | 3/8/2023 | 1.00 | 3/8/2023 | 0.00 | Residential Sales | $585.32 | - |
| 3/8/2023 | 3/22/2023 | 15.00 | 3/22/2023 | 14.00 | Residential Sales | $17.26 | 241.64 |
| 3/8/2023 | 3/9/2023 | 2.00 | 3/9/2023 | 1.00 | Residential Sales | $597,275.44 | 597,275.44 |
| 3/8/2023 | 3/24/2023 | 17.00 | 3/24/2023 | 16.00 | Residential Sales | $87.42 | 1,398.72 |
| 3/8/2023 | 5/23/2023 | 77.00 | 5/23/2023 | 76.00 | Commercial Sales | $187.54 | 14,253.04 |
| 3/8/2023 | 3/8/2023 | 1.00 | 3/8/2023 | 0.00 | Commercial Sales | $867.80 | - |
| 3/8/2023 | 3/8/2023 | 1.00 | 3/8/2023 | 0.00 | Public Street & Highway Lighting | $48.31 | - |
| 3/8/2023 | 3/9/2023 | 2.00 | 3/9/2023 | 1.00 | Industrial Service | $4,714.47 | 4,714.47 |
| 3/8/2023 | 3/22/2023 | 15.00 | 3/22/2023 | 14.00 | Commercial Sales | $169.83 | 2,377.62 |
| 3/8/2023 | 3/9/2023 | 2.00 | 3/9/2023 | 1.00 | Commercial Sales | $263,316.20 | 263,316.20 |
| 3/8/2023 | 3/23/2023 | 16.00 | 3/23/2023 | 15.00 | Commercial Sales | $65.27 | 979.05 |
| 3/8/2023 | 3/10/2023 | 3.00 | 3/10/2023 | 2.00 | Residential Sales | $9,260.56 | 18,521.12 |
| 3/8/2023 | 3/8/2023 | 1.00 | 3/8/2023 | 0.00 | Other Sales to Public Authority | $15.04 | - |
| 3/8/2023 | 3/27/2023 | 20.00 | 3/27/2023 | 19.00 | Residential Sales | $53.04 | 1,007.76 |
| 3/8/2023 | 3/9/2023 | 2.00 | 3/9/2023 | 1.00 | Other Sales to Public Authority | $19,945.61 | 19,945.61 |
| 3/8/2023 | 4/5/2023 | 29.00 | 4/5/2023 | 28.00 | Residential Sales | $83.60 | 2,340.80 |
| 3/8/2023 | 12/6/2023 | 274.00 | 12/6/2023 | 273.00 | Residential Sales | $76.82 | 20,971.86 |
| 3/8/2023 | 3/10/2023 | 3.00 | 3/10/2023 | 2.00 | Industrial Service | $1,348.60 | 2,697.20 |
| 3/8/2023 | 3/25/2024 | 384.00 | 3/25/2024 | 383.00 | Commercial Sales | $37.22 | 14,255.26 |
| 3/8/2023 | 3/10/2023 | 3.00 | 3/10/2023 | 2.00 | Commercial Sales | $81,852.32 | 163,704.64 |
| 3/8/2023 | 3/13/2023 | 6.00 | 3/13/2023 | 5.00 | Residential Sales | $5,803.72 | 29,018.60 |
| 3/8/2023 | 5/15/2023 | 69.00 | 5/15/2023 | 68.00 | Residential Sales | $46.01 | 3,128.68 |
| 3/8/2023 | 3/14/2023 | 7.00 | 3/14/2023 | 6.00 | Residential Sales | $688.71 | 4,132.26 |
| 3/8/2023 | 3/28/2023 | 21.00 | 3/28/2023 | 20.00 | Commercial Sales | $16,555.89 | 331,117.80 |
| 3/9/2023 | 3/10/2023 | 2.00 | 3/10/2023 | 1.00 | Residential Sales | $243,405.97 | 243,405.97 |
| 3/9/2023 | 4/4/2023 | 27.00 | 4/4/2023 | 26.00 | Residential Sales | $56.02 | 1,456.52 |
| 3/9/2023 | 3/10/2023 | 2.00 | 3/10/2023 | 1.00 | Industrial Service | $91,812.23 | 91,812.23 |
| 3/9/2023 | 3/10/2023 | 2.00 | 3/10/2023 | 1.00 | Commercial Sales | $227,818.28 | 227,818.28 |
| 3/9/2023 | 3/13/2023 | 5.00 | 3/13/2023 | 4.00 | Residential Sales | $7,476.23 | 29,904.92 |
| 3/9/2023 | 3/27/2023 | 19.00 | 3/27/2023 | 18.00 | Commercial Sales | $21.48 | 386.64 |
| 3/9/2023 | 3/14/2023 | 6.00 | 3/14/2023 | 5.00 | Residential Sales | $3,304.81 | 16,524.05 |
| 3/9/2023 | 3/13/2023 | 5.00 | 3/13/2023 | 4.00 | Industrial Service | $33,940.60 | 135,762.40 |
| 3/9/2023 | 3/10/2023 | 2.00 | 3/10/2023 | 1.00 | Other Sales to Public Authority | $28,950.71 | 28,950.71 |
| 3/9/2023 | 3/15/2023 | 7.00 | 3/15/2023 | 6.00 | Residential Sales | $299.39 | 1,796.34 |
| 3/9/2023 | 3/13/2023 | 5.00 | 3/13/2023 | 4.00 | Commercial Sales | $49,558.33 | 198,233.32 |
| 3/9/2023 | 3/16/2023 | 8.00 | 3/16/2023 | 7.00 | Residential Sales | $19.20 | 134.40 |
| 3/9/2023 | 11/14/2023 | 251.00 | 11/14/2023 | 250.00 | Commercial Sales | $1,205.29 | 301,322.50 |
| 3/9/2023 | 3/14/2023 | 6.00 | 3/14/2023 | 5.00 | Commercial Sales | $109,924.53 | 549,622.65 |
| 3/9/2023 | 3/17/2023 | 9.00 | 3/17/2023 | 8.00 | Residential Sales | $124.58 | 996.64 |
| 3/9/2023 | 5/2/2023 | 55.00 | 5/2/2023 | 54.00 | Residential Sales | $66.01 | 3,564.54 |
| 3/9/2023 | 3/13/2023 | 5.00 | 3/13/2023 | 4.00 | Other Sales to Public Authority | $59,330.12 | 237,320.48 |
| 3/9/2023 | 3/15/2023 | 7.00 | 3/15/2023 | 6.00 | Commercial Sales | $13,394.52 | 80,367.12 |
| 3/9/2023 | 4/10/2023 | 33.00 | 4/10/2023 | 32.00 | Residential Sales | $3.29 | 105.28 |
| 3/9/2023 | 3/14/2023 | 6.00 | 3/14/2023 | 5.00 | Other Sales to Public Authority | $10,062.51 | 50,312.55 |
| 3/9/2023 | 4/28/2023 | 51.00 | 4/28/2023 | 50.00 | Residential Sales | $42.60 | 2,130.00 |
| 3/9/2023 | 3/20/2023 | 12.00 | 3/20/2023 | 11.00 | Residential Sales | $53.15 | 584.65 |
| 3/9/2023 | 3/9/2023 | 1.00 | 3/9/2023 | 0.00 | Residential Sales | $816.56 | - |
| 3/9/2023 | 3/23/2023 | 15.00 | 3/23/2023 | 14.00 | Residential Sales | $14.95 | 209.30 |
| 3/9/2023 | 3/21/2023 | 13.00 | 3/21/2023 | 12.00 | Commercial Sales | $3,005.67 | 36,068.04 |
| 3/9/2023 | 3/24/2023 | 16.00 | 3/24/2023 | 15.00 | Residential Sales | $73.58 | 1,103.70 |
| 3/9/2023 | 3/13/2023 | 5.00 | 3/13/2023 | 4.00 | Company Use | $0.00 | - |
| 3/9/2023 | 3/9/2023 | 1.00 | 3/9/2023 | 0.00 | Commercial Sales | $1,496.91 | - |
| 3/9/2023 | 3/9/2023 | 1.00 | 3/9/2023 | 0.00 | Public Street & Highway Lighting | $15.49 | - |
| 3/10/2023 | 3/10/2023 | 1.00 | 3/10/2023 | 0.00 | Residential Sales | $1,939.17 | - |
| 3/10/2023 | 3/27/2023 | 18.00 | 3/27/2023 | 17.00 | Residential Sales | $72.91 | 1,239.47 |
| 3/10/2023 | 6/20/2023 | 103.00 | 6/20/2023 | 102.00 | Residential Sales | $28.16 | 2,872.32 |
| 3/10/2023 | 10/30/2023 | 235.00 | 10/30/2023 | 234.00 | Other Sales to Public Authority | $294.89 | 69,004.26 |
| 3/10/2023 | 3/28/2023 | 19.00 | 3/28/2023 | 18.00 | Residential Sales | $26.71 | 480.78 |
| 3/10/2023 | 3/13/2023 | 4.00 | 3/13/2023 | 3.00 | Residential Sales | $252,771.55 | 758,314.65 |
| 3/10/2023 | 3/10/2023 | 1.00 | 3/10/2023 | 0.00 | Commercial Sales | $1,361.60 | - |
| 3/10/2023 | 3/10/2023 | 1.00 | 3/10/2023 | 0.00 | Public Street & Highway Lighting | $50.30 | - |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 3/10/2023 | 3/14/2023 | 5.00 | 3/14/2023 | 4.00 | Residential Sales | $1,702.34 | 6,809.36 |
| 3/10/2023 | 3/10/2023 | 1.00 | 3/10/2023 | 0.00 | Other Sales to Public Authority | $184.32 | - |
| 3/10/2023 | 3/13/2023 | 4.00 | 3/13/2023 | 3.00 | Industrial Service | $51,091.56 | 153,274.68 |
| 3/10/2023 | 3/15/2023 | 6.00 | 3/15/2023 | 5.00 | Residential Sales | $1,418.23 | 7,091.15 |
| 3/10/2023 | 3/13/2023 | 4.00 | 3/13/2023 | 3.00 | Commercial Sales | $239,574.64 | 718,723.92 |
| 3/10/2023 | 3/14/2023 | 5.00 | 3/14/2023 | 4.00 | Industrial Service | $16,176.94 | 64,707.76 |
| 3/10/2023 | 3/30/2023 | 21.00 | 3/30/2023 | 20.00 | Residential Sales | $88.66 | 1,773.20 |
| 3/10/2023 | 3/16/2023 | 7.00 | 3/16/2023 | 6.00 | Residential Sales | $738.40 | 4,430.40 |
| 3/10/2023 | 3/14/2023 | 5.00 | 3/14/2023 | 4.00 | Commercial Sales | $59,210.26 | 236,841.04 |
| 3/10/2023 | 3/17/2023 | 8.00 | 3/17/2023 | 7.00 | Residential Sales | $24.70 | 172.90 |
| 3/10/2023 | 3/31/2023 | 22.00 | 3/31/2023 | 21.00 | Residential Sales | $69.05 | 1,450.05 |
| 3/10/2023 | 3/15/2023 | 6.00 | 3/15/2023 | 5.00 | Commercial Sales | $57,679.75 | 288,398.75 |
| 3/10/2023 | 3/13/2023 | 4.00 | 3/13/2023 | 3.00 | Other Sales to Public Authority | $22,564.39 | 67,693.17 |
| 3/10/2023 | 3/14/2023 | 5.00 | 3/14/2023 | 4.00 | Other Sales to Public Authority | $1,787.63 | 7,150.52 |
| 3/10/2023 | 3/15/2023 | 6.00 | 3/15/2023 | 5.00 | Other Sales to Public Authority | $167.27 | 836.35 |
| 3/10/2023 | 3/31/2023 | 22.00 | 3/31/2023 | 21.00 | Commercial Sales | $103.70 | 2,177.70 |
| 3/10/2023 | 3/17/2023 | 8.00 | 3/17/2023 | 7.00 | Commercial Sales | $42.86 | 300.02 |
| 3/10/2023 | 5/4/2023 | 56.00 | 5/4/2023 | 55.00 | Commercial Sales | $1,704.64 | 93,755.20 |
| 3/10/2023 | 4/10/2023 | 32.00 | 4/10/2023 | 31.00 | Commercial Sales | $20.80 | 644.80 |
| 3/10/2023 | 10/10/2023 | 215.00 | 10/10/2023 | 214.00 | Commercial Sales | $1,005.81 | 215,243.34 |
| 3/10/2023 | 3/20/2023 | 11.00 | 3/20/2023 | 10.00 | Residential Sales | $200.40 | 2,004.00 |
| 3/10/2023 | 3/21/2023 | 12.00 | 3/21/2023 | 11.00 | Residential Sales | $27.34 | 300.74 |
| 3/10/2023 | 3/20/2023 | 11.00 | 3/20/2023 | 10.00 | Commercial Sales | $18.61 | 186.10 |
| 3/10/2023 | 3/23/2023 | 14.00 | 3/23/2023 | 13.00 | Residential Sales | $156.43 | 2,033.59 |
| 3/10/2023 | 3/24/2023 | 15.00 | 3/24/2023 | 14.00 | Residential Sales | $54.78 | 766.92 |
| 3/11/2023 | 3/13/2023 | 3.00 | 3/13/2023 | 2.00 | Residential Sales | $482.96 | 965.92 |
| 3/11/2023 | 3/15/2023 | 5.00 | 3/15/2023 | 4.00 | Residential Sales | $53.76 | 215.04 |
| 3/12/2023 | 4/11/2023 | 31.00 | 4/11/2023 | 30.00 | Residential Sales | $20.20 | 606.00 |
| 3/12/2023 | 3/20/2023 | 9.00 | 3/20/2023 | 8.00 | Residential Sales | $203.84 | 1,630.72 |
| 3/12/2023 | 3/23/2023 | 12.00 | 3/23/2023 | 11.00 | Commercial Sales | $6.36 | 69.96 |
| 3/12/2023 | 3/13/2023 | 2.00 | 3/13/2023 | 1.00 | Residential Sales | $1,411.67 | 1,411.67 |
| 3/12/2023 | 3/14/2023 | 3.00 | 3/14/2023 | 2.00 | Residential Sales | $150.52 | 301.04 |
| 3/12/2023 | 3/15/2023 | 4.00 | 3/15/2023 | 3.00 | Residential Sales | $310.57 | 931.71 |
| 3/12/2023 | 3/13/2023 | 2.00 | 3/13/2023 | 1.00 | Commercial Sales | $23.51 | 23.51 |
| 3/12/2023 | 3/16/2023 | 5.00 | 3/16/2023 | 4.00 | Residential Sales | $1.28 | 5.12 |
| 3/12/2023 | 3/14/2023 | 3.00 | 3/14/2023 | 2.00 | Commercial Sales | $45.63 | 91.26 |
| 3/12/2023 | 3/15/2023 | 4.00 | 3/15/2023 | 3.00 | Commercial Sales | $9.92 | 29.76 |
| 3/13/2023 | 3/15/2023 | 3.00 | 3/15/2023 | 2.00 | Residential Sales | $7,390.70 | 14,781.40 |
| 3/13/2023 | 3/29/2023 | 17.00 | 3/29/2023 | 16.00 | Commercial Sales | $85.69 | 1,371.04 |
| 3/13/2023 | 3/14/2023 | 2.00 | 3/14/2023 | 1.00 | Industrial Service | $553,769.78 | 553,769.78 |
| 3/13/2023 | 3/16/2023 | 4.00 | 3/16/2023 | 3.00 | Residential Sales | $1,892.44 | 5,677.32 |
| 3/13/2023 | 3/13/2023 | 1.00 | 3/13/2023 | 0.00 | Commercial Sales | $569.63 | - |
| 3/13/2023 | 3/30/2023 | 18.00 | 3/30/2023 | 17.00 | Residential Sales | $193.86 | 3,295.62 |
| 3/13/2023 | 3/14/2023 | 2.00 | 3/14/2023 | 1.00 | Commercial Sales | $162,389.15 | 162,389.15 |
| 3/13/2023 | 3/17/2023 | 5.00 | 3/17/2023 | 4.00 | Residential Sales | $753.64 | 3,014.56 |
| 3/13/2023 | 3/15/2023 | 3.00 | 3/15/2023 | 2.00 | Industrial Service | $253,200.17 | 506,400.34 |
| 3/13/2023 | 11/15/2023 | 248.00 | 11/15/2023 | 247.00 | Commercial Sales | $194.45 | 48,029.15 |
| 3/13/2023 | 5/2/2023 | 51.00 | 5/2/2023 | 50.00 | Residential Sales | $138.88 | 6,944.00 |
| 3/13/2023 | 3/15/2023 | 3.00 | 3/15/2023 | 2.00 | Commercial Sales | $91,910.17 | 183,820.34 |
| 3/13/2023 | 3/13/2023 | 1.00 | 3/13/2023 | 0.00 | Other Sales to Public Authority | $14.14 | - |
| 3/13/2023 | 3/28/2023 | 16.00 | 3/28/2023 | 15.00 | Public Street & Highway Lighting | $5,486.63 | 82,299.45 |
| 3/13/2023 | 3/16/2023 | 4.00 | 3/16/2023 | 3.00 | Industrial Service | $4,616.35 | 13,849.05 |
| 3/13/2023 | 3/16/2023 | 4.00 | 3/16/2023 | 3.00 | Commercial Sales | $60,163.29 | 180,489.87 |
| 3/13/2023 | 3/14/2023 | 2.00 | 3/14/2023 | 1.00 | Other Sales to Public Authority | $18,570.06 | 18,570.06 |
| 3/13/2023 | 3/17/2023 | 5.00 | 3/17/2023 | 4.00 | Industrial Service | $31,596.76 | 126,387.04 |
| 3/13/2023 | 3/13/2023 | 1.00 | 3/13/2023 | 0.00 | Public Street & Highway Lighting | $50,829.67 | - |
| 3/13/2023 | 3/15/2023 | 3.00 | 3/15/2023 | 2.00 | Other Sales to Public Authority | $4,340.01 | 8,680.02 |
| 3/13/2023 | 3/17/2023 | 5.00 | 3/17/2023 | 4.00 | Commercial Sales | $393.28 | 1,573.12 |
| 3/13/2023 | 3/14/2023 | 2.00 | 3/14/2023 | 1.00 | Public Street & Highway Lighting | $21,333.94 | 21,333.94 |
| 3/13/2023 | 3/16/2023 | 4.00 | 3/16/2023 | 3.00 | Other Sales to Public Authority | $13,496.62 | 40,489.86 |
| 3/13/2023 | 4/13/2023 | 32.00 | 4/13/2023 | 31.00 | Residential Sales | $35.87 | 1,111.97 |
| 3/13/2023 | 3/20/2023 | 8.00 | 3/20/2023 | 7.00 | Residential Sales | $849.94 | 5,949.58 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 3/13/2023 | 3/21/2023 | 9.00 | 3/21/2023 | 8.00 | Residential Sales | $330.46 | 2,643.68 |
| 3/13/2023 | 3/22/2023 | 10.00 | 3/22/2023 | 9.00 | Residential Sales | $87.21 | 784.89 |
| 3/13/2023 | 3/21/2023 | 9.00 | 3/21/2023 | 8.00 | Industrial Service | $44,910.49 | 359,283.92 |
| 3/13/2023 | 3/20/2023 | 8.00 | 3/20/2023 | 7.00 | Commercial Sales | $19,430.86 | 136,016.02 |
| 3/13/2023 | 3/24/2023 | 12.00 | 3/24/2023 | 11.00 | Residential Sales | $326.47 | 3,591.17 |
| 3/13/2023 | 3/22/2023 | 10.00 | 3/22/2023 | 9.00 | Commercial Sales | $309.14 | 2,782.26 |
| 3/13/2023 | 3/15/2023 | 3.00 | 3/15/2023 | 2.00 | Company Use | $0.00 | - |
| 3/13/2023 | 3/21/2023 | 9.00 | 3/21/2023 | 8.00 | Public Street & Highway Lighting | $29,361.65 | 234,893.20 |
| 3/13/2023 | 3/28/2023 | 16.00 | 3/28/2023 | 15.00 | Residential Sales | $76.24 | 1,143.60 |
| 3/13/2023 | 3/29/2023 | 17.00 | 3/29/2023 | 16.00 | Residential Sales | $98.10 | 1,569.60 |
| 3/13/2023 | 3/13/2023 | 1.00 | 3/13/2023 | 0.00 | Residential Sales | $1,482.64 | - |
| 3/13/2023 | 3/14/2023 | 2.00 | 3/14/2023 | 1.00 | Residential Sales | $458,953.06 | 458,953.06 |
| 3/13/2023 | 5/15/2024 | 430.00 | 5/15/2024 | 429.00 | Residential Sales | $194.76 | 83,552.04 |
| 3/13/2023 | 3/28/2023 | 16.00 | 3/28/2023 | 15.00 | Commercial Sales | $2,048.10 | 30,721.50 |
| 3/13/2023 | 11/15/2023 | 248.00 | 11/15/2023 | 247.00 | Residential Sales | $18.01 | 4,448.47 |
| 3/14/2023 | 4/17/2023 | 35.00 | 4/17/2023 | 34.00 | Residential Sales | $204.87 | 6,965.58 |
| 3/14/2023 | 3/24/2023 | 11.00 | 3/24/2023 | 10.00 | Commercial Sales | $82.56 | 825.60 |
| 3/14/2023 | 3/23/2023 | 10.00 | 3/23/2023 | 9.00 | Residential Sales | $314.91 | 2,834.19 |
| 3/14/2023 | 5/26/2023 | 74.00 | 5/26/2023 | 73.00 | Residential Sales | $85.34 | 6,229.82 |
| 3/14/2023 | 6/5/2023 | 84.00 | 6/5/2023 | 83.00 | Residential Sales | $48.99 | 4,066.17 |
| 3/14/2023 | 11/27/2023 | 259.00 | 11/27/2023 | 258.00 | Residential Sales | $79.72 | 20,567.76 |
| 3/14/2023 | 4/3/2023 | 21.00 | 4/3/2023 | 20.00 | Residential Sales | $18.41 | 368.20 |
| 3/14/2023 | 3/27/2023 | 14.00 | 3/27/2023 | 13.00 | Commercial Sales | $18.61 | 241.93 |
| 3/14/2023 | 3/27/2023 | 14.00 | 3/27/2023 | 13.00 | Residential Sales | $38.80 | 504.40 |
| 3/14/2023 | 3/29/2023 | 16.00 | 3/29/2023 | 15.00 | Commercial Sales | $35.82 | 537.30 |
| 3/14/2023 | 4/6/2023 | 24.00 | 4/6/2023 | 23.00 | Residential Sales | $34.00 | 782.00 |
| 3/14/2023 | 3/15/2023 | 2.00 | 3/15/2023 | 1.00 | Industrial Service | $154,846.69 | 154,846.69 |
| 3/14/2023 | 3/14/2023 | 1.00 | 3/14/2023 | 0.00 | Commercial Sales | $229.04 | - |
| 3/14/2023 | 6/9/2023 | 88.00 | 6/9/2023 | 87.00 | Residential Sales | $33.91 | 2,950.17 |
| 3/14/2023 | 3/15/2023 | 2.00 | 3/15/2023 | 1.00 | Commercial Sales | $390,768.38 | 390,768.38 |
| 3/14/2023 | 3/14/2023 | 1.00 | 3/14/2023 | 0.00 | Residential Sales | $998.97 | - |
| 3/14/2023 | 3/16/2023 | 3.00 | 3/16/2023 | 2.00 | Industrial Service | $117,168.52 | 234,337.04 |
| 3/14/2023 | 3/15/2023 | 2.00 | 3/15/2023 | 1.00 | Residential Sales | $654,108.01 | 654,108.01 |
| 3/14/2023 | 3/16/2023 | 3.00 | 3/16/2023 | 2.00 | Commercial Sales | $194,635.02 | 389,270.04 |
| 3/14/2023 | 3/14/2023 | 1.00 | 3/14/2023 | 0.00 | Other Sales to Public Authority | $14.14 | - |
| 3/14/2023 | 3/17/2023 | 4.00 | 3/17/2023 | 3.00 | Industrial Service | $8,766.92 | 26,300.76 |
| 3/14/2023 | 3/17/2023 | 4.00 | 3/17/2023 | 3.00 | Commercial Sales | $12,597.29 | 37,791.87 |
| 3/14/2023 | 3/16/2023 | 3.00 | 3/16/2023 | 2.00 | Residential Sales | $11,960.86 | 23,921.72 |
| 3/14/2023 | 3/15/2023 | 2.00 | 3/15/2023 | 1.00 | Other Sales to Public Authority | $1,641.65 | 1,641.65 |
| 3/14/2023 | 3/30/2023 | 17.00 | 3/30/2023 | 16.00 | Residential Sales | $262.67 | 4,202.72 |
| 3/14/2023 | 3/16/2023 | 3.00 | 3/16/2023 | 2.00 | Other Sales to Public Authority | $928.24 | 1,856.48 |
| 3/14/2023 | 3/17/2023 | 4.00 | 3/17/2023 | 3.00 | Residential Sales | $3,917.98 | 11,753.94 |
| 3/14/2023 | 3/14/2023 | 1.00 | 3/14/2023 | 0.00 | Public Street & Highway Lighting | $10.68 | - |
| 3/14/2023 | 4/10/2023 | 28.00 | 4/10/2023 | 27.00 | Commercial Sales | $22.32 | 602.64 |
| 3/14/2023 | 3/17/2023 | 4.00 | 3/17/2023 | 3.00 | Other Sales to Public Authority | $20.68 | 62.04 |
| 3/14/2023 | 5/5/2023 | 53.00 | 5/5/2023 | 52.00 | Residential Sales | $9.46 | 491.92 |
| 3/14/2023 | 4/11/2023 | 29.00 | 4/11/2023 | 28.00 | Residential Sales | $61.98 | 1,735.44 |
| 3/14/2023 | 4/28/2023 | 46.00 | 4/28/2023 | 45.00 | Residential Sales | $16.69 | 751.05 |
| 3/14/2023 | 3/20/2023 | 7.00 | 3/20/2023 | 6.00 | Industrial Service | $247,202.07 | 1,483,212.42 |
| 3/14/2023 | 8/30/2023 | 170.00 | 8/30/2023 | 169.00 | Residential Sales | $22.98 | 3,883.62 |
| 3/14/2023 | 3/20/2023 | 7.00 | 3/20/2023 | 6.00 | Commercial Sales | $31,745.36 | 190,472.16 |
| 3/14/2023 | 5/6/2024 | 420.00 | 5/6/2024 | 419.00 | Residential Sales | $21.92 | 9,184.48 |
| 3/14/2023 | 3/20/2023 | 7.00 | 3/20/2023 | 6.00 | Residential Sales | $644.15 | 3,864.90 |
| 3/14/2023 | 3/21/2023 | 8.00 | 3/21/2023 | 7.00 | Commercial Sales | $694.39 | 4,860.73 |
| 3/14/2023 | 4/14/2023 | 32.00 | 4/14/2023 | 31.00 | Residential Sales | $133.24 | 4,130.44 |
| 3/14/2023 | 3/5/2024 | 358.00 | 3/5/2024 | 357.00 | Residential Sales | $37.92 | 13,537.44 |
| 3/14/2023 | 3/21/2023 | 8.00 | 3/21/2023 | 7.00 | Residential Sales | $527.40 | 3,691.80 |
| 3/14/2023 | 3/22/2023 | 9.00 | 3/22/2023 | 8.00 | Commercial Sales | $19,354.61 | 154,836.88 |
| 3/14/2023 | 3/23/2023 | 10.00 | 3/23/2023 | 9.00 | Commercial Sales | $113.74 | 1,023.66 |
| 3/14/2023 | 3/22/2023 | 9.00 | 3/22/2023 | 8.00 | Residential Sales | $20.50 | 164.00 |
| 3/14/2023 | 12/18/2023 | 280.00 | 12/18/2023 | 279.00 | Commercial Sales | $546.70 | 152,529.30 |
| 3/14/2023 | 5/24/2023 | 72.00 | 5/24/2023 | 71.00 | Residential Sales | $29.58 | 2,100.18 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 3/15/2023 | 3/20/2023 | 6.00 | 3/20/2023 | 5.00 | Industrial Service | $5,860.34 | 29,301.70 |
| 3/15/2023 | 3/20/2023 | 6.00 | 3/20/2023 | 5.00 | Commercial Sales | $51,798.72 | 258,993.60 |
| 3/15/2023 | 3/21/2023 | 7.00 | 3/21/2023 | 6.00 | Commercial Sales | $10,217.59 | 61,305.54 |
| 3/15/2023 | 3/20/2023 | 6.00 | 3/20/2023 | 5.00 | Residential Sales | $3,389.28 | 16,946.40 |
| 3/15/2023 | 3/21/2023 | 7.00 | 3/21/2023 | 6.00 | Residential Sales | $431.75 | 2,590.50 |
| 3/15/2023 | 3/22/2023 | 8.00 | 3/22/2023 | 7.00 | Commercial Sales | $309.28 | 2,164.96 |
| 3/15/2023 | 3/15/2023 | 1.00 | 3/15/2023 | 0.00 | Other Public Authority Transportation On | $26.69 | - |
| 3/15/2023 | 3/22/2023 | 8.00 | 3/22/2023 | 7.00 | Residential Sales | $146.45 | 1,025.15 |
| 3/15/2023 | 3/23/2023 | 9.00 | 3/23/2023 | 8.00 | Commercial Sales | $246.33 | 1,970.64 |
| 3/15/2023 | 10/30/2023 | 230.00 | 10/30/2023 | 229.00 | Residential Sales | $49.99 | 11,447.71 |
| 3/15/2023 | 3/24/2023 | 10.00 | 3/24/2023 | 9.00 | Commercial Sales | $39.43 | 354.87 |
| 3/15/2023 | 3/15/2023 | 1.00 | 3/15/2023 | 0.00 | Company Use | $12.72 | - |
| 3/15/2023 | 3/16/2023 | 2.00 | 3/16/2023 | 1.00 | Company Use | $0.00 | - |
| 3/15/2023 | 3/17/2023 | 3.00 | 3/17/2023 | 2.00 | Company Use | -$2,867.82 | (5,735.64) |
| 3/15/2023 | 4/3/2023 | 20.00 | 4/3/2023 | 19.00 | Commercial Sales | $6.06 | 115.14 |
| 3/15/2023 | 4/3/2023 | 20.00 | 4/3/2023 | 19.00 | Residential Sales | $54.29 | 1,031.51 |
| 3/15/2023 | 8/23/2023 | 162.00 | 8/23/2023 | 161.00 | Residential Sales | $75.49 | 12,153.89 |
| 3/15/2023 | 4/5/2023 | 22.00 | 4/5/2023 | 21.00 | Residential Sales | $23.08 | 484.68 |
| 3/15/2023 | 3/28/2023 | 14.00 | 3/28/2023 | 13.00 | Residential Sales | $8.96 | 116.48 |
| 3/15/2023 | 11/15/2023 | 246.00 | 11/15/2023 | 245.00 | Commercial Sales | $37.22 | 9,118.90 |
| 3/15/2023 | 3/15/2023 | 1.00 | 3/15/2023 | 0.00 | Commercial Sales | $459.62 | - |
| 3/15/2023 | 3/16/2023 | 2.00 | 3/16/2023 | 1.00 | Industrial Service | $26,317.07 | 26,317.07 |
| 3/15/2023 | 3/20/2023 | 6.00 | 3/20/2023 | 5.00 | Company Use | $0.00 | - |
| 3/15/2023 | 3/16/2023 | 2.00 | 3/16/2023 | 1.00 | Commercial Sales | $272,193.44 | 272,193.44 |
| 3/15/2023 | 3/17/2023 | 3.00 | 3/17/2023 | 2.00 | Industrial Service | $16,276.64 | 32,553.28 |
| 3/15/2023 | 3/21/2023 | 7.00 | 3/21/2023 | 6.00 | Company Use | $0.00 | - |
| 3/15/2023 | 3/15/2023 | 1.00 | 3/15/2023 | 0.00 | Residential Sales | $730.20 | - |
| 3/15/2023 | 3/16/2023 | 2.00 | 3/16/2023 | 1.00 | Residential Sales | $485,484.12 | 485,484.12 |
| 3/15/2023 | 3/17/2023 | 3.00 | 3/17/2023 | 2.00 | Commercial Sales | $44,055.18 | 88,110.36 |
| 3/15/2023 | 3/17/2023 | 3.00 | 3/17/2023 | 2.00 | Residential Sales | $5,589.98 | 11,179.96 |
| 3/15/2023 | 3/16/2023 | 2.00 | 3/16/2023 | 1.00 | Other Sales to Public Authority | $13,470.56 | 13,470.56 |
| 3/15/2023 | 5/2/2023 | 49.00 | 5/2/2023 | 48.00 | Residential Sales | $59.23 | 2,843.04 |
| 3/15/2023 | 3/15/2023 | 1.00 | 3/15/2023 | 0.00 | Public Street & Highway Lighting | $332.49 | - |
| 3/15/2023 | 3/17/2023 | 3.00 | 3/17/2023 | 2.00 | Other Sales to Public Authority | $345.69 | 691.38 |
| 3/15/2023 | 10/27/2023 | 227.00 | 10/27/2023 | 226.00 | Residential Sales | $139.93 | 31,624.18 |
| 3/16/2023 | 3/17/2023 | 2.00 | 3/17/2023 | 1.00 | Commercial Sales | $64,344.38 | 64,344.38 |
| 3/16/2023 | 3/16/2023 | 1.00 | 3/16/2023 | 0.00 | Residential Sales | $478.70 | - |
| 3/16/2023 | 4/24/2023 | 40.00 | 4/24/2023 | 39.00 | Residential Sales | $13.61 | 530.79 |
| 3/16/2023 | 3/17/2023 | 2.00 | 3/17/2023 | 1.00 | Residential Sales | $472,610.08 | 472,610.08 |
| 3/16/2023 | 3/16/2023 | 1.00 | 3/16/2023 | 0.00 | Other Sales to Public Authority | $73.00 | - |
| 3/16/2023 | 3/17/2023 | 2.00 | 3/17/2023 | 1.00 | Other Sales to Public Authority | $11,938.07 | 11,938.07 |
| 3/16/2023 | 4/26/2023 | 42.00 | 4/26/2023 | 41.00 | Residential Sales | $4.44 | 182.04 |
| 3/16/2023 | 3/16/2023 | 1.00 | 3/16/2023 | 0.00 | Public Street & Highway Lighting | $2.57 | - |
| 3/16/2023 | 3/20/2023 | 5.00 | 3/20/2023 | 4.00 | Industrial Service | $346.42 | 1,385.68 |
| 3/16/2023 | 3/20/2023 | 5.00 | 3/20/2023 | 4.00 | Commercial Sales | $18,911.58 | 75,646.32 |
| 3/16/2023 | 3/21/2023 | 6.00 | 3/21/2023 | 5.00 | Industrial Service | $30,354.99 | 151,774.95 |
| 3/16/2023 | 3/20/2023 | 5.00 | 3/20/2023 | 4.00 | Residential Sales | $8,095.47 | 32,381.88 |
| 3/16/2023 | 3/21/2023 | 6.00 | 3/21/2023 | 5.00 | Commercial Sales | $18.61 | 93.05 |
| 3/16/2023 | 3/21/2023 | 6.00 | 3/21/2023 | 5.00 | Residential Sales | $2,788.09 | 13,940.45 |
| 3/16/2023 | 3/20/2023 | 5.00 | 3/20/2023 | 4.00 | Other Sales to Public Authority | $24,739.73 | 98,958.92 |
| 3/16/2023 | 3/22/2023 | 7.00 | 3/22/2023 | 6.00 | Commercial Sales | $292.08 | 1,752.48 |
| 3/16/2023 | 3/22/2023 | 7.00 | 3/22/2023 | 6.00 | Residential Sales | $668.23 | 4,009.38 |
| 3/16/2023 | 3/23/2023 | 8.00 | 3/23/2023 | 7.00 | Residential Sales | $655.61 | 4,589.27 |
| 3/16/2023 | 3/22/2023 | 7.00 | 3/22/2023 | 6.00 | Other Sales to Public Authority | $172.83 | 1,036.98 |
| 3/16/2023 | 6/19/2023 | 96.00 | 6/19/2023 | 95.00 | Residential Sales | $33.38 | 3,171.10 |
| 3/16/2023 | 3/24/2023 | 9.00 | 3/24/2023 | 8.00 | Commercial Sales | $207.83 | 1,662.64 |
| 3/16/2023 | 4/17/2023 | 33.00 | 4/17/2023 | 32.00 | Residential Sales | $53.21 | 1,702.72 |
| 3/16/2023 | 3/24/2023 | 9.00 | 3/24/2023 | 8.00 | Residential Sales | $385.53 | 3,084.24 |
| 3/16/2023 | 5/11/2023 | 57.00 | 5/11/2023 | 56.00 | Residential Sales | $25.36 | 1,420.16 |
| 3/16/2023 | 3/27/2023 | 12.00 | 3/27/2023 | 11.00 | Commercial Sales | $83.01 | 913.11 |
| 3/16/2023 | 4/3/2023 | 19.00 | 4/3/2023 | 18.00 | Residential Sales | $99.76 | 1,795.68 |
| 3/16/2023 | 3/28/2023 | 13.00 | 3/28/2023 | 12.00 | Commercial Sales | $23.29 | 279.48 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 3/16/2023 | 3/28/2023 | 13.00 | 3/28/2023 | 12.00 | Residential Sales | $41.70 | 500.40 |
| 3/16/2023 | 5/16/2023 | 62.00 | 5/16/2023 | 61.00 | Commercial Sales | $41.92 | 2,557.12 |
| 3/16/2023 | 3/16/2023 | 1.00 | 3/16/2023 | 0.00 | Commercial Sales | $233.50 | - |
| 3/16/2023 | 3/17/2023 | 2.00 | 3/17/2023 | 1.00 | Industrial Service | $389.21 | 389.21 |
| 3/16/2023 | 5/17/2023 | 63.00 | 5/17/2023 | 62.00 | Residential Sales | $259.04 | 16,060.48 |
| 3/17/2023 | 3/29/2023 | 13.00 | 3/29/2023 | 12.00 | Commercial Sales | $270.16 | 3,241.92 |
| 3/17/2023 | 4/6/2023 | 21.00 | 4/6/2023 | 20.00 | Residential Sales | $34.47 | 689.40 |
| 3/17/2023 | 3/31/2023 | 15.00 | 3/31/2023 | 14.00 | Industrial Service | $12,588.72 | 176,242.08 |
| 3/17/2023 | 7/19/2023 | 125.00 | 7/19/2023 | 124.00 | Residential Sales | $15.95 | 1,977.80 |
| 3/17/2023 | 3/17/2023 | 1.00 | 3/17/2023 | 0.00 | Commercial Sales | $457.84 | - |
| 3/17/2023 | 3/17/2023 | 1.00 | 3/17/2023 | 0.00 | Residential Sales | $880.88 | - |
| 3/17/2023 | 9/7/2023 | 175.00 | 9/7/2023 | 174.00 | Commercial Sales | $97.95 | 17,043.30 |
| 3/17/2023 | 3/17/2023 | 1.00 | 3/17/2023 | 0.00 | Other Sales to Public Authority | $28.29 | - |
| 3/17/2023 | 4/11/2023 | 26.00 | 4/11/2023 | 25.00 | Commercial Sales | $154.96 | 3,874.00 |
| 3/17/2023 | 3/17/2023 | 1.00 | 3/17/2023 | 0.00 | Public Street & Highway Lighting | $125.90 | - |
| 3/17/2023 | 3/20/2023 | 4.00 | 3/20/2023 | 3.00 | Industrial Service | $64,446.26 | 193,338.78 |
| 3/17/2023 | 4/29/2023 | 44.00 | 4/29/2023 | 43.00 | Residential Sales | $25.91 | 1,114.13 |
| 3/17/2023 | 3/20/2023 | 4.00 | 3/20/2023 | 3.00 | Commercial Sales | $176,815.97 | 530,447.91 |
| 3/17/2023 | 3/21/2023 | 5.00 | 3/21/2023 | 4.00 | Industrial Service | $14,302.81 | 57,211.24 |
| 3/17/2023 | 3/20/2023 | 4.00 | 3/20/2023 | 3.00 | Residential Sales | $688,207.95 | 2,064,623.85 |
| 3/17/2023 | 3/21/2023 | 5.00 | 3/21/2023 | 4.00 | Commercial Sales | $85,341.00 | 341,364.00 |
| 3/17/2023 | 3/21/2023 | 5.00 | 3/21/2023 | 4.00 | Residential Sales | $5,952.49 | 23,809.96 |
| 3/17/2023 | 3/22/2023 | 6.00 | 3/22/2023 | 5.00 | Commercial Sales | $2,090.39 | 10,451.95 |
| 3/17/2023 | 3/20/2023 | 4.00 | 3/20/2023 | 3.00 | Other Sales to Public Authority | $6,676.97 | 20,030.91 |
| 3/17/2023 | 3/21/2023 | 5.00 | 3/21/2023 | 4.00 | Other Sales to Public Authority | $397.09 | 1,588.36 |
| 3/17/2023 | 3/22/2023 | 6.00 | 3/22/2023 | 5.00 | Residential Sales | $1,731.97 | 8,659.85 |
| 3/17/2023 | 3/23/2023 | 7.00 | 3/23/2023 | 6.00 | Commercial Sales | $8,019.38 | 48,116.28 |
| 3/17/2023 | 3/23/2023 | 7.00 | 3/23/2023 | 6.00 | Residential Sales | $2,129.29 | 12,775.74 |
| 3/17/2023 | 3/24/2023 | 8.00 | 3/24/2023 | 7.00 | Residential Sales | $311.16 | 2,178.12 |
| 3/17/2023 | 4/19/2023 | 34.00 | 4/19/2023 | 33.00 | Residential Sales | $8.94 | 295.02 |
| 3/17/2023 | 3/27/2023 | 11.00 | 3/27/2023 | 10.00 | Commercial Sales | $214.51 | 2,145.10 |
| 3/17/2023 | 3/27/2023 | 11.00 | 3/27/2023 | 10.00 | Residential Sales | $263.20 | 2,632.00 |
| 3/18/2023 | 3/23/2023 | 6.00 | 3/23/2023 | 5.00 | Residential Sales | $7.12 | 35.60 |
| 3/18/2023 | 3/20/2023 | 3.00 | 3/20/2023 | 2.00 | Residential Sales | $1,288.60 | 2,577.20 |
| 3/18/2023 | 3/22/2023 | 5.00 | 3/22/2023 | 4.00 | Residential Sales | $63.39 | 253.56 |
| 3/19/2023 | 3/20/2023 | 2.00 | 3/20/2023 | 1.00 | Commercial Sales | $527.12 | 527.12 |
| 3/19/2023 | 3/20/2023 | 2.00 | 3/20/2023 | 1.00 | Residential Sales | $1,387.16 | 1,387.16 |
| 3/19/2023 | 3/21/2023 | 3.00 | 3/21/2023 | 2.00 | Commercial Sales | $58.05 | 116.10 |
| 3/19/2023 | 3/21/2023 | 3.00 | 3/21/2023 | 2.00 | Residential Sales | $301.64 | 603.28 |
| 3/19/2023 | 3/22/2023 | 4.00 | 3/22/2023 | 3.00 | Residential Sales | $102.51 | 307.53 |
| 3/19/2023 | 3/23/2023 | 5.00 | 3/23/2023 | 4.00 | Commercial Sales | $63.64 | 254.56 |
| 3/19/2023 | 3/23/2023 | 5.00 | 3/23/2023 | 4.00 | Residential Sales | $172.38 | 689.52 |
| 3/19/2023 | 3/24/2023 | 6.00 | 3/24/2023 | 5.00 | Residential Sales | $97.85 | 489.25 |
| 3/19/2023 | 4/19/2023 | 32.00 | 4/19/2023 | 31.00 | Residential Sales | $8.23 | 255.13 |
| 3/19/2023 | 3/27/2023 | 9.00 | 3/27/2023 | 8.00 | Residential Sales | $48.04 | 384.32 |
| 3/19/2023 | 4/20/2023 | 33.00 | 4/20/2023 | 32.00 | Residential Sales | $3.68 | 117.76 |
| 3/19/2023 | 4/10/2023 | 23.00 | 4/10/2023 | 22.00 | Commercial Sales | $11.50 | 253.00 |
| 3/20/2023 | 3/20/2023 | 1.00 | 3/20/2023 | 0.00 | Commercial Sales | $2,746.75 | - |
| 3/20/2023 | 3/20/2023 | 1.00 | 3/20/2023 | 0.00 | Residential Sales | $5,341.14 | - |
| 3/20/2023 | 3/21/2023 | 2.00 | 3/21/2023 | 1.00 | Commercial Sales | $1,629.57 | 1,629.57 |
| 3/20/2023 | 3/21/2023 | 2.00 | 3/21/2023 | 1.00 | Residential Sales | $3,150.80 | 3,150.80 |
| 3/20/2023 | 3/22/2023 | 3.00 | 3/22/2023 | 2.00 | Residential Sales | $597.32 | 1,194.64 |
| 3/20/2023 | 3/24/2023 | 5.00 | 3/24/2023 | 4.00 | Commercial Sales | $8.06 | 32.24 |
| 3/20/2023 | 3/24/2023 | 5.00 | 3/24/2023 | 4.00 | Residential Sales | $156.91 | 627.64 |
| 3/20/2023 | 3/27/2023 | 8.00 | 3/27/2023 | 7.00 | Commercial Sales | $62.90 | 440.30 |
| 3/20/2023 | 3/27/2023 | 8.00 | 3/27/2023 | 7.00 | Residential Sales | $20.34 | 142.38 |
| 3/20/2023 | 3/28/2023 | 9.00 | 3/28/2023 | 8.00 | Residential Sales | $9.78 | 78.24 |
| 3/21/2023 | 3/30/2023 | 10.00 | 3/30/2023 | 9.00 | Residential Sales | $104.64 | 941.76 |
| 3/21/2023 | 10/23/2023 | 217.00 | 10/23/2023 | 216.00 | Residential Sales | $71.77 | 15,502.32 |
| 3/21/2023 | 3/31/2023 | 11.00 | 3/31/2023 | 10.00 | Residential Sales | $78.74 | 787.40 |
| 3/21/2023 | 4/11/2023 | 22.00 | 4/11/2023 | 21.00 | Commercial Sales | $203.79 | 4,279.59 |
| 3/21/2023 | 4/10/2023 | 21.00 | 4/10/2023 | 20.00 | Residential Sales | $34.54 | 690.80 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 3/21/2023 | 4/11/2023 | 22.00 | 4/11/2023 | 21.00 | Residential Sales | $75.91 | 1,594.11 |
| 3/21/2023 | 4/12/2023 | 23.00 | 4/12/2023 | 22.00 | Residential Sales | $9.00 | 198.00 |
| 3/21/2023 | 3/21/2023 | 1.00 | 3/21/2023 | 0.00 | Commercial Sales | $165.42 | - |
| 3/21/2023 | 3/22/2023 | 2.00 | 3/22/2023 | 1.00 | Industrial Service | $7,879.23 | 7,879.23 |
| 3/21/2023 | 3/22/2023 | 2.00 | 3/22/2023 | 1.00 | Commercial Sales | $120,318.02 | 120,318.02 |
| 3/21/2023 | 3/21/2023 | 1.00 | 3/21/2023 | 0.00 | Residential Sales | $637.51 | - |
| 3/21/2023 | 9/28/2023 | 192.00 | 9/28/2023 | 191.00 | Commercial Sales | $107.21 | 20,477.11 |
| 3/21/2023 | 3/23/2023 | 3.00 | 3/23/2023 | 2.00 | Industrial Service | $4,976.32 | 9,952.64 |
| 3/21/2023 | 3/22/2023 | 2.00 | 3/22/2023 | 1.00 | Residential Sales | $494,071.48 | 494,071.48 |
| 3/21/2023 | 3/23/2023 | 3.00 | 3/23/2023 | 2.00 | Commercial Sales | $43,665.52 | 87,331.04 |
| 3/21/2023 | 3/23/2023 | 3.00 | 3/23/2023 | 2.00 | Residential Sales | $7,516.92 | 15,033.84 |
| 3/21/2023 | 3/24/2023 | 4.00 | 3/24/2023 | 3.00 | Commercial Sales | $2,386.21 | 7,158.63 |
| 3/21/2023 | 3/22/2023 | 2.00 | 3/22/2023 | 1.00 | Other Sales to Public Authority | $9,104.96 | 9,104.96 |
| 3/21/2023 | 9/29/2023 | 193.00 | 9/29/2023 | 192.00 | Residential Sales | $22.36 | 4,293.12 |
| 3/21/2023 | 3/24/2023 | 4.00 | 3/24/2023 | 3.00 | Residential Sales | $2,205.01 | 6,615.03 |
| 3/21/2023 | 3/23/2023 | 3.00 | 3/23/2023 | 2.00 | Other Sales to Public Authority | $523.03 | 1,046.06 |
| 3/21/2023 | 3/21/2023 | 1.00 | 3/21/2023 | 0.00 | Public Street & Highway Lighting | $293.84 | - |
| 3/21/2023 | 4/4/2023 | 15.00 | 4/4/2023 | 14.00 | Industrial Service | $1,917.21 | 26,840.94 |
| 3/21/2023 | 3/27/2023 | 7.00 | 3/27/2023 | 6.00 | Commercial Sales | $155.41 | 932.46 |
| 3/21/2023 | 4/5/2023 | 16.00 | 4/5/2023 | 15.00 | Commercial Sales | $28.29 | 424.35 |
| 3/21/2023 | 3/27/2023 | 7.00 | 3/27/2023 | 6.00 | Residential Sales | $353.30 | 2,119.80 |
| 3/21/2023 | 3/28/2023 | 8.00 | 3/28/2023 | 7.00 | Commercial Sales | $15,779.52 | 110,456.64 |
| 3/21/2023 | 3/28/2023 | 8.00 | 3/28/2023 | 7.00 | Residential Sales | $381.34 | 2,669.38 |
| 3/21/2023 | 3/29/2023 | 9.00 | 3/29/2023 | 8.00 | Commercial Sales | $171.02 | 1,368.16 |
| 3/21/2023 | 3/29/2023 | 9.00 | 3/29/2023 | 8.00 | Residential Sales | $70.18 | 561.44 |
| 3/21/2023 | 4/6/2023 | 17.00 | 4/6/2023 | 16.00 | Residential Sales | $106.22 | 1,699.52 |
| 3/21/2023 | 3/30/2023 | 10.00 | 3/30/2023 | 9.00 | Commercial Sales | $31,625.87 | 284,632.83 |
| 3/22/2023 | 4/6/2023 | 16.00 | 4/6/2023 | 15.00 | Commercial Sales | $55.01 | 825.15 |
| 3/22/2023 | 3/28/2023 | 7.00 | 3/28/2023 | 6.00 | Residential Sales | $286.22 | 1,717.32 |
| 3/22/2023 | 3/29/2023 | 8.00 | 3/29/2023 | 7.00 | Commercial Sales | $961.31 | 6,729.17 |
| 3/22/2023 | 3/29/2023 | 8.00 | 3/29/2023 | 7.00 | Residential Sales | $452.24 | 3,165.68 |
| 3/22/2023 | 3/28/2023 | 7.00 | 3/28/2023 | 6.00 | Other Sales to Public Authority | $16,494.99 | 98,969.94 |
| 3/22/2023 | 3/29/2023 | 8.00 | 3/29/2023 | 7.00 | Other Sales to Public Authority | $2,719.64 | 19,037.48 |
| 3/22/2023 | 4/21/2023 | 31.00 | 4/21/2023 | 30.00 | Residential Sales | $42.59 | 1,277.70 |
| 3/22/2023 | 3/30/2023 | 9.00 | 3/30/2023 | 8.00 | Residential Sales | $406.55 | 3,252.40 |
| 3/22/2023 | 4/10/2023 | 20.00 | 4/10/2023 | 19.00 | Commercial Sales | $301.32 | 5,725.08 |
| 3/22/2023 | 7/20/2023 | 121.00 | 7/20/2023 | 120.00 | Residential Sales | $28.54 | 3,424.80 |
| 3/22/2023 | 7/21/2023 | 122.00 | 7/21/2023 | 121.00 | Residential Sales | $57.59 | 6,968.39 |
| 3/22/2023 | 4/14/2023 | 24.00 | 4/14/2023 | 23.00 | Commercial Sales | $91.03 | 2,093.69 |
| 3/22/2023 | 3/22/2023 | 1.00 | 3/22/2023 | 0.00 | Commercial Sales | $34.40 | - |
| 3/22/2023 | 3/23/2023 | 2.00 | 3/23/2023 | 1.00 | Industrial Service | $1,072.26 | 1,072.26 |
| 3/22/2023 | 3/23/2023 | 2.00 | 3/23/2023 | 1.00 | Commercial Sales | $78,503.81 | 78,503.81 |
| 3/22/2023 | 3/22/2023 | 1.00 | 3/22/2023 | 0.00 | Residential Sales | $1,209.22 | - |
| 3/22/2023 | 4/17/2023 | 27.00 | 4/17/2023 | 26.00 | Commercial Sales | $124.34 | 3,232.84 |
| 3/22/2023 | 3/23/2023 | 2.00 | 3/23/2023 | 1.00 | Residential Sales | $663,227.75 | 663,227.75 |
| 3/22/2023 | 3/24/2023 | 3.00 | 3/24/2023 | 2.00 | Commercial Sales | $25,532.52 | 51,065.04 |
| 3/22/2023 | 3/24/2023 | 3.00 | 3/24/2023 | 2.00 | Residential Sales | $10,657.93 | 21,315.86 |
| 3/22/2023 | 3/23/2023 | 2.00 | 3/23/2023 | 1.00 | Other Sales to Public Authority | $2,987.29 | 2,987.29 |
| 3/22/2023 | 3/24/2023 | 3.00 | 3/24/2023 | 2.00 | Other Sales to Public Authority | $261.52 | 523.04 |
| 3/22/2023 | 3/22/2023 | 1.00 | 3/22/2023 | 0.00 | Public Street & Highway Lighting | $95.96 | - |
| 3/22/2023 | 5/10/2023 | 50.00 | 5/10/2023 | 49.00 | Residential Sales | $63.81 | 3,126.69 |
| 3/22/2023 | 4/4/2023 | 14.00 | 4/4/2023 | 13.00 | Industrial Service | $203.71 | 2,648.23 |
| 3/22/2023 | 3/27/2023 | 6.00 | 3/27/2023 | 5.00 | Commercial Sales | $25.71 | 128.55 |
| 3/22/2023 | 5/11/2023 | 51.00 | 5/11/2023 | 50.00 | Residential Sales | $23.23 | 1,161.50 |
| 3/22/2023 | 4/4/2023 | 14.00 | 4/4/2023 | 13.00 | Residential Sales | $9.71 | 126.23 |
| 3/22/2023 | 3/27/2023 | 6.00 | 3/27/2023 | 5.00 | Residential Sales | $1,479.93 | 7,399.65 |
| 3/23/2023 | 3/24/2023 | 2.00 | 3/24/2023 | 1.00 | Commercial Sales | $186,288.85 | 186,288.85 |
| 3/23/2023 | 3/23/2023 | 1.00 | 3/23/2023 | 0.00 | Residential Sales | $3,692.38 | - |
| 3/23/2023 | 4/17/2023 | 26.00 | 4/17/2023 | 25.00 | Residential Sales | $133.88 | 3,347.00 |
| 3/23/2023 | 3/24/2023 | 2.00 | 3/24/2023 | 1.00 | Residential Sales | $649,201.62 | 649,201.62 |
| 3/23/2023 | 3/23/2023 | 1.00 | 3/23/2023 | 0.00 | Other Sales to Public Authority | $7.37 | - |
| 3/23/2023 | 4/18/2023 | 27.00 | 4/18/2023 | 26.00 | Residential Sales | $424.11 | 11,026.86 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 3/23/2023 | 3/24/2023 | 2.00 | 3/24/2023 | 1.00 | Other Sales to Public Authority | $11,101.87 | 11,101.87 |
| 3/23/2023 | 3/27/2023 | 5.00 | 3/27/2023 | 4.00 | Industrial Service | $1,244.10 | 4,976.40 |
| 3/23/2023 | 3/27/2023 | 5.00 | 3/27/2023 | 4.00 | Commercial Sales | $44,292.62 | 177,170.48 |
| 3/23/2023 | 5/11/2023 | 50.00 | 5/11/2023 | 49.00 | Residential Sales | $81.87 | 4,011.63 |
| 3/23/2023 | 4/4/2023 | 13.00 | 4/4/2023 | 12.00 | Commercial Sales | $111.63 | 1,339.56 |
| 3/23/2023 | 3/23/2023 | 1.00 | 3/23/2023 | 0.00 | Public Street & Highway Lighting | $15.93 | - |
| 3/23/2023 | 3/28/2023 | 6.00 | 3/28/2023 | 5.00 | Industrial Service | $18,894.44 | 94,472.20 |
| 3/23/2023 | 3/27/2023 | 5.00 | 3/27/2023 | 4.00 | Residential Sales | $8,491.13 | 33,964.52 |
| 3/23/2023 | 3/28/2023 | 6.00 | 3/28/2023 | 5.00 | Commercial Sales | $27,760.62 | 138,803.10 |
| 3/23/2023 | 3/28/2023 | 6.00 | 3/28/2023 | 5.00 | Residential Sales | $1,892.54 | 9,462.70 |
| 3/23/2023 | 4/6/2023 | 15.00 | 4/6/2023 | 14.00 | Commercial Sales | $126.66 | 1,773.24 |
| 3/23/2023 | 4/4/2023 | 13.00 | 4/4/2023 | 12.00 | Other Sales to Public Authority | $10,985.99 | 131,831.88 |
| 3/23/2023 | 3/29/2023 | 7.00 | 3/29/2023 | 6.00 | Residential Sales | $218.22 | 1,309.32 |
| 3/23/2023 | 4/21/2023 | 30.00 | 4/21/2023 | 29.00 | Residential Sales | $14.36 | 416.44 |
| 3/23/2023 | 3/30/2023 | 8.00 | 3/30/2023 | 7.00 | Commercial Sales | $11.79 | 82.53 |
| 3/23/2023 | 8/10/2023 | 141.00 | 8/10/2023 | 140.00 | Residential Sales | $135.71 | 18,999.40 |
| 3/23/2023 | 4/24/2023 | 33.00 | 4/24/2023 | 32.00 | Residential Sales | $72.33 | 2,314.56 |
| 3/23/2023 | 3/30/2023 | 8.00 | 3/30/2023 | 7.00 | Residential Sales | $216.03 | 1,512.21 |
| 3/23/2023 | 6/26/2023 | 96.00 | 6/26/2023 | 95.00 | Residential Sales | $33.25 | 3,158.75 |
| 3/23/2023 | 3/31/2023 | 9.00 | 3/31/2023 | 8.00 | Residential Sales | $292.24 | 2,337.92 |
| 3/23/2023 | 4/25/2023 | 34.00 | 4/25/2023 | 33.00 | Residential Sales | $37.14 | 1,225.62 |
| 3/23/2023 | 4/10/2023 | 19.00 | 4/10/2023 | 18.00 | Commercial Sales | $82.84 | 1,491.12 |
| 3/23/2023 | 4/27/2023 | 36.00 | 4/27/2023 | 35.00 | Residential Sales | $113.58 | 3,975.30 |
| 3/23/2023 | 12/13/2023 | 266.00 | 12/13/2023 | 265.00 | Commercial Sales | $193.95 | 51,396.75 |
| 3/23/2023 | 4/28/2023 | 37.00 | 4/28/2023 | 36.00 | Residential Sales | $35.57 | 1,280.52 |
| 3/23/2023 | 12/14/2023 | 267.00 | 12/14/2023 | 266.00 | Commercial Sales | $117.29 | 31,199.14 |
| 3/23/2023 | 12/13/2023 | 266.00 | 12/13/2023 | 265.00 | Other Sales to Public Authority | $55.60 | 14,734.00 |
| 3/23/2023 | 3/24/2023 | 2.00 | 3/24/2023 | 1.00 | Industrial Service | $41,381.82 | 41,381.82 |
| 3/23/2023 | 3/23/2023 | 1.00 | 3/23/2023 | 0.00 | Commercial Sales | $1,659.34 | - |
| 3/23/2023 | 6/1/2023 | 71.00 | 6/1/2023 | 70.00 | Residential Sales | $171.16 | 11,981.20 |
| 3/23/2023 | 4/17/2023 | 26.00 | 4/17/2023 | 25.00 | Commercial Sales | $25.59 | 639.75 |
| 3/24/2023 | 4/13/2023 | 21.00 | 4/13/2023 | 20.00 | Commercial Sales | $230.29 | 4,605.80 |
| 3/24/2023 | 3/5/2024 | 348.00 | 3/5/2024 | 347.00 | Residential Sales | $29.68 | 10,298.96 |
| 3/24/2023 | 3/24/2023 | 1.00 | 3/24/2023 | 0.00 | Commercial Sales | $791.27 | - |
| 3/24/2023 | 3/24/2023 | 1.00 | 3/24/2023 | 0.00 | Residential Sales | $1,114.77 | - |
| 3/24/2023 | 3/27/2023 | 4.00 | 3/27/2023 | 3.00 | Industrial Service | $38,523.45 | 115,570.35 |
| 3/24/2023 | 3/27/2023 | 4.00 | 3/27/2023 | 3.00 | Commercial Sales | $293,036.55 | 879,109.65 |
| 3/24/2023 | 3/28/2023 | 5.00 | 3/28/2023 | 4.00 | Industrial Service | $359.06 | 1,436.24 |
| 3/24/2023 | 4/3/2023 | 11.00 | 4/3/2023 | 10.00 | Residential Sales | $51.55 | 515.50 |
| 3/24/2023 | 4/4/2023 | 12.00 | 4/4/2023 | 11.00 | Commercial Sales | $5,192.85 | 57,121.35 |
| 3/24/2023 | 3/27/2023 | 4.00 | 3/27/2023 | 3.00 | Residential Sales | $498,995.21 | 1,496,985.63 |
| 3/24/2023 | 3/28/2023 | 5.00 | 3/28/2023 | 4.00 | Commercial Sales | $134,828.20 | 539,312.80 |
| 3/24/2023 | 3/29/2023 | 6.00 | 3/29/2023 | 5.00 | Industrial Service | $10,427.45 | 52,137.25 |
| 3/24/2023 | 3/24/2023 | 1.00 | 3/24/2023 | 0.00 | Public Street & Highway Lighting | $8.53 | - |
| 3/24/2023 | 3/27/2023 | 4.00 | 3/27/2023 | 3.00 | Other Sales to Public Authority | $22,470.53 | 67,411.59 |
| 3/24/2023 | 3/28/2023 | 5.00 | 3/28/2023 | 4.00 | Residential Sales | $2,467.27 | 9,869.08 |
| 3/24/2023 | 3/29/2023 | 6.00 | 3/29/2023 | 5.00 | Commercial Sales | $24,656.02 | 123,280.10 |
| 3/24/2023 | 4/6/2023 | 14.00 | 4/6/2023 | 13.00 | Commercial Sales | $42.40 | 551.20 |
| 3/24/2023 | 3/28/2023 | 5.00 | 3/28/2023 | 4.00 | Other Sales to Public Authority | $1,772.37 | 7,089.48 |
| 3/24/2023 | 4/21/2023 | 29.00 | 4/21/2023 | 28.00 | Commercial Sales | $316.95 | 8,874.60 |
| 3/24/2023 | 3/29/2023 | 6.00 | 3/29/2023 | 5.00 | Residential Sales | $927.14 | 4,635.70 |
| 3/24/2023 | 3/29/2023 | 6.00 | 3/29/2023 | 5.00 | Other Sales to Public Authority | $7,011.62 | 35,058.10 |
| 3/24/2023 | 4/21/2023 | 29.00 | 4/21/2023 | 28.00 | Residential Sales | $122.29 | 3,424.12 |
| 3/24/2023 | 11/14/2023 | 236.00 | 11/14/2023 | 235.00 | Residential Sales | $109.79 | 25,800.65 |
| 3/24/2023 | 3/30/2023 | 7.00 | 3/30/2023 | 6.00 | Commercial Sales | $14,853.70 | 89,122.20 |
| 3/24/2023 | 3/30/2023 | 7.00 | 3/30/2023 | 6.00 | Residential Sales | $279.62 | 1,677.72 |
| 3/24/2023 | 3/31/2023 | 8.00 | 3/31/2023 | 7.00 | Commercial Sales | $3,833.52 | 26,834.64 |
| 3/24/2023 | 3/31/2023 | 8.00 | 3/31/2023 | 7.00 | Residential Sales | $128.13 | 896.91 |
| 3/24/2023 | 4/10/2023 | 18.00 | 4/10/2023 | 17.00 | Commercial Sales | $205.84 | 3,499.28 |
| 3/24/2023 | 4/11/2023 | 19.00 | 4/11/2023 | 18.00 | Commercial Sales | $76.46 | 1,376.28 |
| 3/24/2023 | 4/27/2023 | 35.00 | 4/27/2023 | 34.00 | Residential Sales | $11.83 | 402.22 |
| 3/24/2023 | 4/11/2023 | 19.00 | 4/11/2023 | 18.00 | Residential Sales | $96.86 | 1,743.48 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 3/25/2023 | 3/27/2023 | 3.00 | 3/27/2023 | 2.00 | Residential Sales | $225.92 | 451.84 |
| 3/25/2023 | 3/28/2023 | 4.00 | 3/28/2023 | 3.00 | Residential Sales | $73.12 | 219.36 |
| 3/25/2023 | 3/29/2023 | 5.00 | 3/29/2023 | 4.00 | Residential Sales | $14.45 | 57.80 |
| 3/26/2023 | 3/28/2023 | 3.00 | 3/28/2023 | 2.00 | Residential Sales | $487.62 | 975.24 |
| 3/26/2023 | 3/29/2023 | 4.00 | 3/29/2023 | 3.00 | Residential Sales | $396.86 | 1,190.58 |
| 3/26/2023 | 3/30/2023 | 5.00 | 3/30/2023 | 4.00 | Residential Sales | $21.26 | 85.04 |
| 3/26/2023 | 3/27/2023 | 2.00 | 3/27/2023 | 1.00 | Commercial Sales | $145.93 | 145.93 |
| 3/26/2023 | 3/27/2023 | 2.00 | 3/27/2023 | 1.00 | Residential Sales | $1,177.58 | 1,177.58 |
| 3/26/2023 | 3/28/2023 | 3.00 | 3/28/2023 | 2.00 | Commercial Sales | $17.91 | 35.82 |
| 3/27/2023 | 12/13/2023 | 262.00 | 12/13/2023 | 261.00 | Other Sales to Public Authority | $218.63 | 57,062.43 |
| 3/27/2023 | 4/18/2023 | 23.00 | 4/18/2023 | 22.00 | Residential Sales | $163.59 | 3,598.98 |
| 3/27/2023 | 4/3/2023 | 8.00 | 4/3/2023 | 7.00 | Commercial Sales | $3,523.85 | 24,666.95 |
| 3/27/2023 | 3/27/2023 | 1.00 | 3/27/2023 | 0.00 | Commercial Sales | $13,232.81 | - |
| 3/27/2023 | 3/28/2023 | 2.00 | 3/28/2023 | 1.00 | Industrial Service | $59,905.07 | 59,905.07 |
| 3/27/2023 | 4/3/2023 | 8.00 | 4/3/2023 | 7.00 | Residential Sales | $354.71 | 2,482.97 |
| 3/27/2023 | 4/4/2023 | 9.00 | 4/4/2023 | 8.00 | Commercial Sales | $615.78 | 4,926.24 |
| 3/27/2023 | 4/5/2023 | 10.00 | 4/5/2023 | 9.00 | Industrial Service | $18.61 | 167.49 |
| 3/27/2023 | 3/28/2023 | 2.00 | 3/28/2023 | 1.00 | Commercial Sales | $499,723.12 | 499,723.12 |
| 3/27/2023 | 3/29/2023 | 3.00 | 3/29/2023 | 2.00 | Industrial Service | $787.32 | 1,574.64 |
| 3/27/2023 | 3/27/2023 | 1.00 | 3/27/2023 | 0.00 | Residential Sales | $2,147.19 | - |
| 3/27/2023 | 4/5/2023 | 10.00 | 4/5/2023 | 9.00 | Commercial Sales | $32,262.06 | 290,358.54 |
| 3/27/2023 | 4/4/2023 | 9.00 | 4/4/2023 | 8.00 | Residential Sales | $119.66 | 957.28 |
| 3/27/2023 | 3/28/2023 | 2.00 | 3/28/2023 | 1.00 | Residential Sales | $610,564.15 | 610,564.15 |
| 3/27/2023 | 3/29/2023 | 3.00 | 3/29/2023 | 2.00 | Commercial Sales | $261,256.40 | 522,512.80 |
| 3/27/2023 | 4/6/2023 | 11.00 | 4/6/2023 | 10.00 | Commercial Sales | $15,126.53 | 151,265.30 |
| 3/27/2023 | 4/5/2023 | 10.00 | 4/5/2023 | 9.00 | Residential Sales | $67.05 | 603.45 |
| 3/27/2023 | 3/29/2023 | 3.00 | 3/29/2023 | 2.00 | Residential Sales | $10,846.98 | 21,693.96 |
| 3/27/2023 | 4/6/2023 | 11.00 | 4/6/2023 | 10.00 | Residential Sales | $30.09 | 300.90 |
| 3/27/2023 | 3/27/2023 | 1.00 | 3/27/2023 | 0.00 | Public Street & Highway Lighting | $5,944.01 | - |
| 3/27/2023 | 7/31/2023 | 127.00 | 7/31/2023 | 126.00 | Residential Sales | $71.68 | 9,031.68 |
| 3/27/2023 | 3/28/2023 | 2.00 | 3/28/2023 | 1.00 | Public Street & Highway Lighting | $3,350.45 | 3,350.45 |
| 3/27/2023 | 3/27/2023 | 1.00 | 3/27/2023 | 0.00 | Other Sales to Public Authority | $54.06 | - |
| 3/27/2023 | 3/30/2023 | 4.00 | 3/30/2023 | 3.00 | Commercial Sales | $34,052.39 | 102,157.17 |
| 3/27/2023 | 3/28/2023 | 2.00 | 3/28/2023 | 1.00 | Other Sales to Public Authority | $28,980.58 | 28,980.58 |
| 3/27/2023 | 3/30/2023 | 4.00 | 3/30/2023 | 3.00 | Residential Sales | $1,443.79 | 4,331.37 |
| 3/27/2023 | 4/5/2023 | 10.00 | 4/5/2023 | 9.00 | Other Sales to Public Authority | $7.67 | 69.03 |
| 3/27/2023 | 3/31/2023 | 5.00 | 3/31/2023 | 4.00 | Commercial Sales | $393.54 | 1,574.16 |
| 3/27/2023 | 4/24/2023 | 29.00 | 4/24/2023 | 28.00 | Residential Sales | $42.69 | 1,195.32 |
| 3/27/2023 | 5/1/2023 | 36.00 | 5/1/2023 | 35.00 | Residential Sales | $203.53 | 7,123.55 |
| 3/27/2023 | 4/25/2023 | 30.00 | 4/25/2023 | 29.00 | Residential Sales | $6.07 | 176.03 |
| 3/27/2023 | 3/31/2023 | 5.00 | 3/31/2023 | 4.00 | Residential Sales | $234.19 | 936.76 |
| 3/27/2023 | 3/29/2023 | 3.00 | 3/29/2023 | 2.00 | Other Sales to Public Authority | $8,228.72 | 16,457.44 |
| 3/27/2023 | 3/1/2024 | 341.00 | 3/1/2024 | 340.00 | Commercial Sales | $329.58 | 112,057.20 |
| 3/27/2023 | 4/10/2023 | 15.00 | 4/10/2023 | 14.00 | Commercial Sales | $49.51 | 693.14 |
| 3/27/2023 | 4/26/2023 | 31.00 | 4/26/2023 | 30.00 | Residential Sales | $172.23 | 5,166.90 |
| 3/27/2023 | 12/28/2023 | 277.00 | 12/28/2023 | 276.00 | Residential Sales | $29.94 | 8,263.44 |
| 3/27/2023 | 3/30/2023 | 4.00 | 3/30/2023 | 3.00 | Public Street & Highway Lighting | $3,287.58 | 9,862.74 |
| 3/27/2023 | 4/27/2023 | 32.00 | 4/27/2023 | 31.00 | Residential Sales | $75.73 | 2,347.63 |
| 3/27/2023 | 4/11/2023 | 16.00 | 4/11/2023 | 15.00 | Residential Sales | $115.86 | 1,737.90 |
| 3/27/2023 | 3/30/2023 | 4.00 | 3/30/2023 | 3.00 | Other Sales to Public Authority | $115.80 | 347.40 |
| 3/28/2023 | 3/30/2023 | 3.00 | 3/30/2023 | 2.00 | Other Sales to Public Authority | $16,242.03 | 32,484.06 |
| 3/28/2023 | 3/31/2023 | 4.00 | 3/31/2023 | 3.00 | Other Sales to Public Authority | $346.44 | 1,039.32 |
| 3/28/2023 | 4/10/2023 | 14.00 | 4/10/2023 | 13.00 | Other Sales to Public Authority | $39.06 | 507.78 |
| 3/28/2023 | 4/17/2023 | 21.00 | 4/17/2023 | 20.00 | Commercial Sales | $42.29 | 845.80 |
| 3/28/2023 | 4/17/2023 | 21.00 | 4/17/2023 | 20.00 | Residential Sales | $13.80 | 276.00 |
| 3/28/2023 | 12/13/2023 | 261.00 | 12/13/2023 | 260.00 | Other Sales to Public Authority | $204.13 | 53,073.80 |
| 3/28/2023 | 7/10/2023 | 105.00 | 7/10/2023 | 104.00 | Residential Sales | $86.84 | 9,031.36 |
| 3/28/2023 | 1/2/2024 | 281.00 | 1/2/2024 | 280.00 | Other Sales to Public Authority | $99.74 | 27,927.20 |
| 3/28/2023 | 4/3/2023 | 7.00 | 4/3/2023 | 6.00 | Commercial Sales | $13,218.56 | 79,311.36 |
| 3/28/2023 | 3/31/2023 | 4.00 | 3/31/2023 | 3.00 | Company Use | $154.19 | 462.57 |
| 3/28/2023 | 4/3/2023 | 7.00 | 4/3/2023 | 6.00 | Residential Sales | $1,171.74 | 7,030.44 |
| 3/28/2023 | 4/5/2023 | 9.00 | 4/5/2023 | 8.00 | Industrial Service | $125,841.23 | 1,006,729.84 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 3/28/2023 | 4/4/2023 | 8.00 | 4/4/2023 | 7.00 | Commercial Sales | $58.48 | 409.36 |
| 3/28/2023 | 3/28/2023 | 1.00 | 3/28/2023 | 0.00 | Commercial Sales | $23,362.06 | - |
| 3/28/2023 | 4/4/2023 | 8.00 | 4/4/2023 | 7.00 | Residential Sales | $213.47 | 1,494.29 |
| 3/28/2023 | 3/29/2023 | 2.00 | 3/29/2023 | 1.00 | Industrial Service | $138,139.58 | 138,139.58 |
| 3/28/2023 | 3/29/2023 | 2.00 | 3/29/2023 | 1.00 | Commercial Sales | $593,146.69 | 593,146.69 |
| 3/28/2023 | 4/6/2023 | 10.00 | 4/6/2023 | 9.00 | Commercial Sales | $149.22 | 1,342.98 |
| 3/28/2023 | 4/5/2023 | 9.00 | 4/5/2023 | 8.00 | Residential Sales | $58.83 | 470.64 |
| 3/28/2023 | 3/28/2023 | 1.00 | 3/28/2023 | 0.00 | Residential Sales | $1,043.89 | - |
| 3/28/2023 | 3/29/2023 | 2.00 | 3/29/2023 | 1.00 | Residential Sales | $548,611.25 | 548,611.25 |
| 3/28/2023 | 4/21/2023 | 25.00 | 4/21/2023 | 24.00 | Residential Sales | $3.72 | 89.28 |
| 3/28/2023 | 3/28/2023 | 1.00 | 3/28/2023 | 0.00 | Public Street & Highway Lighting | $1,331.50 | - |
| 3/28/2023 | 3/30/2023 | 3.00 | 3/30/2023 | 2.00 | Industrial Service | $44,323.37 | 88,646.74 |
| 3/28/2023 | 7/18/2023 | 113.00 | 7/18/2023 | 112.00 | Residential Sales | $94.62 | 10,597.44 |
| 3/28/2023 | 3/30/2023 | 3.00 | 3/30/2023 | 2.00 | Commercial Sales | $158,705.58 | 317,411.16 |
| 3/28/2023 | 7/19/2023 | 114.00 | 7/19/2023 | 113.00 | Residential Sales | $94.33 | 10,659.29 |
| 3/28/2023 | 3/31/2023 | 4.00 | 3/31/2023 | 3.00 | Industrial Service | $71,654.56 | 214,963.68 |
| 3/28/2023 | 3/30/2023 | 3.00 | 3/30/2023 | 2.00 | Residential Sales | $10,717.61 | 21,435.22 |
| 3/28/2023 | 3/31/2023 | 4.00 | 3/31/2023 | 3.00 | Commercial Sales | $107,800.95 | 323,402.85 |
| 3/28/2023 | 3/29/2023 | 2.00 | 3/29/2023 | 1.00 | Other Sales to Public Authority | $21,612.47 | 21,612.47 |
| 3/28/2023 | 3/31/2023 | 4.00 | 3/31/2023 | 3.00 | Residential Sales | $189.07 | 567.21 |
| 3/28/2023 | 4/26/2023 | 30.00 | 4/26/2023 | 29.00 | Commercial Sales | $2,669.30 | 77,409.70 |
| 3/28/2023 | 4/25/2023 | 29.00 | 4/25/2023 | 28.00 | Residential Sales | $13.24 | 370.72 |
| 3/28/2023 | 4/10/2023 | 14.00 | 4/10/2023 | 13.00 | Commercial Sales | $15,971.87 | 207,634.31 |
| 3/28/2023 | 6/12/2023 | 77.00 | 6/12/2023 | 76.00 | Commercial Sales | $18.61 | 1,414.36 |
| 3/28/2023 | 4/10/2023 | 14.00 | 4/10/2023 | 13.00 | Residential Sales | $461.92 | 6,004.96 |
| 3/28/2023 | 4/11/2023 | 15.00 | 4/11/2023 | 14.00 | Residential Sales | $111.02 | 1,554.28 |
| 3/29/2023 | 3/30/2023 | 2.00 | 3/30/2023 | 1.00 | Residential Sales | $608,603.20 | 608,603.20 |
| 3/29/2023 | 3/31/2023 | 3.00 | 3/31/2023 | 2.00 | Commercial Sales | $48,447.87 | 96,895.74 |
| 3/29/2023 | 3/31/2023 | 3.00 | 3/31/2023 | 2.00 | Residential Sales | $9,529.47 | 19,058.94 |
| 3/29/2023 | 4/10/2023 | 13.00 | 4/10/2023 | 12.00 | Commercial Sales | $1,459.04 | 17,508.48 |
| 3/29/2023 | 4/10/2023 | 13.00 | 4/10/2023 | 12.00 | Residential Sales | $184.25 | 2,211.00 |
| 3/29/2023 | 4/28/2023 | 31.00 | 4/28/2023 | 30.00 | Residential Sales | $35.46 | 1,063.80 |
| 3/29/2023 | 4/11/2023 | 14.00 | 4/11/2023 | 13.00 | Residential Sales | $22.46 | 291.98 |
| 3/29/2023 | 3/30/2023 | 2.00 | 3/30/2023 | 1.00 | Other Sales to Public Authority | $3,226.13 | 3,226.13 |
| 3/29/2023 | 3/31/2023 | 3.00 | 3/31/2023 | 2.00 | Other Sales to Public Authority | $10,357.78 | 20,715.56 |
| 3/29/2023 | 4/13/2023 | 16.00 | 4/13/2023 | 15.00 | Residential Sales | $35.20 | 528.00 |
| 3/29/2023 | 5/9/2023 | 42.00 | 5/9/2023 | 41.00 | Residential Sales | $214.46 | 8,792.86 |
| 3/29/2023 | 4/10/2023 | 13.00 | 4/10/2023 | 12.00 | Other Sales to Public Authority | $145.45 | 1,745.40 |
| 3/29/2023 | 4/18/2023 | 21.00 | 4/18/2023 | 20.00 | Residential Sales | $32.69 | 653.80 |
| 3/29/2023 | 4/3/2023 | 6.00 | 4/3/2023 | 5.00 | Commercial Sales | $27,240.71 | 136,203.55 |
| 3/29/2023 | 4/3/2023 | 6.00 | 4/3/2023 | 5.00 | Residential Sales | $5,261.83 | 26,309.15 |
| 3/29/2023 | 4/4/2023 | 7.00 | 4/4/2023 | 6.00 | Commercial Sales | $2,805.53 | 16,833.18 |
| 3/29/2023 | 4/4/2023 | 7.00 | 4/4/2023 | 6.00 | Residential Sales | $864.94 | 5,189.64 |
| 3/29/2023 | 4/5/2023 | 8.00 | 4/5/2023 | 7.00 | Commercial Sales | $224.90 | 1,574.30 |
| 3/29/2023 | 3/29/2023 | 1.00 | 3/29/2023 | 0.00 | Commercial Sales | $722.05 | - |
| 3/29/2023 | 3/29/2023 | 1.00 | 3/29/2023 | 0.00 | Residential Sales | $1,146.17 | - |
| 3/29/2023 | 4/20/2023 | 23.00 | 4/20/2023 | 22.00 | Residential Sales | $20.44 | 449.68 |
| 3/29/2023 | 4/21/2024 | 390.00 | 4/21/2024 | 389.00 | Commercial Sales | $29.71 | 11,557.19 |
| 3/29/2023 | 4/21/2023 | 24.00 | 4/21/2023 | 23.00 | Residential Sales | $63.64 | 1,463.72 |
| 3/29/2023 | 3/30/2023 | 2.00 | 3/30/2023 | 1.00 | Industrial Service | $329,251.53 | 329,251.53 |
| 3/29/2023 | 5/16/2023 | 49.00 | 5/16/2023 | 48.00 | Residential Sales | $78.42 | 3,764.16 |
| 3/29/2023 | 4/3/2023 | 6.00 | 4/3/2023 | 5.00 | Other Sales to Public Authority | $210.18 | 1,050.90 |
| 3/29/2023 | 3/30/2023 | 2.00 | 3/30/2023 | 1.00 | Commercial Sales | $141,329.13 | 141,329.13 |
| 3/29/2023 | 3/29/2023 | 1.00 | 3/29/2023 | 0.00 | Public Street & Highway Lighting | $842.92 | - |
| 3/29/2023 | 5/17/2023 | 50.00 | 5/17/2023 | 49.00 | Residential Sales | $103.64 | 5,078.36 |
| 3/29/2023 | 3/31/2023 | 3.00 | 3/31/2023 | 2.00 | Industrial Service | $677.38 | 1,354.76 |
| 3/30/2023 | 3/31/2023 | 2.00 | 3/31/2023 | 1.00 | Commercial Sales | $250,617.67 | 250,617.67 |
| 3/30/2023 | 3/30/2023 | 1.00 | 3/30/2023 | 0.00 | Residential Sales | $1,350.59 | - |
| 3/30/2023 | 5/31/2024 | 429.00 | 5/31/2024 | 428.00 | Residential Sales | $72.84 | 31,175.52 |
| 3/30/2023 | 4/24/2023 | 26.00 | 4/24/2023 | 25.00 | Residential Sales | $37.39 | 934.75 |
| 3/30/2023 | 4/5/2023 | 7.00 | 4/5/2023 | 6.00 | Other Sales to Public Authority | $32,937.58 | 197,625.48 |
| 3/30/2023 | 3/31/2023 | 2.00 | 3/31/2023 | 1.00 | Residential Sales | $500,951.15 | 500,951.15 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 3/30/2023 | 4/10/2023 | 12.00 | 4/10/2023 | 11.00 | Industrial Service | $49,089.30 | 539,982.30 |
| 3/30/2023 | 5/4/2023 | 36.00 | 5/4/2023 | 35.00 | Commercial Sales | $2,353.14 | 82,359.90 |
| 3/30/2023 | 4/10/2023 | 12.00 | 4/10/2023 | 11.00 | Commercial Sales | $162.29 | 1,785.19 |
| 3/30/2023 | 3/30/2023 | 1.00 | 3/30/2023 | 0.00 | Public Street & Highway Lighting | $508.92 | - |
| 3/30/2023 | 4/10/2023 | 12.00 | 4/10/2023 | 11.00 | Residential Sales | $307.84 | 3,386.24 |
| 3/30/2023 | 4/11/2023 | 13.00 | 4/11/2023 | 12.00 | Residential Sales | $113.41 | 1,360.92 |
| 3/30/2023 | 4/3/2023 | 5.00 | 4/3/2023 | 4.00 | Company Use | $0.00 | - |
| 3/30/2023 | 3/30/2023 | 1.00 | 3/30/2023 | 0.00 | Other Sales to Public Authority | $51.83 | - |
| 3/30/2023 | 4/29/2023 | 31.00 | 4/29/2023 | 30.00 | Residential Sales | $19.79 | 593.70 |
| 3/30/2023 | 3/31/2023 | 2.00 | 3/31/2023 | 1.00 | Other Sales to Public Authority | $35,156.95 | 35,156.95 |
| 3/30/2023 | 4/13/2023 | 15.00 | 4/13/2023 | 14.00 | Residential Sales | $247.72 | 3,468.08 |
| 3/30/2023 | 5/23/2023 | 55.00 | 5/23/2023 | 54.00 | Industrial Service | $47.37 | 2,557.98 |
| 3/30/2023 | 4/14/2023 | 16.00 | 4/14/2023 | 15.00 | Residential Sales | $69.28 | 1,039.20 |
| 3/30/2023 | 4/10/2023 | 12.00 | 4/10/2023 | 11.00 | Other Sales to Public Authority | $112.35 | 1,235.85 |
| 3/30/2023 | 4/17/2023 | 19.00 | 4/17/2023 | 18.00 | Commercial Sales | $170.63 | 3,071.34 |
| 3/30/2023 | 4/3/2023 | 5.00 | 4/3/2023 | 4.00 | Industrial Service | $15,543.91 | 62,175.64 |
| 3/30/2023 | 4/18/2023 | 20.00 | 4/18/2023 | 19.00 | Residential Sales | $52.86 | 1,004.34 |
| 3/30/2023 | 4/3/2023 | 5.00 | 4/3/2023 | 4.00 | Commercial Sales | $97,049.51 | 388,198.04 |
| 3/30/2023 | 4/4/2023 | 6.00 | 4/4/2023 | 5.00 | Industrial Service | $142,709.92 | 713,549.60 |
| 3/30/2023 | 4/3/2023 | 5.00 | 4/3/2023 | 4.00 | Residential Sales | $8,021.12 | 32,084.48 |
| 3/30/2023 | 4/4/2023 | 6.00 | 4/4/2023 | 5.00 | Commercial Sales | $6,751.96 | 33,759.80 |
| 3/30/2023 | 4/4/2023 | 6.00 | 4/4/2023 | 5.00 | Residential Sales | $11,624.59 | 58,122.95 |
| 3/30/2023 | 4/5/2023 | 7.00 | 4/5/2023 | 6.00 | Commercial Sales | $18,911.29 | 113,467.74 |
| 3/30/2023 | 8/8/2023 | 132.00 | 8/8/2023 | 131.00 | Residential Sales | $27.14 | 3,555.34 |
| 3/30/2023 | 4/6/2023 | 8.00 | 4/6/2023 | 7.00 | Commercial Sales | $1,229.05 | 8,603.35 |
| 3/30/2023 | 4/5/2023 | 7.00 | 4/5/2023 | 6.00 | Residential Sales | $318.20 | 1,909.20 |
| 3/30/2023 | 4/6/2023 | 8.00 | 4/6/2023 | 7.00 | Residential Sales | $404.88 | 2,834.16 |
| 3/30/2023 | 6/9/2023 | 72.00 | 6/9/2023 | 71.00 | Residential Sales | $39.54 | 2,807.34 |
| 3/30/2023 | 4/3/2023 | 5.00 | 4/3/2023 | 4.00 | Other Sales to Public Authority | $3,735.18 | 14,940.72 |
| 3/30/2023 | 4/4/2023 | 6.00 | 4/4/2023 | 5.00 | Other Sales to Public Authority | $15,383.86 | 76,919.30 |
| 3/30/2023 | 3/31/2023 | 2.00 | 3/31/2023 | 1.00 | Industrial Service | $141,254.11 | 141,254.11 |
| 3/30/2023 | 3/30/2023 | 1.00 | 3/30/2023 | 0.00 | Commercial Sales | $83.01 | - |
| 3/30/2023 | 8/10/2023 | 134.00 | 8/10/2023 | 133.00 | Residential Sales | $36.33 | 4,831.89 |
| 3/31/2023 | 4/5/2023 | 6.00 | 4/5/2023 | 5.00 | Residential Sales | $10.38 | 51.90 |
| 3/31/2023 | 4/12/2023 | 13.00 | 4/12/2023 | 12.00 | Residential Sales | $41.00 | 492.00 |
| 3/31/2023 | 4/17/2023 | 18.00 | 4/17/2023 | 17.00 | Commercial Sales | $19.72 | 335.24 |
| 3/31/2023 | 4/19/2023 | 20.00 | 4/19/2023 | 19.00 | Commercial Sales | $75.07 | 1,426.33 |
| 3/31/2023 | 4/3/2023 | 4.00 | 4/3/2023 | 3.00 | Commercial Sales | $233.83 | 701.49 |
| 3/31/2023 | 4/3/2023 | 4.00 | 4/3/2023 | 3.00 | Residential Sales | $8,981.46 | 26,944.38 |
| 3/31/2023 | 4/4/2023 | 5.00 | 4/4/2023 | 4.00 | Commercial Sales | $1,446.14 | 5,784.56 |
| 3/31/2023 | 4/4/2023 | 5.00 | 4/4/2023 | 4.00 | Residential Sales | $124.96 | 499.84 |
| 4/1/2023 | 4/3/2023 | 3.00 | 4/3/2023 | 2.00 | Residential Sales | $502,653.72 | 1,005,307.44 |
| 4/1/2023 | 4/4/2023 | 4.00 | 4/4/2023 | 3.00 | Commercial Sales | $118,990.92 | 356,972.76 |
| 4/1/2023 | 4/5/2023 | 5.00 | 4/5/2023 | 4.00 | Industrial Service | $152,719.07 | 610,876.28 |
| 4/1/2023 | 5/11/2023 | 41.00 | 5/11/2023 | 40.00 | Residential Sales | $29.48 | 1,179.20 |
| 4/1/2023 | 4/3/2023 | 3.00 | 4/3/2023 | 2.00 | Other Sales to Public Authority | $22,626.22 | 45,252.44 |
| 4/1/2023 | 4/5/2023 | 5.00 | 4/5/2023 | 4.00 | Commercial Sales | $39,462.88 | 157,851.52 |
| 4/1/2023 | 4/4/2023 | 4.00 | 4/4/2023 | 3.00 | Residential Sales | $2,265.65 | 6,796.95 |
| 4/1/2023 | 4/6/2023 | 6.00 | 4/6/2023 | 5.00 | Industrial Service | $5,341.62 | 26,708.10 |
| 4/1/2023 | 4/4/2023 | 4.00 | 4/4/2023 | 3.00 | Other Sales to Public Authority | $215,577.56 | 646,732.68 |
| 4/1/2023 | 4/6/2023 | 6.00 | 4/6/2023 | 5.00 | Commercial Sales | $2,573.17 | 12,865.85 |
| 4/1/2023 | 4/5/2023 | 5.00 | 4/5/2023 | 4.00 | Residential Sales | $920.66 | 3,682.64 |
| 4/1/2023 | 6/22/2023 | 83.00 | 6/22/2023 | 82.00 | Commercial Sales | $141.39 | 11,593.98 |
| 4/1/2023 | 4/20/2023 | 20.00 | 4/20/2023 | 19.00 | Residential Sales | $281.18 | 5,342.42 |
| 4/1/2023 | 4/6/2023 | 6.00 | 4/6/2023 | 5.00 | Residential Sales | $887.72 | 4,438.60 |
| 4/1/2023 | 4/3/2023 | 3.00 | 4/3/2023 | 2.00 | Public Street & Highway Lighting | $98.47 | 196.94 |
| 4/1/2023 | 4/5/2023 | 5.00 | 4/5/2023 | 4.00 | Other Sales to Public Authority | $11,928.77 | 47,715.08 |
| 4/1/2023 | 5/15/2023 | 45.00 | 5/15/2023 | 44.00 | Residential Sales | $57.34 | 2,522.96 |
| 4/1/2023 | 5/16/2023 | 46.00 | 5/16/2023 | 45.00 | Residential Sales | $29.82 | 1,341.90 |
| 4/1/2023 | 5/17/2023 | 47.00 | 5/17/2023 | 46.00 | Residential Sales | $153.43 | 7,057.78 |
| 4/1/2023 | 4/26/2023 | 26.00 | 4/26/2023 | 25.00 | Commercial Sales | $41.97 | 1,049.25 |
| 4/1/2023 | 9/21/2023 | 174.00 | 9/21/2023 | 173.00 | Commercial Sales | $318.48 | 55,097.04 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 4/1/2023 | 4/25/2023 | 25.00 | 4/25/2023 | 24.00 | Residential Sales | $24.27 | 582.48 |
| 4/1/2023 | 5/19/2023 | 49.00 | 5/19/2023 | 48.00 | Residential Sales | $31.05 | 1,490.40 |
| 4/1/2023 | 4/10/2023 | 10.00 | 4/10/2023 | 9.00 | Commercial Sales | $78.55 | 706.95 |
| 4/1/2023 | 4/10/2023 | 10.00 | 4/10/2023 | 9.00 | Residential Sales | $236.67 | 2,130.03 |
| 4/1/2023 | 4/11/2023 | 11.00 | 4/11/2023 | 10.00 | Commercial Sales | $89.93 | 899.30 |
| 4/1/2023 | 4/11/2023 | 11.00 | 4/11/2023 | 10.00 | Residential Sales | $440.51 | 4,405.10 |
| 4/1/2023 | 5/5/2023 | 35.00 | 5/5/2023 | 34.00 | Residential Sales | $49.75 | 1,691.50 |
| 4/1/2023 | 4/12/2023 | 12.00 | 4/12/2023 | 11.00 | Residential Sales | $593.36 | 6,526.96 |
| 4/1/2023 | 4/29/2023 | 29.00 | 4/29/2023 | 28.00 | Residential Sales | $313.81 | 8,786.68 |
| 4/1/2023 | 4/13/2023 | 13.00 | 4/13/2023 | 12.00 | Residential Sales | $33.66 | 403.92 |
| 4/1/2023 | 4/14/2023 | 14.00 | 4/14/2023 | 13.00 | Commercial Sales | $3,954.85 | 51,413.05 |
| 4/1/2023 | 3/20/2024 | 355.00 | 3/20/2024 | 354.00 | Commercial Sales | $18.37 | 6,502.98 |
| 4/1/2023 | 4/14/2023 | 14.00 | 4/14/2023 | 13.00 | Residential Sales | $256.38 | 3,332.94 |
| 4/1/2023 | 5/9/2023 | 39.00 | 5/9/2023 | 38.00 | Residential Sales | $29.82 | 1,133.16 |
| 4/1/2023 | 5/26/2023 | 56.00 | 5/26/2023 | 55.00 | Commercial Sales | $22.56 | 1,240.80 |
| 4/1/2023 | 4/17/2023 | 17.00 | 4/17/2023 | 16.00 | Residential Sales | $6.91 | 110.56 |
| 4/1/2023 | 4/19/2023 | 19.00 | 4/19/2023 | 18.00 | Commercial Sales | $23.49 | 422.82 |
| 4/1/2023 | 4/3/2023 | 3.00 | 4/3/2023 | 2.00 | Industrial Service | $14,493.93 | 28,987.86 |
| 4/1/2023 | 5/10/2023 | 40.00 | 5/10/2023 | 39.00 | Commercial Sales | $27.88 | 1,087.32 |
| 4/1/2023 | 5/26/2023 | 56.00 | 5/26/2023 | 55.00 | Residential Sales | $145.02 | 7,976.10 |
| 4/1/2023 | 4/18/2023 | 18.00 | 4/18/2023 | 17.00 | Residential Sales | $174.71 | 2,970.07 |
| 4/1/2023 | 4/3/2023 | 3.00 | 4/3/2023 | 2.00 | Commercial Sales | $173,580.73 | 347,161.46 |
| 4/1/2023 | 4/4/2023 | 4.00 | 4/4/2023 | 3.00 | Industrial Service | $371,420.70 | 1,114,262.10 |
| 4/1/2023 | 4/19/2023 | 19.00 | 4/19/2023 | 18.00 | Residential Sales | $199.58 | 3,592.44 |
| 4/2/2023 | 4/17/2023 | 16.00 | 4/17/2023 | 15.00 | Commercial Sales | $32.64 | 489.60 |
| 4/2/2023 | 4/3/2023 | 2.00 | 4/3/2023 | 1.00 | Commercial Sales | $1,081.38 | 1,081.38 |
| 4/2/2023 | 4/3/2023 | 2.00 | 4/3/2023 | 1.00 | Residential Sales | $2,897.60 | 2,897.60 |
| 4/2/2023 | 4/4/2023 | 3.00 | 4/4/2023 | 2.00 | Commercial Sales | $69.34 | 138.68 |
| 4/2/2023 | 4/4/2023 | 3.00 | 4/4/2023 | 2.00 | Residential Sales | $294.79 | 589.58 |
| 4/2/2023 | 4/5/2023 | 4.00 | 4/5/2023 | 3.00 | Residential Sales | $263.36 | 790.08 |
| 4/2/2023 | 4/6/2023 | 5.00 | 4/6/2023 | 4.00 | Residential Sales | $320.57 | 1,282.28 |
| 4/2/2023 | 4/11/2023 | 10.00 | 4/11/2023 | 9.00 | Residential Sales | $60.99 | 548.91 |
| 4/2/2023 | 4/12/2023 | 11.00 | 4/12/2023 | 10.00 | Residential Sales | $53.33 | 533.30 |
| 4/3/2023 | 4/10/2023 | 8.00 | 4/10/2023 | 7.00 | Residential Sales | $739.07 | 5,173.49 |
| 4/3/2023 | 4/27/2023 | 25.00 | 4/27/2023 | 24.00 | Residential Sales | $25.15 | 603.60 |
| 4/3/2023 | 4/11/2023 | 9.00 | 4/11/2023 | 8.00 | Commercial Sales | $247.46 | 1,979.68 |
| 4/3/2023 | 5/5/2023 | 33.00 | 5/5/2023 | 32.00 | Commercial Sales | $417.00 | 13,344.00 |
| 4/3/2023 | 4/11/2023 | 9.00 | 4/11/2023 | 8.00 | Residential Sales | $117.74 | 941.92 |
| 4/3/2023 | 5/5/2023 | 33.00 | 5/5/2023 | 32.00 | Residential Sales | $11.55 | 369.60 |
| 4/3/2023 | 4/11/2023 | 9.00 | 4/11/2023 | 8.00 | Other Sales to Public Authority | $131.36 | 1,050.88 |
| 4/3/2023 | 4/12/2023 | 10.00 | 4/12/2023 | 9.00 | Residential Sales | $121.00 | 1,089.00 |
| 4/3/2023 | 4/13/2023 | 11.00 | 4/13/2023 | 10.00 | Residential Sales | $171.87 | 1,718.70 |
| 4/3/2023 | 4/14/2023 | 12.00 | 4/14/2023 | 11.00 | Commercial Sales | $480.31 | 5,283.41 |
| 4/3/2023 | 4/17/2023 | 15.00 | 4/17/2023 | 14.00 | Commercial Sales | $5.96 | 83.44 |
| 4/3/2023 | 4/17/2023 | 15.00 | 4/17/2023 | 14.00 | Residential Sales | $40.26 | 563.64 |
| 4/3/2023 | 4/18/2023 | 16.00 | 4/18/2023 | 15.00 | Residential Sales | $1,790.92 | 26,863.80 |
| 4/3/2023 | 4/3/2023 | 1.00 | 4/3/2023 | 0.00 | Commercial Sales | $1,565.86 | - |
| 4/3/2023 | 4/4/2023 | 2.00 | 4/4/2023 | 1.00 | Industrial Service | $8,858.95 | 8,858.95 |
| 4/3/2023 | 4/19/2023 | 17.00 | 4/19/2023 | 16.00 | Residential Sales | $46.30 | 740.80 |
| 4/3/2023 | 4/4/2023 | 2.00 | 4/4/2023 | 1.00 | Commercial Sales | $74,658.15 | 74,658.15 |
| 4/3/2023 | 4/3/2023 | 1.00 | 4/3/2023 | 0.00 | Residential Sales | $1,143.06 | - |
| 4/3/2023 | 4/5/2023 | 3.00 | 4/5/2023 | 2.00 | Industrial Service | $1,750.52 | 3,501.04 |
| 4/3/2023 | 4/4/2023 | 2.00 | 4/4/2023 | 1.00 | Residential Sales | $506,213.86 | 506,213.86 |
| 4/3/2023 | 4/5/2023 | 3.00 | 4/5/2023 | 2.00 | Commercial Sales | $19,445.53 | 38,891.06 |
| 4/3/2023 | 4/3/2023 | 1.00 | 4/3/2023 | 0.00 | Other Sales to Public Authority | $200.74 | - |
| 4/3/2023 | 4/6/2023 | 4.00 | 4/6/2023 | 3.00 | Commercial Sales | $8,251.49 | 24,754.47 |
| 4/3/2023 | 4/5/2023 | 3.00 | 4/5/2023 | 2.00 | Residential Sales | $7,627.44 | 15,254.88 |
| 4/3/2023 | 4/4/2023 | 2.00 | 4/4/2023 | 1.00 | Other Sales to Public Authority | $29,142.62 | 29,142.62 |
| 4/3/2023 | 4/6/2023 | 4.00 | 4/6/2023 | 3.00 | Residential Sales | $1,992.60 | 5,977.80 |
| 4/3/2023 | 4/5/2023 | 3.00 | 4/5/2023 | 2.00 | Other Sales to Public Authority | $1,259.62 | 2,519.24 |
| 4/3/2023 | 4/20/2023 | 18.00 | 4/20/2023 | 17.00 | Residential Sales | $48.95 | 832.15 |
| 4/3/2023 | 4/21/2023 | 19.00 | 4/21/2023 | 18.00 | Residential Sales | $51.33 | 923.94 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 4/3/2023 | 4/6/2023 | 4.00 | 4/6/2023 | 3.00 | Other Sales to Public Authority | $196.69 | 590.07 |
| 4/3/2023 | 5/2/2023 | 30.00 | 5/2/2023 | 29.00 | Residential Sales | $14.43 | 418.47 |
| 4/3/2023 | 4/10/2023 | 8.00 | 4/10/2023 | 7.00 | Commercial Sales | $897.66 | 6,283.62 |
| 4/3/2023 | 4/11/2023 | 9.00 | 4/11/2023 | 8.00 | Industrial Service | $19.84 | 158.72 |
| 4/4/2023 | 4/24/2023 | 21.00 | 4/24/2023 | 20.00 | Residential Sales | $59.90 | 1,198.00 |
| 4/4/2023 | 4/25/2023 | 22.00 | 4/25/2023 | 21.00 | Residential Sales | $20.04 | 420.84 |
| 4/4/2023 | 4/10/2023 | 7.00 | 4/10/2023 | 6.00 | Commercial Sales | $13,277.26 | 79,663.56 |
| 4/4/2023 | 4/26/2023 | 23.00 | 4/26/2023 | 22.00 | Residential Sales | $4.29 | 94.38 |
| 4/4/2023 | 4/10/2023 | 7.00 | 4/10/2023 | 6.00 | Residential Sales | $1,681.43 | 10,088.58 |
| 4/4/2023 | 5/4/2023 | 31.00 | 5/4/2023 | 30.00 | Residential Sales | $2.03 | 60.90 |
| 4/4/2023 | 4/11/2023 | 8.00 | 4/11/2023 | 7.00 | Commercial Sales | $684.22 | 4,789.54 |
| 4/4/2023 | 4/12/2023 | 9.00 | 4/12/2023 | 8.00 | Commercial Sales | $193.09 | 1,544.72 |
| 4/4/2023 | 4/11/2023 | 8.00 | 4/11/2023 | 7.00 | Residential Sales | $146.04 | 1,022.28 |
| 4/4/2023 | 7/21/2023 | 109.00 | 7/21/2023 | 108.00 | Residential Sales | $63.06 | 6,810.48 |
| 4/4/2023 | 4/10/2023 | 7.00 | 4/10/2023 | 6.00 | Other Sales to Public Authority | $36.43 | 218.58 |
| 4/4/2023 | 4/12/2023 | 9.00 | 4/12/2023 | 8.00 | Residential Sales | $49.80 | 398.40 |
| 4/4/2023 | 4/14/2023 | 11.00 | 4/14/2023 | 10.00 | Commercial Sales | $52,922.39 | 529,223.90 |
| 4/4/2023 | 4/13/2023 | 10.00 | 4/13/2023 | 9.00 | Residential Sales | $311.56 | 2,804.04 |
| 4/4/2023 | 4/14/2023 | 11.00 | 4/14/2023 | 10.00 | Residential Sales | $185.57 | 1,855.70 |
| 4/4/2023 | 4/17/2023 | 14.00 | 4/17/2023 | 13.00 | Residential Sales | $370.51 | 4,816.63 |
| 4/4/2023 | 4/18/2023 | 15.00 | 4/18/2023 | 14.00 | Residential Sales | $418.70 | 5,861.80 |
| 4/4/2023 | 4/19/2023 | 16.00 | 4/19/2023 | 15.00 | Residential Sales | $612.16 | 9,182.40 |
| 4/4/2023 | 4/4/2023 | 1.00 | 4/4/2023 | 0.00 | Commercial Sales | $127.89 | - |
| 4/4/2023 | 3/25/2024 | 357.00 | 3/25/2024 | 356.00 | Residential Sales | $20.42 | 7,269.52 |
| 4/4/2023 | 4/5/2023 | 2.00 | 4/5/2023 | 1.00 | Commercial Sales | $158,125.19 | 158,125.19 |
| 4/4/2023 | 8/22/2023 | 141.00 | 8/22/2023 | 140.00 | Residential Sales | $54.50 | 7,630.00 |
| 4/4/2023 | 4/6/2023 | 3.00 | 4/6/2023 | 2.00 | Industrial Service | $6,953.46 | 13,906.92 |
| 4/4/2023 | 4/4/2023 | 1.00 | 4/4/2023 | 0.00 | Residential Sales | $41.18 | - |
| 4/4/2023 | 4/5/2023 | 2.00 | 4/5/2023 | 1.00 | Residential Sales | $539,282.61 | 539,282.61 |
| 4/4/2023 | 4/6/2023 | 3.00 | 4/6/2023 | 2.00 | Commercial Sales | $52,327.93 | 104,655.86 |
| 4/4/2023 | 4/4/2023 | 1.00 | 4/4/2023 | 0.00 | Other Sales to Public Authority | $110.50 | - |
| 4/4/2023 | 4/6/2023 | 3.00 | 4/6/2023 | 2.00 | Residential Sales | $5,573.22 | 11,146.44 |
| 4/4/2023 | 4/5/2023 | 2.00 | 4/5/2023 | 1.00 | Other Sales to Public Authority | $30,057.71 | 30,057.71 |
| 4/4/2023 | 4/20/2023 | 17.00 | 4/20/2023 | 16.00 | Residential Sales | $163.19 | 2,611.04 |
| 4/4/2023 | 4/6/2023 | 3.00 | 4/6/2023 | 2.00 | Other Sales to Public Authority | $731.32 | 1,462.64 |
| 4/4/2023 | 4/21/2023 | 18.00 | 4/21/2023 | 17.00 | Residential Sales | $55.72 | 947.24 |
| 4/5/2023 | 4/5/2023 | 1.00 | 4/5/2023 | 0.00 | Commercial Sales | $1,409.96 | - |
| 4/5/2023 | 4/6/2023 | 2.00 | 4/6/2023 | 1.00 | Industrial Service | $777.51 | 777.51 |
| 4/5/2023 | 4/6/2023 | 2.00 | 4/6/2023 | 1.00 | Commercial Sales | $120,111.39 | 120,111.39 |
| 4/5/2023 | 4/20/2023 | 16.00 | 4/20/2023 | 15.00 | Commercial Sales | $239.06 | 3,585.90 |
| 4/5/2023 | 4/5/2023 | 1.00 | 4/5/2023 | 0.00 | Residential Sales | $1,200.59 | - |
| 4/5/2023 | 4/6/2023 | 2.00 | 4/6/2023 | 1.00 | Residential Sales | $803,845.45 | 803,845.45 |
| 4/5/2023 | 4/20/2023 | 16.00 | 4/20/2023 | 15.00 | Residential Sales | $967.10 | 14,506.50 |
| 4/5/2023 | 4/5/2023 | 1.00 | 4/5/2023 | 0.00 | Other Sales to Public Authority | $27.28 | - |
| 4/5/2023 | 4/6/2023 | 2.00 | 4/6/2023 | 1.00 | Other Sales to Public Authority | $22,159.89 | 22,159.89 |
| 4/5/2023 | 5/15/2023 | 41.00 | 5/15/2023 | 40.00 | Residential Sales | $56.75 | 2,270.00 |
| 4/5/2023 | 4/21/2023 | 17.00 | 4/21/2023 | 16.00 | Residential Sales | $100.79 | 1,612.64 |
| 4/5/2023 | 5/31/2023 | 57.00 | 5/31/2023 | 56.00 | Residential Sales | $36.74 | 2,057.44 |
| 4/5/2023 | 4/24/2023 | 20.00 | 4/24/2023 | 19.00 | Residential Sales | $80.82 | 1,535.58 |
| 4/5/2023 | 4/10/2023 | 6.00 | 4/10/2023 | 5.00 | Industrial Service | $428.86 | 2,144.30 |
| 4/5/2023 | 4/10/2023 | 6.00 | 4/10/2023 | 5.00 | Commercial Sales | $40,837.99 | 204,189.95 |
| 4/5/2023 | 4/10/2023 | 6.00 | 4/10/2023 | 5.00 | Residential Sales | $13,270.69 | 66,353.45 |
| 4/5/2023 | 4/11/2023 | 7.00 | 4/11/2023 | 6.00 | Commercial Sales | $20,243.40 | 121,460.40 |
| 4/5/2023 | 4/10/2023 | 6.00 | 4/10/2023 | 5.00 | Other Sales to Public Authority | $2,406.82 | 12,034.10 |
| 4/5/2023 | 4/12/2023 | 8.00 | 4/12/2023 | 7.00 | Commercial Sales | $3,352.84 | 23,469.88 |
| 4/5/2023 | 4/28/2023 | 24.00 | 4/28/2023 | 23.00 | Residential Sales | $89.48 | 2,058.04 |
| 4/5/2023 | 4/11/2023 | 7.00 | 4/11/2023 | 6.00 | Residential Sales | $491.88 | 2,951.28 |
| 4/5/2023 | 11/6/2023 | 216.00 | 11/6/2023 | 215.00 | Commercial Sales | $180.28 | 38,760.20 |
| 4/5/2023 | 4/11/2023 | 7.00 | 4/11/2023 | 6.00 | Other Sales to Public Authority | $10,196.28 | 61,177.68 |
| 4/5/2023 | 4/12/2023 | 8.00 | 4/12/2023 | 7.00 | Residential Sales | $70.74 | 495.18 |
| 4/5/2023 | 4/13/2023 | 9.00 | 4/13/2023 | 8.00 | Residential Sales | $19.56 | 156.48 |
| 4/5/2023 | 4/14/2023 | 10.00 | 4/14/2023 | 9.00 | Residential Sales | $147.65 | 1,328.85 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 4/5/2023 | 4/17/2023 | 13.00 | 4/17/2023 | 12.00 | Residential Sales | $384.56 | 4,614.72 |
| 4/5/2023 | 4/18/2023 | 14.00 | 4/18/2023 | 13.00 | Commercial Sales | $15.19 | 197.47 |
| 4/5/2023 | 4/18/2023 | 14.00 | 4/18/2023 | 13.00 | Residential Sales | $488.69 | 6,352.97 |
| 4/5/2023 | 5/26/2023 | 52.00 | 5/26/2023 | 51.00 | Residential Sales | $153.90 | 7,848.90 |
| 4/5/2023 | 4/19/2023 | 15.00 | 4/19/2023 | 14.00 | Residential Sales | $130.63 | 1,828.82 |
| 4/6/2023 | 4/17/2023 | 12.00 | 4/17/2023 | 11.00 | Commercial Sales | $19,580.58 | 215,386.38 |
| 4/6/2023 | 4/17/2023 | 12.00 | 4/17/2023 | 11.00 | Residential Sales | $216.05 | 2,376.55 |
| 4/6/2023 | 4/18/2023 | 13.00 | 4/18/2023 | 12.00 | Residential Sales | $449.28 | 5,391.36 |
| 4/6/2023 | 5/26/2023 | 51.00 | 5/26/2023 | 50.00 | Residential Sales | $79.73 | 3,986.50 |
| 4/6/2023 | 4/19/2023 | 14.00 | 4/19/2023 | 13.00 | Residential Sales | $128.86 | 1,675.18 |
| 4/6/2023 | 3/25/2024 | 355.00 | 3/25/2024 | 354.00 | Commercial Sales | $36.73 | 13,002.42 |
| 4/6/2023 | 10/19/2023 | 197.00 | 10/19/2023 | 196.00 | Residential Sales | $8.65 | 1,695.40 |
| 4/6/2023 | 6/6/2023 | 62.00 | 6/6/2023 | 61.00 | Residential Sales | $38.22 | 2,331.42 |
| 4/6/2023 | 4/6/2023 | 1.00 | 4/6/2023 | 0.00 | Commercial Sales | $1,029.85 | - |
| 4/6/2023 | 4/20/2023 | 15.00 | 4/20/2023 | 14.00 | Commercial Sales | $839.19 | 11,748.66 |
| 4/6/2023 | 12/6/2023 | 245.00 | 12/6/2023 | 244.00 | Residential Sales | $77.66 | 18,949.04 |
| 4/6/2023 | 4/20/2023 | 15.00 | 4/20/2023 | 14.00 | Residential Sales | $775.51 | 10,857.14 |
| 4/6/2023 | 4/6/2023 | 1.00 | 4/6/2023 | 0.00 | Residential Sales | $603.43 | - |
| 4/6/2023 | 5/15/2023 | 40.00 | 5/15/2023 | 39.00 | Residential Sales | $59.98 | 2,339.22 |
| 4/6/2023 | 4/6/2023 | 1.00 | 4/6/2023 | 0.00 | Other Sales to Public Authority | $15.92 | - |
| 4/6/2023 | 4/21/2023 | 16.00 | 4/21/2023 | 15.00 | Residential Sales | $147.81 | 2,217.15 |
| 4/6/2023 | 4/6/2023 | 1.00 | 4/6/2023 | 0.00 | Public Street & Highway Lighting | $50.36 | - |
| 4/6/2023 | 4/24/2023 | 19.00 | 4/24/2023 | 18.00 | Residential Sales | $144.64 | 2,603.52 |
| 4/6/2023 | 4/25/2023 | 20.00 | 4/25/2023 | 19.00 | Commercial Sales | $216.57 | 4,114.83 |
| 4/6/2023 | 5/1/2023 | 26.00 | 5/1/2023 | 25.00 | Residential Sales | $14.36 | 359.00 |
| 4/6/2023 | 4/10/2023 | 5.00 | 4/10/2023 | 4.00 | Industrial Service | $5,445.70 | 21,782.80 |
| 4/6/2023 | 4/26/2023 | 21.00 | 4/26/2023 | 20.00 | Commercial Sales | $93.99 | 1,879.80 |
| 4/6/2023 | 4/25/2023 | 20.00 | 4/25/2023 | 19.00 | Residential Sales | $25.53 | 485.07 |
| 4/6/2023 | 4/10/2023 | 5.00 | 4/10/2023 | 4.00 | Commercial Sales | $289,774.68 | 1,159,098.72 |
| 4/6/2023 | 4/11/2023 | 6.00 | 4/11/2023 | 5.00 | Industrial Service | $1,380.44 | 6,902.20 |
| 4/6/2023 | 4/10/2023 | 5.00 | 4/10/2023 | 4.00 | Residential Sales | $640,317.24 | 2,561,268.96 |
| 4/6/2023 | 4/11/2023 | 6.00 | 4/11/2023 | 5.00 | Commercial Sales | $132,825.60 | 664,128.00 |
| 4/6/2023 | 12/11/2023 | 250.00 | 12/11/2023 | 249.00 | Residential Sales | $19.23 | 4,788.27 |
| 4/6/2023 | 5/5/2023 | 30.00 | 5/5/2023 | 29.00 | Commercial Sales | $420.12 | 12,183.48 |
| 4/6/2023 | 7/7/2023 | 93.00 | 7/7/2023 | 92.00 | Commercial Sales | $46.11 | 4,242.12 |
| 4/6/2023 | 6/29/2023 | 85.00 | 6/29/2023 | 84.00 | Residential Sales | $30.92 | 2,597.28 |
| 4/6/2023 | 4/11/2023 | 6.00 | 4/11/2023 | 5.00 | Residential Sales | $2,762.09 | 13,810.45 |
| 4/6/2023 | 4/10/2023 | 5.00 | 4/10/2023 | 4.00 | Other Sales to Public Authority | $14,956.52 | 59,826.08 |
| 4/6/2023 | 4/12/2023 | 7.00 | 4/12/2023 | 6.00 | Commercial Sales | $5,001.10 | 30,006.60 |
| 4/6/2023 | 4/11/2023 | 6.00 | 4/11/2023 | 5.00 | Other Sales to Public Authority | $11,228.35 | 56,141.75 |
| 4/6/2023 | 4/12/2023 | 7.00 | 4/12/2023 | 6.00 | Residential Sales | $3,370.47 | 20,222.82 |
| 4/6/2023 | 4/13/2023 | 8.00 | 4/13/2023 | 7.00 | Commercial Sales | $14,467.76 | 101,274.32 |
| 4/6/2023 | 4/13/2023 | 8.00 | 4/13/2023 | 7.00 | Residential Sales | $456.44 | 3,195.08 |
| 4/6/2023 | 5/8/2023 | 33.00 | 5/8/2023 | 32.00 | Commercial Sales | $4.90 | 156.80 |
| 4/6/2023 | 4/14/2023 | 9.00 | 4/14/2023 | 8.00 | Residential Sales | $99.66 | 797.28 |
| 4/6/2023 | 5/23/2023 | 48.00 | 5/23/2023 | 47.00 | Commercial Sales | $198.63 | 9,335.61 |
| 4/7/2023 | 4/10/2023 | 4.00 | 4/10/2023 | 3.00 | Residential Sales | $1,679.06 | 5,037.18 |
| 4/7/2023 | 4/11/2023 | 5.00 | 4/11/2023 | 4.00 | Commercial Sales | $49.12 | 196.48 |
| 4/7/2023 | 4/11/2023 | 5.00 | 4/11/2023 | 4.00 | Residential Sales | $263.26 | 1,053.04 |
| 4/7/2023 | 4/12/2023 | 6.00 | 4/12/2023 | 5.00 | Residential Sales | $14.36 | 71.80 |
| 4/7/2023 | 4/18/2023 | 12.00 | 4/18/2023 | 11.00 | Commercial Sales | $7,446.26 | 81,908.86 |
| 4/7/2023 | 4/10/2023 | 4.00 | 4/10/2023 | 3.00 | Commercial Sales | $39.51 | 118.53 |
| 4/8/2023 | 4/10/2023 | 3.00 | 4/10/2023 | 2.00 | Residential Sales | $261.10 | 522.20 |
| 4/8/2023 | 4/11/2023 | 4.00 | 4/11/2023 | 3.00 | Commercial Sales | $15.71 | 47.13 |
| 4/8/2023 | 4/13/2023 | 6.00 | 4/13/2023 | 5.00 | Residential Sales | $133.19 | 665.95 |
| 4/9/2023 | 6/9/2023 | 62.00 | 6/9/2023 | 61.00 | Residential Sales | $11.95 | 728.95 |
| 4/9/2023 | 5/1/2023 | 23.00 | 5/1/2023 | 22.00 | Commercial Sales | $3.41 | 75.02 |
| 4/9/2023 | 4/10/2023 | 2.00 | 4/10/2023 | 1.00 | Commercial Sales | $153.50 | 153.50 |
| 4/9/2023 | 4/10/2023 | 2.00 | 4/10/2023 | 1.00 | Residential Sales | $2,044.13 | 2,044.13 |
| 4/9/2023 | 4/11/2023 | 3.00 | 4/11/2023 | 2.00 | Commercial Sales | $88.62 | 177.24 |
| 4/9/2023 | 4/11/2023 | 3.00 | 4/11/2023 | 2.00 | Residential Sales | $203.96 | 407.92 |
| 4/9/2023 | 7/21/2023 | 104.00 | 7/21/2023 | 103.00 | Residential Sales | $36.30 | 3,738.90 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 4/9/2023 | 4/13/2023 | 5.00 | 4/13/2023 | 4.00 | Commercial Sales | $50.46 | 201.84 |
| 4/9/2023 | 4/12/2023 | 4.00 | 4/12/2023 | 3.00 | Residential Sales | $82.42 | 247.26 |
| 4/9/2023 | 4/13/2023 | 5.00 | 4/13/2023 | 4.00 | Residential Sales | $69.36 | 277.44 |
| 4/9/2023 | 4/14/2023 | 6.00 | 4/14/2023 | 5.00 | Residential Sales | $19.37 | 96.85 |
| 4/9/2023 | 4/17/2023 | 9.00 | 4/17/2023 | 8.00 | Commercial Sales | $34.22 | 273.76 |
| 4/9/2023 | 4/17/2023 | 9.00 | 4/17/2023 | 8.00 | Residential Sales | $30.49 | 243.92 |
| 4/10/2023 | 4/20/2023 | 11.00 | 4/20/2023 | 10.00 | Commercial Sales | $51.69 | 516.90 |
| 4/10/2023 | 4/12/2023 | 3.00 | 4/12/2023 | 2.00 | Company Use | $0.00 | - |
| 4/10/2023 | 11/14/2023 | 219.00 | 11/14/2023 | 218.00 | Commercial Sales | $1,418.76 | 309,289.68 |
| 4/10/2023 | 6/8/2023 | 60.00 | 6/8/2023 | 59.00 | Residential Sales | $86.54 | 5,105.86 |
| 4/10/2023 | 5/15/2023 | 36.00 | 5/15/2023 | 35.00 | Commercial Sales | $442.85 | 15,499.75 |
| 4/10/2023 | 4/21/2023 | 12.00 | 4/21/2023 | 11.00 | Residential Sales | $6.77 | 74.47 |
| 4/10/2023 | 4/24/2023 | 15.00 | 4/24/2023 | 14.00 | Residential Sales | $847.07 | 11,858.98 |
| 4/10/2023 | 5/2/2023 | 23.00 | 5/2/2023 | 22.00 | Residential Sales | $68.02 | 1,496.44 |
| 4/10/2023 | 4/25/2023 | 16.00 | 4/25/2023 | 15.00 | Residential Sales | $49.98 | 749.70 |
| 4/10/2023 | 4/11/2023 | 2.00 | 4/11/2023 | 1.00 | Industrial Service | $102,451.60 | 102,451.60 |
| 4/10/2023 | 4/10/2023 | 1.00 | 4/10/2023 | 0.00 | Commercial Sales | $1,652.16 | - |
| 4/10/2023 | 4/11/2023 | 2.00 | 4/11/2023 | 1.00 | Commercial Sales | $243,349.60 | 243,349.60 |
| 4/10/2023 | 4/10/2023 | 1.00 | 4/10/2023 | 0.00 | Residential Sales | $923.54 | - |
| 4/10/2023 | 4/12/2023 | 3.00 | 4/12/2023 | 2.00 | Industrial Service | $37,379.78 | 74,759.56 |
| 4/10/2023 | 4/11/2023 | 2.00 | 4/11/2023 | 1.00 | Residential Sales | $276,179.58 | 276,179.58 |
| 4/10/2023 | 4/12/2023 | 3.00 | 4/12/2023 | 2.00 | Commercial Sales | $65,637.16 | 131,274.32 |
| 4/10/2023 | 4/28/2023 | 19.00 | 4/28/2023 | 18.00 | Residential Sales | $44.43 | 799.74 |
| 4/10/2023 | 4/12/2023 | 3.00 | 4/12/2023 | 2.00 | Residential Sales | $5,285.76 | 10,571.52 |
| 4/10/2023 | 4/11/2023 | 2.00 | 4/11/2023 | 1.00 | Other Sales to Public Authority | $35,309.56 | 35,309.56 |
| 4/10/2023 | 4/13/2023 | 4.00 | 4/13/2023 | 3.00 | Commercial Sales | $79,047.05 | 237,141.15 |
| 4/10/2023 | 4/12/2023 | 3.00 | 4/12/2023 | 2.00 | Other Sales to Public Authority | $69,931.84 | 139,863.68 |
| 4/10/2023 | 4/13/2023 | 4.00 | 4/13/2023 | 3.00 | Residential Sales | $1,219.68 | 3,659.04 |
| 4/10/2023 | 4/10/2023 | 1.00 | 4/10/2023 | 0.00 | Public Street & Highway Lighting | $16.73 | - |
| 4/10/2023 | 4/14/2023 | 5.00 | 4/14/2023 | 4.00 | Commercial Sales | $39,075.50 | 156,302.00 |
| 4/10/2023 | 4/14/2023 | 5.00 | 4/14/2023 | 4.00 | Residential Sales | $288.14 | 1,152.56 |
| 4/10/2023 | 5/9/2023 | 30.00 | 5/9/2023 | 29.00 | Commercial Sales | $177.70 | 5,153.30 |
| 4/10/2023 | 4/13/2023 | 4.00 | 4/13/2023 | 3.00 | Other Sales to Public Authority | $11,258.14 | 33,774.42 |
| 4/10/2023 | 6/30/2023 | 82.00 | 6/30/2023 | 81.00 | Residential Sales | $55.61 | 4,504.41 |
| 4/10/2023 | 5/9/2023 | 30.00 | 5/9/2023 | 29.00 | Residential Sales | $9.70 | 281.30 |
| 4/10/2023 | 4/17/2023 | 8.00 | 4/17/2023 | 7.00 | Commercial Sales | $39,963.85 | 279,746.95 |
| 4/10/2023 | 4/17/2023 | 8.00 | 4/17/2023 | 7.00 | Residential Sales | $469.45 | 3,286.15 |
| 4/10/2023 | 4/18/2023 | 9.00 | 4/18/2023 | 8.00 | Commercial Sales | $798.04 | 6,384.32 |
| 4/10/2023 | 4/19/2023 | 10.00 | 4/19/2023 | 9.00 | Commercial Sales | $73.08 | 657.72 |
| 4/10/2023 | 4/18/2023 | 9.00 | 4/18/2023 | 8.00 | Residential Sales | $39.54 | 316.32 |
| 4/10/2023 | 4/19/2023 | 10.00 | 4/19/2023 | 9.00 | Residential Sales | $111.40 | 1,002.60 |
| 4/11/2023 | 4/14/2023 | 4.00 | 4/14/2023 | 3.00 | Other Sales to Public Authority | $877.59 | 2,632.77 |
| 4/11/2023 | 4/17/2023 | 7.00 | 4/17/2023 | 6.00 | Commercial Sales | $2,372.32 | 14,233.92 |
| 4/11/2023 | 4/17/2023 | 7.00 | 4/17/2023 | 6.00 | Residential Sales | $1,119.95 | 6,719.70 |
| 4/11/2023 | 4/18/2023 | 8.00 | 4/18/2023 | 7.00 | Commercial Sales | $73.46 | 514.22 |
| 4/11/2023 | 4/19/2023 | 9.00 | 4/19/2023 | 8.00 | Commercial Sales | $2,023.85 | 16,190.80 |
| 4/11/2023 | 10/30/2023 | 203.00 | 10/30/2023 | 202.00 | Other Sales to Public Authority | $325.40 | 65,730.80 |
| 4/11/2023 | 4/19/2023 | 9.00 | 4/19/2023 | 8.00 | Residential Sales | $79.03 | 632.24 |
| 4/11/2023 | 4/19/2023 | 9.00 | 4/19/2023 | 8.00 | Other Sales to Public Authority | $197.89 | 1,583.12 |
| 4/11/2023 | 4/20/2023 | 10.00 | 4/20/2023 | 9.00 | Residential Sales | $57.85 | 520.65 |
| 4/11/2023 | 5/17/2023 | 37.00 | 5/17/2023 | 36.00 | Commercial Sales | $2,526.50 | 90,954.00 |
| 4/11/2023 | 5/17/2023 | 37.00 | 5/17/2023 | 36.00 | Residential Sales | $18.27 | 657.72 |
| 4/11/2023 | 5/1/2023 | 21.00 | 5/1/2023 | 20.00 | Commercial Sales | $106.50 | 2,130.00 |
| 4/11/2023 | 4/24/2023 | 14.00 | 4/24/2023 | 13.00 | Residential Sales | $73.66 | 957.58 |
| 4/11/2023 | 5/2/2023 | 22.00 | 5/2/2023 | 21.00 | Commercial Sales | $1,333.14 | 27,995.94 |
| 4/11/2023 | 4/25/2023 | 15.00 | 4/25/2023 | 14.00 | Residential Sales | $792.95 | 11,101.30 |
| 4/11/2023 | 5/3/2023 | 23.00 | 5/3/2023 | 22.00 | Commercial Sales | $383.86 | 8,444.92 |
| 4/11/2023 | 5/2/2023 | 22.00 | 5/2/2023 | 21.00 | Residential Sales | $47.54 | 998.34 |
| 4/11/2023 | 5/4/2023 | 24.00 | 5/4/2023 | 23.00 | Commercial Sales | $1,958.64 | 45,048.72 |
| 4/11/2023 | 4/26/2023 | 16.00 | 4/26/2023 | 15.00 | Residential Sales | $158.23 | 2,373.45 |
| 4/11/2023 | 4/11/2023 | 1.00 | 4/11/2023 | 0.00 | Commercial Sales | $143.67 | - |
| 4/11/2023 | 10/10/2023 | 183.00 | 10/10/2023 | 182.00 | Commercial Sales | $1,080.97 | 196,736.54 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 4/11/2023 | 4/12/2023 | 2.00 | 4/12/2023 | 1.00 | Industrial Service | $62,146.36 | 62,146.36 |
| 4/11/2023 | 4/12/2023 | 2.00 | 4/12/2023 | 1.00 | Commercial Sales | $270,146.79 | 270,146.79 |
| 4/11/2023 | 4/11/2023 | 1.00 | 4/11/2023 | 0.00 | Residential Sales | $2,221.92 | - |
| 4/11/2023 | 4/13/2023 | 3.00 | 4/13/2023 | 2.00 | Industrial Service | $20,417.27 | 40,834.54 |
| 4/11/2023 | 4/12/2023 | 2.00 | 4/12/2023 | 1.00 | Residential Sales | $283,367.17 | 283,367.17 |
| 4/11/2023 | 4/13/2023 | 3.00 | 4/13/2023 | 2.00 | Commercial Sales | $80,779.07 | 161,558.14 |
| 4/11/2023 | 4/11/2023 | 1.00 | 4/11/2023 | 0.00 | Other Sales to Public Authority | $196.38 | - |
| 4/11/2023 | 4/29/2023 | 19.00 | 4/29/2023 | 18.00 | Residential Sales | $78.78 | 1,418.04 |
| 4/11/2023 | 4/13/2023 | 3.00 | 4/13/2023 | 2.00 | Residential Sales | $5,154.56 | 10,309.12 |
| 4/11/2023 | 4/14/2023 | 4.00 | 4/14/2023 | 3.00 | Commercial Sales | $49,993.14 | 149,979.42 |
| 4/11/2023 | 4/12/2023 | 2.00 | 4/12/2023 | 1.00 | Other Sales to Public Authority | $22,433.29 | 22,433.29 |
| 4/11/2023 | 5/8/2023 | 28.00 | 5/8/2023 | 27.00 | Commercial Sales | $33.87 | 914.49 |
| 4/11/2023 | 4/13/2023 | 3.00 | 4/13/2023 | 2.00 | Other Sales to Public Authority | $2,171.88 | 4,343.76 |
| 4/11/2023 | 4/14/2023 | 4.00 | 4/14/2023 | 3.00 | Residential Sales | $780.02 | 2,340.06 |
| 4/11/2023 | 4/11/2023 | 1.00 | 4/11/2023 | 0.00 | Public Street & Highway Lighting | $51.13 | - |
| 4/11/2023 | 5/9/2023 | 29.00 | 5/9/2023 | 28.00 | Commercial Sales | $50.51 | 1,414.28 |
| 4/12/2023 | 4/27/2023 | 16.00 | 4/27/2023 | 15.00 | Residential Sales | $74.94 | 1,124.10 |
| 4/12/2023 | 4/13/2023 | 2.00 | 4/13/2023 | 1.00 | Industrial Service | $288,442.10 | 288,442.10 |
| 4/12/2023 | 4/12/2023 | 1.00 | 4/12/2023 | 0.00 | Commercial Sales | $629.48 | - |
| 4/12/2023 | 4/28/2023 | 17.00 | 4/28/2023 | 16.00 | Residential Sales | $64.13 | 1,026.08 |
| 4/12/2023 | 4/12/2023 | 1.00 | 4/12/2023 | 0.00 | Residential Sales | $1,469.27 | - |
| 4/12/2023 | 4/13/2023 | 2.00 | 4/13/2023 | 1.00 | Commercial Sales | $152,312.02 | 152,312.02 |
| 4/12/2023 | 4/14/2023 | 3.00 | 4/14/2023 | 2.00 | Industrial Service | $645,880.48 | 1,291,760.96 |
| 4/12/2023 | 4/13/2023 | 2.00 | 4/13/2023 | 1.00 | Residential Sales | $438,449.32 | 438,449.32 |
| 4/12/2023 | 4/14/2023 | 3.00 | 4/14/2023 | 2.00 | Commercial Sales | $193,291.34 | 386,582.68 |
| 4/12/2023 | 4/12/2023 | 1.00 | 4/12/2023 | 0.00 | Other Sales to Public Authority | $15.19 | - |
| 4/12/2023 | 4/14/2023 | 3.00 | 4/14/2023 | 2.00 | Residential Sales | $8,344.47 | 16,688.94 |
| 4/12/2023 | 4/13/2023 | 2.00 | 4/13/2023 | 1.00 | Other Sales to Public Authority | $20,286.92 | 20,286.92 |
| 4/12/2023 | 5/9/2023 | 28.00 | 5/9/2023 | 27.00 | Commercial Sales | $403.02 | 10,881.54 |
| 4/12/2023 | 4/12/2023 | 1.00 | 4/12/2023 | 0.00 | Public Street & Highway Lighting | $52,855.49 | - |
| 4/12/2023 | 6/1/2023 | 51.00 | 6/1/2023 | 50.00 | Commercial Sales | $9.18 | 459.00 |
| 4/12/2023 | 4/14/2023 | 3.00 | 4/14/2023 | 2.00 | Other Sales to Public Authority | $1,220.74 | 2,441.48 |
| 4/12/2023 | 4/13/2023 | 2.00 | 4/13/2023 | 1.00 | Public Street & Highway Lighting | $58,583.92 | 58,583.92 |
| 4/12/2023 | 4/17/2023 | 6.00 | 4/17/2023 | 5.00 | Commercial Sales | $405.71 | 2,028.55 |
| 4/12/2023 | 4/17/2023 | 6.00 | 4/17/2023 | 5.00 | Residential Sales | $892.74 | 4,463.70 |
| 4/12/2023 | 4/18/2023 | 7.00 | 4/18/2023 | 6.00 | Commercial Sales | $170.44 | 1,022.64 |
| 4/12/2023 | 4/18/2023 | 7.00 | 4/18/2023 | 6.00 | Residential Sales | $674.96 | 4,049.76 |
| 4/12/2023 | 4/19/2023 | 8.00 | 4/19/2023 | 7.00 | Residential Sales | $318.57 | 2,229.99 |
| 4/12/2023 | 4/18/2023 | 7.00 | 4/18/2023 | 6.00 | Other Sales to Public Authority | $15,240.87 | 91,445.22 |
| 4/12/2023 | 5/19/2023 | 38.00 | 5/19/2023 | 37.00 | Company Use | $694.55 | 25,698.35 |
| 4/12/2023 | 5/11/2023 | 30.00 | 5/11/2023 | 29.00 | Residential Sales | $12.99 | 376.71 |
| 4/12/2023 | 5/12/2023 | 31.00 | 5/12/2023 | 30.00 | Residential Sales | $28.77 | 863.10 |
| 4/12/2023 | 4/21/2023 | 10.00 | 4/21/2023 | 9.00 | Industrial Service | $4,266.78 | 38,401.02 |
| 4/12/2023 | 4/20/2023 | 9.00 | 4/20/2023 | 8.00 | Commercial Sales | $292.70 | 2,341.60 |
| 4/12/2023 | 4/20/2023 | 9.00 | 4/20/2023 | 8.00 | Residential Sales | $144.80 | 1,158.40 |
| 4/12/2023 | 4/21/2023 | 10.00 | 4/21/2023 | 9.00 | Residential Sales | $253.04 | 2,277.36 |
| 4/12/2023 | 11/15/2023 | 218.00 | 11/15/2023 | 217.00 | Commercial Sales | $229.05 | 49,703.85 |
| 4/12/2023 | 4/21/2023 | 10.00 | 4/21/2023 | 9.00 | Other Sales to Public Authority | $3,135.61 | 28,220.49 |
| 4/12/2023 | 11/15/2023 | 218.00 | 11/15/2023 | 217.00 | Residential Sales | $35.20 | 7,638.40 |
| 4/12/2023 | 5/1/2023 | 20.00 | 5/1/2023 | 19.00 | Residential Sales | $26.90 | 511.10 |
| 4/12/2023 | 4/26/2023 | 15.00 | 4/26/2023 | 14.00 | Commercial Sales | $99.10 | 1,387.40 |
| 4/12/2023 | 5/2/2023 | 21.00 | 5/2/2023 | 20.00 | Residential Sales | $138.23 | 2,764.60 |
| 4/12/2023 | 5/3/2023 | 22.00 | 5/3/2023 | 21.00 | Commercial Sales | $67.99 | 1,427.79 |
| 4/12/2023 | 4/25/2023 | 14.00 | 4/25/2023 | 13.00 | Residential Sales | $272.26 | 3,539.38 |
| 4/12/2023 | 4/26/2023 | 15.00 | 4/26/2023 | 14.00 | Residential Sales | $900.30 | 12,604.20 |
| 4/13/2023 | 5/17/2023 | 35.00 | 5/17/2023 | 34.00 | Residential Sales | $24.31 | 826.54 |
| 4/13/2023 | 4/24/2023 | 12.00 | 4/24/2023 | 11.00 | Commercial Sales | $183.40 | 2,017.40 |
| 4/13/2023 | 4/24/2023 | 12.00 | 4/24/2023 | 11.00 | Residential Sales | $164.49 | 1,809.39 |
| 4/13/2023 | 4/25/2023 | 13.00 | 4/25/2023 | 12.00 | Residential Sales | $218.29 | 2,619.48 |
| 4/13/2023 | 4/26/2023 | 14.00 | 4/26/2023 | 13.00 | Commercial Sales | $371.17 | 4,825.21 |
| 4/13/2023 | 5/3/2023 | 21.00 | 5/3/2023 | 20.00 | Residential Sales | $9.83 | 196.60 |
| 4/13/2023 | 4/26/2023 | 14.00 | 4/26/2023 | 13.00 | Residential Sales | $1,043.99 | 13,571.87 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 4/13/2023 | 4/27/2023 | 15.00 | 4/27/2023 | 14.00 | Residential Sales | $55.96 | 783.44 |
| 4/13/2023 | 5/4/2023 | 22.00 | 5/4/2023 | 21.00 | Residential Sales | $282.53 | 5,933.13 |
| 4/13/2023 | 5/5/2023 | 23.00 | 5/5/2023 | 22.00 | Residential Sales | $17.44 | 383.68 |
| 4/13/2023 | 7/21/2023 | 100.00 | 7/21/2023 | 99.00 | Residential Sales | $69.63 | 6,893.37 |
| 4/13/2023 | 4/28/2023 | 16.00 | 4/28/2023 | 15.00 | Residential Sales | $28.89 | 433.35 |
| 4/13/2023 | 4/13/2023 | 1.00 | 4/13/2023 | 0.00 | Commercial Sales | $241.29 | - |
| 4/13/2023 | 4/14/2023 | 2.00 | 4/14/2023 | 1.00 | Industrial Service | $448,570.49 | 448,570.49 |
| 4/13/2023 | 8/30/2023 | 140.00 | 8/30/2023 | 139.00 | Residential Sales | $24.08 | 3,347.12 |
| 4/13/2023 | 4/13/2023 | 1.00 | 4/13/2023 | 0.00 | Residential Sales | $1,121.61 | - |
| 4/13/2023 | 4/14/2023 | 2.00 | 4/14/2023 | 1.00 | Commercial Sales | $474,114.85 | 474,114.85 |
| 4/13/2023 | 5/6/2024 | 390.00 | 5/6/2024 | 389.00 | Residential Sales | $18.02 | 7,009.78 |
| 4/13/2023 | 4/14/2023 | 2.00 | 4/14/2023 | 1.00 | Residential Sales | $652,728.78 | 652,728.78 |
| 4/13/2023 | 3/5/2024 | 328.00 | 3/5/2024 | 327.00 | Residential Sales | $23.94 | 7,828.38 |
| 4/13/2023 | 4/17/2023 | 5.00 | 4/17/2023 | 4.00 | Industrial Service | $119,510.44 | 478,041.76 |
| 4/13/2023 | 5/23/2023 | 41.00 | 5/23/2023 | 40.00 | Residential Sales | $113.46 | 4,538.40 |
| 4/13/2023 | 4/18/2023 | 6.00 | 4/18/2023 | 5.00 | Industrial Service | $9,360.10 | 46,800.50 |
| 4/13/2023 | 4/17/2023 | 5.00 | 4/17/2023 | 4.00 | Commercial Sales | $100,821.42 | 403,285.68 |
| 4/13/2023 | 5/24/2023 | 42.00 | 5/24/2023 | 41.00 | Residential Sales | $44.51 | 1,824.91 |
| 4/13/2023 | 4/13/2023 | 1.00 | 4/13/2023 | 0.00 | Public Street & Highway Lighting | $11.17 | - |
| 4/13/2023 | 12/18/2023 | 250.00 | 12/18/2023 | 249.00 | Commercial Sales | $692.66 | 172,472.34 |
| 4/13/2023 | 4/17/2023 | 5.00 | 4/17/2023 | 4.00 | Residential Sales | $13,013.69 | 52,054.76 |
| 4/13/2023 | 4/18/2023 | 6.00 | 4/18/2023 | 5.00 | Commercial Sales | $25,379.43 | 126,897.15 |
| 4/13/2023 | 4/18/2023 | 6.00 | 4/18/2023 | 5.00 | Residential Sales | $795.18 | 3,975.90 |
| 4/13/2023 | 4/13/2023 | 1.00 | 4/13/2023 | 0.00 | Other Sales to Public Authority | $15.19 | - |
| 4/13/2023 | 4/19/2023 | 7.00 | 4/19/2023 | 6.00 | Commercial Sales | $11,229.02 | 67,374.12 |
| 4/13/2023 | 5/26/2023 | 44.00 | 5/26/2023 | 43.00 | Residential Sales | $82.88 | 3,563.84 |
| 4/13/2023 | 4/19/2023 | 7.00 | 4/19/2023 | 6.00 | Residential Sales | $467.68 | 2,806.08 |
| 4/13/2023 | 4/14/2023 | 2.00 | 4/14/2023 | 1.00 | Other Sales to Public Authority | $1,788.79 | 1,788.79 |
| 4/13/2023 | 6/5/2023 | 54.00 | 6/5/2023 | 53.00 | Residential Sales | $59.90 | 3,174.70 |
| 4/13/2023 | 11/27/2023 | 229.00 | 11/27/2023 | 228.00 | Residential Sales | $91.07 | 20,763.96 |
| 4/13/2023 | 5/11/2023 | 29.00 | 5/11/2023 | 28.00 | Residential Sales | $48.79 | 1,366.12 |
| 4/13/2023 | 5/12/2023 | 30.00 | 5/12/2023 | 29.00 | Residential Sales | $16.20 | 469.80 |
| 4/13/2023 | 8/8/2023 | 118.00 | 8/8/2023 | 117.00 | Residential Sales | $12.73 | 1,489.41 |
| 4/13/2023 | 4/20/2023 | 8.00 | 4/20/2023 | 7.00 | Commercial Sales | $1,246.79 | 8,727.53 |
| 4/13/2023 | 4/20/2023 | 8.00 | 4/20/2023 | 7.00 | Residential Sales | $281.33 | 1,969.31 |
| 4/13/2023 | 4/21/2023 | 9.00 | 4/21/2023 | 8.00 | Commercial Sales | $84.14 | 673.12 |
| 4/13/2023 | 4/18/2023 | 6.00 | 4/18/2023 | 5.00 | Other Sales to Public Authority | $20.33 | 101.65 |
| 4/13/2023 | 4/21/2023 | 9.00 | 4/21/2023 | 8.00 | Residential Sales | $112.99 | 903.92 |
| 4/13/2023 | 8/25/2023 | 135.00 | 8/25/2023 | 134.00 | Residential Sales | $8.37 | 1,121.58 |
| 4/13/2023 | 6/9/2023 | 58.00 | 6/9/2023 | 57.00 | Residential Sales | $41.02 | 2,338.14 |
| 4/14/2023 | 4/17/2023 | 4.00 | 4/17/2023 | 3.00 | Other Sales to Public Authority | $13,334.04 | 40,002.12 |
| 4/14/2023 | 4/20/2023 | 7.00 | 4/20/2023 | 6.00 | Commercial Sales | $12,831.35 | 76,988.10 |
| 4/14/2023 | 8/23/2023 | 132.00 | 8/23/2023 | 131.00 | Residential Sales | $72.38 | 9,481.78 |
| 4/14/2023 | 4/18/2023 | 5.00 | 4/18/2023 | 4.00 | Other Sales to Public Authority | $527.21 | 2,108.84 |
| 4/14/2023 | 4/21/2023 | 8.00 | 4/21/2023 | 7.00 | Commercial Sales | $922.88 | 6,460.16 |
| 4/14/2023 | 4/20/2023 | 7.00 | 4/20/2023 | 6.00 | Residential Sales | $569.00 | 3,414.00 |
| 4/14/2023 | 4/21/2023 | 8.00 | 4/21/2023 | 7.00 | Residential Sales | $1,527.93 | 10,695.51 |
| 4/14/2023 | 11/15/2023 | 216.00 | 11/15/2023 | 215.00 | Commercial Sales | $36.73 | 7,896.95 |
| 4/14/2023 | 4/14/2023 | 1.00 | 4/14/2023 | 0.00 | Other Public Authority Transportation On | $28.76 | - |
| 4/14/2023 | 4/14/2023 | 1.00 | 4/14/2023 | 0.00 | Company Use | $13.43 | - |
| 4/14/2023 | 5/16/2023 | 33.00 | 5/16/2023 | 32.00 | Residential Sales | $50.82 | 1,626.24 |
| 4/14/2023 | 5/15/2024 | 398.00 | 5/15/2024 | 397.00 | Residential Sales | $141.57 | 56,203.29 |
| 4/14/2023 | 4/25/2023 | 12.00 | 4/25/2023 | 11.00 | Commercial Sales | $227.05 | 2,497.55 |
| 4/14/2023 | 4/24/2023 | 11.00 | 4/24/2023 | 10.00 | Residential Sales | $17.85 | 178.50 |
| 4/14/2023 | 4/17/2023 | 4.00 | 4/17/2023 | 3.00 | Company Use | $0.00 | - |
| 4/14/2023 | 4/26/2023 | 13.00 | 4/26/2023 | 12.00 | Commercial Sales | $19.79 | 237.48 |
| 4/14/2023 | 5/2/2023 | 19.00 | 5/2/2023 | 18.00 | Residential Sales | $87.57 | 1,576.26 |
| 4/14/2023 | 4/18/2023 | 5.00 | 4/18/2023 | 4.00 | Company Use | $0.00 | - |
| 4/14/2023 | 4/26/2023 | 13.00 | 4/26/2023 | 12.00 | Residential Sales | $1,342.55 | 16,110.60 |
| 4/14/2023 | 4/27/2023 | 14.00 | 4/27/2023 | 13.00 | Commercial Sales | $644.96 | 8,384.48 |
| 4/14/2023 | 7/5/2023 | 83.00 | 7/5/2023 | 82.00 | Residential Sales | $16.28 | 1,334.96 |
| 4/14/2023 | 4/19/2023 | 6.00 | 4/19/2023 | 5.00 | Company Use | -$2,997.63 | (14,988.15) |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 4/14/2023 | 4/27/2023 | 14.00 | 4/27/2023 | 13.00 | Residential Sales | $9.98 | 129.74 |
| 4/14/2023 | 10/27/2023 | 197.00 | 10/27/2023 | 196.00 | Residential Sales | $127.73 | 25,035.08 |
| 4/14/2023 | 4/14/2023 | 1.00 | 4/14/2023 | 0.00 | Commercial Sales | $541.19 | - |
| 4/14/2023 | 4/14/2023 | 1.00 | 4/14/2023 | 0.00 | Residential Sales | $638.41 | - |
| 4/14/2023 | 4/20/2023 | 7.00 | 4/20/2023 | 6.00 | Company Use | $0.00 | - |
| 4/14/2023 | 4/17/2023 | 4.00 | 4/17/2023 | 3.00 | Industrial Service | $30,057.26 | 90,171.78 |
| 4/14/2023 | 4/21/2023 | 8.00 | 4/21/2023 | 7.00 | Company Use | $0.00 | - |
| 4/14/2023 | 4/17/2023 | 4.00 | 4/17/2023 | 3.00 | Commercial Sales | $299,845.06 | 899,535.18 |
| 4/14/2023 | 4/18/2023 | 5.00 | 4/18/2023 | 4.00 | Industrial Service | $20,046.70 | 80,186.80 |
| 4/14/2023 | 4/17/2023 | 4.00 | 4/17/2023 | 3.00 | Residential Sales | $480,124.74 | 1,440,374.22 |
| 4/14/2023 | 4/18/2023 | 5.00 | 4/18/2023 | 4.00 | Commercial Sales | $55,752.96 | 223,011.84 |
| 4/14/2023 | 4/14/2023 | 1.00 | 4/14/2023 | 0.00 | Public Street & Highway Lighting | $332.72 | - |
| 4/14/2023 | 10/30/2023 | 200.00 | 10/30/2023 | 199.00 | Residential Sales | $49.63 | 9,876.37 |
| 4/14/2023 | 4/19/2023 | 6.00 | 4/19/2023 | 5.00 | Industrial Service | $6,370.86 | 31,854.30 |
| 4/14/2023 | 4/18/2023 | 5.00 | 4/18/2023 | 4.00 | Residential Sales | $1,442.90 | 5,771.60 |
| 4/14/2023 | 4/19/2023 | 6.00 | 4/19/2023 | 5.00 | Commercial Sales | $67,657.70 | 338,288.50 |
| 4/14/2023 | 4/19/2023 | 6.00 | 4/19/2023 | 5.00 | Residential Sales | $229.27 | 1,146.35 |
| 4/15/2023 | 4/17/2023 | 3.00 | 4/17/2023 | 2.00 | Commercial Sales | $24.11 | 48.22 |
| 4/15/2023 | 4/17/2023 | 3.00 | 4/17/2023 | 2.00 | Residential Sales | $1,021.98 | 2,043.96 |
| 4/15/2023 | 4/18/2023 | 4.00 | 4/18/2023 | 3.00 | Residential Sales | $14.36 | 43.08 |
| 4/15/2023 | 4/19/2023 | 5.00 | 4/19/2023 | 4.00 | Residential Sales | $22.66 | 90.64 |
| 4/16/2023 | 4/17/2023 | 2.00 | 4/17/2023 | 1.00 | Residential Sales | $2,014.10 | 2,014.10 |
| 4/16/2023 | 4/18/2023 | 3.00 | 4/18/2023 | 2.00 | Residential Sales | $302.92 | 605.84 |
| 4/16/2023 | 4/19/2023 | 4.00 | 4/19/2023 | 3.00 | Residential Sales | $37.77 | 113.31 |
| 4/16/2023 | 4/20/2023 | 5.00 | 4/20/2023 | 4.00 | Residential Sales | $6.27 | 25.08 |
| 4/16/2023 | 4/21/2023 | 6.00 | 4/21/2023 | 5.00 | Residential Sales | $94.75 | 473.75 |
| 4/16/2023 | 4/24/2023 | 9.00 | 4/24/2023 | 8.00 | Residential Sales | $32.99 | 263.92 |
| 4/17/2023 | 5/17/2023 | 31.00 | 5/17/2023 | 30.00 | Residential Sales | $87.23 | 2,616.90 |
| 4/17/2023 | 4/24/2023 | 8.00 | 4/24/2023 | 7.00 | Commercial Sales | $813.46 | 5,694.22 |
| 4/17/2023 | 4/24/2023 | 8.00 | 4/24/2023 | 7.00 | Residential Sales | $1,629.65 | 11,407.55 |
| 4/17/2023 | 4/25/2023 | 9.00 | 4/25/2023 | 8.00 | Commercial Sales | $109.85 | 878.80 |
| 4/17/2023 | 5/2/2023 | 16.00 | 5/2/2023 | 15.00 | Commercial Sales | $1,899.07 | 28,486.05 |
| 4/17/2023 | 4/26/2023 | 10.00 | 4/26/2023 | 9.00 | Commercial Sales | $343.67 | 3,093.03 |
| 4/17/2023 | 4/25/2023 | 9.00 | 4/25/2023 | 8.00 | Residential Sales | $222.55 | 1,780.40 |
| 4/17/2023 | 4/20/2023 | 4.00 | 4/20/2023 | 3.00 | Other Sales to Public Authority | $106.06 | 318.18 |
| 4/17/2023 | 4/26/2023 | 10.00 | 4/26/2023 | 9.00 | Residential Sales | $727.29 | 6,545.61 |
| 4/17/2023 | 4/17/2023 | 1.00 | 4/17/2023 | 0.00 | Commercial Sales | $242.97 | - |
| 4/17/2023 | 4/18/2023 | 2.00 | 4/18/2023 | 1.00 | Industrial Service | $497.60 | 497.60 |
| 4/17/2023 | 4/18/2023 | 2.00 | 4/18/2023 | 1.00 | Commercial Sales | $69,520.22 | 69,520.22 |
| 4/17/2023 | 4/19/2023 | 3.00 | 4/19/2023 | 2.00 | Industrial Service | $34,342.16 | 68,684.32 |
| 4/17/2023 | 4/17/2023 | 1.00 | 4/17/2023 | 0.00 | Residential Sales | $941.69 | - |
| 4/17/2023 | 4/18/2023 | 2.00 | 4/18/2023 | 1.00 | Residential Sales | $484,228.26 | 484,228.26 |
| 4/17/2023 | 4/19/2023 | 3.00 | 4/19/2023 | 2.00 | Commercial Sales | $22,255.59 | 44,511.18 |
| 4/17/2023 | 4/19/2023 | 3.00 | 4/19/2023 | 2.00 | Residential Sales | $8,963.17 | 17,926.34 |
| 4/17/2023 | 6/16/2023 | 61.00 | 6/16/2023 | 60.00 | Other Sales to Public Authority | $132.50 | 7,950.00 |
| 4/17/2023 | 4/17/2023 | 1.00 | 4/17/2023 | 0.00 | Public Street & Highway Lighting | $2.71 | - |
| 4/17/2023 | 5/11/2023 | 25.00 | 5/11/2023 | 24.00 | Residential Sales | $42.97 | 1,031.28 |
| 4/17/2023 | 5/12/2023 | 26.00 | 5/12/2023 | 25.00 | Commercial Sales | $41.02 | 1,025.50 |
| 4/17/2023 | 4/20/2023 | 4.00 | 4/20/2023 | 3.00 | Commercial Sales | $1,855.40 | 5,566.20 |
| 4/17/2023 | 4/17/2023 | 1.00 | 4/17/2023 | 0.00 | Other Sales to Public Authority | $76.75 | - |
| 4/17/2023 | 4/20/2023 | 4.00 | 4/20/2023 | 3.00 | Residential Sales | $2,021.01 | 6,063.03 |
| 4/17/2023 | 4/21/2023 | 5.00 | 4/21/2023 | 4.00 | Commercial Sales | $1,798.22 | 7,192.88 |
| 4/17/2023 | 4/18/2023 | 2.00 | 4/18/2023 | 1.00 | Other Sales to Public Authority | $12,964.75 | 12,964.75 |
| 4/17/2023 | 4/19/2023 | 3.00 | 4/19/2023 | 2.00 | Other Sales to Public Authority | $26,253.11 | 52,506.22 |
| 4/17/2023 | 4/21/2023 | 5.00 | 4/21/2023 | 4.00 | Residential Sales | $746.77 | 2,987.08 |
| 4/17/2023 | 5/16/2023 | 30.00 | 5/16/2023 | 29.00 | Commercial Sales | $57.43 | 1,665.47 |
| 4/18/2023 | 4/20/2023 | 3.00 | 4/20/2023 | 2.00 | Industrial Service | $29,092.77 | 58,185.54 |
| 4/18/2023 | 4/18/2023 | 1.00 | 4/18/2023 | 0.00 | Public Street & Highway Lighting | $130.83 | - |
| 4/18/2023 | 6/20/2023 | 64.00 | 6/20/2023 | 63.00 | Residential Sales | $23.47 | 1,478.61 |
| 4/18/2023 | 4/20/2023 | 3.00 | 4/20/2023 | 2.00 | Commercial Sales | $96,619.23 | 193,238.46 |
| 4/18/2023 | 4/20/2023 | 3.00 | 4/20/2023 | 2.00 | Residential Sales | $17,388.36 | 34,776.72 |
| 4/18/2023 | 4/21/2023 | 4.00 | 4/21/2023 | 3.00 | Commercial Sales | $31,285.88 | 93,857.64 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 4/18/2023 | 4/18/2023 | 1.00 | 4/18/2023 | 0.00 | Other Sales to Public Authority | $30.40 | - |
| 4/18/2023 | 4/21/2023 | 4.00 | 4/21/2023 | 3.00 | Residential Sales | $1,644.01 | 4,932.03 |
| 4/18/2023 | 4/19/2023 | 2.00 | 4/19/2023 | 1.00 | Other Sales to Public Authority | $7,706.39 | 7,706.39 |
| 4/18/2023 | 4/24/2023 | 7.00 | 4/24/2023 | 6.00 | Industrial Service | $27,192.58 | 163,155.48 |
| 4/18/2023 | 4/24/2023 | 7.00 | 4/24/2023 | 6.00 | Commercial Sales | $94.34 | 566.04 |
| 4/18/2023 | 5/18/2023 | 31.00 | 5/18/2023 | 30.00 | Commercial Sales | $56.29 | 1,688.70 |
| 4/18/2023 | 7/19/2023 | 93.00 | 7/19/2023 | 92.00 | Residential Sales | $15.97 | 1,469.24 |
| 4/18/2023 | 8/11/2023 | 116.00 | 8/11/2023 | 115.00 | Commercial Sales | $192.18 | 22,100.70 |
| 4/18/2023 | 4/24/2023 | 7.00 | 4/24/2023 | 6.00 | Residential Sales | $766.18 | 4,597.08 |
| 4/18/2023 | 4/25/2023 | 8.00 | 4/25/2023 | 7.00 | Commercial Sales | $19.43 | 136.01 |
| 4/18/2023 | 5/18/2023 | 31.00 | 5/18/2023 | 30.00 | Residential Sales | $140.29 | 4,208.70 |
| 4/18/2023 | 4/25/2023 | 8.00 | 4/25/2023 | 7.00 | Residential Sales | $489.79 | 3,428.53 |
| 4/18/2023 | 4/20/2023 | 3.00 | 4/20/2023 | 2.00 | Other Sales to Public Authority | $393.75 | 787.50 |
| 4/18/2023 | 9/7/2023 | 143.00 | 9/7/2023 | 142.00 | Commercial Sales | $232.15 | 32,965.30 |
| 4/18/2023 | 4/26/2023 | 9.00 | 4/26/2023 | 8.00 | Commercial Sales | $157.00 | 1,256.00 |
| 4/18/2023 | 5/19/2023 | 32.00 | 5/19/2023 | 31.00 | Residential Sales | $1.76 | 54.56 |
| 4/18/2023 | 4/26/2023 | 9.00 | 4/26/2023 | 8.00 | Residential Sales | $3,328.81 | 26,630.48 |
| 4/18/2023 | 5/4/2023 | 17.00 | 5/4/2023 | 16.00 | Commercial Sales | $731.45 | 11,703.20 |
| 4/18/2023 | 4/27/2023 | 10.00 | 4/27/2023 | 9.00 | Commercial Sales | $186.68 | 1,680.12 |
| 4/18/2023 | 4/27/2023 | 10.00 | 4/27/2023 | 9.00 | Residential Sales | $382.67 | 3,444.03 |
| 4/18/2023 | 4/28/2023 | 11.00 | 4/28/2023 | 10.00 | Residential Sales | $184.85 | 1,848.50 |
| 4/18/2023 | 4/29/2023 | 12.00 | 4/29/2023 | 11.00 | Residential Sales | $31.69 | 348.59 |
| 4/18/2023 | 4/18/2023 | 1.00 | 4/18/2023 | 0.00 | Commercial Sales | $531.97 | - |
| 4/18/2023 | 4/19/2023 | 2.00 | 4/19/2023 | 1.00 | Industrial Service | $78,261.70 | 78,261.70 |
| 4/18/2023 | 4/19/2023 | 2.00 | 4/19/2023 | 1.00 | Commercial Sales | $188,067.43 | 188,067.43 |
| 4/18/2023 | 4/18/2023 | 1.00 | 4/18/2023 | 0.00 | Residential Sales | $1,181.15 | - |
| 4/18/2023 | 4/19/2023 | 2.00 | 4/19/2023 | 1.00 | Residential Sales | $694,526.60 | 694,526.60 |
| 4/18/2023 | 5/11/2023 | 24.00 | 5/11/2023 | 23.00 | Commercial Sales | $33.62 | 773.26 |
| 4/19/2023 | 9/28/2023 | 163.00 | 9/28/2023 | 162.00 | Commercial Sales | $106.50 | 17,253.00 |
| 4/19/2023 | 5/23/2023 | 35.00 | 5/23/2023 | 34.00 | Residential Sales | $68.77 | 2,338.18 |
| 4/19/2023 | 7/26/2023 | 99.00 | 7/26/2023 | 98.00 | Commercial Sales | $14.66 | 1,436.68 |
| 4/19/2023 | 4/19/2023 | 1.00 | 4/19/2023 | 0.00 | Commercial Sales | $176.74 | - |
| 4/19/2023 | 4/19/2023 | 1.00 | 4/19/2023 | 0.00 | Residential Sales | $4,682.44 | - |
| 4/19/2023 | 5/11/2023 | 23.00 | 5/11/2023 | 22.00 | Commercial Sales | $1,359.76 | 29,914.72 |
| 4/19/2023 | 5/10/2023 | 22.00 | 5/10/2023 | 21.00 | Residential Sales | $58.95 | 1,237.95 |
| 4/19/2023 | 5/12/2023 | 24.00 | 5/12/2023 | 23.00 | Commercial Sales | $28.16 | 647.68 |
| 4/19/2023 | 4/20/2023 | 2.00 | 4/20/2023 | 1.00 | Industrial Service | $7,530.73 | 7,530.73 |
| 4/19/2023 | 4/20/2023 | 2.00 | 4/20/2023 | 1.00 | Commercial Sales | $100,143.75 | 100,143.75 |
| 4/19/2023 | 4/19/2023 | 1.00 | 4/19/2023 | 0.00 | Public Street & Highway Lighting | $312.22 | - |
| 4/19/2023 | 4/21/2023 | 3.00 | 4/21/2023 | 2.00 | Industrial Service | $5,729.42 | 11,458.84 |
| 4/19/2023 | 4/20/2023 | 2.00 | 4/20/2023 | 1.00 | Residential Sales | $402,944.19 | 402,944.19 |
| 4/19/2023 | 4/21/2023 | 3.00 | 4/21/2023 | 2.00 | Commercial Sales | $58,192.07 | 116,384.14 |
| 4/19/2023 | 4/21/2023 | 3.00 | 4/21/2023 | 2.00 | Residential Sales | $6,390.93 | 12,781.86 |
| 4/19/2023 | 4/24/2023 | 6.00 | 4/24/2023 | 5.00 | Industrial Service | $76.15 | 380.75 |
| 4/19/2023 | 4/24/2023 | 6.00 | 4/24/2023 | 5.00 | Commercial Sales | $45,640.58 | 228,202.90 |
| 4/19/2023 | 8/11/2023 | 115.00 | 8/11/2023 | 114.00 | Commercial Sales | $61.92 | 7,058.88 |
| 4/19/2023 | 5/17/2023 | 29.00 | 5/17/2023 | 28.00 | Residential Sales | $1.65 | 46.20 |
| 4/19/2023 | 4/25/2023 | 7.00 | 4/25/2023 | 6.00 | Commercial Sales | $688.84 | 4,133.04 |
| 4/19/2023 | 4/24/2023 | 6.00 | 4/24/2023 | 5.00 | Residential Sales | $1,714.87 | 8,574.35 |
| 4/19/2023 | 10/23/2023 | 188.00 | 10/23/2023 | 187.00 | Residential Sales | $65.79 | 12,302.73 |
| 4/19/2023 | 5/2/2023 | 14.00 | 5/2/2023 | 13.00 | Commercial Sales | $3,777.91 | 49,112.83 |
| 4/19/2023 | 4/26/2023 | 8.00 | 4/26/2023 | 7.00 | Commercial Sales | $9,809.63 | 68,667.41 |
| 4/19/2023 | 4/25/2023 | 7.00 | 4/25/2023 | 6.00 | Residential Sales | $419.24 | 2,515.44 |
| 4/19/2023 | 4/20/2023 | 2.00 | 4/20/2023 | 1.00 | Other Sales to Public Authority | $8,462.50 | 8,462.50 |
| 4/19/2023 | 5/2/2023 | 14.00 | 5/2/2023 | 13.00 | Residential Sales | $28.99 | 376.87 |
| 4/19/2023 | 4/26/2023 | 8.00 | 4/26/2023 | 7.00 | Residential Sales | $1,236.58 | 8,656.06 |
| 4/19/2023 | 4/27/2023 | 9.00 | 4/27/2023 | 8.00 | Commercial Sales | $238.42 | 1,907.36 |
| 4/19/2023 | 4/21/2023 | 3.00 | 4/21/2023 | 2.00 | Other Sales to Public Authority | $971.13 | 1,942.26 |
| 4/19/2023 | 8/14/2023 | 118.00 | 8/14/2023 | 117.00 | Commercial Sales | $1,671.68 | 195,586.56 |
| 4/19/2023 | 4/27/2023 | 9.00 | 4/27/2023 | 8.00 | Residential Sales | $259.39 | 2,075.12 |
| 4/19/2023 | 4/28/2023 | 10.00 | 4/28/2023 | 9.00 | Commercial Sales | $7,810.05 | 70,290.45 |
| 4/19/2023 | 5/5/2023 | 17.00 | 5/5/2023 | 16.00 | Commercial Sales | $353.66 | 5,658.56 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 4/19/2023 | 4/28/2023 | 10.00 | 4/28/2023 | 9.00 | Residential Sales | $140.82 | 1,267.38 |
| 4/19/2023 | 5/5/2023 | 17.00 | 5/5/2023 | 16.00 | Residential Sales | $27.84 | 445.44 |
| 4/19/2023 | 4/29/2023 | 11.00 | 4/29/2023 | 10.00 | Residential Sales | $64.91 | 649.10 |
| 4/19/2023 | 4/24/2023 | 6.00 | 4/24/2023 | 5.00 | Other Sales to Public Authority | $14,240.65 | 71,203.25 |
| 4/20/2023 | 5/23/2023 | 34.00 | 5/23/2023 | 33.00 | Residential Sales | $1.25 | 41.25 |
| 4/20/2023 | 5/9/2023 | 20.00 | 5/9/2023 | 19.00 | Residential Sales | $32.98 | 626.62 |
| 4/20/2023 | 5/24/2023 | 35.00 | 5/24/2023 | 34.00 | Residential Sales | $16.84 | 572.56 |
| 4/20/2023 | 5/25/2023 | 36.00 | 5/25/2023 | 35.00 | Residential Sales | $17.09 | 598.15 |
| 4/20/2023 | 5/10/2023 | 21.00 | 5/10/2023 | 20.00 | Residential Sales | $64.93 | 1,298.60 |
| 4/20/2023 | 5/11/2023 | 22.00 | 5/11/2023 | 21.00 | Residential Sales | $27.85 | 584.85 |
| 4/20/2023 | 6/20/2023 | 62.00 | 6/20/2023 | 61.00 | Residential Sales | $26.34 | 1,606.74 |
| 4/20/2023 | 4/20/2023 | 1.00 | 4/20/2023 | 0.00 | Commercial Sales | $36.60 | - |
| 4/20/2023 | 4/21/2023 | 2.00 | 4/21/2023 | 1.00 | Industrial Service | $2,901.83 | 2,901.83 |
| 4/20/2023 | 4/21/2023 | 2.00 | 4/21/2023 | 1.00 | Commercial Sales | $78,424.12 | 78,424.12 |
| 4/20/2023 | 4/20/2023 | 1.00 | 4/20/2023 | 0.00 | Residential Sales | $1,446.22 | - |
| 4/20/2023 | 4/21/2023 | 2.00 | 4/21/2023 | 1.00 | Residential Sales | $571,046.39 | 571,046.39 |
| 4/20/2023 | 5/15/2023 | 26.00 | 5/15/2023 | 25.00 | Residential Sales | $2.95 | 73.75 |
| 4/20/2023 | 4/24/2023 | 5.00 | 4/24/2023 | 4.00 | Commercial Sales | $25,151.03 | 100,604.12 |
| 4/20/2023 | 5/1/2023 | 12.00 | 5/1/2023 | 11.00 | Commercial Sales | $148.67 | 1,635.37 |
| 4/20/2023 | 5/17/2023 | 28.00 | 5/17/2023 | 27.00 | Residential Sales | $12.60 | 340.20 |
| 4/20/2023 | 4/20/2023 | 1.00 | 4/20/2023 | 0.00 | Public Street & Highway Lighting | $92.03 | - |
| 4/20/2023 | 4/24/2023 | 5.00 | 4/24/2023 | 4.00 | Residential Sales | $9,386.11 | 37,544.44 |
| 4/20/2023 | 4/25/2023 | 6.00 | 4/25/2023 | 5.00 | Commercial Sales | $13,631.03 | 68,155.15 |
| 4/20/2023 | 5/1/2023 | 12.00 | 5/1/2023 | 11.00 | Residential Sales | $156.98 | 1,726.78 |
| 4/20/2023 | 4/26/2023 | 7.00 | 4/26/2023 | 6.00 | Commercial Sales | $717.56 | 4,305.36 |
| 4/20/2023 | 4/25/2023 | 6.00 | 4/25/2023 | 5.00 | Residential Sales | $510.48 | 2,552.40 |
| 4/20/2023 | 5/19/2023 | 30.00 | 5/19/2023 | 29.00 | Residential Sales | $45.86 | 1,329.94 |
| 4/20/2023 | 4/26/2023 | 7.00 | 4/26/2023 | 6.00 | Residential Sales | $493.38 | 2,960.28 |
| 4/20/2023 | 4/27/2023 | 8.00 | 4/27/2023 | 7.00 | Commercial Sales | $11,787.43 | 82,512.01 |
| 4/20/2023 | 4/21/2023 | 2.00 | 4/21/2023 | 1.00 | Other Sales to Public Authority | $11,086.77 | 11,086.77 |
| 4/20/2023 | 4/27/2023 | 8.00 | 4/27/2023 | 7.00 | Residential Sales | $869.41 | 6,085.87 |
| 4/20/2023 | 7/20/2023 | 92.00 | 7/20/2023 | 91.00 | Residential Sales | $43.23 | 3,933.93 |
| 4/20/2023 | 4/28/2023 | 9.00 | 4/28/2023 | 8.00 | Residential Sales | $539.54 | 4,316.32 |
| 4/20/2023 | 7/21/2023 | 93.00 | 7/21/2023 | 92.00 | Residential Sales | $47.24 | 4,346.08 |
| 4/20/2023 | 4/24/2023 | 5.00 | 4/24/2023 | 4.00 | Other Sales to Public Authority | $18,197.24 | 72,788.96 |
| 4/20/2023 | 4/25/2023 | 6.00 | 4/25/2023 | 5.00 | Other Sales to Public Authority | $60.36 | 301.80 |
| 4/20/2023 | 5/22/2023 | 33.00 | 5/22/2023 | 32.00 | Residential Sales | $3.05 | 97.60 |
| 4/21/2023 | 4/27/2023 | 7.00 | 4/27/2023 | 6.00 | Residential Sales | $1,298.40 | 7,790.40 |
| 4/21/2023 | 4/28/2023 | 8.00 | 4/28/2023 | 7.00 | Commercial Sales | $603.30 | 4,223.10 |
| 4/21/2023 | 4/28/2023 | 8.00 | 4/28/2023 | 7.00 | Residential Sales | $652.45 | 4,567.15 |
| 4/21/2023 | 12/13/2023 | 237.00 | 12/13/2023 | 236.00 | Commercial Sales | $234.67 | 55,382.12 |
| 4/21/2023 | 4/29/2023 | 9.00 | 4/29/2023 | 8.00 | Residential Sales | $14.36 | 114.88 |
| 4/21/2023 | 4/24/2023 | 4.00 | 4/24/2023 | 3.00 | Other Sales to Public Authority | $11,711.87 | 35,135.61 |
| 4/21/2023 | 12/14/2023 | 238.00 | 12/14/2023 | 237.00 | Commercial Sales | $141.93 | 33,637.41 |
| 4/21/2023 | 4/25/2023 | 5.00 | 4/25/2023 | 4.00 | Other Sales to Public Authority | $6,509.85 | 26,039.40 |
| 4/21/2023 | 5/23/2023 | 33.00 | 5/23/2023 | 32.00 | Commercial Sales | $16.15 | 516.80 |
| 4/21/2023 | 5/23/2023 | 33.00 | 5/23/2023 | 32.00 | Residential Sales | $72.19 | 2,310.08 |
| 4/21/2023 | 4/27/2023 | 7.00 | 4/27/2023 | 6.00 | Other Sales to Public Authority | $12,701.05 | 76,206.30 |
| 4/21/2023 | 6/1/2023 | 42.00 | 6/1/2023 | 41.00 | Residential Sales | $117.72 | 4,826.52 |
| 4/21/2023 | 12/13/2023 | 237.00 | 12/13/2023 | 236.00 | Other Sales to Public Authority | $67.28 | 15,878.08 |
| 4/21/2023 | 5/12/2023 | 22.00 | 5/12/2023 | 21.00 | Residential Sales | $66.12 | 1,388.52 |
| 4/21/2023 | 4/21/2023 | 1.00 | 4/21/2023 | 0.00 | Commercial Sales | $1,822.51 | - |
| 4/21/2023 | 4/21/2023 | 1.00 | 4/21/2023 | 0.00 | Residential Sales | $3,397.66 | - |
| 4/21/2023 | 5/10/2023 | 20.00 | 5/10/2023 | 19.00 | Other Sales to Public Authority | $527.30 | 10,018.70 |
| 4/21/2023 | 4/24/2023 | 4.00 | 4/24/2023 | 3.00 | Industrial Service | $56,075.97 | 168,227.91 |
| 4/21/2023 | 4/24/2023 | 4.00 | 4/24/2023 | 3.00 | Commercial Sales | $214,353.07 | 643,059.21 |
| 4/21/2023 | 4/25/2023 | 5.00 | 4/25/2023 | 4.00 | Industrial Service | $24,211.75 | 96,847.00 |
| 4/21/2023 | 8/10/2023 | 112.00 | 8/10/2023 | 111.00 | Residential Sales | $161.90 | 17,970.90 |
| 4/21/2023 | 4/24/2023 | 4.00 | 4/24/2023 | 3.00 | Residential Sales | $567,107.70 | 1,701,323.10 |
| 4/21/2023 | 4/25/2023 | 5.00 | 4/25/2023 | 4.00 | Commercial Sales | $44,708.96 | 178,835.84 |
| 4/21/2023 | 4/21/2023 | 1.00 | 4/21/2023 | 0.00 | Public Street & Highway Lighting | $16.84 | - |
| 4/21/2023 | 5/1/2023 | 11.00 | 5/1/2023 | 10.00 | Residential Sales | $468.40 | 4,684.00 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 4/21/2023 | 4/25/2023 | 5.00 | 4/25/2023 | 4.00 | Residential Sales | $2,333.43 | 9,333.72 |
| 4/21/2023 | 4/26/2023 | 6.00 | 4/26/2023 | 5.00 | Commercial Sales | $33,251.00 | 166,255.00 |
| 4/21/2023 | 5/2/2023 | 12.00 | 5/2/2023 | 11.00 | Residential Sales | $75.24 | 827.64 |
| 4/21/2023 | 5/3/2023 | 13.00 | 5/3/2023 | 12.00 | Commercial Sales | $91.96 | 1,103.52 |
| 4/21/2023 | 4/26/2023 | 6.00 | 4/26/2023 | 5.00 | Residential Sales | $546.49 | 2,732.45 |
| 4/21/2023 | 4/27/2023 | 7.00 | 4/27/2023 | 6.00 | Commercial Sales | $1,837.90 | 11,027.40 |
| 4/21/2023 | 4/21/2023 | 1.00 | 4/21/2023 | 0.00 | Other Sales to Public Authority | $7.63 | - |
| 4/21/2023 | 7/5/2023 | 76.00 | 7/5/2023 | 75.00 | Residential Sales | $14.10 | 1,057.50 |
| 4/22/2023 | 4/25/2023 | 4.00 | 4/25/2023 | 3.00 | Commercial Sales | $3.89 | 11.67 |
| 4/22/2023 | 4/24/2023 | 3.00 | 4/24/2023 | 2.00 | Residential Sales | $336.33 | 672.66 |
| 4/22/2023 | 4/28/2023 | 7.00 | 4/28/2023 | 6.00 | Residential Sales | $37.00 | 222.00 |
| 4/23/2023 | 4/24/2023 | 2.00 | 4/24/2023 | 1.00 | Commercial Sales | $670.10 | 670.10 |
| 4/23/2023 | 4/24/2023 | 2.00 | 4/24/2023 | 1.00 | Residential Sales | $916.70 | 916.70 |
| 4/23/2023 | 4/25/2023 | 3.00 | 4/25/2023 | 2.00 | Commercial Sales | $94.96 | 189.92 |
| 4/23/2023 | 4/25/2023 | 3.00 | 4/25/2023 | 2.00 | Residential Sales | $192.54 | 385.08 |
| 4/23/2023 | 5/3/2023 | 11.00 | 5/3/2023 | 10.00 | Residential Sales | $11.76 | 117.60 |
| 4/23/2023 | 5/4/2023 | 12.00 | 5/4/2023 | 11.00 | Residential Sales | $24.07 | 264.77 |
| 4/23/2023 | 4/27/2023 | 5.00 | 4/27/2023 | 4.00 | Residential Sales | $13.85 | 55.40 |
| 4/23/2023 | 4/28/2023 | 6.00 | 4/28/2023 | 5.00 | Residential Sales | $29.99 | 149.95 |
| 4/23/2023 | 4/29/2023 | 7.00 | 4/29/2023 | 6.00 | Residential Sales | $12.47 | 74.82 |
| 4/24/2023 | 4/27/2023 | 4.00 | 4/27/2023 | 3.00 | Other Sales to Public Authority | $272.42 | 817.26 |
| 4/24/2023 | 8/1/2023 | 100.00 | 8/1/2023 | 99.00 | Other Sales to Public Authority | $456.71 | 45,214.29 |
| 4/24/2023 | 7/12/2023 | 80.00 | 7/12/2023 | 79.00 | Residential Sales | $14.10 | 1,113.90 |
| 4/24/2023 | 6/9/2023 | 47.00 | 6/9/2023 | 46.00 | Commercial Sales | $3,856.78 | 177,411.88 |
| 4/24/2023 | 5/1/2023 | 8.00 | 5/1/2023 | 7.00 | Industrial Service | $18.37 | 128.59 |
| 4/24/2023 | 4/24/2023 | 1.00 | 4/24/2023 | 0.00 | Commercial Sales | $833.71 | - |
| 4/24/2023 | 4/25/2023 | 2.00 | 4/25/2023 | 1.00 | Industrial Service | $46,226.87 | 46,226.87 |
| 4/24/2023 | 4/25/2023 | 2.00 | 4/25/2023 | 1.00 | Commercial Sales | $231,949.21 | 231,949.21 |
| 4/24/2023 | 5/1/2023 | 8.00 | 5/1/2023 | 7.00 | Residential Sales | $1,202.68 | 8,418.76 |
| 4/24/2023 | 4/24/2023 | 1.00 | 4/24/2023 | 0.00 | Residential Sales | $1,104.87 | - |
| 4/24/2023 | 4/26/2023 | 3.00 | 4/26/2023 | 2.00 | Industrial Service | $2,812.70 | 5,625.40 |
| 4/24/2023 | 4/25/2023 | 2.00 | 4/25/2023 | 1.00 | Residential Sales | $455,427.16 | 455,427.16 |
| 4/24/2023 | 4/26/2023 | 3.00 | 4/26/2023 | 2.00 | Commercial Sales | $130,632.58 | 261,265.16 |
| 4/24/2023 | 5/2/2023 | 9.00 | 5/2/2023 | 8.00 | Residential Sales | $96.90 | 775.20 |
| 4/24/2023 | 5/19/2023 | 26.00 | 5/19/2023 | 25.00 | Residential Sales | $1.91 | 47.75 |
| 4/24/2023 | 4/26/2023 | 3.00 | 4/26/2023 | 2.00 | Residential Sales | $7,974.11 | 15,948.22 |
| 4/24/2023 | 4/27/2023 | 4.00 | 4/27/2023 | 3.00 | Commercial Sales | $59,835.37 | 179,506.11 |
| 4/24/2023 | 4/28/2023 | 5.00 | 4/28/2023 | 4.00 | Industrial Service | $13,026.27 | 52,105.08 |
| 4/24/2023 | 4/28/2023 | 5.00 | 4/28/2023 | 4.00 | Commercial Sales | $23,369.23 | 93,476.92 |
| 4/24/2023 | 4/27/2023 | 4.00 | 4/27/2023 | 3.00 | Residential Sales | $1,352.44 | 4,057.32 |
| 4/24/2023 | 5/4/2023 | 11.00 | 5/4/2023 | 10.00 | Residential Sales | $69.62 | 696.20 |
| 4/24/2023 | 4/24/2023 | 1.00 | 4/24/2023 | 0.00 | Public Street & Highway Lighting | $8.99 | - |
| 4/24/2023 | 4/29/2023 | 6.00 | 4/29/2023 | 5.00 | Commercial Sales | $924.52 | 4,622.60 |
| 4/24/2023 | 4/28/2023 | 5.00 | 4/28/2023 | 4.00 | Residential Sales | $652.10 | 2,608.40 |
| 4/24/2023 | 4/29/2023 | 6.00 | 4/29/2023 | 5.00 | Residential Sales | $415.71 | 2,078.55 |
| 4/24/2023 | 4/25/2023 | 2.00 | 4/25/2023 | 1.00 | Other Sales to Public Authority | $32,744.28 | 32,744.28 |
| 4/24/2023 | 4/26/2023 | 3.00 | 4/26/2023 | 2.00 | Other Sales to Public Authority | $902.40 | 1,804.80 |
| 4/24/2023 | 3/5/2024 | 317.00 | 3/5/2024 | 316.00 | Residential Sales | $34.52 | 10,908.32 |
| 4/25/2023 | 4/27/2023 | 3.00 | 4/27/2023 | 2.00 | Residential Sales | $8,237.13 | 16,474.26 |
| 4/25/2023 | 4/28/2023 | 4.00 | 4/28/2023 | 3.00 | Commercial Sales | $160,589.39 | 481,768.17 |
| 4/25/2023 | 12/28/2023 | 248.00 | 12/28/2023 | 247.00 | Residential Sales | $19.91 | 4,917.77 |
| 4/25/2023 | 4/25/2023 | 1.00 | 4/25/2023 | 0.00 | Public Street & Highway Lighting | $6,569.31 | - |
| 4/25/2023 | 4/28/2023 | 4.00 | 4/28/2023 | 3.00 | Residential Sales | $847.26 | 2,541.78 |
| 4/25/2023 | 4/29/2023 | 5.00 | 4/29/2023 | 4.00 | Commercial Sales | $34.18 | 136.72 |
| 4/25/2023 | 4/29/2023 | 5.00 | 4/29/2023 | 4.00 | Residential Sales | $384.48 | 1,537.92 |
| 4/25/2023 | 4/26/2023 | 2.00 | 4/26/2023 | 1.00 | Public Street & Highway Lighting | $9,434.27 | 9,434.27 |
| 4/25/2023 | 4/25/2023 | 1.00 | 4/25/2023 | 0.00 | Other Sales to Public Authority | $57.04 | - |
| 4/25/2023 | 4/26/2023 | 2.00 | 4/26/2023 | 1.00 | Other Sales to Public Authority | $27,906.66 | 27,906.66 |
| 4/25/2023 | 5/22/2023 | 28.00 | 5/22/2023 | 27.00 | Residential Sales | $0.90 | 24.30 |
| 4/25/2023 | 4/27/2023 | 3.00 | 4/27/2023 | 2.00 | Other Sales to Public Authority | $9,105.90 | 18,211.80 |
| 4/25/2023 | 5/9/2023 | 15.00 | 5/9/2023 | 14.00 | Residential Sales | $27.56 | 385.84 |
| 4/25/2023 | 4/28/2023 | 4.00 | 4/28/2023 | 3.00 | Other Sales to Public Authority | $11,597.38 | 34,792.14 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 4/25/2023 | 12/13/2023 | 233.00 | 12/13/2023 | 232.00 | Other Sales to Public Authority | $264.55 | 61,375.60 |
| 4/25/2023 | 5/25/2023 | 31.00 | 5/25/2023 | 30.00 | Residential Sales | $9.11 | 273.30 |
| 4/25/2023 | 5/10/2023 | 16.00 | 5/10/2023 | 15.00 | Commercial Sales | $28.15 | 422.25 |
| 4/25/2023 | 5/26/2023 | 32.00 | 5/26/2023 | 31.00 | Residential Sales | $69.45 | 2,152.95 |
| 4/25/2023 | 5/10/2023 | 16.00 | 5/10/2023 | 15.00 | Residential Sales | $26.32 | 394.80 |
| 4/25/2023 | 8/1/2023 | 99.00 | 8/1/2023 | 98.00 | Other Sales to Public Authority | $952.36 | 93,331.28 |
| 4/25/2023 | 5/12/2023 | 18.00 | 5/12/2023 | 17.00 | Commercial Sales | $158.12 | 2,688.04 |
| 4/25/2023 | 7/31/2023 | 98.00 | 7/31/2023 | 97.00 | Residential Sales | $68.60 | 6,654.20 |
| 4/25/2023 | 5/16/2023 | 22.00 | 5/16/2023 | 21.00 | Residential Sales | $100.22 | 2,104.62 |
| 4/25/2023 | 4/25/2023 | 1.00 | 4/25/2023 | 0.00 | Commercial Sales | $12,513.93 | - |
| 4/25/2023 | 5/1/2023 | 7.00 | 5/1/2023 | 6.00 | Residential Sales | $855.57 | 5,133.42 |
| 4/25/2023 | 4/26/2023 | 2.00 | 4/26/2023 | 1.00 | Industrial Service | $70,031.79 | 70,031.79 |
| 4/25/2023 | 4/26/2023 | 2.00 | 4/26/2023 | 1.00 | Commercial Sales | $517,422.99 | 517,422.99 |
| 4/25/2023 | 4/25/2023 | 1.00 | 4/25/2023 | 0.00 | Residential Sales | $1,766.19 | - |
| 4/25/2023 | 9/21/2023 | 150.00 | 9/21/2023 | 149.00 | Commercial Sales | $41.93 | 6,247.57 |
| 4/25/2023 | 5/2/2023 | 8.00 | 5/2/2023 | 7.00 | Residential Sales | $891.84 | 6,242.88 |
| 4/25/2023 | 4/27/2023 | 3.00 | 4/27/2023 | 2.00 | Industrial Service | $1,158.35 | 2,316.70 |
| 4/25/2023 | 5/3/2023 | 9.00 | 5/3/2023 | 8.00 | Commercial Sales | $4,029.27 | 32,234.16 |
| 4/25/2023 | 4/27/2023 | 3.00 | 4/27/2023 | 2.00 | Commercial Sales | $283,441.66 | 566,883.32 |
| 4/25/2023 | 4/26/2023 | 2.00 | 4/26/2023 | 1.00 | Residential Sales | $491,727.98 | 491,727.98 |
| 4/25/2023 | 5/3/2023 | 9.00 | 5/3/2023 | 8.00 | Residential Sales | $13.22 | 105.76 |
| 4/25/2023 | 3/1/2024 | 312.00 | 3/1/2024 | 311.00 | Commercial Sales | $360.01 | 111,963.11 |
| 4/26/2023 | 7/18/2023 | 84.00 | 7/18/2023 | 83.00 | Residential Sales | $115.09 | 9,552.47 |
| 4/26/2023 | 5/1/2023 | 6.00 | 5/1/2023 | 5.00 | Industrial Service | $151,655.64 | 758,278.20 |
| 4/26/2023 | 5/30/2023 | 35.00 | 5/30/2023 | 34.00 | Residential Sales | $19.63 | 667.42 |
| 4/26/2023 | 5/1/2023 | 6.00 | 5/1/2023 | 5.00 | Commercial Sales | $31,145.26 | 155,726.30 |
| 4/26/2023 | 7/19/2023 | 85.00 | 7/19/2023 | 84.00 | Residential Sales | $92.37 | 7,759.08 |
| 4/26/2023 | 5/1/2023 | 6.00 | 5/1/2023 | 5.00 | Residential Sales | $1,067.12 | 5,335.60 |
| 4/26/2023 | 5/2/2023 | 7.00 | 5/2/2023 | 6.00 | Commercial Sales | $11,939.78 | 71,638.68 |
| 4/26/2023 | 4/29/2023 | 4.00 | 4/29/2023 | 3.00 | Company Use | $155.94 | 467.82 |
| 4/26/2023 | 4/26/2023 | 1.00 | 4/26/2023 | 0.00 | Commercial Sales | $29,832.50 | - |
| 4/26/2023 | 4/27/2023 | 2.00 | 4/27/2023 | 1.00 | Industrial Service | $142,776.10 | 142,776.10 |
| 4/26/2023 | 5/2/2023 | 7.00 | 5/2/2023 | 6.00 | Residential Sales | $1,649.91 | 9,899.46 |
| 4/26/2023 | 4/27/2023 | 2.00 | 4/27/2023 | 1.00 | Commercial Sales | $913,711.86 | 913,711.86 |
| 4/26/2023 | 4/28/2023 | 3.00 | 4/28/2023 | 2.00 | Industrial Service | $145,130.84 | 290,261.68 |
| 4/26/2023 | 5/3/2023 | 8.00 | 5/3/2023 | 7.00 | Residential Sales | $144.65 | 1,012.55 |
| 4/26/2023 | 4/26/2023 | 1.00 | 4/26/2023 | 0.00 | Residential Sales | $830.47 | - |
| 4/26/2023 | 6/12/2023 | 48.00 | 6/12/2023 | 47.00 | Commercial Sales | $18.37 | 863.39 |
| 4/26/2023 | 4/27/2023 | 2.00 | 4/27/2023 | 1.00 | Residential Sales | $443,562.06 | 443,562.06 |
| 4/26/2023 | 4/28/2023 | 3.00 | 4/28/2023 | 2.00 | Commercial Sales | $206,227.24 | 412,454.48 |
| 4/26/2023 | 5/4/2023 | 9.00 | 5/4/2023 | 8.00 | Residential Sales | $67.24 | 537.92 |
| 4/26/2023 | 4/29/2023 | 4.00 | 4/29/2023 | 3.00 | Commercial Sales | $82,609.25 | 247,827.75 |
| 4/26/2023 | 4/28/2023 | 3.00 | 4/28/2023 | 2.00 | Residential Sales | $7,573.86 | 15,147.72 |
| 4/26/2023 | 4/26/2023 | 1.00 | 4/26/2023 | 0.00 | Public Street & Highway Lighting | $1,468.01 | - |
| 4/26/2023 | 4/29/2023 | 4.00 | 4/29/2023 | 3.00 | Residential Sales | $580.26 | 1,740.78 |
| 4/26/2023 | 5/8/2023 | 13.00 | 5/8/2023 | 12.00 | Residential Sales | $80.22 | 962.64 |
| 4/26/2023 | 4/27/2023 | 2.00 | 4/27/2023 | 1.00 | Other Sales to Public Authority | $32,566.49 | 32,566.49 |
| 4/26/2023 | 5/9/2023 | 14.00 | 5/9/2023 | 13.00 | Residential Sales | $58.11 | 755.43 |
| 4/26/2023 | 4/28/2023 | 3.00 | 4/28/2023 | 2.00 | Other Sales to Public Authority | $15,495.72 | 30,991.44 |
| 4/26/2023 | 4/29/2023 | 4.00 | 4/29/2023 | 3.00 | Other Sales to Public Authority | $353.90 | 1,061.70 |
| 4/26/2023 | 7/10/2023 | 76.00 | 7/10/2023 | 75.00 | Residential Sales | $83.13 | 6,234.75 |
| 4/26/2023 | 6/19/2023 | 55.00 | 6/19/2023 | 54.00 | Residential Sales | $91.59 | 4,945.86 |
| 4/26/2023 | 12/13/2023 | 232.00 | 12/13/2023 | 231.00 | Other Sales to Public Authority | $247.00 | 57,057.00 |
| 4/26/2023 | 5/26/2023 | 31.00 | 5/26/2023 | 30.00 | Commercial Sales | $403.30 | 12,099.00 |
| 4/26/2023 | 5/10/2023 | 15.00 | 5/10/2023 | 14.00 | Commercial Sales | $51.51 | 721.14 |
| 4/26/2023 | 1/2/2024 | 252.00 | 1/2/2024 | 251.00 | Other Sales to Public Authority | $120.69 | 30,293.19 |
| 4/27/2023 | 7/13/2023 | 78.00 | 7/13/2023 | 77.00 | Residential Sales | $19.99 | 1,539.23 |
| 4/27/2023 | 6/9/2023 | 44.00 | 6/9/2023 | 43.00 | Industrial Service | $602.29 | 25,898.47 |
| 4/27/2023 | 4/21/2024 | 361.00 | 4/21/2024 | 360.00 | Commercial Sales | $30.67 | 11,041.20 |
| 4/27/2023 | 5/16/2023 | 20.00 | 5/16/2023 | 19.00 | Residential Sales | $148.86 | 2,828.34 |
| 4/27/2023 | 5/1/2023 | 5.00 | 5/1/2023 | 4.00 | Industrial Service | $2,696.25 | 10,785.00 |
| 4/27/2023 | 5/30/2023 | 34.00 | 5/30/2023 | 33.00 | Residential Sales | $17.23 | 568.59 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 4/27/2023 | 5/1/2023 | 5.00 | 5/1/2023 | 4.00 | Commercial Sales | $21,742.44 | 86,969.76 |
| 4/27/2023 | 5/17/2023 | 21.00 | 5/17/2023 | 20.00 | Residential Sales | $14.90 | 298.00 |
| 4/27/2023 | 5/1/2023 | 5.00 | 5/1/2023 | 4.00 | Residential Sales | $4,172.16 | 16,688.64 |
| 4/27/2023 | 5/2/2023 | 6.00 | 5/2/2023 | 5.00 | Commercial Sales | $3,072.85 | 15,364.25 |
| 4/27/2023 | 5/2/2023 | 6.00 | 5/2/2023 | 5.00 | Residential Sales | $1,878.63 | 9,393.15 |
| 4/27/2023 | 5/3/2023 | 7.00 | 5/3/2023 | 6.00 | Residential Sales | $339.63 | 2,037.78 |
| 4/27/2023 | 4/27/2023 | 1.00 | 4/27/2023 | 0.00 | Commercial Sales | $105.11 | - |
| 4/27/2023 | 4/28/2023 | 2.00 | 4/28/2023 | 1.00 | Industrial Service | $436,882.72 | 436,882.72 |
| 4/27/2023 | 4/27/2023 | 1.00 | 4/27/2023 | 0.00 | Residential Sales | $1,048.59 | - |
| 4/27/2023 | 4/28/2023 | 2.00 | 4/28/2023 | 1.00 | Commercial Sales | $133,792.37 | 133,792.37 |
| 4/27/2023 | 4/29/2023 | 3.00 | 4/29/2023 | 2.00 | Industrial Service | $24.20 | 48.40 |
| 4/27/2023 | 5/4/2023 | 8.00 | 5/4/2023 | 7.00 | Residential Sales | $213.58 | 1,495.06 |
| 4/27/2023 | 4/28/2023 | 2.00 | 4/28/2023 | 1.00 | Residential Sales | $497,611.47 | 497,611.47 |
| 4/27/2023 | 4/29/2023 | 3.00 | 4/29/2023 | 2.00 | Commercial Sales | $72,897.17 | 145,794.34 |
| 4/27/2023 | 5/5/2023 | 9.00 | 5/5/2023 | 8.00 | Residential Sales | $135.05 | 1,080.40 |
| 4/27/2023 | 6/14/2023 | 49.00 | 6/14/2023 | 48.00 | Commercial Sales | $171.58 | 8,235.84 |
| 4/27/2023 | 4/29/2023 | 3.00 | 4/29/2023 | 2.00 | Residential Sales | $6,967.60 | 13,935.20 |
| 4/27/2023 | 5/1/2023 | 5.00 | 5/1/2023 | 4.00 | Other Sales to Public Authority | $9,405.60 | 37,622.40 |
| 4/27/2023 | 4/27/2023 | 1.00 | 4/27/2023 | 0.00 | Public Street & Highway Lighting | $854.89 | - |
| 4/27/2023 | 5/8/2023 | 12.00 | 5/8/2023 | 11.00 | Commercial Sales | $1,518.21 | 16,700.31 |
| 4/27/2023 | 5/22/2023 | 26.00 | 5/22/2023 | 25.00 | Residential Sales | $28.34 | 708.50 |
| 4/27/2023 | 5/8/2023 | 12.00 | 5/8/2023 | 11.00 | Residential Sales | $55.97 | 615.67 |
| 4/27/2023 | 4/28/2023 | 2.00 | 4/28/2023 | 1.00 | Public Street & Highway Lighting | $38.01 | 38.01 |
| 4/27/2023 | 5/9/2023 | 13.00 | 5/9/2023 | 12.00 | Residential Sales | $152.68 | 1,832.16 |
| 4/27/2023 | 4/28/2023 | 2.00 | 4/28/2023 | 1.00 | Other Sales to Public Authority | $1,850.94 | 1,850.94 |
| 4/27/2023 | 4/29/2023 | 3.00 | 4/29/2023 | 2.00 | Other Sales to Public Authority | $1,466.20 | 2,932.40 |
| 4/27/2023 | 5/10/2023 | 14.00 | 5/10/2023 | 13.00 | Commercial Sales | $98.03 | 1,274.39 |
| 4/27/2023 | 5/11/2023 | 15.00 | 5/11/2023 | 14.00 | Industrial Service | $436.16 | 6,106.24 |
| 4/27/2023 | 5/8/2023 | 12.00 | 5/8/2023 | 11.00 | Other Sales to Public Authority | $219.66 | 2,416.26 |
| 4/27/2023 | 5/10/2023 | 14.00 | 5/10/2023 | 13.00 | Residential Sales | $19.12 | 248.56 |
| 4/28/2023 | 4/28/2023 | 1.00 | 4/28/2023 | 0.00 | Other Sales to Public Authority | $55.02 | - |
| 4/28/2023 | 6/2/2023 | 36.00 | 6/2/2023 | 35.00 | Commercial Sales | $357.76 | 12,521.60 |
| 4/28/2023 | 5/5/2023 | 8.00 | 5/5/2023 | 7.00 | Other Sales to Public Authority | $37,221.23 | 260,548.61 |
| 4/28/2023 | 4/29/2023 | 2.00 | 4/29/2023 | 1.00 | Other Sales to Public Authority | $31,938.49 | 31,938.49 |
| 4/28/2023 | 5/26/2023 | 29.00 | 5/26/2023 | 28.00 | Commercial Sales | $289.95 | 8,118.60 |
| 4/28/2023 | 5/8/2023 | 11.00 | 5/8/2023 | 10.00 | Other Sales to Public Authority | $156.83 | 1,568.30 |
| 4/28/2023 | 8/8/2023 | 103.00 | 8/8/2023 | 102.00 | Residential Sales | $38.86 | 3,963.72 |
| 4/28/2023 | 6/2/2023 | 36.00 | 6/2/2023 | 35.00 | Other Sales to Public Authority | $117.58 | 4,115.30 |
| 4/28/2023 | 5/3/2023 | 6.00 | 5/3/2023 | 5.00 | Company Use | $0.00 | - |
| 4/28/2023 | 5/1/2023 | 4.00 | 5/1/2023 | 3.00 | Industrial Service | $55,249.96 | 165,749.88 |
| 4/28/2023 | 5/17/2023 | 20.00 | 5/17/2023 | 19.00 | Commercial Sales | $9.83 | 186.77 |
| 4/28/2023 | 5/1/2023 | 4.00 | 5/1/2023 | 3.00 | Commercial Sales | $24,781.90 | 74,345.70 |
| 4/28/2023 | 5/2/2023 | 5.00 | 5/2/2023 | 4.00 | Commercial Sales | $2,688.97 | 10,755.88 |
| 4/28/2023 | 5/1/2023 | 4.00 | 5/1/2023 | 3.00 | Residential Sales | $8,615.58 | 25,846.74 |
| 4/28/2023 | 5/31/2024 | 400.00 | 5/31/2024 | 399.00 | Residential Sales | $72.62 | 28,975.38 |
| 4/28/2023 | 5/3/2023 | 6.00 | 5/3/2023 | 5.00 | Industrial Service | $4,233.90 | 21,169.50 |
| 4/28/2023 | 5/2/2023 | 5.00 | 5/2/2023 | 4.00 | Residential Sales | $1,983.20 | 7,932.80 |
| 4/28/2023 | 5/3/2023 | 6.00 | 5/3/2023 | 5.00 | Commercial Sales | $46,656.60 | 233,283.00 |
| 4/28/2023 | 5/4/2023 | 7.00 | 5/4/2023 | 6.00 | Commercial Sales | $2,854.89 | 17,129.34 |
| 4/28/2023 | 5/3/2023 | 6.00 | 5/3/2023 | 5.00 | Residential Sales | $2,175.72 | 10,878.60 |
| 4/28/2023 | 5/5/2023 | 8.00 | 5/5/2023 | 7.00 | Industrial Service | $13,543.71 | 94,805.97 |
| 4/28/2023 | 4/28/2023 | 1.00 | 4/28/2023 | 0.00 | Commercial Sales | $83.84 | - |
| 4/28/2023 | 4/29/2023 | 2.00 | 4/29/2023 | 1.00 | Industrial Service | $98,901.07 | 98,901.07 |
| 4/28/2023 | 5/4/2023 | 7.00 | 5/4/2023 | 6.00 | Residential Sales | $156.13 | 936.78 |
| 4/28/2023 | 4/29/2023 | 2.00 | 4/29/2023 | 1.00 | Commercial Sales | $251,382.71 | 251,382.71 |
| 4/28/2023 | 4/28/2023 | 1.00 | 4/28/2023 | 0.00 | Residential Sales | $1,523.94 | - |
| 4/28/2023 | 5/5/2023 | 8.00 | 5/5/2023 | 7.00 | Residential Sales | $166.42 | 1,164.94 |
| 4/28/2023 | 4/29/2023 | 2.00 | 4/29/2023 | 1.00 | Residential Sales | $403,550.18 | 403,550.18 |
| 4/28/2023 | 5/1/2023 | 4.00 | 5/1/2023 | 3.00 | Other Sales to Public Authority | $19,981.28 | 59,943.84 |
| 4/28/2023 | 5/8/2023 | 11.00 | 5/8/2023 | 10.00 | Industrial Service | $368.07 | 3,680.70 |
| 4/28/2023 | 5/8/2023 | 11.00 | 5/8/2023 | 10.00 | Commercial Sales | $7,124.82 | 71,248.20 |
| 4/28/2023 | 5/2/2023 | 5.00 | 5/2/2023 | 4.00 | Other Sales to Public Authority | $26,056.59 | 104,226.36 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 4/28/2023 | 5/23/2023 | 26.00 | 5/23/2023 | 25.00 | Industrial Service | $40.92 | 1,023.00 |
| 4/28/2023 | 5/8/2023 | 11.00 | 5/8/2023 | 10.00 | Residential Sales | $112.36 | 1,123.60 |
| 4/28/2023 | 4/28/2023 | 1.00 | 4/28/2023 | 0.00 | Public Street & Highway Lighting | $511.86 | - |
| 4/28/2023 | 5/3/2023 | 6.00 | 5/3/2023 | 5.00 | Other Sales to Public Authority | $14,084.37 | 70,421.85 |
| 4/29/2023 | 5/5/2023 | 7.00 | 5/5/2023 | 6.00 | Residential Sales | $54.77 | 328.62 |
| 4/29/2023 | 5/24/2023 | 26.00 | 5/24/2023 | 25.00 | Residential Sales | $11.36 | 284.00 |
| 4/29/2023 | 5/1/2023 | 3.00 | 5/1/2023 | 2.00 | Residential Sales | $11,463.85 | 22,927.70 |
| 4/29/2023 | 5/2/2023 | 4.00 | 5/2/2023 | 3.00 | Residential Sales | $14.36 | 43.08 |
| 4/30/2023 | 5/1/2023 | 2.00 | 5/1/2023 | 1.00 | Commercial Sales | $2,363.40 | 2,363.40 |
| 4/30/2023 | 5/4/2023 | 5.00 | 5/4/2023 | 4.00 | Residential Sales | $97.20 | 388.80 |
| 4/30/2023 | 5/2/2023 | 3.00 | 5/2/2023 | 2.00 | Commercial Sales | $339.16 | 678.32 |
| 4/30/2023 | 5/5/2023 | 6.00 | 5/5/2023 | 5.00 | Residential Sales | $65.40 | 327.00 |
| 4/30/2023 | 5/8/2023 | 9.00 | 5/8/2023 | 8.00 | Residential Sales | $128.56 | 1,028.48 |
| 4/30/2023 | 5/9/2023 | 10.00 | 5/9/2023 | 9.00 | Residential Sales | $14.46 | 130.14 |
| 4/30/2023 | 5/8/2023 | 9.00 | 5/8/2023 | 8.00 | Commercial Sales | $12.59 | 100.72 |
| 4/30/2023 | 5/9/2023 | 10.00 | 5/9/2023 | 9.00 | Commercial Sales | $243.33 | 2,189.97 |
| 4/30/2023 | 5/15/2023 | 16.00 | 5/15/2023 | 15.00 | Residential Sales | $83.10 | 1,246.50 |
| 4/30/2023 | 5/1/2023 | 2.00 | 5/1/2023 | 1.00 | Residential Sales | $9,629.74 | 9,629.74 |
| 4/30/2023 | 5/2/2023 | 3.00 | 5/2/2023 | 2.00 | Residential Sales | $318.08 | 636.16 |
| 4/30/2023 | 5/3/2023 | 4.00 | 5/3/2023 | 3.00 | Residential Sales | $215.98 | 647.94 |
| 5/1/2023 | 6/9/2023 | 40.00 | 6/9/2023 | 39.00 | Commercial Sales | $321.38 | 12,533.82 |
| 5/1/2023 | 5/15/2023 | 15.00 | 5/15/2023 | 14.00 | Residential Sales | $124.79 | 1,747.06 |
| 5/1/2023 | 5/16/2023 | 16.00 | 5/16/2023 | 15.00 | Residential Sales | $41.80 | 627.00 |
| 5/1/2023 | 5/2/2023 | 2.00 | 5/2/2023 | 1.00 | Industrial Service | $4,443.92 | 4,443.92 |
| 5/1/2023 | 5/1/2023 | 1.00 | 5/1/2023 | 0.00 | Commercial Sales | $799.43 | - |
| 5/1/2023 | 5/17/2023 | 17.00 | 5/17/2023 | 16.00 | Residential Sales | $221.41 | 3,542.56 |
| 5/1/2023 | 5/2/2023 | 2.00 | 5/2/2023 | 1.00 | Commercial Sales | $137,927.73 | 137,927.73 |
| 5/1/2023 | 5/3/2023 | 3.00 | 5/3/2023 | 2.00 | Industrial Service | $3,312.21 | 6,624.42 |
| 5/1/2023 | 5/1/2023 | 1.00 | 5/1/2023 | 0.00 | Residential Sales | $379.31 | - |
| 5/1/2023 | 5/18/2023 | 18.00 | 5/18/2023 | 17.00 | Residential Sales | $136.18 | 2,315.06 |
| 5/1/2023 | 5/2/2023 | 2.00 | 5/2/2023 | 1.00 | Residential Sales | $441,332.25 | 441,332.25 |
| 5/1/2023 | 5/3/2023 | 3.00 | 5/3/2023 | 2.00 | Commercial Sales | $90,577.97 | 181,155.94 |
| 5/1/2023 | 9/21/2023 | 144.00 | 9/21/2023 | 143.00 | Commercial Sales | $286.68 | 40,995.24 |
| 5/1/2023 | 5/4/2023 | 4.00 | 5/4/2023 | 3.00 | Industrial Service | $246,188.86 | 738,566.58 |
| 5/1/2023 | 5/19/2023 | 19.00 | 5/19/2023 | 18.00 | Residential Sales | $261.10 | 4,699.80 |
| 5/1/2023 | 5/4/2023 | 4.00 | 5/4/2023 | 3.00 | Commercial Sales | $11,806.13 | 35,418.39 |
| 5/1/2023 | 5/3/2023 | 3.00 | 5/3/2023 | 2.00 | Residential Sales | $8,327.15 | 16,654.30 |
| 5/1/2023 | 5/5/2023 | 5.00 | 5/5/2023 | 4.00 | Industrial Service | $158,942.95 | 635,771.80 |
| 5/1/2023 | 6/12/2023 | 43.00 | 6/12/2023 | 42.00 | Commercial Sales | $27.79 | 1,167.18 |
| 5/1/2023 | 5/4/2023 | 4.00 | 5/4/2023 | 3.00 | Residential Sales | $1,623.69 | 4,871.07 |
| 5/1/2023 | 5/5/2023 | 5.00 | 5/5/2023 | 4.00 | Commercial Sales | $55,149.10 | 220,596.40 |
| 5/1/2023 | 5/1/2023 | 1.00 | 5/1/2023 | 0.00 | Public Street & Highway Lighting | $102.89 | - |
| 5/1/2023 | 5/5/2023 | 5.00 | 5/5/2023 | 4.00 | Residential Sales | $891.76 | 3,567.04 |
| 5/1/2023 | 6/13/2023 | 44.00 | 6/13/2023 | 43.00 | Residential Sales | $183.03 | 7,870.29 |
| 5/1/2023 | 5/1/2023 | 1.00 | 5/1/2023 | 0.00 | Other Sales to Public Authority | $390.01 | - |
| 5/1/2023 | 5/8/2023 | 8.00 | 5/8/2023 | 7.00 | Industrial Service | $159,320.74 | 1,115,245.18 |
| 5/1/2023 | 5/2/2023 | 2.00 | 5/2/2023 | 1.00 | Other Sales to Public Authority | $15,963.97 | 15,963.97 |
| 5/1/2023 | 5/23/2023 | 23.00 | 5/23/2023 | 22.00 | Industrial Service | $463.66 | 10,200.52 |
| 5/1/2023 | 5/8/2023 | 8.00 | 5/8/2023 | 7.00 | Commercial Sales | $20,657.78 | 144,604.46 |
| 5/1/2023 | 5/22/2023 | 22.00 | 5/22/2023 | 21.00 | Commercial Sales | $8,319.82 | 174,716.22 |
| 5/1/2023 | 5/3/2023 | 3.00 | 5/3/2023 | 2.00 | Other Sales to Public Authority | $23,371.08 | 46,742.16 |
| 5/1/2023 | 5/23/2023 | 23.00 | 5/23/2023 | 22.00 | Commercial Sales | $43.06 | 947.32 |
| 5/1/2023 | 5/8/2023 | 8.00 | 5/8/2023 | 7.00 | Residential Sales | $348.46 | 2,439.22 |
| 5/1/2023 | 5/22/2023 | 22.00 | 5/22/2023 | 21.00 | Residential Sales | $47.32 | 993.72 |
| 5/1/2023 | 6/30/2023 | 61.00 | 6/30/2023 | 60.00 | Residential Sales | $38.18 | 2,290.80 |
| 5/1/2023 | 5/9/2023 | 9.00 | 5/9/2023 | 8.00 | Commercial Sales | $686.27 | 5,490.16 |
| 5/1/2023 | 3/20/2024 | 325.00 | 3/20/2024 | 324.00 | Commercial Sales | $17.13 | 5,550.12 |
| 5/1/2023 | 5/9/2023 | 9.00 | 5/9/2023 | 8.00 | Residential Sales | $803.85 | 6,430.80 |
| 5/1/2023 | 5/4/2023 | 4.00 | 5/4/2023 | 3.00 | Other Sales to Public Authority | $21,732.25 | 65,196.75 |
| 5/1/2023 | 5/25/2023 | 25.00 | 5/25/2023 | 24.00 | Commercial Sales | $675.34 | 16,208.16 |
| 5/1/2023 | 5/5/2023 | 5.00 | 5/5/2023 | 4.00 | Other Sales to Public Authority | $232,774.99 | 931,099.96 |
| 5/1/2023 | 5/24/2023 | 24.00 | 5/24/2023 | 23.00 | Residential Sales | $11.20 | 257.60 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 5/1/2023 | 5/26/2023 | 26.00 | 5/26/2023 | 25.00 | Commercial Sales | $132.18 | 3,304.50 |
| 5/1/2023 | 5/26/2023 | 26.00 | 5/26/2023 | 25.00 | Residential Sales | $182.28 | 4,557.00 |
| 5/1/2023 | 5/10/2023 | 10.00 | 5/10/2023 | 9.00 | Commercial Sales | $622.91 | 5,606.19 |
| 5/1/2023 | 5/10/2023 | 10.00 | 5/10/2023 | 9.00 | Residential Sales | $23.78 | 214.02 |
| 5/1/2023 | 5/11/2023 | 11.00 | 5/11/2023 | 10.00 | Residential Sales | $43.91 | 439.10 |
| 5/1/2023 | 6/6/2023 | 37.00 | 6/6/2023 | 36.00 | Commercial Sales | $415.21 | 14,947.56 |
| 5/1/2023 | 8/21/2023 | 113.00 | 8/21/2023 | 112.00 | Residential Sales | $6.97 | 780.64 |
| 5/1/2023 | 6/7/2023 | 38.00 | 6/7/2023 | 37.00 | Commercial Sales | $17.84 | 660.08 |
| 5/1/2023 | 5/12/2023 | 12.00 | 5/12/2023 | 11.00 | Residential Sales | $11.78 | 129.58 |
| 5/1/2023 | 7/14/2023 | 75.00 | 7/14/2023 | 74.00 | Residential Sales | $2.45 | 181.30 |
| 5/1/2023 | 6/7/2023 | 38.00 | 6/7/2023 | 37.00 | Residential Sales | $44.10 | 1,631.70 |
| 5/1/2023 | 6/22/2023 | 53.00 | 6/22/2023 | 52.00 | Commercial Sales | $137.56 | 7,153.12 |
| 5/2/2023 | 5/10/2023 | 9.00 | 5/10/2023 | 8.00 | Commercial Sales | $125.65 | 1,005.20 |
| 5/2/2023 | 5/10/2023 | 9.00 | 5/10/2023 | 8.00 | Residential Sales | $153.99 | 1,231.92 |
| 5/2/2023 | 5/8/2023 | 7.00 | 5/8/2023 | 6.00 | Other Sales to Public Authority | $95.07 | 570.42 |
| 5/2/2023 | 6/6/2023 | 36.00 | 6/6/2023 | 35.00 | Residential Sales | $53.86 | 1,885.10 |
| 5/2/2023 | 5/16/2023 | 15.00 | 5/16/2023 | 14.00 | Residential Sales | $11.66 | 163.24 |
| 5/2/2023 | 5/2/2023 | 1.00 | 5/2/2023 | 0.00 | Commercial Sales | $656.01 | - |
| 5/2/2023 | 5/3/2023 | 2.00 | 5/3/2023 | 1.00 | Industrial Service | $8,474.75 | 8,474.75 |
| 5/2/2023 | 5/3/2023 | 2.00 | 5/3/2023 | 1.00 | Commercial Sales | $60,081.85 | 60,081.85 |
| 5/2/2023 | 5/4/2023 | 3.00 | 5/4/2023 | 2.00 | Industrial Service | $1,430.05 | 2,860.10 |
| 5/2/2023 | 5/2/2023 | 1.00 | 5/2/2023 | 0.00 | Residential Sales | $1,073.60 | - |
| 5/2/2023 | 5/19/2023 | 18.00 | 5/19/2023 | 17.00 | Residential Sales | $1.99 | 33.83 |
| 5/2/2023 | 5/3/2023 | 2.00 | 5/3/2023 | 1.00 | Residential Sales | $419,228.37 | 419,228.37 |
| 5/2/2023 | 5/4/2023 | 3.00 | 5/4/2023 | 2.00 | Commercial Sales | $31,850.12 | 63,700.24 |
| 5/2/2023 | 6/12/2023 | 42.00 | 6/12/2023 | 41.00 | Commercial Sales | $110.83 | 4,544.03 |
| 5/2/2023 | 5/4/2023 | 3.00 | 5/4/2023 | 2.00 | Residential Sales | $8,957.63 | 17,915.26 |
| 5/2/2023 | 5/5/2023 | 4.00 | 5/5/2023 | 3.00 | Commercial Sales | $4,439.27 | 13,317.81 |
| 5/2/2023 | 5/5/2023 | 4.00 | 5/5/2023 | 3.00 | Residential Sales | $1,118.99 | 3,356.97 |
| 5/2/2023 | 5/2/2023 | 1.00 | 5/2/2023 | 0.00 | Other Sales to Public Authority | $213.72 | - |
| 5/2/2023 | 5/8/2023 | 7.00 | 5/8/2023 | 6.00 | Commercial Sales | $21.31 | 127.86 |
| 5/2/2023 | 5/3/2023 | 2.00 | 5/3/2023 | 1.00 | Other Sales to Public Authority | $7,245.11 | 7,245.11 |
| 5/2/2023 | 5/8/2023 | 7.00 | 5/8/2023 | 6.00 | Residential Sales | $224.46 | 1,346.76 |
| 5/2/2023 | 5/9/2023 | 8.00 | 5/9/2023 | 7.00 | Commercial Sales | $714.35 | 5,000.45 |
| 5/2/2023 | 5/4/2023 | 3.00 | 5/4/2023 | 2.00 | Other Sales to Public Authority | $1,677.44 | 3,354.88 |
| 5/2/2023 | 5/9/2023 | 8.00 | 5/9/2023 | 7.00 | Residential Sales | $168.27 | 1,177.89 |
| 5/2/2023 | 5/5/2023 | 4.00 | 5/5/2023 | 3.00 | Other Sales to Public Authority | $22,642.38 | 67,927.14 |
| 5/2/2023 | 5/25/2023 | 24.00 | 5/25/2023 | 23.00 | Residential Sales | $51.78 | 1,190.94 |
| 5/3/2023 | 5/8/2023 | 6.00 | 5/8/2023 | 5.00 | Commercial Sales | $19,645.48 | 98,227.40 |
| 5/3/2023 | 5/8/2023 | 6.00 | 5/8/2023 | 5.00 | Residential Sales | $2,622.26 | 13,111.30 |
| 5/3/2023 | 5/3/2023 | 1.00 | 5/3/2023 | 0.00 | Other Sales to Public Authority | $117.77 | - |
| 5/3/2023 | 5/9/2023 | 7.00 | 5/9/2023 | 6.00 | Commercial Sales | $55,684.33 | 334,105.98 |
| 5/3/2023 | 5/22/2023 | 20.00 | 5/22/2023 | 19.00 | Residential Sales | $24.41 | 463.79 |
| 5/3/2023 | 5/4/2023 | 2.00 | 5/4/2023 | 1.00 | Other Sales to Public Authority | $26,465.98 | 26,465.98 |
| 5/3/2023 | 5/9/2023 | 7.00 | 5/9/2023 | 6.00 | Residential Sales | $271.20 | 1,627.20 |
| 5/3/2023 | 5/5/2023 | 3.00 | 5/5/2023 | 2.00 | Other Sales to Public Authority | $3,849.68 | 7,699.36 |
| 5/3/2023 | 5/10/2023 | 8.00 | 5/10/2023 | 7.00 | Commercial Sales | $141.39 | 989.73 |
| 5/3/2023 | 5/8/2023 | 6.00 | 5/8/2023 | 5.00 | Other Sales to Public Authority | $1,265.55 | 6,327.75 |
| 5/3/2023 | 5/10/2023 | 8.00 | 5/10/2023 | 7.00 | Residential Sales | $188.34 | 1,318.38 |
| 5/3/2023 | 5/11/2023 | 9.00 | 5/11/2023 | 8.00 | Residential Sales | $70.53 | 564.24 |
| 5/3/2023 | 3/25/2024 | 328.00 | 3/25/2024 | 327.00 | Residential Sales | $20.18 | 6,598.86 |
| 5/3/2023 | 8/22/2023 | 112.00 | 8/22/2023 | 111.00 | Residential Sales | $30.93 | 3,433.23 |
| 5/3/2023 | 5/12/2023 | 10.00 | 5/12/2023 | 9.00 | Residential Sales | $93.61 | 842.49 |
| 5/3/2023 | 10/20/2023 | 171.00 | 10/20/2023 | 170.00 | Residential Sales | $38.64 | 6,568.80 |
| 5/3/2023 | 5/16/2023 | 14.00 | 5/16/2023 | 13.00 | Residential Sales | $1.74 | 22.62 |
| 5/3/2023 | 5/3/2023 | 1.00 | 5/3/2023 | 0.00 | Commercial Sales | $133.86 | - |
| 5/3/2023 | 5/4/2023 | 2.00 | 5/4/2023 | 1.00 | Commercial Sales | $153,925.69 | 153,925.69 |
| 5/3/2023 | 5/3/2023 | 1.00 | 5/3/2023 | 0.00 | Residential Sales | $55.65 | - |
| 5/3/2023 | 5/5/2023 | 3.00 | 5/5/2023 | 2.00 | Industrial Service | $6,667.37 | 13,334.74 |
| 5/3/2023 | 5/4/2023 | 2.00 | 5/4/2023 | 1.00 | Residential Sales | $457,149.31 | 457,149.31 |
| 5/3/2023 | 5/5/2023 | 3.00 | 5/5/2023 | 2.00 | Commercial Sales | $60,076.14 | 120,152.28 |
| 5/3/2023 | 5/5/2023 | 3.00 | 5/5/2023 | 2.00 | Residential Sales | $5,846.30 | 11,692.60 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 5/3/2023 | 7/21/2023 | 80.00 | 7/21/2023 | 79.00 | Residential Sales | $44.01 | 3,476.79 |
| 5/3/2023 | 5/18/2023 | 16.00 | 5/18/2023 | 15.00 | Other Sales to Public Authority | $1,167.72 | 17,515.80 |
| 5/4/2023 | 5/5/2023 | 2.00 | 5/5/2023 | 1.00 | Industrial Service | $319.66 | 319.66 |
| 5/4/2023 | 5/4/2023 | 1.00 | 5/4/2023 | 0.00 | Commercial Sales | $1,472.09 | - |
| 5/4/2023 | 8/14/2023 | 103.00 | 8/14/2023 | 102.00 | Commercial Sales | $309.38 | 31,556.76 |
| 5/4/2023 | 5/5/2023 | 2.00 | 5/5/2023 | 1.00 | Commercial Sales | $118,195.48 | 118,195.48 |
| 5/4/2023 | 5/4/2023 | 1.00 | 5/4/2023 | 0.00 | Residential Sales | $1,114.88 | - |
| 5/4/2023 | 5/5/2023 | 2.00 | 5/5/2023 | 1.00 | Residential Sales | $697,350.11 | 697,350.11 |
| 5/4/2023 | 5/8/2023 | 5.00 | 5/8/2023 | 4.00 | Industrial Service | $448.27 | 1,793.08 |
| 5/4/2023 | 11/6/2023 | 187.00 | 11/6/2023 | 186.00 | Commercial Sales | $183.29 | 34,091.94 |
| 5/4/2023 | 5/8/2023 | 5.00 | 5/8/2023 | 4.00 | Commercial Sales | $49,866.33 | 199,465.32 |
| 5/4/2023 | 5/22/2023 | 19.00 | 5/22/2023 | 18.00 | Commercial Sales | $197.03 | 3,546.54 |
| 5/4/2023 | 5/8/2023 | 5.00 | 5/8/2023 | 4.00 | Residential Sales | $15,402.80 | 61,611.20 |
| 5/4/2023 | 5/22/2023 | 19.00 | 5/22/2023 | 18.00 | Residential Sales | $50.95 | 917.10 |
| 5/4/2023 | 5/9/2023 | 6.00 | 5/9/2023 | 5.00 | Commercial Sales | $23,701.43 | 118,507.15 |
| 5/4/2023 | 5/4/2023 | 1.00 | 5/4/2023 | 0.00 | Other Sales to Public Authority | $28.58 | - |
| 5/4/2023 | 5/9/2023 | 6.00 | 5/9/2023 | 5.00 | Residential Sales | $185.33 | 926.65 |
| 5/4/2023 | 5/23/2023 | 20.00 | 5/23/2023 | 19.00 | Residential Sales | $101.86 | 1,935.34 |
| 5/4/2023 | 5/5/2023 | 2.00 | 5/5/2023 | 1.00 | Other Sales to Public Authority | $17,671.50 | 17,671.50 |
| 5/4/2023 | 6/2/2023 | 30.00 | 6/2/2023 | 29.00 | Residential Sales | $45.73 | 1,326.17 |
| 5/4/2023 | 5/26/2023 | 23.00 | 5/26/2023 | 22.00 | Residential Sales | $165.06 | 3,631.32 |
| 5/4/2023 | 5/10/2023 | 7.00 | 5/10/2023 | 6.00 | Commercial Sales | $151.48 | 908.88 |
| 5/4/2023 | 5/10/2023 | 7.00 | 5/10/2023 | 6.00 | Residential Sales | $158.11 | 948.66 |
| 5/4/2023 | 5/8/2023 | 5.00 | 5/8/2023 | 4.00 | Other Sales to Public Authority | $3,225.51 | 12,902.04 |
| 5/4/2023 | 5/11/2023 | 8.00 | 5/11/2023 | 7.00 | Commercial Sales | $57.01 | 399.07 |
| 5/4/2023 | 5/11/2023 | 8.00 | 5/11/2023 | 7.00 | Residential Sales | $130.88 | 916.16 |
| 5/4/2023 | 5/9/2023 | 6.00 | 5/9/2023 | 5.00 | Other Sales to Public Authority | $11,150.18 | 55,750.90 |
| 5/4/2023 | 5/12/2023 | 9.00 | 5/12/2023 | 8.00 | Residential Sales | $55.32 | 442.56 |
| 5/4/2023 | 6/6/2023 | 34.00 | 6/6/2023 | 33.00 | Residential Sales | $0.80 | 26.40 |
| 5/4/2023 | 6/7/2023 | 35.00 | 6/7/2023 | 34.00 | Residential Sales | $25.10 | 853.40 |
| 5/4/2023 | 5/15/2023 | 12.00 | 5/15/2023 | 11.00 | Residential Sales | $170.23 | 1,872.53 |
| 5/4/2023 | 5/16/2023 | 13.00 | 5/16/2023 | 12.00 | Residential Sales | $88.93 | 1,067.16 |
| 5/4/2023 | 5/18/2023 | 15.00 | 5/18/2023 | 14.00 | Commercial Sales | $17.13 | 239.82 |
| 5/4/2023 | 6/20/2023 | 48.00 | 6/20/2023 | 47.00 | Other Sales to Public Authority | $1.26 | 59.22 |
| 5/4/2023 | 5/31/2023 | 28.00 | 5/31/2023 | 27.00 | Residential Sales | $26.54 | 716.58 |
| 5/5/2023 | 5/15/2023 | 11.00 | 5/15/2023 | 10.00 | Commercial Sales | $611.34 | 6,113.40 |
| 5/5/2023 | 6/9/2023 | 36.00 | 6/9/2023 | 35.00 | Residential Sales | $23.40 | 819.00 |
| 5/5/2023 | 5/15/2023 | 11.00 | 5/15/2023 | 10.00 | Residential Sales | $174.12 | 1,741.20 |
| 5/5/2023 | 5/10/2023 | 6.00 | 5/10/2023 | 5.00 | Other Sales to Public Authority | $151.23 | 756.15 |
| 5/5/2023 | 5/16/2023 | 12.00 | 5/16/2023 | 11.00 | Residential Sales | $85.14 | 936.54 |
| 5/5/2023 | 5/17/2023 | 13.00 | 5/17/2023 | 12.00 | Residential Sales | $29.59 | 355.08 |
| 5/5/2023 | 5/12/2023 | 8.00 | 5/12/2023 | 7.00 | Other Sales to Public Authority | $2,998.11 | 20,986.77 |
| 5/5/2023 | 5/31/2023 | 27.00 | 5/31/2023 | 26.00 | Residential Sales | $14.44 | 375.44 |
| 5/5/2023 | 6/26/2023 | 53.00 | 6/26/2023 | 52.00 | Residential Sales | $9.82 | 510.64 |
| 5/5/2023 | 7/5/2023 | 62.00 | 7/5/2023 | 61.00 | Commercial Sales | $50.87 | 3,103.07 |
| 5/5/2023 | 5/19/2023 | 15.00 | 5/19/2023 | 14.00 | Residential Sales | $15.43 | 216.02 |
| 5/5/2023 | 8/14/2023 | 102.00 | 8/14/2023 | 101.00 | Commercial Sales | $39.36 | 3,975.36 |
| 5/5/2023 | 6/29/2023 | 56.00 | 6/29/2023 | 55.00 | Residential Sales | $19.73 | 1,085.15 |
| 5/5/2023 | 5/5/2023 | 1.00 | 5/5/2023 | 0.00 | Commercial Sales | $341.47 | - |
| 5/5/2023 | 7/7/2023 | 64.00 | 7/7/2023 | 63.00 | Commercial Sales | $228.37 | 14,387.31 |
| 5/5/2023 | 1/30/2024 | 271.00 | 1/30/2024 | 270.00 | Residential Sales | $27.12 | 7,322.40 |
| 5/5/2023 | 12/11/2023 | 221.00 | 12/11/2023 | 220.00 | Residential Sales | $17.23 | 3,790.60 |
| 5/5/2023 | 5/5/2023 | 1.00 | 5/5/2023 | 0.00 | Residential Sales | $631.28 | - |
| 5/5/2023 | 12/13/2023 | 223.00 | 12/13/2023 | 222.00 | Commercial Sales | $33.31 | 7,394.82 |
| 5/5/2023 | 5/8/2023 | 4.00 | 5/8/2023 | 3.00 | Industrial Service | $11,377.21 | 34,131.63 |
| 5/5/2023 | 5/8/2023 | 4.00 | 5/8/2023 | 3.00 | Commercial Sales | $259,069.15 | 777,207.45 |
| 5/5/2023 | 5/9/2023 | 5.00 | 5/9/2023 | 4.00 | Industrial Service | $607.28 | 2,429.12 |
| 5/5/2023 | 5/22/2023 | 18.00 | 5/22/2023 | 17.00 | Commercial Sales | $164.38 | 2,794.46 |
| 5/5/2023 | 5/9/2023 | 5.00 | 5/9/2023 | 4.00 | Commercial Sales | $93,564.25 | 374,257.00 |
| 5/5/2023 | 5/8/2023 | 4.00 | 5/8/2023 | 3.00 | Residential Sales | $560,226.55 | 1,680,679.65 |
| 5/5/2023 | 5/22/2023 | 18.00 | 5/22/2023 | 17.00 | Residential Sales | $33.01 | 561.17 |
| 5/5/2023 | 5/23/2023 | 19.00 | 5/23/2023 | 18.00 | Commercial Sales | $97.10 | 1,747.80 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 5/5/2023 | 5/5/2023 | 1.00 | 5/5/2023 | 0.00 | Public Street & Highway Lighting | $50.75 | - |
| 5/5/2023 | 5/9/2023 | 5.00 | 5/9/2023 | 4.00 | Residential Sales | $5,933.07 | 23,732.28 |
| 5/5/2023 | 8/3/2023 | 91.00 | 8/3/2023 | 90.00 | Commercial Sales | $74.27 | 6,684.30 |
| 5/5/2023 | 5/23/2023 | 19.00 | 5/23/2023 | 18.00 | Residential Sales | $139.78 | 2,516.04 |
| 5/5/2023 | 5/25/2023 | 21.00 | 5/25/2023 | 20.00 | Commercial Sales | $138.41 | 2,768.20 |
| 5/5/2023 | 5/5/2023 | 1.00 | 5/5/2023 | 0.00 | Other Sales to Public Authority | $17.03 | - |
| 5/5/2023 | 6/2/2023 | 29.00 | 6/2/2023 | 28.00 | Residential Sales | $14.35 | 401.80 |
| 5/5/2023 | 5/10/2023 | 6.00 | 5/10/2023 | 5.00 | Industrial Service | $621.60 | 3,108.00 |
| 5/5/2023 | 7/28/2023 | 85.00 | 7/28/2023 | 84.00 | Commercial Sales | $1,206.96 | 101,384.64 |
| 5/5/2023 | 5/10/2023 | 6.00 | 5/10/2023 | 5.00 | Commercial Sales | $39,008.53 | 195,042.65 |
| 5/5/2023 | 5/26/2023 | 22.00 | 5/26/2023 | 21.00 | Residential Sales | $71.50 | 1,501.50 |
| 5/5/2023 | 5/8/2023 | 4.00 | 5/8/2023 | 3.00 | Other Sales to Public Authority | $20,884.89 | 62,654.67 |
| 5/5/2023 | 3/25/2024 | 326.00 | 3/25/2024 | 325.00 | Commercial Sales | $34.26 | 11,134.50 |
| 5/5/2023 | 5/10/2023 | 6.00 | 5/10/2023 | 5.00 | Residential Sales | $3,501.33 | 17,506.65 |
| 5/5/2023 | 5/11/2023 | 7.00 | 5/11/2023 | 6.00 | Commercial Sales | $16,005.23 | 96,031.38 |
| 5/5/2023 | 5/11/2023 | 7.00 | 5/11/2023 | 6.00 | Residential Sales | $756.07 | 4,536.42 |
| 5/5/2023 | 5/9/2023 | 5.00 | 5/9/2023 | 4.00 | Other Sales to Public Authority | $9,190.03 | 36,760.12 |
| 5/5/2023 | 10/19/2023 | 168.00 | 10/19/2023 | 167.00 | Residential Sales | $26.15 | 4,367.05 |
| 5/5/2023 | 8/8/2023 | 96.00 | 8/8/2023 | 95.00 | Commercial Sales | $16.84 | 1,599.80 |
| 5/5/2023 | 5/12/2023 | 8.00 | 5/12/2023 | 7.00 | Commercial Sales | $112.31 | 786.17 |
| 5/5/2023 | 6/6/2023 | 33.00 | 6/6/2023 | 32.00 | Residential Sales | $44.72 | 1,431.04 |
| 5/5/2023 | 5/12/2023 | 8.00 | 5/12/2023 | 7.00 | Residential Sales | $252.94 | 1,770.58 |
| 5/5/2023 | 12/6/2023 | 216.00 | 12/6/2023 | 215.00 | Residential Sales | $85.66 | 18,416.90 |
| 5/6/2023 | 5/12/2023 | 7.00 | 5/12/2023 | 6.00 | Residential Sales | $52.26 | 313.56 |
| 5/6/2023 | 5/8/2023 | 3.00 | 5/8/2023 | 2.00 | Commercial Sales | $12.15 | 24.30 |
| 5/6/2023 | 5/8/2023 | 3.00 | 5/8/2023 | 2.00 | Residential Sales | $916.93 | 1,833.86 |
| 5/6/2023 | 5/9/2023 | 4.00 | 5/9/2023 | 3.00 | Commercial Sales | $4.01 | 12.03 |
| 5/7/2023 | 5/8/2023 | 2.00 | 5/8/2023 | 1.00 | Commercial Sales | $8.56 | 8.56 |
| 5/7/2023 | 5/8/2023 | 2.00 | 5/8/2023 | 1.00 | Residential Sales | $1,110.22 | 1,110.22 |
| 5/7/2023 | 5/9/2023 | 3.00 | 5/9/2023 | 2.00 | Commercial Sales | $3.45 | 6.90 |
| 5/7/2023 | 5/9/2023 | 3.00 | 5/9/2023 | 2.00 | Residential Sales | $26.63 | 53.26 |
| 5/7/2023 | 5/10/2023 | 4.00 | 5/10/2023 | 3.00 | Commercial Sales | $172.59 | 517.77 |
| 5/7/2023 | 5/10/2023 | 4.00 | 5/10/2023 | 3.00 | Residential Sales | $74.98 | 224.94 |
| 5/7/2023 | 5/11/2023 | 5.00 | 5/11/2023 | 4.00 | Residential Sales | $7.27 | 29.08 |
| 5/7/2023 | 6/5/2023 | 30.00 | 6/5/2023 | 29.00 | Residential Sales | $2.85 | 82.65 |
| 5/7/2023 | 5/15/2023 | 9.00 | 5/15/2023 | 8.00 | Commercial Sales | $7.40 | 59.20 |
| 5/7/2023 | 5/15/2023 | 9.00 | 5/15/2023 | 8.00 | Residential Sales | $120.05 | 960.40 |
| 5/7/2023 | 5/18/2023 | 12.00 | 5/18/2023 | 11.00 | Residential Sales | $24.53 | 269.83 |
| 5/7/2023 | 5/10/2023 | 4.00 | 5/10/2023 | 3.00 | Company Use | $0.00 | - |
| 5/8/2023 | 5/10/2023 | 3.00 | 5/10/2023 | 2.00 | Company Use | $0.00 | - |
| 5/8/2023 | 5/8/2023 | 1.00 | 5/8/2023 | 0.00 | Commercial Sales | $928.34 | - |
| 5/8/2023 | 5/9/2023 | 2.00 | 5/9/2023 | 1.00 | Industrial Service | $82,041.09 | 82,041.09 |
| 5/8/2023 | 5/22/2023 | 15.00 | 5/22/2023 | 14.00 | Commercial Sales | $56.60 | 792.40 |
| 5/8/2023 | 5/9/2023 | 2.00 | 5/9/2023 | 1.00 | Commercial Sales | $225,135.57 | 225,135.57 |
| 5/8/2023 | 5/8/2023 | 1.00 | 5/8/2023 | 0.00 | Residential Sales | $762.50 | - |
| 5/8/2023 | 5/9/2023 | 2.00 | 5/9/2023 | 1.00 | Residential Sales | $213,179.27 | 213,179.27 |
| 5/8/2023 | 5/23/2023 | 16.00 | 5/23/2023 | 15.00 | Residential Sales | $77.06 | 1,155.90 |
| 5/8/2023 | 5/25/2023 | 18.00 | 5/25/2023 | 17.00 | Commercial Sales | $149.87 | 2,547.79 |
| 5/8/2023 | 5/10/2023 | 3.00 | 5/10/2023 | 2.00 | Industrial Service | $10,132.05 | 20,264.10 |
| 5/8/2023 | 7/28/2023 | 82.00 | 7/28/2023 | 81.00 | Commercial Sales | $774.39 | 62,725.59 |
| 5/8/2023 | 5/8/2023 | 1.00 | 5/8/2023 | 0.00 | Public Street & Highway Lighting | $17.95 | - |
| 5/8/2023 | 5/10/2023 | 3.00 | 5/10/2023 | 2.00 | Commercial Sales | $111,442.19 | 222,884.38 |
| 5/8/2023 | 5/11/2023 | 4.00 | 5/11/2023 | 3.00 | Industrial Service | $27,114.11 | 81,342.33 |
| 5/8/2023 | 5/10/2023 | 3.00 | 5/10/2023 | 2.00 | Residential Sales | $4,745.36 | 9,490.72 |
| 5/8/2023 | 5/11/2023 | 4.00 | 5/11/2023 | 3.00 | Commercial Sales | $101,849.33 | 305,547.99 |
| 5/8/2023 | 5/11/2023 | 4.00 | 5/11/2023 | 3.00 | Residential Sales | $783.79 | 2,351.37 |
| 5/8/2023 | 5/9/2023 | 2.00 | 5/9/2023 | 1.00 | Other Sales to Public Authority | $32,181.85 | 32,181.85 |
| 5/8/2023 | 5/12/2023 | 5.00 | 5/12/2023 | 4.00 | Commercial Sales | $15,748.79 | 62,995.16 |
| 5/8/2023 | 10/3/2023 | 149.00 | 10/3/2023 | 148.00 | Commercial Sales | $711.50 | 105,302.00 |
| 5/8/2023 | 5/12/2023 | 5.00 | 5/12/2023 | 4.00 | Residential Sales | $586.18 | 2,344.72 |
| 5/8/2023 | 6/8/2023 | 32.00 | 6/8/2023 | 31.00 | Residential Sales | $79.75 | 2,472.25 |
| 5/8/2023 | 11/14/2023 | 191.00 | 11/14/2023 | 190.00 | Commercial Sales | $1,316.56 | 250,146.40 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 5/8/2023 | 5/15/2023 | 8.00 | 5/15/2023 | 7.00 | Commercial Sales | $979.33 | 6,855.31 |
| 5/8/2023 | 5/10/2023 | 3.00 | 5/10/2023 | 2.00 | Other Sales to Public Authority | $83,477.95 | 166,955.90 |
| 5/8/2023 | 5/15/2023 | 8.00 | 5/15/2023 | 7.00 | Residential Sales | $124.93 | 874.51 |
| 5/8/2023 | 5/11/2023 | 4.00 | 5/11/2023 | 3.00 | Other Sales to Public Authority | $11,892.96 | 35,678.88 |
| 5/8/2023 | 5/16/2023 | 9.00 | 5/16/2023 | 8.00 | Residential Sales | $23.55 | 188.40 |
| 5/8/2023 | 5/18/2023 | 11.00 | 5/18/2023 | 10.00 | Residential Sales | $299.65 | 2,996.50 |
| 5/8/2023 | 5/19/2023 | 12.00 | 5/19/2023 | 11.00 | Commercial Sales | $1,366.73 | 15,034.03 |
| 5/9/2023 | 5/15/2023 | 7.00 | 5/15/2023 | 6.00 | Commercial Sales | $1,678.45 | 10,070.70 |
| 5/9/2023 | 5/15/2023 | 7.00 | 5/15/2023 | 6.00 | Residential Sales | $291.69 | 1,750.14 |
| 5/9/2023 | 5/10/2023 | 2.00 | 5/10/2023 | 1.00 | Other Sales to Public Authority | $13,914.83 | 13,914.83 |
| 5/9/2023 | 5/16/2023 | 8.00 | 5/16/2023 | 7.00 | Commercial Sales | $16,044.20 | 112,309.40 |
| 5/9/2023 | 5/11/2023 | 3.00 | 5/11/2023 | 2.00 | Other Sales to Public Authority | $8,096.11 | 16,192.22 |
| 5/9/2023 | 5/16/2023 | 8.00 | 5/16/2023 | 7.00 | Residential Sales | $383.38 | 2,683.66 |
| 5/9/2023 | 5/30/2023 | 22.00 | 5/30/2023 | 21.00 | Residential Sales | $14.15 | 297.15 |
| 5/9/2023 | 5/17/2023 | 9.00 | 5/17/2023 | 8.00 | Commercial Sales | $2,114.81 | 16,918.48 |
| 5/9/2023 | 5/31/2023 | 23.00 | 5/31/2023 | 22.00 | Residential Sales | $67.39 | 1,482.58 |
| 5/9/2023 | 5/17/2023 | 9.00 | 5/17/2023 | 8.00 | Residential Sales | $75.16 | 601.28 |
| 5/9/2023 | 5/12/2023 | 4.00 | 5/12/2023 | 3.00 | Other Sales to Public Authority | $19,333.83 | 58,001.49 |
| 5/9/2023 | 5/19/2023 | 11.00 | 5/19/2023 | 10.00 | Commercial Sales | $6,452.63 | 64,526.30 |
| 5/9/2023 | 5/19/2023 | 11.00 | 5/19/2023 | 10.00 | Residential Sales | $55.58 | 555.80 |
| 5/9/2023 | 5/16/2023 | 8.00 | 5/16/2023 | 7.00 | Other Sales to Public Authority | $5,878.87 | 41,152.09 |
| 5/9/2023 | 6/12/2023 | 35.00 | 6/12/2023 | 34.00 | Residential Sales | $109.31 | 3,716.54 |
| 5/9/2023 | 10/10/2023 | 155.00 | 10/10/2023 | 154.00 | Commercial Sales | $1,091.23 | 168,049.42 |
| 5/9/2023 | 5/22/2023 | 14.00 | 5/22/2023 | 13.00 | Commercial Sales | $5,456.59 | 70,935.67 |
| 5/9/2023 | 5/22/2023 | 14.00 | 5/22/2023 | 13.00 | Residential Sales | $52.11 | 677.43 |
| 5/9/2023 | 5/9/2023 | 1.00 | 5/9/2023 | 0.00 | Commercial Sales | $152.30 | - |
| 5/9/2023 | 5/9/2023 | 1.00 | 5/9/2023 | 0.00 | Residential Sales | $1,719.08 | - |
| 5/9/2023 | 5/23/2023 | 15.00 | 5/23/2023 | 14.00 | Residential Sales | $138.64 | 1,940.96 |
| 5/9/2023 | 5/24/2023 | 16.00 | 5/24/2023 | 15.00 | Residential Sales | $109.48 | 1,642.20 |
| 5/9/2023 | 5/10/2023 | 2.00 | 5/10/2023 | 1.00 | Industrial Service | $60,343.47 | 60,343.47 |
| 5/9/2023 | 5/26/2023 | 18.00 | 5/26/2023 | 17.00 | Commercial Sales | $112.45 | 1,911.65 |
| 5/9/2023 | 5/25/2023 | 17.00 | 5/25/2023 | 16.00 | Residential Sales | $126.06 | 2,016.96 |
| 5/9/2023 | 5/10/2023 | 2.00 | 5/10/2023 | 1.00 | Commercial Sales | $178,963.34 | 178,963.34 |
| 5/9/2023 | 5/11/2023 | 3.00 | 5/11/2023 | 2.00 | Industrial Service | $24,929.21 | 49,858.42 |
| 5/9/2023 | 5/9/2023 | 1.00 | 5/9/2023 | 0.00 | Public Street & Highway Lighting | $49.63 | - |
| 5/9/2023 | 5/10/2023 | 2.00 | 5/10/2023 | 1.00 | Residential Sales | $221,442.58 | 221,442.58 |
| 5/9/2023 | 5/11/2023 | 3.00 | 5/11/2023 | 2.00 | Commercial Sales | $179,668.28 | 359,336.56 |
| 5/9/2023 | 5/11/2023 | 3.00 | 5/11/2023 | 2.00 | Residential Sales | $4,364.36 | 8,728.72 |
| 5/9/2023 | 5/9/2023 | 1.00 | 5/9/2023 | 0.00 | Other Sales to Public Authority | $208.51 | - |
| 5/9/2023 | 5/12/2023 | 4.00 | 5/12/2023 | 3.00 | Commercial Sales | $71,814.47 | 215,443.41 |
| 5/9/2023 | 6/20/2023 | 43.00 | 6/20/2023 | 42.00 | Commercial Sales | $2,250.56 | 94,523.52 |
| 5/9/2023 | 5/12/2023 | 4.00 | 5/12/2023 | 3.00 | Residential Sales | $140.52 | 421.56 |
| 5/9/2023 | 10/30/2023 | 175.00 | 10/30/2023 | 174.00 | Other Sales to Public Authority | $276.38 | 48,090.12 |
| 5/10/2023 | 5/11/2023 | 2.00 | 5/11/2023 | 1.00 | Public Street & Highway Lighting | $57,263.33 | 57,263.33 |
| 5/10/2023 | 5/15/2023 | 6.00 | 5/15/2023 | 5.00 | Commercial Sales | $6,309.47 | 31,547.35 |
| 5/10/2023 | 5/15/2023 | 6.00 | 5/15/2023 | 5.00 | Residential Sales | $1,059.76 | 5,298.80 |
| 5/10/2023 | 5/10/2023 | 1.00 | 5/10/2023 | 0.00 | Other Sales to Public Authority | $16.25 | - |
| 5/10/2023 | 5/16/2023 | 7.00 | 5/16/2023 | 6.00 | Commercial Sales | $4.45 | 26.70 |
| 5/10/2023 | 11/15/2023 | 190.00 | 11/15/2023 | 189.00 | Commercial Sales | $119.43 | 22,572.27 |
| 5/10/2023 | 5/11/2023 | 2.00 | 5/11/2023 | 1.00 | Other Sales to Public Authority | $24,961.95 | 24,961.95 |
| 5/10/2023 | 5/16/2023 | 7.00 | 5/16/2023 | 6.00 | Residential Sales | $221.82 | 1,330.92 |
| 5/10/2023 | 5/30/2023 | 21.00 | 5/30/2023 | 20.00 | Residential Sales | $30.88 | 617.60 |
| 5/10/2023 | 5/18/2023 | 9.00 | 5/18/2023 | 8.00 | Industrial Service | $397,202.31 | 3,177,618.48 |
| 5/10/2023 | 11/15/2023 | 190.00 | 11/15/2023 | 189.00 | Residential Sales | $41.42 | 7,828.38 |
| 5/10/2023 | 5/15/2024 | 372.00 | 5/15/2024 | 371.00 | Residential Sales | $72.75 | 26,990.25 |
| 5/10/2023 | 5/12/2023 | 3.00 | 5/12/2023 | 2.00 | Other Sales to Public Authority | $1,212.12 | 2,424.24 |
| 5/10/2023 | 5/17/2023 | 8.00 | 5/17/2023 | 7.00 | Residential Sales | $213.98 | 1,497.86 |
| 5/10/2023 | 5/18/2023 | 9.00 | 5/18/2023 | 8.00 | Residential Sales | $197.10 | 1,576.80 |
| 5/10/2023 | 5/16/2023 | 7.00 | 5/16/2023 | 6.00 | Other Sales to Public Authority | $10,112.03 | 60,672.18 |
| 5/10/2023 | 6/13/2023 | 35.00 | 6/13/2023 | 34.00 | Residential Sales | $68.15 | 2,317.10 |
| 5/10/2023 | 8/1/2023 | 84.00 | 8/1/2023 | 83.00 | Commercial Sales | $63.96 | 5,308.68 |
| 5/10/2023 | 5/22/2023 | 13.00 | 5/22/2023 | 12.00 | Residential Sales | $31.09 | 373.08 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 5/10/2023 | 6/1/2023 | 23.00 | 6/1/2023 | 22.00 | Commercial Sales | $17.13 | 376.86 |
| 5/10/2023 | 5/25/2023 | 16.00 | 5/25/2023 | 15.00 | Residential Sales | $79.56 | 1,193.40 |
| 5/10/2023 | 5/11/2023 | 2.00 | 5/11/2023 | 1.00 | Industrial Service | $320,231.28 | 320,231.28 |
| 5/10/2023 | 5/10/2023 | 1.00 | 5/10/2023 | 0.00 | Commercial Sales | $654.25 | - |
| 5/10/2023 | 5/19/2023 | 10.00 | 5/19/2023 | 9.00 | Company Use | -$694.55 | (6,250.95) |
| 5/10/2023 | 5/11/2023 | 2.00 | 5/11/2023 | 1.00 | Commercial Sales | $193,296.48 | 193,296.48 |
| 5/10/2023 | 5/12/2023 | 3.00 | 5/12/2023 | 2.00 | Industrial Service | $279,232.72 | 558,465.44 |
| 5/10/2023 | 5/10/2023 | 1.00 | 5/10/2023 | 0.00 | Residential Sales | $1,378.63 | - |
| 5/10/2023 | 5/11/2023 | 2.00 | 5/11/2023 | 1.00 | Residential Sales | $377,462.80 | 377,462.80 |
| 5/10/2023 | 5/12/2023 | 3.00 | 5/12/2023 | 2.00 | Commercial Sales | $133,590.75 | 267,181.50 |
| 5/10/2023 | 5/12/2023 | 3.00 | 5/12/2023 | 2.00 | Residential Sales | $11,021.30 | 22,042.60 |
| 5/10/2023 | 5/10/2023 | 1.00 | 5/10/2023 | 0.00 | Public Street & Highway Lighting | $57,055.45 | - |
| 5/11/2023 | 5/26/2023 | 16.00 | 5/26/2023 | 15.00 | Residential Sales | $63.35 | 950.25 |
| 5/11/2023 | 5/12/2023 | 2.00 | 5/12/2023 | 1.00 | Industrial Service | $465,326.30 | 465,326.30 |
| 5/11/2023 | 5/11/2023 | 1.00 | 5/11/2023 | 0.00 | Commercial Sales | $578.05 | - |
| 5/11/2023 | 5/12/2023 | 2.00 | 5/12/2023 | 1.00 | Commercial Sales | $436,068.73 | 436,068.73 |
| 5/11/2023 | 5/11/2023 | 1.00 | 5/11/2023 | 0.00 | Residential Sales | $908.24 | - |
| 5/11/2023 | 11/27/2023 | 201.00 | 11/27/2023 | 200.00 | Residential Sales | $467.33 | 93,466.00 |
| 5/11/2023 | 6/5/2023 | 26.00 | 6/5/2023 | 25.00 | Residential Sales | $463.96 | 11,599.00 |
| 5/11/2023 | 5/12/2023 | 2.00 | 5/12/2023 | 1.00 | Residential Sales | $561,393.83 | 561,393.83 |
| 5/11/2023 | 8/8/2023 | 90.00 | 8/8/2023 | 89.00 | Residential Sales | $27.51 | 2,448.39 |
| 5/11/2023 | 5/15/2023 | 5.00 | 5/15/2023 | 4.00 | Industrial Service | $62,027.57 | 248,110.28 |
| 5/11/2023 | 6/21/2023 | 42.00 | 6/21/2023 | 41.00 | Residential Sales | $9.22 | 378.02 |
| 5/11/2023 | 5/15/2023 | 5.00 | 5/15/2023 | 4.00 | Commercial Sales | $56,370.39 | 225,481.56 |
| 5/11/2023 | 5/16/2023 | 6.00 | 5/16/2023 | 5.00 | Industrial Service | $91,050.94 | 455,254.70 |
| 5/11/2023 | 5/11/2023 | 1.00 | 5/11/2023 | 0.00 | Public Street & Highway Lighting | $11.70 | - |
| 5/11/2023 | 11/14/2023 | 188.00 | 11/14/2023 | 187.00 | Commercial Sales | $79.84 | 14,930.08 |
| 5/11/2023 | 5/15/2023 | 5.00 | 5/15/2023 | 4.00 | Residential Sales | $13,917.79 | 55,671.16 |
| 5/11/2023 | 8/25/2023 | 107.00 | 8/25/2023 | 106.00 | Residential Sales | $15.78 | 1,672.68 |
| 5/11/2023 | 5/16/2023 | 6.00 | 5/16/2023 | 5.00 | Commercial Sales | $169,044.68 | 845,223.40 |
| 5/11/2023 | 6/9/2023 | 30.00 | 6/9/2023 | 29.00 | Residential Sales | $50.73 | 1,471.17 |
| 5/11/2023 | 5/17/2023 | 7.00 | 5/17/2023 | 6.00 | Commercial Sales | $16,813.27 | 100,879.62 |
| 5/11/2023 | 5/16/2023 | 6.00 | 5/16/2023 | 5.00 | Residential Sales | $1,592.59 | 7,962.95 |
| 5/11/2023 | 5/11/2023 | 1.00 | 5/11/2023 | 0.00 | Other Sales to Public Authority | $16.25 | - |
| 5/11/2023 | 5/18/2023 | 8.00 | 5/18/2023 | 7.00 | Commercial Sales | $69.05 | 483.35 |
| 5/11/2023 | 5/17/2023 | 7.00 | 5/17/2023 | 6.00 | Residential Sales | $272.95 | 1,637.70 |
| 5/11/2023 | 5/12/2023 | 2.00 | 5/12/2023 | 1.00 | Other Sales to Public Authority | $1,097.15 | 1,097.15 |
| 5/11/2023 | 5/18/2023 | 8.00 | 5/18/2023 | 7.00 | Residential Sales | $325.67 | 2,279.69 |
| 5/11/2023 | 8/29/2023 | 111.00 | 8/29/2023 | 110.00 | Commercial Sales | $658.97 | 72,486.70 |
| 5/11/2023 | 5/19/2023 | 9.00 | 5/19/2023 | 8.00 | Residential Sales | $46.95 | 375.60 |
| 5/11/2023 | 5/15/2023 | 5.00 | 5/15/2023 | 4.00 | Other Sales to Public Authority | $30.49 | 121.96 |
| 5/11/2023 | 7/20/2023 | 71.00 | 7/20/2023 | 70.00 | Residential Sales | $62.79 | 4,395.30 |
| 5/11/2023 | 7/7/2023 | 58.00 | 7/7/2023 | 57.00 | Residential Sales | $7.60 | 433.20 |
| 5/11/2023 | 6/14/2023 | 35.00 | 6/14/2023 | 34.00 | Residential Sales | $62.66 | 2,130.44 |
| 5/11/2023 | 8/30/2023 | 112.00 | 8/30/2023 | 111.00 | Residential Sales | $31.73 | 3,522.03 |
| 5/11/2023 | 5/6/2024 | 362.00 | 5/6/2024 | 361.00 | Residential Sales | $28.02 | 10,115.22 |
| 5/11/2023 | 6/30/2023 | 51.00 | 6/30/2023 | 50.00 | Residential Sales | $34.96 | 1,748.00 |
| 5/11/2023 | 5/22/2023 | 12.00 | 5/22/2023 | 11.00 | Residential Sales | $30.37 | 334.07 |
| 5/11/2023 | 3/5/2024 | 300.00 | 3/5/2024 | 299.00 | Residential Sales | $20.26 | 6,057.74 |
| 5/11/2023 | 5/23/2023 | 13.00 | 5/23/2023 | 12.00 | Residential Sales | $114.51 | 1,374.12 |
| 5/11/2023 | 6/19/2023 | 40.00 | 6/19/2023 | 39.00 | Commercial Sales | $1,362.24 | 53,127.36 |
| 5/11/2023 | 12/18/2023 | 222.00 | 12/18/2023 | 221.00 | Commercial Sales | $595.01 | 131,497.21 |
| 5/11/2023 | 5/24/2023 | 14.00 | 5/24/2023 | 13.00 | Residential Sales | $120.88 | 1,571.44 |
| 5/12/2023 | 6/15/2023 | 35.00 | 6/15/2023 | 34.00 | Residential Sales | $14.63 | 497.42 |
| 5/12/2023 | 5/15/2023 | 4.00 | 5/15/2023 | 3.00 | Company Use | $0.00 | - |
| 5/12/2023 | 5/23/2023 | 12.00 | 5/23/2023 | 11.00 | Residential Sales | $143.21 | 1,575.31 |
| 5/12/2023 | 6/2/2023 | 22.00 | 6/2/2023 | 21.00 | Commercial Sales | $1,709.34 | 35,896.14 |
| 5/12/2023 | 5/16/2023 | 5.00 | 5/16/2023 | 4.00 | Company Use | $0.00 | - |
| 5/12/2023 | 10/30/2023 | 172.00 | 10/30/2023 | 171.00 | Residential Sales | $50.64 | 8,659.44 |
| 5/12/2023 | 5/25/2023 | 14.00 | 5/25/2023 | 13.00 | Residential Sales | $78.94 | 1,026.22 |
| 5/12/2023 | 6/2/2023 | 22.00 | 6/2/2023 | 21.00 | Residential Sales | $89.04 | 1,869.84 |
| 5/12/2023 | 5/12/2023 | 1.00 | 5/12/2023 | 0.00 | Commercial Sales | $2,506.99 | - |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 5/12/2023 | 6/5/2023 | 25.00 | 6/5/2023 | 24.00 | Residential Sales | $122.49 | 2,939.76 |
| 5/12/2023 | 5/12/2023 | 1.00 | 5/12/2023 | 0.00 | Residential Sales | $650.22 | - |
| 5/12/2023 | 6/20/2023 | 40.00 | 6/20/2023 | 39.00 | Residential Sales | $114.54 | 4,467.06 |
| 5/12/2023 | 6/8/2023 | 28.00 | 6/8/2023 | 27.00 | Commercial Sales | $315.96 | 8,530.92 |
| 5/12/2023 | 8/23/2023 | 104.00 | 8/23/2023 | 103.00 | Residential Sales | $43.39 | 4,469.17 |
| 5/12/2023 | 6/7/2023 | 27.00 | 6/7/2023 | 26.00 | Residential Sales | $21.37 | 555.62 |
| 5/12/2023 | 5/15/2023 | 4.00 | 5/15/2023 | 3.00 | Commercial Sales | $17.57 | 52.71 |
| 5/12/2023 | 5/15/2023 | 4.00 | 5/15/2023 | 3.00 | Residential Sales | $417,559.08 | 1,252,677.24 |
| 5/12/2023 | 5/12/2023 | 1.00 | 5/12/2023 | 0.00 | Public Street & Highway Lighting | $302.52 | - |
| 5/12/2023 | 5/30/2023 | 19.00 | 5/30/2023 | 18.00 | Commercial Sales | $578.19 | 10,407.42 |
| 5/12/2023 | 5/16/2023 | 5.00 | 5/16/2023 | 4.00 | Commercial Sales | $3.41 | 13.64 |
| 5/12/2023 | 11/15/2023 | 188.00 | 11/15/2023 | 187.00 | Commercial Sales | $34.26 | 6,406.62 |
| 5/12/2023 | 5/16/2023 | 5.00 | 5/16/2023 | 4.00 | Residential Sales | $4,950.98 | 19,803.92 |
| 5/12/2023 | 5/17/2023 | 6.00 | 5/17/2023 | 5.00 | Commercial Sales | $4,873.99 | 24,369.95 |
| 5/12/2023 | 5/30/2023 | 19.00 | 5/30/2023 | 18.00 | Residential Sales | $72.43 | 1,303.74 |
| 5/12/2023 | 5/17/2023 | 6.00 | 5/17/2023 | 5.00 | Residential Sales | $1,700.05 | 8,500.25 |
| 5/12/2023 | 5/18/2023 | 7.00 | 5/18/2023 | 6.00 | Commercial Sales | $500.84 | 3,005.04 |
| 5/12/2023 | 5/19/2023 | 8.00 | 5/19/2023 | 7.00 | Commercial Sales | $12,230.49 | 85,613.43 |
| 5/12/2023 | 5/18/2023 | 7.00 | 5/18/2023 | 6.00 | Residential Sales | $701.53 | 4,209.18 |
| 5/12/2023 | 5/19/2023 | 8.00 | 5/19/2023 | 7.00 | Residential Sales | $129.61 | 907.27 |
| 5/12/2023 | 7/5/2023 | 55.00 | 7/5/2023 | 54.00 | Residential Sales | $27.51 | 1,485.54 |
| 5/12/2023 | 10/27/2023 | 169.00 | 10/27/2023 | 168.00 | Residential Sales | $115.85 | 19,462.80 |
| 5/12/2023 | 5/12/2023 | 1.00 | 5/12/2023 | 0.00 | Other Public Authority Transportation On | $30.84 | - |
| 5/12/2023 | 5/18/2023 | 7.00 | 5/18/2023 | 6.00 | Other Sales to Public Authority | $9,749.72 | 58,498.32 |
| 5/12/2023 | 5/12/2023 | 1.00 | 5/12/2023 | 0.00 | Company Use | $13.91 | - |
| 5/13/2023 | 5/15/2023 | 3.00 | 5/15/2023 | 2.00 | Residential Sales | $803.37 | 1,606.74 |
| 5/13/2023 | 5/16/2023 | 4.00 | 5/16/2023 | 3.00 | Residential Sales | $13.82 | 41.46 |
| 5/14/2023 | 5/15/2023 | 2.00 | 5/15/2023 | 1.00 | Residential Sales | $2,168.85 | 2,168.85 |
| 5/14/2023 | 5/16/2023 | 3.00 | 5/16/2023 | 2.00 | Residential Sales | $211.31 | 422.62 |
| 5/14/2023 | 5/17/2023 | 4.00 | 5/17/2023 | 3.00 | Residential Sales | $57.52 | 172.56 |
| 5/14/2023 | 5/18/2023 | 5.00 | 5/18/2023 | 4.00 | Residential Sales | $80.83 | 323.32 |
| 5/14/2023 | 5/19/2023 | 6.00 | 5/19/2023 | 5.00 | Residential Sales | $2.30 | 11.50 |
| 5/14/2023 | 5/23/2023 | 10.00 | 5/23/2023 | 9.00 | Residential Sales | $194.59 | 1,751.31 |
| 5/14/2023 | 6/1/2023 | 19.00 | 6/1/2023 | 18.00 | Residential Sales | $52.52 | 945.36 |
| 5/14/2023 | 6/7/2023 | 25.00 | 6/7/2023 | 24.00 | Residential Sales | $54.51 | 1,308.24 |
| 5/15/2023 | 6/8/2023 | 25.00 | 6/8/2023 | 24.00 | Residential Sales | $14.01 | 336.24 |
| 5/15/2023 | 5/16/2023 | 2.00 | 5/16/2023 | 1.00 | Residential Sales | $2,441.99 | 2,441.99 |
| 5/15/2023 | 5/17/2023 | 3.00 | 5/17/2023 | 2.00 | Commercial Sales | $3.82 | 7.64 |
| 5/15/2023 | 5/17/2023 | 3.00 | 5/17/2023 | 2.00 | Residential Sales | $151.50 | 303.00 |
| 5/15/2023 | 5/18/2023 | 4.00 | 5/18/2023 | 3.00 | Residential Sales | $136.26 | 408.78 |
| 5/15/2023 | 5/19/2023 | 5.00 | 5/19/2023 | 4.00 | Residential Sales | $98.01 | 392.04 |
| 5/15/2023 | 5/22/2023 | 8.00 | 5/22/2023 | 7.00 | Residential Sales | $30.75 | 215.25 |
| 5/16/2023 | 5/22/2023 | 7.00 | 5/22/2023 | 6.00 | Commercial Sales | $100.18 | 601.08 |
| 5/16/2023 | 5/22/2023 | 7.00 | 5/22/2023 | 6.00 | Residential Sales | $812.59 | 4,875.54 |
| 5/16/2023 | 5/23/2023 | 8.00 | 5/23/2023 | 7.00 | Residential Sales | $243.69 | 1,705.83 |
| 5/16/2023 | 5/24/2023 | 9.00 | 5/24/2023 | 8.00 | Residential Sales | $702.99 | 5,623.92 |
| 5/16/2023 | 5/25/2023 | 10.00 | 5/25/2023 | 9.00 | Residential Sales | $48.92 | 440.28 |
| 5/16/2023 | 6/2/2023 | 18.00 | 6/2/2023 | 17.00 | Residential Sales | $30.34 | 515.78 |
| 5/16/2023 | 6/16/2023 | 32.00 | 6/16/2023 | 31.00 | Other Sales to Public Authority | $134.43 | 4,167.33 |
| 5/16/2023 | 6/5/2023 | 21.00 | 6/5/2023 | 20.00 | Residential Sales | $31.06 | 621.20 |
| 5/16/2023 | 5/23/2023 | 8.00 | 5/23/2023 | 7.00 | Other Sales to Public Authority | $25,950.46 | 181,653.22 |
| 5/16/2023 | 5/30/2023 | 15.00 | 5/30/2023 | 14.00 | Commercial Sales | $1,502.76 | 21,038.64 |
| 5/16/2023 | 5/17/2023 | 2.00 | 5/17/2023 | 1.00 | Industrial Service | $45.75 | 45.75 |
| 5/16/2023 | 5/17/2023 | 2.00 | 5/17/2023 | 1.00 | Commercial Sales | $78,186.79 | 78,186.79 |
| 5/16/2023 | 5/16/2023 | 1.00 | 5/16/2023 | 0.00 | Residential Sales | $824.88 | - |
| 5/16/2023 | 5/18/2023 | 3.00 | 5/18/2023 | 2.00 | Industrial Service | $724.55 | 1,449.10 |
| 5/16/2023 | 5/17/2023 | 2.00 | 5/17/2023 | 1.00 | Residential Sales | $427,456.85 | 427,456.85 |
| 5/16/2023 | 5/18/2023 | 3.00 | 5/18/2023 | 2.00 | Commercial Sales | $38,517.93 | 77,035.86 |
| 5/16/2023 | 5/19/2023 | 4.00 | 5/19/2023 | 3.00 | Industrial Service | $33,095.70 | 99,287.10 |
| 5/16/2023 | 5/18/2023 | 3.00 | 5/18/2023 | 2.00 | Residential Sales | $10,874.32 | 21,748.64 |
| 5/16/2023 | 5/19/2023 | 4.00 | 5/19/2023 | 3.00 | Commercial Sales | $205.13 | 615.39 |
| 5/16/2023 | 5/19/2023 | 4.00 | 5/19/2023 | 3.00 | Residential Sales | $1,838.55 | 5,515.65 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 5/16/2023 | 5/17/2023 | 2.00 | 5/17/2023 | 1.00 | Other Sales to Public Authority | $11,205.84 | 11,205.84 |
| 5/16/2023 | 5/18/2023 | 3.00 | 5/18/2023 | 2.00 | Other Sales to Public Authority | $1,092.46 | 2,184.92 |
| 5/17/2023 | 5/19/2023 | 3.00 | 5/19/2023 | 2.00 | Residential Sales | $14,310.57 | 28,621.14 |
| 5/17/2023 | 9/7/2023 | 114.00 | 9/7/2023 | 113.00 | Commercial Sales | $195.35 | 22,074.55 |
| 5/17/2023 | 5/17/2023 | 1.00 | 5/17/2023 | 0.00 | Public Street & Highway Lighting | $132.77 | - |
| 5/17/2023 | 5/17/2023 | 1.00 | 5/17/2023 | 0.00 | Other Sales to Public Authority | $32.51 | - |
| 5/17/2023 | 5/18/2023 | 2.00 | 5/18/2023 | 1.00 | Other Sales to Public Authority | $7,692.41 | 7,692.41 |
| 5/17/2023 | 5/22/2023 | 6.00 | 5/22/2023 | 5.00 | Industrial Service | $13,535.70 | 67,678.50 |
| 5/17/2023 | 5/22/2023 | 6.00 | 5/22/2023 | 5.00 | Commercial Sales | $1,113.92 | 5,569.60 |
| 5/17/2023 | 5/19/2023 | 3.00 | 5/19/2023 | 2.00 | Other Sales to Public Authority | $360.47 | 720.94 |
| 5/17/2023 | 5/23/2023 | 7.00 | 5/23/2023 | 6.00 | Industrial Service | $40,550.67 | 243,304.02 |
| 5/17/2023 | 5/22/2023 | 6.00 | 5/22/2023 | 5.00 | Residential Sales | $2,051.47 | 10,257.35 |
| 5/17/2023 | 5/23/2023 | 7.00 | 5/23/2023 | 6.00 | Commercial Sales | $8,921.97 | 53,531.82 |
| 5/17/2023 | 5/23/2023 | 7.00 | 5/23/2023 | 6.00 | Residential Sales | $957.01 | 5,742.06 |
| 5/17/2023 | 5/24/2023 | 8.00 | 5/24/2023 | 7.00 | Commercial Sales | $18.30 | 128.10 |
| 5/17/2023 | 5/24/2023 | 8.00 | 5/24/2023 | 7.00 | Residential Sales | $338.30 | 2,368.10 |
| 5/17/2023 | 6/19/2023 | 34.00 | 6/19/2023 | 33.00 | Residential Sales | $63.83 | 2,106.39 |
| 5/17/2023 | 5/25/2023 | 9.00 | 5/25/2023 | 8.00 | Residential Sales | $25.16 | 201.28 |
| 5/17/2023 | 5/26/2023 | 10.00 | 5/26/2023 | 9.00 | Commercial Sales | $173.84 | 1,564.56 |
| 5/17/2023 | 7/10/2023 | 55.00 | 7/10/2023 | 54.00 | Residential Sales | $78.49 | 4,238.46 |
| 5/17/2023 | 5/26/2023 | 10.00 | 5/26/2023 | 9.00 | Residential Sales | $24.58 | 221.22 |
| 5/17/2023 | 6/5/2023 | 20.00 | 6/5/2023 | 19.00 | Residential Sales | $27.48 | 522.12 |
| 5/17/2023 | 6/20/2023 | 35.00 | 6/20/2023 | 34.00 | Residential Sales | $105.92 | 3,601.28 |
| 5/17/2023 | 6/22/2023 | 37.00 | 6/22/2023 | 36.00 | Residential Sales | $24.56 | 884.16 |
| 5/17/2023 | 6/9/2023 | 24.00 | 6/9/2023 | 23.00 | Residential Sales | $86.90 | 1,998.70 |
| 5/17/2023 | 5/17/2023 | 1.00 | 5/17/2023 | 0.00 | Commercial Sales | $657.76 | - |
| 5/17/2023 | 5/18/2023 | 2.00 | 5/18/2023 | 1.00 | Industrial Service | $81,356.98 | 81,356.98 |
| 5/17/2023 | 5/18/2023 | 2.00 | 5/18/2023 | 1.00 | Commercial Sales | $208,475.34 | 208,475.34 |
| 5/17/2023 | 5/17/2023 | 1.00 | 5/17/2023 | 0.00 | Residential Sales | $1,907.15 | - |
| 5/17/2023 | 5/19/2023 | 3.00 | 5/19/2023 | 2.00 | Industrial Service | $30,705.56 | 61,411.12 |
| 5/17/2023 | 8/11/2023 | 87.00 | 8/11/2023 | 86.00 | Commercial Sales | $177.70 | 15,282.20 |
| 5/17/2023 | 7/19/2023 | 64.00 | 7/19/2023 | 63.00 | Residential Sales | $15.35 | 967.05 |
| 5/17/2023 | 5/18/2023 | 2.00 | 5/18/2023 | 1.00 | Residential Sales | $632,672.13 | 632,672.13 |
| 5/17/2023 | 5/19/2023 | 3.00 | 5/19/2023 | 2.00 | Commercial Sales | $213,119.16 | 426,238.32 |
| 5/18/2023 | 10/6/2023 | 142.00 | 10/6/2023 | 141.00 | Residential Sales | $120.34 | 16,967.94 |
| 5/18/2023 | 5/19/2023 | 2.00 | 5/19/2023 | 1.00 | Industrial Service | $13,083.46 | 13,083.46 |
| 5/18/2023 | 5/18/2023 | 1.00 | 5/18/2023 | 0.00 | Commercial Sales | $726.33 | - |
| 5/18/2023 | 5/31/2023 | 14.00 | 5/31/2023 | 13.00 | Residential Sales | $143.14 | 1,860.82 |
| 5/18/2023 | 8/11/2023 | 86.00 | 8/11/2023 | 85.00 | Commercial Sales | $57.60 | 4,896.00 |
| 5/18/2023 | 5/19/2023 | 2.00 | 5/19/2023 | 1.00 | Commercial Sales | $126,125.56 | 126,125.56 |
| 5/18/2023 | 5/18/2023 | 1.00 | 5/18/2023 | 0.00 | Residential Sales | $3,538.13 | - |
| 5/18/2023 | 10/23/2023 | 159.00 | 10/23/2023 | 158.00 | Residential Sales | $76.53 | 12,091.74 |
| 5/18/2023 | 6/26/2023 | 40.00 | 6/26/2023 | 39.00 | Residential Sales | $45.35 | 1,768.65 |
| 5/18/2023 | 5/19/2023 | 2.00 | 5/19/2023 | 1.00 | Residential Sales | $408,133.39 | 408,133.39 |
| 5/18/2023 | 8/14/2023 | 89.00 | 8/14/2023 | 88.00 | Commercial Sales | $1,769.73 | 155,736.24 |
| 5/18/2023 | 11/2/2023 | 169.00 | 11/2/2023 | 168.00 | Residential Sales | $13.82 | 2,321.76 |
| 5/18/2023 | 5/18/2023 | 1.00 | 5/18/2023 | 0.00 | Public Street & Highway Lighting | $318.41 | - |
| 5/18/2023 | 6/13/2023 | 27.00 | 6/13/2023 | 26.00 | Residential Sales | $28.76 | 747.76 |
| 5/18/2023 | 5/22/2023 | 5.00 | 5/22/2023 | 4.00 | Industrial Service | $682.35 | 2,729.40 |
| 5/18/2023 | 5/22/2023 | 5.00 | 5/22/2023 | 4.00 | Commercial Sales | $85,396.78 | 341,587.12 |
| 5/18/2023 | 5/19/2023 | 2.00 | 5/19/2023 | 1.00 | Other Sales to Public Authority | $8,605.26 | 8,605.26 |
| 5/18/2023 | 6/15/2023 | 29.00 | 6/15/2023 | 28.00 | Residential Sales | $9.76 | 273.28 |
| 5/18/2023 | 5/23/2023 | 6.00 | 5/23/2023 | 5.00 | Commercial Sales | $45,158.58 | 225,792.90 |
| 5/18/2023 | 5/22/2023 | 5.00 | 5/22/2023 | 4.00 | Residential Sales | $8,191.90 | 32,767.60 |
| 5/18/2023 | 5/24/2023 | 7.00 | 5/24/2023 | 6.00 | Commercial Sales | $1,184.28 | 7,105.68 |
| 5/18/2023 | 6/1/2023 | 15.00 | 6/1/2023 | 14.00 | Commercial Sales | $90.66 | 1,269.24 |
| 5/18/2023 | 5/25/2023 | 8.00 | 5/25/2023 | 7.00 | Industrial Service | $2,083.52 | 14,584.64 |
| 5/18/2023 | 5/23/2023 | 6.00 | 5/23/2023 | 5.00 | Residential Sales | $555.97 | 2,779.85 |
| 5/18/2023 | 7/26/2023 | 70.00 | 7/26/2023 | 69.00 | Commercial Sales | $30.66 | 2,115.54 |
| 5/18/2023 | 9/28/2023 | 134.00 | 9/28/2023 | 133.00 | Commercial Sales | $108.43 | 14,421.19 |
| 5/18/2023 | 5/24/2023 | 7.00 | 5/24/2023 | 6.00 | Residential Sales | $680.11 | 4,080.66 |
| 5/18/2023 | 5/25/2023 | 8.00 | 5/25/2023 | 7.00 | Commercial Sales | $854.38 | 5,980.66 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 5/18/2023 | 6/19/2023 | 33.00 | 6/19/2023 | 32.00 | Commercial Sales | $30.08 | 962.56 |
| 5/18/2023 | 5/25/2023 | 8.00 | 5/25/2023 | 7.00 | Residential Sales | $241.91 | 1,693.37 |
| 5/18/2023 | 6/2/2023 | 16.00 | 6/2/2023 | 15.00 | Residential Sales | $167.99 | 2,519.85 |
| 5/18/2023 | 6/19/2023 | 33.00 | 6/19/2023 | 32.00 | Residential Sales | $38.82 | 1,242.24 |
| 5/18/2023 | 5/26/2023 | 9.00 | 5/26/2023 | 8.00 | Residential Sales | $255.34 | 2,042.72 |
| 5/18/2023 | 5/22/2023 | 5.00 | 5/22/2023 | 4.00 | Other Sales to Public Authority | $18,027.21 | 72,108.84 |
| 5/18/2023 | 6/20/2023 | 34.00 | 6/20/2023 | 33.00 | Residential Sales | $3.95 | 130.35 |
| 5/18/2023 | 8/22/2023 | 97.00 | 8/22/2023 | 96.00 | Residential Sales | $10.58 | 1,015.68 |
| 5/18/2023 | 6/21/2023 | 35.00 | 6/21/2023 | 34.00 | Residential Sales | $66.32 | 2,254.88 |
| 5/19/2023 | 5/26/2023 | 8.00 | 5/26/2023 | 7.00 | Residential Sales | $1,193.64 | 8,355.48 |
| 5/19/2023 | 5/22/2023 | 4.00 | 5/22/2023 | 3.00 | Other Sales to Public Authority | $12,085.68 | 36,257.04 |
| 5/19/2023 | 1/8/2024 | 235.00 | 1/8/2024 | 234.00 | Residential Sales | $37.32 | 8,732.88 |
| 5/19/2023 | 5/23/2023 | 5.00 | 5/23/2023 | 4.00 | Other Sales to Public Authority | $30,847.01 | 123,388.04 |
| 5/19/2023 | 6/20/2023 | 33.00 | 6/20/2023 | 32.00 | Residential Sales | $56.90 | 1,820.80 |
| 5/19/2023 | 6/22/2023 | 35.00 | 6/22/2023 | 34.00 | Residential Sales | $71.67 | 2,436.78 |
| 5/19/2023 | 5/30/2023 | 12.00 | 5/30/2023 | 11.00 | Residential Sales | $257.14 | 2,828.54 |
| 5/19/2023 | 5/31/2023 | 13.00 | 5/31/2023 | 12.00 | Residential Sales | $214.21 | 2,570.52 |
| 5/19/2023 | 5/19/2023 | 1.00 | 5/19/2023 | 0.00 | Commercial Sales | $2,039.67 | - |
| 5/19/2023 | 5/19/2023 | 1.00 | 5/19/2023 | 0.00 | Residential Sales | $1,579.67 | - |
| 5/19/2023 | 7/20/2023 | 63.00 | 7/20/2023 | 62.00 | Residential Sales | $77.34 | 4,795.08 |
| 5/19/2023 | 7/21/2023 | 64.00 | 7/21/2023 | 63.00 | Residential Sales | $60.22 | 3,793.86 |
| 5/19/2023 | 6/13/2023 | 26.00 | 6/13/2023 | 25.00 | Residential Sales | $40.07 | 1,001.75 |
| 5/19/2023 | 5/19/2023 | 1.00 | 5/19/2023 | 0.00 | Public Street & Highway Lighting | $94.45 | - |
| 5/19/2023 | 5/22/2023 | 4.00 | 5/22/2023 | 3.00 | Industrial Service | $6,918.92 | 20,756.76 |
| 5/19/2023 | 5/22/2023 | 4.00 | 5/22/2023 | 3.00 | Commercial Sales | $69,144.22 | 207,432.66 |
| 5/19/2023 | 5/22/2023 | 4.00 | 5/22/2023 | 3.00 | Residential Sales | $594,338.73 | 1,783,016.19 |
| 5/19/2023 | 5/23/2023 | 5.00 | 5/23/2023 | 4.00 | Commercial Sales | $21,594.18 | 86,376.72 |
| 5/19/2023 | 5/23/2023 | 5.00 | 5/23/2023 | 4.00 | Residential Sales | $6,862.92 | 27,451.68 |
| 5/19/2023 | 5/24/2023 | 6.00 | 5/24/2023 | 5.00 | Commercial Sales | $25,639.24 | 128,196.20 |
| 5/19/2023 | 5/25/2023 | 7.00 | 5/25/2023 | 6.00 | Industrial Service | $478.56 | 2,871.36 |
| 5/19/2023 | 5/24/2023 | 6.00 | 5/24/2023 | 5.00 | Residential Sales | $905.88 | 4,529.40 |
| 5/19/2023 | 5/25/2023 | 7.00 | 5/25/2023 | 6.00 | Commercial Sales | $166.51 | 999.06 |
| 5/19/2023 | 5/25/2023 | 7.00 | 5/25/2023 | 6.00 | Residential Sales | $445.24 | 2,671.44 |
| 5/19/2023 | 5/26/2023 | 8.00 | 5/26/2023 | 7.00 | Commercial Sales | $590.06 | 4,130.42 |
| 5/20/2023 | 5/26/2023 | 7.00 | 5/26/2023 | 6.00 | Residential Sales | $117.37 | 704.22 |
| 5/20/2023 | 5/22/2023 | 3.00 | 5/22/2023 | 2.00 | Residential Sales | $1,253.54 | 2,507.08 |
| 5/20/2023 | 5/23/2023 | 4.00 | 5/23/2023 | 3.00 | Residential Sales | $197.93 | 593.79 |
| 5/21/2023 | 5/22/2023 | 2.00 | 5/22/2023 | 1.00 | Residential Sales | $1,666.13 | 1,666.13 |
| 5/21/2023 | 5/23/2023 | 3.00 | 5/23/2023 | 2.00 | Residential Sales | $631.05 | 1,262.10 |
| 5/21/2023 | 5/24/2023 | 4.00 | 5/24/2023 | 3.00 | Residential Sales | $17.72 | 53.16 |
| 5/21/2023 | 5/22/2023 | 2.00 | 5/22/2023 | 1.00 | Commercial Sales | $2.28 | 2.28 |
| 5/21/2023 | 5/25/2023 | 5.00 | 5/25/2023 | 4.00 | Residential Sales | $2.46 | 9.84 |
| 5/21/2023 | 5/23/2023 | 3.00 | 5/23/2023 | 2.00 | Commercial Sales | $11.09 | 22.18 |
| 5/21/2023 | 5/24/2023 | 4.00 | 5/24/2023 | 3.00 | Industrial Service | $96.65 | 289.95 |
| 5/21/2023 | 6/13/2023 | 24.00 | 6/13/2023 | 23.00 | Residential Sales | $5.88 | 135.24 |
| 5/22/2023 | 5/30/2023 | 9.00 | 5/30/2023 | 8.00 | Commercial Sales | $434.03 | 3,472.24 |
| 5/22/2023 | 7/5/2023 | 45.00 | 7/5/2023 | 44.00 | Residential Sales | $24.83 | 1,092.52 |
| 5/22/2023 | 5/22/2023 | 1.00 | 5/22/2023 | 0.00 | Residential Sales | $3,685.69 | - |
| 5/22/2023 | 7/24/2023 | 64.00 | 7/24/2023 | 63.00 | Residential Sales | $24.74 | 1,558.62 |
| 5/22/2023 | 5/23/2023 | 2.00 | 5/23/2023 | 1.00 | Residential Sales | $608,784.29 | 608,784.29 |
| 5/22/2023 | 12/13/2023 | 206.00 | 12/13/2023 | 205.00 | Commercial Sales | $275.55 | 56,487.75 |
| 5/22/2023 | 5/24/2023 | 3.00 | 5/24/2023 | 2.00 | Residential Sales | $8,445.12 | 16,890.24 |
| 5/22/2023 | 12/14/2023 | 207.00 | 12/14/2023 | 206.00 | Commercial Sales | $166.64 | 34,327.84 |
| 5/22/2023 | 6/1/2023 | 11.00 | 6/1/2023 | 10.00 | Residential Sales | $116.56 | 1,165.60 |
| 5/22/2023 | 5/25/2023 | 4.00 | 5/25/2023 | 3.00 | Residential Sales | $4,179.25 | 12,537.75 |
| 5/22/2023 | 5/22/2023 | 1.00 | 5/22/2023 | 0.00 | Commercial Sales | $1,877.81 | - |
| 5/22/2023 | 5/23/2023 | 2.00 | 5/23/2023 | 1.00 | Industrial Service | $50,202.65 | 50,202.65 |
| 5/22/2023 | 5/22/2023 | 1.00 | 5/22/2023 | 0.00 | Public Street & Highway Lighting | $17.76 | - |
| 5/22/2023 | 12/13/2023 | 206.00 | 12/13/2023 | 205.00 | Other Sales to Public Authority | $79.01 | 16,197.05 |
| 5/22/2023 | 5/23/2023 | 2.00 | 5/23/2023 | 1.00 | Commercial Sales | $242,379.84 | 242,379.84 |
| 5/22/2023 | 5/26/2023 | 5.00 | 5/26/2023 | 4.00 | Residential Sales | $583.64 | 2,334.56 |
| 5/22/2023 | 5/24/2023 | 3.00 | 5/24/2023 | 2.00 | Industrial Service | $14,495.24 | 28,990.48 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 5/22/2023 | 5/24/2023 | 3.00 | 5/24/2023 | 2.00 | Commercial Sales | $80,436.11 | 160,872.22 |
| 5/22/2023 | 5/22/2023 | 1.00 | 5/22/2023 | 0.00 | Other Sales to Public Authority | $299.17 | - |
| 5/22/2023 | 5/25/2023 | 4.00 | 5/25/2023 | 3.00 | Industrial Service | $23,337.28 | 70,011.84 |
| 5/22/2023 | 5/25/2023 | 4.00 | 5/25/2023 | 3.00 | Commercial Sales | $30,636.67 | 91,910.01 |
| 5/22/2023 | 5/23/2023 | 2.00 | 5/23/2023 | 1.00 | Other Sales to Public Authority | $12,331.59 | 12,331.59 |
| 5/22/2023 | 7/13/2023 | 53.00 | 7/13/2023 | 52.00 | Residential Sales | $19.92 | 1,035.84 |
| 5/22/2023 | 5/24/2023 | 3.00 | 5/24/2023 | 2.00 | Other Sales to Public Authority | $7,146.53 | 14,293.06 |
| 5/22/2023 | 5/26/2023 | 5.00 | 5/26/2023 | 4.00 | Commercial Sales | $337.39 | 1,349.56 |
| 5/22/2023 | 6/6/2023 | 16.00 | 6/6/2023 | 15.00 | Residential Sales | $87.03 | 1,305.45 |
| 5/22/2023 | 5/26/2023 | 5.00 | 5/26/2023 | 4.00 | Other Sales to Public Authority | $14,028.18 | 56,112.72 |
| 5/22/2023 | 5/30/2023 | 9.00 | 5/30/2023 | 8.00 | Residential Sales | $566.15 | 4,529.20 |
| 5/22/2023 | 5/31/2023 | 10.00 | 5/31/2023 | 9.00 | Residential Sales | $345.66 | 3,110.94 |
| 5/22/2023 | 8/10/2023 | 81.00 | 8/10/2023 | 80.00 | Residential Sales | $61.74 | 4,939.20 |
| 5/23/2023 | 5/30/2023 | 8.00 | 5/30/2023 | 7.00 | Residential Sales | $1,035.56 | 7,248.92 |
| 5/23/2023 | 5/31/2023 | 9.00 | 5/31/2023 | 8.00 | Residential Sales | $492.05 | 3,936.40 |
| 5/23/2023 | 6/9/2023 | 18.00 | 6/9/2023 | 17.00 | Commercial Sales | $3,756.52 | 63,860.84 |
| 5/23/2023 | 5/30/2023 | 8.00 | 5/30/2023 | 7.00 | Industrial Service | $13,178.20 | 92,247.40 |
| 5/23/2023 | 6/26/2023 | 35.00 | 6/26/2023 | 34.00 | Residential Sales | $12.86 | 437.24 |
| 5/23/2023 | 5/30/2023 | 8.00 | 5/30/2023 | 7.00 | Commercial Sales | $25,191.99 | 176,343.93 |
| 5/23/2023 | 6/13/2023 | 22.00 | 6/13/2023 | 21.00 | Residential Sales | $47.37 | 994.77 |
| 5/23/2023 | 6/14/2023 | 23.00 | 6/14/2023 | 22.00 | Residential Sales | $2.42 | 53.24 |
| 5/23/2023 | 3/5/2024 | 288.00 | 3/5/2024 | 287.00 | Residential Sales | $33.25 | 9,542.75 |
| 5/23/2023 | 5/23/2023 | 1.00 | 5/23/2023 | 0.00 | Residential Sales | $1,235.01 | - |
| 5/23/2023 | 5/24/2023 | 2.00 | 5/24/2023 | 1.00 | Residential Sales | $447,203.41 | 447,203.41 |
| 5/23/2023 | 6/1/2023 | 10.00 | 6/1/2023 | 9.00 | Residential Sales | $40.43 | 363.87 |
| 5/23/2023 | 5/25/2023 | 3.00 | 5/25/2023 | 2.00 | Residential Sales | $8,239.81 | 16,479.62 |
| 5/23/2023 | 6/2/2023 | 11.00 | 6/2/2023 | 10.00 | Residential Sales | $68.17 | 681.70 |
| 5/23/2023 | 5/26/2023 | 4.00 | 5/26/2023 | 3.00 | Residential Sales | $1,253.57 | 3,760.71 |
| 5/23/2023 | 5/23/2023 | 1.00 | 5/23/2023 | 0.00 | Commercial Sales | $874.92 | - |
| 5/23/2023 | 5/24/2023 | 2.00 | 5/24/2023 | 1.00 | Industrial Service | $49,632.56 | 49,632.56 |
| 5/23/2023 | 5/23/2023 | 1.00 | 5/23/2023 | 0.00 | Public Street & Highway Lighting | $9.45 | - |
| 5/23/2023 | 5/24/2023 | 2.00 | 5/24/2023 | 1.00 | Commercial Sales | $243,479.92 | 243,479.92 |
| 5/23/2023 | 8/1/2023 | 71.00 | 8/1/2023 | 70.00 | Other Sales to Public Authority | $356.93 | 24,985.10 |
| 5/23/2023 | 5/25/2023 | 3.00 | 5/25/2023 | 2.00 | Industrial Service | $337.26 | 674.52 |
| 5/23/2023 | 7/12/2023 | 51.00 | 7/12/2023 | 50.00 | Residential Sales | $42.12 | 2,106.00 |
| 5/23/2023 | 5/25/2023 | 3.00 | 5/25/2023 | 2.00 | Commercial Sales | $152,689.02 | 305,378.04 |
| 5/23/2023 | 5/26/2023 | 4.00 | 5/26/2023 | 3.00 | Industrial Service | $19,539.28 | 58,617.84 |
| 5/23/2023 | 6/2/2023 | 11.00 | 6/2/2023 | 10.00 | Commercial Sales | $698.43 | 6,984.30 |
| 5/23/2023 | 5/26/2023 | 4.00 | 5/26/2023 | 3.00 | Commercial Sales | $50,254.86 | 150,764.58 |
| 5/23/2023 | 5/24/2023 | 2.00 | 5/24/2023 | 1.00 | Other Sales to Public Authority | $32,643.72 | 32,643.72 |
| 5/23/2023 | 6/6/2023 | 15.00 | 6/6/2023 | 14.00 | Residential Sales | $76.12 | 1,065.68 |
| 5/23/2023 | 5/25/2023 | 3.00 | 5/25/2023 | 2.00 | Other Sales to Public Authority | $1,014.62 | 2,029.24 |
| 5/24/2023 | 5/26/2023 | 3.00 | 5/26/2023 | 2.00 | Residential Sales | $11,278.71 | 22,557.42 |
| 5/24/2023 | 5/24/2023 | 1.00 | 5/24/2023 | 0.00 | Public Street & Highway Lighting | $7,131.63 | - |
| 5/24/2023 | 5/24/2023 | 1.00 | 5/24/2023 | 0.00 | Commercial Sales | $15,555.22 | - |
| 5/24/2023 | 5/25/2023 | 2.00 | 5/25/2023 | 1.00 | Industrial Service | $73,932.16 | 73,932.16 |
| 5/24/2023 | 8/1/2023 | 70.00 | 8/1/2023 | 69.00 | Other Sales to Public Authority | $901.84 | 62,226.96 |
| 5/24/2023 | 5/25/2023 | 2.00 | 5/25/2023 | 1.00 | Commercial Sales | $638,277.75 | 638,277.75 |
| 5/24/2023 | 5/26/2023 | 3.00 | 5/26/2023 | 2.00 | Industrial Service | $823.98 | 1,647.96 |
| 5/24/2023 | 6/2/2023 | 10.00 | 6/2/2023 | 9.00 | Commercial Sales | $6,587.44 | 59,286.96 |
| 5/24/2023 | 5/25/2023 | 2.00 | 5/25/2023 | 1.00 | Public Street & Highway Lighting | $9,499.35 | 9,499.35 |
| 5/24/2023 | 5/26/2023 | 3.00 | 5/26/2023 | 2.00 | Commercial Sales | $235,252.62 | 470,505.24 |
| 5/24/2023 | 5/24/2023 | 1.00 | 5/24/2023 | 0.00 | Other Sales to Public Authority | $60.05 | - |
| 5/24/2023 | 5/25/2023 | 2.00 | 5/25/2023 | 1.00 | Other Sales to Public Authority | $39,736.95 | 39,736.95 |
| 5/24/2023 | 5/26/2023 | 3.00 | 5/26/2023 | 2.00 | Other Sales to Public Authority | $2,361.01 | 4,722.02 |
| 5/24/2023 | 9/18/2023 | 118.00 | 9/18/2023 | 117.00 | Residential Sales | $11.07 | 1,295.19 |
| 5/24/2023 | 7/31/2023 | 69.00 | 7/31/2023 | 68.00 | Residential Sales | $30.03 | 2,042.04 |
| 5/24/2023 | 5/30/2023 | 7.00 | 5/30/2023 | 6.00 | Residential Sales | $1,527.59 | 9,165.54 |
| 5/24/2023 | 3/28/2024 | 310.00 | 3/28/2024 | 309.00 | Commercial Sales | $860.39 | 265,860.51 |
| 5/24/2023 | 5/31/2023 | 8.00 | 5/31/2023 | 7.00 | Residential Sales | $1,018.79 | 7,131.53 |
| 5/24/2023 | 5/30/2023 | 7.00 | 5/30/2023 | 6.00 | Industrial Service | $1,927.25 | 11,563.50 |
| 5/24/2023 | 5/30/2023 | 7.00 | 5/30/2023 | 6.00 | Commercial Sales | $227,847.76 | 1,367,086.56 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 5/24/2023 | 6/27/2023 | 35.00 | 6/27/2023 | 34.00 | Residential Sales | $22.29 | 757.86 |
| 5/24/2023 | 5/31/2023 | 8.00 | 5/31/2023 | 7.00 | Commercial Sales | $20,274.80 | 141,923.60 |
| 5/24/2023 | 7/5/2023 | 43.00 | 7/5/2023 | 42.00 | Residential Sales | $17.13 | 719.46 |
| 5/24/2023 | 5/30/2023 | 7.00 | 5/30/2023 | 6.00 | Other Sales to Public Authority | $13,074.52 | 78,447.12 |
| 5/24/2023 | 6/12/2023 | 20.00 | 6/12/2023 | 19.00 | Residential Sales | $25.36 | 481.84 |
| 5/24/2023 | 6/29/2023 | 37.00 | 6/29/2023 | 36.00 | Residential Sales | $3.07 | 110.52 |
| 5/24/2023 | 12/28/2023 | 219.00 | 12/28/2023 | 218.00 | Residential Sales | $19.45 | 4,240.10 |
| 5/24/2023 | 9/21/2023 | 121.00 | 9/21/2023 | 120.00 | Commercial Sales | $40.10 | 4,812.00 |
| 5/24/2023 | 3/1/2024 | 283.00 | 3/1/2024 | 282.00 | Commercial Sales | $429.14 | 121,017.48 |
| 5/24/2023 | 5/24/2023 | 1.00 | 5/24/2023 | 0.00 | Residential Sales | $1,946.58 | - |
| 5/24/2023 | 5/25/2023 | 2.00 | 5/25/2023 | 1.00 | Residential Sales | $498,433.63 | 498,433.63 |
| 5/24/2023 | 6/2/2023 | 10.00 | 6/2/2023 | 9.00 | Residential Sales | $747.73 | 6,729.57 |
| 5/24/2023 | 12/13/2023 | 204.00 | 12/13/2023 | 203.00 | Other Sales to Public Authority | $310.61 | 63,053.83 |
| 5/25/2023 | 6/12/2023 | 19.00 | 6/12/2023 | 18.00 | Commercial Sales | $17.13 | 308.34 |
| 5/25/2023 | 6/1/2023 | 8.00 | 6/1/2023 | 7.00 | Residential Sales | $851.46 | 5,960.22 |
| 5/25/2023 | 11/6/2023 | 166.00 | 11/6/2023 | 165.00 | Commercial Sales | $39.15 | 6,459.75 |
| 5/25/2023 | 6/2/2023 | 9.00 | 6/2/2023 | 8.00 | Residential Sales | $92.57 | 740.56 |
| 5/25/2023 | 12/13/2023 | 203.00 | 12/13/2023 | 202.00 | Other Sales to Public Authority | $290.02 | 58,584.04 |
| 5/25/2023 | 5/25/2023 | 1.00 | 5/25/2023 | 0.00 | Residential Sales | $888.77 | - |
| 5/25/2023 | 6/19/2023 | 26.00 | 6/19/2023 | 25.00 | Residential Sales | $101.42 | 2,535.50 |
| 5/25/2023 | 7/10/2023 | 47.00 | 7/10/2023 | 46.00 | Residential Sales | $79.22 | 3,644.12 |
| 5/25/2023 | 5/26/2023 | 2.00 | 5/26/2023 | 1.00 | Residential Sales | $465,461.08 | 465,461.08 |
| 5/25/2023 | 1/2/2024 | 223.00 | 1/2/2024 | 222.00 | Other Sales to Public Authority | $141.71 | 31,459.62 |
| 5/25/2023 | 6/1/2023 | 8.00 | 6/1/2023 | 7.00 | Commercial Sales | $17,424.00 | 121,968.00 |
| 5/25/2023 | 5/25/2023 | 1.00 | 5/25/2023 | 0.00 | Commercial Sales | $26,113.19 | - |
| 5/25/2023 | 6/2/2023 | 9.00 | 6/2/2023 | 8.00 | Commercial Sales | $28.35 | 226.80 |
| 5/25/2023 | 5/25/2023 | 1.00 | 5/25/2023 | 0.00 | Public Street & Highway Lighting | $1,580.71 | - |
| 5/25/2023 | 6/5/2023 | 12.00 | 6/5/2023 | 11.00 | Residential Sales | $6.61 | 72.71 |
| 5/25/2023 | 5/26/2023 | 2.00 | 5/26/2023 | 1.00 | Industrial Service | $163,775.49 | 163,775.49 |
| 5/25/2023 | 5/26/2023 | 2.00 | 5/26/2023 | 1.00 | Commercial Sales | $1,041,822.18 | 1,041,822.18 |
| 5/25/2023 | 6/6/2023 | 13.00 | 6/6/2023 | 12.00 | Residential Sales | $35.14 | 421.68 |
| 5/25/2023 | 6/20/2023 | 27.00 | 6/20/2023 | 26.00 | Residential Sales | $70.70 | 1,838.20 |
| 5/25/2023 | 5/31/2023 | 7.00 | 5/31/2023 | 6.00 | Company Use | $156.30 | 937.80 |
| 5/25/2023 | 6/7/2023 | 14.00 | 6/7/2023 | 13.00 | Residential Sales | $101.16 | 1,315.08 |
| 5/25/2023 | 5/26/2023 | 2.00 | 5/26/2023 | 1.00 | Other Sales to Public Authority | $25,462.85 | 25,462.85 |
| 5/25/2023 | 6/9/2023 | 16.00 | 6/9/2023 | 15.00 | Residential Sales | $105.80 | 1,587.00 |
| 5/25/2023 | 5/30/2023 | 6.00 | 5/30/2023 | 5.00 | Residential Sales | $10,691.96 | 53,459.80 |
| 5/25/2023 | 7/18/2023 | 55.00 | 7/18/2023 | 54.00 | Residential Sales | $100.60 | 5,432.40 |
| 5/25/2023 | 5/31/2023 | 7.00 | 5/31/2023 | 6.00 | Residential Sales | $324.36 | 1,946.16 |
| 5/25/2023 | 6/8/2023 | 15.00 | 6/8/2023 | 14.00 | Commercial Sales | $1,980.59 | 27,728.26 |
| 5/25/2023 | 7/19/2023 | 56.00 | 7/19/2023 | 55.00 | Residential Sales | $81.25 | 4,468.75 |
| 5/25/2023 | 5/30/2023 | 6.00 | 5/30/2023 | 5.00 | Industrial Service | $320,252.73 | 1,601,263.65 |
| 5/25/2023 | 5/30/2023 | 6.00 | 5/30/2023 | 5.00 | Commercial Sales | $206,424.65 | 1,032,123.25 |
| 5/25/2023 | 5/31/2023 | 7.00 | 5/31/2023 | 6.00 | Industrial Service | $19,965.37 | 119,792.22 |
| 5/25/2023 | 5/31/2023 | 7.00 | 5/31/2023 | 6.00 | Commercial Sales | $102,547.80 | 615,286.80 |
| 5/25/2023 | 6/28/2023 | 35.00 | 6/28/2023 | 34.00 | Residential Sales | $32.66 | 1,110.44 |
| 5/25/2023 | 5/30/2023 | 6.00 | 5/30/2023 | 5.00 | Other Sales to Public Authority | $23,193.72 | 115,968.60 |
| 5/25/2023 | 6/12/2023 | 19.00 | 6/12/2023 | 18.00 | Residential Sales | $70.79 | 1,274.22 |
| 5/25/2023 | 6/13/2023 | 20.00 | 6/13/2023 | 19.00 | Residential Sales | $23.56 | 447.64 |
| 5/26/2023 | 5/30/2023 | 5.00 | 5/30/2023 | 4.00 | Commercial Sales | $181,189.17 | 724,756.68 |
| 5/26/2023 | 5/31/2023 | 6.00 | 5/31/2023 | 5.00 | Industrial Service | $2,963.72 | 14,818.60 |
| 5/26/2023 | 4/21/2024 | 332.00 | 4/21/2024 | 331.00 | Commercial Sales | $28.33 | 9,377.23 |
| 5/26/2023 | 5/31/2023 | 6.00 | 5/31/2023 | 5.00 | Commercial Sales | $56,656.38 | 283,281.90 |
| 5/26/2023 | 5/30/2023 | 5.00 | 5/30/2023 | 4.00 | Other Sales to Public Authority | $1,522.20 | 6,088.80 |
| 5/26/2023 | 6/12/2023 | 18.00 | 6/12/2023 | 17.00 | Residential Sales | $125.09 | 2,126.53 |
| 5/26/2023 | 6/29/2023 | 35.00 | 6/29/2023 | 34.00 | Residential Sales | $61.69 | 2,097.46 |
| 5/26/2023 | 5/31/2023 | 6.00 | 5/31/2023 | 5.00 | Other Sales to Public Authority | $11,524.34 | 57,621.70 |
| 5/26/2023 | 6/13/2023 | 19.00 | 6/13/2023 | 18.00 | Residential Sales | $39.79 | 716.22 |
| 5/26/2023 | 6/15/2023 | 21.00 | 6/15/2023 | 20.00 | Residential Sales | $57.81 | 1,156.20 |
| 5/26/2023 | 6/30/2023 | 36.00 | 6/30/2023 | 35.00 | Residential Sales | $15.27 | 534.45 |
| 5/26/2023 | 6/14/2023 | 20.00 | 6/14/2023 | 19.00 | Commercial Sales | $667.96 | 12,691.24 |
| 5/26/2023 | 6/1/2023 | 7.00 | 6/1/2023 | 6.00 | Residential Sales | $884.66 | 5,307.96 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 5/26/2023 | 6/2/2023 | 8.00 | 6/2/2023 | 7.00 | Residential Sales | $1,155.19 | 8,086.33 |
| 5/26/2023 | 5/26/2023 | 1.00 | 5/26/2023 | 0.00 | Residential Sales | $1,114.41 | - |
| 5/26/2023 | 6/1/2023 | 7.00 | 6/1/2023 | 6.00 | Commercial Sales | $12,293.73 | 73,762.38 |
| 5/26/2023 | 6/2/2023 | 8.00 | 6/2/2023 | 7.00 | Commercial Sales | $17,977.62 | 125,843.34 |
| 5/26/2023 | 5/26/2023 | 1.00 | 5/26/2023 | 0.00 | Industrial Service | $1,954.54 | - |
| 5/26/2023 | 6/5/2023 | 11.00 | 6/5/2023 | 10.00 | Residential Sales | $83.15 | 831.50 |
| 5/26/2023 | 5/26/2023 | 1.00 | 5/26/2023 | 0.00 | Commercial Sales | $547.52 | - |
| 5/26/2023 | 5/26/2023 | 1.00 | 5/26/2023 | 0.00 | Public Street & Highway Lighting | $934.41 | - |
| 5/26/2023 | 6/6/2023 | 12.00 | 6/6/2023 | 11.00 | Residential Sales | $11.13 | 122.43 |
| 5/26/2023 | 6/7/2023 | 13.00 | 6/7/2023 | 12.00 | Residential Sales | $138.34 | 1,660.08 |
| 5/26/2023 | 6/8/2023 | 14.00 | 6/8/2023 | 13.00 | Residential Sales | $156.96 | 2,040.48 |
| 5/26/2023 | 6/5/2023 | 11.00 | 6/5/2023 | 10.00 | Commercial Sales | $68.85 | 688.50 |
| 5/26/2023 | 6/6/2023 | 12.00 | 6/6/2023 | 11.00 | Commercial Sales | $3,447.81 | 37,925.91 |
| 5/26/2023 | 5/30/2023 | 5.00 | 5/30/2023 | 4.00 | Residential Sales | $525,642.00 | 2,102,568.00 |
| 5/26/2023 | 6/7/2023 | 13.00 | 6/7/2023 | 12.00 | Commercial Sales | $65.56 | 786.72 |
| 5/26/2023 | 5/31/2023 | 6.00 | 5/31/2023 | 5.00 | Residential Sales | $4,545.41 | 22,727.05 |
| 5/26/2023 | 6/9/2023 | 15.00 | 6/9/2023 | 14.00 | Industrial Service | $611.16 | 8,556.24 |
| 5/26/2023 | 5/30/2023 | 5.00 | 5/30/2023 | 4.00 | Industrial Service | $366,623.33 | 1,466,493.32 |
| 5/27/2023 | 6/9/2023 | 14.00 | 6/9/2023 | 13.00 | Residential Sales | $49.29 | 640.77 |
| 5/27/2023 | 5/30/2023 | 4.00 | 5/30/2023 | 3.00 | Residential Sales | $5,589.99 | 16,769.97 |
| 5/27/2023 | 6/5/2023 | 10.00 | 6/5/2023 | 9.00 | Residential Sales | $6.14 | 55.26 |
| 5/28/2023 | 5/30/2023 | 3.00 | 5/30/2023 | 2.00 | Residential Sales | $1,322.24 | 2,644.48 |
| 5/28/2023 | 5/31/2023 | 4.00 | 5/31/2023 | 3.00 | Residential Sales | $13.82 | 41.46 |
| 5/29/2023 | 6/1/2023 | 4.00 | 6/1/2023 | 3.00 | Residential Sales | $3.74 | 11.22 |
| 5/29/2023 | 6/2/2023 | 5.00 | 6/2/2023 | 4.00 | Residential Sales | $12.23 | 48.92 |
| 5/29/2023 | 6/2/2023 | 5.00 | 6/2/2023 | 4.00 | Commercial Sales | $101.25 | 405.00 |
| 5/29/2023 | 5/30/2023 | 2.00 | 5/30/2023 | 1.00 | Residential Sales | $2,908.52 | 2,908.52 |
| 5/29/2023 | 5/31/2023 | 3.00 | 5/31/2023 | 2.00 | Residential Sales | $319.99 | 639.98 |
| 5/29/2023 | 5/30/2023 | 2.00 | 5/30/2023 | 1.00 | Commercial Sales | $86.92 | 86.92 |
| 5/30/2023 | 6/12/2023 | 14.00 | 6/12/2023 | 13.00 | Residential Sales | $189.15 | 2,458.95 |
| 5/30/2023 | 6/13/2023 | 15.00 | 6/13/2023 | 14.00 | Residential Sales | $131.97 | 1,847.58 |
| 5/30/2023 | 6/14/2023 | 16.00 | 6/14/2023 | 15.00 | Residential Sales | $54.77 | 821.55 |
| 5/30/2023 | 6/15/2023 | 17.00 | 6/15/2023 | 16.00 | Residential Sales | $132.24 | 2,115.84 |
| 5/30/2023 | 6/1/2023 | 3.00 | 6/1/2023 | 2.00 | Industrial Service | $5,650.90 | 11,301.80 |
| 5/30/2023 | 6/30/2023 | 32.00 | 6/30/2023 | 31.00 | Residential Sales | $2.85 | 88.35 |
| 5/30/2023 | 6/1/2023 | 3.00 | 6/1/2023 | 2.00 | Commercial Sales | $100,089.72 | 200,179.44 |
| 5/30/2023 | 6/2/2023 | 4.00 | 6/2/2023 | 3.00 | Industrial Service | $1,583.03 | 4,749.09 |
| 5/30/2023 | 6/1/2023 | 3.00 | 6/1/2023 | 2.00 | Residential Sales | $1,032.10 | 2,064.20 |
| 5/30/2023 | 6/2/2023 | 4.00 | 6/2/2023 | 3.00 | Commercial Sales | $87,410.80 | 262,232.40 |
| 5/30/2023 | 6/1/2023 | 3.00 | 6/1/2023 | 2.00 | Other Sales to Public Authority | $31,810.20 | 63,620.40 |
| 5/30/2023 | 6/2/2023 | 4.00 | 6/2/2023 | 3.00 | Residential Sales | $6,643.77 | 19,931.31 |
| 5/30/2023 | 6/5/2023 | 7.00 | 6/5/2023 | 6.00 | Industrial Service | $46,836.79 | 281,020.74 |
| 5/30/2023 | 6/2/2023 | 4.00 | 6/2/2023 | 3.00 | Other Sales to Public Authority | $29,964.24 | 89,892.72 |
| 5/30/2023 | 6/5/2023 | 7.00 | 6/5/2023 | 6.00 | Commercial Sales | $1,867.36 | 11,204.16 |
| 5/30/2023 | 6/5/2023 | 7.00 | 6/5/2023 | 6.00 | Residential Sales | $1,304.09 | 7,824.54 |
| 5/30/2023 | 6/6/2023 | 8.00 | 6/6/2023 | 7.00 | Commercial Sales | $99.16 | 694.12 |
| 5/30/2023 | 6/6/2023 | 8.00 | 6/6/2023 | 7.00 | Residential Sales | $193.72 | 1,356.04 |
| 5/30/2023 | 6/7/2023 | 9.00 | 6/7/2023 | 8.00 | Commercial Sales | $290.45 | 2,323.60 |
| 5/30/2023 | 8/8/2023 | 71.00 | 8/8/2023 | 70.00 | Residential Sales | $37.98 | 2,658.60 |
| 5/30/2023 | 6/20/2023 | 22.00 | 6/20/2023 | 21.00 | Residential Sales | $123.69 | 2,597.49 |
| 5/30/2023 | 6/7/2023 | 9.00 | 6/7/2023 | 8.00 | Residential Sales | $142.42 | 1,139.36 |
| 5/30/2023 | 6/8/2023 | 10.00 | 6/8/2023 | 9.00 | Residential Sales | $179.19 | 1,612.71 |
| 5/30/2023 | 5/31/2023 | 2.00 | 5/31/2023 | 1.00 | Industrial Service | $183,420.10 | 183,420.10 |
| 5/30/2023 | 5/30/2023 | 1.00 | 5/30/2023 | 0.00 | Commercial Sales | $2,081.21 | - |
| 5/30/2023 | 6/8/2023 | 10.00 | 6/8/2023 | 9.00 | Other Sales to Public Authority | $46,130.26 | 415,172.34 |
| 5/30/2023 | 5/31/2023 | 2.00 | 5/31/2023 | 1.00 | Commercial Sales | $321,092.89 | 321,092.89 |
| 5/30/2023 | 5/30/2023 | 1.00 | 5/30/2023 | 0.00 | Residential Sales | $1,727.11 | - |
| 5/30/2023 | 5/31/2023 | 2.00 | 5/31/2023 | 1.00 | Residential Sales | $475,151.00 | 475,151.00 |
| 5/30/2023 | 5/30/2023 | 1.00 | 5/30/2023 | 0.00 | Other Sales to Public Authority | $58.20 | - |
| 5/30/2023 | 5/31/2023 | 2.00 | 5/31/2023 | 1.00 | Other Sales to Public Authority | $47,166.30 | 47,166.30 |
| 5/30/2023 | 5/31/2024 | 368.00 | 5/31/2024 | 367.00 | Residential Sales | $81.18 | 29,793.06 |
| 5/30/2023 | 5/30/2023 | 1.00 | 5/30/2023 | 0.00 | Public Street & Highway Lighting | $493.34 | - |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 5/30/2023 | 6/12/2023 | 14.00 | 6/12/2023 | 13.00 | Industrial Service | $13,232.12 | 172,017.56 |
| 5/30/2023 | 6/2/2023 | 4.00 | 6/2/2023 | 3.00 | Company Use | $0.00 | - |
| 5/31/2023 | 6/26/2023 | 27.00 | 6/26/2023 | 26.00 | Residential Sales | $20.26 | 526.76 |
| 5/31/2023 | 6/12/2023 | 13.00 | 6/12/2023 | 12.00 | Residential Sales | $3.92 | 47.04 |
| 5/31/2023 | 6/2/2023 | 3.00 | 6/2/2023 | 2.00 | Commercial Sales | $235.94 | 471.88 |
| 5/31/2023 | 6/2/2023 | 3.00 | 6/2/2023 | 2.00 | Residential Sales | $12,688.14 | 25,376.28 |
| 5/31/2023 | 6/19/2023 | 20.00 | 6/19/2023 | 19.00 | Residential Sales | $12.34 | 234.46 |
| 5/31/2023 | 7/11/2023 | 42.00 | 7/11/2023 | 41.00 | Residential Sales | $33.57 | 1,376.37 |
| 5/31/2023 | 6/5/2023 | 6.00 | 6/5/2023 | 5.00 | Commercial Sales | $84.30 | 421.50 |
| 5/31/2023 | 6/5/2023 | 6.00 | 6/5/2023 | 5.00 | Residential Sales | $609.83 | 3,049.15 |
| 5/31/2023 | 6/6/2023 | 7.00 | 6/6/2023 | 6.00 | Residential Sales | $84.80 | 508.80 |
| 5/31/2023 | 6/5/2023 | 6.00 | 6/5/2023 | 5.00 | Other Sales to Public Authority | $177.92 | 889.60 |
| 5/31/2023 | 6/7/2023 | 8.00 | 6/7/2023 | 7.00 | Residential Sales | $36.56 | 255.92 |
| 6/1/2023 | 6/6/2023 | 6.00 | 6/6/2023 | 5.00 | Other Sales to Public Authority | $41,073.04 | 205,365.20 |
| 6/1/2023 | 6/7/2023 | 7.00 | 6/7/2023 | 6.00 | Other Sales to Public Authority | $24,235.02 | 145,410.12 |
| 6/1/2023 | 6/26/2023 | 26.00 | 6/26/2023 | 25.00 | Residential Sales | $8.94 | 223.50 |
| 6/1/2023 | 7/3/2023 | 33.00 | 7/3/2023 | 32.00 | Residential Sales | $14.43 | 461.76 |
| 6/1/2023 | 7/5/2023 | 35.00 | 7/5/2023 | 34.00 | Commercial Sales | $74.01 | 2,516.34 |
| 6/1/2023 | 9/21/2023 | 113.00 | 9/21/2023 | 112.00 | Commercial Sales | $393.29 | 44,048.48 |
| 6/1/2023 | 12/27/2023 | 210.00 | 12/27/2023 | 209.00 | Residential Sales | $8.59 | 1,795.31 |
| 6/1/2023 | 6/28/2023 | 28.00 | 6/28/2023 | 27.00 | Residential Sales | $105.75 | 2,855.25 |
| 6/1/2023 | 7/6/2023 | 36.00 | 7/6/2023 | 35.00 | Residential Sales | $25.09 | 878.15 |
| 6/1/2023 | 6/12/2023 | 12.00 | 6/12/2023 | 11.00 | Residential Sales | $171.32 | 1,884.52 |
| 6/1/2023 | 6/13/2023 | 13.00 | 6/13/2023 | 12.00 | Residential Sales | $218.64 | 2,623.68 |
| 6/1/2023 | 6/14/2023 | 14.00 | 6/14/2023 | 13.00 | Commercial Sales | $13.33 | 173.29 |
| 6/1/2023 | 6/14/2023 | 14.00 | 6/14/2023 | 13.00 | Residential Sales | $313.58 | 4,076.54 |
| 6/1/2023 | 6/15/2023 | 15.00 | 6/15/2023 | 14.00 | Commercial Sales | $144.74 | 2,026.36 |
| 6/1/2023 | 9/26/2023 | 118.00 | 9/26/2023 | 117.00 | Commercial Sales | $132.26 | 15,474.42 |
| 6/1/2023 | 6/30/2023 | 30.00 | 6/30/2023 | 29.00 | Residential Sales | $45.08 | 1,307.32 |
| 6/1/2023 | 3/20/2024 | 294.00 | 3/20/2024 | 293.00 | Commercial Sales | $18.56 | 5,438.08 |
| 6/1/2023 | 7/24/2023 | 54.00 | 7/24/2023 | 53.00 | Residential Sales | $41.20 | 2,183.60 |
| 6/1/2023 | 6/2/2023 | 2.00 | 6/2/2023 | 1.00 | Industrial Service | $514,419.70 | 514,419.70 |
| 6/1/2023 | 6/2/2023 | 2.00 | 6/2/2023 | 1.00 | Commercial Sales | $251,234.12 | 251,234.12 |
| 6/1/2023 | 7/27/2023 | 57.00 | 7/27/2023 | 56.00 | Commercial Sales | $47.21 | 2,643.76 |
| 6/1/2023 | 6/2/2023 | 2.00 | 6/2/2023 | 1.00 | Residential Sales | $587,411.46 | 587,411.46 |
| 6/1/2023 | 7/10/2023 | 40.00 | 7/10/2023 | 39.00 | Residential Sales | $156.89 | 6,118.71 |
| 6/1/2023 | 6/19/2023 | 19.00 | 6/19/2023 | 18.00 | Residential Sales | $80.08 | 1,441.44 |
| 6/1/2023 | 7/27/2023 | 57.00 | 7/27/2023 | 56.00 | Residential Sales | $98.49 | 5,515.44 |
| 6/1/2023 | 6/5/2023 | 5.00 | 6/5/2023 | 4.00 | Industrial Service | $225,575.48 | 902,301.92 |
| 6/1/2023 | 6/5/2023 | 5.00 | 6/5/2023 | 4.00 | Commercial Sales | $100,817.75 | 403,271.00 |
| 6/1/2023 | 6/6/2023 | 6.00 | 6/6/2023 | 5.00 | Industrial Service | $16,694.73 | 83,473.65 |
| 6/1/2023 | 6/2/2023 | 2.00 | 6/2/2023 | 1.00 | Public Street & Highway Lighting | $113.53 | 113.53 |
| 6/1/2023 | 6/5/2023 | 5.00 | 6/5/2023 | 4.00 | Residential Sales | $13,464.55 | 53,858.20 |
| 6/1/2023 | 6/6/2023 | 6.00 | 6/6/2023 | 5.00 | Commercial Sales | $29,210.93 | 146,054.65 |
| 6/1/2023 | 8/21/2023 | 82.00 | 8/21/2023 | 81.00 | Residential Sales | $59.94 | 4,855.14 |
| 6/1/2023 | 6/7/2023 | 7.00 | 6/7/2023 | 6.00 | Industrial Service | $5,362.31 | 32,173.86 |
| 6/1/2023 | 6/6/2023 | 6.00 | 6/6/2023 | 5.00 | Residential Sales | $1,061.28 | 5,306.40 |
| 6/1/2023 | 6/7/2023 | 7.00 | 6/7/2023 | 6.00 | Commercial Sales | $30,502.71 | 183,016.26 |
| 6/1/2023 | 7/14/2023 | 44.00 | 7/14/2023 | 43.00 | Residential Sales | $54.21 | 2,331.03 |
| 6/1/2023 | 6/20/2023 | 20.00 | 6/20/2023 | 19.00 | Residential Sales | $195.78 | 3,719.82 |
| 6/1/2023 | 6/2/2023 | 2.00 | 6/2/2023 | 1.00 | Other Sales to Public Authority | $326,274.84 | 326,274.84 |
| 6/1/2023 | 6/21/2023 | 21.00 | 6/21/2023 | 20.00 | Residential Sales | $328.62 | 6,572.40 |
| 6/1/2023 | 6/7/2023 | 7.00 | 6/7/2023 | 6.00 | Residential Sales | $663.05 | 3,978.30 |
| 6/1/2023 | 6/8/2023 | 8.00 | 6/8/2023 | 7.00 | Commercial Sales | $787.92 | 5,515.44 |
| 6/1/2023 | 6/22/2023 | 22.00 | 6/22/2023 | 21.00 | Commercial Sales | $189.92 | 3,988.32 |
| 6/1/2023 | 6/8/2023 | 8.00 | 6/8/2023 | 7.00 | Residential Sales | $202.84 | 1,419.88 |
| 6/1/2023 | 6/9/2023 | 9.00 | 6/9/2023 | 8.00 | Commercial Sales | $210.84 | 1,686.72 |
| 6/1/2023 | 6/9/2023 | 9.00 | 6/9/2023 | 8.00 | Residential Sales | $1,131.54 | 9,052.32 |
| 6/1/2023 | 6/23/2023 | 23.00 | 6/23/2023 | 22.00 | Residential Sales | $7.86 | 172.92 |
| 6/1/2023 | 6/5/2023 | 5.00 | 6/5/2023 | 4.00 | Other Sales to Public Authority | $9,681.36 | 38,725.44 |
| 6/2/2023 | 6/6/2023 | 5.00 | 6/6/2023 | 4.00 | Residential Sales | $2,882.96 | 11,531.84 |
| 6/2/2023 | 6/22/2023 | 21.00 | 6/22/2023 | 20.00 | Commercial Sales | $218.51 | 4,370.20 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 6/2/2023 | 6/7/2023 | 6.00 | 6/7/2023 | 5.00 | Residential Sales | $361.60 | 1,808.00 |
| 6/2/2023 | 6/8/2023 | 7.00 | 6/8/2023 | 6.00 | Commercial Sales | $667.64 | 4,005.84 |
| 6/2/2023 | 6/2/2023 | 1.00 | 6/2/2023 | 0.00 | Other Sales to Public Authority | $244.92 | - |
| 6/2/2023 | 6/9/2023 | 8.00 | 6/9/2023 | 7.00 | Industrial Service | $7,808.10 | 54,656.70 |
| 6/2/2023 | 6/8/2023 | 7.00 | 6/8/2023 | 6.00 | Residential Sales | $442.68 | 2,656.08 |
| 6/2/2023 | 6/22/2023 | 21.00 | 6/22/2023 | 20.00 | Residential Sales | $130.07 | 2,601.40 |
| 6/2/2023 | 6/9/2023 | 8.00 | 6/9/2023 | 7.00 | Residential Sales | $158.65 | 1,110.55 |
| 6/2/2023 | 6/5/2023 | 4.00 | 6/5/2023 | 3.00 | Other Sales to Public Authority | $15,291.80 | 45,875.40 |
| 6/2/2023 | 8/21/2023 | 81.00 | 8/21/2023 | 80.00 | Other Sales to Public Authority | $30,563.14 | 2,445,051.20 |
| 6/2/2023 | 6/6/2023 | 5.00 | 6/6/2023 | 4.00 | Other Sales to Public Authority | $2,264.67 | 9,058.68 |
| 6/2/2023 | 6/29/2023 | 28.00 | 6/29/2023 | 27.00 | Commercial Sales | $59.69 | 1,611.63 |
| 6/2/2023 | 6/23/2023 | 22.00 | 6/23/2023 | 21.00 | Other Sales to Public Authority | $20.41 | 428.61 |
| 6/2/2023 | 6/12/2023 | 11.00 | 6/12/2023 | 10.00 | Commercial Sales | $298.87 | 2,988.70 |
| 6/2/2023 | 6/12/2023 | 11.00 | 6/12/2023 | 10.00 | Residential Sales | $306.40 | 3,064.00 |
| 6/2/2023 | 6/13/2023 | 12.00 | 6/13/2023 | 11.00 | Residential Sales | $206.93 | 2,276.23 |
| 6/2/2023 | 6/16/2023 | 15.00 | 6/16/2023 | 14.00 | Residential Sales | $64.03 | 896.42 |
| 6/2/2023 | 6/2/2023 | 1.00 | 6/2/2023 | 0.00 | Commercial Sales | $6,737.16 | - |
| 6/2/2023 | 6/2/2023 | 1.00 | 6/2/2023 | 0.00 | Residential Sales | $1,189.60 | - |
| 6/2/2023 | 6/5/2023 | 4.00 | 6/5/2023 | 3.00 | Industrial Service | $7,922.27 | 23,766.81 |
| 6/2/2023 | 6/5/2023 | 4.00 | 6/5/2023 | 3.00 | Commercial Sales | $86,989.50 | 260,968.50 |
| 6/2/2023 | 6/6/2023 | 5.00 | 6/6/2023 | 4.00 | Industrial Service | $1,328.84 | 5,315.36 |
| 6/2/2023 | 9/14/2023 | 105.00 | 9/14/2023 | 104.00 | Residential Sales | $47.69 | 4,959.76 |
| 6/2/2023 | 6/5/2023 | 4.00 | 6/5/2023 | 3.00 | Residential Sales | $557,276.80 | 1,671,830.40 |
| 6/2/2023 | 6/6/2023 | 5.00 | 6/6/2023 | 4.00 | Commercial Sales | $31,030.95 | 124,123.80 |
| 6/2/2023 | 7/13/2023 | 42.00 | 7/13/2023 | 41.00 | Residential Sales | $81.81 | 3,354.21 |
| 6/2/2023 | 6/7/2023 | 6.00 | 6/7/2023 | 5.00 | Industrial Service | $10,017.95 | 50,089.75 |
| 6/3/2023 | 6/5/2023 | 3.00 | 6/5/2023 | 2.00 | Residential Sales | $27,226.55 | 54,453.10 |
| 6/3/2023 | 6/6/2023 | 4.00 | 6/6/2023 | 3.00 | Residential Sales | $110.74 | 332.22 |
| 6/3/2023 | 6/9/2023 | 7.00 | 6/9/2023 | 6.00 | Residential Sales | $28.86 | 173.16 |
| 6/3/2023 | 7/5/2023 | 33.00 | 7/5/2023 | 32.00 | Residential Sales | $6.91 | 221.12 |
| 6/4/2023 | 6/5/2023 | 2.00 | 6/5/2023 | 1.00 | Commercial Sales | $197.26 | 197.26 |
| 6/4/2023 | 6/5/2023 | 2.00 | 6/5/2023 | 1.00 | Residential Sales | $2,767.07 | 2,767.07 |
| 6/4/2023 | 6/6/2023 | 3.00 | 6/6/2023 | 2.00 | Commercial Sales | $56.60 | 113.20 |
| 6/4/2023 | 6/6/2023 | 3.00 | 6/6/2023 | 2.00 | Residential Sales | $683.09 | 1,366.18 |
| 6/4/2023 | 6/7/2023 | 4.00 | 6/7/2023 | 3.00 | Residential Sales | $12.54 | 37.62 |
| 6/4/2023 | 6/8/2023 | 5.00 | 6/8/2023 | 4.00 | Residential Sales | $25.27 | 101.08 |
| 6/4/2023 | 6/12/2023 | 9.00 | 6/12/2023 | 8.00 | Commercial Sales | $146.04 | 1,168.32 |
| 6/5/2023 | 6/6/2023 | 2.00 | 6/6/2023 | 1.00 | Other Sales to Public Authority | $46,142.98 | 46,142.98 |
| 6/5/2023 | 6/7/2023 | 3.00 | 6/7/2023 | 2.00 | Other Sales to Public Authority | $1,043.01 | 2,086.02 |
| 6/5/2023 | 6/8/2023 | 4.00 | 6/8/2023 | 3.00 | Other Sales to Public Authority | $70.05 | 210.15 |
| 6/5/2023 | 6/12/2023 | 8.00 | 6/12/2023 | 7.00 | Commercial Sales | $82,414.00 | 576,898.00 |
| 6/5/2023 | 6/9/2023 | 5.00 | 6/9/2023 | 4.00 | Other Sales to Public Authority | $2,204.39 | 8,817.56 |
| 6/5/2023 | 6/13/2023 | 9.00 | 6/13/2023 | 8.00 | Industrial Service | $282.70 | 2,261.60 |
| 6/5/2023 | 7/5/2023 | 31.00 | 7/5/2023 | 30.00 | Residential Sales | $14.04 | 421.20 |
| 6/5/2023 | 6/12/2023 | 8.00 | 6/12/2023 | 7.00 | Residential Sales | $108.12 | 756.84 |
| 6/5/2023 | 6/13/2023 | 9.00 | 6/13/2023 | 8.00 | Residential Sales | $107.18 | 857.44 |
| 6/5/2023 | 7/21/2023 | 47.00 | 7/21/2023 | 46.00 | Residential Sales | $58.41 | 2,686.86 |
| 6/5/2023 | 6/14/2023 | 10.00 | 6/14/2023 | 9.00 | Residential Sales | $519.57 | 4,676.13 |
| 6/5/2023 | 6/16/2023 | 12.00 | 6/16/2023 | 11.00 | Commercial Sales | $3,046.31 | 33,509.41 |
| 6/5/2023 | 7/11/2023 | 37.00 | 7/11/2023 | 36.00 | Residential Sales | $164.80 | 5,932.80 |
| 6/5/2023 | 6/5/2023 | 1.00 | 6/5/2023 | 0.00 | Commercial Sales | $148.24 | - |
| 6/5/2023 | 6/6/2023 | 2.00 | 6/6/2023 | 1.00 | Commercial Sales | $223,321.22 | 223,321.22 |
| 6/5/2023 | 6/5/2023 | 1.00 | 6/5/2023 | 0.00 | Residential Sales | $64.09 | - |
| 6/5/2023 | 6/7/2023 | 3.00 | 6/7/2023 | 2.00 | Industrial Service | $7,278.95 | 14,557.90 |
| 6/5/2023 | 3/25/2024 | 295.00 | 3/25/2024 | 294.00 | Residential Sales | $22.98 | 6,756.12 |
| 6/5/2023 | 6/6/2023 | 2.00 | 6/6/2023 | 1.00 | Residential Sales | $667,979.48 | 667,979.48 |
| 6/5/2023 | 6/7/2023 | 3.00 | 6/7/2023 | 2.00 | Commercial Sales | $67,726.27 | 135,452.54 |
| 6/5/2023 | 8/22/2023 | 79.00 | 8/22/2023 | 78.00 | Residential Sales | $50.57 | 3,944.46 |
| 6/5/2023 | 6/7/2023 | 3.00 | 6/7/2023 | 2.00 | Residential Sales | $10,899.35 | 21,798.70 |
| 6/5/2023 | 6/8/2023 | 4.00 | 6/8/2023 | 3.00 | Commercial Sales | $41,711.94 | 125,135.82 |
| 6/5/2023 | 6/9/2023 | 5.00 | 6/9/2023 | 4.00 | Commercial Sales | $6,900.98 | 27,603.92 |
| 6/5/2023 | 6/8/2023 | 4.00 | 6/8/2023 | 3.00 | Residential Sales | $144.00 | 432.00 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 6/5/2023 | 6/9/2023 | 5.00 | 6/9/2023 | 4.00 | Residential Sales | $1,585.33 | 6,341.32 |
| 6/5/2023 | 6/23/2023 | 19.00 | 6/23/2023 | 18.00 | Residential Sales | $106.70 | 1,920.60 |
| 6/5/2023 | 10/20/2023 | 138.00 | 10/20/2023 | 137.00 | Residential Sales | $103.82 | 14,223.34 |
| 6/5/2023 | 6/5/2023 | 1.00 | 6/5/2023 | 0.00 | Other Sales to Public Authority | $4,618.19 | - |
| 6/6/2023 | 6/7/2023 | 2.00 | 6/7/2023 | 1.00 | Commercial Sales | $141,359.07 | 141,359.07 |
| 6/6/2023 | 6/6/2023 | 1.00 | 6/6/2023 | 0.00 | Residential Sales | $1,194.92 | - |
| 6/6/2023 | 6/20/2023 | 15.00 | 6/20/2023 | 14.00 | Residential Sales | $147.42 | 2,063.88 |
| 6/6/2023 | 6/8/2023 | 3.00 | 6/8/2023 | 2.00 | Industrial Service | $464.45 | 928.90 |
| 6/6/2023 | 6/7/2023 | 2.00 | 6/7/2023 | 1.00 | Residential Sales | $1,050,361.93 | 1,050,361.93 |
| 6/6/2023 | 6/8/2023 | 3.00 | 6/8/2023 | 2.00 | Commercial Sales | $71,936.82 | 143,873.64 |
| 6/6/2023 | 6/19/2023 | 14.00 | 6/19/2023 | 13.00 | Other Sales to Public Authority | $1,114.99 | 14,494.87 |
| 6/6/2023 | 6/9/2023 | 4.00 | 6/9/2023 | 3.00 | Commercial Sales | $38,380.12 | 115,140.36 |
| 6/6/2023 | 6/8/2023 | 3.00 | 6/8/2023 | 2.00 | Residential Sales | $5,190.04 | 10,380.08 |
| 6/6/2023 | 6/22/2023 | 17.00 | 6/22/2023 | 16.00 | Residential Sales | $101.23 | 1,619.68 |
| 6/6/2023 | 6/9/2023 | 4.00 | 6/9/2023 | 3.00 | Residential Sales | $10,623.23 | 31,869.69 |
| 6/6/2023 | 6/23/2023 | 18.00 | 6/23/2023 | 17.00 | Residential Sales | $634.23 | 10,781.91 |
| 6/6/2023 | 7/19/2023 | 44.00 | 7/19/2023 | 43.00 | Commercial Sales | $44.65 | 1,919.95 |
| 6/6/2023 | 6/6/2023 | 1.00 | 6/6/2023 | 0.00 | Other Sales to Public Authority | $31.70 | - |
| 6/6/2023 | 6/7/2023 | 2.00 | 6/7/2023 | 1.00 | Other Sales to Public Authority | $15,988.61 | 15,988.61 |
| 6/6/2023 | 6/8/2023 | 3.00 | 6/8/2023 | 2.00 | Other Sales to Public Authority | $2,513.74 | 5,027.48 |
| 6/6/2023 | 6/12/2023 | 7.00 | 6/12/2023 | 6.00 | Commercial Sales | $2,225.76 | 13,354.56 |
| 6/6/2023 | 6/9/2023 | 4.00 | 6/9/2023 | 3.00 | Other Sales to Public Authority | $29,903.10 | 89,709.30 |
| 6/6/2023 | 8/14/2023 | 70.00 | 8/14/2023 | 69.00 | Commercial Sales | $443.99 | 30,635.31 |
| 6/6/2023 | 7/6/2023 | 31.00 | 7/6/2023 | 30.00 | Commercial Sales | $26.85 | 805.50 |
| 6/6/2023 | 6/13/2023 | 8.00 | 6/13/2023 | 7.00 | Commercial Sales | $1,145.14 | 8,015.98 |
| 6/6/2023 | 6/12/2023 | 7.00 | 6/12/2023 | 6.00 | Residential Sales | $1,018.48 | 6,110.88 |
| 6/6/2023 | 6/13/2023 | 8.00 | 6/13/2023 | 7.00 | Residential Sales | $582.90 | 4,080.30 |
| 6/6/2023 | 6/15/2023 | 10.00 | 6/15/2023 | 9.00 | Commercial Sales | $315.21 | 2,836.89 |
| 6/6/2023 | 6/14/2023 | 9.00 | 6/14/2023 | 8.00 | Residential Sales | $1,343.14 | 10,745.12 |
| 6/6/2023 | 11/6/2023 | 154.00 | 11/6/2023 | 153.00 | Commercial Sales | $245.98 | 37,634.94 |
| 6/6/2023 | 6/15/2023 | 10.00 | 6/15/2023 | 9.00 | Residential Sales | $28.01 | 252.09 |
| 6/6/2023 | 6/30/2023 | 25.00 | 6/30/2023 | 24.00 | Residential Sales | $2.04 | 48.96 |
| 6/6/2023 | 6/19/2023 | 14.00 | 6/19/2023 | 13.00 | Commercial Sales | $402.28 | 5,229.64 |
| 6/6/2023 | 9/29/2023 | 116.00 | 9/29/2023 | 115.00 | Residential Sales | $126.38 | 14,533.70 |
| 6/6/2023 | 6/6/2023 | 1.00 | 6/6/2023 | 0.00 | Commercial Sales | $8,112.08 | - |
| 6/6/2023 | 6/7/2023 | 2.00 | 6/7/2023 | 1.00 | Industrial Service | $733.28 | 733.28 |
| 6/7/2023 | 6/15/2023 | 9.00 | 6/15/2023 | 8.00 | Commercial Sales | $4,510.51 | 36,084.08 |
| 6/7/2023 | 7/10/2023 | 34.00 | 7/10/2023 | 33.00 | Residential Sales | $27.33 | 901.89 |
| 6/7/2023 | 6/14/2023 | 8.00 | 6/14/2023 | 7.00 | Other Sales to Public Authority | $5,973.50 | 41,814.50 |
| 6/7/2023 | 7/11/2023 | 35.00 | 7/11/2023 | 34.00 | Residential Sales | $143.24 | 4,870.16 |
| 6/7/2023 | 8/3/2023 | 58.00 | 8/3/2023 | 57.00 | Commercial Sales | $145.84 | 8,312.88 |
| 6/7/2023 | 10/19/2023 | 135.00 | 10/19/2023 | 134.00 | Residential Sales | $35.63 | 4,774.42 |
| 6/7/2023 | 6/8/2023 | 2.00 | 6/8/2023 | 1.00 | Industrial Service | $10,141.98 | 10,141.98 |
| 6/7/2023 | 7/28/2023 | 52.00 | 7/28/2023 | 51.00 | Commercial Sales | $889.26 | 45,352.26 |
| 6/7/2023 | 6/9/2023 | 3.00 | 6/9/2023 | 2.00 | Industrial Service | $2,357.41 | 4,714.82 |
| 6/7/2023 | 6/7/2023 | 1.00 | 6/7/2023 | 0.00 | Residential Sales | $972.57 | - |
| 6/7/2023 | 6/21/2023 | 15.00 | 6/21/2023 | 14.00 | Residential Sales | $16.29 | 228.06 |
| 6/7/2023 | 12/6/2023 | 183.00 | 12/6/2023 | 182.00 | Residential Sales | $153.84 | 27,998.88 |
| 6/7/2023 | 6/8/2023 | 2.00 | 6/8/2023 | 1.00 | Residential Sales | $385,047.22 | 385,047.22 |
| 6/7/2023 | 6/22/2023 | 16.00 | 6/22/2023 | 15.00 | Residential Sales | $30.81 | 462.15 |
| 6/7/2023 | 3/25/2024 | 293.00 | 3/25/2024 | 292.00 | Commercial Sales | $37.11 | 10,836.12 |
| 6/7/2023 | 6/9/2023 | 3.00 | 6/9/2023 | 2.00 | Residential Sales | $471,827.55 | 943,655.10 |
| 6/7/2023 | 6/23/2023 | 17.00 | 6/23/2023 | 16.00 | Residential Sales | $219.96 | 3,519.36 |
| 6/7/2023 | 9/19/2023 | 105.00 | 9/19/2023 | 104.00 | Residential Sales | $139.33 | 14,490.32 |
| 6/7/2023 | 8/8/2023 | 63.00 | 8/8/2023 | 62.00 | Commercial Sales | $27.58 | 1,709.96 |
| 6/7/2023 | 6/7/2023 | 1.00 | 6/7/2023 | 0.00 | Commercial Sales | $1,910.90 | - |
| 6/7/2023 | 6/7/2023 | 1.00 | 6/7/2023 | 0.00 | Public Street & Highway Lighting | $59.13 | - |
| 6/7/2023 | 6/8/2023 | 2.00 | 6/8/2023 | 1.00 | Commercial Sales | $87,445.03 | 87,445.03 |
| 6/7/2023 | 6/9/2023 | 3.00 | 6/9/2023 | 2.00 | Commercial Sales | $340,496.88 | 680,993.76 |
| 6/7/2023 | 6/26/2023 | 20.00 | 6/26/2023 | 19.00 | Residential Sales | $100.31 | 1,905.89 |
| 6/7/2023 | 6/7/2023 | 1.00 | 6/7/2023 | 0.00 | Other Sales to Public Authority | $18.80 | - |
| 6/7/2023 | 6/27/2023 | 21.00 | 6/27/2023 | 20.00 | Residential Sales | $223.58 | 4,471.60 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 6/7/2023 | 6/12/2023 | 6.00 | 6/12/2023 | 5.00 | Industrial Service | $508.08 | 2,540.40 |
| 6/7/2023 | 6/8/2023 | 2.00 | 6/8/2023 | 1.00 | Other Sales to Public Authority | $10,925.82 | 10,925.82 |
| 6/7/2023 | 6/9/2023 | 3.00 | 6/9/2023 | 2.00 | Other Sales to Public Authority | $12,678.71 | 25,357.42 |
| 6/7/2023 | 6/12/2023 | 6.00 | 6/12/2023 | 5.00 | Residential Sales | $8,064.99 | 40,324.95 |
| 6/7/2023 | 1/30/2024 | 238.00 | 1/30/2024 | 237.00 | Residential Sales | $146.37 | 34,689.69 |
| 6/7/2023 | 6/29/2023 | 23.00 | 6/29/2023 | 22.00 | Residential Sales | $37.96 | 835.12 |
| 6/7/2023 | 12/11/2023 | 188.00 | 12/11/2023 | 187.00 | Residential Sales | $22.54 | 4,214.98 |
| 6/7/2023 | 6/13/2023 | 7.00 | 6/13/2023 | 6.00 | Residential Sales | $908.18 | 5,449.08 |
| 6/7/2023 | 6/14/2023 | 8.00 | 6/14/2023 | 7.00 | Residential Sales | $1,020.55 | 7,143.85 |
| 6/7/2023 | 7/5/2023 | 29.00 | 7/5/2023 | 28.00 | Commercial Sales | $254.97 | 7,139.16 |
| 6/7/2023 | 6/12/2023 | 6.00 | 6/12/2023 | 5.00 | Commercial Sales | $85,459.12 | 427,295.60 |
| 6/7/2023 | 6/15/2023 | 9.00 | 6/15/2023 | 8.00 | Residential Sales | $286.25 | 2,290.00 |
| 6/7/2023 | 8/14/2023 | 69.00 | 8/14/2023 | 68.00 | Commercial Sales | $128.97 | 8,769.96 |
| 6/7/2023 | 7/6/2023 | 30.00 | 7/6/2023 | 29.00 | Commercial Sales | $40.01 | 1,160.29 |
| 6/7/2023 | 6/13/2023 | 7.00 | 6/13/2023 | 6.00 | Commercial Sales | $38,821.07 | 232,926.42 |
| 6/7/2023 | 7/7/2023 | 31.00 | 7/7/2023 | 30.00 | Commercial Sales | $243.13 | 7,293.90 |
| 6/7/2023 | 6/16/2023 | 10.00 | 6/16/2023 | 9.00 | Residential Sales | $40.43 | 363.87 |
| 6/7/2023 | 6/12/2023 | 6.00 | 6/12/2023 | 5.00 | Other Sales to Public Authority | $1,479.82 | 7,399.10 |
| 6/7/2023 | 6/14/2023 | 8.00 | 6/14/2023 | 7.00 | Commercial Sales | $33,293.63 | 233,055.41 |
| 6/7/2023 | 12/13/2023 | 190.00 | 12/13/2023 | 189.00 | Commercial Sales | $43.30 | 8,183.70 |
| 6/8/2023 | 6/13/2023 | 6.00 | 6/13/2023 | 5.00 | Residential Sales | $431.95 | 2,159.75 |
| 6/8/2023 | 6/14/2023 | 7.00 | 6/14/2023 | 6.00 | Residential Sales | $425.06 | 2,550.36 |
| 6/8/2023 | 6/28/2023 | 21.00 | 6/28/2023 | 20.00 | Commercial Sales | $25.36 | 507.20 |
| 6/8/2023 | 6/12/2023 | 5.00 | 6/12/2023 | 4.00 | Commercial Sales | $121,104.75 | 484,419.00 |
| 6/8/2023 | 6/15/2023 | 8.00 | 6/15/2023 | 7.00 | Residential Sales | $233.30 | 1,633.10 |
| 6/8/2023 | 6/16/2023 | 9.00 | 6/16/2023 | 8.00 | Residential Sales | $412.38 | 3,299.04 |
| 6/8/2023 | 6/13/2023 | 6.00 | 6/13/2023 | 5.00 | Commercial Sales | $219,464.40 | 1,097,322.00 |
| 6/8/2023 | 6/12/2023 | 5.00 | 6/12/2023 | 4.00 | Other Sales to Public Authority | $17,455.09 | 69,820.36 |
| 6/8/2023 | 6/14/2023 | 7.00 | 6/14/2023 | 6.00 | Commercial Sales | $24,108.62 | 144,651.72 |
| 6/8/2023 | 6/13/2023 | 6.00 | 6/13/2023 | 5.00 | Other Sales to Public Authority | $99,717.19 | 498,585.95 |
| 6/8/2023 | 9/11/2023 | 96.00 | 9/11/2023 | 95.00 | Residential Sales | $36.88 | 3,503.60 |
| 6/8/2023 | 6/14/2023 | 7.00 | 6/14/2023 | 6.00 | Other Sales to Public Authority | $25,205.49 | 151,232.94 |
| 6/8/2023 | 7/28/2023 | 51.00 | 7/28/2023 | 50.00 | Commercial Sales | $1,135.62 | 56,781.00 |
| 6/8/2023 | 6/9/2023 | 2.00 | 6/9/2023 | 1.00 | Industrial Service | $32,852.80 | 32,852.80 |
| 6/8/2023 | 6/8/2023 | 1.00 | 6/8/2023 | 0.00 | Residential Sales | $624.67 | - |
| 6/8/2023 | 6/22/2023 | 15.00 | 6/22/2023 | 14.00 | Residential Sales | $28.78 | 402.92 |
| 6/8/2023 | 6/9/2023 | 2.00 | 6/9/2023 | 1.00 | Residential Sales | $324,101.89 | 324,101.89 |
| 6/8/2023 | 6/23/2023 | 16.00 | 6/23/2023 | 15.00 | Residential Sales | $275.75 | 4,136.25 |
| 6/8/2023 | 10/3/2023 | 118.00 | 10/3/2023 | 117.00 | Commercial Sales | $720.53 | 84,302.01 |
| 6/8/2023 | 6/12/2023 | 5.00 | 6/12/2023 | 4.00 | Company Use | $0.00 | - |
| 6/8/2023 | 6/21/2023 | 14.00 | 6/21/2023 | 13.00 | Commercial Sales | $130.34 | 1,694.42 |
| 6/8/2023 | 6/8/2023 | 1.00 | 6/8/2023 | 0.00 | Commercial Sales | $3,468.88 | - |
| 6/8/2023 | 6/8/2023 | 1.00 | 6/8/2023 | 0.00 | Public Street & Highway Lighting | $20.94 | - |
| 6/8/2023 | 6/9/2023 | 2.00 | 6/9/2023 | 1.00 | Commercial Sales | $265,737.68 | 265,737.68 |
| 6/8/2023 | 7/3/2023 | 26.00 | 7/3/2023 | 25.00 | Residential Sales | $69.78 | 1,744.50 |
| 6/8/2023 | 11/14/2023 | 160.00 | 11/14/2023 | 159.00 | Commercial Sales | $2,004.88 | 318,775.92 |
| 6/8/2023 | 6/12/2023 | 5.00 | 6/12/2023 | 4.00 | Industrial Service | $33,108.55 | 132,434.20 |
| 6/8/2023 | 6/9/2023 | 2.00 | 6/9/2023 | 1.00 | Other Sales to Public Authority | $27,796.64 | 27,796.64 |
| 6/8/2023 | 7/5/2023 | 28.00 | 7/5/2023 | 27.00 | Residential Sales | $44.65 | 1,205.55 |
| 6/8/2023 | 6/12/2023 | 5.00 | 6/12/2023 | 4.00 | Residential Sales | $6,844.23 | 27,376.92 |
| 6/8/2023 | 6/14/2023 | 7.00 | 6/14/2023 | 6.00 | Industrial Service | $66,870.59 | 401,223.54 |
| 6/9/2023 | 2/20/2024 | 257.00 | 2/20/2024 | 256.00 | Residential Sales | $25.14 | 6,435.84 |
| 6/9/2023 | 6/9/2023 | 1.00 | 6/9/2023 | 0.00 | Commercial Sales | $9,607.28 | - |
| 6/9/2023 | 6/26/2023 | 18.00 | 6/26/2023 | 17.00 | Residential Sales | $37.40 | 635.80 |
| 6/9/2023 | 6/9/2023 | 1.00 | 6/9/2023 | 0.00 | Public Street & Highway Lighting | $56.34 | - |
| 6/9/2023 | 6/12/2023 | 4.00 | 6/12/2023 | 3.00 | Industrial Service | $85,631.21 | 256,893.63 |
| 6/9/2023 | 6/27/2023 | 19.00 | 6/27/2023 | 18.00 | Residential Sales | $157.32 | 2,831.76 |
| 6/9/2023 | 6/9/2023 | 1.00 | 6/9/2023 | 0.00 | Other Sales to Public Authority | $237.64 | - |
| 6/9/2023 | 6/13/2023 | 5.00 | 6/13/2023 | 4.00 | Industrial Service | $34,999.03 | 139,996.12 |
| 6/9/2023 | 6/12/2023 | 4.00 | 6/12/2023 | 3.00 | Residential Sales | $320,762.28 | 962,286.84 |
| 6/9/2023 | 6/13/2023 | 5.00 | 6/13/2023 | 4.00 | Residential Sales | $3,592.47 | 14,369.88 |
| 6/9/2023 | 7/21/2023 | 43.00 | 7/21/2023 | 42.00 | Residential Sales | $174.01 | 7,308.42 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 6/9/2023 | 6/14/2023 | 6.00 | 6/14/2023 | 5.00 | Residential Sales | $1,381.59 | 6,907.95 |
| 6/9/2023 | 6/12/2023 | 4.00 | 6/12/2023 | 3.00 | Commercial Sales | $243,310.83 | 729,932.49 |
| 6/9/2023 | 6/15/2023 | 7.00 | 6/15/2023 | 6.00 | Residential Sales | $431.30 | 2,587.80 |
| 6/9/2023 | 6/13/2023 | 5.00 | 6/13/2023 | 4.00 | Commercial Sales | $173,656.09 | 694,624.36 |
| 6/9/2023 | 6/16/2023 | 8.00 | 6/16/2023 | 7.00 | Residential Sales | $471.17 | 3,298.19 |
| 6/9/2023 | 10/10/2023 | 124.00 | 10/10/2023 | 123.00 | Commercial Sales | $941.19 | 115,766.37 |
| 6/9/2023 | 6/12/2023 | 4.00 | 6/12/2023 | 3.00 | Other Sales to Public Authority | $20,265.83 | 60,797.49 |
| 6/9/2023 | 6/14/2023 | 6.00 | 6/14/2023 | 5.00 | Commercial Sales | $52,204.08 | 261,020.40 |
| 6/9/2023 | 6/13/2023 | 5.00 | 6/13/2023 | 4.00 | Other Sales to Public Authority | $17,086.30 | 68,345.20 |
| 6/9/2023 | 6/15/2023 | 7.00 | 6/15/2023 | 6.00 | Commercial Sales | $24,182.90 | 145,097.40 |
| 6/9/2023 | 6/14/2023 | 6.00 | 6/14/2023 | 5.00 | Other Sales to Public Authority | $26,868.10 | 134,340.50 |
| 6/9/2023 | 6/19/2023 | 11.00 | 6/19/2023 | 10.00 | Residential Sales | $66.26 | 662.60 |
| 6/9/2023 | 8/3/2023 | 56.00 | 8/3/2023 | 55.00 | Commercial Sales | $654.41 | 35,992.55 |
| 6/9/2023 | 8/4/2023 | 57.00 | 8/4/2023 | 56.00 | Commercial Sales | $30,205.48 | 1,691,506.88 |
| 6/9/2023 | 10/30/2023 | 144.00 | 10/30/2023 | 143.00 | Other Sales to Public Authority | $357.18 | 51,076.74 |
| 6/9/2023 | 6/22/2023 | 14.00 | 6/22/2023 | 13.00 | Residential Sales | $79.65 | 1,035.45 |
| 6/9/2023 | 6/20/2023 | 12.00 | 6/20/2023 | 11.00 | Commercial Sales | $27,340.66 | 300,747.26 |
| 6/9/2023 | 6/9/2023 | 1.00 | 6/9/2023 | 0.00 | Residential Sales | $2,312.81 | - |
| 6/10/2023 | 6/27/2023 | 18.00 | 6/27/2023 | 17.00 | Residential Sales | $87.16 | 1,481.72 |
| 6/10/2023 | 6/12/2023 | 3.00 | 6/12/2023 | 2.00 | Residential Sales | $474.15 | 948.30 |
| 6/10/2023 | 6/13/2023 | 4.00 | 6/13/2023 | 3.00 | Residential Sales | $12.25 | 36.75 |
| 6/10/2023 | 6/15/2023 | 6.00 | 6/15/2023 | 5.00 | Residential Sales | $1.55 | 7.75 |
| 6/10/2023 | 6/13/2023 | 4.00 | 6/13/2023 | 3.00 | Commercial Sales | $0.02 | 0.06 |
| 6/10/2023 | 6/20/2023 | 11.00 | 6/20/2023 | 10.00 | Residential Sales | $59.14 | 591.40 |
| 6/11/2023 | 7/28/2023 | 48.00 | 7/28/2023 | 47.00 | Commercial Sales | $288.04 | 13,537.88 |
| 6/11/2023 | 6/12/2023 | 2.00 | 6/12/2023 | 1.00 | Residential Sales | $2,313.34 | 2,313.34 |
| 6/11/2023 | 6/13/2023 | 3.00 | 6/13/2023 | 2.00 | Residential Sales | $291.79 | 583.58 |
| 6/11/2023 | 7/5/2023 | 25.00 | 7/5/2023 | 24.00 | Commercial Sales | $14.85 | 356.40 |
| 6/11/2023 | 6/12/2023 | 2.00 | 6/12/2023 | 1.00 | Commercial Sales | $45.68 | 45.68 |
| 6/11/2023 | 6/15/2023 | 5.00 | 6/15/2023 | 4.00 | Residential Sales | $59.38 | 237.52 |
| 6/11/2023 | 6/16/2023 | 6.00 | 6/16/2023 | 5.00 | Residential Sales | $198.69 | 993.45 |
| 6/11/2023 | 6/13/2023 | 3.00 | 6/13/2023 | 2.00 | Commercial Sales | $156.73 | 313.46 |
| 6/11/2023 | 6/30/2023 | 20.00 | 6/30/2023 | 19.00 | Commercial Sales | $7.42 | 140.98 |
| 6/11/2023 | 6/19/2023 | 9.00 | 6/19/2023 | 8.00 | Residential Sales | $137.60 | 1,100.80 |
| 6/12/2023 | 6/13/2023 | 2.00 | 6/13/2023 | 1.00 | Other Sales to Public Authority | $38,137.23 | 38,137.23 |
| 6/12/2023 | 6/15/2023 | 4.00 | 6/15/2023 | 3.00 | Public Street & Highway Lighting | $60,758.35 | 182,275.05 |
| 6/12/2023 | 6/15/2023 | 4.00 | 6/15/2023 | 3.00 | Commercial Sales | $346.21 | 1,038.63 |
| 6/12/2023 | 6/19/2023 | 8.00 | 6/19/2023 | 7.00 | Residential Sales | $1,991.01 | 13,937.07 |
| 6/12/2023 | 8/1/2023 | 51.00 | 8/1/2023 | 50.00 | Commercial Sales | $219.82 | 10,991.00 |
| 6/12/2023 | 6/14/2023 | 3.00 | 6/14/2023 | 2.00 | Other Sales to Public Authority | $1,952.90 | 3,905.80 |
| 6/12/2023 | 8/4/2023 | 54.00 | 8/4/2023 | 53.00 | Residential Sales | $14.43 | 764.79 |
| 6/12/2023 | 6/19/2023 | 8.00 | 6/19/2023 | 7.00 | Industrial Service | $44,461.83 | 311,232.81 |
| 6/12/2023 | 6/19/2023 | 8.00 | 6/19/2023 | 7.00 | Commercial Sales | $395.30 | 2,767.10 |
| 6/12/2023 | 8/4/2023 | 54.00 | 8/4/2023 | 53.00 | Commercial Sales | $57,094.18 | 3,025,991.54 |
| 6/12/2023 | 6/20/2023 | 9.00 | 6/20/2023 | 8.00 | Residential Sales | $604.32 | 4,834.56 |
| 6/12/2023 | 8/7/2023 | 57.00 | 8/7/2023 | 56.00 | Commercial Sales | $25,345.18 | 1,419,330.08 |
| 6/12/2023 | 6/22/2023 | 11.00 | 6/22/2023 | 10.00 | Residential Sales | $27.55 | 275.50 |
| 6/12/2023 | 6/23/2023 | 12.00 | 6/23/2023 | 11.00 | Residential Sales | $55.12 | 606.32 |
| 6/12/2023 | 11/15/2023 | 157.00 | 11/15/2023 | 156.00 | Residential Sales | $98.49 | 15,364.44 |
| 6/12/2023 | 5/15/2024 | 339.00 | 5/15/2024 | 338.00 | Residential Sales | $78.88 | 26,661.44 |
| 6/12/2023 | 6/20/2023 | 9.00 | 6/20/2023 | 8.00 | Other Sales to Public Authority | $11,263.29 | 90,106.32 |
| 6/12/2023 | 6/22/2023 | 11.00 | 6/22/2023 | 10.00 | Commercial Sales | $162.99 | 1,629.90 |
| 6/12/2023 | 6/14/2023 | 3.00 | 6/14/2023 | 2.00 | Company Use | $0.00 | - |
| 6/12/2023 | 10/6/2023 | 117.00 | 10/6/2023 | 116.00 | Commercial Sales | $18.56 | 2,152.96 |
| 6/12/2023 | 9/5/2023 | 86.00 | 9/5/2023 | 85.00 | Residential Sales | $48.12 | 4,090.20 |
| 6/12/2023 | 11/15/2023 | 157.00 | 11/15/2023 | 156.00 | Commercial Sales | $84.07 | 13,114.92 |
| 6/12/2023 | 6/27/2023 | 16.00 | 6/27/2023 | 15.00 | Residential Sales | $137.17 | 2,057.55 |
| 6/12/2023 | 6/28/2023 | 17.00 | 6/28/2023 | 16.00 | Residential Sales | $21.48 | 343.68 |
| 6/12/2023 | 6/12/2023 | 1.00 | 6/12/2023 | 0.00 | Residential Sales | $1,975.98 | - |
| 6/12/2023 | 6/13/2023 | 2.00 | 6/13/2023 | 1.00 | Residential Sales | $595,576.19 | 595,576.19 |
| 6/12/2023 | 7/21/2023 | 40.00 | 7/21/2023 | 39.00 | Residential Sales | $138.26 | 5,392.14 |
| 6/12/2023 | 6/14/2023 | 3.00 | 6/14/2023 | 2.00 | Residential Sales | $12,814.26 | 25,628.52 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 6/12/2023 | 6/28/2023 | 17.00 | 6/28/2023 | 16.00 | Commercial Sales | $34.92 | 558.72 |
| 6/12/2023 | 6/12/2023 | 1.00 | 6/12/2023 | 0.00 | Public Street & Highway Lighting | $55,890.28 | - |
| 6/12/2023 | 6/13/2023 | 2.00 | 6/13/2023 | 1.00 | Industrial Service | $408,818.21 | 408,818.21 |
| 6/12/2023 | 6/12/2023 | 1.00 | 6/12/2023 | 0.00 | Commercial Sales | $1,782.35 | - |
| 6/12/2023 | 6/15/2023 | 4.00 | 6/15/2023 | 3.00 | Residential Sales | $940.00 | 2,820.00 |
| 6/12/2023 | 8/31/2023 | 81.00 | 8/31/2023 | 80.00 | Residential Sales | $51.37 | 4,109.60 |
| 6/12/2023 | 6/13/2023 | 2.00 | 6/13/2023 | 1.00 | Commercial Sales | $241,234.67 | 241,234.67 |
| 6/12/2023 | 6/16/2023 | 5.00 | 6/16/2023 | 4.00 | Residential Sales | $789.32 | 3,157.28 |
| 6/12/2023 | 6/14/2023 | 3.00 | 6/14/2023 | 2.00 | Industrial Service | $906,784.26 | 1,813,568.52 |
| 6/12/2023 | 6/13/2023 | 2.00 | 6/13/2023 | 1.00 | Public Street & Highway Lighting | $6,178.63 | 6,178.63 |
| 6/12/2023 | 6/14/2023 | 3.00 | 6/14/2023 | 2.00 | Commercial Sales | $146,661.58 | 293,323.16 |
| 6/12/2023 | 6/12/2023 | 1.00 | 6/12/2023 | 0.00 | Other Sales to Public Authority | $18.80 | - |
| 6/13/2023 | 6/13/2023 | 1.00 | 6/13/2023 | 0.00 | Residential Sales | $1,252.40 | - |
| 6/13/2023 | 8/29/2023 | 78.00 | 8/29/2023 | 77.00 | Commercial Sales | $837.71 | 64,503.67 |
| 6/13/2023 | 7/21/2023 | 39.00 | 7/21/2023 | 38.00 | Residential Sales | $107.95 | 4,102.10 |
| 6/13/2023 | 7/7/2023 | 25.00 | 7/7/2023 | 24.00 | Residential Sales | $48.39 | 1,161.36 |
| 6/13/2023 | 6/14/2023 | 2.00 | 6/14/2023 | 1.00 | Residential Sales | $847,599.47 | 847,599.47 |
| 6/13/2023 | 8/30/2023 | 79.00 | 8/30/2023 | 78.00 | Residential Sales | $79.33 | 6,187.74 |
| 6/13/2023 | 6/28/2023 | 16.00 | 6/28/2023 | 15.00 | Commercial Sales | $217.32 | 3,259.80 |
| 6/13/2023 | 6/15/2023 | 3.00 | 6/15/2023 | 2.00 | Residential Sales | $10,074.95 | 20,149.90 |
| 6/13/2023 | 5/6/2024 | 329.00 | 5/6/2024 | 328.00 | Residential Sales | $231.90 | 76,063.20 |
| 6/13/2023 | 6/14/2023 | 2.00 | 6/14/2023 | 1.00 | Industrial Service | $650,970.82 | 650,970.82 |
| 6/13/2023 | 6/16/2023 | 4.00 | 6/16/2023 | 3.00 | Residential Sales | $6,389.90 | 19,169.70 |
| 6/13/2023 | 6/13/2023 | 1.00 | 6/13/2023 | 0.00 | Public Street & Highway Lighting | $12.95 | - |
| 6/13/2023 | 6/30/2023 | 18.00 | 6/30/2023 | 17.00 | Residential Sales | $48.01 | 816.17 |
| 6/13/2023 | 6/13/2023 | 1.00 | 6/13/2023 | 0.00 | Commercial Sales | $283.06 | - |
| 6/13/2023 | 3/5/2024 | 267.00 | 3/5/2024 | 266.00 | Residential Sales | $23.53 | 6,258.98 |
| 6/13/2023 | 6/14/2023 | 2.00 | 6/14/2023 | 1.00 | Commercial Sales | $581,803.01 | 581,803.01 |
| 6/13/2023 | 6/15/2023 | 3.00 | 6/15/2023 | 2.00 | Industrial Service | $72,536.78 | 145,073.56 |
| 6/13/2023 | 12/13/2023 | 184.00 | 12/13/2023 | 183.00 | Commercial Sales | $37.11 | 6,791.13 |
| 6/13/2023 | 7/6/2023 | 24.00 | 7/6/2023 | 23.00 | Other Sales to Public Authority | $41.28 | 949.44 |
| 6/13/2023 | 6/15/2023 | 3.00 | 6/15/2023 | 2.00 | Commercial Sales | $37,938.75 | 75,877.50 |
| 6/13/2023 | 6/13/2023 | 1.00 | 6/13/2023 | 0.00 | Other Sales to Public Authority | $18.80 | - |
| 6/13/2023 | 6/19/2023 | 7.00 | 6/19/2023 | 6.00 | Residential Sales | $4,804.63 | 28,827.78 |
| 6/13/2023 | 6/16/2023 | 4.00 | 6/16/2023 | 3.00 | Commercial Sales | $209.69 | 629.07 |
| 6/13/2023 | 6/14/2023 | 2.00 | 6/14/2023 | 1.00 | Other Sales to Public Authority | $1,048.47 | 1,048.47 |
| 6/13/2023 | 8/3/2023 | 52.00 | 8/3/2023 | 51.00 | Commercial Sales | $230.16 | 11,738.16 |
| 6/13/2023 | 6/19/2023 | 7.00 | 6/19/2023 | 6.00 | Commercial Sales | $19,657.76 | 117,946.56 |
| 6/13/2023 | 8/4/2023 | 53.00 | 8/4/2023 | 52.00 | Commercial Sales | $8,165.85 | 424,624.20 |
| 6/13/2023 | 11/27/2023 | 168.00 | 11/27/2023 | 167.00 | Residential Sales | $689.14 | 115,086.38 |
| 6/13/2023 | 8/7/2023 | 56.00 | 8/7/2023 | 55.00 | Residential Sales | $44.98 | 2,473.90 |
| 6/13/2023 | 12/18/2023 | 189.00 | 12/18/2023 | 188.00 | Commercial Sales | $796.45 | 149,732.60 |
| 6/13/2023 | 6/20/2023 | 8.00 | 6/20/2023 | 7.00 | Residential Sales | $491.99 | 3,443.93 |
| 6/13/2023 | 8/8/2023 | 57.00 | 8/8/2023 | 56.00 | Residential Sales | $40.97 | 2,294.32 |
| 6/13/2023 | 6/21/2023 | 9.00 | 6/21/2023 | 8.00 | Residential Sales | $123.32 | 986.56 |
| 6/13/2023 | 6/20/2023 | 8.00 | 6/20/2023 | 7.00 | Industrial Service | $95,710.69 | 669,974.83 |
| 6/13/2023 | 6/22/2023 | 10.00 | 6/22/2023 | 9.00 | Residential Sales | $180.34 | 1,623.06 |
| 6/13/2023 | 8/7/2023 | 56.00 | 8/7/2023 | 55.00 | Commercial Sales | $12,056.35 | 663,099.25 |
| 6/13/2023 | 6/20/2023 | 8.00 | 6/20/2023 | 7.00 | Commercial Sales | $193,138.51 | 1,351,969.57 |
| 6/13/2023 | 6/21/2023 | 9.00 | 6/21/2023 | 8.00 | Industrial Service | $25,596.35 | 204,770.80 |
| 6/13/2023 | 6/23/2023 | 11.00 | 6/23/2023 | 10.00 | Residential Sales | $145.72 | 1,457.20 |
| 6/13/2023 | 8/25/2023 | 74.00 | 8/25/2023 | 73.00 | Residential Sales | $20.93 | 1,527.89 |
| 6/13/2023 | 6/22/2023 | 10.00 | 6/22/2023 | 9.00 | Industrial Service | $7,261.67 | 65,355.03 |
| 6/13/2023 | 6/21/2023 | 9.00 | 6/21/2023 | 8.00 | Commercial Sales | $67,543.30 | 540,346.40 |
| 6/13/2023 | 11/14/2023 | 155.00 | 11/14/2023 | 154.00 | Commercial Sales | $355.85 | 54,800.90 |
| 6/13/2023 | 6/23/2023 | 11.00 | 6/23/2023 | 10.00 | Commercial Sales | $8,633.78 | 86,337.80 |
| 6/13/2023 | 8/11/2023 | 60.00 | 8/11/2023 | 59.00 | Residential Sales | $14.32 | 844.88 |
| 6/13/2023 | 6/26/2023 | 14.00 | 6/26/2023 | 13.00 | Residential Sales | $172.27 | 2,239.51 |
| 6/13/2023 | 6/27/2023 | 15.00 | 6/27/2023 | 14.00 | Residential Sales | $66.44 | 930.16 |
| 6/13/2023 | 6/28/2023 | 16.00 | 6/28/2023 | 15.00 | Residential Sales | $55.04 | 825.60 |
| 6/13/2023 | 7/6/2023 | 24.00 | 7/6/2023 | 23.00 | Residential Sales | $1.47 | 33.81 |
| 6/13/2023 | 7/20/2023 | 38.00 | 7/20/2023 | 37.00 | Residential Sales | $298.03 | 11,027.11 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 6/13/2023 | 2/7/2024 | 240.00 | 2/7/2024 | 239.00 | Commercial Sales | $107.13 | 25,604.07 |
| 6/13/2023 | 6/29/2023 | 17.00 | 6/29/2023 | 16.00 | Residential Sales | $22.54 | 360.64 |
| 6/14/2023 | 6/14/2023 | 1.00 | 6/14/2023 | 0.00 | Other Public Authority Transportation On | $35.82 | - |
| 6/14/2023 | 7/19/2023 | 36.00 | 7/19/2023 | 35.00 | Residential Sales | $18.98 | 664.30 |
| 6/14/2023 | 6/22/2023 | 9.00 | 6/22/2023 | 8.00 | Commercial Sales | $18,327.48 | 146,619.84 |
| 6/14/2023 | 6/21/2023 | 8.00 | 6/21/2023 | 7.00 | Other Sales to Public Authority | $14,587.39 | 102,111.73 |
| 6/14/2023 | 6/14/2023 | 1.00 | 6/14/2023 | 0.00 | Company Use | $16.77 | - |
| 6/14/2023 | 6/26/2023 | 13.00 | 6/26/2023 | 12.00 | Residential Sales | $41.12 | 493.44 |
| 6/14/2023 | 7/3/2023 | 20.00 | 7/3/2023 | 19.00 | Residential Sales | $86.36 | 1,640.84 |
| 6/14/2023 | 6/27/2023 | 14.00 | 6/27/2023 | 13.00 | Residential Sales | $17.68 | 229.84 |
| 6/14/2023 | 6/15/2023 | 2.00 | 6/15/2023 | 1.00 | Company Use | $0.00 | - |
| 6/14/2023 | 6/28/2023 | 15.00 | 6/28/2023 | 14.00 | Residential Sales | $245.94 | 3,443.16 |
| 6/14/2023 | 7/5/2023 | 22.00 | 7/5/2023 | 21.00 | Residential Sales | $73.15 | 1,536.15 |
| 6/14/2023 | 7/6/2023 | 23.00 | 7/6/2023 | 22.00 | Residential Sales | $106.10 | 2,334.20 |
| 6/14/2023 | 6/29/2023 | 16.00 | 6/29/2023 | 15.00 | Residential Sales | $273.56 | 4,103.40 |
| 6/14/2023 | 6/26/2023 | 13.00 | 6/26/2023 | 12.00 | Commercial Sales | $66.30 | 795.60 |
| 6/14/2023 | 10/27/2023 | 136.00 | 10/27/2023 | 135.00 | Residential Sales | $165.33 | 22,319.55 |
| 6/14/2023 | 7/21/2023 | 38.00 | 7/21/2023 | 37.00 | Residential Sales | $102.47 | 3,791.39 |
| 6/14/2023 | 6/19/2023 | 6.00 | 6/19/2023 | 5.00 | Company Use | -$7,393.70 | (36,968.50) |
| 6/14/2023 | 6/14/2023 | 1.00 | 6/14/2023 | 0.00 | Residential Sales | $989.04 | - |
| 6/14/2023 | 10/11/2023 | 120.00 | 10/11/2023 | 119.00 | Residential Sales | $58.88 | 7,006.72 |
| 6/14/2023 | 8/4/2023 | 52.00 | 8/4/2023 | 51.00 | Company Use | $63.90 | 3,258.90 |
| 6/14/2023 | 6/15/2023 | 2.00 | 6/15/2023 | 1.00 | Residential Sales | $636,628.69 | 636,628.69 |
| 6/14/2023 | 6/16/2023 | 3.00 | 6/16/2023 | 2.00 | Residential Sales | $9,477.46 | 18,954.92 |
| 6/14/2023 | 7/21/2023 | 38.00 | 7/21/2023 | 37.00 | Commercial Sales | $1,009.45 | 37,349.65 |
| 6/14/2023 | 6/30/2023 | 17.00 | 6/30/2023 | 16.00 | Residential Sales | $71.04 | 1,136.64 |
| 6/14/2023 | 7/24/2023 | 41.00 | 7/24/2023 | 40.00 | Residential Sales | $17.40 | 696.00 |
| 6/14/2023 | 6/15/2023 | 2.00 | 6/15/2023 | 1.00 | Industrial Service | $38,862.36 | 38,862.36 |
| 6/14/2023 | 6/14/2023 | 1.00 | 6/14/2023 | 0.00 | Commercial Sales | $4,352.20 | - |
| 6/14/2023 | 6/15/2023 | 2.00 | 6/15/2023 | 1.00 | Commercial Sales | $429,887.34 | 429,887.34 |
| 6/14/2023 | 6/20/2023 | 7.00 | 6/20/2023 | 6.00 | Company Use | $0.00 | - |
| 6/14/2023 | 6/19/2023 | 6.00 | 6/19/2023 | 5.00 | Residential Sales | $1,588.01 | 7,940.05 |
| 6/14/2023 | 6/16/2023 | 3.00 | 6/16/2023 | 2.00 | Commercial Sales | $12.51 | 25.02 |
| 6/14/2023 | 10/30/2023 | 139.00 | 10/30/2023 | 138.00 | Residential Sales | $78.88 | 10,885.44 |
| 6/14/2023 | 6/15/2023 | 2.00 | 6/15/2023 | 1.00 | Other Sales to Public Authority | $9,451.43 | 9,451.43 |
| 6/14/2023 | 7/11/2023 | 28.00 | 7/11/2023 | 27.00 | Residential Sales | $23.53 | 635.31 |
| 6/14/2023 | 6/19/2023 | 6.00 | 6/19/2023 | 5.00 | Industrial Service | $380.44 | 1,902.20 |
| 6/14/2023 | 8/4/2023 | 52.00 | 8/4/2023 | 51.00 | Industrial Service | $23,342.01 | 1,190,442.51 |
| 6/14/2023 | 6/14/2023 | 1.00 | 6/14/2023 | 0.00 | Public Street & Highway Lighting | $336.91 | - |
| 6/14/2023 | 6/16/2023 | 3.00 | 6/16/2023 | 2.00 | Other Sales to Public Authority | $5,137.92 | 10,275.84 |
| 6/14/2023 | 6/19/2023 | 6.00 | 6/19/2023 | 5.00 | Commercial Sales | $5,550.07 | 27,750.35 |
| 6/14/2023 | 6/20/2023 | 7.00 | 6/20/2023 | 6.00 | Residential Sales | $1,777.35 | 10,664.10 |
| 6/14/2023 | 6/21/2023 | 8.00 | 6/21/2023 | 7.00 | Residential Sales | $64.68 | 452.76 |
| 6/14/2023 | 6/19/2023 | 6.00 | 6/19/2023 | 5.00 | Other Sales to Public Authority | $1.25 | 6.25 |
| 6/14/2023 | 8/23/2023 | 71.00 | 8/23/2023 | 70.00 | Residential Sales | $24.50 | 1,715.00 |
| 6/14/2023 | 6/22/2023 | 9.00 | 6/22/2023 | 8.00 | Residential Sales | $67.70 | 541.60 |
| 6/14/2023 | 6/20/2023 | 7.00 | 6/20/2023 | 6.00 | Industrial Service | $7,821.95 | 46,931.70 |
| 6/14/2023 | 6/20/2023 | 7.00 | 6/20/2023 | 6.00 | Commercial Sales | $120,239.56 | 721,437.36 |
| 6/14/2023 | 6/21/2023 | 8.00 | 6/21/2023 | 7.00 | Commercial Sales | $17,746.86 | 124,228.02 |
| 6/15/2023 | 7/11/2023 | 27.00 | 7/11/2023 | 26.00 | Commercial Sales | $20.33 | 528.58 |
| 6/15/2023 | 6/20/2023 | 6.00 | 6/20/2023 | 5.00 | Residential Sales | $3,348.41 | 16,742.05 |
| 6/15/2023 | 6/21/2023 | 7.00 | 6/21/2023 | 6.00 | Residential Sales | $805.18 | 4,831.08 |
| 6/15/2023 | 6/20/2023 | 6.00 | 6/20/2023 | 5.00 | Industrial Service | $45,454.58 | 227,272.90 |
| 6/15/2023 | 6/22/2023 | 8.00 | 6/22/2023 | 7.00 | Residential Sales | $1,020.70 | 7,144.90 |
| 6/15/2023 | 6/20/2023 | 6.00 | 6/20/2023 | 5.00 | Commercial Sales | $21,405.73 | 107,028.65 |
| 6/15/2023 | 6/23/2023 | 9.00 | 6/23/2023 | 8.00 | Residential Sales | $15.67 | 125.36 |
| 6/15/2023 | 8/25/2023 | 72.00 | 8/25/2023 | 71.00 | Residential Sales | $3.85 | 273.35 |
| 6/15/2023 | 6/21/2023 | 7.00 | 6/21/2023 | 6.00 | Commercial Sales | $17,422.47 | 104,534.82 |
| 6/15/2023 | 6/20/2023 | 6.00 | 6/20/2023 | 5.00 | Other Sales to Public Authority | $1,548.67 | 7,743.35 |
| 6/15/2023 | 6/22/2023 | 8.00 | 6/22/2023 | 7.00 | Commercial Sales | $14.47 | 101.29 |
| 6/15/2023 | 7/3/2023 | 19.00 | 7/3/2023 | 18.00 | Residential Sales | $92.14 | 1,658.52 |
| 6/15/2023 | 6/27/2023 | 13.00 | 6/27/2023 | 12.00 | Residential Sales | $75.42 | 905.04 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 6/15/2023 | 7/6/2023 | 22.00 | 7/6/2023 | 21.00 | Residential Sales | $4.81 | 101.01 |
| 6/15/2023 | 6/26/2023 | 12.00 | 6/26/2023 | 11.00 | Commercial Sales | $61.03 | 671.33 |
| 6/15/2023 | 7/21/2023 | 37.00 | 7/21/2023 | 36.00 | Residential Sales | $296.45 | 10,672.20 |
| 6/15/2023 | 6/15/2023 | 1.00 | 6/15/2023 | 0.00 | Residential Sales | $1,185.49 | - |
| 6/15/2023 | 8/31/2023 | 78.00 | 8/31/2023 | 77.00 | Residential Sales | $2.09 | 160.93 |
| 6/15/2023 | 6/16/2023 | 2.00 | 6/16/2023 | 1.00 | Residential Sales | $626,303.22 | 626,303.22 |
| 6/15/2023 | 6/15/2023 | 1.00 | 6/15/2023 | 0.00 | Commercial Sales | $1,604.47 | - |
| 6/15/2023 | 8/3/2023 | 50.00 | 8/3/2023 | 49.00 | Residential Sales | $64.17 | 3,144.33 |
| 6/15/2023 | 6/16/2023 | 2.00 | 6/16/2023 | 1.00 | Industrial Service | $714.45 | 714.45 |
| 6/15/2023 | 6/16/2023 | 2.00 | 6/16/2023 | 1.00 | Commercial Sales | $104,032.28 | 104,032.28 |
| 6/15/2023 | 6/19/2023 | 5.00 | 6/19/2023 | 4.00 | Residential Sales | $8,644.11 | 34,576.44 |
| 6/15/2023 | 6/15/2023 | 1.00 | 6/15/2023 | 0.00 | Other Sales to Public Authority | $89.55 | - |
| 6/15/2023 | 6/16/2023 | 2.00 | 6/16/2023 | 1.00 | Other Sales to Public Authority | $17,683.32 | 17,683.32 |
| 6/15/2023 | 6/30/2023 | 16.00 | 6/30/2023 | 15.00 | Other Sales to Public Authority | $46,366.21 | 695,493.15 |
| 6/15/2023 | 6/19/2023 | 5.00 | 6/19/2023 | 4.00 | Commercial Sales | $201.65 | 806.60 |
| 6/15/2023 | 6/15/2023 | 1.00 | 6/15/2023 | 0.00 | Public Street & Highway Lighting | $3.23 | - |
| 6/16/2023 | 6/19/2023 | 4.00 | 6/19/2023 | 3.00 | Residential Sales | $2,008.88 | 6,026.64 |
| 6/16/2023 | 6/20/2023 | 5.00 | 6/20/2023 | 4.00 | Residential Sales | $24.09 | 96.36 |
| 6/16/2023 | 6/22/2023 | 7.00 | 6/22/2023 | 6.00 | Residential Sales | $78.52 | 471.12 |
| 6/16/2023 | 6/20/2023 | 5.00 | 6/20/2023 | 4.00 | Commercial Sales | $15.00 | 60.00 |
| 6/16/2023 | 6/26/2023 | 11.00 | 6/26/2023 | 10.00 | Residential Sales | $11.54 | 115.40 |
| 6/17/2023 | 6/29/2023 | 13.00 | 6/29/2023 | 12.00 | Residential Sales | $6.87 | 82.44 |
| 6/17/2023 | 6/19/2023 | 3.00 | 6/19/2023 | 2.00 | Residential Sales | $558.63 | 1,117.26 |
| 6/18/2023 | 6/22/2023 | 5.00 | 6/22/2023 | 4.00 | Residential Sales | $28.34 | 113.36 |
| 6/18/2023 | 6/26/2023 | 9.00 | 6/26/2023 | 8.00 | Residential Sales | $3.02 | 24.16 |
| 6/18/2023 | 7/5/2023 | 18.00 | 7/5/2023 | 17.00 | Residential Sales | $13.28 | 225.76 |
| 6/18/2023 | 6/19/2023 | 2.00 | 6/19/2023 | 1.00 | Commercial Sales | $34.86 | 34.86 |
| 6/18/2023 | 6/19/2023 | 2.00 | 6/19/2023 | 1.00 | Residential Sales | $2,322.77 | 2,322.77 |
| 6/18/2023 | 6/20/2023 | 3.00 | 6/20/2023 | 2.00 | Commercial Sales | $361.60 | 723.20 |
| 6/18/2023 | 6/20/2023 | 3.00 | 6/20/2023 | 2.00 | Residential Sales | $669.71 | 1,339.42 |
| 6/18/2023 | 1/24/2024 | 221.00 | 1/24/2024 | 220.00 | Residential Sales | $5.59 | 1,229.80 |
| 6/19/2023 | 6/19/2023 | 1.00 | 6/19/2023 | 0.00 | Residential Sales | $877.14 | - |
| 6/19/2023 | 7/10/2023 | 22.00 | 7/10/2023 | 21.00 | Residential Sales | $391.31 | 8,217.51 |
| 6/19/2023 | 6/19/2023 | 1.00 | 6/19/2023 | 0.00 | Other Sales to Public Authority | $37.60 | - |
| 6/19/2023 | 7/11/2023 | 23.00 | 7/11/2023 | 22.00 | Residential Sales | $191.01 | 4,202.22 |
| 6/19/2023 | 6/20/2023 | 2.00 | 6/20/2023 | 1.00 | Industrial Service | $110,618.50 | 110,618.50 |
| 6/19/2023 | 6/20/2023 | 2.00 | 6/20/2023 | 1.00 | Commercial Sales | $261,416.93 | 261,416.93 |
| 6/19/2023 | 6/19/2023 | 1.00 | 6/19/2023 | 0.00 | Public Street & Highway Lighting | $150.92 | - |
| 6/19/2023 | 6/21/2023 | 3.00 | 6/21/2023 | 2.00 | Industrial Service | $39,986.13 | 79,972.26 |
| 6/19/2023 | 6/20/2023 | 2.00 | 6/20/2023 | 1.00 | Residential Sales | $974,984.17 | 974,984.17 |
| 6/19/2023 | 6/21/2023 | 3.00 | 6/21/2023 | 2.00 | Commercial Sales | $121,906.70 | 243,813.40 |
| 6/19/2023 | 6/22/2023 | 4.00 | 6/22/2023 | 3.00 | Industrial Service | $22,445.25 | 67,335.75 |
| 6/19/2023 | 6/22/2023 | 4.00 | 6/22/2023 | 3.00 | Commercial Sales | $67,626.24 | 202,878.72 |
| 6/19/2023 | 6/21/2023 | 3.00 | 6/21/2023 | 2.00 | Residential Sales | $37,573.29 | 75,146.58 |
| 6/19/2023 | 6/20/2023 | 2.00 | 6/20/2023 | 1.00 | Other Sales to Public Authority | $7,313.85 | 7,313.85 |
| 6/19/2023 | 6/23/2023 | 5.00 | 6/23/2023 | 4.00 | Industrial Service | $52,082.83 | 208,331.32 |
| 6/19/2023 | 6/22/2023 | 4.00 | 6/22/2023 | 3.00 | Residential Sales | $3,434.09 | 10,302.27 |
| 6/19/2023 | 6/21/2023 | 3.00 | 6/21/2023 | 2.00 | Other Sales to Public Authority | $3,363.00 | 6,726.00 |
| 6/19/2023 | 6/23/2023 | 5.00 | 6/23/2023 | 4.00 | Residential Sales | $218.13 | 872.52 |
| 6/19/2023 | 7/19/2023 | 31.00 | 7/19/2023 | 30.00 | Commercial Sales | $486.14 | 14,584.20 |
| 6/19/2023 | 7/19/2023 | 31.00 | 7/19/2023 | 30.00 | Residential Sales | $24.95 | 748.50 |
| 6/19/2023 | 6/26/2023 | 8.00 | 6/26/2023 | 7.00 | Residential Sales | $2,002.01 | 14,014.07 |
| 6/19/2023 | 6/27/2023 | 9.00 | 6/27/2023 | 8.00 | Commercial Sales | $9.28 | 74.24 |
| 6/19/2023 | 6/27/2023 | 9.00 | 6/27/2023 | 8.00 | Residential Sales | $947.48 | 7,579.84 |
| 6/19/2023 | 9/7/2023 | 81.00 | 9/7/2023 | 80.00 | Commercial Sales | $255.43 | 20,434.40 |
| 6/19/2023 | 6/28/2023 | 10.00 | 6/28/2023 | 9.00 | Commercial Sales | $1,069.84 | 9,628.56 |
| 6/19/2023 | 6/28/2023 | 10.00 | 6/28/2023 | 9.00 | Residential Sales | $790.05 | 7,110.45 |
| 6/19/2023 | 7/6/2023 | 18.00 | 7/6/2023 | 17.00 | Residential Sales | $19.20 | 326.40 |
| 6/19/2023 | 7/21/2023 | 33.00 | 7/21/2023 | 32.00 | Residential Sales | $49.56 | 1,585.92 |
| 6/19/2023 | 6/30/2023 | 12.00 | 6/30/2023 | 11.00 | Residential Sales | $342.56 | 3,768.16 |
| 6/19/2023 | 9/27/2023 | 101.00 | 9/27/2023 | 100.00 | Commercial Sales | $479.00 | 47,900.00 |
| 6/19/2023 | 8/3/2023 | 46.00 | 8/3/2023 | 45.00 | Commercial Sales | $19.15 | 861.75 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 6/19/2023 | 6/19/2023 | 1.00 | 6/19/2023 | 0.00 | Commercial Sales | $11,566.74 | - |
| 6/19/2023 | 8/4/2023 | 47.00 | 8/4/2023 | 46.00 | Commercial Sales | $131,944.86 | 6,069,463.56 |
| 6/20/2023 | 7/11/2023 | 22.00 | 7/11/2023 | 21.00 | Commercial Sales | $553.89 | 11,631.69 |
| 6/20/2023 | 7/12/2023 | 23.00 | 7/12/2023 | 22.00 | Commercial Sales | $8.04 | 176.88 |
| 6/20/2023 | 7/12/2023 | 23.00 | 7/12/2023 | 22.00 | Residential Sales | $277.28 | 6,100.16 |
| 6/20/2023 | 6/20/2023 | 1.00 | 6/20/2023 | 0.00 | Commercial Sales | $1,995.06 | - |
| 6/20/2023 | 6/21/2023 | 2.00 | 6/21/2023 | 1.00 | Industrial Service | $16,445.85 | 16,445.85 |
| 6/20/2023 | 6/21/2023 | 2.00 | 6/21/2023 | 1.00 | Commercial Sales | $187,753.02 | 187,753.02 |
| 6/20/2023 | 6/20/2023 | 1.00 | 6/20/2023 | 0.00 | Residential Sales | $2,719.05 | - |
| 6/20/2023 | 7/14/2023 | 25.00 | 7/14/2023 | 24.00 | Residential Sales | $4.33 | 103.92 |
| 6/20/2023 | 6/22/2023 | 3.00 | 6/22/2023 | 2.00 | Industrial Service | $343.49 | 686.98 |
| 6/20/2023 | 6/21/2023 | 2.00 | 6/21/2023 | 1.00 | Residential Sales | $639,899.06 | 639,899.06 |
| 6/20/2023 | 6/22/2023 | 3.00 | 6/22/2023 | 2.00 | Commercial Sales | $59,381.91 | 118,763.82 |
| 6/20/2023 | 6/22/2023 | 3.00 | 6/22/2023 | 2.00 | Residential Sales | $9,884.99 | 19,769.98 |
| 6/20/2023 | 6/21/2023 | 2.00 | 6/21/2023 | 1.00 | Other Sales to Public Authority | $11,811.81 | 11,811.81 |
| 6/20/2023 | 6/23/2023 | 4.00 | 6/23/2023 | 3.00 | Commercial Sales | $111,260.07 | 333,780.21 |
| 6/20/2023 | 6/20/2023 | 1.00 | 6/20/2023 | 0.00 | Public Street & Highway Lighting | $360.03 | - |
| 6/20/2023 | 6/23/2023 | 4.00 | 6/23/2023 | 3.00 | Residential Sales | $1,596.23 | 4,788.69 |
| 6/20/2023 | 10/6/2023 | 109.00 | 10/6/2023 | 108.00 | Residential Sales | $162.28 | 17,526.24 |
| 6/20/2023 | 6/22/2023 | 3.00 | 6/22/2023 | 2.00 | Other Sales to Public Authority | $394.21 | 788.42 |
| 6/20/2023 | 6/23/2023 | 4.00 | 6/23/2023 | 3.00 | Other Sales to Public Authority | $24,021.84 | 72,065.52 |
| 6/20/2023 | 6/26/2023 | 7.00 | 6/26/2023 | 6.00 | Commercial Sales | $16,015.86 | 96,095.16 |
| 6/20/2023 | 6/27/2023 | 8.00 | 6/27/2023 | 7.00 | Commercial Sales | $258.85 | 1,811.95 |
| 6/20/2023 | 6/26/2023 | 7.00 | 6/26/2023 | 6.00 | Residential Sales | $1,254.73 | 7,528.38 |
| 6/20/2023 | 10/23/2023 | 126.00 | 10/23/2023 | 125.00 | Residential Sales | $140.74 | 17,592.50 |
| 6/20/2023 | 6/28/2023 | 9.00 | 6/28/2023 | 8.00 | Industrial Service | $91.78 | 734.24 |
| 6/20/2023 | 7/3/2023 | 14.00 | 7/3/2023 | 13.00 | Residential Sales | $220.81 | 2,870.53 |
| 6/20/2023 | 6/28/2023 | 9.00 | 6/28/2023 | 8.00 | Commercial Sales | $4.02 | 32.16 |
| 6/20/2023 | 6/27/2023 | 8.00 | 6/27/2023 | 7.00 | Residential Sales | $936.49 | 6,555.43 |
| 6/20/2023 | 6/28/2023 | 9.00 | 6/28/2023 | 8.00 | Residential Sales | $77.56 | 620.48 |
| 6/20/2023 | 7/5/2023 | 16.00 | 7/5/2023 | 15.00 | Residential Sales | $97.85 | 1,467.75 |
| 6/20/2023 | 11/2/2023 | 136.00 | 11/2/2023 | 135.00 | Residential Sales | $14.43 | 1,948.05 |
| 6/20/2023 | 8/14/2023 | 56.00 | 8/14/2023 | 55.00 | Commercial Sales | $2,504.31 | 137,737.05 |
| 6/20/2023 | 6/29/2023 | 10.00 | 6/29/2023 | 9.00 | Residential Sales | $650.80 | 5,857.20 |
| 6/20/2023 | 7/21/2023 | 32.00 | 7/21/2023 | 31.00 | Residential Sales | $28.95 | 897.45 |
| 6/20/2023 | 7/7/2023 | 18.00 | 7/7/2023 | 17.00 | Residential Sales | $82.12 | 1,396.04 |
| 6/20/2023 | 6/30/2023 | 11.00 | 6/30/2023 | 10.00 | Commercial Sales | $204.35 | 2,043.50 |
| 6/20/2023 | 6/30/2023 | 11.00 | 6/30/2023 | 10.00 | Residential Sales | $101.93 | 1,019.30 |
| 6/20/2023 | 8/3/2023 | 45.00 | 8/3/2023 | 44.00 | Industrial Service | $2,366.05 | 104,106.20 |
| 6/20/2023 | 9/28/2023 | 101.00 | 9/28/2023 | 100.00 | Commercial Sales | $142.55 | 14,255.00 |
| 6/20/2023 | 8/3/2023 | 45.00 | 8/3/2023 | 44.00 | Commercial Sales | $1,897.40 | 83,485.60 |
| 6/20/2023 | 7/26/2023 | 37.00 | 7/26/2023 | 36.00 | Commercial Sales | $36.85 | 1,326.60 |
| 6/20/2023 | 7/28/2023 | 39.00 | 7/28/2023 | 38.00 | Industrial Service | $2,462.85 | 93,588.30 |
| 6/20/2023 | 7/27/2023 | 38.00 | 7/27/2023 | 37.00 | Commercial Sales | $4.33 | 160.21 |
| 6/21/2023 | 10/12/2023 | 114.00 | 10/12/2023 | 113.00 | Residential Sales | $338.35 | 38,233.55 |
| 6/21/2023 | 6/30/2023 | 10.00 | 6/30/2023 | 9.00 | Residential Sales | $100.66 | 905.94 |
| 6/21/2023 | 8/3/2023 | 44.00 | 8/3/2023 | 43.00 | Industrial Service | $46.56 | 2,002.08 |
| 6/21/2023 | 7/11/2023 | 21.00 | 7/11/2023 | 20.00 | Commercial Sales | $191.42 | 3,828.40 |
| 6/21/2023 | 7/11/2023 | 21.00 | 7/11/2023 | 20.00 | Residential Sales | $120.61 | 2,412.20 |
| 6/21/2023 | 1/8/2024 | 202.00 | 1/8/2024 | 201.00 | Residential Sales | $78.88 | 15,854.88 |
| 6/21/2023 | 6/21/2023 | 1.00 | 6/21/2023 | 0.00 | Commercial Sales | $2,907.75 | - |
| 6/21/2023 | 6/22/2023 | 2.00 | 6/22/2023 | 1.00 | Commercial Sales | $99,658.56 | 99,658.56 |
| 6/21/2023 | 6/21/2023 | 1.00 | 6/21/2023 | 0.00 | Residential Sales | $1,871.01 | - |
| 6/21/2023 | 6/23/2023 | 3.00 | 6/23/2023 | 2.00 | Industrial Service | $10,483.82 | 20,967.64 |
| 6/21/2023 | 6/22/2023 | 2.00 | 6/22/2023 | 1.00 | Residential Sales | $943,086.56 | 943,086.56 |
| 6/21/2023 | 6/23/2023 | 3.00 | 6/23/2023 | 2.00 | Commercial Sales | $31,943.37 | 63,886.74 |
| 6/21/2023 | 6/23/2023 | 3.00 | 6/23/2023 | 2.00 | Residential Sales | $22,654.73 | 45,309.46 |
| 6/21/2023 | 6/22/2023 | 2.00 | 6/22/2023 | 1.00 | Other Sales to Public Authority | $9,597.58 | 9,597.58 |
| 6/21/2023 | 6/23/2023 | 3.00 | 6/23/2023 | 2.00 | Other Sales to Public Authority | $41,969.06 | 83,938.12 |
| 6/21/2023 | 6/21/2023 | 1.00 | 6/21/2023 | 0.00 | Public Street & Highway Lighting | $106.39 | - |
| 6/21/2023 | 6/26/2023 | 6.00 | 6/26/2023 | 5.00 | Commercial Sales | $36,189.53 | 180,947.65 |
| 6/21/2023 | 6/26/2023 | 6.00 | 6/26/2023 | 5.00 | Residential Sales | $4,256.03 | 21,280.15 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 6/21/2023 | 7/3/2023 | 13.00 | 7/3/2023 | 12.00 | Residential Sales | $242.08 | 2,904.96 |
| 6/21/2023 | 6/27/2023 | 7.00 | 6/27/2023 | 6.00 | Commercial Sales | $125.82 | 754.92 |
| 6/21/2023 | 6/28/2023 | 8.00 | 6/28/2023 | 7.00 | Commercial Sales | $62.86 | 440.02 |
| 6/21/2023 | 6/27/2023 | 7.00 | 6/27/2023 | 6.00 | Residential Sales | $158.55 | 951.30 |
| 6/21/2023 | 8/29/2023 | 70.00 | 8/29/2023 | 69.00 | Residential Sales | $174.22 | 12,021.18 |
| 6/21/2023 | 7/5/2023 | 15.00 | 7/5/2023 | 14.00 | Commercial Sales | $83.69 | 1,171.66 |
| 6/21/2023 | 7/5/2023 | 15.00 | 7/5/2023 | 14.00 | Residential Sales | $611.06 | 8,554.84 |
| 6/21/2023 | 6/29/2023 | 9.00 | 6/29/2023 | 8.00 | Commercial Sales | $13,138.88 | 105,111.04 |
| 6/21/2023 | 6/29/2023 | 9.00 | 6/29/2023 | 8.00 | Residential Sales | $209.33 | 1,674.64 |
| 6/21/2023 | 7/6/2023 | 16.00 | 7/6/2023 | 15.00 | Residential Sales | $241.73 | 3,625.95 |
| 6/21/2023 | 7/20/2023 | 30.00 | 7/20/2023 | 29.00 | Residential Sales | $128.83 | 3,736.07 |
| 6/21/2023 | 7/21/2023 | 31.00 | 7/21/2023 | 30.00 | Residential Sales | $163.69 | 4,910.70 |
| 6/22/2023 | 6/26/2023 | 5.00 | 6/26/2023 | 4.00 | Residential Sales | $15,764.59 | 63,058.36 |
| 6/22/2023 | 7/3/2023 | 12.00 | 7/3/2023 | 11.00 | Residential Sales | $133.30 | 1,466.30 |
| 6/22/2023 | 6/27/2023 | 6.00 | 6/27/2023 | 5.00 | Commercial Sales | $37,730.18 | 188,650.90 |
| 6/22/2023 | 6/26/2023 | 5.00 | 6/26/2023 | 4.00 | Other Sales to Public Authority | $9,701.88 | 38,807.52 |
| 6/22/2023 | 6/27/2023 | 6.00 | 6/27/2023 | 5.00 | Residential Sales | $524.55 | 2,622.75 |
| 6/22/2023 | 7/5/2023 | 14.00 | 7/5/2023 | 13.00 | Commercial Sales | $57.02 | 741.26 |
| 6/22/2023 | 7/3/2023 | 12.00 | 7/3/2023 | 11.00 | Other Sales to Public Authority | $19,401.34 | 213,414.74 |
| 6/22/2023 | 6/28/2023 | 7.00 | 6/28/2023 | 6.00 | Commercial Sales | $78.03 | 468.18 |
| 6/22/2023 | 6/27/2023 | 6.00 | 6/27/2023 | 5.00 | Other Sales to Public Authority | $12,656.01 | 63,280.05 |
| 6/22/2023 | 6/28/2023 | 7.00 | 6/28/2023 | 6.00 | Residential Sales | $390.72 | 2,344.32 |
| 6/22/2023 | 6/29/2023 | 8.00 | 6/29/2023 | 7.00 | Commercial Sales | $192.33 | 1,346.31 |
| 6/22/2023 | 6/29/2023 | 8.00 | 6/29/2023 | 7.00 | Residential Sales | $550.82 | 3,855.74 |
| 6/22/2023 | 7/7/2023 | 16.00 | 7/7/2023 | 15.00 | Commercial Sales | $68.84 | 1,032.60 |
| 6/22/2023 | 7/6/2023 | 15.00 | 7/6/2023 | 14.00 | Residential Sales | $154.39 | 2,161.46 |
| 6/22/2023 | 7/21/2023 | 30.00 | 7/21/2023 | 29.00 | Residential Sales | $12.69 | 368.01 |
| 6/22/2023 | 12/13/2023 | 175.00 | 12/13/2023 | 174.00 | Commercial Sales | $373.76 | 65,034.24 |
| 6/22/2023 | 12/14/2023 | 176.00 | 12/14/2023 | 175.00 | Commercial Sales | $226.05 | 39,558.75 |
| 6/22/2023 | 12/13/2023 | 175.00 | 12/13/2023 | 174.00 | Other Sales to Public Authority | $107.17 | 18,647.58 |
| 6/22/2023 | 6/30/2023 | 9.00 | 6/30/2023 | 8.00 | Residential Sales | $390.03 | 3,120.24 |
| 6/22/2023 | 8/1/2023 | 41.00 | 8/1/2023 | 40.00 | Residential Sales | $128.33 | 5,133.20 |
| 6/22/2023 | 7/24/2023 | 33.00 | 7/24/2023 | 32.00 | Residential Sales | $14.43 | 461.76 |
| 6/22/2023 | 8/2/2023 | 42.00 | 8/2/2023 | 41.00 | Residential Sales | $16.38 | 671.58 |
| 6/22/2023 | 8/4/2023 | 44.00 | 8/4/2023 | 43.00 | Residential Sales | $16.05 | 690.15 |
| 6/22/2023 | 7/13/2023 | 22.00 | 7/13/2023 | 21.00 | Commercial Sales | $37.11 | 779.31 |
| 6/22/2023 | 7/13/2023 | 22.00 | 7/13/2023 | 21.00 | Residential Sales | $21.15 | 444.15 |
| 6/22/2023 | 7/14/2023 | 23.00 | 7/14/2023 | 22.00 | Commercial Sales | $37.11 | 816.42 |
| 6/22/2023 | 6/22/2023 | 1.00 | 6/22/2023 | 0.00 | Commercial Sales | $4,516.10 | - |
| 6/22/2023 | 6/23/2023 | 2.00 | 6/23/2023 | 1.00 | Industrial Service | $66,958.34 | 66,958.34 |
| 6/22/2023 | 6/23/2023 | 2.00 | 6/23/2023 | 1.00 | Commercial Sales | $353,805.61 | 353,805.61 |
| 6/22/2023 | 6/22/2023 | 1.00 | 6/22/2023 | 0.00 | Residential Sales | $3,511.87 | - |
| 6/22/2023 | 10/5/2023 | 106.00 | 10/5/2023 | 105.00 | Residential Sales | $215.39 | 22,615.95 |
| 6/22/2023 | 7/31/2023 | 40.00 | 7/31/2023 | 39.00 | Commercial Sales | $170.64 | 6,654.96 |
| 6/22/2023 | 11/13/2023 | 145.00 | 11/13/2023 | 144.00 | Residential Sales | $52.87 | 7,613.28 |
| 6/22/2023 | 6/23/2023 | 2.00 | 6/23/2023 | 1.00 | Residential Sales | $858,871.85 | 858,871.85 |
| 6/22/2023 | 6/22/2023 | 1.00 | 6/22/2023 | 0.00 | Other Sales to Public Authority | $8.52 | - |
| 6/22/2023 | 6/23/2023 | 2.00 | 6/23/2023 | 1.00 | Other Sales to Public Authority | $3,984.83 | 3,984.83 |
| 6/22/2023 | 7/18/2023 | 27.00 | 7/18/2023 | 26.00 | Residential Sales | $37.29 | 969.54 |
| 6/22/2023 | 6/26/2023 | 5.00 | 6/26/2023 | 4.00 | Industrial Service | $16,198.50 | 64,794.00 |
| 6/22/2023 | 6/26/2023 | 5.00 | 6/26/2023 | 4.00 | Commercial Sales | $53,950.76 | 215,803.04 |
| 6/22/2023 | 7/3/2023 | 12.00 | 7/3/2023 | 11.00 | Commercial Sales | $36,913.52 | 406,048.72 |
| 6/22/2023 | 6/22/2023 | 1.00 | 6/22/2023 | 0.00 | Public Street & Highway Lighting | $19.96 | - |
| 6/22/2023 | 8/10/2023 | 50.00 | 8/10/2023 | 49.00 | Residential Sales | $159.05 | 7,793.45 |
| 6/22/2023 | 6/27/2023 | 6.00 | 6/27/2023 | 5.00 | Industrial Service | $31,723.50 | 158,617.50 |
| 6/23/2023 | 6/23/2023 | 1.00 | 6/23/2023 | 0.00 | Commercial Sales | $6,208.94 | - |
| 6/23/2023 | 6/23/2023 | 1.00 | 6/23/2023 | 0.00 | Residential Sales | $3,125.37 | - |
| 6/23/2023 | 6/26/2023 | 4.00 | 6/26/2023 | 3.00 | Industrial Service | $67,590.17 | 202,770.51 |
| 6/23/2023 | 7/3/2023 | 11.00 | 7/3/2023 | 10.00 | Industrial Service | $10,272.24 | 102,722.40 |
| 6/23/2023 | 6/26/2023 | 4.00 | 6/26/2023 | 3.00 | Commercial Sales | $353,282.35 | 1,059,847.05 |
| 6/23/2023 | 7/3/2023 | 11.00 | 7/3/2023 | 10.00 | Commercial Sales | $13,015.55 | 130,155.50 |
| 6/23/2023 | 6/27/2023 | 5.00 | 6/27/2023 | 4.00 | Industrial Service | $159.67 | 638.68 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 6/23/2023 | 6/26/2023 | 4.00 | 6/26/2023 | 3.00 | Residential Sales | $679,275.28 | 2,037,825.84 |
| 6/23/2023 | 6/27/2023 | 5.00 | 6/27/2023 | 4.00 | Commercial Sales | $115,223.89 | 460,895.56 |
| 6/23/2023 | 7/3/2023 | 11.00 | 7/3/2023 | 10.00 | Residential Sales | $374.85 | 3,748.50 |
| 6/23/2023 | 6/28/2023 | 6.00 | 6/28/2023 | 5.00 | Industrial Service | $25,572.87 | 127,864.35 |
| 6/23/2023 | 6/23/2023 | 1.00 | 6/23/2023 | 0.00 | Public Street & Highway Lighting | $10.55 | - |
| 6/23/2023 | 6/28/2023 | 6.00 | 6/28/2023 | 5.00 | Commercial Sales | $101,717.81 | 508,589.05 |
| 6/23/2023 | 6/27/2023 | 5.00 | 6/27/2023 | 4.00 | Residential Sales | $4,355.67 | 17,422.68 |
| 6/23/2023 | 6/26/2023 | 4.00 | 6/26/2023 | 3.00 | Other Sales to Public Authority | $23,084.16 | 69,252.48 |
| 6/23/2023 | 6/29/2023 | 7.00 | 6/29/2023 | 6.00 | Industrial Service | $29,185.15 | 175,110.90 |
| 6/23/2023 | 9/7/2023 | 77.00 | 9/7/2023 | 76.00 | Commercial Sales | $219.88 | 16,710.88 |
| 6/23/2023 | 6/28/2023 | 6.00 | 6/28/2023 | 5.00 | Residential Sales | $381.75 | 1,908.75 |
| 6/23/2023 | 6/27/2023 | 5.00 | 6/27/2023 | 4.00 | Other Sales to Public Authority | $11,230.87 | 44,923.48 |
| 6/23/2023 | 7/5/2023 | 13.00 | 7/5/2023 | 12.00 | Residential Sales | $646.34 | 7,756.08 |
| 6/23/2023 | 6/29/2023 | 7.00 | 6/29/2023 | 6.00 | Commercial Sales | $24,807.11 | 148,842.66 |
| 6/23/2023 | 6/29/2023 | 7.00 | 6/29/2023 | 6.00 | Residential Sales | $476.61 | 2,859.66 |
| 6/23/2023 | 7/6/2023 | 14.00 | 7/6/2023 | 13.00 | Residential Sales | $58.72 | 763.36 |
| 6/23/2023 | 7/5/2023 | 13.00 | 7/5/2023 | 12.00 | Other Sales to Public Authority | $10,462.18 | 125,546.16 |
| 6/23/2023 | 7/7/2023 | 15.00 | 7/7/2023 | 14.00 | Residential Sales | $0.48 | 6.72 |
| 6/23/2023 | 6/30/2023 | 8.00 | 6/30/2023 | 7.00 | Industrial Service | $248.89 | 1,742.23 |
| 6/23/2023 | 6/30/2023 | 8.00 | 6/30/2023 | 7.00 | Commercial Sales | $12,988.42 | 90,918.94 |
| 6/23/2023 | 6/30/2023 | 8.00 | 6/30/2023 | 7.00 | Residential Sales | $559.17 | 3,914.19 |
| 6/23/2023 | 3/5/2024 | 257.00 | 3/5/2024 | 256.00 | Residential Sales | $45.96 | 11,765.76 |
| 6/23/2023 | 8/1/2023 | 40.00 | 8/1/2023 | 39.00 | Other Sales to Public Authority | $663.64 | 25,881.96 |
| 6/23/2023 | 8/3/2023 | 42.00 | 8/3/2023 | 41.00 | Commercial Sales | $21,047.19 | 862,934.79 |
| 6/23/2023 | 7/10/2023 | 18.00 | 7/10/2023 | 17.00 | Residential Sales | $187.56 | 3,188.52 |
| 6/23/2023 | 7/12/2023 | 20.00 | 7/12/2023 | 19.00 | Residential Sales | $56.90 | 1,081.10 |
| 6/23/2023 | 8/22/2023 | 61.00 | 8/22/2023 | 60.00 | Residential Sales | $120.45 | 7,227.00 |
| 6/24/2023 | 6/26/2023 | 3.00 | 6/26/2023 | 2.00 | Residential Sales | $266.95 | 533.90 |
| 6/24/2023 | 6/27/2023 | 4.00 | 6/27/2023 | 3.00 | Residential Sales | $430.21 | 1,290.63 |
| 6/25/2023 | 6/30/2023 | 6.00 | 6/30/2023 | 5.00 | Residential Sales | $6.35 | 31.75 |
| 6/25/2023 | 6/26/2023 | 2.00 | 6/26/2023 | 1.00 | Residential Sales | $2,955.77 | 2,955.77 |
| 6/25/2023 | 7/3/2023 | 9.00 | 7/3/2023 | 8.00 | Residential Sales | $28.91 | 231.28 |
| 6/25/2023 | 6/27/2023 | 3.00 | 6/27/2023 | 2.00 | Residential Sales | $352.96 | 705.92 |
| 6/25/2023 | 7/5/2023 | 11.00 | 7/5/2023 | 10.00 | Residential Sales | $34.88 | 348.80 |
| 6/25/2023 | 6/29/2023 | 5.00 | 6/29/2023 | 4.00 | Residential Sales | $10.80 | 43.20 |
| 6/25/2023 | 7/21/2023 | 27.00 | 7/21/2023 | 26.00 | Residential Sales | $35.80 | 930.80 |
| 6/26/2023 | 6/27/2023 | 2.00 | 6/27/2023 | 1.00 | Commercial Sales | $927,765.79 | 927,765.79 |
| 6/26/2023 | 6/26/2023 | 1.00 | 6/26/2023 | 0.00 | Residential Sales | $2,694.69 | - |
| 6/26/2023 | 6/28/2023 | 3.00 | 6/28/2023 | 2.00 | Industrial Service | $351.49 | 702.98 |
| 6/26/2023 | 7/3/2023 | 8.00 | 7/3/2023 | 7.00 | Residential Sales | $311.05 | 2,177.35 |
| 6/26/2023 | 7/19/2023 | 24.00 | 7/19/2023 | 23.00 | Other Sales to Public Authority | $8.00 | 184.00 |
| 6/26/2023 | 6/28/2023 | 3.00 | 6/28/2023 | 2.00 | Commercial Sales | $296,502.79 | 593,005.58 |
| 6/26/2023 | 6/27/2023 | 2.00 | 6/27/2023 | 1.00 | Residential Sales | $778,504.30 | 778,504.30 |
| 6/26/2023 | 7/5/2023 | 10.00 | 7/5/2023 | 9.00 | Commercial Sales | $307.17 | 2,764.53 |
| 6/26/2023 | 6/26/2023 | 1.00 | 6/26/2023 | 0.00 | Other Sales to Public Authority | $67.27 | - |
| 6/26/2023 | 9/21/2023 | 88.00 | 9/21/2023 | 87.00 | Commercial Sales | $46.31 | 4,028.97 |
| 6/26/2023 | 6/29/2023 | 4.00 | 6/29/2023 | 3.00 | Industrial Service | $9,657.39 | 28,972.17 |
| 6/26/2023 | 7/6/2023 | 11.00 | 7/6/2023 | 10.00 | Industrial Service | $97.37 | 973.70 |
| 6/26/2023 | 6/28/2023 | 3.00 | 6/28/2023 | 2.00 | Residential Sales | $13,849.45 | 27,698.90 |
| 6/26/2023 | 6/29/2023 | 4.00 | 6/29/2023 | 3.00 | Commercial Sales | $154,284.78 | 462,854.34 |
| 6/26/2023 | 6/27/2023 | 2.00 | 6/27/2023 | 1.00 | Other Sales to Public Authority | $48,346.65 | 48,346.65 |
| 6/26/2023 | 7/6/2023 | 11.00 | 7/6/2023 | 10.00 | Commercial Sales | $13,072.89 | 130,728.90 |
| 6/26/2023 | 8/14/2023 | 50.00 | 8/14/2023 | 49.00 | Commercial Sales | $1,691.69 | 82,892.81 |
| 6/26/2023 | 3/1/2024 | 250.00 | 3/1/2024 | 249.00 | Commercial Sales | $848.32 | 211,231.68 |
| 6/26/2023 | 7/5/2023 | 10.00 | 7/5/2023 | 9.00 | Residential Sales | $190.91 | 1,718.19 |
| 6/26/2023 | 7/3/2023 | 8.00 | 7/3/2023 | 7.00 | Public Street & Highway Lighting | $6,158.34 | 43,108.38 |
| 6/26/2023 | 6/28/2023 | 3.00 | 6/28/2023 | 2.00 | Other Sales to Public Authority | $2,852.50 | 5,705.00 |
| 6/26/2023 | 6/26/2023 | 1.00 | 6/26/2023 | 0.00 | Public Street & Highway Lighting | $10,157.54 | - |
| 6/26/2023 | 6/29/2023 | 4.00 | 6/29/2023 | 3.00 | Residential Sales | $1,223.30 | 3,669.90 |
| 6/26/2023 | 7/7/2023 | 12.00 | 7/7/2023 | 11.00 | Commercial Sales | $868.92 | 9,558.12 |
| 6/26/2023 | 7/6/2023 | 11.00 | 7/6/2023 | 10.00 | Residential Sales | $246.96 | 2,469.60 |
| 6/26/2023 | 7/20/2023 | 25.00 | 7/20/2023 | 24.00 | Residential Sales | $52.42 | 1,258.08 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 6/26/2023 | 12/28/2023 | 186.00 | 12/28/2023 | 185.00 | Residential Sales | $24.61 | 4,552.85 |
| 6/26/2023 | 6/27/2023 | 2.00 | 6/27/2023 | 1.00 | Public Street & Highway Lighting | $2,223.51 | 2,223.51 |
| 6/26/2023 | 6/29/2023 | 4.00 | 6/29/2023 | 3.00 | Other Sales to Public Authority | $13,531.29 | 40,593.87 |
| 6/26/2023 | 7/21/2023 | 26.00 | 7/21/2023 | 25.00 | Residential Sales | $0.69 | 17.25 |
| 6/26/2023 | 6/30/2023 | 5.00 | 6/30/2023 | 4.00 | Commercial Sales | $84,184.03 | 336,736.12 |
| 6/26/2023 | 12/13/2023 | 171.00 | 12/13/2023 | 170.00 | Other Sales to Public Authority | $421.32 | 71,624.40 |
| 6/26/2023 | 8/31/2023 | 67.00 | 8/31/2023 | 66.00 | Residential Sales | $208.35 | 13,751.10 |
| 6/26/2023 | 6/30/2023 | 5.00 | 6/30/2023 | 4.00 | Residential Sales | $1,612.56 | 6,450.24 |
| 6/26/2023 | 8/1/2023 | 37.00 | 8/1/2023 | 36.00 | Other Sales to Public Authority | $1,164.41 | 41,918.76 |
| 6/26/2023 | 7/25/2023 | 30.00 | 7/25/2023 | 29.00 | Residential Sales | $151.68 | 4,398.72 |
| 6/26/2023 | 7/26/2023 | 31.00 | 7/26/2023 | 30.00 | Residential Sales | $123.62 | 3,708.60 |
| 6/26/2023 | 8/4/2023 | 40.00 | 8/4/2023 | 39.00 | Commercial Sales | $59,940.02 | 2,337,660.78 |
| 6/26/2023 | 7/10/2023 | 15.00 | 7/10/2023 | 14.00 | Commercial Sales | $12,124.25 | 169,739.50 |
| 6/26/2023 | 7/12/2023 | 17.00 | 7/12/2023 | 16.00 | Commercial Sales | $8,451.91 | 135,230.56 |
| 6/26/2023 | 7/11/2023 | 16.00 | 7/11/2023 | 15.00 | Residential Sales | $34.91 | 523.65 |
| 6/26/2023 | 7/12/2023 | 17.00 | 7/12/2023 | 16.00 | Residential Sales | $152.45 | 2,439.20 |
| 6/26/2023 | 7/14/2023 | 19.00 | 7/14/2023 | 18.00 | Commercial Sales | $114.86 | 2,067.48 |
| 6/26/2023 | 8/9/2023 | 45.00 | 8/9/2023 | 44.00 | Residential Sales | $96.12 | 4,229.28 |
| 6/26/2023 | 3/28/2024 | 277.00 | 3/28/2024 | 276.00 | Commercial Sales | $712.10 | 196,539.60 |
| 6/26/2023 | 9/18/2023 | 85.00 | 9/18/2023 | 84.00 | Residential Sales | $47.37 | 3,979.08 |
| 6/26/2023 | 6/26/2023 | 1.00 | 6/26/2023 | 0.00 | Commercial Sales | $22,346.49 | - |
| 6/26/2023 | 6/27/2023 | 2.00 | 6/27/2023 | 1.00 | Industrial Service | $100,752.95 | 100,752.95 |
| 6/26/2023 | 7/3/2023 | 8.00 | 7/3/2023 | 7.00 | Commercial Sales | $16,562.47 | 115,937.29 |
| 6/27/2023 | 7/12/2023 | 16.00 | 7/12/2023 | 15.00 | Public Street & Highway Lighting | $42.06 | 630.90 |
| 6/27/2023 | 7/14/2023 | 18.00 | 7/14/2023 | 17.00 | Other Sales to Public Authority | $1,062.25 | 18,058.25 |
| 6/27/2023 | 7/31/2023 | 35.00 | 7/31/2023 | 34.00 | Residential Sales | $27.21 | 925.14 |
| 6/27/2023 | 7/18/2023 | 22.00 | 7/18/2023 | 21.00 | Residential Sales | $132.84 | 2,789.64 |
| 6/27/2023 | 7/3/2023 | 7.00 | 7/3/2023 | 6.00 | Industrial Service | $12,399.29 | 74,395.74 |
| 6/27/2023 | 6/30/2023 | 4.00 | 6/30/2023 | 3.00 | Company Use | $162.75 | 488.25 |
| 6/27/2023 | 7/3/2023 | 7.00 | 7/3/2023 | 6.00 | Commercial Sales | $10,883.76 | 65,302.56 |
| 6/27/2023 | 7/19/2023 | 23.00 | 7/19/2023 | 22.00 | Residential Sales | $100.73 | 2,216.06 |
| 6/27/2023 | 6/27/2023 | 1.00 | 6/27/2023 | 0.00 | Commercial Sales | $53,868.60 | - |
| 6/27/2023 | 7/3/2023 | 7.00 | 7/3/2023 | 6.00 | Residential Sales | $1,214.89 | 7,289.34 |
| 6/27/2023 | 6/28/2023 | 2.00 | 6/28/2023 | 1.00 | Industrial Service | $186,213.74 | 186,213.74 |
| 6/27/2023 | 7/5/2023 | 9.00 | 7/5/2023 | 8.00 | Industrial Service | $347.54 | 2,780.32 |
| 6/27/2023 | 6/28/2023 | 2.00 | 6/28/2023 | 1.00 | Commercial Sales | $959,938.49 | 959,938.49 |
| 6/27/2023 | 6/27/2023 | 1.00 | 6/27/2023 | 0.00 | Residential Sales | $1,250.74 | - |
| 6/27/2023 | 7/5/2023 | 9.00 | 7/5/2023 | 8.00 | Commercial Sales | $33,440.09 | 267,520.72 |
| 6/27/2023 | 6/29/2023 | 3.00 | 6/29/2023 | 2.00 | Industrial Service | $468,857.10 | 937,714.20 |
| 6/27/2023 | 11/1/2023 | 128.00 | 11/1/2023 | 127.00 | Residential Sales | $45.30 | 5,753.10 |
| 6/27/2023 | 6/28/2023 | 2.00 | 6/28/2023 | 1.00 | Residential Sales | $728,610.41 | 728,610.41 |
| 6/27/2023 | 7/5/2023 | 9.00 | 7/5/2023 | 8.00 | Residential Sales | $1,350.97 | 10,807.76 |
| 6/27/2023 | 6/29/2023 | 3.00 | 6/29/2023 | 2.00 | Commercial Sales | $597,732.47 | 1,195,464.94 |
| 6/27/2023 | 7/6/2023 | 10.00 | 7/6/2023 | 9.00 | Commercial Sales | $19,729.52 | 177,565.68 |
| 6/27/2023 | 6/29/2023 | 3.00 | 6/29/2023 | 2.00 | Residential Sales | $13,352.54 | 26,705.08 |
| 6/27/2023 | 6/28/2023 | 2.00 | 6/28/2023 | 1.00 | Other Sales to Public Authority | $23,651.54 | 23,651.54 |
| 6/27/2023 | 7/6/2023 | 10.00 | 7/6/2023 | 9.00 | Residential Sales | $697.63 | 6,278.67 |
| 6/27/2023 | 6/27/2023 | 1.00 | 6/27/2023 | 0.00 | Public Street & Highway Lighting | $1,964.11 | - |
| 6/27/2023 | 6/29/2023 | 3.00 | 6/29/2023 | 2.00 | Other Sales to Public Authority | $6,046.02 | 12,092.04 |
| 6/27/2023 | 7/7/2023 | 11.00 | 7/7/2023 | 10.00 | Residential Sales | $1,397.94 | 13,979.40 |
| 6/27/2023 | 7/6/2023 | 10.00 | 7/6/2023 | 9.00 | Other Sales to Public Authority | $482.83 | 4,345.47 |
| 6/27/2023 | 6/30/2023 | 4.00 | 6/30/2023 | 3.00 | Industrial Service | $24,985.94 | 74,957.82 |
| 6/27/2023 | 11/6/2023 | 133.00 | 11/6/2023 | 132.00 | Commercial Sales | $133.59 | 17,633.88 |
| 6/27/2023 | 6/30/2023 | 4.00 | 6/30/2023 | 3.00 | Commercial Sales | $261,933.85 | 785,801.55 |
| 6/27/2023 | 12/13/2023 | 170.00 | 12/13/2023 | 169.00 | Other Sales to Public Authority | $393.37 | 66,479.53 |
| 6/27/2023 | 10/12/2023 | 108.00 | 10/12/2023 | 107.00 | Residential Sales | $207.15 | 22,165.05 |
| 6/27/2023 | 6/30/2023 | 4.00 | 6/30/2023 | 3.00 | Residential Sales | $1,650.23 | 4,950.69 |
| 6/27/2023 | 7/24/2023 | 28.00 | 7/24/2023 | 27.00 | Residential Sales | $128.93 | 3,481.11 |
| 6/27/2023 | 7/25/2023 | 29.00 | 7/25/2023 | 28.00 | Commercial Sales | $192.82 | 5,398.96 |
| 6/27/2023 | 1/2/2024 | 190.00 | 1/2/2024 | 189.00 | Other Sales to Public Authority | $192.21 | 36,327.69 |
| 6/27/2023 | 7/10/2023 | 14.00 | 7/10/2023 | 13.00 | Industrial Service | $28,890.15 | 375,571.95 |
| 6/27/2023 | 6/30/2023 | 4.00 | 6/30/2023 | 3.00 | Other Sales to Public Authority | $33,838.66 | 101,515.98 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 6/27/2023 | 7/10/2023 | 14.00 | 7/10/2023 | 13.00 | Commercial Sales | $43,809.22 | 569,519.86 |
| 6/27/2023 | 7/27/2023 | 31.00 | 7/27/2023 | 30.00 | Commercial Sales | $80.32 | 2,409.60 |
| 6/27/2023 | 7/10/2023 | 14.00 | 7/10/2023 | 13.00 | Residential Sales | $747.78 | 9,721.14 |
| 6/27/2023 | 7/12/2023 | 16.00 | 7/12/2023 | 15.00 | Commercial Sales | $1,363.77 | 20,456.55 |
| 6/27/2023 | 7/28/2023 | 32.00 | 7/28/2023 | 31.00 | Residential Sales | $110.84 | 3,436.04 |
| 6/27/2023 | 7/25/2023 | 29.00 | 7/25/2023 | 28.00 | Public Street & Highway Lighting | $21.06 | 589.68 |
| 6/27/2023 | 8/4/2023 | 39.00 | 8/4/2023 | 38.00 | Other Sales to Public Authority | $37.11 | 1,410.18 |
| 6/27/2023 | 7/11/2023 | 15.00 | 7/11/2023 | 14.00 | Residential Sales | $219.39 | 3,071.46 |
| 6/27/2023 | 7/14/2023 | 18.00 | 7/14/2023 | 17.00 | Commercial Sales | $20.14 | 342.38 |
| 6/28/2023 | 7/10/2023 | 13.00 | 7/10/2023 | 12.00 | Residential Sales | $121.45 | 1,457.40 |
| 6/28/2023 | 7/11/2023 | 14.00 | 7/11/2023 | 13.00 | Commercial Sales | $616.35 | 8,012.55 |
| 6/28/2023 | 7/12/2023 | 15.00 | 7/12/2023 | 14.00 | Commercial Sales | $196.64 | 2,752.96 |
| 6/28/2023 | 7/11/2023 | 14.00 | 7/11/2023 | 13.00 | Residential Sales | $763.17 | 9,921.21 |
| 6/28/2023 | 9/13/2023 | 78.00 | 9/13/2023 | 77.00 | Residential Sales | $31.23 | 2,404.71 |
| 6/28/2023 | 7/13/2023 | 16.00 | 7/13/2023 | 15.00 | Commercial Sales | $160.56 | 2,408.40 |
| 6/28/2023 | 7/14/2023 | 17.00 | 7/14/2023 | 16.00 | Commercial Sales | $78.02 | 1,248.32 |
| 6/28/2023 | 4/21/2024 | 299.00 | 4/21/2024 | 298.00 | Commercial Sales | $32.51 | 9,687.98 |
| 6/28/2023 | 7/3/2023 | 6.00 | 7/3/2023 | 5.00 | Commercial Sales | $22,344.03 | 111,720.15 |
| 6/28/2023 | 7/3/2023 | 6.00 | 7/3/2023 | 5.00 | Residential Sales | $1,762.72 | 8,813.60 |
| 6/28/2023 | 6/28/2023 | 1.00 | 6/28/2023 | 0.00 | Industrial Service | $2,858.65 | - |
| 6/28/2023 | 6/28/2023 | 1.00 | 6/28/2023 | 0.00 | Commercial Sales | $9,960.99 | - |
| 6/28/2023 | 7/5/2023 | 8.00 | 7/5/2023 | 7.00 | Commercial Sales | $22,700.06 | 158,900.42 |
| 6/28/2023 | 6/29/2023 | 2.00 | 6/29/2023 | 1.00 | Industrial Service | $2,158.56 | 2,158.56 |
| 6/28/2023 | 6/29/2023 | 2.00 | 6/29/2023 | 1.00 | Commercial Sales | $210,373.76 | 210,373.76 |
| 6/28/2023 | 6/28/2023 | 1.00 | 6/28/2023 | 0.00 | Residential Sales | $1,796.14 | - |
| 6/28/2023 | 7/5/2023 | 8.00 | 7/5/2023 | 7.00 | Residential Sales | $1,853.04 | 12,971.28 |
| 6/28/2023 | 7/6/2023 | 9.00 | 7/6/2023 | 8.00 | Commercial Sales | $21,925.52 | 175,404.16 |
| 6/28/2023 | 6/29/2023 | 2.00 | 6/29/2023 | 1.00 | Residential Sales | $829,375.57 | 829,375.57 |
| 6/28/2023 | 7/7/2023 | 10.00 | 7/7/2023 | 9.00 | Commercial Sales | $5,669.31 | 51,023.79 |
| 6/28/2023 | 9/8/2023 | 73.00 | 9/8/2023 | 72.00 | Residential Sales | $15.73 | 1,132.56 |
| 6/28/2023 | 7/6/2023 | 9.00 | 7/6/2023 | 8.00 | Residential Sales | $14.43 | 115.44 |
| 6/28/2023 | 7/7/2023 | 10.00 | 7/7/2023 | 9.00 | Residential Sales | $1,400.83 | 12,607.47 |
| 6/28/2023 | 6/29/2023 | 2.00 | 6/29/2023 | 1.00 | Other Sales to Public Authority | $3,528.09 | 3,528.09 |
| 6/28/2023 | 7/21/2023 | 24.00 | 7/21/2023 | 23.00 | Residential Sales | $69.01 | 1,587.23 |
| 6/28/2023 | 6/28/2023 | 1.00 | 6/28/2023 | 0.00 | Public Street & Highway Lighting | $1,043.02 | - |
| 6/28/2023 | 6/30/2023 | 3.00 | 6/30/2023 | 2.00 | Industrial Service | $2,695.55 | 5,391.10 |
| 6/28/2023 | 6/30/2023 | 3.00 | 6/30/2023 | 2.00 | Commercial Sales | $93,149.31 | 186,298.62 |
| 6/28/2023 | 10/12/2023 | 107.00 | 10/12/2023 | 106.00 | Residential Sales | $121.68 | 12,898.08 |
| 6/28/2023 | 6/30/2023 | 3.00 | 6/30/2023 | 2.00 | Residential Sales | $17,708.13 | 35,416.26 |
| 6/28/2023 | 7/24/2023 | 27.00 | 7/24/2023 | 26.00 | Residential Sales | $275.18 | 7,154.68 |
| 6/28/2023 | 6/30/2023 | 3.00 | 6/30/2023 | 2.00 | Other Sales to Public Authority | $1,509.63 | 3,019.26 |
| 6/28/2023 | 7/10/2023 | 13.00 | 7/10/2023 | 12.00 | Industrial Service | $254.70 | 3,056.40 |
| 6/28/2023 | 7/10/2023 | 13.00 | 7/10/2023 | 12.00 | Commercial Sales | $4,901.77 | 58,821.24 |
| 6/28/2023 | 7/26/2023 | 29.00 | 7/26/2023 | 28.00 | Residential Sales | $18.50 | 518.00 |
| 6/29/2023 | 7/3/2023 | 5.00 | 7/3/2023 | 4.00 | Other Sales to Public Authority | $146,914.74 | 587,658.96 |
| 6/29/2023 | 6/30/2023 | 2.00 | 6/30/2023 | 1.00 | Industrial Service | $87,197.25 | 87,197.25 |
| 6/29/2023 | 10/12/2023 | 106.00 | 10/12/2023 | 105.00 | Commercial Sales | $23.80 | 2,499.00 |
| 6/29/2023 | 6/30/2023 | 2.00 | 6/30/2023 | 1.00 | Commercial Sales | $191,296.85 | 191,296.85 |
| 6/29/2023 | 6/29/2023 | 1.00 | 6/29/2023 | 0.00 | Public Street & Highway Lighting | $545.12 | - |
| 6/29/2023 | 6/30/2023 | 2.00 | 6/30/2023 | 1.00 | Residential Sales | $619,029.05 | 619,029.05 |
| 6/29/2023 | 7/5/2023 | 7.00 | 7/5/2023 | 6.00 | Other Sales to Public Authority | $15,642.52 | 93,855.12 |
| 6/29/2023 | 7/10/2023 | 12.00 | 7/10/2023 | 11.00 | Industrial Service | $114,431.09 | 1,258,741.99 |
| 6/29/2023 | 6/29/2023 | 1.00 | 6/29/2023 | 0.00 | Other Sales to Public Authority | $65.90 | - |
| 6/29/2023 | 7/6/2023 | 8.00 | 7/6/2023 | 7.00 | Other Sales to Public Authority | $90.20 | 631.40 |
| 6/29/2023 | 7/10/2023 | 12.00 | 7/10/2023 | 11.00 | Commercial Sales | $43,541.71 | 478,958.81 |
| 6/29/2023 | 7/11/2023 | 13.00 | 7/11/2023 | 12.00 | Industrial Service | $319.36 | 3,832.32 |
| 6/29/2023 | 8/4/2023 | 37.00 | 8/4/2023 | 36.00 | Commercial Sales | $21,051.93 | 757,869.48 |
| 6/29/2023 | 7/10/2023 | 12.00 | 7/10/2023 | 11.00 | Residential Sales | $729.42 | 8,023.62 |
| 6/29/2023 | 7/11/2023 | 13.00 | 7/11/2023 | 12.00 | Commercial Sales | $4,305.37 | 51,664.44 |
| 6/29/2023 | 7/12/2023 | 14.00 | 7/12/2023 | 13.00 | Industrial Service | $475.53 | 6,181.89 |
| 6/29/2023 | 7/12/2023 | 14.00 | 7/12/2023 | 13.00 | Commercial Sales | $1,347.12 | 17,512.56 |
| 6/29/2023 | 7/3/2023 | 5.00 | 7/3/2023 | 4.00 | Company Use | $0.00 | - |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 6/29/2023 | 7/11/2023 | 13.00 | 7/11/2023 | 12.00 | Residential Sales | $193.09 | 2,317.08 |
| 6/29/2023 | 7/12/2023 | 14.00 | 7/12/2023 | 13.00 | Residential Sales | $1,374.59 | 17,869.67 |
| 6/29/2023 | 6/30/2023 | 2.00 | 6/30/2023 | 1.00 | Other Sales to Public Authority | $30,027.59 | 30,027.59 |
| 6/29/2023 | 8/8/2023 | 41.00 | 8/8/2023 | 40.00 | Residential Sales | $112.79 | 4,511.60 |
| 6/29/2023 | 8/9/2023 | 42.00 | 8/9/2023 | 41.00 | Commercial Sales | $1,022.64 | 41,928.24 |
| 6/29/2023 | 7/10/2023 | 12.00 | 7/10/2023 | 11.00 | Other Sales to Public Authority | $18,759.69 | 206,356.59 |
| 6/29/2023 | 7/11/2023 | 13.00 | 7/11/2023 | 12.00 | Other Sales to Public Authority | $135.20 | 1,622.40 |
| 6/29/2023 | 7/12/2023 | 14.00 | 7/12/2023 | 13.00 | Other Sales to Public Authority | $619.47 | 8,053.11 |
| 6/29/2023 | 7/31/2023 | 33.00 | 7/31/2023 | 32.00 | Residential Sales | $27.39 | 876.48 |
| 6/29/2023 | 8/7/2023 | 40.00 | 8/7/2023 | 39.00 | Other Sales to Public Authority | $201.04 | 7,840.56 |
| 6/29/2023 | 7/3/2023 | 5.00 | 7/3/2023 | 4.00 | Industrial Service | $152,000.45 | 608,001.80 |
| 6/29/2023 | 7/3/2023 | 5.00 | 7/3/2023 | 4.00 | Commercial Sales | $385,195.30 | 1,540,781.20 |
| 6/29/2023 | 7/5/2023 | 7.00 | 7/5/2023 | 6.00 | Industrial Service | $6,394.07 | 38,364.42 |
| 6/29/2023 | 7/3/2023 | 5.00 | 7/3/2023 | 4.00 | Residential Sales | $24,543.05 | 98,172.20 |
| 6/29/2023 | 5/31/2024 | 338.00 | 5/31/2024 | 337.00 | Residential Sales | $90.79 | 30,596.23 |
| 6/29/2023 | 7/5/2023 | 7.00 | 7/5/2023 | 6.00 | Commercial Sales | $19,169.30 | 115,015.80 |
| 6/29/2023 | 7/6/2023 | 8.00 | 7/6/2023 | 7.00 | Commercial Sales | $3,911.75 | 27,382.25 |
| 6/29/2023 | 7/5/2023 | 7.00 | 7/5/2023 | 6.00 | Residential Sales | $1,610.05 | 9,660.30 |
| 6/29/2023 | 6/29/2023 | 1.00 | 6/29/2023 | 0.00 | Commercial Sales | $3,293.90 | - |
| 6/29/2023 | 7/6/2023 | 8.00 | 7/6/2023 | 7.00 | Residential Sales | $478.65 | 3,350.55 |
| 6/29/2023 | 7/7/2023 | 9.00 | 7/7/2023 | 8.00 | Commercial Sales | $16,550.26 | 132,402.08 |
| 6/29/2023 | 6/29/2023 | 1.00 | 6/29/2023 | 0.00 | Residential Sales | $1,676.39 | - |
| 6/29/2023 | 7/7/2023 | 9.00 | 7/7/2023 | 8.00 | Residential Sales | $292.98 | 2,343.84 |
| 6/29/2023 | 7/21/2023 | 23.00 | 7/21/2023 | 22.00 | Residential Sales | $117.94 | 2,594.68 |
| 6/30/2023 | 7/27/2023 | 28.00 | 7/27/2023 | 27.00 | Residential Sales | $2.54 | 68.58 |
| 6/30/2023 | 7/11/2023 | 12.00 | 7/11/2023 | 11.00 | Commercial Sales | $122.98 | 1,352.78 |
| 6/30/2023 | 7/10/2023 | 11.00 | 7/10/2023 | 10.00 | Residential Sales | $18.46 | 184.60 |
| 6/30/2023 | 7/3/2023 | 4.00 | 7/3/2023 | 3.00 | Commercial Sales | $2,114.78 | 6,344.34 |
| 6/30/2023 | 7/3/2023 | 4.00 | 7/3/2023 | 3.00 | Residential Sales | $12,247.43 | 36,742.29 |
| 6/30/2023 | 7/5/2023 | 6.00 | 7/5/2023 | 5.00 | Commercial Sales | $27.18 | 135.90 |
| 6/30/2023 | 7/5/2023 | 6.00 | 7/5/2023 | 5.00 | Residential Sales | $5,662.61 | 28,313.05 |
| 6/30/2023 | 7/6/2023 | 7.00 | 7/6/2023 | 6.00 | Residential Sales | $25.25 | 151.50 |
| 6/30/2023 | 7/7/2023 | 8.00 | 7/7/2023 | 7.00 | Commercial Sales | $71.86 | 503.02 |
| 6/30/2023 | 7/7/2023 | 8.00 | 7/7/2023 | 7.00 | Residential Sales | $191.66 | 1,341.62 |
| 6/30/2023 | 7/21/2023 | 22.00 | 7/21/2023 | 21.00 | Residential Sales | $83.28 | 1,748.88 |
| 7/1/2023 | 7/5/2023 | 5.00 | 7/5/2023 | 4.00 | Residential Sales | $583,552.91 | 2,334,211.64 |
| 7/1/2023 | 12/27/2023 | 180.00 | 12/27/2023 | 179.00 | Residential Sales | $17.60 | 3,150.40 |
| 7/1/2023 | 7/3/2023 | 3.00 | 7/3/2023 | 2.00 | Industrial Service | $376,511.07 | 753,022.14 |
| 7/1/2023 | 7/6/2023 | 6.00 | 7/6/2023 | 5.00 | Residential Sales | $3,574.84 | 17,874.20 |
| 7/1/2023 | 7/3/2023 | 3.00 | 7/3/2023 | 2.00 | Commercial Sales | $38,835.29 | 77,670.58 |
| 7/1/2023 | 7/20/2023 | 20.00 | 7/20/2023 | 19.00 | Residential Sales | $13.88 | 263.72 |
| 7/1/2023 | 10/9/2023 | 101.00 | 10/9/2023 | 100.00 | Commercial Sales | $18.76 | 1,876.00 |
| 7/1/2023 | 7/21/2023 | 21.00 | 7/21/2023 | 20.00 | Residential Sales | $1,435.54 | 28,710.80 |
| 7/1/2023 | 7/7/2023 | 7.00 | 7/7/2023 | 6.00 | Residential Sales | $918.95 | 5,513.70 |
| 7/1/2023 | 7/5/2023 | 5.00 | 7/5/2023 | 4.00 | Industrial Service | $254,758.26 | 1,019,033.04 |
| 7/1/2023 | 7/5/2023 | 5.00 | 7/5/2023 | 4.00 | Commercial Sales | $217,675.64 | 870,702.56 |
| 7/1/2023 | 7/6/2023 | 6.00 | 7/6/2023 | 5.00 | Industrial Service | $1,080.83 | 5,404.15 |
| 7/1/2023 | 7/3/2023 | 3.00 | 7/3/2023 | 2.00 | Other Sales to Public Authority | $21,701.50 | 43,403.00 |
| 7/1/2023 | 9/21/2023 | 83.00 | 9/21/2023 | 82.00 | Commercial Sales | $379.63 | 31,129.66 |
| 7/1/2023 | 7/6/2023 | 6.00 | 7/6/2023 | 5.00 | Commercial Sales | $44,323.25 | 221,616.25 |
| 7/1/2023 | 7/7/2023 | 7.00 | 7/7/2023 | 6.00 | Industrial Service | $30,706.49 | 184,238.94 |
| 7/1/2023 | 10/12/2023 | 104.00 | 10/12/2023 | 103.00 | Residential Sales | $24.03 | 2,475.09 |
| 7/1/2023 | 8/17/2023 | 48.00 | 8/17/2023 | 47.00 | Residential Sales | $264.54 | 12,433.38 |
| 7/1/2023 | 7/3/2023 | 3.00 | 7/3/2023 | 2.00 | Public Street & Highway Lighting | $105.49 | 210.98 |
| 7/1/2023 | 7/7/2023 | 7.00 | 7/7/2023 | 6.00 | Commercial Sales | $21,439.07 | 128,634.42 |
| 7/1/2023 | 7/5/2023 | 5.00 | 7/5/2023 | 4.00 | Other Sales to Public Authority | $280,455.40 | 1,121,821.60 |
| 7/1/2023 | 7/24/2023 | 24.00 | 7/24/2023 | 23.00 | Residential Sales | $40.03 | 920.69 |
| 7/1/2023 | 8/15/2023 | 46.00 | 8/15/2023 | 45.00 | Commercial Sales | $17.74 | 798.30 |
| 7/1/2023 | 7/6/2023 | 6.00 | 7/6/2023 | 5.00 | Other Sales to Public Authority | $40,114.41 | 200,572.05 |
| 7/1/2023 | 11/6/2023 | 129.00 | 11/6/2023 | 128.00 | Industrial Service | $558.83 | 71,530.24 |
| 7/1/2023 | 7/7/2023 | 7.00 | 7/7/2023 | 6.00 | Other Sales to Public Authority | $12,633.14 | 75,798.84 |
| 7/1/2023 | 7/10/2023 | 10.00 | 7/10/2023 | 9.00 | Residential Sales | $540.34 | 4,863.06 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 7/1/2023 | 7/27/2023 | 27.00 | 7/27/2023 | 26.00 | Residential Sales | $234.66 | 6,101.16 |
| 7/1/2023 | 9/26/2023 | 88.00 | 9/26/2023 | 87.00 | Commercial Sales | $1,855.59 | 161,436.33 |
| 7/1/2023 | 3/20/2024 | 264.00 | 3/20/2024 | 263.00 | Commercial Sales | $17.24 | 4,534.12 |
| 7/1/2023 | 7/11/2023 | 11.00 | 7/11/2023 | 10.00 | Residential Sales | $280.84 | 2,808.40 |
| 7/1/2023 | 7/28/2023 | 28.00 | 7/28/2023 | 27.00 | Residential Sales | $27.94 | 754.38 |
| 7/1/2023 | 7/12/2023 | 12.00 | 7/12/2023 | 11.00 | Residential Sales | $431.93 | 4,751.23 |
| 7/1/2023 | 8/4/2023 | 35.00 | 8/4/2023 | 34.00 | Commercial Sales | $26,450.66 | 899,322.44 |
| 7/1/2023 | 7/27/2023 | 27.00 | 7/27/2023 | 26.00 | Commercial Sales | $50.69 | 1,317.94 |
| 7/1/2023 | 7/10/2023 | 10.00 | 7/10/2023 | 9.00 | Commercial Sales | $10,637.38 | 95,736.42 |
| 7/1/2023 | 8/21/2023 | 52.00 | 8/21/2023 | 51.00 | Residential Sales | $81.08 | 4,135.08 |
| 7/1/2023 | 7/12/2023 | 12.00 | 7/12/2023 | 11.00 | Industrial Service | $430.45 | 4,734.95 |
| 7/1/2023 | 7/11/2023 | 11.00 | 7/11/2023 | 10.00 | Commercial Sales | $147.88 | 1,478.80 |
| 7/1/2023 | 7/14/2023 | 14.00 | 7/14/2023 | 13.00 | Residential Sales | $203.41 | 2,644.33 |
| 7/1/2023 | 7/28/2023 | 28.00 | 7/28/2023 | 27.00 | Commercial Sales | $2,280.45 | 61,572.15 |
| 7/1/2023 | 7/12/2023 | 12.00 | 7/12/2023 | 11.00 | Commercial Sales | $14,993.57 | 164,929.27 |
| 7/1/2023 | 8/23/2023 | 54.00 | 8/23/2023 | 53.00 | Residential Sales | $123.05 | 6,521.65 |
| 7/1/2023 | 12/7/2023 | 160.00 | 12/7/2023 | 159.00 | Residential Sales | $106.07 | 16,865.13 |
| 7/1/2023 | 9/1/2023 | 63.00 | 9/1/2023 | 62.00 | Residential Sales | $27.32 | 1,693.84 |
| 7/1/2023 | 9/2/2023 | 64.00 | 9/2/2023 | 63.00 | Residential Sales | $27.66 | 1,742.58 |
| 7/1/2023 | 7/12/2023 | 12.00 | 7/12/2023 | 11.00 | Other Sales to Public Authority | $235.20 | 2,587.20 |
| 7/1/2023 | 7/3/2023 | 3.00 | 7/3/2023 | 2.00 | Residential Sales | $428.74 | 857.48 |
| 7/1/2023 | 7/17/2023 | 17.00 | 7/17/2023 | 16.00 | Commercial Sales | $26,484.12 | 423,745.92 |
| 7/1/2023 | 8/28/2023 | 59.00 | 8/28/2023 | 58.00 | Residential Sales | $108.32 | 6,282.56 |
| 7/1/2023 | 9/20/2023 | 82.00 | 9/20/2023 | 81.00 | Residential Sales | $17.04 | 1,380.24 |
| 7/1/2023 | 9/6/2023 | 68.00 | 9/6/2023 | 67.00 | Residential Sales | $5.65 | 378.55 |
| 7/2/2023 | 7/18/2023 | 17.00 | 7/18/2023 | 16.00 | Residential Sales | $10.35 | 165.60 |
| 7/2/2023 | 7/3/2023 | 2.00 | 7/3/2023 | 1.00 | Residential Sales | $2.28 | 2.28 |
| 7/2/2023 | 7/5/2023 | 4.00 | 7/5/2023 | 3.00 | Residential Sales | $4,063.65 | 12,190.95 |
| 7/2/2023 | 7/19/2023 | 18.00 | 7/19/2023 | 17.00 | Commercial Sales | $100.23 | 1,703.91 |
| 7/2/2023 | 7/6/2023 | 5.00 | 7/6/2023 | 4.00 | Residential Sales | $157.13 | 628.52 |
| 7/2/2023 | 7/20/2023 | 19.00 | 7/20/2023 | 18.00 | Residential Sales | $68.50 | 1,233.00 |
| 7/2/2023 | 8/28/2023 | 58.00 | 8/28/2023 | 57.00 | Commercial Sales | $54.46 | 3,104.22 |
| 7/2/2023 | 7/5/2023 | 4.00 | 7/5/2023 | 3.00 | Commercial Sales | $509.28 | 1,527.84 |
| 7/2/2023 | 7/6/2023 | 5.00 | 7/6/2023 | 4.00 | Commercial Sales | $37.62 | 150.48 |
| 7/2/2023 | 7/25/2023 | 24.00 | 7/25/2023 | 23.00 | Residential Sales | $36.13 | 830.99 |
| 7/2/2023 | 7/26/2023 | 25.00 | 7/26/2023 | 24.00 | Residential Sales | $0.57 | 13.68 |
| 7/2/2023 | 7/11/2023 | 10.00 | 7/11/2023 | 9.00 | Residential Sales | $26.46 | 238.14 |
| 7/2/2023 | 7/13/2023 | 12.00 | 7/13/2023 | 11.00 | Residential Sales | $13.88 | 152.68 |
| 7/2/2023 | 7/27/2023 | 26.00 | 7/27/2023 | 25.00 | Commercial Sales | $47.29 | 1,182.25 |
| 7/3/2023 | 7/12/2023 | 10.00 | 7/12/2023 | 9.00 | Residential Sales | $1,016.75 | 9,150.75 |
| 7/3/2023 | 9/14/2023 | 74.00 | 9/14/2023 | 73.00 | Residential Sales | $47.66 | 3,479.18 |
| 7/3/2023 | 7/13/2023 | 11.00 | 7/13/2023 | 10.00 | Residential Sales | $292.18 | 2,921.80 |
| 7/3/2023 | 7/10/2023 | 8.00 | 7/10/2023 | 7.00 | Commercial Sales | $1,558.76 | 10,911.32 |
| 7/3/2023 | 8/4/2023 | 33.00 | 8/4/2023 | 32.00 | Commercial Sales | $170.35 | 5,451.20 |
| 7/3/2023 | 7/12/2023 | 10.00 | 7/12/2023 | 9.00 | Commercial Sales | $2,787.89 | 25,091.01 |
| 7/3/2023 | 7/12/2023 | 10.00 | 7/12/2023 | 9.00 | Other Sales to Public Authority | $58.95 | 530.55 |
| 7/3/2023 | 8/21/2023 | 50.00 | 8/21/2023 | 49.00 | Other Sales to Public Authority | $26,748.64 | 1,310,683.36 |
| 7/3/2023 | 11/30/2023 | 151.00 | 11/30/2023 | 150.00 | Residential Sales | $152.93 | 22,939.50 |
| 7/3/2023 | 7/3/2023 | 1.00 | 7/3/2023 | 0.00 | Residential Sales | $44.44 | - |
| 7/3/2023 | 7/5/2023 | 3.00 | 7/5/2023 | 2.00 | Residential Sales | $584,568.12 | 1,169,136.24 |
| 7/3/2023 | 7/3/2023 | 1.00 | 7/3/2023 | 0.00 | Commercial Sales | $161.37 | - |
| 7/3/2023 | 7/6/2023 | 4.00 | 7/6/2023 | 3.00 | Residential Sales | $3,112.31 | 9,336.93 |
| 7/3/2023 | 7/7/2023 | 5.00 | 7/7/2023 | 4.00 | Residential Sales | $506.01 | 2,024.04 |
| 7/3/2023 | 7/5/2023 | 3.00 | 7/5/2023 | 2.00 | Industrial Service | $9,643.60 | 19,287.20 |
| 7/3/2023 | 8/15/2023 | 44.00 | 8/15/2023 | 43.00 | Residential Sales | $118.59 | 5,099.37 |
| 7/3/2023 | 7/21/2023 | 19.00 | 7/21/2023 | 18.00 | Residential Sales | $153.41 | 2,761.38 |
| 7/3/2023 | 7/5/2023 | 3.00 | 7/5/2023 | 2.00 | Commercial Sales | $100,250.50 | 200,501.00 |
| 7/3/2023 | 7/6/2023 | 4.00 | 7/6/2023 | 3.00 | Industrial Service | $13,951.04 | 41,853.12 |
| 7/3/2023 | 7/3/2023 | 1.00 | 7/3/2023 | 0.00 | Other Sales to Public Authority | $221.37 | - |
| 7/3/2023 | 7/6/2023 | 4.00 | 7/6/2023 | 3.00 | Commercial Sales | $29,117.10 | 87,351.30 |
| 7/3/2023 | 7/5/2023 | 3.00 | 7/5/2023 | 2.00 | Other Sales to Public Authority | $14,563.42 | 29,126.84 |
| 7/3/2023 | 7/7/2023 | 5.00 | 7/7/2023 | 4.00 | Commercial Sales | $1,050.45 | 4,201.80 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 7/3/2023 | 7/24/2023 | 22.00 | 7/24/2023 | 21.00 | Residential Sales | $393.99 | 8,273.79 |
| 7/3/2023 | 7/6/2023 | 4.00 | 7/6/2023 | 3.00 | Other Sales to Public Authority | $2,164.27 | 6,492.81 |
| 7/3/2023 | 7/25/2023 | 23.00 | 7/25/2023 | 22.00 | Residential Sales | $56.33 | 1,239.26 |
| 7/3/2023 | 7/10/2023 | 8.00 | 7/10/2023 | 7.00 | Residential Sales | $671.75 | 4,702.25 |
| 7/3/2023 | 7/11/2023 | 9.00 | 7/11/2023 | 8.00 | Residential Sales | $590.40 | 4,723.20 |
| 7/4/2023 | 7/6/2023 | 3.00 | 7/6/2023 | 2.00 | Residential Sales | $692.10 | 1,384.20 |
| 7/4/2023 | 7/21/2023 | 18.00 | 7/21/2023 | 17.00 | Residential Sales | $3.24 | 55.08 |
| 7/4/2023 | 7/7/2023 | 4.00 | 7/7/2023 | 3.00 | Residential Sales | $93.64 | 280.92 |
| 7/4/2023 | 7/10/2023 | 7.00 | 7/10/2023 | 6.00 | Residential Sales | $251.65 | 1,509.90 |
| 7/4/2023 | 7/11/2023 | 8.00 | 7/11/2023 | 7.00 | Residential Sales | $62.49 | 437.43 |
| 7/4/2023 | 7/12/2023 | 9.00 | 7/12/2023 | 8.00 | Residential Sales | $38.21 | 305.68 |
| 7/4/2023 | 7/5/2023 | 2.00 | 7/5/2023 | 1.00 | Residential Sales | $4,818.82 | 4,818.82 |
| 7/4/2023 | 7/6/2023 | 3.00 | 7/6/2023 | 2.00 | Commercial Sales | $44.52 | 89.04 |
| 7/5/2023 | 7/18/2023 | 14.00 | 7/18/2023 | 13.00 | Residential Sales | $46.13 | 599.69 |
| 7/5/2023 | 7/19/2023 | 15.00 | 7/19/2023 | 14.00 | Residential Sales | $129.47 | 1,812.58 |
| 7/5/2023 | 8/28/2023 | 55.00 | 8/28/2023 | 54.00 | Residential Sales | $132.53 | 7,156.62 |
| 7/5/2023 | 7/5/2023 | 1.00 | 7/5/2023 | 0.00 | Commercial Sales | $121.64 | - |
| 7/5/2023 | 7/6/2023 | 2.00 | 7/6/2023 | 1.00 | Industrial Service | $6,992.21 | 6,992.21 |
| 7/5/2023 | 7/6/2023 | 2.00 | 7/6/2023 | 1.00 | Commercial Sales | $203,045.48 | 203,045.48 |
| 7/5/2023 | 7/5/2023 | 1.00 | 7/5/2023 | 0.00 | Residential Sales | $59.39 | - |
| 7/5/2023 | 7/20/2023 | 16.00 | 7/20/2023 | 15.00 | Commercial Sales | $27.82 | 417.30 |
| 7/5/2023 | 9/7/2023 | 65.00 | 9/7/2023 | 64.00 | Residential Sales | $14.11 | 903.04 |
| 7/5/2023 | 7/6/2023 | 2.00 | 7/6/2023 | 1.00 | Residential Sales | $602,710.35 | 602,710.35 |
| 7/5/2023 | 7/7/2023 | 3.00 | 7/7/2023 | 2.00 | Commercial Sales | $64,421.94 | 128,843.88 |
| 7/5/2023 | 7/5/2023 | 1.00 | 7/5/2023 | 0.00 | Other Sales to Public Authority | $4,139.52 | - |
| 7/5/2023 | 7/21/2023 | 17.00 | 7/21/2023 | 16.00 | Commercial Sales | $302.81 | 4,844.96 |
| 7/5/2023 | 7/7/2023 | 3.00 | 7/7/2023 | 2.00 | Residential Sales | $6,459.22 | 12,918.44 |
| 7/5/2023 | 7/21/2023 | 17.00 | 7/21/2023 | 16.00 | Residential Sales | $507.04 | 8,112.64 |
| 7/5/2023 | 7/6/2023 | 2.00 | 7/6/2023 | 1.00 | Other Sales to Public Authority | $37,239.10 | 37,239.10 |
| 7/5/2023 | 8/15/2023 | 42.00 | 8/15/2023 | 41.00 | Residential Sales | $39.27 | 1,610.07 |
| 7/5/2023 | 7/7/2023 | 3.00 | 7/7/2023 | 2.00 | Other Sales to Public Authority | $2,741.92 | 5,483.84 |
| 7/5/2023 | 7/10/2023 | 6.00 | 7/10/2023 | 5.00 | Commercial Sales | $97,101.46 | 485,507.30 |
| 7/5/2023 | 8/3/2023 | 30.00 | 8/3/2023 | 29.00 | Residential Sales | $13.88 | 402.52 |
| 7/5/2023 | 8/4/2023 | 31.00 | 8/4/2023 | 30.00 | Commercial Sales | $114.23 | 3,426.90 |
| 7/5/2023 | 7/11/2023 | 7.00 | 7/11/2023 | 6.00 | Commercial Sales | $1,854.71 | 11,128.26 |
| 7/5/2023 | 7/10/2023 | 6.00 | 7/10/2023 | 5.00 | Residential Sales | $2,265.50 | 11,327.50 |
| 7/5/2023 | 7/12/2023 | 8.00 | 7/12/2023 | 7.00 | Commercial Sales | $3,950.43 | 27,653.01 |
| 7/5/2023 | 7/11/2023 | 7.00 | 7/11/2023 | 6.00 | Residential Sales | $404.83 | 2,428.98 |
| 7/5/2023 | 7/13/2023 | 9.00 | 7/13/2023 | 8.00 | Industrial Service | $279.97 | 2,239.76 |
| 7/5/2023 | 7/10/2023 | 6.00 | 7/10/2023 | 5.00 | Other Sales to Public Authority | $49.62 | 248.10 |
| 7/5/2023 | 7/12/2023 | 8.00 | 7/12/2023 | 7.00 | Residential Sales | $63.58 | 445.06 |
| 7/5/2023 | 7/13/2023 | 9.00 | 7/13/2023 | 8.00 | Commercial Sales | $626.98 | 5,015.84 |
| 7/5/2023 | 8/7/2023 | 34.00 | 8/7/2023 | 33.00 | Residential Sales | $10.42 | 343.86 |
| 7/5/2023 | 3/25/2024 | 265.00 | 3/25/2024 | 264.00 | Residential Sales | $20.48 | 5,406.72 |
| 7/5/2023 | 7/13/2023 | 9.00 | 7/13/2023 | 8.00 | Residential Sales | $3.92 | 31.36 |
| 7/5/2023 | 7/14/2023 | 10.00 | 7/14/2023 | 9.00 | Residential Sales | $441.40 | 3,972.60 |
| 7/5/2023 | 7/17/2023 | 13.00 | 7/17/2023 | 12.00 | Commercial Sales | $192.30 | 2,307.60 |
| 7/5/2023 | 7/17/2023 | 13.00 | 7/17/2023 | 12.00 | Residential Sales | $101.41 | 1,216.92 |
| 7/5/2023 | 10/20/2023 | 108.00 | 10/20/2023 | 107.00 | Residential Sales | $49.61 | 5,308.27 |
| 7/6/2023 | 7/13/2023 | 8.00 | 7/13/2023 | 7.00 | Residential Sales | $211.07 | 1,477.49 |
| 7/6/2023 | 8/7/2023 | 33.00 | 8/7/2023 | 32.00 | Residential Sales | $1.85 | 59.20 |
| 7/6/2023 | 7/14/2023 | 9.00 | 7/14/2023 | 8.00 | Residential Sales | $250.28 | 2,002.24 |
| 7/6/2023 | 10/4/2023 | 91.00 | 10/4/2023 | 90.00 | Commercial Sales | $31.35 | 2,821.50 |
| 7/6/2023 | 7/14/2023 | 9.00 | 7/14/2023 | 8.00 | Other Sales to Public Authority | $968.72 | 7,749.76 |
| 7/6/2023 | 7/17/2023 | 12.00 | 7/17/2023 | 11.00 | Industrial Service | $122.22 | 1,344.42 |
| 7/6/2023 | 7/17/2023 | 12.00 | 7/17/2023 | 11.00 | Commercial Sales | $4,756.83 | 52,325.13 |
| 7/6/2023 | 7/17/2023 | 12.00 | 7/17/2023 | 11.00 | Residential Sales | $1,568.21 | 17,250.31 |
| 7/6/2023 | 7/18/2023 | 13.00 | 7/18/2023 | 12.00 | Commercial Sales | $13,144.04 | 157,728.48 |
| 7/6/2023 | 7/19/2023 | 14.00 | 7/19/2023 | 13.00 | Commercial Sales | $225.18 | 2,927.34 |
| 7/6/2023 | 7/17/2023 | 12.00 | 7/17/2023 | 11.00 | Other Sales to Public Authority | $15,982.45 | 175,806.95 |
| 7/6/2023 | 7/18/2023 | 13.00 | 7/18/2023 | 12.00 | Residential Sales | $35.05 | 420.60 |
| 7/6/2023 | 7/19/2023 | 14.00 | 7/19/2023 | 13.00 | Residential Sales | $68.89 | 895.57 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 7/6/2023 | 9/6/2023 | 63.00 | 9/6/2023 | 62.00 | Residential Sales | $13.99 | 867.38 |
| 7/6/2023 | 7/6/2023 | 1.00 | 7/6/2023 | 0.00 | Commercial Sales | $5,433.49 | - |
| 7/6/2023 | 7/7/2023 | 2.00 | 7/7/2023 | 1.00 | Industrial Service | $634.94 | 634.94 |
| 7/6/2023 | 8/14/2023 | 40.00 | 8/14/2023 | 39.00 | Commercial Sales | $367.22 | 14,321.58 |
| 7/6/2023 | 7/7/2023 | 2.00 | 7/7/2023 | 1.00 | Commercial Sales | $164,383.55 | 164,383.55 |
| 7/6/2023 | 7/21/2023 | 16.00 | 7/21/2023 | 15.00 | Commercial Sales | $653.80 | 9,807.00 |
| 7/6/2023 | 7/6/2023 | 1.00 | 7/6/2023 | 0.00 | Residential Sales | $1,192.75 | - |
| 7/6/2023 | 9/8/2023 | 65.00 | 9/8/2023 | 64.00 | Residential Sales | $34.21 | 2,189.44 |
| 7/6/2023 | 7/7/2023 | 2.00 | 7/7/2023 | 1.00 | Residential Sales | $949,502.50 | 949,502.50 |
| 7/6/2023 | 7/21/2023 | 16.00 | 7/21/2023 | 15.00 | Residential Sales | $1,287.52 | 19,312.80 |
| 7/6/2023 | 12/13/2023 | 161.00 | 12/13/2023 | 160.00 | Commercial Sales | $40.23 | 6,436.80 |
| 7/6/2023 | 8/15/2023 | 41.00 | 8/15/2023 | 40.00 | Residential Sales | $197.83 | 7,913.20 |
| 7/6/2023 | 7/6/2023 | 1.00 | 7/6/2023 | 0.00 | Other Sales to Public Authority | $29.34 | - |
| 7/6/2023 | 7/7/2023 | 2.00 | 7/7/2023 | 1.00 | Other Sales to Public Authority | $24,373.65 | 24,373.65 |
| 7/6/2023 | 11/6/2023 | 124.00 | 11/6/2023 | 123.00 | Commercial Sales | $196.35 | 24,151.05 |
| 7/6/2023 | 7/24/2023 | 19.00 | 7/24/2023 | 18.00 | Commercial Sales | $251.62 | 4,529.16 |
| 7/6/2023 | 10/12/2023 | 99.00 | 10/12/2023 | 98.00 | Residential Sales | $96.43 | 9,450.14 |
| 7/6/2023 | 7/24/2023 | 19.00 | 7/24/2023 | 18.00 | Residential Sales | $215.38 | 3,876.84 |
| 7/6/2023 | 7/10/2023 | 5.00 | 7/10/2023 | 4.00 | Industrial Service | $390.75 | 1,563.00 |
| 7/6/2023 | 7/10/2023 | 5.00 | 7/10/2023 | 4.00 | Commercial Sales | $45,636.83 | 182,547.32 |
| 7/6/2023 | 7/10/2023 | 5.00 | 7/10/2023 | 4.00 | Residential Sales | $12,838.96 | 51,355.84 |
| 7/6/2023 | 7/11/2023 | 6.00 | 7/11/2023 | 5.00 | Commercial Sales | $12,783.32 | 63,916.60 |
| 7/6/2023 | 9/29/2023 | 86.00 | 9/29/2023 | 85.00 | Residential Sales | $138.97 | 11,812.45 |
| 7/6/2023 | 8/4/2023 | 30.00 | 8/4/2023 | 29.00 | Residential Sales | $81.25 | 2,356.25 |
| 7/6/2023 | 7/10/2023 | 5.00 | 7/10/2023 | 4.00 | Other Sales to Public Authority | $1,814.29 | 7,257.16 |
| 7/6/2023 | 7/12/2023 | 7.00 | 7/12/2023 | 6.00 | Commercial Sales | $410.95 | 2,465.70 |
| 7/6/2023 | 7/11/2023 | 6.00 | 7/11/2023 | 5.00 | Residential Sales | $287.51 | 1,437.55 |
| 7/6/2023 | 7/13/2023 | 8.00 | 7/13/2023 | 7.00 | Commercial Sales | $1,209.83 | 8,468.81 |
| 7/6/2023 | 7/12/2023 | 7.00 | 7/12/2023 | 6.00 | Residential Sales | $386.44 | 2,318.64 |
| 7/7/2023 | 7/25/2023 | 19.00 | 7/25/2023 | 18.00 | Residential Sales | $185.29 | 3,335.22 |
| 7/7/2023 | 7/10/2023 | 4.00 | 7/10/2023 | 3.00 | Industrial Service | $7,776.45 | 23,329.35 |
| 7/7/2023 | 8/2/2023 | 27.00 | 8/2/2023 | 26.00 | Residential Sales | $59.43 | 1,545.18 |
| 7/7/2023 | 8/3/2023 | 28.00 | 8/3/2023 | 27.00 | Commercial Sales | $141.82 | 3,829.14 |
| 7/7/2023 | 7/10/2023 | 4.00 | 7/10/2023 | 3.00 | Commercial Sales | $372,813.46 | 1,118,440.38 |
| 7/7/2023 | 7/11/2023 | 5.00 | 7/11/2023 | 4.00 | Industrial Service | $939.62 | 3,758.48 |
| 7/7/2023 | 7/26/2023 | 20.00 | 7/26/2023 | 19.00 | Residential Sales | $152.46 | 2,896.74 |
| 7/7/2023 | 7/10/2023 | 4.00 | 7/10/2023 | 3.00 | Residential Sales | $780,618.85 | 2,341,856.55 |
| 7/7/2023 | 7/11/2023 | 5.00 | 7/11/2023 | 4.00 | Commercial Sales | $123,837.31 | 495,349.24 |
| 7/7/2023 | 7/28/2023 | 22.00 | 7/28/2023 | 21.00 | Commercial Sales | $697.07 | 14,638.47 |
| 7/7/2023 | 7/12/2023 | 6.00 | 7/12/2023 | 5.00 | Commercial Sales | $44,761.75 | 223,808.75 |
| 7/7/2023 | 7/10/2023 | 4.00 | 7/10/2023 | 3.00 | Other Sales to Public Authority | $17,846.10 | 53,538.30 |
| 7/7/2023 | 7/11/2023 | 5.00 | 7/11/2023 | 4.00 | Residential Sales | $3,661.43 | 14,645.72 |
| 7/7/2023 | 7/13/2023 | 7.00 | 7/13/2023 | 6.00 | Commercial Sales | $12,093.50 | 72,561.00 |
| 7/7/2023 | 7/11/2023 | 5.00 | 7/11/2023 | 4.00 | Other Sales to Public Authority | $1,853.08 | 7,412.32 |
| 7/7/2023 | 7/12/2023 | 6.00 | 7/12/2023 | 5.00 | Residential Sales | $3,194.79 | 15,973.95 |
| 7/7/2023 | 3/25/2024 | 263.00 | 3/25/2024 | 262.00 | Commercial Sales | $34.49 | 9,036.38 |
| 7/7/2023 | 7/13/2023 | 7.00 | 7/13/2023 | 6.00 | Residential Sales | $1,005.46 | 6,032.76 |
| 7/7/2023 | 10/19/2023 | 105.00 | 10/19/2023 | 104.00 | Residential Sales | $38.92 | 4,047.68 |
| 7/7/2023 | 8/8/2023 | 33.00 | 8/8/2023 | 32.00 | Commercial Sales | $27.83 | 890.56 |
| 7/7/2023 | 7/14/2023 | 8.00 | 7/14/2023 | 7.00 | Residential Sales | $40.59 | 284.13 |
| 7/7/2023 | 7/13/2023 | 7.00 | 7/13/2023 | 6.00 | Other Sales to Public Authority | $6,843.16 | 41,058.96 |
| 7/7/2023 | 12/6/2023 | 153.00 | 12/6/2023 | 152.00 | Residential Sales | $132.35 | 20,117.20 |
| 7/7/2023 | 8/23/2023 | 48.00 | 8/23/2023 | 47.00 | Residential Sales | $92.98 | 4,370.06 |
| 7/7/2023 | 7/18/2023 | 12.00 | 7/18/2023 | 11.00 | Industrial Service | $309.85 | 3,408.35 |
| 7/7/2023 | 7/18/2023 | 12.00 | 7/18/2023 | 11.00 | Commercial Sales | $13,007.94 | 143,087.34 |
| 7/7/2023 | 7/17/2023 | 11.00 | 7/17/2023 | 10.00 | Residential Sales | $481.14 | 4,811.40 |
| 7/7/2023 | 7/31/2023 | 25.00 | 7/31/2023 | 24.00 | Residential Sales | $139.91 | 3,357.84 |
| 7/7/2023 | 9/19/2023 | 75.00 | 9/19/2023 | 74.00 | Residential Sales | $106.76 | 7,900.24 |
| 7/7/2023 | 7/19/2023 | 13.00 | 7/19/2023 | 12.00 | Commercial Sales | $9,629.22 | 115,550.64 |
| 7/7/2023 | 8/10/2023 | 35.00 | 8/10/2023 | 34.00 | Residential Sales | $20.98 | 713.32 |
| 7/7/2023 | 10/9/2023 | 95.00 | 10/9/2023 | 94.00 | Commercial Sales | $48.35 | 4,544.90 |
| 7/7/2023 | 7/18/2023 | 12.00 | 7/18/2023 | 11.00 | Other Sales to Public Authority | $257.15 | 2,828.65 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 7/7/2023 | 8/11/2023 | 36.00 | 8/11/2023 | 35.00 | Residential Sales | $171.82 | 6,013.70 |
| 7/7/2023 | 7/20/2023 | 14.00 | 7/20/2023 | 13.00 | Commercial Sales | $1,514.41 | 19,687.33 |
| 7/7/2023 | 8/14/2023 | 39.00 | 8/14/2023 | 38.00 | Commercial Sales | $166.65 | 6,332.70 |
| 7/7/2023 | 9/7/2023 | 63.00 | 9/7/2023 | 62.00 | Residential Sales | $50.70 | 3,143.40 |
| 7/7/2023 | 7/21/2023 | 15.00 | 7/21/2023 | 14.00 | Commercial Sales | $7,585.88 | 106,202.32 |
| 7/7/2023 | 7/7/2023 | 1.00 | 7/7/2023 | 0.00 | Commercial Sales | $2,536.74 | - |
| 7/7/2023 | 1/30/2024 | 208.00 | 1/30/2024 | 207.00 | Residential Sales | $130.03 | 26,916.21 |
| 7/7/2023 | 8/15/2023 | 40.00 | 8/15/2023 | 39.00 | Commercial Sales | $248.30 | 9,683.70 |
| 7/7/2023 | 12/11/2023 | 158.00 | 12/11/2023 | 157.00 | Residential Sales | $60.97 | 9,572.29 |
| 7/7/2023 | 7/21/2023 | 15.00 | 7/21/2023 | 14.00 | Residential Sales | $1,954.58 | 27,364.12 |
| 7/7/2023 | 7/7/2023 | 1.00 | 7/7/2023 | 0.00 | Residential Sales | $1,105.66 | - |
| 7/7/2023 | 10/27/2023 | 113.00 | 10/27/2023 | 112.00 | Residential Sales | $207.10 | 23,195.20 |
| 7/7/2023 | 8/15/2023 | 40.00 | 8/15/2023 | 39.00 | Residential Sales | $227.94 | 8,889.66 |
| 7/7/2023 | 10/12/2023 | 98.00 | 10/12/2023 | 97.00 | Commercial Sales | $54.92 | 5,327.24 |
| 7/7/2023 | 7/7/2023 | 1.00 | 7/7/2023 | 0.00 | Other Sales to Public Authority | $17.85 | - |
| 7/7/2023 | 7/7/2023 | 1.00 | 7/7/2023 | 0.00 | Public Street & Highway Lighting | $52.40 | - |
| 7/7/2023 | 7/24/2023 | 18.00 | 7/24/2023 | 17.00 | Residential Sales | $284.46 | 4,835.82 |
| 7/7/2023 | 8/2/2023 | 27.00 | 8/2/2023 | 26.00 | Commercial Sales | $1,241.01 | 32,266.26 |
| 7/8/2023 | 7/10/2023 | 3.00 | 7/10/2023 | 2.00 | Residential Sales | $1,460.47 | 2,920.94 |
| 7/8/2023 | 7/14/2023 | 7.00 | 7/14/2023 | 6.00 | Residential Sales | $158.36 | 950.16 |
| 7/9/2023 | 7/21/2023 | 13.00 | 7/21/2023 | 12.00 | Residential Sales | $259.05 | 3,108.60 |
| 7/9/2023 | 8/16/2023 | 39.00 | 8/16/2023 | 38.00 | Residential Sales | $21.84 | 829.92 |
| 7/9/2023 | 7/10/2023 | 2.00 | 7/10/2023 | 1.00 | Commercial Sales | $337.63 | 337.63 |
| 7/9/2023 | 7/10/2023 | 2.00 | 7/10/2023 | 1.00 | Residential Sales | $2,832.33 | 2,832.33 |
| 7/9/2023 | 7/11/2023 | 3.00 | 7/11/2023 | 2.00 | Residential Sales | $410.93 | 821.86 |
| 7/9/2023 | 7/12/2023 | 4.00 | 7/12/2023 | 3.00 | Commercial Sales | $35.91 | 107.73 |
| 7/9/2023 | 7/13/2023 | 5.00 | 7/13/2023 | 4.00 | Commercial Sales | $95.29 | 381.16 |
| 7/9/2023 | 7/13/2023 | 5.00 | 7/13/2023 | 4.00 | Residential Sales | $14.96 | 59.84 |
| 7/9/2023 | 8/22/2023 | 45.00 | 8/22/2023 | 44.00 | Residential Sales | $9.71 | 427.24 |
| 7/9/2023 | 7/17/2023 | 9.00 | 7/17/2023 | 8.00 | Residential Sales | $144.74 | 1,157.92 |
| 7/10/2023 | 7/19/2023 | 10.00 | 7/19/2023 | 9.00 | Commercial Sales | $38,739.36 | 348,654.24 |
| 7/10/2023 | 7/19/2023 | 10.00 | 7/19/2023 | 9.00 | Residential Sales | $657.62 | 5,918.58 |
| 7/10/2023 | 7/19/2023 | 10.00 | 7/19/2023 | 9.00 | Other Sales to Public Authority | $167.41 | 1,506.69 |
| 7/10/2023 | 2/9/2024 | 215.00 | 2/9/2024 | 214.00 | Commercial Sales | $40.23 | 8,609.22 |
| 7/10/2023 | 8/15/2023 | 37.00 | 8/15/2023 | 36.00 | Commercial Sales | $171.77 | 6,183.72 |
| 7/10/2023 | 7/21/2023 | 12.00 | 7/21/2023 | 11.00 | Commercial Sales | $1,195.06 | 13,145.66 |
| 7/10/2023 | 7/12/2023 | 3.00 | 7/12/2023 | 2.00 | Company Use | $0.00 | - |
| 7/10/2023 | 7/21/2023 | 12.00 | 7/21/2023 | 11.00 | Residential Sales | $7,477.64 | 82,254.04 |
| 7/10/2023 | 8/15/2023 | 37.00 | 8/15/2023 | 36.00 | Residential Sales | $5.94 | 213.84 |
| 7/10/2023 | 7/24/2023 | 15.00 | 7/24/2023 | 14.00 | Commercial Sales | $138.73 | 1,942.22 |
| 7/10/2023 | 8/1/2023 | 23.00 | 8/1/2023 | 22.00 | Commercial Sales | $106.66 | 2,346.52 |
| 7/10/2023 | 7/24/2023 | 15.00 | 7/24/2023 | 14.00 | Residential Sales | $126.96 | 1,777.44 |
| 7/10/2023 | 7/25/2023 | 16.00 | 7/25/2023 | 15.00 | Residential Sales | $122.00 | 1,830.00 |
| 7/10/2023 | 7/11/2023 | 2.00 | 7/11/2023 | 1.00 | Industrial Service | $121,720.53 | 121,720.53 |
| 7/10/2023 | 7/10/2023 | 1.00 | 7/10/2023 | 0.00 | Commercial Sales | $13,192.83 | - |
| 7/10/2023 | 8/4/2023 | 26.00 | 8/4/2023 | 25.00 | Commercial Sales | $61.03 | 1,525.75 |
| 7/10/2023 | 9/11/2023 | 64.00 | 9/11/2023 | 63.00 | Residential Sales | $66.09 | 4,163.67 |
| 7/10/2023 | 7/27/2023 | 18.00 | 7/27/2023 | 17.00 | Commercial Sales | $840.99 | 14,296.83 |
| 7/10/2023 | 7/11/2023 | 2.00 | 7/11/2023 | 1.00 | Commercial Sales | $289,380.00 | 289,380.00 |
| 7/10/2023 | 7/12/2023 | 3.00 | 7/12/2023 | 2.00 | Industrial Service | $28,314.53 | 56,629.06 |
| 7/10/2023 | 7/10/2023 | 1.00 | 7/10/2023 | 0.00 | Residential Sales | $1,079.30 | - |
| 7/10/2023 | 7/26/2023 | 17.00 | 7/26/2023 | 16.00 | Other Sales to Public Authority | $60,988.64 | 975,818.24 |
| 7/10/2023 | 7/27/2023 | 18.00 | 7/27/2023 | 17.00 | Residential Sales | $254.01 | 4,318.17 |
| 7/10/2023 | 7/28/2023 | 19.00 | 7/28/2023 | 18.00 | Commercial Sales | $996.71 | 17,940.78 |
| 7/10/2023 | 7/11/2023 | 2.00 | 7/11/2023 | 1.00 | Residential Sales | $339,278.21 | 339,278.21 |
| 7/10/2023 | 7/12/2023 | 3.00 | 7/12/2023 | 2.00 | Commercial Sales | $138,795.91 | 277,591.82 |
| 7/10/2023 | 7/13/2023 | 4.00 | 7/13/2023 | 3.00 | Industrial Service | $10,721.02 | 32,163.06 |
| 7/10/2023 | 7/14/2023 | 5.00 | 7/14/2023 | 4.00 | Industrial Service | $11,505.63 | 46,022.52 |
| 7/10/2023 | 7/11/2023 | 2.00 | 7/11/2023 | 1.00 | Other Sales to Public Authority | $37,615.02 | 37,615.02 |
| 7/10/2023 | 7/13/2023 | 4.00 | 7/13/2023 | 3.00 | Commercial Sales | $101,270.24 | 303,810.72 |
| 7/10/2023 | 7/12/2023 | 3.00 | 7/12/2023 | 2.00 | Residential Sales | $1,037.45 | 2,074.90 |
| 7/10/2023 | 8/7/2023 | 29.00 | 8/7/2023 | 28.00 | Commercial Sales | $39.06 | 1,093.68 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 7/10/2023 | 7/12/2023 | 3.00 | 7/12/2023 | 2.00 | Other Sales to Public Authority | $33,209.60 | 66,419.20 |
| 7/10/2023 | 7/14/2023 | 5.00 | 7/14/2023 | 4.00 | Commercial Sales | $40,762.56 | 163,050.24 |
| 7/10/2023 | 10/3/2023 | 86.00 | 10/3/2023 | 85.00 | Commercial Sales | $831.13 | 70,646.05 |
| 7/10/2023 | 7/10/2023 | 1.00 | 7/10/2023 | 0.00 | Public Street & Highway Lighting | $18.69 | - |
| 7/10/2023 | 8/7/2023 | 29.00 | 8/7/2023 | 28.00 | Residential Sales | $5.55 | 155.40 |
| 7/10/2023 | 7/13/2023 | 4.00 | 7/13/2023 | 3.00 | Residential Sales | $116.25 | 348.75 |
| 7/10/2023 | 7/13/2023 | 4.00 | 7/13/2023 | 3.00 | Other Sales to Public Authority | $11,590.90 | 34,772.70 |
| 7/10/2023 | 7/14/2023 | 5.00 | 7/14/2023 | 4.00 | Residential Sales | $60.72 | 242.88 |
| 7/10/2023 | 8/9/2023 | 31.00 | 8/9/2023 | 30.00 | Residential Sales | $193.12 | 5,793.60 |
| 7/10/2023 | 7/14/2023 | 5.00 | 7/14/2023 | 4.00 | Other Sales to Public Authority | $918.17 | 3,672.68 |
| 7/10/2023 | 11/14/2023 | 128.00 | 11/14/2023 | 127.00 | Commercial Sales | $2,025.51 | 257,239.77 |
| 7/10/2023 | 7/17/2023 | 8.00 | 7/17/2023 | 7.00 | Residential Sales | $26.26 | 183.82 |
| 7/10/2023 | 7/19/2023 | 10.00 | 7/19/2023 | 9.00 | Industrial Service | $276.38 | 2,487.42 |
| 7/10/2023 | 7/31/2023 | 22.00 | 7/31/2023 | 21.00 | Residential Sales | $20.81 | 437.01 |
| 7/11/2023 | 7/12/2023 | 2.00 | 7/12/2023 | 1.00 | Other Sales to Public Authority | $15,868.02 | 15,868.02 |
| 7/11/2023 | 7/13/2023 | 3.00 | 7/13/2023 | 2.00 | Residential Sales | $445.75 | 891.50 |
| 7/11/2023 | 7/14/2023 | 4.00 | 7/14/2023 | 3.00 | Commercial Sales | $59,182.95 | 177,548.85 |
| 7/11/2023 | 8/8/2023 | 29.00 | 8/8/2023 | 28.00 | Commercial Sales | $26,211.01 | 733,908.28 |
| 7/11/2023 | 7/13/2023 | 3.00 | 7/13/2023 | 2.00 | Other Sales to Public Authority | $11,160.33 | 22,320.66 |
| 7/11/2023 | 7/11/2023 | 1.00 | 7/11/2023 | 0.00 | Public Street & Highway Lighting | $50.72 | - |
| 7/11/2023 | 7/14/2023 | 4.00 | 7/14/2023 | 3.00 | Residential Sales | $31.15 | 93.45 |
| 7/11/2023 | 7/31/2023 | 21.00 | 7/31/2023 | 20.00 | Commercial Sales | $27,865.42 | 557,308.40 |
| 7/11/2023 | 7/17/2023 | 7.00 | 7/17/2023 | 6.00 | Residential Sales | $817.75 | 4,906.50 |
| 7/11/2023 | 7/19/2023 | 9.00 | 7/19/2023 | 8.00 | Industrial Service | $119.74 | 957.92 |
| 7/11/2023 | 7/18/2023 | 8.00 | 7/18/2023 | 7.00 | Residential Sales | $134.97 | 944.79 |
| 7/11/2023 | 7/19/2023 | 9.00 | 7/19/2023 | 8.00 | Commercial Sales | $302.36 | 2,418.88 |
| 7/11/2023 | 8/10/2023 | 31.00 | 8/10/2023 | 30.00 | Residential Sales | $48.46 | 1,453.80 |
| 7/11/2023 | 2/20/2024 | 225.00 | 2/20/2024 | 224.00 | Residential Sales | $19.79 | 4,432.96 |
| 7/11/2023 | 8/28/2023 | 49.00 | 8/28/2023 | 48.00 | Residential Sales | $44.83 | 2,151.84 |
| 7/11/2023 | 7/21/2023 | 11.00 | 7/21/2023 | 10.00 | Industrial Service | $7,838.13 | 78,381.30 |
| 7/11/2023 | 7/21/2023 | 11.00 | 7/21/2023 | 10.00 | Commercial Sales | $165,236.16 | 1,652,361.60 |
| 7/11/2023 | 7/20/2023 | 10.00 | 7/20/2023 | 9.00 | Residential Sales | $134.63 | 1,211.67 |
| 7/11/2023 | 10/10/2023 | 92.00 | 10/10/2023 | 91.00 | Commercial Sales | $1,062.68 | 96,703.88 |
| 7/11/2023 | 7/21/2023 | 11.00 | 7/21/2023 | 10.00 | Residential Sales | $164,727.63 | 1,647,276.30 |
| 7/11/2023 | 7/20/2023 | 10.00 | 7/20/2023 | 9.00 | Other Sales to Public Authority | $10,743.24 | 96,689.16 |
| 7/11/2023 | 7/24/2023 | 14.00 | 7/24/2023 | 13.00 | Industrial Service | $4,333.39 | 56,334.07 |
| 7/11/2023 | 7/21/2023 | 11.00 | 7/21/2023 | 10.00 | Other Sales to Public Authority | $10,008.42 | 100,084.20 |
| 7/11/2023 | 7/24/2023 | 14.00 | 7/24/2023 | 13.00 | Commercial Sales | $35,647.61 | 463,418.93 |
| 7/11/2023 | 8/16/2023 | 37.00 | 8/16/2023 | 36.00 | Other Sales to Public Authority | $156.88 | 5,647.68 |
| 7/11/2023 | 7/24/2023 | 14.00 | 7/24/2023 | 13.00 | Residential Sales | $949.39 | 12,342.07 |
| 7/11/2023 | 8/18/2023 | 39.00 | 8/18/2023 | 38.00 | Residential Sales | $275.72 | 10,477.36 |
| 7/11/2023 | 7/25/2023 | 15.00 | 7/25/2023 | 14.00 | Commercial Sales | $187.53 | 2,625.42 |
| 7/11/2023 | 7/24/2023 | 14.00 | 7/24/2023 | 13.00 | Other Sales to Public Authority | $756.34 | 9,832.42 |
| 7/11/2023 | 7/26/2023 | 16.00 | 7/26/2023 | 15.00 | Commercial Sales | $141.73 | 2,125.95 |
| 7/11/2023 | 7/27/2023 | 17.00 | 7/27/2023 | 16.00 | Industrial Service | $25,846.18 | 413,538.88 |
| 7/11/2023 | 8/3/2023 | 24.00 | 8/3/2023 | 23.00 | Commercial Sales | $639.31 | 14,704.13 |
| 7/11/2023 | 7/27/2023 | 17.00 | 7/27/2023 | 16.00 | Commercial Sales | $334.35 | 5,349.60 |
| 7/11/2023 | 7/26/2023 | 16.00 | 7/26/2023 | 15.00 | Residential Sales | $168.14 | 2,522.10 |
| 7/11/2023 | 7/27/2023 | 17.00 | 7/27/2023 | 16.00 | Residential Sales | $31.20 | 499.20 |
| 7/11/2023 | 7/12/2023 | 2.00 | 7/12/2023 | 1.00 | Industrial Service | $65,215.57 | 65,215.57 |
| 7/11/2023 | 7/11/2023 | 1.00 | 7/11/2023 | 0.00 | Commercial Sales | $14,448.32 | - |
| 7/11/2023 | 7/26/2023 | 16.00 | 7/26/2023 | 15.00 | Other Sales to Public Authority | $6,552.73 | 98,290.95 |
| 7/11/2023 | 7/12/2023 | 2.00 | 7/12/2023 | 1.00 | Commercial Sales | $181,122.35 | 181,122.35 |
| 7/11/2023 | 7/11/2023 | 1.00 | 7/11/2023 | 0.00 | Residential Sales | $2,437.53 | - |
| 7/11/2023 | 7/13/2023 | 3.00 | 7/13/2023 | 2.00 | Industrial Service | $130.16 | 260.32 |
| 7/11/2023 | 10/30/2023 | 112.00 | 10/30/2023 | 111.00 | Other Sales to Public Authority | $299.54 | 33,248.94 |
| 7/11/2023 | 7/27/2023 | 17.00 | 7/27/2023 | 16.00 | Other Sales to Public Authority | $336.26 | 5,380.16 |
| 7/11/2023 | 7/12/2023 | 2.00 | 7/12/2023 | 1.00 | Residential Sales | $177,668.72 | 177,668.72 |
| 7/11/2023 | 7/13/2023 | 3.00 | 7/13/2023 | 2.00 | Commercial Sales | $98,683.60 | 197,367.20 |
| 7/11/2023 | 7/11/2023 | 1.00 | 7/11/2023 | 0.00 | Other Sales to Public Authority | $215.67 | - |
| 7/12/2023 | 7/26/2023 | 15.00 | 7/26/2023 | 14.00 | Commercial Sales | $713.79 | 9,993.06 |
| 7/12/2023 | 7/25/2023 | 14.00 | 7/25/2023 | 13.00 | Residential Sales | $292.55 | 3,803.15 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 7/12/2023 | 7/24/2023 | 13.00 | 7/24/2023 | 12.00 | Other Sales to Public Authority | $716.88 | 8,602.56 |
| 7/12/2023 | 7/27/2023 | 16.00 | 7/27/2023 | 15.00 | Industrial Service | $60.71 | 910.65 |
| 7/12/2023 | 7/27/2023 | 16.00 | 7/27/2023 | 15.00 | Commercial Sales | $1,043.34 | 15,650.10 |
| 7/12/2023 | 8/4/2023 | 24.00 | 8/4/2023 | 23.00 | Commercial Sales | $53,494.00 | 1,230,362.00 |
| 7/12/2023 | 7/26/2023 | 15.00 | 7/26/2023 | 14.00 | Residential Sales | $460.29 | 6,444.06 |
| 7/12/2023 | 8/4/2023 | 24.00 | 8/4/2023 | 23.00 | Residential Sales | $13.88 | 319.24 |
| 7/12/2023 | 7/12/2023 | 1.00 | 7/12/2023 | 0.00 | Commercial Sales | $661.34 | - |
| 7/12/2023 | 7/13/2023 | 2.00 | 7/13/2023 | 1.00 | Industrial Service | $279,328.96 | 279,328.96 |
| 7/12/2023 | 10/9/2023 | 90.00 | 10/9/2023 | 89.00 | Company Use | $694.34 | 61,796.26 |
| 7/12/2023 | 9/13/2023 | 64.00 | 9/13/2023 | 63.00 | Residential Sales | $85.82 | 5,406.66 |
| 7/12/2023 | 7/28/2023 | 17.00 | 7/28/2023 | 16.00 | Residential Sales | $37.90 | 606.40 |
| 7/12/2023 | 7/12/2023 | 1.00 | 7/12/2023 | 0.00 | Residential Sales | $1,328.98 | - |
| 7/12/2023 | 7/13/2023 | 2.00 | 7/13/2023 | 1.00 | Commercial Sales | $132,257.65 | 132,257.65 |
| 7/12/2023 | 7/14/2023 | 3.00 | 7/14/2023 | 2.00 | Industrial Service | $830,494.36 | 1,660,988.72 |
| 7/12/2023 | 9/14/2023 | 65.00 | 9/14/2023 | 64.00 | Residential Sales | $109.00 | 6,976.00 |
| 7/12/2023 | 8/7/2023 | 27.00 | 8/7/2023 | 26.00 | Commercial Sales | $21,902.41 | 569,462.66 |
| 7/12/2023 | 7/14/2023 | 3.00 | 7/14/2023 | 2.00 | Commercial Sales | $109,599.09 | 219,198.18 |
| 7/12/2023 | 7/13/2023 | 2.00 | 7/13/2023 | 1.00 | Residential Sales | $255,947.16 | 255,947.16 |
| 7/12/2023 | 7/12/2023 | 1.00 | 7/12/2023 | 0.00 | Other Sales to Public Authority | $16.88 | - |
| 7/12/2023 | 7/14/2023 | 3.00 | 7/14/2023 | 2.00 | Residential Sales | $792.24 | 1,584.48 |
| 7/12/2023 | 7/13/2023 | 2.00 | 7/13/2023 | 1.00 | Other Sales to Public Authority | $14,753.28 | 14,753.28 |
| 7/12/2023 | 7/12/2023 | 1.00 | 7/12/2023 | 0.00 | Public Street & Highway Lighting | $30,821.07 | - |
| 7/12/2023 | 7/14/2023 | 3.00 | 7/14/2023 | 2.00 | Other Sales to Public Authority | $889.32 | 1,778.64 |
| 7/12/2023 | 7/13/2023 | 2.00 | 7/13/2023 | 1.00 | Public Street & Highway Lighting | $5,908.44 | 5,908.44 |
| 7/12/2023 | 10/6/2023 | 87.00 | 10/6/2023 | 86.00 | Commercial Sales | $17.24 | 1,482.64 |
| 7/12/2023 | 7/31/2023 | 20.00 | 7/31/2023 | 19.00 | Residential Sales | $161.30 | 3,064.70 |
| 7/12/2023 | 7/19/2023 | 8.00 | 7/19/2023 | 7.00 | Industrial Service | $77.37 | 541.59 |
| 7/12/2023 | 7/17/2023 | 6.00 | 7/17/2023 | 5.00 | Residential Sales | $34.02 | 170.10 |
| 7/12/2023 | 11/15/2023 | 127.00 | 11/15/2023 | 126.00 | Commercial Sales | $69.04 | 8,699.04 |
| 7/12/2023 | 7/19/2023 | 8.00 | 7/19/2023 | 7.00 | Commercial Sales | $460.98 | 3,226.86 |
| 7/12/2023 | 11/15/2023 | 127.00 | 11/15/2023 | 126.00 | Residential Sales | $89.54 | 11,282.04 |
| 7/12/2023 | 7/18/2023 | 7.00 | 7/18/2023 | 6.00 | Residential Sales | $62.09 | 372.54 |
| 7/12/2023 | 5/15/2024 | 309.00 | 5/15/2024 | 308.00 | Residential Sales | $80.24 | 24,713.92 |
| 7/12/2023 | 7/19/2023 | 8.00 | 7/19/2023 | 7.00 | Residential Sales | $141.07 | 987.49 |
| 7/12/2023 | 8/11/2023 | 31.00 | 8/11/2023 | 30.00 | Residential Sales | $111.97 | 3,359.10 |
| 7/12/2023 | 9/5/2023 | 56.00 | 9/5/2023 | 55.00 | Residential Sales | $112.15 | 6,168.25 |
| 7/12/2023 | 7/19/2023 | 8.00 | 7/19/2023 | 7.00 | Public Street & Highway Lighting | $3,825.63 | 26,779.41 |
| 7/12/2023 | 7/21/2023 | 10.00 | 7/21/2023 | 9.00 | Industrial Service | $12,634.76 | 113,712.84 |
| 7/12/2023 | 7/20/2023 | 9.00 | 7/20/2023 | 8.00 | Commercial Sales | $1,208.31 | 9,666.48 |
| 7/12/2023 | 7/21/2023 | 10.00 | 7/21/2023 | 9.00 | Commercial Sales | $150,525.46 | 1,354,729.14 |
| 7/12/2023 | 8/15/2023 | 35.00 | 8/15/2023 | 34.00 | Commercial Sales | $26.49 | 900.66 |
| 7/12/2023 | 7/20/2023 | 9.00 | 7/20/2023 | 8.00 | Residential Sales | $264.39 | 2,115.12 |
| 7/12/2023 | 7/21/2023 | 10.00 | 7/21/2023 | 9.00 | Residential Sales | $324,958.16 | 2,924,623.44 |
| 7/12/2023 | 7/20/2023 | 9.00 | 7/20/2023 | 8.00 | Other Sales to Public Authority | $9,916.64 | 79,333.12 |
| 7/12/2023 | 7/21/2023 | 10.00 | 7/21/2023 | 9.00 | Other Sales to Public Authority | $17,542.16 | 157,879.44 |
| 7/12/2023 | 7/24/2023 | 13.00 | 7/24/2023 | 12.00 | Commercial Sales | $42,578.60 | 510,943.20 |
| 7/12/2023 | 10/12/2023 | 93.00 | 10/12/2023 | 92.00 | Residential Sales | $339.65 | 31,247.80 |
| 7/12/2023 | 7/20/2023 | 9.00 | 7/20/2023 | 8.00 | Public Street & Highway Lighting | $45,674.32 | 365,394.56 |
| 7/12/2023 | 8/1/2023 | 21.00 | 8/1/2023 | 20.00 | Commercial Sales | $209.30 | 4,186.00 |
| 7/12/2023 | 7/25/2023 | 14.00 | 7/25/2023 | 13.00 | Industrial Service | $5,468.03 | 71,084.39 |
| 7/12/2023 | 7/21/2023 | 10.00 | 7/21/2023 | 9.00 | Public Street & Highway Lighting | $23,490.19 | 211,411.71 |
| 7/12/2023 | 7/24/2023 | 13.00 | 7/24/2023 | 12.00 | Residential Sales | $1,459.28 | 17,511.36 |
| 7/12/2023 | 7/26/2023 | 15.00 | 7/26/2023 | 14.00 | Industrial Service | $46,500.92 | 651,012.88 |
| 7/13/2023 | 7/21/2023 | 9.00 | 7/21/2023 | 8.00 | Commercial Sales | $223,966.72 | 1,791,733.76 |
| 7/13/2023 | 7/20/2023 | 8.00 | 7/20/2023 | 7.00 | Residential Sales | $523.40 | 3,663.80 |
| 7/13/2023 | 8/14/2023 | 33.00 | 8/14/2023 | 32.00 | Residential Sales | $22.77 | 728.64 |
| 7/13/2023 | 8/15/2023 | 34.00 | 8/15/2023 | 33.00 | Commercial Sales | $178.46 | 5,889.18 |
| 7/13/2023 | 7/21/2023 | 9.00 | 7/21/2023 | 8.00 | Residential Sales | $387,797.32 | 3,102,378.56 |
| 7/13/2023 | 12/13/2023 | 154.00 | 12/13/2023 | 153.00 | Commercial Sales | $34.49 | 5,276.97 |
| 7/13/2023 | 7/24/2023 | 12.00 | 7/24/2023 | 11.00 | Industrial Service | $73,072.34 | 803,795.74 |
| 7/13/2023 | 8/31/2023 | 50.00 | 8/31/2023 | 49.00 | Commercial Sales | $6,998.62 | 342,932.38 |
| 7/13/2023 | 8/30/2023 | 49.00 | 8/30/2023 | 48.00 | Residential Sales | $82.56 | 3,962.88 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 7/13/2023 | 7/24/2023 | 12.00 | 7/24/2023 | 11.00 | Commercial Sales | $126,412.32 | 1,390,535.52 |
| 7/13/2023 | 10/12/2023 | 92.00 | 10/12/2023 | 91.00 | Residential Sales | $30.45 | 2,770.95 |
| 7/13/2023 | 8/17/2023 | 36.00 | 8/17/2023 | 35.00 | Residential Sales | $70.85 | 2,479.75 |
| 7/13/2023 | 8/1/2023 | 20.00 | 8/1/2023 | 19.00 | Commercial Sales | $27,827.17 | 528,716.23 |
| 7/13/2023 | 5/6/2024 | 299.00 | 5/6/2024 | 298.00 | Residential Sales | $213.99 | 63,769.02 |
| 7/13/2023 | 7/24/2023 | 12.00 | 7/24/2023 | 11.00 | Residential Sales | $3,760.08 | 41,360.88 |
| 7/13/2023 | 3/5/2024 | 237.00 | 3/5/2024 | 236.00 | Residential Sales | $21.14 | 4,989.04 |
| 7/13/2023 | 7/26/2023 | 14.00 | 7/26/2023 | 13.00 | Industrial Service | $5,885.15 | 76,506.95 |
| 7/13/2023 | 7/25/2023 | 13.00 | 7/25/2023 | 12.00 | Residential Sales | $615.08 | 7,380.96 |
| 7/13/2023 | 7/26/2023 | 14.00 | 7/26/2023 | 13.00 | Commercial Sales | $15,680.44 | 203,845.72 |
| 7/13/2023 | 7/27/2023 | 15.00 | 7/27/2023 | 14.00 | Industrial Service | $11,656.75 | 163,194.50 |
| 7/13/2023 | 8/3/2023 | 22.00 | 8/3/2023 | 21.00 | Commercial Sales | $228.03 | 4,788.63 |
| 7/13/2023 | 7/27/2023 | 15.00 | 7/27/2023 | 14.00 | Commercial Sales | $3,855.03 | 53,970.42 |
| 7/13/2023 | 7/26/2023 | 14.00 | 7/26/2023 | 13.00 | Residential Sales | $700.78 | 9,110.14 |
| 7/13/2023 | 12/18/2023 | 159.00 | 12/18/2023 | 158.00 | Commercial Sales | $706.36 | 111,604.88 |
| 7/13/2023 | 8/4/2023 | 23.00 | 8/4/2023 | 22.00 | Commercial Sales | $61.99 | 1,363.78 |
| 7/13/2023 | 7/27/2023 | 15.00 | 7/27/2023 | 14.00 | Residential Sales | $148.55 | 2,079.70 |
| 7/13/2023 | 10/17/2023 | 97.00 | 10/17/2023 | 96.00 | Commercial Sales | $14.37 | 1,379.52 |
| 7/13/2023 | 7/28/2023 | 16.00 | 7/28/2023 | 15.00 | Residential Sales | $19.37 | 290.55 |
| 7/13/2023 | 7/13/2023 | 1.00 | 7/13/2023 | 0.00 | Commercial Sales | $423.76 | - |
| 7/13/2023 | 7/14/2023 | 2.00 | 7/14/2023 | 1.00 | Industrial Service | $511,914.44 | 511,914.44 |
| 7/13/2023 | 7/14/2023 | 2.00 | 7/14/2023 | 1.00 | Commercial Sales | $406,583.44 | 406,583.44 |
| 7/13/2023 | 11/27/2023 | 138.00 | 11/27/2023 | 137.00 | Residential Sales | $625.12 | 85,641.44 |
| 7/13/2023 | 7/13/2023 | 1.00 | 7/13/2023 | 0.00 | Residential Sales | $821.62 | - |
| 7/13/2023 | 8/21/2023 | 40.00 | 8/21/2023 | 39.00 | Residential Sales | $10.65 | 415.35 |
| 7/13/2023 | 7/14/2023 | 2.00 | 7/14/2023 | 1.00 | Residential Sales | $442,555.46 | 442,555.46 |
| 7/13/2023 | 7/13/2023 | 1.00 | 7/13/2023 | 0.00 | Other Sales to Public Authority | $16.88 | - |
| 7/13/2023 | 8/8/2023 | 27.00 | 8/8/2023 | 26.00 | Residential Sales | $30.27 | 787.02 |
| 7/13/2023 | 8/9/2023 | 28.00 | 8/9/2023 | 27.00 | Commercial Sales | $10,474.92 | 282,822.84 |
| 7/13/2023 | 7/17/2023 | 5.00 | 7/17/2023 | 4.00 | Industrial Service | $72,781.59 | 291,126.36 |
| 7/13/2023 | 7/14/2023 | 2.00 | 7/14/2023 | 1.00 | Other Sales to Public Authority | $1,007.95 | 1,007.95 |
| 7/13/2023 | 7/17/2023 | 5.00 | 7/17/2023 | 4.00 | Commercial Sales | $33,385.79 | 133,543.16 |
| 7/13/2023 | 11/14/2023 | 125.00 | 11/14/2023 | 124.00 | Commercial Sales | $384.55 | 47,684.20 |
| 7/13/2023 | 7/13/2023 | 1.00 | 7/13/2023 | 0.00 | Public Street & Highway Lighting | $12.01 | - |
| 7/13/2023 | 7/18/2023 | 6.00 | 7/18/2023 | 5.00 | Industrial Service | $16,709.27 | 83,546.35 |
| 7/13/2023 | 7/31/2023 | 19.00 | 7/31/2023 | 18.00 | Residential Sales | $48.64 | 875.52 |
| 7/13/2023 | 8/25/2023 | 44.00 | 8/25/2023 | 43.00 | Residential Sales | $17.88 | 768.84 |
| 7/13/2023 | 7/19/2023 | 7.00 | 7/19/2023 | 6.00 | Industrial Service | $42,692.82 | 256,156.92 |
| 7/13/2023 | 7/17/2023 | 5.00 | 7/17/2023 | 4.00 | Residential Sales | $1,899.71 | 7,598.84 |
| 7/13/2023 | 7/18/2023 | 6.00 | 7/18/2023 | 5.00 | Commercial Sales | $76,538.88 | 382,694.40 |
| 7/13/2023 | 7/19/2023 | 7.00 | 7/19/2023 | 6.00 | Commercial Sales | $27,838.24 | 167,029.44 |
| 7/13/2023 | 7/18/2023 | 6.00 | 7/18/2023 | 5.00 | Residential Sales | $151.85 | 759.25 |
| 7/13/2023 | 11/30/2023 | 141.00 | 11/30/2023 | 140.00 | Commercial Sales | $394.55 | 55,237.00 |
| 7/13/2023 | 7/17/2023 | 5.00 | 7/17/2023 | 4.00 | Other Sales to Public Authority | $1.29 | 5.16 |
| 7/13/2023 | 7/19/2023 | 7.00 | 7/19/2023 | 6.00 | Residential Sales | $566.68 | 3,400.08 |
| 7/13/2023 | 2/7/2024 | 210.00 | 2/7/2024 | 209.00 | Commercial Sales | $253.77 | 53,037.93 |
| 7/13/2023 | 7/19/2023 | 7.00 | 7/19/2023 | 6.00 | Other Sales to Public Authority | $17.75 | 106.50 |
| 7/13/2023 | 8/29/2023 | 48.00 | 8/29/2023 | 47.00 | Commercial Sales | $476.41 | 22,391.27 |
| 7/13/2023 | 8/11/2023 | 30.00 | 8/11/2023 | 29.00 | Residential Sales | $34.09 | 988.61 |
| 7/13/2023 | 7/20/2023 | 8.00 | 7/20/2023 | 7.00 | Commercial Sales | $1,201.13 | 8,407.91 |
| 7/13/2023 | 7/21/2023 | 9.00 | 7/21/2023 | 8.00 | Industrial Service | $33,946.40 | 271,571.20 |
| 7/14/2023 | 7/24/2023 | 11.00 | 7/24/2023 | 10.00 | Company Use | $0.00 | - |
| 7/14/2023 | 7/19/2023 | 6.00 | 7/19/2023 | 5.00 | Commercial Sales | $62,127.22 | 310,636.10 |
| 7/14/2023 | 7/18/2023 | 5.00 | 7/18/2023 | 4.00 | Residential Sales | $757.02 | 3,028.08 |
| 7/14/2023 | 7/17/2023 | 4.00 | 7/17/2023 | 3.00 | Other Sales to Public Authority | $11,339.99 | 34,019.97 |
| 7/14/2023 | 7/19/2023 | 6.00 | 7/19/2023 | 5.00 | Residential Sales | $229.66 | 1,148.30 |
| 7/14/2023 | 7/18/2023 | 5.00 | 7/18/2023 | 4.00 | Other Sales to Public Authority | $165.82 | 663.28 |
| 7/14/2023 | 9/6/2023 | 55.00 | 9/6/2023 | 54.00 | Residential Sales | $110.30 | 5,956.20 |
| 7/14/2023 | 8/4/2023 | 22.00 | 8/4/2023 | 21.00 | Company Use | -$63.90 | (1,341.90) |
| 7/14/2023 | 7/20/2023 | 7.00 | 7/20/2023 | 6.00 | Commercial Sales | $14,862.82 | 89,176.92 |
| 7/14/2023 | 7/21/2023 | 8.00 | 7/21/2023 | 7.00 | Industrial Service | $4,732.64 | 33,128.48 |
| 7/14/2023 | 7/21/2023 | 8.00 | 7/21/2023 | 7.00 | Commercial Sales | $128,786.33 | 901,504.31 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 7/14/2023 | 7/20/2023 | 7.00 | 7/20/2023 | 6.00 | Residential Sales | $134.34 | 806.04 |
| 7/14/2023 | 7/21/2023 | 8.00 | 7/21/2023 | 7.00 | Residential Sales | $349,229.24 | 2,444,604.68 |
| 7/14/2023 | 7/20/2023 | 7.00 | 7/20/2023 | 6.00 | Other Sales to Public Authority | $13,526.75 | 81,160.50 |
| 7/14/2023 | 7/14/2023 | 1.00 | 7/14/2023 | 0.00 | Other Public Authority Transportation On | $32.06 | - |
| 7/14/2023 | 8/15/2023 | 33.00 | 8/15/2023 | 32.00 | Residential Sales | $69.53 | 2,224.96 |
| 7/14/2023 | 10/27/2023 | 106.00 | 10/27/2023 | 105.00 | Residential Sales | $142.51 | 14,963.55 |
| 7/14/2023 | 7/24/2023 | 11.00 | 7/24/2023 | 10.00 | Industrial Service | $7,061.09 | 70,610.90 |
| 7/14/2023 | 7/14/2023 | 1.00 | 7/14/2023 | 0.00 | Company Use | $14.69 | - |
| 7/14/2023 | 10/11/2023 | 90.00 | 10/11/2023 | 89.00 | Residential Sales | $90.95 | 8,094.55 |
| 7/14/2023 | 7/21/2023 | 8.00 | 7/21/2023 | 7.00 | Other Sales to Public Authority | $4,104.50 | 28,731.50 |
| 7/14/2023 | 7/24/2023 | 11.00 | 7/24/2023 | 10.00 | Commercial Sales | $36,227.41 | 362,274.10 |
| 7/14/2023 | 8/1/2023 | 19.00 | 8/1/2023 | 18.00 | Commercial Sales | $37,674.41 | 678,139.38 |
| 7/14/2023 | 7/24/2023 | 11.00 | 7/24/2023 | 10.00 | Residential Sales | $881.11 | 8,811.10 |
| 7/14/2023 | 7/25/2023 | 12.00 | 7/25/2023 | 11.00 | Commercial Sales | $350.87 | 3,859.57 |
| 7/14/2023 | 8/2/2023 | 20.00 | 8/2/2023 | 19.00 | Commercial Sales | $220.66 | 4,192.54 |
| 7/14/2023 | 7/26/2023 | 13.00 | 7/26/2023 | 12.00 | Commercial Sales | $1,021.15 | 12,253.80 |
| 7/14/2023 | 7/17/2023 | 4.00 | 7/17/2023 | 3.00 | Company Use | $0.00 | - |
| 7/14/2023 | 7/27/2023 | 14.00 | 7/27/2023 | 13.00 | Industrial Service | $305.89 | 3,976.57 |
| 7/14/2023 | 8/4/2023 | 22.00 | 8/4/2023 | 21.00 | Industrial Service | $18,397.97 | 386,357.37 |
| 7/14/2023 | 7/18/2023 | 5.00 | 7/18/2023 | 4.00 | Company Use | -$5,070.65 | (20,282.60) |
| 7/14/2023 | 7/27/2023 | 14.00 | 7/27/2023 | 13.00 | Commercial Sales | $1,106.16 | 14,380.08 |
| 7/14/2023 | 8/4/2023 | 22.00 | 8/4/2023 | 21.00 | Commercial Sales | $31.38 | 658.98 |
| 7/14/2023 | 7/19/2023 | 6.00 | 7/19/2023 | 5.00 | Company Use | $0.00 | - |
| 7/14/2023 | 7/27/2023 | 14.00 | 7/27/2023 | 13.00 | Residential Sales | $516.77 | 6,718.01 |
| 7/14/2023 | 10/30/2023 | 109.00 | 10/30/2023 | 108.00 | Residential Sales | $86.09 | 9,297.72 |
| 7/14/2023 | 7/28/2023 | 15.00 | 7/28/2023 | 14.00 | Residential Sales | $89.68 | 1,255.52 |
| 7/14/2023 | 8/7/2023 | 25.00 | 8/7/2023 | 24.00 | Commercial Sales | $0.45 | 10.80 |
| 7/14/2023 | 7/14/2023 | 1.00 | 7/14/2023 | 0.00 | Commercial Sales | $508.68 | - |
| 7/14/2023 | 7/14/2023 | 1.00 | 7/14/2023 | 0.00 | Residential Sales | $617.49 | - |
| 7/14/2023 | 7/17/2023 | 4.00 | 7/17/2023 | 3.00 | Industrial Service | $27,478.48 | 82,435.44 |
| 7/14/2023 | 8/23/2023 | 41.00 | 8/23/2023 | 40.00 | Residential Sales | $19.19 | 767.60 |
| 7/14/2023 | 7/17/2023 | 4.00 | 7/17/2023 | 3.00 | Commercial Sales | $308,081.77 | 924,245.31 |
| 7/14/2023 | 7/18/2023 | 5.00 | 7/18/2023 | 4.00 | Industrial Service | $76.48 | 305.92 |
| 7/14/2023 | 9/18/2023 | 67.00 | 9/18/2023 | 66.00 | Residential Sales | $128.91 | 8,508.06 |
| 7/14/2023 | 7/17/2023 | 4.00 | 7/17/2023 | 3.00 | Residential Sales | $285,414.51 | 856,243.53 |
| 7/14/2023 | 7/18/2023 | 5.00 | 7/18/2023 | 4.00 | Commercial Sales | $33,988.23 | 135,952.92 |
| 7/14/2023 | 7/14/2023 | 1.00 | 7/14/2023 | 0.00 | Public Street & Highway Lighting | $390.53 | - |
| 7/14/2023 | 7/19/2023 | 6.00 | 7/19/2023 | 5.00 | Industrial Service | $2,114.98 | 10,574.90 |
| 7/15/2023 | 7/17/2023 | 3.00 | 7/17/2023 | 2.00 | Residential Sales | $769.59 | 1,539.18 |
| 7/15/2023 | 7/18/2023 | 4.00 | 7/18/2023 | 3.00 | Residential Sales | $13.88 | 41.64 |
| 7/15/2023 | 7/21/2023 | 7.00 | 7/21/2023 | 6.00 | Residential Sales | $956.21 | 5,737.26 |
| 7/16/2023 | 7/17/2023 | 2.00 | 7/17/2023 | 1.00 | Commercial Sales | $47.78 | 47.78 |
| 7/16/2023 | 7/17/2023 | 2.00 | 7/17/2023 | 1.00 | Residential Sales | $1,607.62 | 1,607.62 |
| 7/16/2023 | 7/18/2023 | 3.00 | 7/18/2023 | 2.00 | Residential Sales | $190.46 | 380.92 |
| 7/16/2023 | 7/19/2023 | 4.00 | 7/19/2023 | 3.00 | Residential Sales | $13.88 | 41.64 |
| 7/16/2023 | 7/21/2023 | 6.00 | 7/21/2023 | 5.00 | Commercial Sales | $41.46 | 207.30 |
| 7/16/2023 | 7/20/2023 | 5.00 | 7/20/2023 | 4.00 | Residential Sales | $32.24 | 128.96 |
| 7/16/2023 | 7/21/2023 | 6.00 | 7/21/2023 | 5.00 | Residential Sales | $2,503.18 | 12,515.90 |
| 7/16/2023 | 7/24/2023 | 9.00 | 7/24/2023 | 8.00 | Commercial Sales | $171.54 | 1,372.32 |
| 7/16/2023 | 7/24/2023 | 9.00 | 7/24/2023 | 8.00 | Residential Sales | $123.26 | 986.08 |
| 7/17/2023 | 7/21/2023 | 5.00 | 7/21/2023 | 4.00 | Commercial Sales | $69,386.03 | 277,544.12 |
| 7/17/2023 | 7/18/2023 | 2.00 | 7/18/2023 | 1.00 | Other Sales to Public Authority | $4,499.81 | 4,499.81 |
| 7/17/2023 | 7/21/2023 | 5.00 | 7/21/2023 | 4.00 | Residential Sales | $532,161.55 | 2,128,646.20 |
| 7/17/2023 | 7/19/2023 | 3.00 | 7/19/2023 | 2.00 | Other Sales to Public Authority | $2,323.51 | 4,647.02 |
| 7/17/2023 | 10/27/2023 | 103.00 | 10/27/2023 | 102.00 | Residential Sales | $150.71 | 15,372.42 |
| 7/17/2023 | 7/24/2023 | 8.00 | 7/24/2023 | 7.00 | Industrial Service | $150.76 | 1,055.32 |
| 7/17/2023 | 9/25/2023 | 71.00 | 9/25/2023 | 70.00 | Commercial Sales | $3,699.98 | 258,998.60 |
| 7/17/2023 | 7/24/2023 | 8.00 | 7/24/2023 | 7.00 | Commercial Sales | $25,222.07 | 176,554.49 |
| 7/17/2023 | 8/1/2023 | 16.00 | 8/1/2023 | 15.00 | Commercial Sales | $2,184.82 | 32,772.30 |
| 7/17/2023 | 7/25/2023 | 9.00 | 7/25/2023 | 8.00 | Industrial Service | $39,145.17 | 313,161.36 |
| 7/17/2023 | 7/24/2023 | 8.00 | 7/24/2023 | 7.00 | Residential Sales | $3,923.54 | 27,464.78 |
| 7/17/2023 | 8/2/2023 | 17.00 | 8/2/2023 | 16.00 | Commercial Sales | $1,114.35 | 17,829.60 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 7/17/2023 | 7/25/2023 | 9.00 | 7/25/2023 | 8.00 | Residential Sales | $828.54 | 6,628.32 |
| 7/17/2023 | 7/26/2023 | 10.00 | 7/26/2023 | 9.00 | Commercial Sales | $432.01 | 3,888.09 |
| 7/17/2023 | 7/26/2023 | 10.00 | 7/26/2023 | 9.00 | Residential Sales | $293.53 | 2,641.77 |
| 7/17/2023 | 7/27/2023 | 11.00 | 7/27/2023 | 10.00 | Commercial Sales | $943.70 | 9,437.00 |
| 7/17/2023 | 7/21/2023 | 5.00 | 7/21/2023 | 4.00 | Other Sales to Public Authority | $9,952.65 | 39,810.60 |
| 7/17/2023 | 8/3/2023 | 18.00 | 8/3/2023 | 17.00 | Residential Sales | $58.93 | 1,001.81 |
| 7/17/2023 | 12/19/2023 | 156.00 | 12/19/2023 | 155.00 | Commercial Sales | $20.69 | 3,206.95 |
| 7/17/2023 | 8/4/2023 | 19.00 | 8/4/2023 | 18.00 | Residential Sales | $1.50 | 27.00 |
| 7/17/2023 | 7/28/2023 | 12.00 | 7/28/2023 | 11.00 | Commercial Sales | $17.71 | 194.81 |
| 7/17/2023 | 7/28/2023 | 12.00 | 7/28/2023 | 11.00 | Residential Sales | $13.88 | 152.68 |
| 7/17/2023 | 7/24/2023 | 8.00 | 7/24/2023 | 7.00 | Other Sales to Public Authority | $34,387.28 | 240,710.96 |
| 7/17/2023 | 7/17/2023 | 1.00 | 7/17/2023 | 0.00 | Commercial Sales | $258.04 | - |
| 7/17/2023 | 7/18/2023 | 2.00 | 7/18/2023 | 1.00 | Commercial Sales | $34,695.23 | 34,695.23 |
| 7/17/2023 | 7/19/2023 | 3.00 | 7/19/2023 | 2.00 | Industrial Service | $149.59 | 299.18 |
| 7/17/2023 | 7/17/2023 | 1.00 | 7/17/2023 | 0.00 | Residential Sales | $1,013.61 | - |
| 7/17/2023 | 7/18/2023 | 2.00 | 7/18/2023 | 1.00 | Residential Sales | $205,528.15 | 205,528.15 |
| 7/17/2023 | 7/19/2023 | 3.00 | 7/19/2023 | 2.00 | Commercial Sales | $10,292.77 | 20,585.54 |
| 7/17/2023 | 7/19/2023 | 3.00 | 7/19/2023 | 2.00 | Residential Sales | $622.62 | 1,245.24 |
| 7/17/2023 | 7/17/2023 | 1.00 | 7/17/2023 | 0.00 | Public Street & Highway Lighting | $2.95 | - |
| 7/17/2023 | 7/21/2023 | 5.00 | 7/21/2023 | 4.00 | Industrial Service | $688.84 | 2,755.36 |
| 7/17/2023 | 9/7/2023 | 53.00 | 9/7/2023 | 52.00 | Residential Sales | $13.88 | 721.76 |
| 7/17/2023 | 7/20/2023 | 4.00 | 7/20/2023 | 3.00 | Commercial Sales | $414.72 | 1,244.16 |
| 7/17/2023 | 7/17/2023 | 1.00 | 7/17/2023 | 0.00 | Other Sales to Public Authority | $82.72 | - |
| 7/18/2023 | 7/19/2023 | 2.00 | 7/19/2023 | 1.00 | Commercial Sales | $71,178.98 | 71,178.98 |
| 7/18/2023 | 7/18/2023 | 1.00 | 7/18/2023 | 0.00 | Residential Sales | $237.26 | - |
| 7/18/2023 | 7/19/2023 | 2.00 | 7/19/2023 | 1.00 | Residential Sales | $313,865.01 | 313,865.01 |
| 7/18/2023 | 8/11/2023 | 25.00 | 8/11/2023 | 24.00 | Residential Sales | $5.10 | 122.40 |
| 7/18/2023 | 9/7/2023 | 52.00 | 9/7/2023 | 51.00 | Commercial Sales | $92.27 | 4,705.77 |
| 7/18/2023 | 7/18/2023 | 1.00 | 7/18/2023 | 0.00 | Public Street & Highway Lighting | $136.50 | - |
| 7/18/2023 | 7/20/2023 | 3.00 | 7/20/2023 | 2.00 | Industrial Service | $84,637.68 | 169,275.36 |
| 7/18/2023 | 9/6/2023 | 51.00 | 9/6/2023 | 50.00 | Residential Sales | $78.12 | 3,906.00 |
| 7/18/2023 | 7/20/2023 | 3.00 | 7/20/2023 | 2.00 | Commercial Sales | $108,498.48 | 216,996.96 |
| 7/18/2023 | 7/21/2023 | 4.00 | 7/21/2023 | 3.00 | Industrial Service | $36,718.25 | 110,154.75 |
| 7/18/2023 | 7/21/2023 | 4.00 | 7/21/2023 | 3.00 | Commercial Sales | $166,861.62 | 500,584.86 |
| 7/18/2023 | 7/20/2023 | 3.00 | 7/20/2023 | 2.00 | Residential Sales | $1,490.69 | 2,981.38 |
| 7/18/2023 | 7/18/2023 | 1.00 | 7/18/2023 | 0.00 | Other Sales to Public Authority | $33.76 | - |
| 7/18/2023 | 7/21/2023 | 4.00 | 7/21/2023 | 3.00 | Residential Sales | $654,623.95 | 1,963,871.85 |
| 7/18/2023 | 7/19/2023 | 2.00 | 7/19/2023 | 1.00 | Other Sales to Public Authority | $1,069.58 | 1,069.58 |
| 7/18/2023 | 7/24/2023 | 7.00 | 7/24/2023 | 6.00 | Industrial Service | $49,232.11 | 295,392.66 |
| 7/18/2023 | 7/24/2023 | 7.00 | 7/24/2023 | 6.00 | Commercial Sales | $38,751.02 | 232,506.12 |
| 7/18/2023 | 10/12/2023 | 87.00 | 10/12/2023 | 86.00 | Residential Sales | $390.68 | 33,598.48 |
| 7/18/2023 | 7/25/2023 | 8.00 | 7/25/2023 | 7.00 | Commercial Sales | $1,170.00 | 8,190.00 |
| 7/18/2023 | 7/24/2023 | 7.00 | 7/24/2023 | 6.00 | Residential Sales | $3,792.81 | 22,756.86 |
| 7/18/2023 | 8/1/2023 | 15.00 | 8/1/2023 | 14.00 | Residential Sales | $153.72 | 2,152.08 |
| 7/18/2023 | 8/18/2023 | 32.00 | 8/18/2023 | 31.00 | Residential Sales | $110.62 | 3,429.22 |
| 7/18/2023 | 7/26/2023 | 9.00 | 7/26/2023 | 8.00 | Industrial Service | $14,005.87 | 112,046.96 |
| 7/18/2023 | 9/27/2023 | 72.00 | 9/27/2023 | 71.00 | Commercial Sales | $721.35 | 51,215.85 |
| 7/18/2023 | 7/26/2023 | 9.00 | 7/26/2023 | 8.00 | Commercial Sales | $860.16 | 6,881.28 |
| 7/18/2023 | 7/27/2023 | 10.00 | 7/27/2023 | 9.00 | Industrial Service | $364.02 | 3,276.18 |
| 7/18/2023 | 7/25/2023 | 8.00 | 7/25/2023 | 7.00 | Residential Sales | $1,609.17 | 11,264.19 |
| 7/18/2023 | 7/20/2023 | 3.00 | 7/20/2023 | 2.00 | Other Sales to Public Authority | $1,141.59 | 2,283.18 |
| 7/18/2023 | 8/2/2023 | 16.00 | 8/2/2023 | 15.00 | Residential Sales | $47.13 | 706.95 |
| 7/18/2023 | 8/3/2023 | 17.00 | 8/3/2023 | 16.00 | Commercial Sales | $17.75 | 284.00 |
| 7/18/2023 | 7/27/2023 | 10.00 | 7/27/2023 | 9.00 | Commercial Sales | $1,211.94 | 10,907.46 |
| 7/18/2023 | 7/26/2023 | 9.00 | 7/26/2023 | 8.00 | Residential Sales | $557.91 | 4,463.28 |
| 7/18/2023 | 7/21/2023 | 4.00 | 7/21/2023 | 3.00 | Other Sales to Public Authority | $5,712.02 | 17,136.06 |
| 7/18/2023 | 8/4/2023 | 18.00 | 8/4/2023 | 17.00 | Commercial Sales | $101,234.31 | 1,720,983.27 |
| 7/18/2023 | 7/27/2023 | 10.00 | 7/27/2023 | 9.00 | Residential Sales | $22.62 | 203.58 |
| 7/18/2023 | 8/7/2023 | 21.00 | 8/7/2023 | 20.00 | Commercial Sales | $10.30 | 206.00 |
| 7/18/2023 | 7/18/2023 | 1.00 | 7/18/2023 | 0.00 | Commercial Sales | $7,747.59 | - |
| 7/18/2023 | 7/31/2023 | 14.00 | 7/31/2023 | 13.00 | Residential Sales | $376.59 | 4,895.67 |
| 7/19/2023 | 8/23/2023 | 36.00 | 8/23/2023 | 35.00 | Commercial Sales | $196.03 | 6,861.05 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 7/19/2023 | 8/8/2023 | 21.00 | 8/8/2023 | 20.00 | Residential Sales | $192.10 | 3,842.00 |
| 7/19/2023 | 10/6/2023 | 80.00 | 10/6/2023 | 79.00 | Residential Sales | $160.83 | 12,705.57 |
| 7/19/2023 | 7/31/2023 | 13.00 | 7/31/2023 | 12.00 | Residential Sales | $104.21 | 1,250.52 |
| 7/19/2023 | 7/19/2023 | 1.00 | 7/19/2023 | 0.00 | Commercial Sales | $194.79 | - |
| 7/19/2023 | 7/19/2023 | 1.00 | 7/19/2023 | 0.00 | Residential Sales | $1,121.06 | - |
| 7/19/2023 | 10/23/2023 | 97.00 | 10/23/2023 | 96.00 | Residential Sales | $164.66 | 15,807.36 |
| 7/19/2023 | 7/20/2023 | 2.00 | 7/20/2023 | 1.00 | Industrial Service | $8,054.43 | 8,054.43 |
| 7/19/2023 | 7/20/2023 | 2.00 | 7/20/2023 | 1.00 | Commercial Sales | $64,980.19 | 64,980.19 |
| 7/19/2023 | 7/19/2023 | 1.00 | 7/19/2023 | 0.00 | Public Street & Highway Lighting | $173.91 | - |
| 7/19/2023 | 7/21/2023 | 3.00 | 7/21/2023 | 2.00 | Industrial Service | $6,370.42 | 12,740.84 |
| 7/19/2023 | 8/14/2023 | 27.00 | 8/14/2023 | 26.00 | Commercial Sales | $2,285.78 | 59,430.28 |
| 7/19/2023 | 11/2/2023 | 107.00 | 11/2/2023 | 106.00 | Residential Sales | $13.88 | 1,471.28 |
| 7/19/2023 | 7/20/2023 | 2.00 | 7/20/2023 | 1.00 | Residential Sales | $193,386.40 | 193,386.40 |
| 7/19/2023 | 7/21/2023 | 3.00 | 7/21/2023 | 2.00 | Commercial Sales | $147,915.09 | 295,830.18 |
| 7/19/2023 | 10/26/2023 | 100.00 | 10/26/2023 | 99.00 | Residential Sales | $208.68 | 20,659.32 |
| 7/19/2023 | 7/21/2023 | 3.00 | 7/21/2023 | 2.00 | Residential Sales | $443,466.89 | 886,933.78 |
| 7/19/2023 | 7/24/2023 | 6.00 | 7/24/2023 | 5.00 | Industrial Service | $82.18 | 410.90 |
| 7/19/2023 | 7/24/2023 | 6.00 | 7/24/2023 | 5.00 | Commercial Sales | $105,870.13 | 529,350.65 |
| 7/19/2023 | 8/31/2023 | 44.00 | 8/31/2023 | 43.00 | Residential Sales | $45.99 | 1,977.57 |
| 7/19/2023 | 7/25/2023 | 7.00 | 7/25/2023 | 6.00 | Commercial Sales | $662.77 | 3,976.62 |
| 7/19/2023 | 7/24/2023 | 6.00 | 7/24/2023 | 5.00 | Residential Sales | $2,708.23 | 13,541.15 |
| 7/19/2023 | 9/26/2023 | 70.00 | 9/26/2023 | 69.00 | Residential Sales | $153.49 | 10,590.81 |
| 7/19/2023 | 7/21/2023 | 3.00 | 7/21/2023 | 2.00 | Public Street & Highway Lighting | $148.99 | 297.98 |
| 7/19/2023 | 8/3/2023 | 16.00 | 8/3/2023 | 15.00 | Industrial Service | $1,763.10 | 26,446.50 |
| 7/19/2023 | 7/26/2023 | 8.00 | 7/26/2023 | 7.00 | Commercial Sales | $6,081.57 | 42,570.99 |
| 7/19/2023 | 7/25/2023 | 7.00 | 7/25/2023 | 6.00 | Residential Sales | $994.04 | 5,964.24 |
| 7/19/2023 | 8/3/2023 | 16.00 | 8/3/2023 | 15.00 | Commercial Sales | $1,716.01 | 25,740.15 |
| 7/19/2023 | 9/28/2023 | 72.00 | 9/28/2023 | 71.00 | Commercial Sales | $112.37 | 7,978.27 |
| 7/19/2023 | 7/20/2023 | 2.00 | 7/20/2023 | 1.00 | Other Sales to Public Authority | $5,885.58 | 5,885.58 |
| 7/19/2023 | 7/21/2023 | 3.00 | 7/21/2023 | 2.00 | Other Sales to Public Authority | $4,089.60 | 8,179.20 |
| 7/19/2023 | 7/27/2023 | 9.00 | 7/27/2023 | 8.00 | Commercial Sales | $1,472.40 | 11,779.20 |
| 7/19/2023 | 7/28/2023 | 10.00 | 7/28/2023 | 9.00 | Industrial Service | $2,134.40 | 19,209.60 |
| 7/19/2023 | 7/26/2023 | 8.00 | 7/26/2023 | 7.00 | Residential Sales | $326.65 | 2,286.55 |
| 7/19/2023 | 7/27/2023 | 9.00 | 7/27/2023 | 8.00 | Residential Sales | $761.57 | 6,092.56 |
| 7/19/2023 | 7/28/2023 | 10.00 | 7/28/2023 | 9.00 | Residential Sales | $13.88 | 124.92 |
| 7/19/2023 | 7/24/2023 | 6.00 | 7/24/2023 | 5.00 | Other Sales to Public Authority | $20,066.67 | 100,333.35 |
| 7/20/2023 | 7/25/2023 | 6.00 | 7/25/2023 | 5.00 | Other Sales to Public Authority | $146.50 | 732.50 |
| 7/20/2023 | 8/22/2023 | 34.00 | 8/22/2023 | 33.00 | Residential Sales | $11.22 | 370.26 |
| 7/20/2023 | 11/1/2023 | 105.00 | 11/1/2023 | 104.00 | Residential Sales | $11.75 | 1,222.00 |
| 7/20/2023 | 8/29/2023 | 41.00 | 8/29/2023 | 40.00 | Residential Sales | $158.78 | 6,351.20 |
| 7/20/2023 | 7/21/2023 | 2.00 | 7/21/2023 | 1.00 | Industrial Service | $7,136.34 | 7,136.34 |
| 7/20/2023 | 7/20/2023 | 1.00 | 7/20/2023 | 0.00 | Commercial Sales | $40.14 | - |
| 7/20/2023 | 7/21/2023 | 2.00 | 7/21/2023 | 1.00 | Commercial Sales | $93,968.25 | 93,968.25 |
| 7/20/2023 | 7/20/2023 | 1.00 | 7/20/2023 | 0.00 | Residential Sales | $259.81 | - |
| 7/20/2023 | 7/21/2023 | 2.00 | 7/21/2023 | 1.00 | Residential Sales | $933,964.47 | 933,964.47 |
| 7/20/2023 | 7/24/2023 | 5.00 | 7/24/2023 | 4.00 | Commercial Sales | $32,969.98 | 131,879.92 |
| 7/20/2023 | 7/20/2023 | 1.00 | 7/20/2023 | 0.00 | Public Street & Highway Lighting | $96.94 | - |
| 7/20/2023 | 10/12/2023 | 85.00 | 10/12/2023 | 84.00 | Residential Sales | $347.63 | 29,200.92 |
| 7/20/2023 | 7/24/2023 | 5.00 | 7/24/2023 | 4.00 | Residential Sales | $16,217.88 | 64,871.52 |
| 7/20/2023 | 7/25/2023 | 6.00 | 7/25/2023 | 5.00 | Commercial Sales | $32,278.87 | 161,394.35 |
| 7/20/2023 | 8/3/2023 | 15.00 | 8/3/2023 | 14.00 | Industrial Service | $42.67 | 597.38 |
| 7/20/2023 | 7/26/2023 | 7.00 | 7/26/2023 | 6.00 | Commercial Sales | $21,633.02 | 129,798.12 |
| 7/20/2023 | 7/25/2023 | 6.00 | 7/25/2023 | 5.00 | Residential Sales | $726.32 | 3,631.60 |
| 7/20/2023 | 7/27/2023 | 8.00 | 7/27/2023 | 7.00 | Commercial Sales | $569.11 | 3,983.77 |
| 7/20/2023 | 7/26/2023 | 7.00 | 7/26/2023 | 6.00 | Residential Sales | $508.89 | 3,053.34 |
| 7/20/2023 | 7/21/2023 | 2.00 | 7/21/2023 | 1.00 | Other Sales to Public Authority | $8,082.59 | 8,082.59 |
| 7/20/2023 | 7/27/2023 | 8.00 | 7/27/2023 | 7.00 | Residential Sales | $182.77 | 1,279.39 |
| 7/20/2023 | 7/24/2023 | 5.00 | 7/24/2023 | 4.00 | Other Sales to Public Authority | $25,611.86 | 102,447.44 |
| 7/20/2023 | 1/8/2024 | 173.00 | 1/8/2024 | 172.00 | Residential Sales | $62.55 | 10,758.60 |
| 7/21/2023 | 7/25/2023 | 5.00 | 7/25/2023 | 4.00 | Residential Sales | $3,343.52 | 13,374.08 |
| 7/21/2023 | 7/26/2023 | 6.00 | 7/26/2023 | 5.00 | Commercial Sales | $19,385.78 | 96,928.90 |
| 7/21/2023 | 8/2/2023 | 13.00 | 8/2/2023 | 12.00 | Residential Sales | $90.94 | 1,091.28 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 7/21/2023 | 8/3/2023 | 14.00 | 8/3/2023 | 13.00 | Residential Sales | $38.96 | 506.48 |
| 7/21/2023 | 7/26/2023 | 6.00 | 7/26/2023 | 5.00 | Residential Sales | $272.26 | 1,361.30 |
| 7/21/2023 | 7/27/2023 | 7.00 | 7/27/2023 | 6.00 | Commercial Sales | $161.39 | 968.34 |
| 7/21/2023 | 7/21/2023 | 1.00 | 7/21/2023 | 0.00 | Other Sales to Public Authority | $8.05 | - |
| 7/21/2023 | 7/27/2023 | 7.00 | 7/27/2023 | 6.00 | Residential Sales | $536.16 | 3,216.96 |
| 7/21/2023 | 12/13/2023 | 146.00 | 12/13/2023 | 145.00 | Other Sales to Public Authority | $85.91 | 12,456.95 |
| 7/21/2023 | 7/28/2023 | 8.00 | 7/28/2023 | 7.00 | Commercial Sales | $33,368.72 | 233,581.04 |
| 7/21/2023 | 8/4/2023 | 15.00 | 8/4/2023 | 14.00 | Residential Sales | $40.59 | 568.26 |
| 7/21/2023 | 7/28/2023 | 8.00 | 7/28/2023 | 7.00 | Residential Sales | $504.58 | 3,532.06 |
| 7/21/2023 | 7/24/2023 | 4.00 | 7/24/2023 | 3.00 | Other Sales to Public Authority | $3,541.94 | 10,625.82 |
| 7/21/2023 | 7/25/2023 | 5.00 | 7/25/2023 | 4.00 | Other Sales to Public Authority | $1,613.79 | 6,455.16 |
| 7/21/2023 | 8/23/2023 | 34.00 | 8/23/2023 | 33.00 | Commercial Sales | $25.69 | 847.77 |
| 7/21/2023 | 7/26/2023 | 6.00 | 7/26/2023 | 5.00 | Other Sales to Public Authority | $12,158.84 | 60,794.20 |
| 7/21/2023 | 8/8/2023 | 19.00 | 8/8/2023 | 18.00 | Residential Sales | $147.65 | 2,657.70 |
| 7/21/2023 | 8/3/2023 | 14.00 | 8/3/2023 | 13.00 | Other Sales to Public Authority | $18,244.19 | 237,174.47 |
| 7/21/2023 | 7/27/2023 | 7.00 | 7/27/2023 | 6.00 | Other Sales to Public Authority | $7,138.02 | 42,828.12 |
| 7/21/2023 | 10/5/2023 | 77.00 | 10/5/2023 | 76.00 | Residential Sales | $197.05 | 14,975.80 |
| 7/21/2023 | 7/31/2023 | 11.00 | 7/31/2023 | 10.00 | Commercial Sales | $173.44 | 1,734.40 |
| 7/21/2023 | 11/13/2023 | 116.00 | 11/13/2023 | 115.00 | Residential Sales | $63.58 | 7,311.70 |
| 7/21/2023 | 7/31/2023 | 11.00 | 7/31/2023 | 10.00 | Residential Sales | $223.45 | 2,234.50 |
| 7/21/2023 | 8/29/2023 | 40.00 | 8/29/2023 | 39.00 | Residential Sales | $19.57 | 763.23 |
| 7/21/2023 | 7/21/2023 | 1.00 | 7/21/2023 | 0.00 | Commercial Sales | $4,661.79 | - |
| 7/21/2023 | 7/21/2023 | 1.00 | 7/21/2023 | 0.00 | Residential Sales | $4,949.15 | - |
| 7/21/2023 | 12/13/2023 | 146.00 | 12/13/2023 | 145.00 | Commercial Sales | $299.63 | 43,446.35 |
| 7/21/2023 | 7/24/2023 | 4.00 | 7/24/2023 | 3.00 | Industrial Service | $74,270.13 | 222,810.39 |
| 7/21/2023 | 12/14/2023 | 147.00 | 12/14/2023 | 146.00 | Commercial Sales | $181.21 | 26,456.66 |
| 7/21/2023 | 8/1/2023 | 12.00 | 8/1/2023 | 11.00 | Industrial Service | $25,169.32 | 276,862.52 |
| 7/21/2023 | 7/24/2023 | 4.00 | 7/24/2023 | 3.00 | Commercial Sales | $317,187.23 | 951,561.69 |
| 7/21/2023 | 7/25/2023 | 5.00 | 7/25/2023 | 4.00 | Industrial Service | $4,082.23 | 16,328.92 |
| 7/21/2023 | 7/24/2023 | 4.00 | 7/24/2023 | 3.00 | Residential Sales | $892,589.21 | 2,677,767.63 |
| 7/21/2023 | 7/25/2023 | 5.00 | 7/25/2023 | 4.00 | Commercial Sales | $62,063.71 | 248,254.84 |
| 7/21/2023 | 7/21/2023 | 1.00 | 7/21/2023 | 0.00 | Public Street & Highway Lighting | $18.30 | - |
| 7/21/2023 | 8/1/2023 | 12.00 | 8/1/2023 | 11.00 | Residential Sales | $168.50 | 1,853.50 |
| 7/22/2023 | 7/24/2023 | 3.00 | 7/24/2023 | 2.00 | Residential Sales | $676.78 | 1,353.56 |
| 7/22/2023 | 7/28/2023 | 7.00 | 7/28/2023 | 6.00 | Residential Sales | $317.13 | 1,902.78 |
| 7/23/2023 | 7/24/2023 | 2.00 | 7/24/2023 | 1.00 | Commercial Sales | $788.32 | 788.32 |
| 7/23/2023 | 7/24/2023 | 2.00 | 7/24/2023 | 1.00 | Residential Sales | $2,446.88 | 2,446.88 |
| 7/23/2023 | 7/25/2023 | 3.00 | 7/25/2023 | 2.00 | Commercial Sales | $50.87 | 101.74 |
| 7/23/2023 | 7/25/2023 | 3.00 | 7/25/2023 | 2.00 | Residential Sales | $662.26 | 1,324.52 |
| 7/23/2023 | 7/28/2023 | 6.00 | 7/28/2023 | 5.00 | Residential Sales | $40.25 | 201.25 |
| 7/23/2023 | 7/31/2023 | 9.00 | 7/31/2023 | 8.00 | Residential Sales | $56.61 | 452.88 |
| 7/24/2023 | 7/25/2023 | 2.00 | 7/25/2023 | 1.00 | Other Sales to Public Authority | $28,528.05 | 28,528.05 |
| 7/24/2023 | 8/7/2023 | 15.00 | 8/7/2023 | 14.00 | Residential Sales | $119.84 | 1,677.76 |
| 7/24/2023 | 7/26/2023 | 3.00 | 7/26/2023 | 2.00 | Other Sales to Public Authority | $1,041.95 | 2,083.90 |
| 7/24/2023 | 10/3/2023 | 72.00 | 10/3/2023 | 71.00 | Residential Sales | $29.23 | 2,075.33 |
| 7/24/2023 | 8/22/2023 | 30.00 | 8/22/2023 | 29.00 | Residential Sales | $110.96 | 3,217.84 |
| 7/24/2023 | 8/23/2023 | 31.00 | 8/23/2023 | 30.00 | Commercial Sales | $18.87 | 566.10 |
| 7/24/2023 | 7/31/2023 | 8.00 | 7/31/2023 | 7.00 | Commercial Sales | $11,932.83 | 83,529.81 |
| 7/24/2023 | 7/28/2023 | 5.00 | 7/28/2023 | 4.00 | Other Sales to Public Authority | $9,425.39 | 37,701.56 |
| 7/24/2023 | 10/31/2023 | 100.00 | 10/31/2023 | 99.00 | Other Sales to Public Authority | $2,453.44 | 242,890.56 |
| 7/24/2023 | 7/31/2023 | 8.00 | 7/31/2023 | 7.00 | Residential Sales | $130.10 | 910.70 |
| 7/24/2023 | 8/25/2023 | 33.00 | 8/25/2023 | 32.00 | Residential Sales | $53.94 | 1,726.08 |
| 7/24/2023 | 11/14/2023 | 114.00 | 11/14/2023 | 113.00 | Residential Sales | $192.84 | 21,790.92 |
| 7/24/2023 | 8/28/2023 | 36.00 | 8/28/2023 | 35.00 | Commercial Sales | $199.18 | 6,971.30 |
| 7/24/2023 | 9/7/2023 | 46.00 | 9/7/2023 | 45.00 | Commercial Sales | $277.27 | 12,477.15 |
| 7/24/2023 | 8/16/2023 | 24.00 | 8/16/2023 | 23.00 | Commercial Sales | $7.47 | 171.81 |
| 7/24/2023 | 7/25/2023 | 2.00 | 7/25/2023 | 1.00 | Industrial Service | $61,109.02 | 61,109.02 |
| 7/24/2023 | 7/24/2023 | 1.00 | 7/24/2023 | 0.00 | Commercial Sales | $5,820.65 | - |
| 7/24/2023 | 7/25/2023 | 2.00 | 7/25/2023 | 1.00 | Commercial Sales | $336,246.39 | 336,246.39 |
| 7/24/2023 | 7/24/2023 | 1.00 | 7/24/2023 | 0.00 | Residential Sales | $1,827.29 | - |
| 7/24/2023 | 7/26/2023 | 3.00 | 7/26/2023 | 2.00 | Industrial Service | $10,090.59 | 20,181.18 |
| 7/24/2023 | 8/1/2023 | 9.00 | 8/1/2023 | 8.00 | Residential Sales | $623.44 | 4,987.52 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 7/24/2023 | 3/5/2024 | 226.00 | 3/5/2024 | 225.00 | Residential Sales | $52.03 | 11,706.75 |
| 7/24/2023 | 9/26/2023 | 65.00 | 9/26/2023 | 64.00 | Residential Sales | $28.19 | 1,804.16 |
| 7/24/2023 | 7/25/2023 | 2.00 | 7/25/2023 | 1.00 | Residential Sales | $745,259.87 | 745,259.87 |
| 7/24/2023 | 7/26/2023 | 3.00 | 7/26/2023 | 2.00 | Commercial Sales | $141,966.78 | 283,933.56 |
| 7/24/2023 | 7/27/2023 | 4.00 | 7/27/2023 | 3.00 | Industrial Service | $22,003.87 | 66,011.61 |
| 7/24/2023 | 8/3/2023 | 11.00 | 8/3/2023 | 10.00 | Commercial Sales | $19,573.98 | 195,739.80 |
| 7/24/2023 | 8/2/2023 | 10.00 | 8/2/2023 | 9.00 | Residential Sales | $113.84 | 1,024.56 |
| 7/24/2023 | 7/27/2023 | 4.00 | 7/27/2023 | 3.00 | Commercial Sales | $100,501.71 | 301,505.13 |
| 7/24/2023 | 7/26/2023 | 3.00 | 7/26/2023 | 2.00 | Residential Sales | $11,987.80 | 23,975.60 |
| 7/24/2023 | 8/4/2023 | 12.00 | 8/4/2023 | 11.00 | Commercial Sales | $816.00 | 8,976.00 |
| 7/24/2023 | 7/28/2023 | 5.00 | 7/28/2023 | 4.00 | Industrial Service | $26,616.14 | 106,464.56 |
| 7/24/2023 | 8/3/2023 | 11.00 | 8/3/2023 | 10.00 | Residential Sales | $152.66 | 1,526.60 |
| 7/24/2023 | 7/27/2023 | 4.00 | 7/27/2023 | 3.00 | Residential Sales | $895.51 | 2,686.53 |
| 7/24/2023 | 7/28/2023 | 5.00 | 7/28/2023 | 4.00 | Commercial Sales | $10,350.70 | 41,402.80 |
| 7/24/2023 | 8/4/2023 | 12.00 | 8/4/2023 | 11.00 | Residential Sales | $99.22 | 1,091.42 |
| 7/24/2023 | 7/24/2023 | 1.00 | 7/24/2023 | 0.00 | Public Street & Highway Lighting | $9.72 | - |
| 7/24/2023 | 7/28/2023 | 5.00 | 7/28/2023 | 4.00 | Residential Sales | $906.39 | 3,625.56 |
| 7/24/2023 | 8/1/2023 | 9.00 | 8/1/2023 | 8.00 | Other Sales to Public Authority | $697.32 | 5,578.56 |
| 7/24/2023 | 8/7/2023 | 15.00 | 8/7/2023 | 14.00 | Commercial Sales | $146.94 | 2,057.16 |
| 7/25/2023 | 7/25/2023 | 1.00 | 7/25/2023 | 0.00 | Residential Sales | $2,700.30 | - |
| 7/25/2023 | 7/26/2023 | 2.00 | 7/26/2023 | 1.00 | Commercial Sales | $845,321.16 | 845,321.16 |
| 7/25/2023 | 7/27/2023 | 3.00 | 7/27/2023 | 2.00 | Industrial Service | $710.90 | 1,421.80 |
| 7/25/2023 | 8/2/2023 | 9.00 | 8/2/2023 | 8.00 | Residential Sales | $296.47 | 2,371.76 |
| 7/25/2023 | 8/3/2023 | 10.00 | 8/3/2023 | 9.00 | Commercial Sales | $8,057.84 | 72,520.56 |
| 7/25/2023 | 7/26/2023 | 2.00 | 7/26/2023 | 1.00 | Residential Sales | $754,619.50 | 754,619.50 |
| 7/25/2023 | 7/27/2023 | 3.00 | 7/27/2023 | 2.00 | Commercial Sales | $225,615.17 | 451,230.34 |
| 7/25/2023 | 8/4/2023 | 11.00 | 8/4/2023 | 10.00 | Commercial Sales | $55,322.35 | 553,223.50 |
| 7/25/2023 | 7/27/2023 | 3.00 | 7/27/2023 | 2.00 | Residential Sales | $12,893.84 | 25,787.68 |
| 7/25/2023 | 7/28/2023 | 4.00 | 7/28/2023 | 3.00 | Commercial Sales | $127,420.64 | 382,261.92 |
| 7/25/2023 | 12/13/2023 | 142.00 | 12/13/2023 | 141.00 | Other Sales to Public Authority | $337.77 | 47,625.57 |
| 7/25/2023 | 8/4/2023 | 11.00 | 8/4/2023 | 10.00 | Residential Sales | $136.78 | 1,367.80 |
| 7/25/2023 | 7/25/2023 | 1.00 | 7/25/2023 | 0.00 | Public Street & Highway Lighting | $7,572.21 | - |
| 7/25/2023 | 7/28/2023 | 4.00 | 7/28/2023 | 3.00 | Residential Sales | $1,606.79 | 4,820.37 |
| 7/25/2023 | 7/26/2023 | 2.00 | 7/26/2023 | 1.00 | Public Street & Highway Lighting | $3,437.10 | 3,437.10 |
| 7/25/2023 | 8/7/2023 | 14.00 | 8/7/2023 | 13.00 | Commercial Sales | $58.34 | 758.42 |
| 7/25/2023 | 8/1/2023 | 8.00 | 8/1/2023 | 7.00 | Other Sales to Public Authority | $1,007.34 | 7,051.38 |
| 7/25/2023 | 7/25/2023 | 1.00 | 7/25/2023 | 0.00 | Other Sales to Public Authority | $61.84 | - |
| 7/25/2023 | 8/7/2023 | 14.00 | 8/7/2023 | 13.00 | Residential Sales | $239.27 | 3,110.51 |
| 7/25/2023 | 7/27/2023 | 3.00 | 7/27/2023 | 2.00 | Public Street & Highway Lighting | $6,101.32 | 12,202.64 |
| 7/25/2023 | 7/26/2023 | 2.00 | 7/26/2023 | 1.00 | Other Sales to Public Authority | $49,592.80 | 49,592.80 |
| 7/25/2023 | 8/9/2023 | 16.00 | 8/9/2023 | 15.00 | Commercial Sales | $31.81 | 477.15 |
| 7/25/2023 | 7/27/2023 | 3.00 | 7/27/2023 | 2.00 | Other Sales to Public Authority | $2,508.39 | 5,016.78 |
| 7/25/2023 | 8/9/2023 | 16.00 | 8/9/2023 | 15.00 | Residential Sales | $273.42 | 4,101.30 |
| 7/25/2023 | 7/31/2023 | 7.00 | 7/31/2023 | 6.00 | Commercial Sales | $65,980.60 | 395,883.60 |
| 7/25/2023 | 9/18/2023 | 56.00 | 9/18/2023 | 55.00 | Residential Sales | $90.32 | 4,967.60 |
| 7/25/2023 | 7/31/2023 | 7.00 | 7/31/2023 | 6.00 | Residential Sales | $1,660.57 | 9,963.42 |
| 7/25/2023 | 8/25/2023 | 32.00 | 8/25/2023 | 31.00 | Residential Sales | $11.76 | 364.56 |
| 7/25/2023 | 8/10/2023 | 17.00 | 8/10/2023 | 16.00 | Commercial Sales | $4,067.07 | 65,073.12 |
| 7/25/2023 | 8/10/2023 | 17.00 | 8/10/2023 | 16.00 | Residential Sales | $106.72 | 1,707.52 |
| 7/25/2023 | 8/11/2023 | 18.00 | 8/11/2023 | 17.00 | Residential Sales | $114.11 | 1,939.87 |
| 7/25/2023 | 9/21/2023 | 59.00 | 9/21/2023 | 58.00 | Commercial Sales | $36.17 | 2,097.86 |
| 7/25/2023 | 11/2/2023 | 101.00 | 11/2/2023 | 100.00 | Commercial Sales | $10.57 | 1,057.00 |
| 7/25/2023 | 3/1/2024 | 221.00 | 3/1/2024 | 220.00 | Commercial Sales | $837.58 | 184,267.60 |
| 7/25/2023 | 8/14/2023 | 21.00 | 8/14/2023 | 20.00 | Commercial Sales | $2,832.78 | 56,655.60 |
| 7/25/2023 | 12/28/2023 | 157.00 | 12/28/2023 | 156.00 | Residential Sales | $30.90 | 4,820.40 |
| 7/25/2023 | 8/18/2023 | 25.00 | 8/18/2023 | 24.00 | Commercial Sales | $1,432.62 | 34,382.88 |
| 7/25/2023 | 8/31/2023 | 38.00 | 8/31/2023 | 37.00 | Residential Sales | $252.90 | 9,357.30 |
| 7/25/2023 | 8/1/2023 | 8.00 | 8/1/2023 | 7.00 | Commercial Sales | $48,146.96 | 337,028.72 |
| 7/25/2023 | 7/25/2023 | 1.00 | 7/25/2023 | 0.00 | Commercial Sales | $19,807.88 | - |
| 7/25/2023 | 8/1/2023 | 8.00 | 8/1/2023 | 7.00 | Residential Sales | $212.49 | 1,487.43 |
| 7/25/2023 | 7/26/2023 | 2.00 | 7/26/2023 | 1.00 | Industrial Service | $97,467.97 | 97,467.97 |
| 7/25/2023 | 8/2/2023 | 9.00 | 8/2/2023 | 8.00 | Commercial Sales | $2,329.15 | 18,633.20 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 7/26/2023 | 9/22/2023 | 59.00 | 9/22/2023 | 58.00 | Residential Sales | $126.41 | 7,331.78 |
| 7/26/2023 | 12/13/2023 | 141.00 | 12/13/2023 | 140.00 | Commercial Sales | $26.82 | 3,754.80 |
| 7/26/2023 | 11/6/2023 | 104.00 | 11/6/2023 | 103.00 | Commercial Sales | $119.77 | 12,336.31 |
| 7/26/2023 | 8/1/2023 | 7.00 | 8/1/2023 | 6.00 | Commercial Sales | $1,478.78 | 8,872.68 |
| 7/26/2023 | 10/12/2023 | 79.00 | 10/12/2023 | 78.00 | Residential Sales | $181.50 | 14,157.00 |
| 7/26/2023 | 8/2/2023 | 8.00 | 8/2/2023 | 7.00 | Industrial Service | $11,712.79 | 81,989.53 |
| 7/26/2023 | 8/1/2023 | 7.00 | 8/1/2023 | 6.00 | Residential Sales | $438.06 | 2,628.36 |
| 7/26/2023 | 8/2/2023 | 8.00 | 8/2/2023 | 7.00 | Commercial Sales | $165.49 | 1,158.43 |
| 7/26/2023 | 8/18/2023 | 24.00 | 8/18/2023 | 23.00 | Residential Sales | $391.30 | 8,999.90 |
| 7/26/2023 | 7/27/2023 | 2.00 | 7/27/2023 | 1.00 | Industrial Service | $170,092.60 | 170,092.60 |
| 7/26/2023 | 7/26/2023 | 1.00 | 7/26/2023 | 0.00 | Commercial Sales | $52,081.21 | - |
| 7/26/2023 | 8/2/2023 | 8.00 | 8/2/2023 | 7.00 | Residential Sales | $456.86 | 3,198.02 |
| 7/26/2023 | 7/31/2023 | 6.00 | 7/31/2023 | 5.00 | Company Use | $158.32 | 791.60 |
| 7/26/2023 | 7/27/2023 | 2.00 | 7/27/2023 | 1.00 | Commercial Sales | $882,950.16 | 882,950.16 |
| 7/26/2023 | 8/3/2023 | 9.00 | 8/3/2023 | 8.00 | Residential Sales | $123.43 | 987.44 |
| 7/26/2023 | 8/4/2023 | 10.00 | 8/4/2023 | 9.00 | Commercial Sales | $2,036.61 | 18,329.49 |
| 7/26/2023 | 7/28/2023 | 3.00 | 7/28/2023 | 2.00 | Industrial Service | $395,022.86 | 790,045.72 |
| 7/26/2023 | 7/26/2023 | 1.00 | 7/26/2023 | 0.00 | Residential Sales | $1,263.32 | - |
| 7/26/2023 | 7/27/2023 | 2.00 | 7/27/2023 | 1.00 | Residential Sales | $703,512.74 | 703,512.74 |
| 7/26/2023 | 7/28/2023 | 3.00 | 7/28/2023 | 2.00 | Commercial Sales | $592,633.86 | 1,185,267.72 |
| 7/26/2023 | 8/4/2023 | 10.00 | 8/4/2023 | 9.00 | Residential Sales | $280.85 | 2,527.65 |
| 7/26/2023 | 12/13/2023 | 141.00 | 12/13/2023 | 140.00 | Other Sales to Public Authority | $315.36 | 44,150.40 |
| 7/26/2023 | 7/28/2023 | 3.00 | 7/28/2023 | 2.00 | Residential Sales | $15,902.55 | 31,805.10 |
| 7/26/2023 | 1/2/2024 | 161.00 | 1/2/2024 | 160.00 | Other Sales to Public Authority | $154.09 | 24,654.40 |
| 7/26/2023 | 7/26/2023 | 1.00 | 7/26/2023 | 0.00 | Public Street & Highway Lighting | $1,427.28 | - |
| 7/26/2023 | 8/7/2023 | 13.00 | 8/7/2023 | 12.00 | Commercial Sales | $62.39 | 748.68 |
| 7/26/2023 | 8/7/2023 | 13.00 | 8/7/2023 | 12.00 | Residential Sales | $68.41 | 820.92 |
| 7/26/2023 | 8/23/2023 | 29.00 | 8/23/2023 | 28.00 | Commercial Sales | $26.93 | 754.04 |
| 7/26/2023 | 8/8/2023 | 14.00 | 8/8/2023 | 13.00 | Residential Sales | $30.77 | 400.01 |
| 7/26/2023 | 7/31/2023 | 6.00 | 7/31/2023 | 5.00 | Industrial Service | $46,993.98 | 234,969.90 |
| 7/26/2023 | 7/27/2023 | 2.00 | 7/27/2023 | 1.00 | Other Sales to Public Authority | $27,319.95 | 27,319.95 |
| 7/26/2023 | 3/28/2024 | 247.00 | 3/28/2024 | 246.00 | Commercial Sales | $718.26 | 176,691.96 |
| 7/26/2023 | 8/9/2023 | 15.00 | 8/9/2023 | 14.00 | Residential Sales | $105.70 | 1,479.80 |
| 7/26/2023 | 8/4/2023 | 10.00 | 8/4/2023 | 9.00 | Other Sales to Public Authority | $34.49 | 310.41 |
| 7/26/2023 | 7/28/2023 | 3.00 | 7/28/2023 | 2.00 | Other Sales to Public Authority | $15,211.24 | 30,422.48 |
| 7/26/2023 | 7/31/2023 | 6.00 | 7/31/2023 | 5.00 | Commercial Sales | $203,233.57 | 1,016,167.85 |
| 7/26/2023 | 7/31/2023 | 6.00 | 7/31/2023 | 5.00 | Residential Sales | $2,315.24 | 11,576.20 |
| 7/26/2023 | 8/28/2023 | 34.00 | 8/28/2023 | 33.00 | Residential Sales | $166.24 | 5,485.92 |
| 7/26/2023 | 11/1/2023 | 99.00 | 11/1/2023 | 98.00 | Residential Sales | $67.12 | 6,577.76 |
| 7/26/2023 | 8/29/2023 | 35.00 | 8/29/2023 | 34.00 | Residential Sales | $4.91 | 166.94 |
| 7/26/2023 | 7/31/2023 | 6.00 | 7/31/2023 | 5.00 | Other Sales to Public Authority | $11,576.82 | 57,884.10 |
| 7/27/2023 | 8/10/2023 | 15.00 | 8/10/2023 | 14.00 | Residential Sales | $135.79 | 1,901.06 |
| 7/27/2023 | 7/31/2023 | 5.00 | 7/31/2023 | 4.00 | Other Sales to Public Authority | $1,236.75 | 4,947.00 |
| 7/27/2023 | 9/8/2023 | 44.00 | 9/8/2023 | 43.00 | Residential Sales | $23.45 | 1,008.35 |
| 7/27/2023 | 8/14/2023 | 19.00 | 8/14/2023 | 18.00 | Residential Sales | $40.72 | 732.96 |
| 7/27/2023 | 8/15/2023 | 20.00 | 8/15/2023 | 19.00 | Residential Sales | $69.40 | 1,318.60 |
| 7/27/2023 | 8/1/2023 | 6.00 | 8/1/2023 | 5.00 | Commercial Sales | $56,208.50 | 281,042.50 |
| 7/27/2023 | 10/12/2023 | 78.00 | 10/12/2023 | 77.00 | Residential Sales | $97.93 | 7,540.61 |
| 7/27/2023 | 2/28/2024 | 217.00 | 2/28/2024 | 216.00 | Commercial Sales | $2,094.39 | 452,388.24 |
| 7/27/2023 | 8/1/2023 | 6.00 | 8/1/2023 | 5.00 | Residential Sales | $2,498.72 | 12,493.60 |
| 7/27/2023 | 8/2/2023 | 7.00 | 8/2/2023 | 6.00 | Commercial Sales | $24,719.98 | 148,319.88 |
| 7/27/2023 | 8/3/2023 | 8.00 | 8/3/2023 | 7.00 | Commercial Sales | $2,171.98 | 15,203.86 |
| 7/27/2023 | 8/2/2023 | 7.00 | 8/2/2023 | 6.00 | Residential Sales | $656.39 | 3,938.34 |
| 7/27/2023 | 7/27/2023 | 1.00 | 7/27/2023 | 0.00 | Industrial Service | $2,700.84 | - |
| 7/27/2023 | 8/4/2023 | 9.00 | 8/4/2023 | 8.00 | Commercial Sales | $442.59 | 3,540.72 |
| 7/27/2023 | 7/27/2023 | 1.00 | 7/27/2023 | 0.00 | Commercial Sales | $10,662.09 | - |
| 7/27/2023 | 7/28/2023 | 2.00 | 7/28/2023 | 1.00 | Industrial Service | $461,071.49 | 461,071.49 |
| 7/27/2023 | 8/3/2023 | 8.00 | 8/3/2023 | 7.00 | Residential Sales | $547.75 | 3,834.25 |
| 7/27/2023 | 7/28/2023 | 2.00 | 7/28/2023 | 1.00 | Commercial Sales | $209,377.77 | 209,377.77 |
| 7/27/2023 | 8/4/2023 | 9.00 | 8/4/2023 | 8.00 | Residential Sales | $783.27 | 6,266.16 |
| 7/27/2023 | 7/27/2023 | 1.00 | 7/27/2023 | 0.00 | Residential Sales | $1,324.08 | - |
| 7/27/2023 | 7/28/2023 | 2.00 | 7/28/2023 | 1.00 | Residential Sales | $812,624.76 | 812,624.76 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 7/27/2023 | 9/13/2023 | 49.00 | 9/13/2023 | 48.00 | Residential Sales | $81.36 | 3,905.28 |
| 7/27/2023 | 8/1/2023 | 6.00 | 8/1/2023 | 5.00 | Other Sales to Public Authority | $169.23 | 846.15 |
| 7/27/2023 | 8/7/2023 | 12.00 | 8/7/2023 | 11.00 | Commercial Sales | $46.25 | 508.75 |
| 7/27/2023 | 7/27/2023 | 1.00 | 7/27/2023 | 0.00 | Public Street & Highway Lighting | $959.35 | - |
| 7/27/2023 | 8/7/2023 | 12.00 | 8/7/2023 | 11.00 | Residential Sales | $740.29 | 8,143.19 |
| 7/27/2023 | 7/31/2023 | 5.00 | 7/31/2023 | 4.00 | Industrial Service | $2,419.26 | 9,677.04 |
| 7/27/2023 | 7/31/2023 | 5.00 | 7/31/2023 | 4.00 | Commercial Sales | $75,783.43 | 303,133.72 |
| 7/27/2023 | 8/25/2023 | 30.00 | 8/25/2023 | 29.00 | Commercial Sales | $70.55 | 2,045.95 |
| 7/27/2023 | 7/28/2023 | 2.00 | 7/28/2023 | 1.00 | Other Sales to Public Authority | $2,754.00 | 2,754.00 |
| 7/27/2023 | 7/31/2023 | 5.00 | 7/31/2023 | 4.00 | Residential Sales | $16,935.32 | 67,741.28 |
| 7/27/2023 | 4/21/2024 | 270.00 | 4/21/2024 | 269.00 | Commercial Sales | $30.40 | 8,177.60 |
| 7/28/2023 | 8/2/2023 | 6.00 | 8/2/2023 | 5.00 | Other Sales to Public Authority | $36,877.36 | 184,386.80 |
| 7/28/2023 | 9/15/2023 | 50.00 | 9/15/2023 | 49.00 | Residential Sales | $9.38 | 459.62 |
| 7/28/2023 | 8/7/2023 | 11.00 | 8/7/2023 | 10.00 | Residential Sales | $138.54 | 1,385.40 |
| 7/28/2023 | 8/9/2023 | 13.00 | 8/9/2023 | 12.00 | Commercial Sales | $13,269.03 | 159,228.36 |
| 7/28/2023 | 8/23/2023 | 27.00 | 8/23/2023 | 26.00 | Commercial Sales | $75.93 | 1,974.18 |
| 7/28/2023 | 7/28/2023 | 1.00 | 7/28/2023 | 0.00 | Public Street & Highway Lighting | $523.26 | - |
| 7/28/2023 | 8/8/2023 | 12.00 | 8/8/2023 | 11.00 | Residential Sales | $194.05 | 2,134.55 |
| 7/28/2023 | 8/23/2023 | 27.00 | 8/23/2023 | 26.00 | Residential Sales | $132.28 | 3,439.28 |
| 7/28/2023 | 7/31/2023 | 4.00 | 7/31/2023 | 3.00 | Industrial Service | $209,571.93 | 628,715.79 |
| 7/28/2023 | 8/9/2023 | 13.00 | 8/9/2023 | 12.00 | Residential Sales | $104.65 | 1,255.80 |
| 7/28/2023 | 7/31/2023 | 4.00 | 7/31/2023 | 3.00 | Commercial Sales | $418,506.51 | 1,255,519.53 |
| 7/28/2023 | 7/28/2023 | 1.00 | 7/28/2023 | 0.00 | Other Sales to Public Authority | $60.10 | - |
| 7/28/2023 | 8/25/2023 | 29.00 | 8/25/2023 | 28.00 | Commercial Sales | $25.27 | 707.56 |
| 7/28/2023 | 7/31/2023 | 4.00 | 7/31/2023 | 3.00 | Residential Sales | $667,653.20 | 2,002,959.60 |
| 7/28/2023 | 8/1/2023 | 5.00 | 8/1/2023 | 4.00 | Company Use | $0.00 | - |
| 7/28/2023 | 8/7/2023 | 11.00 | 8/7/2023 | 10.00 | Other Sales to Public Authority | $12,504.00 | 125,040.00 |
| 7/28/2023 | 5/31/2024 | 309.00 | 5/31/2024 | 308.00 | Residential Sales | $77.34 | 23,820.72 |
| 7/28/2023 | 8/11/2023 | 15.00 | 8/11/2023 | 14.00 | Residential Sales | $51.79 | 725.06 |
| 7/28/2023 | 7/31/2023 | 4.00 | 7/31/2023 | 3.00 | Other Sales to Public Authority | $116,541.80 | 349,625.40 |
| 7/28/2023 | 8/15/2023 | 19.00 | 8/15/2023 | 18.00 | Residential Sales | $23.00 | 414.00 |
| 7/28/2023 | 8/16/2023 | 20.00 | 8/16/2023 | 19.00 | Commercial Sales | $18,302.26 | 347,742.94 |
| 7/28/2023 | 8/1/2023 | 5.00 | 8/1/2023 | 4.00 | Industrial Service | $244,515.56 | 978,062.24 |
| 7/28/2023 | 8/31/2023 | 35.00 | 8/31/2023 | 34.00 | Commercial Sales | $1,003.80 | 34,129.20 |
| 7/28/2023 | 10/12/2023 | 77.00 | 10/12/2023 | 76.00 | Commercial Sales | $21.17 | 1,608.92 |
| 7/28/2023 | 8/1/2023 | 5.00 | 8/1/2023 | 4.00 | Commercial Sales | $112,539.92 | 450,159.68 |
| 7/28/2023 | 8/2/2023 | 6.00 | 8/2/2023 | 5.00 | Industrial Service | $13,173.71 | 65,868.55 |
| 7/28/2023 | 8/2/2023 | 6.00 | 8/2/2023 | 5.00 | Commercial Sales | $60,834.91 | 304,174.55 |
| 7/28/2023 | 8/1/2023 | 5.00 | 8/1/2023 | 4.00 | Residential Sales | $3,736.27 | 14,945.08 |
| 7/28/2023 | 8/18/2023 | 22.00 | 8/18/2023 | 21.00 | Residential Sales | $5.09 | 106.89 |
| 7/28/2023 | 8/3/2023 | 7.00 | 8/3/2023 | 6.00 | Industrial Service | $125.20 | 751.20 |
| 7/28/2023 | 8/3/2023 | 7.00 | 8/3/2023 | 6.00 | Commercial Sales | $6,275.31 | 37,651.86 |
| 7/28/2023 | 8/2/2023 | 6.00 | 8/2/2023 | 5.00 | Residential Sales | $1,840.06 | 9,200.30 |
| 7/28/2023 | 8/3/2023 | 7.00 | 8/3/2023 | 6.00 | Residential Sales | $865.52 | 5,193.12 |
| 7/28/2023 | 8/4/2023 | 8.00 | 8/4/2023 | 7.00 | Commercial Sales | $469.81 | 3,288.67 |
| 7/28/2023 | 7/28/2023 | 1.00 | 7/28/2023 | 0.00 | Commercial Sales | $2,643.61 | - |
| 7/28/2023 | 8/4/2023 | 8.00 | 8/4/2023 | 7.00 | Residential Sales | $75.37 | 527.59 |
| 7/28/2023 | 7/28/2023 | 1.00 | 7/28/2023 | 0.00 | Residential Sales | $1,913.55 | - |
| 7/28/2023 | 8/1/2023 | 5.00 | 8/1/2023 | 4.00 | Other Sales to Public Authority | $12,372.50 | 49,490.00 |
| 7/29/2023 | 7/31/2023 | 3.00 | 7/31/2023 | 2.00 | Commercial Sales | $6.92 | 13.84 |
| 7/29/2023 | 7/31/2023 | 3.00 | 7/31/2023 | 2.00 | Residential Sales | $6,972.98 | 13,945.96 |
| 7/29/2023 | 8/1/2023 | 4.00 | 8/1/2023 | 3.00 | Residential Sales | $13.88 | 41.64 |
| 7/30/2023 | 8/3/2023 | 5.00 | 8/3/2023 | 4.00 | Commercial Sales | $153.95 | 615.80 |
| 7/30/2023 | 8/3/2023 | 5.00 | 8/3/2023 | 4.00 | Residential Sales | $19.49 | 77.96 |
| 7/30/2023 | 8/1/2023 | 3.00 | 8/1/2023 | 2.00 | Other Sales to Public Authority | $80.53 | 161.06 |
| 7/30/2023 | 8/8/2023 | 10.00 | 8/8/2023 | 9.00 | Residential Sales | $15.98 | 143.82 |
| 7/30/2023 | 7/31/2023 | 2.00 | 7/31/2023 | 1.00 | Industrial Service | $88,006.98 | 88,006.98 |
| 7/30/2023 | 7/31/2023 | 2.00 | 7/31/2023 | 1.00 | Commercial Sales | $1,182.52 | 1,182.52 |
| 7/30/2023 | 7/31/2023 | 2.00 | 7/31/2023 | 1.00 | Residential Sales | $5,988.61 | 5,988.61 |
| 7/30/2023 | 8/10/2023 | 12.00 | 8/10/2023 | 11.00 | Residential Sales | $55.13 | 606.43 |
| 7/30/2023 | 8/1/2023 | 3.00 | 8/1/2023 | 2.00 | Commercial Sales | $28.74 | 57.48 |
| 7/30/2023 | 8/17/2023 | 19.00 | 8/17/2023 | 18.00 | Residential Sales | $57.74 | 1,039.32 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 7/30/2023 | 8/1/2023 | 3.00 | 8/1/2023 | 2.00 | Residential Sales | $409.39 | 818.78 |
| 7/30/2023 | 8/2/2023 | 4.00 | 8/2/2023 | 3.00 | Commercial Sales | $11,224.32 | 33,672.96 |
| 7/31/2023 | 8/15/2023 | 16.00 | 8/15/2023 | 15.00 | Residential Sales | $27.15 | 407.25 |
| 7/31/2023 | 8/1/2023 | 2.00 | 8/1/2023 | 1.00 | Industrial Service | $38.70 | 38.70 |
| 7/31/2023 | 9/25/2023 | 57.00 | 9/25/2023 | 56.00 | Commercial Sales | $20.96 | 1,173.76 |
| 7/31/2023 | 8/1/2023 | 2.00 | 8/1/2023 | 1.00 | Commercial Sales | $882.45 | 882.45 |
| 7/31/2023 | 8/17/2023 | 18.00 | 8/17/2023 | 17.00 | Residential Sales | $7.15 | 121.55 |
| 7/31/2023 | 8/1/2023 | 2.00 | 8/1/2023 | 1.00 | Residential Sales | $20,493.16 | 20,493.16 |
| 7/31/2023 | 8/2/2023 | 3.00 | 8/2/2023 | 2.00 | Commercial Sales | $8,263.21 | 16,526.42 |
| 7/31/2023 | 8/2/2023 | 3.00 | 8/2/2023 | 2.00 | Residential Sales | $894.72 | 1,789.44 |
| 7/31/2023 | 8/3/2023 | 4.00 | 8/3/2023 | 3.00 | Residential Sales | $93.21 | 279.63 |
| 7/31/2023 | 8/4/2023 | 5.00 | 8/4/2023 | 4.00 | Residential Sales | $201.13 | 804.52 |
| 7/31/2023 | 10/30/2023 | 92.00 | 10/30/2023 | 91.00 | Residential Sales | $39.71 | 3,613.61 |
| 7/31/2023 | 8/7/2023 | 8.00 | 8/7/2023 | 7.00 | Residential Sales | $60.36 | 422.52 |
| 7/31/2023 | 8/21/2023 | 22.00 | 8/21/2023 | 21.00 | Residential Sales | $65.96 | 1,385.16 |
| 7/31/2023 | 8/8/2023 | 9.00 | 8/8/2023 | 8.00 | Residential Sales | $37.81 | 302.48 |
| 7/31/2023 | 8/9/2023 | 10.00 | 8/9/2023 | 9.00 | Residential Sales | $9.92 | 89.28 |
| 8/1/2023 | 9/6/2023 | 37.00 | 9/6/2023 | 36.00 | Residential Sales | $154.15 | 5,549.40 |
| 8/1/2023 | 9/20/2023 | 51.00 | 9/20/2023 | 50.00 | Residential Sales | $18.52 | 926.00 |
| 8/1/2023 | 9/21/2023 | 52.00 | 9/21/2023 | 51.00 | Commercial Sales | $606.37 | 30,924.87 |
| 8/1/2023 | 12/27/2023 | 149.00 | 12/27/2023 | 148.00 | Residential Sales | $17.64 | 2,610.72 |
| 8/1/2023 | 8/15/2023 | 15.00 | 8/15/2023 | 14.00 | Commercial Sales | $158.38 | 2,217.32 |
| 8/1/2023 | 8/14/2023 | 14.00 | 8/14/2023 | 13.00 | Residential Sales | $368.77 | 4,794.01 |
| 8/1/2023 | 8/15/2023 | 15.00 | 8/15/2023 | 14.00 | Residential Sales | $210.19 | 2,942.66 |
| 8/1/2023 | 8/16/2023 | 16.00 | 8/16/2023 | 15.00 | Commercial Sales | $458.13 | 6,871.95 |
| 8/1/2023 | 11/6/2023 | 98.00 | 11/6/2023 | 97.00 | Industrial Service | $669.96 | 64,986.12 |
| 8/1/2023 | 10/11/2023 | 72.00 | 10/11/2023 | 71.00 | Residential Sales | $10.64 | 755.44 |
| 8/1/2023 | 8/16/2023 | 16.00 | 8/16/2023 | 15.00 | Residential Sales | $214.00 | 3,210.00 |
| 8/1/2023 | 8/1/2023 | 1.00 | 8/1/2023 | 0.00 | Commercial Sales | $914.12 | - |
| 8/1/2023 | 9/25/2023 | 56.00 | 9/25/2023 | 55.00 | Residential Sales | $26.91 | 1,480.05 |
| 8/1/2023 | 10/12/2023 | 73.00 | 10/12/2023 | 72.00 | Residential Sales | $26.58 | 1,913.76 |
| 8/1/2023 | 9/26/2023 | 57.00 | 9/26/2023 | 56.00 | Commercial Sales | $2,553.36 | 142,988.16 |
| 8/1/2023 | 8/17/2023 | 17.00 | 8/17/2023 | 16.00 | Residential Sales | $348.70 | 5,579.20 |
| 8/1/2023 | 8/3/2023 | 3.00 | 8/3/2023 | 2.00 | Industrial Service | $7,958.19 | 15,916.38 |
| 8/1/2023 | 8/1/2023 | 1.00 | 8/1/2023 | 0.00 | Residential Sales | $386.15 | - |
| 8/1/2023 | 8/2/2023 | 2.00 | 8/2/2023 | 1.00 | Commercial Sales | $13,008.50 | 13,008.50 |
| 8/1/2023 | 8/18/2023 | 18.00 | 8/18/2023 | 17.00 | Residential Sales | $688.24 | 11,700.08 |
| 8/1/2023 | 3/20/2024 | 233.00 | 3/20/2024 | 232.00 | Commercial Sales | $18.01 | 4,178.32 |
| 8/1/2023 | 8/2/2023 | 2.00 | 8/2/2023 | 1.00 | Residential Sales | $8,168.17 | 8,168.17 |
| 8/1/2023 | 8/3/2023 | 3.00 | 8/3/2023 | 2.00 | Commercial Sales | $256,412.30 | 512,824.60 |
| 8/1/2023 | 8/1/2023 | 1.00 | 8/1/2023 | 0.00 | Other Sales to Public Authority | $403.23 | - |
| 8/1/2023 | 8/4/2023 | 4.00 | 8/4/2023 | 3.00 | Industrial Service | $304,231.24 | 912,693.72 |
| 8/1/2023 | 8/3/2023 | 3.00 | 8/3/2023 | 2.00 | Residential Sales | $784,245.93 | 1,568,491.86 |
| 8/1/2023 | 8/4/2023 | 4.00 | 8/4/2023 | 3.00 | Commercial Sales | $149,913.33 | 449,739.99 |
| 8/1/2023 | 8/2/2023 | 2.00 | 8/2/2023 | 1.00 | Other Sales to Public Authority | $94.09 | 94.09 |
| 8/1/2023 | 8/4/2023 | 4.00 | 8/4/2023 | 3.00 | Residential Sales | $2,650.38 | 7,951.14 |
| 8/1/2023 | 8/3/2023 | 3.00 | 8/3/2023 | 2.00 | Other Sales to Public Authority | $22,874.67 | 45,749.34 |
| 8/1/2023 | 8/1/2023 | 1.00 | 8/1/2023 | 0.00 | Public Street & Highway Lighting | $339.86 | - |
| 8/1/2023 | 10/30/2023 | 91.00 | 10/30/2023 | 90.00 | Residential Sales | $23.62 | 2,125.80 |
| 8/1/2023 | 8/4/2023 | 4.00 | 8/4/2023 | 3.00 | Other Sales to Public Authority | $56,337.04 | 169,011.12 |
| 8/1/2023 | 8/7/2023 | 7.00 | 8/7/2023 | 6.00 | Industrial Service | $206,696.46 | 1,240,178.76 |
| 8/1/2023 | 9/13/2023 | 44.00 | 9/13/2023 | 43.00 | Residential Sales | $21.09 | 906.87 |
| 8/1/2023 | 8/7/2023 | 7.00 | 8/7/2023 | 6.00 | Commercial Sales | $63,900.61 | 383,403.66 |
| 8/1/2023 | 9/15/2023 | 46.00 | 9/15/2023 | 45.00 | Commercial Sales | $45.56 | 2,050.20 |
| 8/1/2023 | 8/7/2023 | 7.00 | 8/7/2023 | 6.00 | Residential Sales | $2,059.58 | 12,357.48 |
| 8/1/2023 | 8/21/2023 | 21.00 | 8/21/2023 | 20.00 | Residential Sales | $534.57 | 10,691.40 |
| 8/1/2023 | 8/8/2023 | 8.00 | 8/8/2023 | 7.00 | Commercial Sales | $1,084.95 | 7,594.65 |
| 8/1/2023 | 8/8/2023 | 8.00 | 8/8/2023 | 7.00 | Residential Sales | $1,067.97 | 7,475.79 |
| 8/1/2023 | 8/7/2023 | 7.00 | 8/7/2023 | 6.00 | Other Sales to Public Authority | $37,719.85 | 226,319.10 |
| 8/1/2023 | 8/9/2023 | 9.00 | 8/9/2023 | 8.00 | Commercial Sales | $376.62 | 3,012.96 |
| 8/1/2023 | 8/23/2023 | 23.00 | 8/23/2023 | 22.00 | Commercial Sales | $18.47 | 406.34 |
| 8/1/2023 | 8/9/2023 | 9.00 | 8/9/2023 | 8.00 | Residential Sales | $56.53 | 452.24 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 8/1/2023 | 8/23/2023 | 23.00 | 8/23/2023 | 22.00 | Residential Sales | $129.91 | 2,858.02 |
| 8/1/2023 | 12/7/2023 | 129.00 | 12/7/2023 | 128.00 | Residential Sales | $87.71 | 11,226.88 |
| 8/1/2023 | 10/6/2023 | 67.00 | 10/6/2023 | 66.00 | Commercial Sales | $305.36 | 20,153.76 |
| 8/1/2023 | 9/1/2023 | 32.00 | 9/1/2023 | 31.00 | Residential Sales | $158.99 | 4,928.69 |
| 8/1/2023 | 9/18/2023 | 49.00 | 9/18/2023 | 48.00 | Residential Sales | $142.78 | 6,853.44 |
| 8/1/2023 | 9/19/2023 | 50.00 | 9/19/2023 | 49.00 | Residential Sales | $38.82 | 1,902.18 |
| 8/1/2023 | 9/2/2023 | 33.00 | 9/2/2023 | 32.00 | Residential Sales | $74.09 | 2,370.88 |
| 8/1/2023 | 10/9/2023 | 70.00 | 10/9/2023 | 69.00 | Commercial Sales | $50.53 | 3,486.57 |
| 8/1/2023 | 8/10/2023 | 10.00 | 8/10/2023 | 9.00 | Residential Sales | $110.19 | 991.71 |
| 8/1/2023 | 8/28/2023 | 28.00 | 8/28/2023 | 27.00 | Residential Sales | $246.60 | 6,658.20 |
| 8/1/2023 | 9/6/2023 | 37.00 | 9/6/2023 | 36.00 | Commercial Sales | $39.36 | 1,416.96 |
| 8/1/2023 | 8/11/2023 | 11.00 | 8/11/2023 | 10.00 | Residential Sales | $357.58 | 3,575.80 |
| 8/2/2023 | 8/10/2023 | 9.00 | 8/10/2023 | 8.00 | Residential Sales | $212.19 | 1,697.52 |
| 8/2/2023 | 11/30/2023 | 121.00 | 11/30/2023 | 120.00 | Residential Sales | $165.06 | 19,807.20 |
| 8/2/2023 | 9/6/2023 | 36.00 | 9/6/2023 | 35.00 | Commercial Sales | $1,322.74 | 46,295.90 |
| 8/2/2023 | 8/29/2023 | 28.00 | 8/29/2023 | 27.00 | Residential Sales | $37.96 | 1,024.92 |
| 8/2/2023 | 9/6/2023 | 36.00 | 9/6/2023 | 35.00 | Residential Sales | $61.04 | 2,136.40 |
| 8/2/2023 | 8/14/2023 | 13.00 | 8/14/2023 | 12.00 | Commercial Sales | $61.93 | 743.16 |
| 8/2/2023 | 8/14/2023 | 13.00 | 8/14/2023 | 12.00 | Residential Sales | $234.40 | 2,812.80 |
| 8/2/2023 | 8/15/2023 | 14.00 | 8/15/2023 | 13.00 | Commercial Sales | $677.65 | 8,809.45 |
| 8/2/2023 | 8/15/2023 | 14.00 | 8/15/2023 | 13.00 | Residential Sales | $131.31 | 1,707.03 |
| 8/2/2023 | 8/16/2023 | 15.00 | 8/16/2023 | 14.00 | Commercial Sales | $186.02 | 2,604.28 |
| 8/2/2023 | 8/16/2023 | 15.00 | 8/16/2023 | 14.00 | Residential Sales | $75.89 | 1,062.46 |
| 8/2/2023 | 8/30/2023 | 29.00 | 8/30/2023 | 28.00 | Residential Sales | $54.85 | 1,535.80 |
| 8/2/2023 | 8/16/2023 | 15.00 | 8/16/2023 | 14.00 | Other Sales to Public Authority | $358.66 | 5,021.24 |
| 8/2/2023 | 8/17/2023 | 16.00 | 8/17/2023 | 15.00 | Residential Sales | $109.50 | 1,642.50 |
| 8/2/2023 | 8/3/2023 | 2.00 | 8/3/2023 | 1.00 | Industrial Service | $109.87 | 109.87 |
| 8/2/2023 | 8/3/2023 | 2.00 | 8/3/2023 | 1.00 | Commercial Sales | $97,008.16 | 97,008.16 |
| 8/2/2023 | 8/4/2023 | 3.00 | 8/4/2023 | 2.00 | Industrial Service | $19,706.97 | 39,413.94 |
| 8/2/2023 | 8/3/2023 | 2.00 | 8/3/2023 | 1.00 | Residential Sales | $720,598.81 | 720,598.81 |
| 8/2/2023 | 8/4/2023 | 3.00 | 8/4/2023 | 2.00 | Commercial Sales | $52,435.50 | 104,871.00 |
| 8/2/2023 | 8/4/2023 | 3.00 | 8/4/2023 | 2.00 | Residential Sales | $16,389.81 | 32,779.62 |
| 8/2/2023 | 8/3/2023 | 2.00 | 8/3/2023 | 1.00 | Other Sales to Public Authority | $10,789.98 | 10,789.98 |
| 8/2/2023 | 8/4/2023 | 3.00 | 8/4/2023 | 2.00 | Other Sales to Public Authority | $3,812.38 | 7,624.76 |
| 8/2/2023 | 8/7/2023 | 6.00 | 8/7/2023 | 5.00 | Commercial Sales | $3,288.34 | 16,441.70 |
| 8/2/2023 | 9/14/2023 | 44.00 | 9/14/2023 | 43.00 | Residential Sales | $62.79 | 2,699.97 |
| 8/2/2023 | 1/8/2024 | 160.00 | 1/8/2024 | 159.00 | Residential Sales | $2.63 | 418.17 |
| 8/2/2023 | 8/7/2023 | 6.00 | 8/7/2023 | 5.00 | Residential Sales | $3,690.68 | 18,453.40 |
| 8/2/2023 | 9/15/2023 | 45.00 | 9/15/2023 | 44.00 | Residential Sales | $617.31 | 27,161.64 |
| 8/2/2023 | 8/8/2023 | 7.00 | 8/8/2023 | 6.00 | Commercial Sales | $249.11 | 1,494.66 |
| 8/2/2023 | 8/9/2023 | 8.00 | 8/9/2023 | 7.00 | Commercial Sales | $16.16 | 113.12 |
| 8/2/2023 | 8/8/2023 | 7.00 | 8/8/2023 | 6.00 | Residential Sales | $820.27 | 4,921.62 |
| 8/2/2023 | 11/10/2023 | 101.00 | 11/10/2023 | 100.00 | Other Sales to Public Authority | $4,204.14 | 420,414.00 |
| 8/2/2023 | 8/7/2023 | 6.00 | 8/7/2023 | 5.00 | Other Sales to Public Authority | $64.12 | 320.60 |
| 8/2/2023 | 8/21/2023 | 20.00 | 8/21/2023 | 19.00 | Other Sales to Public Authority | $27,625.42 | 524,882.98 |
| 8/3/2023 | 8/7/2023 | 5.00 | 8/7/2023 | 4.00 | Commercial Sales | $82,780.20 | 331,120.80 |
| 8/3/2023 | 9/14/2023 | 43.00 | 9/14/2023 | 42.00 | Residential Sales | $53.56 | 2,249.52 |
| 8/3/2023 | 8/8/2023 | 6.00 | 8/8/2023 | 5.00 | Industrial Service | $7,957.67 | 39,788.35 |
| 8/3/2023 | 8/8/2023 | 6.00 | 8/8/2023 | 5.00 | Commercial Sales | $42,471.30 | 212,356.50 |
| 8/3/2023 | 8/7/2023 | 5.00 | 8/7/2023 | 4.00 | Residential Sales | $10,052.92 | 40,211.68 |
| 8/3/2023 | 3/25/2024 | 236.00 | 3/25/2024 | 235.00 | Residential Sales | $21.09 | 4,956.15 |
| 8/3/2023 | 8/9/2023 | 7.00 | 8/9/2023 | 6.00 | Commercial Sales | $655.20 | 3,931.20 |
| 8/3/2023 | 8/8/2023 | 6.00 | 8/8/2023 | 5.00 | Residential Sales | $1,645.71 | 8,228.55 |
| 8/3/2023 | 8/23/2023 | 21.00 | 8/23/2023 | 20.00 | Commercial Sales | $180.17 | 3,603.40 |
| 8/3/2023 | 8/3/2023 | 1.00 | 8/3/2023 | 0.00 | Other Sales to Public Authority | $2,820.93 | - |
| 8/3/2023 | 8/4/2023 | 2.00 | 8/4/2023 | 1.00 | Other Sales to Public Authority | $23,822.84 | 23,822.84 |
| 8/3/2023 | 8/24/2023 | 22.00 | 8/24/2023 | 21.00 | Commercial Sales | $84,720.48 | 1,779,130.08 |
| 8/3/2023 | 8/9/2023 | 7.00 | 8/9/2023 | 6.00 | Residential Sales | $536.77 | 3,220.62 |
| 8/3/2023 | 10/20/2023 | 79.00 | 10/20/2023 | 78.00 | Residential Sales | $105.11 | 8,198.58 |
| 8/3/2023 | 8/7/2023 | 5.00 | 8/7/2023 | 4.00 | Other Sales to Public Authority | $22,650.84 | 90,603.36 |
| 8/3/2023 | 8/10/2023 | 8.00 | 8/10/2023 | 7.00 | Commercial Sales | $322.97 | 2,260.79 |
| 8/3/2023 | 8/8/2023 | 6.00 | 8/8/2023 | 5.00 | Other Sales to Public Authority | $73.62 | 368.10 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 8/3/2023 | 8/10/2023 | 8.00 | 8/10/2023 | 7.00 | Residential Sales | $16.24 | 113.68 |
| 8/3/2023 | 8/28/2023 | 26.00 | 8/28/2023 | 25.00 | Residential Sales | $148.18 | 3,704.50 |
| 8/3/2023 | 8/11/2023 | 9.00 | 8/11/2023 | 8.00 | Residential Sales | $40.63 | 325.04 |
| 8/3/2023 | 8/14/2023 | 12.00 | 8/14/2023 | 11.00 | Industrial Service | $295.13 | 3,246.43 |
| 8/3/2023 | 9/7/2023 | 36.00 | 9/7/2023 | 35.00 | Residential Sales | $105.11 | 3,678.85 |
| 8/3/2023 | 8/14/2023 | 12.00 | 8/14/2023 | 11.00 | Residential Sales | $71.28 | 784.08 |
| 8/3/2023 | 8/15/2023 | 13.00 | 8/15/2023 | 12.00 | Commercial Sales | $949.82 | 11,397.84 |
| 8/3/2023 | 8/15/2023 | 13.00 | 8/15/2023 | 12.00 | Residential Sales | $134.32 | 1,611.84 |
| 8/3/2023 | 8/10/2023 | 8.00 | 8/10/2023 | 7.00 | Other Sales to Public Authority | $1,711.33 | 11,979.31 |
| 8/3/2023 | 8/16/2023 | 14.00 | 8/16/2023 | 13.00 | Commercial Sales | $18.68 | 242.84 |
| 8/3/2023 | 8/18/2023 | 16.00 | 8/18/2023 | 15.00 | Commercial Sales | $8.18 | 122.70 |
| 8/3/2023 | 8/4/2023 | 2.00 | 8/4/2023 | 1.00 | Commercial Sales | $210,520.27 | 210,520.27 |
| 8/3/2023 | 8/3/2023 | 1.00 | 8/3/2023 | 0.00 | Residential Sales | $101.59 | - |
| 8/3/2023 | 8/17/2023 | 15.00 | 8/17/2023 | 14.00 | Public Street & Highway Lighting | $1,997.30 | 27,962.20 |
| 8/3/2023 | 8/4/2023 | 2.00 | 8/4/2023 | 1.00 | Residential Sales | $756,789.64 | 756,789.64 |
| 8/4/2023 | 8/17/2023 | 14.00 | 8/17/2023 | 13.00 | Residential Sales | $55.53 | 721.89 |
| 8/4/2023 | 8/18/2023 | 15.00 | 8/18/2023 | 14.00 | Commercial Sales | $553.86 | 7,754.04 |
| 8/4/2023 | 10/12/2023 | 70.00 | 10/12/2023 | 69.00 | Residential Sales | $126.59 | 8,734.71 |
| 8/4/2023 | 10/13/2023 | 71.00 | 10/13/2023 | 70.00 | Residential Sales | $100.97 | 7,067.90 |
| 8/4/2023 | 8/4/2023 | 1.00 | 8/4/2023 | 0.00 | Commercial Sales | $4,097.18 | - |
| 8/4/2023 | 8/4/2023 | 1.00 | 8/4/2023 | 0.00 | Residential Sales | $1,475.88 | - |
| 8/4/2023 | 9/29/2023 | 57.00 | 9/29/2023 | 56.00 | Residential Sales | $210.72 | 11,800.32 |
| 8/4/2023 | 8/7/2023 | 4.00 | 8/7/2023 | 3.00 | Industrial Service | $802.63 | 2,407.89 |
| 8/4/2023 | 8/7/2023 | 4.00 | 8/7/2023 | 3.00 | Commercial Sales | $175,661.23 | 526,983.69 |
| 8/4/2023 | 8/8/2023 | 5.00 | 8/8/2023 | 4.00 | Industrial Service | $869.37 | 3,477.48 |
| 8/4/2023 | 8/7/2023 | 4.00 | 8/7/2023 | 3.00 | Residential Sales | $1,179,311.28 | 3,537,933.84 |
| 8/4/2023 | 8/8/2023 | 5.00 | 8/8/2023 | 4.00 | Commercial Sales | $68,358.26 | 273,433.04 |
| 8/4/2023 | 8/21/2023 | 18.00 | 8/21/2023 | 17.00 | Residential Sales | $80.38 | 1,366.46 |
| 8/4/2023 | 8/9/2023 | 6.00 | 8/9/2023 | 5.00 | Commercial Sales | $42,306.47 | 211,532.35 |
| 8/4/2023 | 8/8/2023 | 5.00 | 8/8/2023 | 4.00 | Residential Sales | $5,037.80 | 20,151.20 |
| 8/4/2023 | 8/22/2023 | 19.00 | 8/22/2023 | 18.00 | Residential Sales | $38.73 | 697.14 |
| 8/4/2023 | 10/4/2023 | 62.00 | 10/4/2023 | 61.00 | Commercial Sales | $35.34 | 2,155.74 |
| 8/4/2023 | 8/9/2023 | 6.00 | 8/9/2023 | 5.00 | Residential Sales | $793.03 | 3,965.15 |
| 8/4/2023 | 8/23/2023 | 20.00 | 8/23/2023 | 19.00 | Residential Sales | $268.13 | 5,094.47 |
| 8/4/2023 | 8/4/2023 | 1.00 | 8/4/2023 | 0.00 | Other Sales to Public Authority | $8.18 | - |
| 8/4/2023 | 9/2/2023 | 30.00 | 9/2/2023 | 29.00 | Commercial Sales | $325.11 | 9,428.19 |
| 8/4/2023 | 8/7/2023 | 4.00 | 8/7/2023 | 3.00 | Other Sales to Public Authority | $11,983.76 | 35,951.28 |
| 8/4/2023 | 8/10/2023 | 7.00 | 8/10/2023 | 6.00 | Commercial Sales | $2,566.83 | 15,400.98 |
| 8/4/2023 | 8/10/2023 | 7.00 | 8/10/2023 | 6.00 | Residential Sales | $791.21 | 4,747.26 |
| 8/4/2023 | 8/8/2023 | 5.00 | 8/8/2023 | 4.00 | Other Sales to Public Authority | $25,402.28 | 101,609.12 |
| 8/4/2023 | 8/11/2023 | 8.00 | 8/11/2023 | 7.00 | Residential Sales | $30.80 | 215.60 |
| 8/4/2023 | 8/9/2023 | 6.00 | 8/9/2023 | 5.00 | Other Sales to Public Authority | $27,508.58 | 137,542.90 |
| 8/4/2023 | 9/6/2023 | 34.00 | 9/6/2023 | 33.00 | Commercial Sales | $2,601.25 | 85,841.25 |
| 8/4/2023 | 9/6/2023 | 34.00 | 9/6/2023 | 33.00 | Residential Sales | $21.47 | 708.51 |
| 8/4/2023 | 8/29/2023 | 26.00 | 8/29/2023 | 25.00 | Residential Sales | $8.15 | 203.75 |
| 8/4/2023 | 9/7/2023 | 35.00 | 9/7/2023 | 34.00 | Residential Sales | $101.96 | 3,466.64 |
| 8/4/2023 | 8/14/2023 | 11.00 | 8/14/2023 | 10.00 | Commercial Sales | $378.60 | 3,786.00 |
| 8/4/2023 | 9/21/2023 | 49.00 | 9/21/2023 | 48.00 | Residential Sales | $90.17 | 4,328.16 |
| 8/4/2023 | 9/8/2023 | 36.00 | 9/8/2023 | 35.00 | Residential Sales | $157.02 | 5,495.70 |
| 8/4/2023 | 8/16/2023 | 13.00 | 8/16/2023 | 12.00 | Commercial Sales | $416.41 | 4,996.92 |
| 8/4/2023 | 8/15/2023 | 12.00 | 8/15/2023 | 11.00 | Residential Sales | $429.05 | 4,719.55 |
| 8/4/2023 | 11/6/2023 | 95.00 | 11/6/2023 | 94.00 | Commercial Sales | $197.02 | 18,519.88 |
| 8/5/2023 | 8/16/2023 | 12.00 | 8/16/2023 | 11.00 | Residential Sales | $27.84 | 306.24 |
| 8/5/2023 | 8/7/2023 | 3.00 | 8/7/2023 | 2.00 | Residential Sales | $890.11 | 1,780.22 |
| 8/6/2023 | 8/7/2023 | 2.00 | 8/7/2023 | 1.00 | Public Street & Highway Lighting | $10.43 | 10.43 |
| 8/6/2023 | 8/10/2023 | 5.00 | 8/10/2023 | 4.00 | Residential Sales | $201.58 | 806.32 |
| 8/6/2023 | 8/14/2023 | 9.00 | 8/14/2023 | 8.00 | Residential Sales | $91.33 | 730.64 |
| 8/6/2023 | 8/17/2023 | 12.00 | 8/17/2023 | 11.00 | Residential Sales | $71.24 | 783.64 |
| 8/6/2023 | 8/7/2023 | 2.00 | 8/7/2023 | 1.00 | Commercial Sales | $22.89 | 22.89 |
| 8/6/2023 | 8/8/2023 | 3.00 | 8/8/2023 | 2.00 | Industrial Service | $163.56 | 327.12 |
| 8/6/2023 | 8/7/2023 | 2.00 | 8/7/2023 | 1.00 | Residential Sales | $3,357.12 | 3,357.12 |
| 8/6/2023 | 8/8/2023 | 3.00 | 8/8/2023 | 2.00 | Residential Sales | $554.35 | 1,108.70 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 8/7/2023 | 9/13/2023 | 38.00 | 9/13/2023 | 37.00 | Residential Sales | $7.23 | 267.51 |
| 8/7/2023 | 8/7/2023 | 1.00 | 8/7/2023 | 0.00 | Commercial Sales | $1,566.25 | - |
| 8/7/2023 | 8/8/2023 | 2.00 | 8/8/2023 | 1.00 | Industrial Service | $14,288.37 | 14,288.37 |
| 8/7/2023 | 3/25/2024 | 232.00 | 3/25/2024 | 231.00 | Commercial Sales | $36.02 | 8,320.62 |
| 8/7/2023 | 8/8/2023 | 2.00 | 8/8/2023 | 1.00 | Commercial Sales | $462,960.45 | 462,960.45 |
| 8/7/2023 | 8/9/2023 | 3.00 | 8/9/2023 | 2.00 | Industrial Service | $1,133.93 | 2,267.86 |
| 8/7/2023 | 8/7/2023 | 1.00 | 8/7/2023 | 0.00 | Residential Sales | $1,517.44 | - |
| 8/7/2023 | 8/21/2023 | 15.00 | 8/21/2023 | 14.00 | Residential Sales | $72.09 | 1,009.26 |
| 8/7/2023 | 10/19/2023 | 74.00 | 10/19/2023 | 73.00 | Residential Sales | $60.36 | 4,406.28 |
| 8/7/2023 | 8/8/2023 | 2.00 | 8/8/2023 | 1.00 | Residential Sales | $1,008,728.25 | 1,008,728.25 |
| 8/7/2023 | 8/9/2023 | 3.00 | 8/9/2023 | 2.00 | Commercial Sales | $174,241.57 | 348,483.14 |
| 8/7/2023 | 8/22/2023 | 16.00 | 8/22/2023 | 15.00 | Residential Sales | $47.48 | 712.20 |
| 8/7/2023 | 8/9/2023 | 3.00 | 8/9/2023 | 2.00 | Residential Sales | $16,132.51 | 32,265.02 |
| 8/7/2023 | 10/4/2023 | 59.00 | 10/4/2023 | 58.00 | Residential Sales | $2.84 | 164.72 |
| 8/7/2023 | 12/6/2023 | 122.00 | 12/6/2023 | 121.00 | Residential Sales | $164.56 | 19,911.76 |
| 8/7/2023 | 8/23/2023 | 17.00 | 8/23/2023 | 16.00 | Residential Sales | $430.60 | 6,889.60 |
| 8/7/2023 | 9/19/2023 | 44.00 | 9/19/2023 | 43.00 | Residential Sales | $134.74 | 5,793.82 |
| 8/7/2023 | 8/7/2023 | 1.00 | 8/7/2023 | 0.00 | Other Sales to Public Authority | $17.42 | - |
| 8/7/2023 | 8/10/2023 | 4.00 | 8/10/2023 | 3.00 | Commercial Sales | $64,099.13 | 192,297.39 |
| 8/7/2023 | 11/15/2023 | 101.00 | 11/15/2023 | 100.00 | Residential Sales | $109.03 | 10,903.00 |
| 8/7/2023 | 8/10/2023 | 4.00 | 8/10/2023 | 3.00 | Residential Sales | $6,919.75 | 20,759.25 |
| 8/7/2023 | 8/8/2023 | 2.00 | 8/8/2023 | 1.00 | Other Sales to Public Authority | $34,270.24 | 34,270.24 |
| 8/7/2023 | 8/11/2023 | 5.00 | 8/11/2023 | 4.00 | Commercial Sales | $11,873.68 | 47,494.72 |
| 8/7/2023 | 8/28/2023 | 22.00 | 8/28/2023 | 21.00 | Commercial Sales | $3,209.98 | 67,409.58 |
| 8/7/2023 | 10/9/2023 | 64.00 | 10/9/2023 | 63.00 | Commercial Sales | $57.05 | 3,594.15 |
| 8/7/2023 | 8/9/2023 | 3.00 | 8/9/2023 | 2.00 | Other Sales to Public Authority | $1,832.97 | 3,665.94 |
| 8/7/2023 | 8/11/2023 | 5.00 | 8/11/2023 | 4.00 | Residential Sales | $1,343.27 | 5,373.08 |
| 8/7/2023 | 8/28/2023 | 22.00 | 8/28/2023 | 21.00 | Residential Sales | $388.00 | 8,148.00 |
| 8/7/2023 | 10/24/2023 | 79.00 | 10/24/2023 | 78.00 | Residential Sales | $15.32 | 1,194.96 |
| 8/7/2023 | 8/14/2023 | 8.00 | 8/14/2023 | 7.00 | Commercial Sales | $2,822.13 | 19,754.91 |
| 8/7/2023 | 9/7/2023 | 32.00 | 9/7/2023 | 31.00 | Residential Sales | $144.95 | 4,493.45 |
| 8/7/2023 | 8/14/2023 | 8.00 | 8/14/2023 | 7.00 | Residential Sales | $1,075.14 | 7,525.98 |
| 8/7/2023 | 1/30/2024 | 177.00 | 1/30/2024 | 176.00 | Residential Sales | $152.40 | 26,822.40 |
| 8/7/2023 | 8/15/2023 | 9.00 | 8/15/2023 | 8.00 | Commercial Sales | $1,383.90 | 11,071.20 |
| 8/7/2023 | 9/22/2023 | 47.00 | 9/22/2023 | 46.00 | Residential Sales | $63.12 | 2,903.52 |
| 8/7/2023 | 12/11/2023 | 127.00 | 12/11/2023 | 126.00 | Residential Sales | $132.77 | 16,729.02 |
| 8/7/2023 | 8/16/2023 | 10.00 | 8/16/2023 | 9.00 | Commercial Sales | $191.41 | 1,722.69 |
| 8/7/2023 | 8/10/2023 | 4.00 | 8/10/2023 | 3.00 | Other Sales to Public Authority | $7,921.87 | 23,765.61 |
| 8/7/2023 | 8/15/2023 | 9.00 | 8/15/2023 | 8.00 | Residential Sales | $1,109.47 | 8,875.76 |
| 8/7/2023 | 12/13/2023 | 129.00 | 12/13/2023 | 128.00 | Commercial Sales | $16.81 | 2,151.68 |
| 8/7/2023 | 10/27/2023 | 82.00 | 10/27/2023 | 81.00 | Residential Sales | $289.72 | 23,467.32 |
| 8/7/2023 | 8/16/2023 | 10.00 | 8/16/2023 | 9.00 | Residential Sales | $432.15 | 3,889.35 |
| 8/7/2023 | 8/31/2023 | 25.00 | 8/31/2023 | 24.00 | Commercial Sales | $707.41 | 16,977.84 |
| 8/7/2023 | 10/12/2023 | 67.00 | 10/12/2023 | 66.00 | Commercial Sales | $67.56 | 4,458.96 |
| 8/7/2023 | 9/26/2023 | 51.00 | 9/26/2023 | 50.00 | Commercial Sales | $11,347.63 | 567,381.50 |
| 8/7/2023 | 9/25/2023 | 50.00 | 9/25/2023 | 49.00 | Residential Sales | $48.90 | 2,396.10 |
| 8/7/2023 | 8/17/2023 | 11.00 | 8/17/2023 | 10.00 | Residential Sales | $206.58 | 2,065.80 |
| 8/7/2023 | 8/17/2023 | 11.00 | 8/17/2023 | 10.00 | Public Street & Highway Lighting | $57.81 | 578.10 |
| 8/7/2023 | 9/11/2023 | 36.00 | 9/11/2023 | 35.00 | Residential Sales | $15.63 | 547.05 |
| 8/8/2023 | 8/17/2023 | 10.00 | 8/17/2023 | 9.00 | Residential Sales | $288.73 | 2,598.57 |
| 8/8/2023 | 8/14/2023 | 7.00 | 8/14/2023 | 6.00 | Other Sales to Public Authority | $10,072.39 | 60,434.34 |
| 8/8/2023 | 9/11/2023 | 35.00 | 9/11/2023 | 34.00 | Residential Sales | $124.31 | 4,226.54 |
| 8/8/2023 | 8/30/2023 | 23.00 | 8/30/2023 | 22.00 | Other Sales to Public Authority | $61,156.32 | 1,345,439.04 |
| 8/8/2023 | 8/10/2023 | 3.00 | 8/10/2023 | 2.00 | Company Use | $0.00 | - |
| 8/8/2023 | 8/8/2023 | 1.00 | 8/8/2023 | 0.00 | Commercial Sales | $454.44 | - |
| 8/8/2023 | 8/9/2023 | 2.00 | 8/9/2023 | 1.00 | Industrial Service | $43,744.42 | 43,744.42 |
| 8/8/2023 | 10/3/2023 | 57.00 | 10/3/2023 | 56.00 | Commercial Sales | $968.49 | 54,235.44 |
| 8/8/2023 | 8/9/2023 | 2.00 | 8/9/2023 | 1.00 | Commercial Sales | $315,204.41 | 315,204.41 |
| 8/8/2023 | 8/8/2023 | 1.00 | 8/8/2023 | 0.00 | Residential Sales | $992.12 | - |
| 8/8/2023 | 8/9/2023 | 2.00 | 8/9/2023 | 1.00 | Residential Sales | $404,971.75 | 404,971.75 |
| 8/8/2023 | 8/23/2023 | 16.00 | 8/23/2023 | 15.00 | Residential Sales | $110.19 | 1,652.85 |
| 8/8/2023 | 11/14/2023 | 99.00 | 11/14/2023 | 98.00 | Commercial Sales | $2,160.72 | 211,750.56 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 8/8/2023 | 8/10/2023 | 3.00 | 8/10/2023 | 2.00 | Industrial Service | $27,815.45 | 55,630.90 |
| 8/8/2023 | 8/8/2023 | 1.00 | 8/8/2023 | 0.00 | Public Street & Highway Lighting | $19.32 | - |
| 8/8/2023 | 8/10/2023 | 3.00 | 8/10/2023 | 2.00 | Commercial Sales | $109,049.55 | 218,099.10 |
| 8/8/2023 | 8/11/2023 | 4.00 | 8/11/2023 | 3.00 | Industrial Service | $11,476.91 | 34,430.73 |
| 8/8/2023 | 8/10/2023 | 3.00 | 8/10/2023 | 2.00 | Residential Sales | $6,881.88 | 13,763.76 |
| 8/8/2023 | 8/11/2023 | 4.00 | 8/11/2023 | 3.00 | Commercial Sales | $179,637.13 | 538,911.39 |
| 8/8/2023 | 8/9/2023 | 2.00 | 8/9/2023 | 1.00 | Other Sales to Public Authority | $41,178.68 | 41,178.68 |
| 8/8/2023 | 8/11/2023 | 4.00 | 8/11/2023 | 3.00 | Residential Sales | $734.23 | 2,202.69 |
| 8/8/2023 | 9/6/2023 | 30.00 | 9/6/2023 | 29.00 | Commercial Sales | $3,424.33 | 99,305.57 |
| 8/8/2023 | 9/7/2023 | 31.00 | 9/7/2023 | 30.00 | Commercial Sales | $8.18 | 245.40 |
| 8/8/2023 | 8/14/2023 | 7.00 | 8/14/2023 | 6.00 | Industrial Service | $13,052.46 | 78,314.76 |
| 8/8/2023 | 2/9/2024 | 186.00 | 2/9/2024 | 185.00 | Commercial Sales | $42.03 | 7,775.55 |
| 8/8/2023 | 8/14/2023 | 7.00 | 8/14/2023 | 6.00 | Commercial Sales | $45,230.21 | 271,381.26 |
| 8/8/2023 | 8/15/2023 | 8.00 | 8/15/2023 | 7.00 | Industrial Service | $89,534.70 | 626,742.90 |
| 8/8/2023 | 8/14/2023 | 7.00 | 8/14/2023 | 6.00 | Residential Sales | $469.01 | 2,814.06 |
| 8/8/2023 | 8/15/2023 | 8.00 | 8/15/2023 | 7.00 | Commercial Sales | $10,915.66 | 76,409.62 |
| 8/8/2023 | 8/10/2023 | 3.00 | 8/10/2023 | 2.00 | Other Sales to Public Authority | $24,983.11 | 49,966.22 |
| 8/8/2023 | 8/16/2023 | 9.00 | 8/16/2023 | 8.00 | Commercial Sales | $62.72 | 501.76 |
| 8/8/2023 | 8/15/2023 | 8.00 | 8/15/2023 | 7.00 | Residential Sales | $91.46 | 640.22 |
| 8/8/2023 | 8/16/2023 | 9.00 | 8/16/2023 | 8.00 | Residential Sales | $536.91 | 4,295.28 |
| 8/8/2023 | 8/11/2023 | 4.00 | 8/11/2023 | 3.00 | Other Sales to Public Authority | $25,214.21 | 75,642.63 |
| 8/8/2023 | 8/31/2023 | 24.00 | 8/31/2023 | 23.00 | Commercial Sales | $963.15 | 22,152.45 |
| 8/9/2023 | 9/7/2023 | 30.00 | 9/7/2023 | 29.00 | Commercial Sales | $298.25 | 8,649.25 |
| 8/9/2023 | 8/14/2023 | 6.00 | 8/14/2023 | 5.00 | Commercial Sales | $90,471.65 | 452,358.25 |
| 8/9/2023 | 8/15/2023 | 7.00 | 8/15/2023 | 6.00 | Commercial Sales | $52,570.93 | 315,425.58 |
| 8/9/2023 | 8/14/2023 | 6.00 | 8/14/2023 | 5.00 | Residential Sales | $515.08 | 2,575.40 |
| 8/9/2023 | 10/10/2023 | 63.00 | 10/10/2023 | 62.00 | Commercial Sales | $1,630.63 | 101,099.06 |
| 8/9/2023 | 8/10/2023 | 2.00 | 8/10/2023 | 1.00 | Other Sales to Public Authority | $38,082.75 | 38,082.75 |
| 8/9/2023 | 8/15/2023 | 7.00 | 8/15/2023 | 6.00 | Residential Sales | $499.79 | 2,998.74 |
| 8/9/2023 | 8/16/2023 | 8.00 | 8/16/2023 | 7.00 | Commercial Sales | $8,028.40 | 56,198.80 |
| 8/9/2023 | 8/11/2023 | 3.00 | 8/11/2023 | 2.00 | Other Sales to Public Authority | $8,941.06 | 17,882.12 |
| 8/9/2023 | 8/16/2023 | 8.00 | 8/16/2023 | 7.00 | Residential Sales | $405.31 | 2,837.17 |
| 8/9/2023 | 8/30/2023 | 22.00 | 8/30/2023 | 21.00 | Residential Sales | $93.50 | 1,963.50 |
| 8/9/2023 | 8/18/2023 | 10.00 | 8/18/2023 | 9.00 | Industrial Service | $223.42 | 2,010.78 |
| 8/9/2023 | 8/18/2023 | 10.00 | 8/18/2023 | 9.00 | Commercial Sales | $13,517.93 | 121,661.37 |
| 8/9/2023 | 8/17/2023 | 9.00 | 8/17/2023 | 8.00 | Residential Sales | $106.22 | 849.76 |
| 8/9/2023 | 8/14/2023 | 6.00 | 8/14/2023 | 5.00 | Public Street & Highway Lighting | $53.23 | 266.15 |
| 8/9/2023 | 8/18/2023 | 10.00 | 8/18/2023 | 9.00 | Residential Sales | $343.60 | 3,092.40 |
| 8/9/2023 | 8/14/2023 | 6.00 | 8/14/2023 | 5.00 | Other Sales to Public Authority | $22,552.78 | 112,763.90 |
| 8/9/2023 | 8/16/2023 | 8.00 | 8/16/2023 | 7.00 | Other Sales to Public Authority | $145.48 | 1,018.36 |
| 8/9/2023 | 8/22/2023 | 14.00 | 8/22/2023 | 13.00 | Commercial Sales | $12.61 | 163.93 |
| 8/9/2023 | 8/21/2023 | 13.00 | 8/21/2023 | 12.00 | Residential Sales | $300.44 | 3,605.28 |
| 8/9/2023 | 8/9/2023 | 1.00 | 8/9/2023 | 0.00 | Commercial Sales | $939.86 | - |
| 8/9/2023 | 8/22/2023 | 14.00 | 8/22/2023 | 13.00 | Residential Sales | $397.37 | 5,165.81 |
| 8/9/2023 | 8/23/2023 | 15.00 | 8/23/2023 | 14.00 | Residential Sales | $102.26 | 1,431.64 |
| 8/9/2023 | 10/30/2023 | 83.00 | 10/30/2023 | 82.00 | Other Sales to Public Authority | $292.50 | 23,985.00 |
| 8/9/2023 | 8/9/2023 | 1.00 | 8/9/2023 | 0.00 | Residential Sales | $2,612.40 | - |
| 8/9/2023 | 8/24/2023 | 16.00 | 8/24/2023 | 15.00 | Residential Sales | $21.54 | 323.10 |
| 8/9/2023 | 8/10/2023 | 2.00 | 8/10/2023 | 1.00 | Industrial Service | $72,235.83 | 72,235.83 |
| 8/9/2023 | 8/25/2023 | 17.00 | 8/25/2023 | 16.00 | Residential Sales | $99.90 | 1,598.40 |
| 8/9/2023 | 8/10/2023 | 2.00 | 8/10/2023 | 1.00 | Commercial Sales | $345,687.75 | 345,687.75 |
| 8/9/2023 | 8/11/2023 | 3.00 | 8/11/2023 | 2.00 | Industrial Service | $38,934.87 | 77,869.74 |
| 8/9/2023 | 8/10/2023 | 2.00 | 8/10/2023 | 1.00 | Residential Sales | $376,469.78 | 376,469.78 |
| 8/9/2023 | 8/11/2023 | 3.00 | 8/11/2023 | 2.00 | Commercial Sales | $207,787.82 | 415,575.64 |
| 8/9/2023 | 2/20/2024 | 196.00 | 2/20/2024 | 195.00 | Residential Sales | $23.08 | 4,500.60 |
| 8/9/2023 | 8/11/2023 | 3.00 | 8/11/2023 | 2.00 | Residential Sales | $6,384.48 | 12,768.96 |
| 8/9/2023 | 8/28/2023 | 20.00 | 8/28/2023 | 19.00 | Residential Sales | $208.93 | 3,969.67 |
| 8/9/2023 | 8/9/2023 | 1.00 | 8/9/2023 | 0.00 | Other Sales to Public Authority | $221.74 | - |
| 8/9/2023 | 9/6/2023 | 29.00 | 9/6/2023 | 28.00 | Commercial Sales | $1,803.86 | 50,508.08 |
| 8/10/2023 | 8/14/2023 | 5.00 | 8/14/2023 | 4.00 | Industrial Service | $315,765.49 | 1,263,061.96 |
| 8/10/2023 | 8/14/2023 | 5.00 | 8/14/2023 | 4.00 | Commercial Sales | $121,808.93 | 487,235.72 |
| 8/10/2023 | 8/10/2023 | 1.00 | 8/10/2023 | 0.00 | Public Street & Highway Lighting | $241.58 | - |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 8/10/2023 | 8/15/2023 | 6.00 | 8/15/2023 | 5.00 | Industrial Service | $237,484.82 | 1,187,424.10 |
| 8/10/2023 | 8/14/2023 | 5.00 | 8/14/2023 | 4.00 | Residential Sales | $11,940.17 | 47,760.68 |
| 8/10/2023 | 8/15/2023 | 6.00 | 8/15/2023 | 5.00 | Commercial Sales | $205,319.78 | 1,026,598.90 |
| 8/10/2023 | 8/16/2023 | 7.00 | 8/16/2023 | 6.00 | Industrial Service | $11,574.32 | 69,445.92 |
| 8/10/2023 | 10/26/2023 | 78.00 | 10/26/2023 | 77.00 | Residential Sales | $30.98 | 2,385.46 |
| 8/10/2023 | 8/11/2023 | 2.00 | 8/11/2023 | 1.00 | Public Street & Highway Lighting | $54.04 | 54.04 |
| 8/10/2023 | 8/15/2023 | 6.00 | 8/15/2023 | 5.00 | Residential Sales | $754.17 | 3,770.85 |
| 8/10/2023 | 8/16/2023 | 7.00 | 8/16/2023 | 6.00 | Commercial Sales | $371.49 | 2,228.94 |
| 8/10/2023 | 8/10/2023 | 1.00 | 8/10/2023 | 0.00 | Other Sales to Public Authority | $17.42 | - |
| 8/10/2023 | 8/16/2023 | 7.00 | 8/16/2023 | 6.00 | Residential Sales | $699.28 | 4,195.68 |
| 8/10/2023 | 8/11/2023 | 2.00 | 8/11/2023 | 1.00 | Other Sales to Public Authority | $29,399.80 | 29,399.80 |
| 8/10/2023 | 8/30/2023 | 21.00 | 8/30/2023 | 20.00 | Residential Sales | $82.02 | 1,640.40 |
| 8/10/2023 | 8/17/2023 | 8.00 | 8/17/2023 | 7.00 | Residential Sales | $69.88 | 489.16 |
| 8/10/2023 | 8/14/2023 | 5.00 | 8/14/2023 | 4.00 | Public Street & Highway Lighting | $143.44 | 573.76 |
| 8/10/2023 | 10/12/2023 | 64.00 | 10/12/2023 | 63.00 | Residential Sales | $233.86 | 14,733.18 |
| 8/10/2023 | 8/18/2023 | 9.00 | 8/18/2023 | 8.00 | Residential Sales | $221.44 | 1,771.52 |
| 8/10/2023 | 8/14/2023 | 5.00 | 8/14/2023 | 4.00 | Other Sales to Public Authority | $8,426.89 | 33,707.56 |
| 8/10/2023 | 8/17/2023 | 8.00 | 8/17/2023 | 7.00 | Public Street & Highway Lighting | $54,855.12 | 383,985.84 |
| 8/10/2023 | 9/11/2023 | 33.00 | 9/11/2023 | 32.00 | Residential Sales | $79.55 | 2,545.60 |
| 8/10/2023 | 8/18/2023 | 9.00 | 8/18/2023 | 8.00 | Public Street & Highway Lighting | $18,052.55 | 144,420.40 |
| 8/10/2023 | 8/21/2023 | 12.00 | 8/21/2023 | 11.00 | Industrial Service | $87,773.73 | 965,511.03 |
| 8/10/2023 | 9/13/2023 | 35.00 | 9/13/2023 | 34.00 | Residential Sales | $101.17 | 3,439.78 |
| 8/10/2023 | 10/9/2023 | 61.00 | 10/9/2023 | 60.00 | Company Use | -$694.34 | (41,660.40) |
| 8/10/2023 | 9/14/2023 | 36.00 | 9/14/2023 | 35.00 | Residential Sales | $130.02 | 4,550.70 |
| 8/10/2023 | 8/22/2023 | 13.00 | 8/22/2023 | 12.00 | Commercial Sales | $3,441.93 | 41,303.16 |
| 8/10/2023 | 8/24/2023 | 15.00 | 8/24/2023 | 14.00 | Industrial Service | $502,775.84 | 7,038,861.76 |
| 8/10/2023 | 8/22/2023 | 13.00 | 8/22/2023 | 12.00 | Residential Sales | $25.11 | 301.32 |
| 8/10/2023 | 9/18/2023 | 40.00 | 9/18/2023 | 39.00 | Industrial Service | $38,892.34 | 1,516,801.26 |
| 8/10/2023 | 9/19/2023 | 41.00 | 9/19/2023 | 40.00 | Commercial Sales | $1,160.10 | 46,404.00 |
| 8/10/2023 | 10/6/2023 | 58.00 | 10/6/2023 | 57.00 | Commercial Sales | $18.01 | 1,026.57 |
| 8/10/2023 | 8/22/2023 | 13.00 | 8/22/2023 | 12.00 | Public Street & Highway Lighting | $9,660.40 | 115,924.80 |
| 8/10/2023 | 11/15/2023 | 98.00 | 11/15/2023 | 97.00 | Commercial Sales | $100.24 | 9,723.28 |
| 8/10/2023 | 8/25/2023 | 16.00 | 8/25/2023 | 15.00 | Residential Sales | $110.63 | 1,659.45 |
| 8/10/2023 | 11/14/2023 | 97.00 | 11/14/2023 | 96.00 | Residential Sales | $336.78 | 32,330.88 |
| 8/10/2023 | 8/10/2023 | 1.00 | 8/10/2023 | 0.00 | Commercial Sales | $2,208.19 | - |
| 8/10/2023 | 8/11/2023 | 2.00 | 8/11/2023 | 1.00 | Industrial Service | $127,824.24 | 127,824.24 |
| 8/10/2023 | 11/15/2023 | 98.00 | 11/15/2023 | 97.00 | Residential Sales | $144.75 | 14,040.75 |
| 8/10/2023 | 8/22/2023 | 13.00 | 8/22/2023 | 12.00 | Other Sales to Public Authority | $11,342.65 | 136,111.80 |
| 8/10/2023 | 8/11/2023 | 2.00 | 8/11/2023 | 1.00 | Commercial Sales | $267,447.74 | 267,447.74 |
| 8/10/2023 | 8/10/2023 | 1.00 | 8/10/2023 | 0.00 | Residential Sales | $2,269.63 | - |
| 8/10/2023 | 8/11/2023 | 2.00 | 8/11/2023 | 1.00 | Residential Sales | $668,596.95 | 668,596.95 |
| 8/10/2023 | 8/28/2023 | 19.00 | 8/28/2023 | 18.00 | Residential Sales | $182.83 | 3,290.94 |
| 8/10/2023 | 9/5/2023 | 27.00 | 9/5/2023 | 26.00 | Residential Sales | $177.42 | 4,612.92 |
| 8/11/2023 | 11/14/2023 | 96.00 | 11/14/2023 | 95.00 | Commercial Sales | $528.79 | 50,235.05 |
| 8/11/2023 | 8/25/2023 | 15.00 | 8/25/2023 | 14.00 | Residential Sales | $213.81 | 2,993.34 |
| 8/11/2023 | 11/30/2023 | 112.00 | 11/30/2023 | 111.00 | Commercial Sales | $414.31 | 45,988.41 |
| 8/11/2023 | 8/11/2023 | 1.00 | 8/11/2023 | 0.00 | Commercial Sales | $477.85 | - |
| 8/11/2023 | 8/28/2023 | 18.00 | 8/28/2023 | 17.00 | Commercial Sales | $11,457.59 | 194,779.03 |
| 8/11/2023 | 9/5/2023 | 26.00 | 9/5/2023 | 25.00 | Commercial Sales | $436.99 | 10,924.75 |
| 8/11/2023 | 2/7/2024 | 181.00 | 2/7/2024 | 180.00 | Commercial Sales | $280.51 | 50,491.80 |
| 8/11/2023 | 8/28/2023 | 18.00 | 8/28/2023 | 17.00 | Residential Sales | $34.09 | 579.53 |
| 8/11/2023 | 8/11/2023 | 1.00 | 8/11/2023 | 0.00 | Residential Sales | $755.83 | - |
| 8/11/2023 | 8/29/2023 | 19.00 | 8/29/2023 | 18.00 | Commercial Sales | $1,274.32 | 22,937.76 |
| 8/11/2023 | 9/7/2023 | 28.00 | 9/7/2023 | 27.00 | Industrial Service | $37,883.80 | 1,022,862.60 |
| 8/11/2023 | 8/14/2023 | 4.00 | 8/14/2023 | 3.00 | Industrial Service | $592,190.02 | 1,776,570.06 |
| 8/11/2023 | 8/14/2023 | 4.00 | 8/14/2023 | 3.00 | Commercial Sales | $674,841.26 | 2,024,523.78 |
| 8/11/2023 | 8/15/2023 | 5.00 | 8/15/2023 | 4.00 | Industrial Service | $206,137.84 | 824,551.36 |
| 8/11/2023 | 8/15/2023 | 5.00 | 8/15/2023 | 4.00 | Commercial Sales | $156,695.15 | 626,780.60 |
| 8/11/2023 | 8/14/2023 | 4.00 | 8/14/2023 | 3.00 | Residential Sales | $936,239.85 | 2,808,719.55 |
| 8/11/2023 | 8/16/2023 | 6.00 | 8/16/2023 | 5.00 | Industrial Service | $64,844.73 | 324,223.65 |
| 8/11/2023 | 8/15/2023 | 5.00 | 8/15/2023 | 4.00 | Residential Sales | $7,649.13 | 30,596.52 |
| 8/11/2023 | 8/16/2023 | 6.00 | 8/16/2023 | 5.00 | Commercial Sales | $143,479.55 | 717,397.75 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 8/11/2023 | 12/13/2023 | 125.00 | 12/13/2023 | 124.00 | Commercial Sales | $36.02 | 4,466.48 |
| 8/11/2023 | 8/16/2023 | 6.00 | 8/16/2023 | 5.00 | Residential Sales | $2,482.42 | 12,412.10 |
| 8/11/2023 | 8/17/2023 | 7.00 | 8/17/2023 | 6.00 | Commercial Sales | $53,428.92 | 320,573.52 |
| 8/11/2023 | 12/14/2023 | 126.00 | 12/14/2023 | 125.00 | Commercial Sales | $2,096.73 | 262,091.25 |
| 8/11/2023 | 8/30/2023 | 20.00 | 8/30/2023 | 19.00 | Residential Sales | $193.64 | 3,679.16 |
| 8/11/2023 | 8/31/2023 | 21.00 | 8/31/2023 | 20.00 | Commercial Sales | $7,460.96 | 149,219.20 |
| 8/11/2023 | 8/11/2023 | 1.00 | 8/11/2023 | 0.00 | Other Sales to Public Authority | $17.42 | - |
| 8/11/2023 | 8/17/2023 | 7.00 | 8/17/2023 | 6.00 | Residential Sales | $2,577.93 | 15,467.58 |
| 8/11/2023 | 8/18/2023 | 8.00 | 8/18/2023 | 7.00 | Commercial Sales | $634.55 | 4,441.85 |
| 8/11/2023 | 1/2/2024 | 145.00 | 1/2/2024 | 144.00 | Residential Sales | $52.67 | 7,584.48 |
| 8/11/2023 | 8/31/2023 | 21.00 | 8/31/2023 | 20.00 | Residential Sales | $15.39 | 307.80 |
| 8/11/2023 | 8/14/2023 | 4.00 | 8/14/2023 | 3.00 | Public Street & Highway Lighting | $3.25 | 9.75 |
| 8/11/2023 | 5/6/2024 | 270.00 | 5/6/2024 | 269.00 | Residential Sales | $242.09 | 65,122.21 |
| 8/11/2023 | 12/30/2023 | 142.00 | 12/30/2023 | 141.00 | Commercial Sales | $284.54 | 40,120.14 |
| 8/11/2023 | 3/5/2024 | 208.00 | 3/5/2024 | 207.00 | Residential Sales | $21.39 | 4,427.73 |
| 8/11/2023 | 8/18/2023 | 8.00 | 8/18/2023 | 7.00 | Residential Sales | $457.40 | 3,201.80 |
| 8/11/2023 | 8/14/2023 | 4.00 | 8/14/2023 | 3.00 | Other Sales to Public Authority | $1,488.50 | 4,465.50 |
| 8/11/2023 | 8/15/2023 | 5.00 | 8/15/2023 | 4.00 | Other Sales to Public Authority | $806.89 | 3,227.56 |
| 8/11/2023 | 8/17/2023 | 7.00 | 8/17/2023 | 6.00 | Public Street & Highway Lighting | $9.02 | 54.12 |
| 8/11/2023 | 12/18/2023 | 130.00 | 12/18/2023 | 129.00 | Commercial Sales | $762.84 | 98,406.36 |
| 8/11/2023 | 9/11/2023 | 32.00 | 9/11/2023 | 31.00 | Residential Sales | $77.13 | 2,391.03 |
| 8/11/2023 | 9/14/2023 | 35.00 | 9/14/2023 | 34.00 | Residential Sales | $243.75 | 8,287.50 |
| 8/11/2023 | 8/21/2023 | 11.00 | 8/21/2023 | 10.00 | Commercial Sales | $14,002.83 | 140,028.30 |
| 8/11/2023 | 8/22/2023 | 12.00 | 8/22/2023 | 11.00 | Industrial Service | $6,553.20 | 72,085.20 |
| 8/11/2023 | 8/22/2023 | 12.00 | 8/22/2023 | 11.00 | Commercial Sales | $3,011.17 | 33,122.87 |
| 8/11/2023 | 11/27/2023 | 109.00 | 11/27/2023 | 108.00 | Residential Sales | $682.72 | 73,733.76 |
| 8/11/2023 | 8/21/2023 | 11.00 | 8/21/2023 | 10.00 | Residential Sales | $402.12 | 4,021.20 |
| 8/11/2023 | 8/23/2023 | 13.00 | 8/23/2023 | 12.00 | Commercial Sales | $18,043.72 | 216,524.64 |
| 8/11/2023 | 8/24/2023 | 14.00 | 8/24/2023 | 13.00 | Industrial Service | $7,922.87 | 102,997.31 |
| 8/11/2023 | 8/22/2023 | 12.00 | 8/22/2023 | 11.00 | Residential Sales | $350.64 | 3,857.04 |
| 8/11/2023 | 8/23/2023 | 13.00 | 8/23/2023 | 12.00 | Residential Sales | $71.84 | 862.08 |
| 8/12/2023 | 8/14/2023 | 3.00 | 8/14/2023 | 2.00 | Commercial Sales | $91.60 | 183.20 |
| 8/12/2023 | 8/14/2023 | 3.00 | 8/14/2023 | 2.00 | Residential Sales | $7,485.27 | 14,970.54 |
| 8/12/2023 | 8/15/2023 | 4.00 | 8/15/2023 | 3.00 | Residential Sales | $14.21 | 42.63 |
| 8/12/2023 | 10/12/2023 | 62.00 | 10/12/2023 | 61.00 | Residential Sales | $36.89 | 2,250.29 |
| 8/13/2023 | 8/17/2023 | 5.00 | 8/17/2023 | 4.00 | Residential Sales | $78.09 | 312.36 |
| 8/13/2023 | 8/31/2023 | 19.00 | 8/31/2023 | 18.00 | Residential Sales | $97.17 | 1,749.06 |
| 8/13/2023 | 9/14/2023 | 33.00 | 9/14/2023 | 32.00 | Residential Sales | $68.56 | 2,193.92 |
| 8/13/2023 | 8/21/2023 | 9.00 | 8/21/2023 | 8.00 | Residential Sales | $44.69 | 357.52 |
| 8/13/2023 | 8/22/2023 | 10.00 | 8/22/2023 | 9.00 | Residential Sales | $14.41 | 129.69 |
| 8/13/2023 | 8/24/2023 | 12.00 | 8/24/2023 | 11.00 | Residential Sales | $87.71 | 964.81 |
| 8/13/2023 | 8/14/2023 | 2.00 | 8/14/2023 | 1.00 | Commercial Sales | $311.68 | 311.68 |
| 8/13/2023 | 8/14/2023 | 2.00 | 8/14/2023 | 1.00 | Residential Sales | $3,997.69 | 3,997.69 |
| 8/13/2023 | 8/15/2023 | 3.00 | 8/15/2023 | 2.00 | Commercial Sales | $13.81 | 27.62 |
| 8/13/2023 | 8/16/2023 | 4.00 | 8/16/2023 | 3.00 | Commercial Sales | $36.02 | 108.06 |
| 8/13/2023 | 8/15/2023 | 3.00 | 8/15/2023 | 2.00 | Residential Sales | $305.03 | 610.06 |
| 8/13/2023 | 8/16/2023 | 4.00 | 8/16/2023 | 3.00 | Residential Sales | $87.80 | 263.40 |
| 8/14/2023 | 8/29/2023 | 16.00 | 8/29/2023 | 15.00 | Residential Sales | $26.55 | 398.25 |
| 8/14/2023 | 9/6/2023 | 24.00 | 9/6/2023 | 23.00 | Residential Sales | $145.62 | 3,349.26 |
| 8/14/2023 | 8/15/2023 | 2.00 | 8/15/2023 | 1.00 | Industrial Service | $35,961.45 | 35,961.45 |
| 8/14/2023 | 8/14/2023 | 1.00 | 8/14/2023 | 0.00 | Commercial Sales | $4,157.17 | - |
| 8/14/2023 | 8/15/2023 | 2.00 | 8/15/2023 | 1.00 | Commercial Sales | $458,443.04 | 458,443.04 |
| 8/14/2023 | 8/14/2023 | 1.00 | 8/14/2023 | 0.00 | Residential Sales | $917.21 | - |
| 8/14/2023 | 8/16/2023 | 3.00 | 8/16/2023 | 2.00 | Industrial Service | $19,748.78 | 39,497.56 |
| 8/14/2023 | 8/15/2023 | 2.00 | 8/15/2023 | 1.00 | Residential Sales | $748,661.16 | 748,661.16 |
| 8/14/2023 | 8/16/2023 | 3.00 | 8/16/2023 | 2.00 | Commercial Sales | $48,020.90 | 96,041.80 |
| 8/14/2023 | 8/17/2023 | 4.00 | 8/17/2023 | 3.00 | Industrial Service | $7,121.56 | 21,364.68 |
| 8/14/2023 | 10/27/2023 | 75.00 | 10/27/2023 | 74.00 | Residential Sales | $189.01 | 13,986.74 |
| 8/14/2023 | 8/16/2023 | 3.00 | 8/16/2023 | 2.00 | Residential Sales | $11,336.84 | 22,673.68 |
| 8/14/2023 | 8/17/2023 | 4.00 | 8/17/2023 | 3.00 | Commercial Sales | $104,655.93 | 313,967.79 |
| 8/14/2023 | 10/11/2023 | 59.00 | 10/11/2023 | 58.00 | Residential Sales | $126.98 | 7,364.84 |
| 8/14/2023 | 8/18/2023 | 5.00 | 8/18/2023 | 4.00 | Industrial Service | $1,891.05 | 7,564.20 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 8/14/2023 | 8/17/2023 | 4.00 | 8/17/2023 | 3.00 | Residential Sales | $776.20 | 2,328.60 |
| 8/14/2023 | 8/18/2023 | 5.00 | 8/18/2023 | 4.00 | Commercial Sales | $16,875.21 | 67,500.84 |
| 8/14/2023 | 8/18/2023 | 5.00 | 8/18/2023 | 4.00 | Residential Sales | $945.36 | 3,781.44 |
| 8/14/2023 | 8/15/2023 | 2.00 | 8/15/2023 | 1.00 | Other Sales to Public Authority | $15,388.20 | 15,388.20 |
| 8/14/2023 | 8/17/2023 | 4.00 | 8/17/2023 | 3.00 | Public Street & Highway Lighting | $397.35 | 1,192.05 |
| 8/14/2023 | 10/30/2023 | 78.00 | 10/30/2023 | 77.00 | Residential Sales | $75.74 | 5,831.98 |
| 8/14/2023 | 8/16/2023 | 3.00 | 8/16/2023 | 2.00 | Other Sales to Public Authority | $3,811.09 | 7,622.18 |
| 8/14/2023 | 9/14/2023 | 32.00 | 9/14/2023 | 31.00 | Commercial Sales | $10,694.70 | 331,535.70 |
| 8/14/2023 | 8/21/2023 | 8.00 | 8/21/2023 | 7.00 | Commercial Sales | $341.39 | 2,389.73 |
| 8/14/2023 | 8/18/2023 | 5.00 | 8/18/2023 | 4.00 | Other Sales to Public Authority | $15,799.66 | 63,198.64 |
| 8/14/2023 | 8/21/2023 | 8.00 | 8/21/2023 | 7.00 | Residential Sales | $742.78 | 5,199.46 |
| 8/14/2023 | 8/22/2023 | 9.00 | 8/22/2023 | 8.00 | Commercial Sales | $10,078.44 | 80,627.52 |
| 8/14/2023 | 8/14/2023 | 1.00 | 8/14/2023 | 0.00 | Other Public Authority Transportation On | $33.10 | - |
| 8/14/2023 | 9/15/2023 | 33.00 | 9/15/2023 | 32.00 | Residential Sales | $296.37 | 9,483.84 |
| 8/14/2023 | 8/22/2023 | 9.00 | 8/22/2023 | 8.00 | Residential Sales | $1,061.85 | 8,494.80 |
| 8/14/2023 | 8/23/2023 | 10.00 | 8/23/2023 | 9.00 | Commercial Sales | $42,147.82 | 379,330.38 |
| 8/14/2023 | 8/15/2023 | 2.00 | 8/15/2023 | 1.00 | Company Use | $0.00 | - |
| 8/14/2023 | 10/5/2023 | 53.00 | 10/5/2023 | 52.00 | Commercial Sales | $1,060.66 | 55,154.32 |
| 8/14/2023 | 8/23/2023 | 10.00 | 8/23/2023 | 9.00 | Residential Sales | $44.27 | 398.43 |
| 8/14/2023 | 8/16/2023 | 3.00 | 8/16/2023 | 2.00 | Company Use | -$8,521.59 | (17,043.18) |
| 8/14/2023 | 9/18/2023 | 36.00 | 9/18/2023 | 35.00 | Residential Sales | $160.36 | 5,612.60 |
| 8/14/2023 | 8/17/2023 | 4.00 | 8/17/2023 | 3.00 | Company Use | $2,490.94 | 7,472.82 |
| 8/14/2023 | 5/15/2024 | 276.00 | 5/15/2024 | 275.00 | Residential Sales | $63.29 | 17,404.75 |
| 8/14/2023 | 9/6/2023 | 24.00 | 9/6/2023 | 23.00 | Commercial Sales | $7,216.10 | 165,970.30 |
| 8/14/2023 | 9/7/2023 | 25.00 | 9/7/2023 | 24.00 | Industrial Service | $2,451.07 | 58,825.68 |
| 8/15/2023 | 8/25/2023 | 11.00 | 8/25/2023 | 10.00 | Residential Sales | $33.73 | 337.30 |
| 8/15/2023 | 8/17/2023 | 3.00 | 8/17/2023 | 2.00 | Company Use | -$2,475.59 | (4,951.18) |
| 8/15/2023 | 9/19/2023 | 36.00 | 9/19/2023 | 35.00 | Residential Sales | $41.98 | 1,469.30 |
| 8/15/2023 | 8/22/2023 | 8.00 | 8/22/2023 | 7.00 | Other Sales to Public Authority | $37,447.28 | 262,130.96 |
| 8/15/2023 | 9/6/2023 | 23.00 | 9/6/2023 | 22.00 | Commercial Sales | $107.02 | 2,354.44 |
| 8/15/2023 | 8/28/2023 | 14.00 | 8/28/2023 | 13.00 | Residential Sales | $138.59 | 1,801.67 |
| 8/15/2023 | 9/21/2023 | 38.00 | 9/21/2023 | 37.00 | Commercial Sales | $115.99 | 4,291.63 |
| 8/15/2023 | 8/29/2023 | 15.00 | 8/29/2023 | 14.00 | Residential Sales | $301.58 | 4,222.12 |
| 8/15/2023 | 9/7/2023 | 24.00 | 9/7/2023 | 23.00 | Residential Sales | $84.13 | 1,934.99 |
| 8/15/2023 | 8/15/2023 | 1.00 | 8/15/2023 | 0.00 | Commercial Sales | $3,006.57 | - |
| 8/15/2023 | 9/22/2023 | 39.00 | 9/22/2023 | 38.00 | Residential Sales | $31.28 | 1,188.64 |
| 8/15/2023 | 8/16/2023 | 2.00 | 8/16/2023 | 1.00 | Industrial Service | $602.67 | 602.67 |
| 8/15/2023 | 8/15/2023 | 1.00 | 8/15/2023 | 0.00 | Residential Sales | $1,137.40 | - |
| 8/15/2023 | 8/16/2023 | 2.00 | 8/16/2023 | 1.00 | Commercial Sales | $113,738.51 | 113,738.51 |
| 8/15/2023 | 8/30/2023 | 16.00 | 8/30/2023 | 15.00 | Commercial Sales | $13.44 | 201.60 |
| 8/15/2023 | 8/17/2023 | 3.00 | 8/17/2023 | 2.00 | Industrial Service | $409.74 | 819.48 |
| 8/15/2023 | 10/27/2023 | 74.00 | 10/27/2023 | 73.00 | Residential Sales | $182.82 | 13,345.86 |
| 8/15/2023 | 8/16/2023 | 2.00 | 8/16/2023 | 1.00 | Residential Sales | $778,201.60 | 778,201.60 |
| 8/15/2023 | 8/17/2023 | 3.00 | 8/17/2023 | 2.00 | Commercial Sales | $24,443.40 | 48,886.80 |
| 8/15/2023 | 9/25/2023 | 42.00 | 9/25/2023 | 41.00 | Commercial Sales | $4,166.82 | 170,839.62 |
| 8/15/2023 | 8/17/2023 | 3.00 | 8/17/2023 | 2.00 | Residential Sales | $13,737.29 | 27,474.58 |
| 8/15/2023 | 8/18/2023 | 4.00 | 8/18/2023 | 3.00 | Commercial Sales | $19,748.17 | 59,244.51 |
| 8/15/2023 | 8/18/2023 | 4.00 | 8/18/2023 | 3.00 | Residential Sales | $1,379.58 | 4,138.74 |
| 8/15/2023 | 8/15/2023 | 1.00 | 8/15/2023 | 0.00 | Public Street & Highway Lighting | $3.03 | - |
| 8/15/2023 | 8/15/2023 | 1.00 | 8/15/2023 | 0.00 | Other Sales to Public Authority | $84.61 | - |
| 8/15/2023 | 8/16/2023 | 2.00 | 8/16/2023 | 1.00 | Other Sales to Public Authority | $16,623.84 | 16,623.84 |
| 8/15/2023 | 12/19/2023 | 127.00 | 12/19/2023 | 126.00 | Commercial Sales | $36.02 | 4,538.52 |
| 8/15/2023 | 8/17/2023 | 3.00 | 8/17/2023 | 2.00 | Other Sales to Public Authority | $757.65 | 1,515.30 |
| 8/15/2023 | 8/22/2023 | 8.00 | 8/22/2023 | 7.00 | Industrial Service | $40,190.21 | 281,331.47 |
| 8/15/2023 | 8/21/2023 | 7.00 | 8/21/2023 | 6.00 | Commercial Sales | $349.48 | 2,096.88 |
| 8/15/2023 | 9/14/2023 | 31.00 | 9/14/2023 | 30.00 | Residential Sales | $271.94 | 8,158.20 |
| 8/15/2023 | 8/22/2023 | 8.00 | 8/22/2023 | 7.00 | Commercial Sales | $1,116.42 | 7,814.94 |
| 8/15/2023 | 8/21/2023 | 7.00 | 8/21/2023 | 6.00 | Residential Sales | $1,011.05 | 6,066.30 |
| 8/15/2023 | 8/22/2023 | 8.00 | 8/22/2023 | 7.00 | Residential Sales | $1,919.04 | 13,433.28 |
| 8/16/2023 | 8/21/2023 | 6.00 | 8/21/2023 | 5.00 | Residential Sales | $93.72 | 468.60 |
| 8/16/2023 | 8/22/2023 | 7.00 | 8/22/2023 | 6.00 | Residential Sales | $65.05 | 390.30 |
| 8/16/2023 | 8/24/2023 | 9.00 | 8/24/2023 | 8.00 | Residential Sales | $106.49 | 851.92 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 8/16/2023 | 8/16/2023 | 1.00 | 8/16/2023 | 0.00 | Residential Sales | $5.25 | - |
| 8/16/2023 | 8/17/2023 | 2.00 | 8/17/2023 | 1.00 | Commercial Sales | $46.18 | 46.18 |
| 8/16/2023 | 8/17/2023 | 2.00 | 8/17/2023 | 1.00 | Residential Sales | $3,991.10 | 3,991.10 |
| 8/16/2023 | 8/18/2023 | 3.00 | 8/18/2023 | 2.00 | Commercial Sales | $16.58 | 33.16 |
| 8/16/2023 | 8/18/2023 | 3.00 | 8/18/2023 | 2.00 | Residential Sales | $199.94 | 399.88 |
| 8/17/2023 | 8/18/2023 | 2.00 | 8/18/2023 | 1.00 | Commercial Sales | $268,551.33 | 268,551.33 |
| 8/17/2023 | 10/12/2023 | 57.00 | 10/12/2023 | 56.00 | Residential Sales | $527.54 | 29,542.24 |
| 8/17/2023 | 8/17/2023 | 1.00 | 8/17/2023 | 0.00 | Residential Sales | $977.06 | - |
| 8/17/2023 | 8/31/2023 | 15.00 | 8/31/2023 | 14.00 | Residential Sales | $26.48 | 370.72 |
| 8/17/2023 | 8/18/2023 | 2.00 | 8/18/2023 | 1.00 | Residential Sales | $1,107,710.60 | 1,107,710.60 |
| 8/17/2023 | 9/27/2023 | 42.00 | 9/27/2023 | 41.00 | Commercial Sales | $772.04 | 31,653.64 |
| 8/17/2023 | 8/17/2023 | 1.00 | 8/17/2023 | 0.00 | Public Street & Highway Lighting | $141.73 | - |
| 8/17/2023 | 9/12/2023 | 27.00 | 9/12/2023 | 26.00 | Residential Sales | $4.80 | 124.80 |
| 8/17/2023 | 8/21/2023 | 5.00 | 8/21/2023 | 4.00 | Industrial Service | $39,501.47 | 158,005.88 |
| 8/17/2023 | 8/17/2023 | 1.00 | 8/17/2023 | 0.00 | Other Sales to Public Authority | $34.82 | - |
| 8/17/2023 | 8/21/2023 | 5.00 | 8/21/2023 | 4.00 | Commercial Sales | $253,347.59 | 1,013,390.36 |
| 8/17/2023 | 8/22/2023 | 6.00 | 8/22/2023 | 5.00 | Industrial Service | $20,729.27 | 103,646.35 |
| 8/17/2023 | 9/14/2023 | 29.00 | 9/14/2023 | 28.00 | Residential Sales | $136.40 | 3,819.20 |
| 8/17/2023 | 8/18/2023 | 2.00 | 8/18/2023 | 1.00 | Other Sales to Public Authority | $8,385.63 | 8,385.63 |
| 8/17/2023 | 8/21/2023 | 5.00 | 8/21/2023 | 4.00 | Residential Sales | $18,783.02 | 75,132.08 |
| 8/17/2023 | 8/22/2023 | 6.00 | 8/22/2023 | 5.00 | Commercial Sales | $40,676.40 | 203,382.00 |
| 8/17/2023 | 8/23/2023 | 7.00 | 8/23/2023 | 6.00 | Industrial Service | $49,098.36 | 294,590.16 |
| 8/17/2023 | 8/22/2023 | 6.00 | 8/22/2023 | 5.00 | Residential Sales | $2,599.14 | 12,995.70 |
| 8/17/2023 | 8/23/2023 | 7.00 | 8/23/2023 | 6.00 | Commercial Sales | $4,925.78 | 29,554.68 |
| 8/17/2023 | 8/23/2023 | 7.00 | 8/23/2023 | 6.00 | Residential Sales | $706.48 | 4,238.88 |
| 8/17/2023 | 8/24/2023 | 8.00 | 8/24/2023 | 7.00 | Residential Sales | $32.79 | 229.53 |
| 8/17/2023 | 9/19/2023 | 34.00 | 9/19/2023 | 33.00 | Commercial Sales | $20.00 | 660.00 |
| 8/17/2023 | 9/19/2023 | 34.00 | 9/19/2023 | 33.00 | Residential Sales | $85.30 | 2,814.90 |
| 8/17/2023 | 8/25/2023 | 9.00 | 8/25/2023 | 8.00 | Residential Sales | $81.33 | 650.64 |
| 8/17/2023 | 8/21/2023 | 5.00 | 8/21/2023 | 4.00 | Other Sales to Public Authority | $460.13 | 1,840.52 |
| 8/17/2023 | 9/6/2023 | 21.00 | 9/6/2023 | 20.00 | Commercial Sales | $2,301.85 | 46,037.00 |
| 8/17/2023 | 8/29/2023 | 13.00 | 8/29/2023 | 12.00 | Commercial Sales | $199.90 | 2,398.80 |
| 8/17/2023 | 9/6/2023 | 21.00 | 9/6/2023 | 20.00 | Residential Sales | $111.77 | 2,235.40 |
| 8/17/2023 | 9/21/2023 | 36.00 | 9/21/2023 | 35.00 | Commercial Sales | $129.63 | 4,537.05 |
| 8/17/2023 | 9/7/2023 | 22.00 | 9/7/2023 | 21.00 | Commercial Sales | $73.10 | 1,535.10 |
| 8/17/2023 | 9/21/2023 | 36.00 | 9/21/2023 | 35.00 | Residential Sales | $61.43 | 2,150.05 |
| 8/17/2023 | 8/30/2023 | 14.00 | 8/30/2023 | 13.00 | Commercial Sales | $8,315.51 | 108,101.63 |
| 8/17/2023 | 8/17/2023 | 1.00 | 8/17/2023 | 0.00 | Commercial Sales | $687.66 | - |
| 8/17/2023 | 8/18/2023 | 2.00 | 8/18/2023 | 1.00 | Industrial Service | $96,338.24 | 96,338.24 |
| 8/17/2023 | 8/30/2023 | 14.00 | 8/30/2023 | 13.00 | Residential Sales | $35.58 | 462.54 |
| 8/18/2023 | 9/20/2023 | 34.00 | 9/20/2023 | 33.00 | Residential Sales | $13.61 | 449.13 |
| 8/18/2023 | 8/29/2023 | 12.00 | 8/29/2023 | 11.00 | Residential Sales | $114.03 | 1,254.33 |
| 8/18/2023 | 11/2/2023 | 77.00 | 11/2/2023 | 76.00 | Residential Sales | $14.21 | 1,079.96 |
| 8/18/2023 | 9/21/2023 | 35.00 | 9/21/2023 | 34.00 | Residential Sales | $163.58 | 5,561.72 |
| 8/18/2023 | 10/26/2023 | 70.00 | 10/26/2023 | 69.00 | Residential Sales | $208.45 | 14,383.05 |
| 8/18/2023 | 10/27/2023 | 71.00 | 10/27/2023 | 70.00 | Commercial Sales | $3.19 | 223.30 |
| 8/18/2023 | 8/31/2023 | 14.00 | 8/31/2023 | 13.00 | Commercial Sales | $318.51 | 4,140.63 |
| 8/18/2023 | 8/18/2023 | 1.00 | 8/18/2023 | 0.00 | Commercial Sales | $2,535.16 | - |
| 8/18/2023 | 8/31/2023 | 14.00 | 8/31/2023 | 13.00 | Residential Sales | $48.87 | 635.31 |
| 8/18/2023 | 8/18/2023 | 1.00 | 8/18/2023 | 0.00 | Residential Sales | $8,782.37 | - |
| 8/18/2023 | 9/28/2023 | 42.00 | 9/28/2023 | 41.00 | Commercial Sales | $121.65 | 4,987.65 |
| 8/18/2023 | 8/18/2023 | 1.00 | 8/18/2023 | 0.00 | Public Street & Highway Lighting | $338.65 | - |
| 8/18/2023 | 8/21/2023 | 4.00 | 8/21/2023 | 3.00 | Industrial Service | $21,713.40 | 65,140.20 |
| 8/18/2023 | 8/21/2023 | 4.00 | 8/21/2023 | 3.00 | Commercial Sales | $208,328.07 | 624,984.21 |
| 8/18/2023 | 8/22/2023 | 5.00 | 8/22/2023 | 4.00 | Industrial Service | $422.85 | 1,691.40 |
| 8/18/2023 | 9/14/2023 | 28.00 | 9/14/2023 | 27.00 | Residential Sales | $54.65 | 1,475.55 |
| 8/18/2023 | 8/21/2023 | 4.00 | 8/21/2023 | 3.00 | Residential Sales | $711,491.97 | 2,134,475.91 |
| 8/18/2023 | 8/22/2023 | 5.00 | 8/22/2023 | 4.00 | Commercial Sales | $50,765.08 | 203,060.32 |
| 8/18/2023 | 9/15/2023 | 29.00 | 9/15/2023 | 28.00 | Residential Sales | $49.05 | 1,373.40 |
| 8/18/2023 | 10/3/2023 | 47.00 | 10/3/2023 | 46.00 | Commercial Sales | $25.89 | 1,190.94 |
| 8/18/2023 | 8/23/2023 | 6.00 | 8/23/2023 | 5.00 | Commercial Sales | $96,244.05 | 481,220.25 |
| 8/18/2023 | 8/22/2023 | 5.00 | 8/22/2023 | 4.00 | Residential Sales | $2,718.05 | 10,872.20 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 8/18/2023 | 8/23/2023 | 6.00 | 8/23/2023 | 5.00 | Residential Sales | $983.99 | 4,919.95 |
| 8/18/2023 | 8/24/2023 | 7.00 | 8/24/2023 | 6.00 | Commercial Sales | $12,998.11 | 77,988.66 |
| 8/18/2023 | 8/24/2023 | 7.00 | 8/24/2023 | 6.00 | Residential Sales | $612.45 | 3,674.70 |
| 8/18/2023 | 10/6/2023 | 50.00 | 10/6/2023 | 49.00 | Commercial Sales | $2,544.54 | 124,682.46 |
| 8/18/2023 | 8/25/2023 | 8.00 | 8/25/2023 | 7.00 | Commercial Sales | $18.15 | 127.05 |
| 8/18/2023 | 10/6/2023 | 50.00 | 10/6/2023 | 49.00 | Residential Sales | $182.23 | 8,929.27 |
| 8/18/2023 | 8/25/2023 | 8.00 | 8/25/2023 | 7.00 | Residential Sales | $113.44 | 794.08 |
| 8/18/2023 | 8/21/2023 | 4.00 | 8/21/2023 | 3.00 | Other Sales to Public Authority | $10,238.17 | 30,714.51 |
| 8/18/2023 | 8/28/2023 | 11.00 | 8/28/2023 | 10.00 | Industrial Service | $89.14 | 891.40 |
| 8/18/2023 | 8/22/2023 | 5.00 | 8/22/2023 | 4.00 | Other Sales to Public Authority | $1,214.67 | 4,858.68 |
| 8/18/2023 | 9/6/2023 | 20.00 | 9/6/2023 | 19.00 | Commercial Sales | $2,326.88 | 44,210.72 |
| 8/18/2023 | 10/9/2023 | 53.00 | 10/9/2023 | 52.00 | Residential Sales | $67.08 | 3,488.16 |
| 8/18/2023 | 8/28/2023 | 11.00 | 8/28/2023 | 10.00 | Residential Sales | $53.57 | 535.70 |
| 8/18/2023 | 8/23/2023 | 6.00 | 8/23/2023 | 5.00 | Other Sales to Public Authority | $21,051.52 | 105,257.60 |
| 8/18/2023 | 10/23/2023 | 67.00 | 10/23/2023 | 66.00 | Residential Sales | $176.17 | 11,627.22 |
| 8/19/2023 | 8/21/2023 | 3.00 | 8/21/2023 | 2.00 | Residential Sales | $502.39 | 1,004.78 |
| 8/20/2023 | 8/21/2023 | 2.00 | 8/21/2023 | 1.00 | Commercial Sales | $59.97 | 59.97 |
| 8/20/2023 | 8/24/2023 | 5.00 | 8/24/2023 | 4.00 | Residential Sales | $160.45 | 641.80 |
| 8/20/2023 | 8/22/2023 | 3.00 | 8/22/2023 | 2.00 | Commercial Sales | $31.65 | 63.30 |
| 8/20/2023 | 8/28/2023 | 9.00 | 8/28/2023 | 8.00 | Industrial Service | $4.21 | 33.68 |
| 8/20/2023 | 8/28/2023 | 9.00 | 8/28/2023 | 8.00 | Residential Sales | $115.82 | 926.56 |
| 8/20/2023 | 8/29/2023 | 10.00 | 8/29/2023 | 9.00 | Residential Sales | $80.06 | 720.54 |
| 8/20/2023 | 8/28/2023 | 9.00 | 8/28/2023 | 8.00 | Commercial Sales | $10.37 | 82.96 |
| 8/20/2023 | 9/13/2023 | 25.00 | 9/13/2023 | 24.00 | Residential Sales | $30.13 | 723.12 |
| 8/20/2023 | 8/21/2023 | 2.00 | 8/21/2023 | 1.00 | Residential Sales | $3,283.58 | 3,283.58 |
| 8/20/2023 | 8/22/2023 | 3.00 | 8/22/2023 | 2.00 | Residential Sales | $158.58 | 317.16 |
| 8/20/2023 | 8/23/2023 | 4.00 | 8/23/2023 | 3.00 | Residential Sales | $37.47 | 112.41 |
| 8/21/2023 | 9/13/2023 | 24.00 | 9/13/2023 | 23.00 | Residential Sales | $18.50 | 425.50 |
| 8/21/2023 | 8/21/2023 | 1.00 | 8/21/2023 | 0.00 | Industrial Service | $36.02 | - |
| 8/21/2023 | 1/8/2024 | 141.00 | 1/8/2024 | 140.00 | Residential Sales | $70.86 | 9,920.40 |
| 8/21/2023 | 8/21/2023 | 1.00 | 8/21/2023 | 0.00 | Residential Sales | $2,250.41 | - |
| 8/21/2023 | 8/22/2023 | 2.00 | 8/22/2023 | 1.00 | Residential Sales | $1,105,388.75 | 1,105,388.75 |
| 8/21/2023 | 11/28/2023 | 100.00 | 11/28/2023 | 99.00 | Residential Sales | $154.81 | 15,326.19 |
| 8/21/2023 | 8/23/2023 | 3.00 | 8/23/2023 | 2.00 | Residential Sales | $34,554.32 | 69,108.64 |
| 8/21/2023 | 8/25/2023 | 5.00 | 8/25/2023 | 4.00 | Industrial Service | $9,216.35 | 36,865.40 |
| 8/21/2023 | 1/25/2024 | 158.00 | 1/25/2024 | 157.00 | Residential Sales | $65.84 | 10,336.88 |
| 8/21/2023 | 8/24/2023 | 4.00 | 8/24/2023 | 3.00 | Residential Sales | $1,503.29 | 4,509.87 |
| 8/21/2023 | 8/21/2023 | 1.00 | 8/21/2023 | 0.00 | Commercial Sales | $43.12 | - |
| 8/21/2023 | 8/21/2023 | 1.00 | 8/21/2023 | 0.00 | Public Street & Highway Lighting | $95.81 | - |
| 8/21/2023 | 8/22/2023 | 2.00 | 8/22/2023 | 1.00 | Commercial Sales | $105,519.80 | 105,519.80 |
| 8/21/2023 | 8/25/2023 | 5.00 | 8/25/2023 | 4.00 | Residential Sales | $678.19 | 2,712.76 |
| 8/21/2023 | 8/23/2023 | 3.00 | 8/23/2023 | 2.00 | Commercial Sales | $45,058.56 | 90,117.12 |
| 8/21/2023 | 8/24/2023 | 4.00 | 8/24/2023 | 3.00 | Commercial Sales | $53,452.61 | 160,357.83 |
| 8/21/2023 | 9/1/2023 | 12.00 | 9/1/2023 | 11.00 | Commercial Sales | $601.13 | 6,612.43 |
| 8/21/2023 | 8/22/2023 | 2.00 | 8/22/2023 | 1.00 | Other Sales to Public Authority | $17,667.70 | 17,667.70 |
| 8/21/2023 | 8/28/2023 | 8.00 | 8/28/2023 | 7.00 | Residential Sales | $194.96 | 1,364.72 |
| 8/21/2023 | 8/23/2023 | 3.00 | 8/23/2023 | 2.00 | Other Sales to Public Authority | $32,923.54 | 65,847.08 |
| 8/21/2023 | 8/25/2023 | 5.00 | 8/25/2023 | 4.00 | Commercial Sales | $1,033.78 | 4,135.12 |
| 8/21/2023 | 8/29/2023 | 9.00 | 8/29/2023 | 8.00 | Residential Sales | $767.73 | 6,141.84 |
| 8/21/2023 | 11/1/2023 | 73.00 | 11/1/2023 | 72.00 | Residential Sales | $146.62 | 10,556.64 |
| 8/21/2023 | 9/6/2023 | 17.00 | 9/6/2023 | 16.00 | Residential Sales | $123.28 | 1,972.48 |
| 8/21/2023 | 8/28/2023 | 8.00 | 8/28/2023 | 7.00 | Commercial Sales | $457.20 | 3,200.40 |
| 8/21/2023 | 9/6/2023 | 17.00 | 9/6/2023 | 16.00 | Commercial Sales | $3,168.39 | 50,694.24 |
| 8/21/2023 | 8/28/2023 | 8.00 | 8/28/2023 | 7.00 | Other Sales to Public Authority | $324.72 | 2,273.04 |
| 8/21/2023 | 10/12/2023 | 53.00 | 10/12/2023 | 52.00 | Residential Sales | $444.49 | 23,113.48 |
| 8/21/2023 | 9/26/2023 | 37.00 | 9/26/2023 | 36.00 | Residential Sales | $57.89 | 2,084.04 |
| 8/22/2023 | 8/29/2023 | 8.00 | 8/29/2023 | 7.00 | Other Sales to Public Authority | $20,842.39 | 145,896.73 |
| 8/22/2023 | 9/25/2023 | 35.00 | 9/25/2023 | 34.00 | Residential Sales | $42.67 | 1,450.78 |
| 8/22/2023 | 12/13/2023 | 114.00 | 12/13/2023 | 113.00 | Commercial Sales | $320.12 | 36,173.56 |
| 8/22/2023 | 8/30/2023 | 9.00 | 8/30/2023 | 8.00 | Commercial Sales | $152.74 | 1,221.92 |
| 8/22/2023 | 12/14/2023 | 115.00 | 12/14/2023 | 114.00 | Commercial Sales | $193.61 | 22,071.54 |
| 8/22/2023 | 12/13/2023 | 114.00 | 12/13/2023 | 113.00 | Other Sales to Public Authority | $91.79 | 10,372.27 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 8/22/2023 | 8/23/2023 | 2.00 | 8/23/2023 | 1.00 | Industrial Service | $85,054.69 | 85,054.69 |
| 8/22/2023 | 9/15/2023 | 25.00 | 9/15/2023 | 24.00 | Residential Sales | $62.41 | 1,497.84 |
| 8/22/2023 | 8/22/2023 | 1.00 | 8/22/2023 | 0.00 | Residential Sales | $1,867.62 | - |
| 8/22/2023 | 8/24/2023 | 3.00 | 8/24/2023 | 2.00 | Industrial Service | $30,363.96 | 60,727.92 |
| 8/22/2023 | 8/23/2023 | 2.00 | 8/23/2023 | 1.00 | Residential Sales | $1,048,852.57 | 1,048,852.57 |
| 8/22/2023 | 8/25/2023 | 4.00 | 8/25/2023 | 3.00 | Industrial Service | $5,129.23 | 15,387.69 |
| 8/22/2023 | 8/24/2023 | 3.00 | 8/24/2023 | 2.00 | Residential Sales | $13,638.81 | 27,277.62 |
| 8/22/2023 | 10/5/2023 | 45.00 | 10/5/2023 | 44.00 | Residential Sales | $234.46 | 10,316.24 |
| 8/22/2023 | 11/13/2023 | 84.00 | 11/13/2023 | 83.00 | Residential Sales | $60.72 | 5,039.76 |
| 8/22/2023 | 8/22/2023 | 1.00 | 8/22/2023 | 0.00 | Public Street & Highway Lighting | $18.77 | - |
| 8/22/2023 | 8/25/2023 | 4.00 | 8/25/2023 | 3.00 | Residential Sales | $2,828.20 | 8,484.60 |
| 8/22/2023 | 8/22/2023 | 1.00 | 8/22/2023 | 0.00 | Commercial Sales | $1,653.98 | - |
| 8/22/2023 | 8/23/2023 | 2.00 | 8/23/2023 | 1.00 | Commercial Sales | $368,851.85 | 368,851.85 |
| 8/22/2023 | 8/24/2023 | 3.00 | 8/24/2023 | 2.00 | Commercial Sales | $57,924.22 | 115,848.44 |
| 8/22/2023 | 8/22/2023 | 1.00 | 8/22/2023 | 0.00 | Other Sales to Public Authority | $8.19 | - |
| 8/22/2023 | 8/25/2023 | 4.00 | 8/25/2023 | 3.00 | Commercial Sales | $76,124.43 | 228,373.29 |
| 8/22/2023 | 8/23/2023 | 2.00 | 8/23/2023 | 1.00 | Other Sales to Public Authority | $12,654.68 | 12,654.68 |
| 8/22/2023 | 8/28/2023 | 7.00 | 8/28/2023 | 6.00 | Residential Sales | $1,377.75 | 8,266.50 |
| 8/22/2023 | 8/29/2023 | 8.00 | 8/29/2023 | 7.00 | Residential Sales | $292.27 | 2,045.89 |
| 8/22/2023 | 8/24/2023 | 3.00 | 8/24/2023 | 2.00 | Other Sales to Public Authority | $1,801.09 | 3,602.18 |
| 8/22/2023 | 9/6/2023 | 16.00 | 9/6/2023 | 15.00 | Residential Sales | $89.49 | 1,342.35 |
| 8/22/2023 | 8/25/2023 | 4.00 | 8/25/2023 | 3.00 | Other Sales to Public Authority | $15,307.46 | 45,922.38 |
| 8/22/2023 | 9/7/2023 | 17.00 | 9/7/2023 | 16.00 | Residential Sales | $97.60 | 1,561.60 |
| 8/22/2023 | 8/28/2023 | 7.00 | 8/28/2023 | 6.00 | Commercial Sales | $541.63 | 3,249.78 |
| 8/22/2023 | 9/8/2023 | 18.00 | 9/8/2023 | 17.00 | Residential Sales | $235.62 | 4,005.54 |
| 8/22/2023 | 9/6/2023 | 16.00 | 9/6/2023 | 15.00 | Commercial Sales | $3,156.50 | 47,347.50 |
| 8/22/2023 | 8/30/2023 | 9.00 | 8/30/2023 | 8.00 | Residential Sales | $234.93 | 1,879.44 |
| 8/23/2023 | 8/29/2023 | 7.00 | 8/29/2023 | 6.00 | Residential Sales | $157.14 | 942.84 |
| 8/23/2023 | 8/23/2023 | 1.00 | 8/23/2023 | 0.00 | Residential Sales | $4,544.06 | - |
| 8/23/2023 | 8/24/2023 | 2.00 | 8/24/2023 | 1.00 | Residential Sales | $2,645.78 | 2,645.78 |
| 8/23/2023 | 8/25/2023 | 3.00 | 8/25/2023 | 2.00 | Residential Sales | $287.77 | 575.54 |
| 8/23/2023 | 8/24/2023 | 2.00 | 8/24/2023 | 1.00 | Commercial Sales | $4,098.35 | 4,098.35 |
| 8/23/2023 | 8/25/2023 | 3.00 | 8/25/2023 | 2.00 | Commercial Sales | $49.42 | 98.84 |
| 8/23/2023 | 8/28/2023 | 6.00 | 8/28/2023 | 5.00 | Residential Sales | $147.41 | 737.05 |
| 8/24/2023 | 8/24/2023 | 1.00 | 8/24/2023 | 0.00 | Residential Sales | $1,410.41 | - |
| 8/24/2023 | 9/1/2023 | 9.00 | 9/1/2023 | 8.00 | Residential Sales | $191.06 | 1,528.48 |
| 8/24/2023 | 10/31/2023 | 69.00 | 10/31/2023 | 68.00 | Other Sales to Public Authority | $3,178.81 | 216,159.08 |
| 8/24/2023 | 8/25/2023 | 2.00 | 8/25/2023 | 1.00 | Residential Sales | $824,022.93 | 824,022.93 |
| 8/24/2023 | 11/14/2023 | 83.00 | 11/14/2023 | 82.00 | Residential Sales | $226.99 | 18,613.18 |
| 8/24/2023 | 9/2/2023 | 10.00 | 9/2/2023 | 9.00 | Residential Sales | $69.26 | 623.34 |
| 8/24/2023 | 8/24/2023 | 1.00 | 8/24/2023 | 0.00 | Commercial Sales | $931.39 | - |
| 8/24/2023 | 8/25/2023 | 2.00 | 8/25/2023 | 1.00 | Industrial Service | $64,064.26 | 64,064.26 |
| 8/24/2023 | 9/1/2023 | 9.00 | 9/1/2023 | 8.00 | Commercial Sales | $2,072.98 | 16,583.84 |
| 8/24/2023 | 8/24/2023 | 1.00 | 8/24/2023 | 0.00 | Public Street & Highway Lighting | $9.96 | - |
| 8/24/2023 | 9/5/2023 | 13.00 | 9/5/2023 | 12.00 | Residential Sales | $125.78 | 1,509.36 |
| 8/24/2023 | 8/25/2023 | 2.00 | 8/25/2023 | 1.00 | Commercial Sales | $462,847.49 | 462,847.49 |
| 8/24/2023 | 8/28/2023 | 5.00 | 8/28/2023 | 4.00 | Residential Sales | $12,555.80 | 50,223.20 |
| 8/24/2023 | 9/6/2023 | 14.00 | 9/6/2023 | 13.00 | Residential Sales | $109.49 | 1,423.37 |
| 8/24/2023 | 8/29/2023 | 6.00 | 8/29/2023 | 5.00 | Residential Sales | $935.55 | 4,677.75 |
| 8/24/2023 | 8/25/2023 | 2.00 | 8/25/2023 | 1.00 | Other Sales to Public Authority | $27,257.11 | 27,257.11 |
| 8/24/2023 | 9/7/2023 | 15.00 | 9/7/2023 | 14.00 | Residential Sales | $20.87 | 292.18 |
| 8/24/2023 | 8/28/2023 | 5.00 | 8/28/2023 | 4.00 | Industrial Service | $10,025.94 | 40,103.76 |
| 8/24/2023 | 9/21/2023 | 29.00 | 9/21/2023 | 28.00 | Residential Sales | $8.05 | 225.40 |
| 8/24/2023 | 8/28/2023 | 5.00 | 8/28/2023 | 4.00 | Commercial Sales | $156,374.90 | 625,499.60 |
| 8/24/2023 | 9/5/2023 | 13.00 | 9/5/2023 | 12.00 | Commercial Sales | $34.41 | 412.92 |
| 8/24/2023 | 8/29/2023 | 6.00 | 8/29/2023 | 5.00 | Industrial Service | $23,152.27 | 115,761.35 |
| 8/24/2023 | 8/29/2023 | 6.00 | 8/29/2023 | 5.00 | Commercial Sales | $126,304.54 | 631,522.70 |
| 8/24/2023 | 9/6/2023 | 14.00 | 9/6/2023 | 13.00 | Commercial Sales | $5,902.67 | 76,734.71 |
| 8/24/2023 | 9/7/2023 | 15.00 | 9/7/2023 | 14.00 | Commercial Sales | $352.67 | 4,937.38 |
| 8/24/2023 | 8/30/2023 | 7.00 | 8/30/2023 | 6.00 | Residential Sales | $305.83 | 1,834.98 |
| 8/24/2023 | 8/28/2023 | 5.00 | 8/28/2023 | 4.00 | Other Sales to Public Authority | $1,300.05 | 5,200.20 |
| 8/24/2023 | 9/22/2023 | 30.00 | 9/22/2023 | 29.00 | Commercial Sales | $5,319.60 | 154,268.40 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 8/24/2023 | 9/25/2023 | 33.00 | 9/25/2023 | 32.00 | Residential Sales | $6.34 | 202.88 |
| 8/24/2023 | 8/29/2023 | 6.00 | 8/29/2023 | 5.00 | Other Sales to Public Authority | $11,488.64 | 57,443.20 |
| 8/24/2023 | 8/30/2023 | 7.00 | 8/30/2023 | 6.00 | Industrial Service | $28,454.35 | 170,726.10 |
| 8/24/2023 | 9/21/2023 | 29.00 | 9/21/2023 | 28.00 | Other Sales to Public Authority | $749.67 | 20,990.76 |
| 8/24/2023 | 9/26/2023 | 34.00 | 9/26/2023 | 33.00 | Residential Sales | $82.13 | 2,710.29 |
| 8/24/2023 | 3/5/2024 | 195.00 | 3/5/2024 | 194.00 | Residential Sales | $46.00 | 8,924.00 |
| 8/24/2023 | 8/30/2023 | 7.00 | 8/30/2023 | 6.00 | Commercial Sales | $14,092.12 | 84,552.72 |
| 8/24/2023 | 8/31/2023 | 8.00 | 8/31/2023 | 7.00 | Commercial Sales | $13,392.42 | 93,746.94 |
| 8/24/2023 | 8/30/2023 | 7.00 | 8/30/2023 | 6.00 | Other Sales to Public Authority | $10,101.96 | 60,611.76 |
| 8/24/2023 | 9/12/2023 | 20.00 | 9/12/2023 | 19.00 | Residential Sales | $59.17 | 1,124.23 |
| 8/24/2023 | 10/30/2023 | 68.00 | 10/30/2023 | 67.00 | Residential Sales | $51.30 | 3,437.10 |
| 8/24/2023 | 9/14/2023 | 22.00 | 9/14/2023 | 21.00 | Residential Sales | $35.38 | 742.98 |
| 8/24/2023 | 10/3/2023 | 41.00 | 10/3/2023 | 40.00 | Residential Sales | $39.73 | 1,589.20 |
| 8/25/2023 | 9/13/2023 | 20.00 | 9/13/2023 | 19.00 | Commercial Sales | $9,278.72 | 176,295.68 |
| 8/25/2023 | 10/4/2023 | 41.00 | 10/4/2023 | 40.00 | Residential Sales | $31.78 | 1,271.20 |
| 8/25/2023 | 11/13/2023 | 81.00 | 11/13/2023 | 80.00 | Residential Sales | $26.76 | 2,140.80 |
| 8/25/2023 | 9/18/2023 | 25.00 | 9/18/2023 | 24.00 | Residential Sales | $50.22 | 1,205.28 |
| 8/25/2023 | 8/25/2023 | 1.00 | 8/25/2023 | 0.00 | Residential Sales | $3,741.45 | - |
| 8/25/2023 | 1/10/2024 | 139.00 | 1/10/2024 | 138.00 | Residential Sales | $42.96 | 5,928.48 |
| 8/25/2023 | 9/18/2023 | 25.00 | 9/18/2023 | 24.00 | Commercial Sales | $18.01 | 432.24 |
| 8/25/2023 | 8/28/2023 | 4.00 | 8/28/2023 | 3.00 | Residential Sales | $900,730.63 | 2,702,191.89 |
| 8/25/2023 | 8/25/2023 | 1.00 | 8/25/2023 | 0.00 | Public Street & Highway Lighting | $7,870.29 | - |
| 8/25/2023 | 8/25/2023 | 1.00 | 8/25/2023 | 0.00 | Commercial Sales | $16,998.10 | - |
| 8/25/2023 | 9/5/2023 | 12.00 | 9/5/2023 | 11.00 | Residential Sales | $451.72 | 4,968.92 |
| 8/25/2023 | 8/29/2023 | 5.00 | 8/29/2023 | 4.00 | Residential Sales | $5,012.56 | 20,050.24 |
| 8/25/2023 | 9/6/2023 | 13.00 | 9/6/2023 | 12.00 | Residential Sales | $255.43 | 3,065.16 |
| 8/25/2023 | 11/1/2023 | 69.00 | 11/1/2023 | 68.00 | Residential Sales | $111.27 | 7,566.36 |
| 8/25/2023 | 8/25/2023 | 1.00 | 8/25/2023 | 0.00 | Other Sales to Public Authority | $63.35 | - |
| 8/25/2023 | 8/28/2023 | 4.00 | 8/28/2023 | 3.00 | Industrial Service | $101,996.14 | 305,988.42 |
| 8/25/2023 | 9/7/2023 | 14.00 | 9/7/2023 | 13.00 | Residential Sales | $268.39 | 3,489.07 |
| 8/25/2023 | 8/28/2023 | 4.00 | 8/28/2023 | 3.00 | Commercial Sales | $1,018,006.08 | 3,054,018.24 |
| 8/25/2023 | 8/29/2023 | 5.00 | 8/29/2023 | 4.00 | Industrial Service | $1,002.64 | 4,010.56 |
| 8/25/2023 | 8/28/2023 | 4.00 | 8/28/2023 | 3.00 | Public Street & Highway Lighting | $3,453.34 | 10,360.02 |
| 8/25/2023 | 9/5/2023 | 12.00 | 9/5/2023 | 11.00 | Commercial Sales | $64.42 | 708.62 |
| 8/25/2023 | 12/28/2023 | 126.00 | 12/28/2023 | 125.00 | Residential Sales | $35.61 | 4,451.25 |
| 8/25/2023 | 9/8/2023 | 15.00 | 9/8/2023 | 14.00 | Residential Sales | $152.69 | 2,137.66 |
| 8/25/2023 | 8/29/2023 | 5.00 | 8/29/2023 | 4.00 | Commercial Sales | $357,520.31 | 1,430,081.24 |
| 8/25/2023 | 8/29/2023 | 5.00 | 8/29/2023 | 4.00 | Public Street & Highway Lighting | $6,117.09 | 24,468.36 |
| 8/25/2023 | 9/6/2023 | 13.00 | 9/6/2023 | 12.00 | Commercial Sales | $7,700.94 | 92,411.28 |
| 8/25/2023 | 8/28/2023 | 4.00 | 8/28/2023 | 3.00 | Other Sales to Public Authority | $55,686.18 | 167,058.54 |
| 8/25/2023 | 8/30/2023 | 6.00 | 8/30/2023 | 5.00 | Residential Sales | $1,746.60 | 8,733.00 |
| 8/25/2023 | 9/7/2023 | 14.00 | 9/7/2023 | 13.00 | Commercial Sales | $165.11 | 2,146.43 |
| 8/25/2023 | 9/21/2023 | 28.00 | 9/21/2023 | 27.00 | Commercial Sales | $38.11 | 1,028.97 |
| 8/25/2023 | 11/2/2023 | 70.00 | 11/2/2023 | 69.00 | Commercial Sales | $38.76 | 2,674.44 |
| 8/25/2023 | 8/31/2023 | 7.00 | 8/31/2023 | 6.00 | Residential Sales | $880.73 | 5,284.38 |
| 8/25/2023 | 8/29/2023 | 5.00 | 8/29/2023 | 4.00 | Other Sales to Public Authority | $2,621.92 | 10,487.68 |
| 8/25/2023 | 3/1/2024 | 190.00 | 3/1/2024 | 189.00 | Commercial Sales | $935.05 | 176,724.45 |
| 8/25/2023 | 9/21/2023 | 28.00 | 9/21/2023 | 27.00 | Other Sales to Public Authority | $1,071.92 | 28,941.84 |
| 8/25/2023 | 8/30/2023 | 6.00 | 8/30/2023 | 5.00 | Industrial Service | $9,421.96 | 47,109.80 |
| 8/25/2023 | 8/30/2023 | 6.00 | 8/30/2023 | 5.00 | Commercial Sales | $233,636.39 | 1,168,181.95 |
| 8/25/2023 | 8/30/2023 | 6.00 | 8/30/2023 | 5.00 | Other Sales to Public Authority | $13,372.03 | 66,860.15 |
| 8/25/2023 | 12/13/2023 | 111.00 | 12/13/2023 | 110.00 | Other Sales to Public Authority | $360.87 | 39,695.70 |
| 8/25/2023 | 9/29/2023 | 36.00 | 9/29/2023 | 35.00 | Residential Sales | $44.22 | 1,547.70 |
| 8/26/2023 | 8/28/2023 | 3.00 | 8/28/2023 | 2.00 | Residential Sales | $1,141.74 | 2,283.48 |
| 8/26/2023 | 8/30/2023 | 5.00 | 8/30/2023 | 4.00 | Residential Sales | $55.77 | 223.08 |
| 8/27/2023 | 8/29/2023 | 3.00 | 8/29/2023 | 2.00 | Residential Sales | $205.03 | 410.06 |
| 8/27/2023 | 9/20/2023 | 25.00 | 9/20/2023 | 24.00 | Residential Sales | $39.66 | 951.84 |
| 8/27/2023 | 9/8/2023 | 13.00 | 9/8/2023 | 12.00 | Residential Sales | $130.40 | 1,564.80 |
| 8/27/2023 | 8/28/2023 | 2.00 | 8/28/2023 | 1.00 | Commercial Sales | $109.23 | 109.23 |
| 8/27/2023 | 8/30/2023 | 4.00 | 8/30/2023 | 3.00 | Residential Sales | $238.91 | 716.73 |
| 8/27/2023 | 9/26/2023 | 31.00 | 9/26/2023 | 30.00 | Residential Sales | $103.47 | 3,104.10 |
| 8/27/2023 | 8/28/2023 | 2.00 | 8/28/2023 | 1.00 | Residential Sales | $2,807.78 | 2,807.78 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 8/28/2023 | 9/1/2023 | 5.00 | 9/1/2023 | 4.00 | Residential Sales | $473.11 | 1,892.44 |
| 8/28/2023 | 9/19/2023 | 23.00 | 9/19/2023 | 22.00 | Residential Sales | $88.40 | 1,944.80 |
| 8/28/2023 | 9/1/2023 | 5.00 | 9/1/2023 | 4.00 | Industrial Service | $13,623.03 | 54,492.12 |
| 8/28/2023 | 9/1/2023 | 5.00 | 9/1/2023 | 4.00 | Commercial Sales | $14,220.13 | 56,880.52 |
| 8/28/2023 | 3/28/2024 | 214.00 | 3/28/2024 | 213.00 | Commercial Sales | $702.63 | 149,660.19 |
| 8/28/2023 | 8/28/2023 | 1.00 | 8/28/2023 | 0.00 | Residential Sales | $1,524.39 | - |
| 8/28/2023 | 9/5/2023 | 9.00 | 9/5/2023 | 8.00 | Residential Sales | $253.28 | 2,026.24 |
| 8/28/2023 | 9/19/2023 | 23.00 | 9/19/2023 | 22.00 | Commercial Sales | $181.76 | 3,998.72 |
| 8/28/2023 | 2/21/2024 | 178.00 | 2/21/2024 | 177.00 | Residential Sales | $171.74 | 30,397.98 |
| 8/28/2023 | 8/29/2023 | 2.00 | 8/29/2023 | 1.00 | Residential Sales | $863,622.07 | 863,622.07 |
| 8/28/2023 | 9/6/2023 | 10.00 | 9/6/2023 | 9.00 | Residential Sales | $1,055.64 | 9,500.76 |
| 8/28/2023 | 9/1/2023 | 5.00 | 9/1/2023 | 4.00 | Other Sales to Public Authority | $10,818.60 | 43,274.40 |
| 8/28/2023 | 9/5/2023 | 9.00 | 9/5/2023 | 8.00 | Industrial Service | $281,390.26 | 2,251,122.08 |
| 8/28/2023 | 9/7/2023 | 11.00 | 9/7/2023 | 10.00 | Residential Sales | $23.56 | 235.60 |
| 8/28/2023 | 8/29/2023 | 2.00 | 8/29/2023 | 1.00 | Industrial Service | $195,370.04 | 195,370.04 |
| 8/28/2023 | 8/28/2023 | 1.00 | 8/28/2023 | 0.00 | Public Street & Highway Lighting | $1,515.76 | - |
| 8/28/2023 | 6/11/2024 | 289.00 | 6/11/2024 | 288.00 | Residential Sales | $76.67 | 22,080.96 |
| 8/28/2023 | 8/28/2023 | 1.00 | 8/28/2023 | 0.00 | Commercial Sales | $36,532.75 | - |
| 8/28/2023 | 9/22/2023 | 26.00 | 9/22/2023 | 25.00 | Residential Sales | $146.52 | 3,663.00 |
| 8/28/2023 | 8/29/2023 | 2.00 | 8/29/2023 | 1.00 | Commercial Sales | $578,604.85 | 578,604.85 |
| 8/28/2023 | 9/6/2023 | 10.00 | 9/6/2023 | 9.00 | Commercial Sales | $22,724.30 | 204,518.70 |
| 8/28/2023 | 8/30/2023 | 3.00 | 8/30/2023 | 2.00 | Residential Sales | $12,354.80 | 24,709.60 |
| 8/28/2023 | 9/7/2023 | 11.00 | 9/7/2023 | 10.00 | Commercial Sales | $329.79 | 3,297.90 |
| 8/28/2023 | 8/29/2023 | 2.00 | 8/29/2023 | 1.00 | Other Sales to Public Authority | $35,676.81 | 35,676.81 |
| 8/28/2023 | 8/31/2023 | 4.00 | 8/31/2023 | 3.00 | Residential Sales | $2,218.18 | 6,654.54 |
| 8/28/2023 | 9/8/2023 | 12.00 | 9/8/2023 | 11.00 | Commercial Sales | $3,342.69 | 36,769.59 |
| 8/28/2023 | 9/25/2023 | 29.00 | 9/25/2023 | 28.00 | Residential Sales | $180.77 | 5,061.56 |
| 8/28/2023 | 10/12/2023 | 46.00 | 10/12/2023 | 45.00 | Residential Sales | $223.36 | 10,051.20 |
| 8/28/2023 | 8/30/2023 | 3.00 | 8/30/2023 | 2.00 | Industrial Service | $188,440.40 | 376,880.80 |
| 8/28/2023 | 8/30/2023 | 3.00 | 8/30/2023 | 2.00 | Commercial Sales | $611,686.42 | 1,223,372.84 |
| 8/28/2023 | 8/31/2023 | 4.00 | 8/31/2023 | 3.00 | Industrial Service | $25,569.89 | 76,709.67 |
| 8/28/2023 | 8/31/2023 | 4.00 | 8/31/2023 | 3.00 | Commercial Sales | $787,784.14 | 2,363,352.42 |
| 8/28/2023 | 11/6/2023 | 71.00 | 11/6/2023 | 70.00 | Commercial Sales | $1,004.80 | 70,336.00 |
| 8/28/2023 | 9/25/2023 | 29.00 | 9/25/2023 | 28.00 | Commercial Sales | $312.14 | 8,739.92 |
| 8/28/2023 | 8/30/2023 | 3.00 | 8/30/2023 | 2.00 | Other Sales to Public Authority | $4,517.28 | 9,034.56 |
| 8/28/2023 | 9/12/2023 | 16.00 | 9/12/2023 | 15.00 | Residential Sales | $297.15 | 4,457.25 |
| 8/28/2023 | 12/13/2023 | 108.00 | 12/13/2023 | 107.00 | Other Sales to Public Authority | $336.93 | 36,051.51 |
| 8/28/2023 | 8/31/2023 | 4.00 | 8/31/2023 | 3.00 | Other Sales to Public Authority | $12,832.23 | 38,496.69 |
| 8/28/2023 | 1/2/2024 | 128.00 | 1/2/2024 | 127.00 | Other Sales to Public Authority | $164.63 | 20,908.01 |
| 8/28/2023 | 9/13/2023 | 17.00 | 9/13/2023 | 16.00 | Residential Sales | $14.41 | 230.56 |
| 8/28/2023 | 9/12/2023 | 16.00 | 9/12/2023 | 15.00 | Industrial Service | $28,035.11 | 420,526.65 |
| 8/28/2023 | 9/11/2023 | 15.00 | 9/11/2023 | 14.00 | Commercial Sales | $11,203.84 | 156,853.76 |
| 8/28/2023 | 9/28/2023 | 32.00 | 9/28/2023 | 31.00 | Commercial Sales | $14,217.42 | 440,740.02 |
| 8/28/2023 | 12/6/2023 | 101.00 | 12/6/2023 | 100.00 | Residential Sales | $104.31 | 10,431.00 |
| 8/29/2023 | 8/31/2023 | 3.00 | 8/31/2023 | 2.00 | Other Sales to Public Authority | $1,426.13 | 2,852.26 |
| 8/29/2023 | 9/11/2023 | 14.00 | 9/11/2023 | 13.00 | Commercial Sales | $446.99 | 5,810.87 |
| 8/29/2023 | 9/14/2023 | 17.00 | 9/14/2023 | 16.00 | Residential Sales | $107.88 | 1,726.08 |
| 8/29/2023 | 9/12/2023 | 15.00 | 9/12/2023 | 14.00 | Industrial Service | $251.21 | 3,516.94 |
| 8/29/2023 | 9/1/2023 | 4.00 | 9/1/2023 | 3.00 | Residential Sales | $441.60 | 1,324.80 |
| 8/29/2023 | 9/1/2023 | 4.00 | 9/1/2023 | 3.00 | Commercial Sales | $66,745.58 | 200,236.74 |
| 8/29/2023 | 10/9/2023 | 42.00 | 10/9/2023 | 41.00 | Residential Sales | $59.98 | 2,459.18 |
| 8/29/2023 | 9/2/2023 | 5.00 | 9/2/2023 | 4.00 | Commercial Sales | $5,649.34 | 22,597.36 |
| 8/29/2023 | 9/5/2023 | 8.00 | 9/5/2023 | 7.00 | Residential Sales | $1,709.15 | 11,964.05 |
| 8/29/2023 | 9/6/2023 | 9.00 | 9/6/2023 | 8.00 | Residential Sales | $3,275.37 | 26,202.96 |
| 8/29/2023 | 9/1/2023 | 4.00 | 9/1/2023 | 3.00 | Other Sales to Public Authority | $15,144.73 | 45,434.19 |
| 8/29/2023 | 8/29/2023 | 1.00 | 8/29/2023 | 0.00 | Residential Sales | $1,504.90 | - |
| 8/29/2023 | 4/21/2024 | 237.00 | 4/21/2024 | 236.00 | Commercial Sales | $33.81 | 7,979.16 |
| 8/29/2023 | 9/7/2023 | 10.00 | 9/7/2023 | 9.00 | Residential Sales | $1,290.10 | 11,610.90 |
| 8/29/2023 | 9/5/2023 | 8.00 | 9/5/2023 | 7.00 | Industrial Service | $559,106.15 | 3,913,743.05 |
| 8/29/2023 | 9/5/2023 | 8.00 | 9/5/2023 | 7.00 | Commercial Sales | $1,045.08 | 7,315.56 |
| 8/29/2023 | 9/8/2023 | 11.00 | 9/8/2023 | 10.00 | Residential Sales | $286.15 | 2,861.50 |
| 8/29/2023 | 9/6/2023 | 9.00 | 9/6/2023 | 8.00 | Industrial Service | $3,142.18 | 25,137.44 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 8/29/2023 | 8/29/2023 | 1.00 | 8/29/2023 | 0.00 | Public Street & Highway Lighting | $954.19 | - |
| 8/29/2023 | 8/29/2023 | 1.00 | 8/29/2023 | 0.00 | Commercial Sales | $1,762.48 | - |
| 8/29/2023 | 9/6/2023 | 9.00 | 9/6/2023 | 8.00 | Commercial Sales | $13,406.36 | 107,250.88 |
| 8/29/2023 | 8/30/2023 | 2.00 | 8/30/2023 | 1.00 | Residential Sales | $968,308.56 | 968,308.56 |
| 8/29/2023 | 9/7/2023 | 10.00 | 9/7/2023 | 9.00 | Commercial Sales | $12,602.23 | 113,420.07 |
| 8/29/2023 | 8/31/2023 | 3.00 | 8/31/2023 | 2.00 | Residential Sales | $10,092.86 | 20,185.72 |
| 8/29/2023 | 10/12/2023 | 45.00 | 10/12/2023 | 44.00 | Residential Sales | $124.73 | 5,488.12 |
| 8/29/2023 | 11/20/2023 | 84.00 | 11/20/2023 | 83.00 | Residential Sales | $68.19 | 5,659.77 |
| 8/29/2023 | 9/8/2023 | 11.00 | 9/8/2023 | 10.00 | Commercial Sales | $22,465.93 | 224,659.30 |
| 8/29/2023 | 8/30/2023 | 2.00 | 8/30/2023 | 1.00 | Industrial Service | $2,974.99 | 2,974.99 |
| 8/29/2023 | 8/30/2023 | 2.00 | 8/30/2023 | 1.00 | Commercial Sales | $252,118.79 | 252,118.79 |
| 8/29/2023 | 8/31/2023 | 3.00 | 8/31/2023 | 2.00 | Industrial Service | $2,620.03 | 5,240.06 |
| 8/29/2023 | 8/31/2023 | 3.00 | 8/31/2023 | 2.00 | Commercial Sales | $85,207.92 | 170,415.84 |
| 8/29/2023 | 9/11/2023 | 14.00 | 9/11/2023 | 13.00 | Residential Sales | $241.63 | 3,141.19 |
| 8/29/2023 | 9/12/2023 | 15.00 | 9/12/2023 | 14.00 | Residential Sales | $341.41 | 4,779.74 |
| 8/29/2023 | 8/30/2023 | 2.00 | 8/30/2023 | 1.00 | Other Sales to Public Authority | $2,699.69 | 2,699.69 |
| 8/29/2023 | 2/28/2024 | 184.00 | 2/28/2024 | 183.00 | Commercial Sales | $2,456.45 | 449,530.35 |
| 8/30/2023 | 8/31/2023 | 2.00 | 8/31/2023 | 1.00 | Other Sales to Public Authority | $128,440.58 | 128,440.58 |
| 8/30/2023 | 9/1/2023 | 3.00 | 9/1/2023 | 2.00 | Company Use | $0.00 | - |
| 8/30/2023 | 11/8/2023 | 71.00 | 11/8/2023 | 70.00 | Residential Sales | $19.14 | 1,339.80 |
| 8/30/2023 | 8/30/2023 | 1.00 | 8/30/2023 | 0.00 | Public Street & Highway Lighting | $527.63 | - |
| 8/30/2023 | 9/27/2023 | 29.00 | 9/27/2023 | 28.00 | Residential Sales | $78.39 | 2,194.92 |
| 8/30/2023 | 9/11/2023 | 13.00 | 9/11/2023 | 12.00 | Residential Sales | $1,000.97 | 12,011.64 |
| 8/30/2023 | 9/14/2023 | 16.00 | 9/14/2023 | 15.00 | Industrial Service | $13,702.55 | 205,538.25 |
| 8/30/2023 | 9/13/2023 | 15.00 | 9/13/2023 | 14.00 | Commercial Sales | $14,259.07 | 199,626.98 |
| 8/30/2023 | 9/29/2023 | 31.00 | 9/29/2023 | 30.00 | Residential Sales | $211.09 | 6,332.70 |
| 8/30/2023 | 9/14/2023 | 16.00 | 9/14/2023 | 15.00 | Commercial Sales | $127.49 | 1,912.35 |
| 8/30/2023 | 9/13/2023 | 15.00 | 9/13/2023 | 14.00 | Residential Sales | $46.65 | 653.10 |
| 8/30/2023 | 9/1/2023 | 3.00 | 9/1/2023 | 2.00 | Industrial Service | $277,010.63 | 554,021.26 |
| 8/30/2023 | 10/3/2023 | 35.00 | 10/3/2023 | 34.00 | Residential Sales | $164.39 | 5,589.26 |
| 8/30/2023 | 9/1/2023 | 3.00 | 9/1/2023 | 2.00 | Commercial Sales | $137,805.29 | 275,610.58 |
| 8/30/2023 | 9/1/2023 | 3.00 | 9/1/2023 | 2.00 | Residential Sales | $2,127.27 | 4,254.54 |
| 8/30/2023 | 9/2/2023 | 4.00 | 9/2/2023 | 3.00 | Commercial Sales | $53,605.80 | 160,817.40 |
| 8/30/2023 | 9/1/2023 | 3.00 | 9/1/2023 | 2.00 | Other Sales to Public Authority | $31,010.85 | 62,021.70 |
| 8/30/2023 | 9/2/2023 | 4.00 | 9/2/2023 | 3.00 | Other Sales to Public Authority | $57,155.91 | 171,467.73 |
| 8/30/2023 | 9/5/2023 | 7.00 | 9/5/2023 | 6.00 | Commercial Sales | $17,205.18 | 103,231.08 |
| 8/30/2023 | 9/6/2023 | 8.00 | 9/6/2023 | 7.00 | Industrial Service | $399.94 | 2,799.58 |
| 8/30/2023 | 9/6/2023 | 8.00 | 9/6/2023 | 7.00 | Commercial Sales | $12,731.43 | 89,120.01 |
| 8/30/2023 | 9/5/2023 | 7.00 | 9/5/2023 | 6.00 | Residential Sales | $1,759.78 | 10,558.68 |
| 8/30/2023 | 5/31/2024 | 276.00 | 5/31/2024 | 275.00 | Residential Sales | $90.36 | 24,849.00 |
| 8/30/2023 | 9/6/2023 | 8.00 | 9/6/2023 | 7.00 | Residential Sales | $9,732.48 | 68,127.36 |
| 8/30/2023 | 9/7/2023 | 9.00 | 9/7/2023 | 8.00 | Commercial Sales | $31,031.10 | 248,248.80 |
| 8/30/2023 | 9/20/2023 | 22.00 | 9/20/2023 | 21.00 | Residential Sales | $183.75 | 3,858.75 |
| 8/30/2023 | 9/8/2023 | 10.00 | 9/8/2023 | 9.00 | Commercial Sales | $9,940.68 | 89,466.12 |
| 8/30/2023 | 9/6/2023 | 8.00 | 9/6/2023 | 7.00 | Other Sales to Public Authority | $708.55 | 4,959.85 |
| 8/30/2023 | 9/7/2023 | 9.00 | 9/7/2023 | 8.00 | Residential Sales | $126.90 | 1,015.20 |
| 8/30/2023 | 9/8/2023 | 10.00 | 9/8/2023 | 9.00 | Residential Sales | $573.08 | 5,157.72 |
| 8/30/2023 | 8/31/2023 | 2.00 | 8/31/2023 | 1.00 | Industrial Service | $298,360.60 | 298,360.60 |
| 8/30/2023 | 9/8/2023 | 10.00 | 9/8/2023 | 9.00 | Other Sales to Public Authority | $68.89 | 620.01 |
| 8/30/2023 | 8/30/2023 | 1.00 | 8/30/2023 | 0.00 | Commercial Sales | $1,754.06 | - |
| 8/30/2023 | 9/22/2023 | 24.00 | 9/22/2023 | 23.00 | Other Sales to Public Authority | $159.50 | 3,668.50 |
| 8/30/2023 | 8/31/2023 | 2.00 | 8/31/2023 | 1.00 | Commercial Sales | $487,833.31 | 487,833.31 |
| 8/30/2023 | 8/30/2023 | 1.00 | 8/30/2023 | 0.00 | Residential Sales | $2,568.45 | - |
| 8/30/2023 | 10/12/2023 | 44.00 | 10/12/2023 | 43.00 | Commercial Sales | $22.36 | 961.48 |
| 8/30/2023 | 8/31/2023 | 2.00 | 8/31/2023 | 1.00 | Residential Sales | $772,612.14 | 772,612.14 |
| 8/30/2023 | 8/30/2023 | 1.00 | 8/30/2023 | 0.00 | Other Sales to Public Authority | $61.70 | - |
| 8/30/2023 | 10/12/2023 | 44.00 | 10/12/2023 | 43.00 | Residential Sales | $0.86 | 36.98 |
| 8/31/2023 | 9/8/2023 | 9.00 | 9/8/2023 | 8.00 | Residential Sales | $61.78 | 494.24 |
| 8/31/2023 | 9/12/2023 | 13.00 | 9/12/2023 | 12.00 | Commercial Sales | $298.48 | 3,581.76 |
| 8/31/2023 | 9/29/2023 | 30.00 | 9/29/2023 | 29.00 | Commercial Sales | $77.31 | 2,241.99 |
| 8/31/2023 | 9/13/2023 | 14.00 | 9/13/2023 | 13.00 | Commercial Sales | $116.19 | 1,510.47 |
| 8/31/2023 | 9/12/2023 | 13.00 | 9/12/2023 | 12.00 | Residential Sales | $1.44 | 17.28 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 8/31/2023 | 9/29/2023 | 30.00 | 9/29/2023 | 29.00 | Residential Sales | $87.47 | 2,536.63 |
| 8/31/2023 | 9/14/2023 | 15.00 | 9/14/2023 | 14.00 | Commercial Sales | $80.26 | 1,123.64 |
| 8/31/2023 | 9/1/2023 | 2.00 | 9/1/2023 | 1.00 | Commercial Sales | $602.06 | 602.06 |
| 8/31/2023 | 9/1/2023 | 2.00 | 9/1/2023 | 1.00 | Residential Sales | $18,997.97 | 18,997.97 |
| 8/31/2023 | 9/2/2023 | 3.00 | 9/2/2023 | 2.00 | Commercial Sales | $210.89 | 421.78 |
| 8/31/2023 | 10/5/2023 | 36.00 | 10/5/2023 | 35.00 | Residential Sales | $27.26 | 954.10 |
| 8/31/2023 | 9/2/2023 | 3.00 | 9/2/2023 | 2.00 | Residential Sales | $656.93 | 1,313.86 |
| 8/31/2023 | 9/19/2023 | 20.00 | 9/19/2023 | 19.00 | Residential Sales | $2.35 | 44.65 |
| 8/31/2023 | 9/5/2023 | 6.00 | 9/5/2023 | 5.00 | Residential Sales | $1,173.91 | 5,869.55 |
| 8/31/2023 | 9/7/2023 | 8.00 | 9/7/2023 | 7.00 | Commercial Sales | $89.73 | 628.11 |
| 8/31/2023 | 9/6/2023 | 7.00 | 9/6/2023 | 6.00 | Residential Sales | $947.02 | 5,682.12 |
| 8/31/2023 | 9/20/2023 | 21.00 | 9/20/2023 | 20.00 | Residential Sales | $24.90 | 498.00 |
| 9/1/2023 | 11/6/2023 | 67.00 | 11/6/2023 | 66.00 | Industrial Service | $725.31 | 47,870.46 |
| 9/1/2023 | 9/7/2023 | 7.00 | 9/7/2023 | 6.00 | Public Street & Highway Lighting | $51.51 | 309.06 |
| 9/1/2023 | 10/11/2023 | 41.00 | 10/11/2023 | 40.00 | Residential Sales | $147.62 | 5,904.80 |
| 9/1/2023 | 12/14/2023 | 105.00 | 12/14/2023 | 104.00 | Commercial Sales | $591.54 | 61,520.16 |
| 9/1/2023 | 10/12/2023 | 42.00 | 10/12/2023 | 41.00 | Commercial Sales | $420.76 | 17,251.16 |
| 9/1/2023 | 9/25/2023 | 25.00 | 9/25/2023 | 24.00 | Residential Sales | $408.65 | 9,807.60 |
| 9/1/2023 | 9/6/2023 | 6.00 | 9/6/2023 | 5.00 | Other Sales to Public Authority | $16,097.83 | 80,489.15 |
| 9/1/2023 | 10/12/2023 | 42.00 | 10/12/2023 | 41.00 | Residential Sales | $144.52 | 5,925.32 |
| 9/1/2023 | 9/26/2023 | 26.00 | 9/26/2023 | 25.00 | Commercial Sales | $2,711.26 | 67,781.50 |
| 9/1/2023 | 9/7/2023 | 7.00 | 9/7/2023 | 6.00 | Other Sales to Public Authority | $405,768.46 | 2,434,610.76 |
| 9/1/2023 | 3/20/2024 | 202.00 | 3/20/2024 | 201.00 | Commercial Sales | $18.23 | 3,664.23 |
| 9/1/2023 | 9/11/2023 | 11.00 | 9/11/2023 | 10.00 | Commercial Sales | $36,770.12 | 367,701.20 |
| 9/1/2023 | 9/8/2023 | 8.00 | 9/8/2023 | 7.00 | Other Sales to Public Authority | $54,007.99 | 378,055.93 |
| 9/1/2023 | 9/11/2023 | 11.00 | 9/11/2023 | 10.00 | Residential Sales | $394.63 | 3,946.30 |
| 9/1/2023 | 9/12/2023 | 12.00 | 9/12/2023 | 11.00 | Commercial Sales | $63.08 | 693.88 |
| 9/1/2023 | 9/13/2023 | 13.00 | 9/13/2023 | 12.00 | Commercial Sales | $530.98 | 6,371.76 |
| 9/1/2023 | 9/12/2023 | 12.00 | 9/12/2023 | 11.00 | Residential Sales | $669.52 | 7,364.72 |
| 9/1/2023 | 9/14/2023 | 14.00 | 9/14/2023 | 13.00 | Industrial Service | $10.16 | 132.08 |
| 9/1/2023 | 10/30/2023 | 60.00 | 10/30/2023 | 59.00 | Residential Sales | $60.88 | 3,591.92 |
| 9/1/2023 | 9/29/2023 | 29.00 | 9/29/2023 | 28.00 | Residential Sales | $77.21 | 2,161.88 |
| 9/1/2023 | 9/13/2023 | 13.00 | 9/13/2023 | 12.00 | Residential Sales | $148.47 | 1,781.64 |
| 9/1/2023 | 9/14/2023 | 14.00 | 9/14/2023 | 13.00 | Commercial Sales | $201.39 | 2,618.07 |
| 9/1/2023 | 9/14/2023 | 14.00 | 9/14/2023 | 13.00 | Residential Sales | $477.54 | 6,208.02 |
| 9/1/2023 | 9/15/2023 | 15.00 | 9/15/2023 | 14.00 | Commercial Sales | $48.32 | 676.48 |
| 9/1/2023 | 1/8/2024 | 130.00 | 1/8/2024 | 129.00 | Residential Sales | $73.63 | 9,498.27 |
| 9/1/2023 | 9/15/2023 | 15.00 | 9/15/2023 | 14.00 | Residential Sales | $157.83 | 2,209.62 |
| 9/1/2023 | 10/2/2023 | 32.00 | 10/2/2023 | 31.00 | Residential Sales | $139.80 | 4,333.80 |
| 9/1/2023 | 10/3/2023 | 33.00 | 10/3/2023 | 32.00 | Residential Sales | $169.66 | 5,429.12 |
| 9/1/2023 | 9/11/2023 | 11.00 | 9/11/2023 | 10.00 | Other Sales to Public Authority | $28,920.73 | 289,207.30 |
| 9/1/2023 | 12/6/2023 | 97.00 | 12/6/2023 | 96.00 | Residential Sales | $113.15 | 10,862.40 |
| 9/1/2023 | 10/6/2023 | 36.00 | 10/6/2023 | 35.00 | Commercial Sales | $377.61 | 13,216.35 |
| 9/1/2023 | 12/7/2023 | 98.00 | 12/7/2023 | 97.00 | Residential Sales | $92.29 | 8,952.13 |
| 9/1/2023 | 9/18/2023 | 18.00 | 9/18/2023 | 17.00 | Residential Sales | $378.30 | 6,431.10 |
| 9/1/2023 | 9/19/2023 | 19.00 | 9/19/2023 | 18.00 | Residential Sales | $373.16 | 6,716.88 |
| 9/1/2023 | 11/14/2023 | 75.00 | 11/14/2023 | 74.00 | Residential Sales | $121.66 | 9,002.84 |
| 9/1/2023 | 9/6/2023 | 6.00 | 9/6/2023 | 5.00 | Industrial Service | $7,202.19 | 36,010.95 |
| 9/1/2023 | 10/9/2023 | 39.00 | 10/9/2023 | 38.00 | Commercial Sales | $92.71 | 3,522.98 |
| 9/1/2023 | 9/5/2023 | 5.00 | 9/5/2023 | 4.00 | Commercial Sales | $151.82 | 607.28 |
| 9/1/2023 | 9/5/2023 | 5.00 | 9/5/2023 | 4.00 | Residential Sales | $280,706.50 | 1,122,826.00 |
| 9/1/2023 | 9/6/2023 | 6.00 | 9/6/2023 | 5.00 | Commercial Sales | $253,217.97 | 1,266,089.85 |
| 9/1/2023 | 9/7/2023 | 7.00 | 9/7/2023 | 6.00 | Industrial Service | $525,207.46 | 3,151,244.76 |
| 9/1/2023 | 2/7/2024 | 160.00 | 2/7/2024 | 159.00 | Residential Sales | $94.18 | 14,974.62 |
| 9/1/2023 | 10/9/2023 | 39.00 | 10/9/2023 | 38.00 | Residential Sales | $208.62 | 7,927.56 |
| 9/1/2023 | 9/6/2023 | 6.00 | 9/6/2023 | 5.00 | Residential Sales | $519,088.13 | 2,595,440.65 |
| 9/1/2023 | 9/7/2023 | 7.00 | 9/7/2023 | 6.00 | Commercial Sales | $78,224.46 | 469,346.76 |
| 9/1/2023 | 9/20/2023 | 20.00 | 9/20/2023 | 19.00 | Residential Sales | $461.86 | 8,775.34 |
| 9/1/2023 | 11/1/2023 | 62.00 | 11/1/2023 | 61.00 | Residential Sales | $107.16 | 6,536.76 |
| 9/1/2023 | 9/8/2023 | 8.00 | 9/8/2023 | 7.00 | Industrial Service | $229,299.66 | 1,605,097.62 |
| 9/1/2023 | 10/24/2023 | 54.00 | 10/24/2023 | 53.00 | Residential Sales | $20.21 | 1,071.13 |
| 9/1/2023 | 9/21/2023 | 21.00 | 9/21/2023 | 20.00 | Commercial Sales | $352.42 | 7,048.40 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 9/1/2023 | 9/7/2023 | 7.00 | 9/7/2023 | 6.00 | Residential Sales | $13,468.13 | 80,808.78 |
| 9/1/2023 | 9/8/2023 | 8.00 | 9/8/2023 | 7.00 | Commercial Sales | $166,755.58 | 1,167,289.06 |
| 9/1/2023 | 12/27/2023 | 118.00 | 12/27/2023 | 117.00 | Residential Sales | $18.31 | 2,142.27 |
| 9/1/2023 | 9/8/2023 | 8.00 | 9/8/2023 | 7.00 | Residential Sales | $2,213.54 | 15,494.78 |
| 9/2/2023 | 9/6/2023 | 5.00 | 9/6/2023 | 4.00 | Industrial Service | $10,463.83 | 41,855.32 |
| 9/2/2023 | 11/30/2023 | 90.00 | 11/30/2023 | 89.00 | Residential Sales | $175.32 | 15,603.48 |
| 9/2/2023 | 9/5/2023 | 4.00 | 9/5/2023 | 3.00 | Residential Sales | $331,593.00 | 994,779.00 |
| 9/2/2023 | 9/6/2023 | 5.00 | 9/6/2023 | 4.00 | Commercial Sales | $103,166.16 | 412,664.64 |
| 9/2/2023 | 9/7/2023 | 6.00 | 9/7/2023 | 5.00 | Industrial Service | $1,085.56 | 5,427.80 |
| 9/2/2023 | 9/6/2023 | 5.00 | 9/6/2023 | 4.00 | Residential Sales | $438,472.95 | 1,753,891.80 |
| 9/2/2023 | 9/7/2023 | 6.00 | 9/7/2023 | 5.00 | Commercial Sales | $43,615.93 | 218,079.65 |
| 9/2/2023 | 9/8/2023 | 7.00 | 9/8/2023 | 6.00 | Industrial Service | $10,297.31 | 61,783.86 |
| 9/2/2023 | 9/7/2023 | 6.00 | 9/7/2023 | 5.00 | Residential Sales | $9,147.49 | 45,737.45 |
| 9/2/2023 | 9/8/2023 | 7.00 | 9/8/2023 | 6.00 | Commercial Sales | $13,420.27 | 80,521.62 |
| 9/2/2023 | 9/8/2023 | 7.00 | 9/8/2023 | 6.00 | Residential Sales | $2,812.62 | 16,875.72 |
| 9/2/2023 | 10/26/2023 | 55.00 | 10/26/2023 | 54.00 | Residential Sales | $164.58 | 8,887.32 |
| 9/2/2023 | 9/25/2023 | 24.00 | 9/25/2023 | 23.00 | Commercial Sales | $319.28 | 7,343.44 |
| 9/2/2023 | 9/6/2023 | 5.00 | 9/6/2023 | 4.00 | Other Sales to Public Authority | $11,659.66 | 46,638.64 |
| 9/2/2023 | 9/7/2023 | 6.00 | 9/7/2023 | 5.00 | Other Sales to Public Authority | $4,317.76 | 21,588.80 |
| 9/2/2023 | 9/8/2023 | 7.00 | 9/8/2023 | 6.00 | Other Sales to Public Authority | $66.75 | 400.50 |
| 9/2/2023 | 9/11/2023 | 10.00 | 9/11/2023 | 9.00 | Commercial Sales | $104.08 | 936.72 |
| 9/2/2023 | 9/27/2023 | 26.00 | 9/27/2023 | 25.00 | Residential Sales | $68.50 | 1,712.50 |
| 9/2/2023 | 9/12/2023 | 11.00 | 9/12/2023 | 10.00 | Commercial Sales | $39.08 | 390.80 |
| 9/2/2023 | 9/11/2023 | 10.00 | 9/11/2023 | 9.00 | Residential Sales | $199.02 | 1,791.18 |
| 9/2/2023 | 9/13/2023 | 12.00 | 9/13/2023 | 11.00 | Commercial Sales | $857.09 | 9,427.99 |
| 9/2/2023 | 9/12/2023 | 11.00 | 9/12/2023 | 10.00 | Residential Sales | $798.21 | 7,982.10 |
| 9/2/2023 | 9/13/2023 | 12.00 | 9/13/2023 | 11.00 | Residential Sales | $116.72 | 1,283.92 |
| 9/2/2023 | 9/14/2023 | 13.00 | 9/14/2023 | 12.00 | Commercial Sales | $149.73 | 1,796.76 |
| 9/2/2023 | 9/14/2023 | 13.00 | 9/14/2023 | 12.00 | Residential Sales | $264.12 | 3,169.44 |
| 9/2/2023 | 9/15/2023 | 14.00 | 9/15/2023 | 13.00 | Residential Sales | $184.38 | 2,396.94 |
| 9/2/2023 | 9/11/2023 | 10.00 | 9/11/2023 | 9.00 | Other Sales to Public Authority | $31,890.16 | 287,011.44 |
| 9/2/2023 | 9/18/2023 | 17.00 | 9/18/2023 | 16.00 | Commercial Sales | $386.27 | 6,180.32 |
| 9/2/2023 | 9/18/2023 | 17.00 | 9/18/2023 | 16.00 | Residential Sales | $62.99 | 1,007.84 |
| 9/2/2023 | 9/19/2023 | 18.00 | 9/19/2023 | 17.00 | Residential Sales | $51.20 | 870.40 |
| 9/2/2023 | 11/10/2023 | 70.00 | 11/10/2023 | 69.00 | Other Sales to Public Authority | $6,642.56 | 458,336.64 |
| 9/3/2023 | 9/5/2023 | 3.00 | 9/5/2023 | 2.00 | Residential Sales | $2,660.52 | 5,321.04 |
| 9/3/2023 | 9/6/2023 | 4.00 | 9/6/2023 | 3.00 | Commercial Sales | $26.78 | 80.34 |
| 9/3/2023 | 9/6/2023 | 4.00 | 9/6/2023 | 3.00 | Residential Sales | $1,289.52 | 3,868.56 |
| 9/3/2023 | 9/7/2023 | 5.00 | 9/7/2023 | 4.00 | Commercial Sales | $55.46 | 221.84 |
| 9/3/2023 | 9/7/2023 | 5.00 | 9/7/2023 | 4.00 | Residential Sales | $130.68 | 522.72 |
| 9/3/2023 | 9/8/2023 | 6.00 | 9/8/2023 | 5.00 | Residential Sales | $14.31 | 71.55 |
| 9/3/2023 | 9/7/2023 | 5.00 | 9/7/2023 | 4.00 | Other Sales to Public Authority | $51.64 | 206.56 |
| 9/4/2023 | 9/11/2023 | 8.00 | 9/11/2023 | 7.00 | Residential Sales | $60.52 | 423.64 |
| 9/4/2023 | 9/28/2023 | 25.00 | 9/28/2023 | 24.00 | Residential Sales | $2.96 | 71.04 |
| 9/4/2023 | 9/12/2023 | 9.00 | 9/12/2023 | 8.00 | Commercial Sales | $237.65 | 1,901.20 |
| 9/4/2023 | 9/12/2023 | 9.00 | 9/12/2023 | 8.00 | Residential Sales | $63.15 | 505.20 |
| 9/4/2023 | 9/13/2023 | 10.00 | 9/13/2023 | 9.00 | Residential Sales | $32.69 | 294.21 |
| 9/4/2023 | 9/5/2023 | 2.00 | 9/5/2023 | 1.00 | Commercial Sales | $20.66 | 20.66 |
| 9/4/2023 | 9/5/2023 | 2.00 | 9/5/2023 | 1.00 | Residential Sales | $1,607.01 | 1,607.01 |
| 9/4/2023 | 9/6/2023 | 3.00 | 9/6/2023 | 2.00 | Residential Sales | $2,206.61 | 4,413.22 |
| 9/4/2023 | 9/7/2023 | 4.00 | 9/7/2023 | 3.00 | Commercial Sales | $60.29 | 180.87 |
| 9/4/2023 | 9/7/2023 | 4.00 | 9/7/2023 | 3.00 | Residential Sales | $131.22 | 393.66 |
| 9/4/2023 | 9/8/2023 | 5.00 | 9/8/2023 | 4.00 | Residential Sales | $628.04 | 2,512.16 |
| 9/4/2023 | 9/25/2023 | 22.00 | 9/25/2023 | 21.00 | Commercial Sales | $3.37 | 70.77 |
| 9/5/2023 | 10/23/2023 | 49.00 | 10/23/2023 | 48.00 | Other Sales to Public Authority | $19.90 | 955.20 |
| 9/5/2023 | 9/6/2023 | 2.00 | 9/6/2023 | 1.00 | Other Sales to Public Authority | $24,237.84 | 24,237.84 |
| 9/5/2023 | 9/25/2023 | 21.00 | 9/25/2023 | 20.00 | Residential Sales | $36.85 | 737.00 |
| 9/5/2023 | 11/1/2023 | 58.00 | 11/1/2023 | 57.00 | Other Sales to Public Authority | $103,072.09 | 5,875,109.13 |
| 9/5/2023 | 9/26/2023 | 22.00 | 9/26/2023 | 21.00 | Commercial Sales | $1,678.63 | 35,251.23 |
| 9/5/2023 | 9/7/2023 | 3.00 | 9/7/2023 | 2.00 | Other Sales to Public Authority | $44,839.78 | 89,679.56 |
| 9/5/2023 | 9/27/2023 | 23.00 | 9/27/2023 | 22.00 | Commercial Sales | $404.36 | 8,895.92 |
| 9/5/2023 | 9/8/2023 | 4.00 | 9/8/2023 | 3.00 | Other Sales to Public Authority | $2,830.80 | 8,492.40 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 9/5/2023 | 9/11/2023 | 7.00 | 9/11/2023 | 6.00 | Commercial Sales | $229.17 | 1,375.02 |
| 9/5/2023 | 9/11/2023 | 7.00 | 9/11/2023 | 6.00 | Residential Sales | $1,044.14 | 6,264.84 |
| 9/5/2023 | 9/12/2023 | 8.00 | 9/12/2023 | 7.00 | Commercial Sales | $371.40 | 2,599.80 |
| 9/5/2023 | 9/13/2023 | 9.00 | 9/13/2023 | 8.00 | Commercial Sales | $13,088.70 | 104,709.60 |
| 9/5/2023 | 9/12/2023 | 8.00 | 9/12/2023 | 7.00 | Residential Sales | $136.09 | 952.63 |
| 9/5/2023 | 9/13/2023 | 9.00 | 9/13/2023 | 8.00 | Residential Sales | $633.00 | 5,064.00 |
| 9/5/2023 | 9/14/2023 | 10.00 | 9/14/2023 | 9.00 | Residential Sales | $125.64 | 1,130.76 |
| 9/5/2023 | 3/25/2024 | 203.00 | 3/25/2024 | 202.00 | Residential Sales | $23.06 | 4,658.12 |
| 9/5/2023 | 9/15/2023 | 11.00 | 9/15/2023 | 10.00 | Residential Sales | $6.20 | 62.00 |
| 9/5/2023 | 10/5/2023 | 31.00 | 10/5/2023 | 30.00 | Residential Sales | $14.31 | 429.30 |
| 9/5/2023 | 9/19/2023 | 15.00 | 9/19/2023 | 14.00 | Residential Sales | $955.92 | 13,382.88 |
| 9/5/2023 | 10/20/2023 | 46.00 | 10/20/2023 | 45.00 | Residential Sales | $158.68 | 7,140.60 |
| 9/5/2023 | 9/6/2023 | 2.00 | 9/6/2023 | 1.00 | Commercial Sales | $160,474.41 | 160,474.41 |
| 9/5/2023 | 9/7/2023 | 3.00 | 9/7/2023 | 2.00 | Industrial Service | $9,279.15 | 18,558.30 |
| 9/5/2023 | 9/6/2023 | 2.00 | 9/6/2023 | 1.00 | Residential Sales | $880,280.73 | 880,280.73 |
| 9/5/2023 | 9/7/2023 | 3.00 | 9/7/2023 | 2.00 | Commercial Sales | $166,580.20 | 333,160.40 |
| 9/5/2023 | 9/20/2023 | 16.00 | 9/20/2023 | 15.00 | Residential Sales | $99.54 | 1,493.10 |
| 9/5/2023 | 9/8/2023 | 4.00 | 9/8/2023 | 3.00 | Commercial Sales | $156,025.23 | 468,075.69 |
| 9/5/2023 | 9/7/2023 | 3.00 | 9/7/2023 | 2.00 | Residential Sales | $14,880.14 | 29,760.28 |
| 9/5/2023 | 9/8/2023 | 4.00 | 9/8/2023 | 3.00 | Residential Sales | $1,658.56 | 4,975.68 |
| 9/6/2023 | 9/7/2023 | 2.00 | 9/7/2023 | 1.00 | Industrial Service | $309.67 | 309.67 |
| 9/6/2023 | 9/6/2023 | 1.00 | 9/6/2023 | 0.00 | Commercial Sales | $5,532.35 | - |
| 9/6/2023 | 9/7/2023 | 2.00 | 9/7/2023 | 1.00 | Commercial Sales | $197,612.37 | 197,612.37 |
| 9/6/2023 | 9/6/2023 | 1.00 | 9/6/2023 | 0.00 | Residential Sales | $1,246.47 | - |
| 9/6/2023 | 9/8/2023 | 3.00 | 9/8/2023 | 2.00 | Industrial Service | $225.63 | 451.26 |
| 9/6/2023 | 9/20/2023 | 15.00 | 9/20/2023 | 14.00 | Residential Sales | $332.54 | 4,655.56 |
| 9/6/2023 | 9/7/2023 | 2.00 | 9/7/2023 | 1.00 | Residential Sales | $1,374,402.17 | 1,374,402.17 |
| 9/6/2023 | 9/8/2023 | 3.00 | 9/8/2023 | 2.00 | Commercial Sales | $64,940.54 | 129,881.08 |
| 9/6/2023 | 9/21/2023 | 16.00 | 9/21/2023 | 15.00 | Residential Sales | $224.09 | 3,361.35 |
| 9/6/2023 | 9/8/2023 | 3.00 | 9/8/2023 | 2.00 | Residential Sales | $21,532.07 | 43,064.14 |
| 9/6/2023 | 9/22/2023 | 17.00 | 9/22/2023 | 16.00 | Residential Sales | $385.41 | 6,166.56 |
| 9/6/2023 | 11/6/2023 | 62.00 | 11/6/2023 | 61.00 | Commercial Sales | $110.05 | 6,713.05 |
| 9/6/2023 | 9/26/2023 | 21.00 | 9/26/2023 | 20.00 | Commercial Sales | $323.48 | 6,469.60 |
| 9/6/2023 | 10/12/2023 | 37.00 | 10/12/2023 | 36.00 | Residential Sales | $134.01 | 4,824.36 |
| 9/6/2023 | 9/11/2023 | 6.00 | 9/11/2023 | 5.00 | Industrial Service | $895.97 | 4,479.85 |
| 9/6/2023 | 9/7/2023 | 2.00 | 9/7/2023 | 1.00 | Other Sales to Public Authority | $20,978.68 | 20,978.68 |
| 9/6/2023 | 9/27/2023 | 22.00 | 9/27/2023 | 21.00 | Commercial Sales | $138.66 | 2,911.86 |
| 9/6/2023 | 10/13/2023 | 38.00 | 10/13/2023 | 37.00 | Residential Sales | $110.41 | 4,085.17 |
| 9/6/2023 | 9/11/2023 | 6.00 | 9/11/2023 | 5.00 | Commercial Sales | $58,342.43 | 291,712.15 |
| 9/6/2023 | 9/8/2023 | 3.00 | 9/8/2023 | 2.00 | Other Sales to Public Authority | $27,358.38 | 54,716.76 |
| 9/6/2023 | 9/27/2023 | 22.00 | 9/27/2023 | 21.00 | Residential Sales | $18.73 | 393.33 |
| 9/6/2023 | 9/11/2023 | 6.00 | 9/11/2023 | 5.00 | Residential Sales | $3,411.01 | 17,055.05 |
| 9/6/2023 | 9/12/2023 | 7.00 | 9/12/2023 | 6.00 | Residential Sales | $1,436.68 | 8,620.08 |
| 9/6/2023 | 9/13/2023 | 8.00 | 9/13/2023 | 7.00 | Commercial Sales | $6,167.48 | 43,172.36 |
| 9/6/2023 | 9/14/2023 | 9.00 | 9/14/2023 | 8.00 | Commercial Sales | $415.97 | 3,327.76 |
| 9/6/2023 | 9/13/2023 | 8.00 | 9/13/2023 | 7.00 | Residential Sales | $190.03 | 1,330.21 |
| 9/6/2023 | 9/14/2023 | 9.00 | 9/14/2023 | 8.00 | Residential Sales | $607.26 | 4,858.08 |
| 9/6/2023 | 10/3/2023 | 28.00 | 10/3/2023 | 27.00 | Commercial Sales | $3.79 | 102.33 |
| 9/6/2023 | 9/15/2023 | 10.00 | 9/15/2023 | 9.00 | Residential Sales | $249.16 | 2,242.44 |
| 9/6/2023 | 9/11/2023 | 6.00 | 9/11/2023 | 5.00 | Other Sales to Public Authority | $32,466.94 | 162,334.70 |
| 9/6/2023 | 9/13/2023 | 8.00 | 9/13/2023 | 7.00 | Public Street & Highway Lighting | $1,126.55 | 7,885.85 |
| 9/6/2023 | 10/4/2023 | 29.00 | 10/4/2023 | 28.00 | Commercial Sales | $39.75 | 1,113.00 |
| 9/6/2023 | 10/4/2023 | 29.00 | 10/4/2023 | 28.00 | Residential Sales | $52.34 | 1,465.52 |
| 9/6/2023 | 9/18/2023 | 13.00 | 9/18/2023 | 12.00 | Commercial Sales | $16,083.43 | 193,001.16 |
| 9/6/2023 | 9/18/2023 | 13.00 | 9/18/2023 | 12.00 | Residential Sales | $177.74 | 2,132.88 |
| 9/6/2023 | 10/6/2023 | 31.00 | 10/6/2023 | 30.00 | Residential Sales | $5.28 | 158.40 |
| 9/7/2023 | 9/11/2023 | 5.00 | 9/11/2023 | 4.00 | Other Sales to Public Authority | $10,849.83 | 43,399.32 |
| 9/7/2023 | 9/18/2023 | 12.00 | 9/18/2023 | 11.00 | Commercial Sales | $8,727.32 | 96,000.52 |
| 9/7/2023 | 9/12/2023 | 6.00 | 9/12/2023 | 5.00 | Other Sales to Public Authority | $10,448.49 | 52,242.45 |
| 9/7/2023 | 12/6/2023 | 91.00 | 12/6/2023 | 90.00 | Residential Sales | $174.80 | 15,732.00 |
| 9/7/2023 | 10/5/2023 | 29.00 | 10/5/2023 | 28.00 | Commercial Sales | $13,081.08 | 366,270.24 |
| 9/7/2023 | 9/18/2023 | 12.00 | 9/18/2023 | 11.00 | Residential Sales | $1,071.92 | 11,791.12 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 9/7/2023 | 9/19/2023 | 13.00 | 9/19/2023 | 12.00 | Residential Sales | $307.51 | 3,690.12 |
| 9/7/2023 | 9/14/2023 | 8.00 | 9/14/2023 | 7.00 | Other Sales to Public Authority | $7,270.05 | 50,890.35 |
| 9/7/2023 | 11/15/2023 | 70.00 | 11/15/2023 | 69.00 | Residential Sales | $183.74 | 12,678.06 |
| 9/7/2023 | 10/9/2023 | 33.00 | 10/9/2023 | 32.00 | Commercial Sales | $58.46 | 1,870.72 |
| 9/7/2023 | 10/24/2023 | 48.00 | 10/24/2023 | 47.00 | Commercial Sales | $98.77 | 4,642.19 |
| 9/7/2023 | 11/1/2023 | 56.00 | 11/1/2023 | 55.00 | Commercial Sales | $112.88 | 6,208.40 |
| 9/7/2023 | 9/7/2023 | 1.00 | 9/7/2023 | 0.00 | Commercial Sales | $5,392.14 | - |
| 9/7/2023 | 9/8/2023 | 2.00 | 9/8/2023 | 1.00 | Industrial Service | $14,763.80 | 14,763.80 |
| 9/7/2023 | 9/20/2023 | 14.00 | 9/20/2023 | 13.00 | Residential Sales | $53.10 | 690.30 |
| 9/7/2023 | 10/24/2023 | 48.00 | 10/24/2023 | 47.00 | Residential Sales | $20.33 | 955.51 |
| 9/7/2023 | 9/8/2023 | 2.00 | 9/8/2023 | 1.00 | Commercial Sales | $478,523.46 | 478,523.46 |
| 9/7/2023 | 9/7/2023 | 1.00 | 9/7/2023 | 0.00 | Residential Sales | $1,435.74 | - |
| 9/7/2023 | 9/8/2023 | 2.00 | 9/8/2023 | 1.00 | Residential Sales | $1,039,937.86 | 1,039,937.86 |
| 9/7/2023 | 12/11/2023 | 96.00 | 12/11/2023 | 95.00 | Residential Sales | $124.11 | 11,790.45 |
| 9/7/2023 | 9/22/2023 | 16.00 | 9/22/2023 | 15.00 | Residential Sales | $412.73 | 6,190.95 |
| 9/7/2023 | 1/30/2024 | 146.00 | 1/30/2024 | 145.00 | Residential Sales | $158.99 | 23,053.55 |
| 9/7/2023 | 10/27/2023 | 51.00 | 10/27/2023 | 50.00 | Residential Sales | $306.19 | 15,309.50 |
| 9/7/2023 | 12/13/2023 | 98.00 | 12/13/2023 | 97.00 | Commercial Sales | $42.54 | 4,126.38 |
| 9/7/2023 | 10/12/2023 | 36.00 | 10/12/2023 | 35.00 | Commercial Sales | $51.79 | 1,812.65 |
| 9/7/2023 | 10/12/2023 | 36.00 | 10/12/2023 | 35.00 | Residential Sales | $101.76 | 3,561.60 |
| 9/7/2023 | 9/26/2023 | 20.00 | 9/26/2023 | 19.00 | Commercial Sales | $12,808.27 | 243,357.13 |
| 9/7/2023 | 9/25/2023 | 19.00 | 9/25/2023 | 18.00 | Residential Sales | $120.95 | 2,177.10 |
| 9/7/2023 | 9/11/2023 | 5.00 | 9/11/2023 | 4.00 | Industrial Service | $1,549.70 | 6,198.80 |
| 9/7/2023 | 9/7/2023 | 1.00 | 9/7/2023 | 0.00 | Other Sales to Public Authority | $18.69 | - |
| 9/7/2023 | 9/11/2023 | 5.00 | 9/11/2023 | 4.00 | Commercial Sales | $180,807.09 | 723,228.36 |
| 9/7/2023 | 9/8/2023 | 2.00 | 9/8/2023 | 1.00 | Other Sales to Public Authority | $24,500.19 | 24,500.19 |
| 9/7/2023 | 9/28/2023 | 22.00 | 9/28/2023 | 21.00 | Commercial Sales | $176.03 | 3,696.63 |
| 9/7/2023 | 9/11/2023 | 5.00 | 9/11/2023 | 4.00 | Residential Sales | $21,711.12 | 86,844.48 |
| 9/7/2023 | 9/12/2023 | 6.00 | 9/12/2023 | 5.00 | Commercial Sales | $73,145.72 | 365,728.60 |
| 9/7/2023 | 9/13/2023 | 7.00 | 9/13/2023 | 6.00 | Commercial Sales | $13,465.46 | 80,792.76 |
| 9/7/2023 | 9/12/2023 | 6.00 | 9/12/2023 | 5.00 | Residential Sales | $3,719.61 | 18,598.05 |
| 9/7/2023 | 9/13/2023 | 7.00 | 9/13/2023 | 6.00 | Residential Sales | $1,122.52 | 6,735.12 |
| 9/7/2023 | 9/14/2023 | 8.00 | 9/14/2023 | 7.00 | Commercial Sales | $1,969.37 | 13,785.59 |
| 9/7/2023 | 12/19/2023 | 104.00 | 12/19/2023 | 103.00 | Residential Sales | $230.24 | 23,714.72 |
| 9/7/2023 | 9/14/2023 | 8.00 | 9/14/2023 | 7.00 | Residential Sales | $271.99 | 1,903.93 |
| 9/7/2023 | 9/15/2023 | 9.00 | 9/15/2023 | 8.00 | Commercial Sales | $14,322.10 | 114,576.80 |
| 9/7/2023 | 3/25/2024 | 201.00 | 3/25/2024 | 200.00 | Commercial Sales | $36.46 | 7,292.00 |
| 9/7/2023 | 10/2/2023 | 26.00 | 10/2/2023 | 25.00 | Residential Sales | $234.23 | 5,855.75 |
| 9/7/2023 | 9/12/2023 | 6.00 | 9/12/2023 | 5.00 | Public Street & Highway Lighting | $58.33 | 291.65 |
| 9/7/2023 | 10/19/2023 | 43.00 | 10/19/2023 | 42.00 | Residential Sales | $57.06 | 2,396.52 |
| 9/7/2023 | 9/15/2023 | 9.00 | 9/15/2023 | 8.00 | Residential Sales | $165.31 | 1,322.48 |
| 9/8/2023 | 9/11/2023 | 4.00 | 9/11/2023 | 3.00 | Residential Sales | $437,691.34 | 1,313,074.02 |
| 9/8/2023 | 9/12/2023 | 5.00 | 9/12/2023 | 4.00 | Commercial Sales | $104,549.53 | 418,198.12 |
| 9/8/2023 | 9/28/2023 | 21.00 | 9/28/2023 | 20.00 | Residential Sales | $136.25 | 2,725.00 |
| 9/8/2023 | 9/13/2023 | 6.00 | 9/13/2023 | 5.00 | Industrial Service | $119,881.31 | 599,406.55 |
| 9/8/2023 | 9/12/2023 | 5.00 | 9/12/2023 | 4.00 | Residential Sales | $2,403.16 | 9,612.64 |
| 9/8/2023 | 9/13/2023 | 6.00 | 9/13/2023 | 5.00 | Commercial Sales | $235,622.91 | 1,178,114.55 |
| 9/8/2023 | 9/14/2023 | 7.00 | 9/14/2023 | 6.00 | Industrial Service | $15,385.83 | 92,314.98 |
| 9/8/2023 | 9/14/2023 | 7.00 | 9/14/2023 | 6.00 | Commercial Sales | $49,860.39 | 299,162.34 |
| 9/8/2023 | 9/13/2023 | 6.00 | 9/13/2023 | 5.00 | Residential Sales | $1,016.20 | 5,081.00 |
| 9/8/2023 | 9/15/2023 | 8.00 | 9/15/2023 | 7.00 | Commercial Sales | $18.72 | 131.04 |
| 9/8/2023 | 10/3/2023 | 26.00 | 10/3/2023 | 25.00 | Commercial Sales | $11,666.09 | 291,652.25 |
| 9/8/2023 | 10/2/2023 | 25.00 | 10/2/2023 | 24.00 | Residential Sales | $3.90 | 93.60 |
| 9/8/2023 | 9/15/2023 | 8.00 | 9/15/2023 | 7.00 | Residential Sales | $429.16 | 3,004.12 |
| 9/8/2023 | 9/11/2023 | 4.00 | 9/11/2023 | 3.00 | Other Sales to Public Authority | $47,234.51 | 141,703.53 |
| 9/8/2023 | 9/12/2023 | 5.00 | 9/12/2023 | 4.00 | Other Sales to Public Authority | $17,469.44 | 69,877.76 |
| 9/8/2023 | 10/5/2023 | 28.00 | 10/5/2023 | 27.00 | Commercial Sales | $206.99 | 5,588.73 |
| 9/8/2023 | 9/18/2023 | 11.00 | 9/18/2023 | 10.00 | Commercial Sales | $164.99 | 1,649.90 |
| 9/8/2023 | 9/13/2023 | 6.00 | 9/13/2023 | 5.00 | Other Sales to Public Authority | $50,670.86 | 253,354.30 |
| 9/8/2023 | 9/18/2023 | 11.00 | 9/18/2023 | 10.00 | Residential Sales | $469.21 | 4,692.10 |
| 9/8/2023 | 10/5/2023 | 28.00 | 10/5/2023 | 27.00 | Residential Sales | $4.70 | 126.90 |
| 9/8/2023 | 11/14/2023 | 68.00 | 11/14/2023 | 67.00 | Commercial Sales | $2,377.99 | 159,325.33 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 9/8/2023 | 9/14/2023 | 7.00 | 9/14/2023 | 6.00 | Other Sales to Public Authority | $10,627.46 | 63,764.76 |
| 9/8/2023 | 9/19/2023 | 12.00 | 9/19/2023 | 11.00 | Residential Sales | $78.38 | 862.18 |
| 9/8/2023 | 9/20/2023 | 13.00 | 9/20/2023 | 12.00 | Residential Sales | $273.05 | 3,276.60 |
| 9/8/2023 | 2/9/2024 | 155.00 | 2/9/2024 | 154.00 | Commercial Sales | $42.54 | 6,551.16 |
| 9/8/2023 | 9/8/2023 | 1.00 | 9/8/2023 | 0.00 | Commercial Sales | $17,080.63 | - |
| 9/8/2023 | 9/8/2023 | 1.00 | 9/8/2023 | 0.00 | Residential Sales | $1,149.23 | - |
| 9/8/2023 | 9/22/2023 | 15.00 | 9/22/2023 | 14.00 | Residential Sales | $124.42 | 1,741.88 |
| 9/8/2023 | 9/12/2023 | 5.00 | 9/12/2023 | 4.00 | Company Use | $0.00 | - |
| 9/8/2023 | 9/8/2023 | 1.00 | 9/8/2023 | 0.00 | Public Street & Highway Lighting | $20.81 | - |
| 9/8/2023 | 10/13/2023 | 36.00 | 10/13/2023 | 35.00 | Commercial Sales | $234.24 | 8,198.40 |
| 9/8/2023 | 9/11/2023 | 4.00 | 9/11/2023 | 3.00 | Industrial Service | $47,192.19 | 141,576.57 |
| 9/8/2023 | 9/11/2023 | 4.00 | 9/11/2023 | 3.00 | Commercial Sales | $354,546.84 | 1,063,640.52 |
| 9/8/2023 | 9/28/2023 | 21.00 | 9/28/2023 | 20.00 | Commercial Sales | $22.29 | 445.80 |
| 9/8/2023 | 10/26/2023 | 49.00 | 10/26/2023 | 48.00 | Other Sales to Public Authority | $76,864.88 | 3,689,514.24 |
| 9/8/2023 | 9/12/2023 | 5.00 | 9/12/2023 | 4.00 | Industrial Service | $31,268.05 | 125,072.20 |
| 9/8/2023 | 11/9/2023 | 63.00 | 11/9/2023 | 62.00 | Commercial Sales | $681.59 | 42,258.58 |
| 9/9/2023 | 9/11/2023 | 3.00 | 9/11/2023 | 2.00 | Residential Sales | $1,573.86 | 3,147.72 |
| 9/10/2023 | 9/22/2023 | 13.00 | 9/22/2023 | 12.00 | Commercial Sales | $60.41 | 724.92 |
| 9/10/2023 | 9/25/2023 | 16.00 | 9/25/2023 | 15.00 | Residential Sales | $27.38 | 410.70 |
| 9/10/2023 | 9/11/2023 | 2.00 | 9/11/2023 | 1.00 | Residential Sales | $2,969.86 | 2,969.86 |
| 9/10/2023 | 9/12/2023 | 3.00 | 9/12/2023 | 2.00 | Residential Sales | $219.86 | 439.72 |
| 9/10/2023 | 9/13/2023 | 4.00 | 9/13/2023 | 3.00 | Residential Sales | $2.07 | 6.21 |
| 9/10/2023 | 9/11/2023 | 2.00 | 9/11/2023 | 1.00 | Commercial Sales | $176.30 | 176.30 |
| 9/10/2023 | 9/14/2023 | 5.00 | 9/14/2023 | 4.00 | Residential Sales | $57.08 | 228.32 |
| 9/10/2023 | 9/12/2023 | 3.00 | 9/12/2023 | 2.00 | Commercial Sales | $149.26 | 298.52 |
| 9/10/2023 | 9/15/2023 | 6.00 | 9/15/2023 | 5.00 | Residential Sales | $52.02 | 260.10 |
| 9/10/2023 | 9/14/2023 | 5.00 | 9/14/2023 | 4.00 | Commercial Sales | $177.78 | 711.12 |
| 9/10/2023 | 9/15/2023 | 6.00 | 9/15/2023 | 5.00 | Commercial Sales | $22.97 | 114.85 |
| 9/10/2023 | 9/18/2023 | 9.00 | 9/18/2023 | 8.00 | Residential Sales | $10.45 | 83.60 |
| 9/10/2023 | 9/18/2023 | 9.00 | 9/18/2023 | 8.00 | Commercial Sales | $9.72 | 77.76 |
| 9/11/2023 | 9/18/2023 | 8.00 | 9/18/2023 | 7.00 | Commercial Sales | $11,086.13 | 77,602.91 |
| 9/11/2023 | 2/20/2024 | 163.00 | 2/20/2024 | 162.00 | Residential Sales | $23.85 | 3,863.70 |
| 9/11/2023 | 10/5/2023 | 25.00 | 10/5/2023 | 24.00 | Commercial Sales | $24.94 | 598.56 |
| 9/11/2023 | 10/24/2023 | 44.00 | 10/24/2023 | 43.00 | Residential Sales | $63.07 | 2,712.01 |
| 9/11/2023 | 9/18/2023 | 8.00 | 9/18/2023 | 7.00 | Other Sales to Public Authority | $20,705.59 | 144,939.13 |
| 9/11/2023 | 9/20/2023 | 10.00 | 9/20/2023 | 9.00 | Residential Sales | $182.27 | 1,640.43 |
| 9/11/2023 | 9/22/2023 | 12.00 | 9/22/2023 | 11.00 | Residential Sales | $64.62 | 710.82 |
| 9/11/2023 | 10/11/2023 | 31.00 | 10/11/2023 | 30.00 | Residential Sales | $31.42 | 942.60 |
| 9/11/2023 | 9/22/2023 | 12.00 | 9/22/2023 | 11.00 | Commercial Sales | $5,364.13 | 59,005.43 |
| 9/11/2023 | 10/26/2023 | 46.00 | 10/26/2023 | 45.00 | Commercial Sales | $285.90 | 12,865.50 |
| 9/11/2023 | 10/12/2023 | 32.00 | 10/12/2023 | 31.00 | Residential Sales | $98.82 | 3,063.42 |
| 9/11/2023 | 9/25/2023 | 15.00 | 9/25/2023 | 14.00 | Residential Sales | $2,987.01 | 41,818.14 |
| 9/11/2023 | 10/10/2023 | 30.00 | 10/10/2023 | 29.00 | Commercial Sales | $1,880.32 | 54,529.28 |
| 9/11/2023 | 9/26/2023 | 16.00 | 9/26/2023 | 15.00 | Residential Sales | $191.86 | 2,877.90 |
| 9/11/2023 | 9/11/2023 | 1.00 | 9/11/2023 | 0.00 | Residential Sales | $3,253.78 | - |
| 9/11/2023 | 9/12/2023 | 2.00 | 9/12/2023 | 1.00 | Residential Sales | $429,828.17 | 429,828.17 |
| 9/11/2023 | 9/29/2023 | 19.00 | 9/29/2023 | 18.00 | Residential Sales | $262.39 | 4,723.02 |
| 9/11/2023 | 9/13/2023 | 3.00 | 9/13/2023 | 2.00 | Residential Sales | $7,367.02 | 14,734.04 |
| 9/11/2023 | 9/14/2023 | 4.00 | 9/14/2023 | 3.00 | Residential Sales | $1,434.07 | 4,302.21 |
| 9/11/2023 | 9/11/2023 | 1.00 | 9/11/2023 | 0.00 | Commercial Sales | $12,618.55 | - |
| 9/11/2023 | 9/12/2023 | 2.00 | 9/12/2023 | 1.00 | Industrial Service | $90,558.95 | 90,558.95 |
| 9/11/2023 | 9/12/2023 | 2.00 | 9/12/2023 | 1.00 | Commercial Sales | $409,444.02 | 409,444.02 |
| 9/11/2023 | 9/15/2023 | 5.00 | 9/15/2023 | 4.00 | Residential Sales | $1,613.26 | 6,453.04 |
| 9/11/2023 | 9/12/2023 | 2.00 | 9/12/2023 | 1.00 | Public Street & Highway Lighting | $55.43 | 55.43 |
| 9/11/2023 | 10/2/2023 | 22.00 | 10/2/2023 | 21.00 | Residential Sales | $21.90 | 459.90 |
| 9/11/2023 | 9/13/2023 | 3.00 | 9/13/2023 | 2.00 | Industrial Service | $37,561.19 | 75,122.38 |
| 9/11/2023 | 10/30/2023 | 50.00 | 10/30/2023 | 49.00 | Commercial Sales | $16.75 | 820.75 |
| 9/11/2023 | 9/13/2023 | 3.00 | 9/13/2023 | 2.00 | Commercial Sales | $236,922.92 | 473,845.84 |
| 9/11/2023 | 9/11/2023 | 1.00 | 9/11/2023 | 0.00 | Other Sales to Public Authority | $231.31 | - |
| 9/11/2023 | 9/15/2023 | 5.00 | 9/15/2023 | 4.00 | Industrial Service | $5,043.34 | 20,173.36 |
| 9/11/2023 | 10/30/2023 | 50.00 | 10/30/2023 | 49.00 | Other Sales to Public Authority | $372.29 | 18,242.21 |
| 9/11/2023 | 9/14/2023 | 4.00 | 9/14/2023 | 3.00 | Commercial Sales | $120,365.07 | 361,095.21 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 9/11/2023 | 9/12/2023 | 2.00 | 9/12/2023 | 1.00 | Other Sales to Public Authority | $25,951.60 | 25,951.60 |
| 9/11/2023 | 9/15/2023 | 5.00 | 9/15/2023 | 4.00 | Commercial Sales | $29,354.82 | 117,419.28 |
| 9/11/2023 | 9/13/2023 | 3.00 | 9/13/2023 | 2.00 | Other Sales to Public Authority | $2,558.95 | 5,117.90 |
| 9/11/2023 | 9/18/2023 | 8.00 | 9/18/2023 | 7.00 | Residential Sales | $385.92 | 2,701.44 |
| 9/11/2023 | 9/19/2023 | 9.00 | 9/19/2023 | 8.00 | Residential Sales | $779.99 | 6,239.92 |
| 9/11/2023 | 9/14/2023 | 4.00 | 9/14/2023 | 3.00 | Other Sales to Public Authority | $43,607.33 | 130,821.99 |
| 9/11/2023 | 9/15/2023 | 5.00 | 9/15/2023 | 4.00 | Other Sales to Public Authority | $1,321.82 | 5,287.28 |
| 9/12/2023 | 9/13/2023 | 2.00 | 9/13/2023 | 1.00 | Commercial Sales | $298,151.13 | 298,151.13 |
| 9/12/2023 | 9/14/2023 | 3.00 | 9/14/2023 | 2.00 | Industrial Service | $1,159,273.67 | 2,318,547.34 |
| 9/12/2023 | 9/13/2023 | 2.00 | 9/13/2023 | 1.00 | Public Street & Highway Lighting | $54.04 | 54.04 |
| 9/12/2023 | 9/14/2023 | 3.00 | 9/14/2023 | 2.00 | Public Street & Highway Lighting | $47,534.36 | 95,068.72 |
| 9/12/2023 | 9/14/2023 | 3.00 | 9/14/2023 | 2.00 | Commercial Sales | $168,943.98 | 337,887.96 |
| 9/12/2023 | 9/15/2023 | 4.00 | 9/15/2023 | 3.00 | Industrial Service | $6,747.29 | 20,241.87 |
| 9/12/2023 | 9/12/2023 | 1.00 | 9/12/2023 | 0.00 | Other Sales to Public Authority | $18.69 | - |
| 9/12/2023 | 9/15/2023 | 4.00 | 9/15/2023 | 3.00 | Public Street & Highway Lighting | $58,983.86 | 176,951.58 |
| 9/12/2023 | 9/13/2023 | 2.00 | 9/13/2023 | 1.00 | Other Sales to Public Authority | $39,025.04 | 39,025.04 |
| 9/12/2023 | 9/18/2023 | 7.00 | 9/18/2023 | 6.00 | Residential Sales | $660.31 | 3,961.86 |
| 9/12/2023 | 9/15/2023 | 4.00 | 9/15/2023 | 3.00 | Commercial Sales | $171,980.13 | 515,940.39 |
| 9/12/2023 | 10/5/2023 | 24.00 | 10/5/2023 | 23.00 | Residential Sales | $245.04 | 5,635.92 |
| 9/12/2023 | 9/14/2023 | 3.00 | 9/14/2023 | 2.00 | Other Sales to Public Authority | $2,126.97 | 4,253.94 |
| 9/12/2023 | 11/14/2023 | 64.00 | 11/14/2023 | 63.00 | Residential Sales | $277.58 | 17,487.54 |
| 9/12/2023 | 9/19/2023 | 8.00 | 9/19/2023 | 7.00 | Residential Sales | $571.60 | 4,001.20 |
| 9/12/2023 | 11/15/2023 | 65.00 | 11/15/2023 | 64.00 | Residential Sales | $154.45 | 9,884.80 |
| 9/12/2023 | 10/4/2023 | 23.00 | 10/4/2023 | 22.00 | Commercial Sales | $19.44 | 427.68 |
| 9/12/2023 | 9/18/2023 | 7.00 | 9/18/2023 | 6.00 | Industrial Service | $186,414.85 | 1,118,489.10 |
| 9/12/2023 | 5/15/2024 | 247.00 | 5/15/2024 | 246.00 | Residential Sales | $117.69 | 28,951.74 |
| 9/12/2023 | 9/18/2023 | 7.00 | 9/18/2023 | 6.00 | Public Street & Highway Lighting | $15,395.29 | 92,371.74 |
| 9/12/2023 | 9/18/2023 | 7.00 | 9/18/2023 | 6.00 | Commercial Sales | $25,240.64 | 151,443.84 |
| 9/12/2023 | 10/5/2023 | 24.00 | 10/5/2023 | 23.00 | Commercial Sales | $342.75 | 7,883.25 |
| 9/12/2023 | 10/10/2023 | 29.00 | 10/10/2023 | 28.00 | Company Use | $0.00 | - |
| 9/12/2023 | 12/8/2023 | 88.00 | 12/8/2023 | 87.00 | Commercial Sales | $754.81 | 65,668.47 |
| 9/12/2023 | 10/6/2023 | 25.00 | 10/6/2023 | 24.00 | Commercial Sales | $442.16 | 10,611.84 |
| 9/12/2023 | 9/19/2023 | 8.00 | 9/19/2023 | 7.00 | Commercial Sales | $1,595.82 | 11,170.74 |
| 9/12/2023 | 9/20/2023 | 9.00 | 9/20/2023 | 8.00 | Residential Sales | $768.59 | 6,148.72 |
| 9/12/2023 | 11/15/2023 | 65.00 | 11/15/2023 | 64.00 | Commercial Sales | $98.51 | 6,304.64 |
| 9/12/2023 | 9/18/2023 | 7.00 | 9/18/2023 | 6.00 | Other Sales to Public Authority | $13,640.77 | 81,844.62 |
| 9/12/2023 | 9/21/2023 | 10.00 | 9/21/2023 | 9.00 | Residential Sales | $67.66 | 608.94 |
| 9/12/2023 | 10/9/2023 | 28.00 | 10/9/2023 | 27.00 | Commercial Sales | $271.11 | 7,319.97 |
| 9/12/2023 | 10/27/2023 | 46.00 | 10/27/2023 | 45.00 | Residential Sales | $144.76 | 6,514.20 |
| 9/12/2023 | 10/10/2023 | 29.00 | 10/10/2023 | 28.00 | Residential Sales | $23.36 | 654.08 |
| 9/12/2023 | 9/20/2023 | 9.00 | 9/20/2023 | 8.00 | Commercial Sales | $34,802.74 | 278,421.92 |
| 9/12/2023 | 10/11/2023 | 30.00 | 10/11/2023 | 29.00 | Residential Sales | $186.80 | 5,417.20 |
| 9/12/2023 | 10/26/2023 | 45.00 | 10/26/2023 | 44.00 | Commercial Sales | $1,207.17 | 53,115.48 |
| 9/12/2023 | 10/12/2023 | 31.00 | 10/12/2023 | 30.00 | Residential Sales | $307.11 | 9,213.30 |
| 9/12/2023 | 9/20/2023 | 9.00 | 9/20/2023 | 8.00 | Other Sales to Public Authority | $6,315.09 | 50,520.72 |
| 9/12/2023 | 9/26/2023 | 15.00 | 9/26/2023 | 14.00 | Residential Sales | $300.49 | 4,206.86 |
| 9/12/2023 | 10/11/2023 | 30.00 | 10/11/2023 | 29.00 | Commercial Sales | $71.34 | 2,068.86 |
| 9/12/2023 | 9/28/2023 | 17.00 | 9/28/2023 | 16.00 | Residential Sales | $65.53 | 1,048.48 |
| 9/12/2023 | 1/5/2024 | 116.00 | 1/5/2024 | 115.00 | Residential Sales | $188.47 | 21,674.05 |
| 9/12/2023 | 9/12/2023 | 1.00 | 9/12/2023 | 0.00 | Residential Sales | $2,368.59 | - |
| 9/12/2023 | 9/29/2023 | 18.00 | 9/29/2023 | 17.00 | Residential Sales | $373.35 | 6,346.95 |
| 9/12/2023 | 9/13/2023 | 2.00 | 9/13/2023 | 1.00 | Residential Sales | $761,119.11 | 761,119.11 |
| 9/12/2023 | 9/14/2023 | 3.00 | 9/14/2023 | 2.00 | Residential Sales | $9,593.69 | 19,187.38 |
| 9/12/2023 | 9/13/2023 | 2.00 | 9/13/2023 | 1.00 | Industrial Service | $146,673.27 | 146,673.27 |
| 9/12/2023 | 9/12/2023 | 1.00 | 9/12/2023 | 0.00 | Public Street & Highway Lighting | $4,627.67 | - |
| 9/12/2023 | 9/12/2023 | 1.00 | 9/12/2023 | 0.00 | Commercial Sales | $2,294.98 | - |
| 9/12/2023 | 9/15/2023 | 4.00 | 9/15/2023 | 3.00 | Residential Sales | $605.40 | 1,816.20 |
| 9/13/2023 | 9/28/2023 | 16.00 | 9/28/2023 | 15.00 | Residential Sales | $69.96 | 1,049.40 |
| 9/13/2023 | 12/14/2023 | 93.00 | 12/14/2023 | 92.00 | Commercial Sales | $2,376.48 | 218,636.16 |
| 9/13/2023 | 9/29/2023 | 17.00 | 9/29/2023 | 16.00 | Residential Sales | $26.96 | 431.36 |
| 9/13/2023 | 9/13/2023 | 1.00 | 9/13/2023 | 0.00 | Residential Sales | $1,727.09 | - |
| 9/13/2023 | 12/30/2023 | 109.00 | 12/30/2023 | 108.00 | Commercial Sales | $925.63 | 99,968.04 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 9/13/2023 | 9/14/2023 | 2.00 | 9/14/2023 | 1.00 | Residential Sales | $1,056,911.64 | 1,056,911.64 |
| 9/13/2023 | 9/15/2023 | 3.00 | 9/15/2023 | 2.00 | Residential Sales | $17,359.08 | 34,718.16 |
| 9/13/2023 | 11/27/2023 | 76.00 | 11/27/2023 | 75.00 | Residential Sales | $780.94 | 58,570.50 |
| 9/13/2023 | 12/18/2023 | 97.00 | 12/18/2023 | 96.00 | Commercial Sales | $787.72 | 75,621.12 |
| 9/13/2023 | 10/30/2023 | 48.00 | 10/30/2023 | 47.00 | Commercial Sales | $1,221.23 | 57,397.81 |
| 9/13/2023 | 9/14/2023 | 2.00 | 9/14/2023 | 1.00 | Industrial Service | $700,126.92 | 700,126.92 |
| 9/13/2023 | 9/13/2023 | 1.00 | 9/13/2023 | 0.00 | Commercial Sales | $1,076.40 | - |
| 9/13/2023 | 9/14/2023 | 2.00 | 9/14/2023 | 1.00 | Commercial Sales | $787,351.08 | 787,351.08 |
| 9/13/2023 | 9/15/2023 | 3.00 | 9/15/2023 | 2.00 | Industrial Service | $224,959.33 | 449,918.66 |
| 9/13/2023 | 9/14/2023 | 2.00 | 9/14/2023 | 1.00 | Public Street & Highway Lighting | $9.14 | 9.14 |
| 9/13/2023 | 9/15/2023 | 3.00 | 9/15/2023 | 2.00 | Commercial Sales | $172,126.44 | 344,252.88 |
| 9/13/2023 | 9/18/2023 | 6.00 | 9/18/2023 | 5.00 | Residential Sales | $6,426.73 | 32,133.65 |
| 9/13/2023 | 9/13/2023 | 1.00 | 9/13/2023 | 0.00 | Other Sales to Public Authority | $18.69 | - |
| 9/13/2023 | 9/19/2023 | 7.00 | 9/19/2023 | 6.00 | Residential Sales | $1,559.58 | 9,357.48 |
| 9/13/2023 | 10/6/2023 | 24.00 | 10/6/2023 | 23.00 | Residential Sales | $86.20 | 1,982.60 |
| 9/13/2023 | 9/14/2023 | 2.00 | 9/14/2023 | 1.00 | Other Sales to Public Authority | $1,821.26 | 1,821.26 |
| 9/13/2023 | 9/18/2023 | 6.00 | 9/18/2023 | 5.00 | Industrial Service | $101,861.83 | 509,309.15 |
| 9/13/2023 | 2/19/2024 | 160.00 | 2/19/2024 | 159.00 | Commercial Sales | $151.13 | 24,029.67 |
| 9/13/2023 | 9/15/2023 | 3.00 | 9/15/2023 | 2.00 | Other Sales to Public Authority | $864.80 | 1,729.60 |
| 9/13/2023 | 10/4/2023 | 22.00 | 10/4/2023 | 21.00 | Commercial Sales | $25,821.32 | 542,247.72 |
| 9/13/2023 | 9/18/2023 | 6.00 | 9/18/2023 | 5.00 | Commercial Sales | $210,064.22 | 1,050,321.10 |
| 9/13/2023 | 9/19/2023 | 7.00 | 9/19/2023 | 6.00 | Industrial Service | $18,256.06 | 109,536.36 |
| 9/13/2023 | 10/5/2023 | 23.00 | 10/5/2023 | 22.00 | Commercial Sales | $461.22 | 10,146.84 |
| 9/13/2023 | 9/19/2023 | 7.00 | 9/19/2023 | 6.00 | Commercial Sales | $70,486.59 | 422,919.54 |
| 9/13/2023 | 10/6/2023 | 24.00 | 10/6/2023 | 23.00 | Commercial Sales | $427.41 | 9,830.43 |
| 9/13/2023 | 11/14/2023 | 63.00 | 11/14/2023 | 62.00 | Commercial Sales | $594.59 | 36,864.58 |
| 9/13/2023 | 10/9/2023 | 27.00 | 10/9/2023 | 26.00 | Residential Sales | $140.39 | 3,650.14 |
| 9/13/2023 | 9/20/2023 | 8.00 | 9/20/2023 | 7.00 | Residential Sales | $1,538.71 | 10,770.97 |
| 9/13/2023 | 9/18/2023 | 6.00 | 9/18/2023 | 5.00 | Other Sales to Public Authority | $18.86 | 94.30 |
| 9/13/2023 | 9/21/2023 | 9.00 | 9/21/2023 | 8.00 | Residential Sales | $546.40 | 4,371.20 |
| 9/13/2023 | 11/30/2023 | 79.00 | 11/30/2023 | 78.00 | Commercial Sales | $511.77 | 39,918.06 |
| 9/13/2023 | 10/9/2023 | 27.00 | 10/9/2023 | 26.00 | Commercial Sales | $141.48 | 3,678.48 |
| 9/13/2023 | 9/22/2023 | 10.00 | 9/22/2023 | 9.00 | Residential Sales | $779.69 | 7,017.21 |
| 9/13/2023 | 2/7/2024 | 148.00 | 2/7/2024 | 147.00 | Commercial Sales | $329.45 | 48,429.15 |
| 9/13/2023 | 9/20/2023 | 8.00 | 9/20/2023 | 7.00 | Commercial Sales | $10,428.84 | 73,001.88 |
| 9/13/2023 | 10/27/2023 | 45.00 | 10/27/2023 | 44.00 | Residential Sales | $13.55 | 596.20 |
| 9/13/2023 | 9/21/2023 | 9.00 | 9/21/2023 | 8.00 | Commercial Sales | $2.67 | 21.36 |
| 9/13/2023 | 5/6/2024 | 237.00 | 5/6/2024 | 236.00 | Residential Sales | $274.07 | 64,680.52 |
| 9/13/2023 | 9/25/2023 | 13.00 | 9/25/2023 | 12.00 | Residential Sales | $413.53 | 4,962.36 |
| 9/13/2023 | 1/2/2024 | 112.00 | 1/2/2024 | 111.00 | Residential Sales | $97.98 | 10,875.78 |
| 9/13/2023 | 10/12/2023 | 30.00 | 10/12/2023 | 29.00 | Residential Sales | $44.98 | 1,304.42 |
| 9/13/2023 | 9/26/2023 | 14.00 | 9/26/2023 | 13.00 | Residential Sales | $69.59 | 904.67 |
| 9/13/2023 | 3/5/2024 | 175.00 | 3/5/2024 | 174.00 | Residential Sales | $23.37 | 4,066.38 |
| 9/13/2023 | 10/13/2023 | 31.00 | 10/13/2023 | 30.00 | Residential Sales | $41.50 | 1,245.00 |
| 9/13/2023 | 9/27/2023 | 15.00 | 9/27/2023 | 14.00 | Residential Sales | $213.09 | 2,983.26 |
| 9/13/2023 | 12/13/2023 | 92.00 | 12/13/2023 | 91.00 | Commercial Sales | $36.46 | 3,317.86 |
| 9/14/2023 | 9/20/2023 | 7.00 | 9/20/2023 | 6.00 | Commercial Sales | $18,250.56 | 109,503.36 |
| 9/14/2023 | 10/27/2023 | 44.00 | 10/27/2023 | 43.00 | Residential Sales | $200.29 | 8,612.47 |
| 9/14/2023 | 10/11/2023 | 28.00 | 10/11/2023 | 27.00 | Residential Sales | $132.31 | 3,572.37 |
| 9/14/2023 | 10/26/2023 | 43.00 | 10/26/2023 | 42.00 | Commercial Sales | $1,230.50 | 51,681.00 |
| 9/14/2023 | 9/20/2023 | 7.00 | 9/20/2023 | 6.00 | Other Sales to Public Authority | $18,929.46 | 113,576.76 |
| 9/14/2023 | 9/25/2023 | 12.00 | 9/25/2023 | 11.00 | Residential Sales | $182.56 | 2,008.16 |
| 9/14/2023 | 9/15/2023 | 2.00 | 9/15/2023 | 1.00 | Company Use | $0.00 | - |
| 9/14/2023 | 9/25/2023 | 12.00 | 9/25/2023 | 11.00 | Commercial Sales | $497.24 | 5,469.64 |
| 9/14/2023 | 10/30/2023 | 47.00 | 10/30/2023 | 46.00 | Residential Sales | $83.75 | 3,852.50 |
| 9/14/2023 | 10/13/2023 | 30.00 | 10/13/2023 | 29.00 | Public Street & Highway Lighting | $0.57 | 16.53 |
| 9/14/2023 | 10/16/2023 | 33.00 | 10/16/2023 | 32.00 | Residential Sales | $15.82 | 506.24 |
| 9/14/2023 | 9/18/2023 | 5.00 | 9/18/2023 | 4.00 | Company Use | -$10,452.46 | (41,809.84) |
| 9/14/2023 | 9/19/2023 | 6.00 | 9/19/2023 | 5.00 | Company Use | $2,885.82 | 14,429.10 |
| 9/14/2023 | 9/14/2023 | 1.00 | 9/14/2023 | 0.00 | Residential Sales | $923.39 | - |
| 9/14/2023 | 9/15/2023 | 2.00 | 9/15/2023 | 1.00 | Residential Sales | $748,787.21 | 748,787.21 |
| 9/14/2023 | 10/3/2023 | 20.00 | 10/3/2023 | 19.00 | Residential Sales | $100.92 | 1,917.48 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 9/14/2023 | 9/15/2023 | 2.00 | 9/15/2023 | 1.00 | Industrial Service | $37,417.82 | 37,417.82 |
| 9/14/2023 | 9/14/2023 | 1.00 | 9/14/2023 | 0.00 | Public Street & Highway Lighting | $426.67 | - |
| 9/14/2023 | 9/14/2023 | 1.00 | 9/14/2023 | 0.00 | Commercial Sales | $11,468.19 | - |
| 9/14/2023 | 9/15/2023 | 2.00 | 9/15/2023 | 1.00 | Commercial Sales | $490,922.21 | 490,922.21 |
| 9/14/2023 | 9/18/2023 | 5.00 | 9/18/2023 | 4.00 | Residential Sales | $9,180.64 | 36,722.56 |
| 9/14/2023 | 10/2/2023 | 19.00 | 10/2/2023 | 18.00 | Commercial Sales | $119.40 | 2,149.20 |
| 9/14/2023 | 9/19/2023 | 6.00 | 9/19/2023 | 5.00 | Residential Sales | $1,330.94 | 6,654.70 |
| 9/14/2023 | 9/18/2023 | 5.00 | 9/18/2023 | 4.00 | Industrial Service | $25,296.04 | 101,184.16 |
| 9/14/2023 | 9/15/2023 | 2.00 | 9/15/2023 | 1.00 | Other Sales to Public Authority | $24,254.67 | 24,254.67 |
| 9/14/2023 | 10/4/2023 | 21.00 | 10/4/2023 | 20.00 | Commercial Sales | $32.53 | 650.60 |
| 9/14/2023 | 9/18/2023 | 5.00 | 9/18/2023 | 4.00 | Commercial Sales | $134,463.25 | 537,853.00 |
| 9/14/2023 | 9/19/2023 | 6.00 | 9/19/2023 | 5.00 | Industrial Service | $8,051.49 | 40,257.45 |
| 9/14/2023 | 10/5/2023 | 22.00 | 10/5/2023 | 21.00 | Commercial Sales | $1,077.13 | 22,619.73 |
| 9/14/2023 | 9/19/2023 | 6.00 | 9/19/2023 | 5.00 | Commercial Sales | $103,902.25 | 519,511.25 |
| 9/14/2023 | 10/6/2023 | 23.00 | 10/6/2023 | 22.00 | Commercial Sales | $112.86 | 2,482.92 |
| 9/14/2023 | 10/9/2023 | 26.00 | 10/9/2023 | 25.00 | Residential Sales | $338.64 | 8,466.00 |
| 9/14/2023 | 9/20/2023 | 7.00 | 9/20/2023 | 6.00 | Residential Sales | $1,854.59 | 11,127.54 |
| 9/14/2023 | 9/18/2023 | 5.00 | 9/18/2023 | 4.00 | Other Sales to Public Authority | $216.50 | 866.00 |
| 9/14/2023 | 5/1/2024 | 231.00 | 5/1/2024 | 230.00 | Residential Sales | $91.76 | 21,104.80 |
| 9/14/2023 | 9/14/2023 | 1.00 | 9/14/2023 | 0.00 | Other Public Authority Transportation On | $35.62 | - |
| 9/14/2023 | 9/22/2023 | 9.00 | 9/22/2023 | 8.00 | Residential Sales | $240.70 | 1,925.60 |
| 9/14/2023 | 10/9/2023 | 26.00 | 10/9/2023 | 25.00 | Commercial Sales | $120.85 | 3,021.25 |
| 9/15/2023 | 9/18/2023 | 4.00 | 9/18/2023 | 3.00 | Commercial Sales | $129,130.28 | 387,390.84 |
| 9/15/2023 | 9/19/2023 | 5.00 | 9/19/2023 | 4.00 | Industrial Service | $431.57 | 1,726.28 |
| 9/15/2023 | 10/5/2023 | 21.00 | 10/5/2023 | 20.00 | Commercial Sales | $18.23 | 364.60 |
| 9/15/2023 | 9/19/2023 | 5.00 | 9/19/2023 | 4.00 | Commercial Sales | $19,607.38 | 78,429.52 |
| 9/15/2023 | 9/20/2023 | 6.00 | 9/20/2023 | 5.00 | Residential Sales | $1,186.11 | 5,930.55 |
| 9/15/2023 | 9/18/2023 | 4.00 | 9/18/2023 | 3.00 | Other Sales to Public Authority | $9,075.74 | 27,227.22 |
| 9/15/2023 | 10/24/2023 | 40.00 | 10/24/2023 | 39.00 | Residential Sales | $55.08 | 2,148.12 |
| 9/15/2023 | 9/19/2023 | 5.00 | 9/19/2023 | 4.00 | Other Sales to Public Authority | $1,120.63 | 4,482.52 |
| 9/15/2023 | 9/21/2023 | 7.00 | 9/21/2023 | 6.00 | Residential Sales | $1,275.94 | 7,655.64 |
| 9/15/2023 | 9/22/2023 | 8.00 | 9/22/2023 | 7.00 | Residential Sales | $235.73 | 1,650.11 |
| 9/15/2023 | 10/27/2023 | 43.00 | 10/27/2023 | 42.00 | Residential Sales | $206.73 | 8,682.66 |
| 9/15/2023 | 9/20/2023 | 6.00 | 9/20/2023 | 5.00 | Commercial Sales | $387.47 | 1,937.35 |
| 9/15/2023 | 9/21/2023 | 7.00 | 9/21/2023 | 6.00 | Industrial Service | $46,118.02 | 276,708.12 |
| 9/15/2023 | 9/21/2023 | 7.00 | 9/21/2023 | 6.00 | Commercial Sales | $1,462.51 | 8,775.06 |
| 9/15/2023 | 11/2/2023 | 49.00 | 11/2/2023 | 48.00 | Commercial Sales | $406.24 | 19,499.52 |
| 9/15/2023 | 9/20/2023 | 6.00 | 9/20/2023 | 5.00 | Other Sales to Public Authority | $53,584.38 | 267,921.90 |
| 9/15/2023 | 10/26/2023 | 42.00 | 10/26/2023 | 41.00 | Commercial Sales | $596.43 | 24,453.63 |
| 9/15/2023 | 9/22/2023 | 8.00 | 9/22/2023 | 7.00 | Commercial Sales | $21,707.91 | 151,955.37 |
| 9/15/2023 | 9/25/2023 | 11.00 | 9/25/2023 | 10.00 | Residential Sales | $12.60 | 126.00 |
| 9/15/2023 | 9/26/2023 | 12.00 | 9/26/2023 | 11.00 | Residential Sales | $115.47 | 1,270.17 |
| 9/15/2023 | 9/27/2023 | 13.00 | 9/27/2023 | 12.00 | Residential Sales | $31.22 | 374.64 |
| 9/15/2023 | 9/25/2023 | 11.00 | 9/25/2023 | 10.00 | Commercial Sales | $7,010.81 | 70,108.10 |
| 9/15/2023 | 9/19/2023 | 5.00 | 9/19/2023 | 4.00 | Company Use | -$2,885.82 | (11,543.28) |
| 9/15/2023 | 9/15/2023 | 1.00 | 9/15/2023 | 0.00 | Residential Sales | $1,482.62 | - |
| 9/15/2023 | 12/19/2023 | 96.00 | 12/19/2023 | 95.00 | Commercial Sales | $36.46 | 3,463.70 |
| 9/15/2023 | 9/18/2023 | 4.00 | 9/18/2023 | 3.00 | Residential Sales | $806,946.41 | 2,420,839.23 |
| 9/15/2023 | 9/15/2023 | 1.00 | 9/15/2023 | 0.00 | Commercial Sales | $3,426.14 | - |
| 9/15/2023 | 10/2/2023 | 18.00 | 10/2/2023 | 17.00 | Commercial Sales | $28.83 | 490.11 |
| 9/15/2023 | 10/5/2023 | 21.00 | 10/5/2023 | 20.00 | Residential Sales | $18.23 | 364.60 |
| 9/15/2023 | 9/15/2023 | 1.00 | 9/15/2023 | 0.00 | Public Street & Highway Lighting | $3.21 | - |
| 9/15/2023 | 9/19/2023 | 5.00 | 9/19/2023 | 4.00 | Residential Sales | $5,118.35 | 20,473.40 |
| 9/15/2023 | 11/14/2023 | 61.00 | 11/14/2023 | 60.00 | Residential Sales | $11.03 | 661.80 |
| 9/15/2023 | 9/15/2023 | 1.00 | 9/15/2023 | 0.00 | Other Sales to Public Authority | $89.18 | - |
| 9/15/2023 | 9/18/2023 | 4.00 | 9/18/2023 | 3.00 | Industrial Service | $647.43 | 1,942.29 |
| 9/16/2023 | 9/18/2023 | 3.00 | 9/18/2023 | 2.00 | Residential Sales | $1,707.56 | 3,415.12 |
| 9/16/2023 | 9/19/2023 | 4.00 | 9/19/2023 | 3.00 | Residential Sales | $113.67 | 341.01 |
| 9/17/2023 | 9/26/2023 | 10.00 | 9/26/2023 | 9.00 | Commercial Sales | $94.92 | 854.28 |
| 9/17/2023 | 9/18/2023 | 2.00 | 9/18/2023 | 1.00 | Residential Sales | $3,856.37 | 3,856.37 |
| 9/17/2023 | 9/19/2023 | 3.00 | 9/19/2023 | 2.00 | Residential Sales | $135.45 | 270.90 |
| 9/17/2023 | 10/3/2023 | 17.00 | 10/3/2023 | 16.00 | Commercial Sales | $25.53 | 408.48 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 9/17/2023 | 9/18/2023 | 2.00 | 9/18/2023 | 1.00 | Industrial Service | $64.86 | 64.86 |
| 9/17/2023 | 9/18/2023 | 2.00 | 9/18/2023 | 1.00 | Commercial Sales | $709.31 | 709.31 |
| 9/17/2023 | 9/19/2023 | 3.00 | 9/19/2023 | 2.00 | Commercial Sales | $1,077.30 | 2,154.60 |
| 9/17/2023 | 9/25/2023 | 9.00 | 9/25/2023 | 8.00 | Residential Sales | $59.23 | 473.84 |
| 9/17/2023 | 9/26/2023 | 10.00 | 9/26/2023 | 9.00 | Residential Sales | $31.20 | 280.80 |
| 9/18/2023 | 9/20/2023 | 3.00 | 9/20/2023 | 2.00 | Commercial Sales | $149,042.02 | 298,084.04 |
| 9/18/2023 | 9/19/2023 | 2.00 | 9/19/2023 | 1.00 | Public Street & Highway Lighting | $28.62 | 28.62 |
| 9/18/2023 | 9/21/2023 | 4.00 | 9/21/2023 | 3.00 | Industrial Service | $22,639.98 | 67,919.94 |
| 9/18/2023 | 9/21/2023 | 4.00 | 9/21/2023 | 3.00 | Commercial Sales | $190,667.78 | 572,003.34 |
| 9/18/2023 | 9/22/2023 | 5.00 | 9/22/2023 | 4.00 | Industrial Service | $54,794.63 | 219,178.52 |
| 9/18/2023 | 9/22/2023 | 5.00 | 9/22/2023 | 4.00 | Commercial Sales | $2,333.75 | 9,335.00 |
| 9/18/2023 | 9/25/2023 | 8.00 | 9/25/2023 | 7.00 | Residential Sales | $1,363.99 | 9,547.93 |
| 9/18/2023 | 10/12/2023 | 25.00 | 10/12/2023 | 24.00 | Residential Sales | $521.79 | 12,522.96 |
| 9/18/2023 | 9/20/2023 | 3.00 | 9/20/2023 | 2.00 | Other Sales to Public Authority | $24.65 | 49.30 |
| 9/18/2023 | 11/20/2023 | 64.00 | 11/20/2023 | 63.00 | Residential Sales | $14.31 | 901.53 |
| 9/18/2023 | 9/26/2023 | 9.00 | 9/26/2023 | 8.00 | Residential Sales | $727.26 | 5,818.08 |
| 9/18/2023 | 10/11/2023 | 24.00 | 10/11/2023 | 23.00 | Commercial Sales | $447.83 | 10,300.09 |
| 9/18/2023 | 9/27/2023 | 10.00 | 9/27/2023 | 9.00 | Residential Sales | $125.94 | 1,133.46 |
| 9/18/2023 | 9/28/2023 | 11.00 | 9/28/2023 | 10.00 | Residential Sales | $68.85 | 688.50 |
| 9/18/2023 | 9/27/2023 | 10.00 | 9/27/2023 | 9.00 | Commercial Sales | $227.22 | 2,044.98 |
| 9/18/2023 | 10/19/2023 | 32.00 | 10/19/2023 | 31.00 | Residential Sales | $230.82 | 7,155.42 |
| 9/18/2023 | 10/3/2023 | 16.00 | 10/3/2023 | 15.00 | Residential Sales | $159.61 | 2,394.15 |
| 9/18/2023 | 10/4/2023 | 17.00 | 10/4/2023 | 16.00 | Residential Sales | $2.91 | 46.56 |
| 9/18/2023 | 9/18/2023 | 1.00 | 9/18/2023 | 0.00 | Residential Sales | $2,194.70 | - |
| 9/18/2023 | 10/2/2023 | 15.00 | 10/2/2023 | 14.00 | Commercial Sales | $794.86 | 11,128.04 |
| 9/18/2023 | 10/5/2023 | 18.00 | 10/5/2023 | 17.00 | Residential Sales | $1,677.21 | 28,512.57 |
| 9/18/2023 | 9/19/2023 | 2.00 | 9/19/2023 | 1.00 | Residential Sales | $1,143,096.34 | 1,143,096.34 |
| 9/18/2023 | 9/18/2023 | 1.00 | 9/18/2023 | 0.00 | Commercial Sales | $12,011.86 | - |
| 9/18/2023 | 9/19/2023 | 2.00 | 9/19/2023 | 1.00 | Industrial Service | $104,434.44 | 104,434.44 |
| 9/18/2023 | 10/5/2023 | 18.00 | 10/5/2023 | 17.00 | Commercial Sales | $376.02 | 6,392.34 |
| 9/18/2023 | 9/19/2023 | 2.00 | 9/19/2023 | 1.00 | Commercial Sales | $288,265.68 | 288,265.68 |
| 9/18/2023 | 10/6/2023 | 19.00 | 10/6/2023 | 18.00 | Commercial Sales | $288.08 | 5,185.44 |
| 9/18/2023 | 9/20/2023 | 3.00 | 9/20/2023 | 2.00 | Residential Sales | $16,687.52 | 33,375.04 |
| 9/18/2023 | 9/18/2023 | 1.00 | 9/18/2023 | 0.00 | Other Sales to Public Authority | $37.39 | - |
| 9/18/2023 | 9/21/2023 | 4.00 | 9/21/2023 | 3.00 | Residential Sales | $2,799.78 | 8,399.34 |
| 9/18/2023 | 9/19/2023 | 2.00 | 9/19/2023 | 1.00 | Other Sales to Public Authority | $10,307.01 | 10,307.01 |
| 9/18/2023 | 9/18/2023 | 1.00 | 9/18/2023 | 0.00 | Public Street & Highway Lighting | $149.27 | - |
| 9/18/2023 | 9/20/2023 | 3.00 | 9/20/2023 | 2.00 | Industrial Service | $42,977.99 | 85,955.98 |
| 9/18/2023 | 9/22/2023 | 5.00 | 9/22/2023 | 4.00 | Residential Sales | $393.47 | 1,573.88 |
| 9/18/2023 | 10/9/2023 | 22.00 | 10/9/2023 | 21.00 | Commercial Sales | $19.26 | 404.46 |
| 9/19/2023 | 10/5/2023 | 17.00 | 10/5/2023 | 16.00 | Commercial Sales | $283.23 | 4,531.68 |
| 9/19/2023 | 9/19/2023 | 1.00 | 9/19/2023 | 0.00 | Commercial Sales | $5,340.93 | - |
| 9/19/2023 | 10/23/2023 | 35.00 | 10/23/2023 | 34.00 | Residential Sales | $189.10 | 6,429.40 |
| 9/19/2023 | 10/6/2023 | 18.00 | 10/6/2023 | 17.00 | Commercial Sales | $2,729.49 | 46,401.33 |
| 9/19/2023 | 10/9/2023 | 21.00 | 10/9/2023 | 20.00 | Residential Sales | $135.48 | 2,709.60 |
| 9/19/2023 | 9/20/2023 | 2.00 | 9/20/2023 | 1.00 | Residential Sales | $720,724.85 | 720,724.85 |
| 9/19/2023 | 9/21/2023 | 3.00 | 9/21/2023 | 2.00 | Residential Sales | $11,049.25 | 22,098.50 |
| 9/19/2023 | 11/2/2023 | 45.00 | 11/2/2023 | 44.00 | Residential Sales | $14.31 | 629.64 |
| 9/19/2023 | 10/26/2023 | 38.00 | 10/26/2023 | 37.00 | Residential Sales | $224.54 | 8,307.98 |
| 9/19/2023 | 9/22/2023 | 4.00 | 9/22/2023 | 3.00 | Residential Sales | $1,791.75 | 5,375.25 |
| 9/19/2023 | 9/20/2023 | 2.00 | 9/20/2023 | 1.00 | Industrial Service | $23,902.06 | 23,902.06 |
| 9/19/2023 | 9/20/2023 | 2.00 | 9/20/2023 | 1.00 | Commercial Sales | $216,581.36 | 216,581.36 |
| 9/19/2023 | 9/19/2023 | 1.00 | 9/19/2023 | 0.00 | Public Street & Highway Lighting | $356.81 | - |
| 9/19/2023 | 10/10/2023 | 22.00 | 10/10/2023 | 21.00 | Residential Sales | $42.40 | 890.40 |
| 9/19/2023 | 9/21/2023 | 3.00 | 9/21/2023 | 2.00 | Commercial Sales | $86,251.22 | 172,502.44 |
| 9/19/2023 | 9/20/2023 | 2.00 | 9/20/2023 | 1.00 | Other Sales to Public Authority | $12,433.68 | 12,433.68 |
| 9/19/2023 | 9/22/2023 | 4.00 | 9/22/2023 | 3.00 | Commercial Sales | $78,812.27 | 236,436.81 |
| 9/19/2023 | 9/25/2023 | 7.00 | 9/25/2023 | 6.00 | Residential Sales | $853.31 | 5,119.86 |
| 9/19/2023 | 9/21/2023 | 3.00 | 9/21/2023 | 2.00 | Other Sales to Public Authority | $773.13 | 1,546.26 |
| 9/19/2023 | 9/26/2023 | 8.00 | 9/26/2023 | 7.00 | Residential Sales | $408.50 | 2,859.50 |
| 9/19/2023 | 10/13/2023 | 25.00 | 10/13/2023 | 24.00 | Residential Sales | $221.26 | 5,310.24 |
| 9/19/2023 | 9/22/2023 | 4.00 | 9/22/2023 | 3.00 | Other Sales to Public Authority | $23,297.38 | 69,892.14 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 9/19/2023 | 9/27/2023 | 9.00 | 9/27/2023 | 8.00 | Residential Sales | $9.25 | 74.00 |
| 9/19/2023 | 9/28/2023 | 10.00 | 9/28/2023 | 9.00 | Residential Sales | $14.73 | 132.57 |
| 9/19/2023 | 11/6/2023 | 49.00 | 11/6/2023 | 48.00 | Commercial Sales | $48.05 | 2,306.40 |
| 9/19/2023 | 9/29/2023 | 11.00 | 9/29/2023 | 10.00 | Residential Sales | $150.32 | 1,503.20 |
| 9/19/2023 | 9/26/2023 | 8.00 | 9/26/2023 | 7.00 | Commercial Sales | $659.70 | 4,617.90 |
| 9/19/2023 | 10/30/2023 | 42.00 | 10/30/2023 | 41.00 | Residential Sales | $66.36 | 2,720.76 |
| 9/19/2023 | 9/27/2023 | 9.00 | 9/27/2023 | 8.00 | Commercial Sales | $797.74 | 6,381.92 |
| 9/19/2023 | 10/4/2023 | 16.00 | 10/4/2023 | 15.00 | Residential Sales | $22.76 | 341.40 |
| 9/19/2023 | 9/19/2023 | 1.00 | 9/19/2023 | 0.00 | Residential Sales | $7,366.69 | - |
| 9/19/2023 | 10/3/2023 | 15.00 | 10/3/2023 | 14.00 | Commercial Sales | $97.58 | 1,366.12 |
| 9/19/2023 | 10/6/2023 | 18.00 | 10/6/2023 | 17.00 | Residential Sales | $167.63 | 2,849.71 |
| 9/19/2023 | 10/20/2023 | 32.00 | 10/20/2023 | 31.00 | Residential Sales | $13.42 | 416.02 |
| 9/20/2023 | 1/25/2024 | 128.00 | 1/25/2024 | 127.00 | Residential Sales | $70.68 | 8,976.36 |
| 9/20/2023 | 10/5/2023 | 16.00 | 10/5/2023 | 15.00 | Commercial Sales | $594.90 | 8,923.50 |
| 9/20/2023 | 10/4/2023 | 15.00 | 10/4/2023 | 14.00 | Residential Sales | $38.91 | 544.74 |
| 9/20/2023 | 10/6/2023 | 17.00 | 10/6/2023 | 16.00 | Commercial Sales | $92.18 | 1,474.88 |
| 9/20/2023 | 10/6/2023 | 17.00 | 10/6/2023 | 16.00 | Residential Sales | $43.40 | 694.40 |
| 9/20/2023 | 9/20/2023 | 1.00 | 9/20/2023 | 0.00 | Industrial Service | $45.77 | - |
| 9/20/2023 | 10/9/2023 | 20.00 | 10/9/2023 | 19.00 | Commercial Sales | $45.29 | 860.51 |
| 9/20/2023 | 9/20/2023 | 1.00 | 9/20/2023 | 0.00 | Commercial Sales | $3,069.69 | - |
| 9/20/2023 | 10/23/2023 | 34.00 | 10/23/2023 | 33.00 | Residential Sales | $30.92 | 1,020.36 |
| 9/20/2023 | 9/21/2023 | 2.00 | 9/21/2023 | 1.00 | Industrial Service | $10,928.46 | 10,928.46 |
| 9/20/2023 | 9/20/2023 | 1.00 | 9/20/2023 | 0.00 | Residential Sales | $2,058.43 | - |
| 9/20/2023 | 9/21/2023 | 2.00 | 9/21/2023 | 1.00 | Commercial Sales | $118,087.35 | 118,087.35 |
| 9/20/2023 | 11/1/2023 | 43.00 | 11/1/2023 | 42.00 | Residential Sales | $98.71 | 4,145.82 |
| 9/20/2023 | 10/24/2023 | 35.00 | 10/24/2023 | 34.00 | Residential Sales | $89.86 | 3,055.24 |
| 9/20/2023 | 9/21/2023 | 2.00 | 9/21/2023 | 1.00 | Residential Sales | $997,006.35 | 997,006.35 |
| 9/20/2023 | 9/22/2023 | 3.00 | 9/22/2023 | 2.00 | Commercial Sales | $32,608.09 | 65,216.18 |
| 9/20/2023 | 9/22/2023 | 3.00 | 9/22/2023 | 2.00 | Residential Sales | $14,408.74 | 28,817.48 |
| 9/20/2023 | 9/21/2023 | 2.00 | 9/21/2023 | 1.00 | Other Sales to Public Authority | $18,802.12 | 18,802.12 |
| 9/20/2023 | 9/22/2023 | 3.00 | 9/22/2023 | 2.00 | Other Sales to Public Authority | $32,798.92 | 65,597.84 |
| 9/20/2023 | 9/20/2023 | 1.00 | 9/20/2023 | 0.00 | Public Street & Highway Lighting | $99.79 | - |
| 9/20/2023 | 9/25/2023 | 6.00 | 9/25/2023 | 5.00 | Commercial Sales | $812.19 | 4,060.95 |
| 9/20/2023 | 9/25/2023 | 6.00 | 9/25/2023 | 5.00 | Residential Sales | $3,011.80 | 15,059.00 |
| 9/20/2023 | 9/26/2023 | 7.00 | 9/26/2023 | 6.00 | Commercial Sales | $357.43 | 2,144.58 |
| 9/20/2023 | 10/12/2023 | 23.00 | 10/12/2023 | 22.00 | Residential Sales | $365.64 | 8,044.08 |
| 9/20/2023 | 9/26/2023 | 7.00 | 9/26/2023 | 6.00 | Residential Sales | $389.27 | 2,335.62 |
| 9/20/2023 | 9/28/2023 | 9.00 | 9/28/2023 | 8.00 | Commercial Sales | $2,891.55 | 23,132.40 |
| 9/20/2023 | 9/27/2023 | 8.00 | 9/27/2023 | 7.00 | Residential Sales | $166.88 | 1,168.16 |
| 9/20/2023 | 9/26/2023 | 7.00 | 9/26/2023 | 6.00 | Other Sales to Public Authority | $257.10 | 1,542.60 |
| 9/20/2023 | 10/16/2023 | 27.00 | 10/16/2023 | 26.00 | Commercial Sales | $100.03 | 2,600.78 |
| 9/20/2023 | 9/28/2023 | 9.00 | 9/28/2023 | 8.00 | Residential Sales | $49.71 | 397.68 |
| 9/20/2023 | 1/8/2024 | 111.00 | 1/8/2024 | 110.00 | Residential Sales | $71.31 | 7,844.10 |
| 9/20/2023 | 10/3/2023 | 14.00 | 10/3/2023 | 13.00 | Commercial Sales | $18.29 | 237.77 |
| 9/20/2023 | 10/2/2023 | 13.00 | 10/2/2023 | 12.00 | Residential Sales | $33.69 | 404.28 |
| 9/20/2023 | 11/28/2023 | 70.00 | 11/28/2023 | 69.00 | Residential Sales | $283.53 | 19,563.57 |
| 9/20/2023 | 10/3/2023 | 14.00 | 10/3/2023 | 13.00 | Residential Sales | $517.92 | 6,732.96 |
| 9/20/2023 | 10/4/2023 | 15.00 | 10/4/2023 | 14.00 | Commercial Sales | $414.92 | 5,808.88 |
| 9/21/2023 | 9/29/2023 | 9.00 | 9/29/2023 | 8.00 | Residential Sales | $896.69 | 7,173.52 |
| 9/21/2023 | 10/2/2023 | 12.00 | 10/2/2023 | 11.00 | Residential Sales | $240.79 | 2,648.69 |
| 9/21/2023 | 10/3/2023 | 13.00 | 10/3/2023 | 12.00 | Commercial Sales | $138.66 | 1,663.92 |
| 9/21/2023 | 10/3/2023 | 13.00 | 10/3/2023 | 12.00 | Residential Sales | $33.50 | 402.00 |
| 9/21/2023 | 10/4/2023 | 14.00 | 10/4/2023 | 13.00 | Residential Sales | $61.89 | 804.57 |
| 9/21/2023 | 10/5/2023 | 15.00 | 10/5/2023 | 14.00 | Commercial Sales | $25.38 | 355.32 |
| 9/21/2023 | 11/13/2023 | 54.00 | 11/13/2023 | 53.00 | Residential Sales | $66.36 | 3,517.08 |
| 9/21/2023 | 10/6/2023 | 16.00 | 10/6/2023 | 15.00 | Commercial Sales | $231.25 | 3,468.75 |
| 9/21/2023 | 10/5/2023 | 15.00 | 10/5/2023 | 14.00 | Residential Sales | $222.84 | 3,119.76 |
| 9/21/2023 | 10/23/2023 | 33.00 | 10/23/2023 | 32.00 | Residential Sales | $24.14 | 772.48 |
| 9/21/2023 | 9/21/2023 | 1.00 | 9/21/2023 | 0.00 | Commercial Sales | $5,641.14 | - |
| 9/21/2023 | 9/22/2023 | 2.00 | 9/22/2023 | 1.00 | Industrial Service | $85,170.95 | 85,170.95 |
| 9/21/2023 | 9/22/2023 | 2.00 | 9/22/2023 | 1.00 | Commercial Sales | $370,578.56 | 370,578.56 |
| 9/21/2023 | 9/21/2023 | 1.00 | 9/21/2023 | 0.00 | Residential Sales | $5,369.94 | - |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 9/21/2023 | 10/26/2023 | 36.00 | 10/26/2023 | 35.00 | Commercial Sales | $231.17 | 8,090.95 |
| 9/21/2023 | 9/22/2023 | 2.00 | 9/22/2023 | 1.00 | Residential Sales | $913,992.81 | 913,992.81 |
| 9/21/2023 | 9/21/2023 | 1.00 | 9/21/2023 | 0.00 | Other Sales to Public Authority | $8.51 | - |
| 9/21/2023 | 9/22/2023 | 2.00 | 9/22/2023 | 1.00 | Other Sales to Public Authority | $12,066.52 | 12,066.52 |
| 9/21/2023 | 10/11/2023 | 21.00 | 10/11/2023 | 20.00 | Commercial Sales | $45.41 | 908.20 |
| 9/21/2023 | 12/13/2023 | 84.00 | 12/13/2023 | 83.00 | Commercial Sales | $369.76 | 30,690.08 |
| 9/21/2023 | 9/25/2023 | 5.00 | 9/25/2023 | 4.00 | Commercial Sales | $5,643.55 | 22,574.20 |
| 9/21/2023 | 9/21/2023 | 1.00 | 9/21/2023 | 0.00 | Public Street & Highway Lighting | $19.87 | - |
| 9/21/2023 | 9/26/2023 | 6.00 | 9/26/2023 | 5.00 | Industrial Service | $4,825.77 | 24,128.85 |
| 9/21/2023 | 12/14/2023 | 85.00 | 12/14/2023 | 84.00 | Commercial Sales | $223.63 | 18,784.92 |
| 9/21/2023 | 9/25/2023 | 5.00 | 9/25/2023 | 4.00 | Residential Sales | $12,378.09 | 49,512.36 |
| 9/21/2023 | 12/13/2023 | 84.00 | 12/13/2023 | 83.00 | Other Sales to Public Authority | $106.03 | 8,800.49 |
| 9/21/2023 | 9/26/2023 | 6.00 | 9/26/2023 | 5.00 | Commercial Sales | $37,322.47 | 186,612.35 |
| 9/21/2023 | 11/6/2023 | 47.00 | 11/6/2023 | 46.00 | Residential Sales | $14.44 | 664.24 |
| 9/21/2023 | 9/26/2023 | 6.00 | 9/26/2023 | 5.00 | Residential Sales | $1,061.30 | 5,306.50 |
| 9/21/2023 | 9/27/2023 | 7.00 | 9/27/2023 | 6.00 | Commercial Sales | $168.66 | 1,011.96 |
| 9/21/2023 | 9/25/2023 | 5.00 | 9/25/2023 | 4.00 | Other Sales to Public Authority | $4.57 | 18.28 |
| 9/21/2023 | 9/27/2023 | 7.00 | 9/27/2023 | 6.00 | Residential Sales | $800.61 | 4,803.66 |
| 9/21/2023 | 9/26/2023 | 6.00 | 9/26/2023 | 5.00 | Other Sales to Public Authority | $16,066.52 | 80,332.60 |
| 9/21/2023 | 9/28/2023 | 8.00 | 9/28/2023 | 7.00 | Commercial Sales | $38,331.51 | 268,320.57 |
| 9/21/2023 | 9/28/2023 | 8.00 | 9/28/2023 | 7.00 | Residential Sales | $336.12 | 2,352.84 |
| 9/21/2023 | 9/27/2023 | 7.00 | 9/27/2023 | 6.00 | Other Sales to Public Authority | $20,084.17 | 120,505.02 |
| 9/21/2023 | 9/29/2023 | 9.00 | 9/29/2023 | 8.00 | Commercial Sales | $9.06 | 72.48 |
| 9/22/2023 | 9/25/2023 | 4.00 | 9/25/2023 | 3.00 | Commercial Sales | $430,341.41 | 1,291,024.23 |
| 9/22/2023 | 9/26/2023 | 5.00 | 9/26/2023 | 4.00 | Industrial Service | $9,831.95 | 39,327.80 |
| 9/22/2023 | 9/25/2023 | 4.00 | 9/25/2023 | 3.00 | Residential Sales | $695,771.54 | 2,087,314.62 |
| 9/22/2023 | 9/26/2023 | 5.00 | 9/26/2023 | 4.00 | Commercial Sales | $152,933.63 | 611,734.52 |
| 9/22/2023 | 9/27/2023 | 6.00 | 9/27/2023 | 5.00 | Industrial Service | $23,706.82 | 118,534.10 |
| 9/22/2023 | 10/13/2023 | 22.00 | 10/13/2023 | 21.00 | Commercial Sales | $668.52 | 14,038.92 |
| 9/22/2023 | 9/22/2023 | 1.00 | 9/22/2023 | 0.00 | Public Street & Highway Lighting | $10.51 | - |
| 9/22/2023 | 9/27/2023 | 6.00 | 9/27/2023 | 5.00 | Commercial Sales | $136,401.50 | 682,007.50 |
| 9/22/2023 | 9/26/2023 | 5.00 | 9/26/2023 | 4.00 | Residential Sales | $3,044.03 | 12,176.12 |
| 9/22/2023 | 9/25/2023 | 4.00 | 9/25/2023 | 3.00 | Other Sales to Public Authority | $28,539.80 | 85,619.40 |
| 9/22/2023 | 9/28/2023 | 7.00 | 9/28/2023 | 6.00 | Industrial Service | $28,439.45 | 170,636.70 |
| 9/22/2023 | 3/5/2024 | 166.00 | 3/5/2024 | 165.00 | Residential Sales | $46.44 | 7,662.60 |
| 9/22/2023 | 9/26/2023 | 5.00 | 9/26/2023 | 4.00 | Other Sales to Public Authority | $11,822.06 | 47,288.24 |
| 9/22/2023 | 9/27/2023 | 6.00 | 9/27/2023 | 5.00 | Residential Sales | $1,083.20 | 5,416.00 |
| 9/22/2023 | 9/28/2023 | 7.00 | 9/28/2023 | 6.00 | Commercial Sales | $10,647.07 | 63,882.42 |
| 9/22/2023 | 9/27/2023 | 6.00 | 9/27/2023 | 5.00 | Other Sales to Public Authority | $13,571.04 | 67,855.20 |
| 9/22/2023 | 9/29/2023 | 8.00 | 9/29/2023 | 7.00 | Commercial Sales | $13,918.71 | 97,430.97 |
| 9/22/2023 | 10/16/2023 | 25.00 | 10/16/2023 | 24.00 | Commercial Sales | $216.47 | 5,195.28 |
| 9/22/2023 | 9/28/2023 | 7.00 | 9/28/2023 | 6.00 | Residential Sales | $624.95 | 3,749.70 |
| 9/22/2023 | 9/29/2023 | 8.00 | 9/29/2023 | 7.00 | Residential Sales | $90.00 | 630.00 |
| 9/22/2023 | 10/30/2023 | 39.00 | 10/30/2023 | 38.00 | Residential Sales | $500.60 | 19,022.80 |
| 9/22/2023 | 10/31/2023 | 40.00 | 10/31/2023 | 39.00 | Other Sales to Public Authority | $3,445.21 | 134,363.19 |
| 9/22/2023 | 11/27/2023 | 67.00 | 11/27/2023 | 66.00 | Commercial Sales | $133.29 | 8,797.14 |
| 9/22/2023 | 10/2/2023 | 11.00 | 10/2/2023 | 10.00 | Commercial Sales | $9.11 | 91.10 |
| 9/22/2023 | 10/2/2023 | 11.00 | 10/2/2023 | 10.00 | Residential Sales | $117.16 | 1,171.60 |
| 9/22/2023 | 10/19/2023 | 28.00 | 10/19/2023 | 27.00 | Residential Sales | $584.58 | 15,783.66 |
| 9/22/2023 | 10/4/2023 | 13.00 | 10/4/2023 | 12.00 | Commercial Sales | $460.26 | 5,523.12 |
| 9/22/2023 | 10/3/2023 | 12.00 | 10/3/2023 | 11.00 | Residential Sales | $21.58 | 237.38 |
| 9/22/2023 | 10/5/2023 | 14.00 | 10/5/2023 | 13.00 | Commercial Sales | $352.98 | 4,588.74 |
| 9/22/2023 | 10/4/2023 | 13.00 | 10/4/2023 | 12.00 | Residential Sales | $191.96 | 2,303.52 |
| 9/22/2023 | 11/29/2023 | 69.00 | 11/29/2023 | 68.00 | Residential Sales | $26.97 | 1,833.96 |
| 9/22/2023 | 3/29/2024 | 190.00 | 3/29/2024 | 189.00 | Commercial Sales | $2,557.45 | 483,358.05 |
| 9/22/2023 | 10/6/2023 | 15.00 | 10/6/2023 | 14.00 | Commercial Sales | $132.44 | 1,854.16 |
| 9/22/2023 | 10/5/2023 | 14.00 | 10/5/2023 | 13.00 | Residential Sales | $104.09 | 1,353.17 |
| 9/22/2023 | 10/6/2023 | 15.00 | 10/6/2023 | 14.00 | Residential Sales | $57.00 | 798.00 |
| 9/22/2023 | 11/14/2023 | 54.00 | 11/14/2023 | 53.00 | Residential Sales | $179.95 | 9,537.35 |
| 9/22/2023 | 10/23/2023 | 32.00 | 10/23/2023 | 31.00 | Commercial Sales | $623.07 | 19,315.17 |
| 9/22/2023 | 10/9/2023 | 18.00 | 10/9/2023 | 17.00 | Other Sales to Public Authority | $8.51 | 144.67 |
| 9/22/2023 | 9/22/2023 | 1.00 | 9/22/2023 | 0.00 | Commercial Sales | $988.59 | - |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 9/22/2023 | 10/26/2023 | 35.00 | 10/26/2023 | 34.00 | Commercial Sales | $165.47 | 5,625.98 |
| 9/22/2023 | 9/22/2023 | 1.00 | 9/22/2023 | 0.00 | Residential Sales | $1,464.70 | - |
| 9/22/2023 | 10/27/2023 | 36.00 | 10/27/2023 | 35.00 | Commercial Sales | $55.36 | 1,937.60 |
| 9/22/2023 | 9/25/2023 | 4.00 | 9/25/2023 | 3.00 | Industrial Service | $65,818.08 | 197,454.24 |
| 9/22/2023 | 10/10/2023 | 19.00 | 10/10/2023 | 18.00 | Residential Sales | $37.87 | 681.66 |
| 9/23/2023 | 9/25/2023 | 3.00 | 9/25/2023 | 2.00 | Residential Sales | $383.90 | 767.80 |
| 9/24/2023 | 9/25/2023 | 2.00 | 9/25/2023 | 1.00 | Commercial Sales | $732.98 | 732.98 |
| 9/24/2023 | 9/25/2023 | 2.00 | 9/25/2023 | 1.00 | Residential Sales | $2,718.35 | 2,718.35 |
| 9/24/2023 | 9/26/2023 | 3.00 | 9/26/2023 | 2.00 | Residential Sales | $248.59 | 497.18 |
| 9/24/2023 | 9/27/2023 | 4.00 | 9/27/2023 | 3.00 | Commercial Sales | $72.46 | 217.38 |
| 9/24/2023 | 9/27/2023 | 4.00 | 9/27/2023 | 3.00 | Residential Sales | $26.75 | 80.25 |
| 9/24/2023 | 10/2/2023 | 9.00 | 10/2/2023 | 8.00 | Residential Sales | $112.67 | 901.36 |
| 9/24/2023 | 10/3/2023 | 10.00 | 10/3/2023 | 9.00 | Residential Sales | $121.77 | 1,095.93 |
| 9/25/2023 | 9/29/2023 | 5.00 | 9/29/2023 | 4.00 | Residential Sales | $507.71 | 2,030.84 |
| 9/25/2023 | 9/28/2023 | 4.00 | 9/28/2023 | 3.00 | Other Sales to Public Authority | $15,327.80 | 45,983.40 |
| 9/25/2023 | 9/26/2023 | 2.00 | 9/26/2023 | 1.00 | Public Street & Highway Lighting | $3,259.38 | 3,259.38 |
| 9/25/2023 | 9/27/2023 | 3.00 | 9/27/2023 | 2.00 | Public Street & Highway Lighting | $3,338.87 | 6,677.74 |
| 9/25/2023 | 10/2/2023 | 8.00 | 10/2/2023 | 7.00 | Commercial Sales | $1,591.12 | 11,137.84 |
| 9/25/2023 | 10/2/2023 | 8.00 | 10/2/2023 | 7.00 | Residential Sales | $255.40 | 1,787.80 |
| 9/25/2023 | 10/3/2023 | 9.00 | 10/3/2023 | 8.00 | Commercial Sales | $5,623.55 | 44,988.40 |
| 9/25/2023 | 10/4/2023 | 10.00 | 10/4/2023 | 9.00 | Industrial Service | $9,691.87 | 87,226.83 |
| 9/25/2023 | 2/1/2024 | 130.00 | 2/1/2024 | 129.00 | Commercial Sales | $48.48 | 6,253.92 |
| 9/25/2023 | 10/4/2023 | 10.00 | 10/4/2023 | 9.00 | Commercial Sales | $392.74 | 3,534.66 |
| 9/25/2023 | 10/3/2023 | 9.00 | 10/3/2023 | 8.00 | Residential Sales | $36.97 | 295.76 |
| 9/25/2023 | 10/5/2023 | 11.00 | 10/5/2023 | 10.00 | Commercial Sales | $781.46 | 7,814.60 |
| 9/25/2023 | 10/4/2023 | 10.00 | 10/4/2023 | 9.00 | Residential Sales | $102.80 | 925.20 |
| 9/25/2023 | 10/6/2023 | 12.00 | 10/6/2023 | 11.00 | Commercial Sales | $103.00 | 1,133.00 |
| 9/25/2023 | 11/13/2023 | 50.00 | 11/13/2023 | 49.00 | Residential Sales | $18.63 | 912.87 |
| 9/25/2023 | 10/5/2023 | 11.00 | 10/5/2023 | 10.00 | Residential Sales | $168.36 | 1,683.60 |
| 9/25/2023 | 10/6/2023 | 12.00 | 10/6/2023 | 11.00 | Residential Sales | $150.45 | 1,654.95 |
| 9/25/2023 | 10/9/2023 | 15.00 | 10/9/2023 | 14.00 | Commercial Sales | $19.83 | 277.62 |
| 9/25/2023 | 11/1/2023 | 38.00 | 11/1/2023 | 37.00 | Residential Sales | $125.26 | 4,634.62 |
| 9/25/2023 | 11/2/2023 | 39.00 | 11/2/2023 | 38.00 | Commercial Sales | $28.36 | 1,077.68 |
| 9/25/2023 | 10/26/2023 | 32.00 | 10/26/2023 | 31.00 | Commercial Sales | $36.46 | 1,130.26 |
| 9/25/2023 | 3/1/2024 | 159.00 | 3/1/2024 | 158.00 | Commercial Sales | $719.53 | 113,685.74 |
| 9/25/2023 | 10/25/2023 | 31.00 | 10/25/2023 | 30.00 | Residential Sales | $82.62 | 2,478.60 |
| 9/25/2023 | 12/28/2023 | 95.00 | 12/28/2023 | 94.00 | Residential Sales | $26.22 | 2,464.68 |
| 9/25/2023 | 10/27/2023 | 33.00 | 10/27/2023 | 32.00 | Commercial Sales | $46.02 | 1,472.64 |
| 9/25/2023 | 9/25/2023 | 1.00 | 9/25/2023 | 0.00 | Commercial Sales | $24,044.80 | - |
| 9/25/2023 | 10/12/2023 | 18.00 | 10/12/2023 | 17.00 | Commercial Sales | $83.42 | 1,418.14 |
| 9/25/2023 | 9/26/2023 | 2.00 | 9/26/2023 | 1.00 | Industrial Service | $100,297.33 | 100,297.33 |
| 9/25/2023 | 9/26/2023 | 2.00 | 9/26/2023 | 1.00 | Commercial Sales | $975,200.11 | 975,200.11 |
| 9/25/2023 | 9/25/2023 | 1.00 | 9/25/2023 | 0.00 | Residential Sales | $2,668.67 | - |
| 9/25/2023 | 9/27/2023 | 3.00 | 9/27/2023 | 2.00 | Industrial Service | $425.18 | 850.36 |
| 9/25/2023 | 12/13/2023 | 80.00 | 12/13/2023 | 79.00 | Other Sales to Public Authority | $416.83 | 32,929.57 |
| 9/25/2023 | 9/26/2023 | 2.00 | 9/26/2023 | 1.00 | Residential Sales | $774,328.23 | 774,328.23 |
| 9/25/2023 | 9/27/2023 | 3.00 | 9/27/2023 | 2.00 | Commercial Sales | $324,678.65 | 649,357.30 |
| 9/25/2023 | 9/25/2023 | 1.00 | 9/25/2023 | 0.00 | Other Sales to Public Authority | $67.00 | - |
| 9/25/2023 | 9/28/2023 | 4.00 | 9/28/2023 | 3.00 | Commercial Sales | $284,246.02 | 852,738.06 |
| 9/25/2023 | 9/26/2023 | 2.00 | 9/26/2023 | 1.00 | Other Sales to Public Authority | $55,169.23 | 55,169.23 |
| 9/25/2023 | 9/27/2023 | 3.00 | 9/27/2023 | 2.00 | Residential Sales | $11,362.03 | 22,724.06 |
| 9/25/2023 | 9/25/2023 | 1.00 | 9/25/2023 | 0.00 | Public Street & Highway Lighting | $8,904.07 | - |
| 9/25/2023 | 9/29/2023 | 5.00 | 9/29/2023 | 4.00 | Commercial Sales | $887.97 | 3,551.88 |
| 9/25/2023 | 9/27/2023 | 3.00 | 9/27/2023 | 2.00 | Other Sales to Public Authority | $2,971.85 | 5,943.70 |
| 9/25/2023 | 9/28/2023 | 4.00 | 9/28/2023 | 3.00 | Residential Sales | $588.19 | 1,764.57 |
| 9/26/2023 | 11/6/2023 | 42.00 | 11/6/2023 | 41.00 | Commercial Sales | $1,382.10 | 56,666.10 |
| 9/26/2023 | 9/26/2023 | 1.00 | 9/26/2023 | 0.00 | Commercial Sales | $38,491.29 | - |
| 9/26/2023 | 9/27/2023 | 2.00 | 9/27/2023 | 1.00 | Industrial Service | $185,374.38 | 185,374.38 |
| 9/26/2023 | 10/12/2023 | 17.00 | 10/12/2023 | 16.00 | Residential Sales | $193.02 | 3,088.32 |
| 9/26/2023 | 10/13/2023 | 18.00 | 10/13/2023 | 17.00 | Commercial Sales | $44.78 | 761.26 |
| 9/26/2023 | 12/13/2023 | 79.00 | 12/13/2023 | 78.00 | Other Sales to Public Authority | $389.16 | 30,354.48 |
| 9/26/2023 | 9/27/2023 | 2.00 | 9/27/2023 | 1.00 | Commercial Sales | $919,198.14 | 919,198.14 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 9/26/2023 | 9/28/2023 | 3.00 | 9/28/2023 | 2.00 | Industrial Service | $162,194.38 | 324,388.76 |
| 9/26/2023 | 9/26/2023 | 1.00 | 9/26/2023 | 0.00 | Residential Sales | $995.84 | - |
| 9/26/2023 | 1/2/2024 | 99.00 | 1/2/2024 | 98.00 | Other Sales to Public Authority | $190.16 | 18,635.68 |
| 9/26/2023 | 9/27/2023 | 2.00 | 9/27/2023 | 1.00 | Residential Sales | $623,317.53 | 623,317.53 |
| 9/26/2023 | 9/28/2023 | 3.00 | 9/28/2023 | 2.00 | Commercial Sales | $692,759.31 | 1,385,518.62 |
| 9/26/2023 | 9/29/2023 | 4.00 | 9/29/2023 | 3.00 | Industrial Service | $50,136.16 | 150,408.48 |
| 9/26/2023 | 9/28/2023 | 3.00 | 9/28/2023 | 2.00 | Residential Sales | $41,980.51 | 83,961.02 |
| 9/26/2023 | 9/27/2023 | 2.00 | 9/27/2023 | 1.00 | Other Sales to Public Authority | $31,734.67 | 31,734.67 |
| 9/26/2023 | 9/29/2023 | 4.00 | 9/29/2023 | 3.00 | Commercial Sales | $228,302.73 | 684,908.19 |
| 9/26/2023 | 9/29/2023 | 4.00 | 9/29/2023 | 3.00 | Residential Sales | $1,021.33 | 3,063.99 |
| 9/26/2023 | 9/28/2023 | 3.00 | 9/28/2023 | 2.00 | Other Sales to Public Authority | $6,645.01 | 13,290.02 |
| 9/26/2023 | 9/26/2023 | 1.00 | 9/26/2023 | 0.00 | Public Street & Highway Lighting | $1,698.63 | - |
| 9/26/2023 | 9/27/2023 | 2.00 | 9/27/2023 | 1.00 | Public Street & Highway Lighting | $219.06 | 219.06 |
| 9/26/2023 | 9/29/2023 | 4.00 | 9/29/2023 | 3.00 | Other Sales to Public Authority | $12,321.72 | 36,965.16 |
| 9/26/2023 | 10/2/2023 | 7.00 | 10/2/2023 | 6.00 | Commercial Sales | $2,164.39 | 12,986.34 |
| 9/26/2023 | 10/3/2023 | 8.00 | 10/3/2023 | 7.00 | Commercial Sales | $53,954.75 | 377,683.25 |
| 9/26/2023 | 10/2/2023 | 7.00 | 10/2/2023 | 6.00 | Residential Sales | $404.40 | 2,426.40 |
| 9/26/2023 | 10/2/2023 | 7.00 | 10/2/2023 | 6.00 | Other Sales to Public Authority | $88.96 | 533.76 |
| 9/26/2023 | 10/3/2023 | 8.00 | 10/3/2023 | 7.00 | Residential Sales | $919.31 | 6,435.17 |
| 9/26/2023 | 12/6/2023 | 72.00 | 12/6/2023 | 71.00 | Residential Sales | $114.20 | 8,108.20 |
| 9/26/2023 | 10/5/2023 | 10.00 | 10/5/2023 | 9.00 | Commercial Sales | $170.94 | 1,538.46 |
| 9/26/2023 | 10/4/2023 | 9.00 | 10/4/2023 | 8.00 | Residential Sales | $457.34 | 3,658.72 |
| 9/26/2023 | 3/28/2024 | 185.00 | 3/28/2024 | 184.00 | Commercial Sales | $653.69 | 120,278.96 |
| 9/26/2023 | 11/13/2023 | 49.00 | 11/13/2023 | 48.00 | Residential Sales | $730.85 | 35,080.80 |
| 9/26/2023 | 10/9/2023 | 14.00 | 10/9/2023 | 13.00 | Commercial Sales | $13,434.89 | 174,653.57 |
| 9/26/2023 | 2/21/2024 | 149.00 | 2/21/2024 | 148.00 | Residential Sales | $122.11 | 18,072.28 |
| 9/26/2023 | 10/26/2023 | 31.00 | 10/26/2023 | 30.00 | Commercial Sales | $469.99 | 14,099.70 |
| 9/26/2023 | 10/11/2023 | 16.00 | 10/11/2023 | 15.00 | Industrial Service | $251,717.27 | 3,775,759.05 |
| 9/26/2023 | 6/11/2024 | 260.00 | 6/11/2024 | 259.00 | Residential Sales | $88.38 | 22,890.42 |
| 9/26/2023 | 10/27/2023 | 32.00 | 10/27/2023 | 31.00 | Residential Sales | $130.74 | 4,052.94 |
| 9/27/2023 | 10/9/2023 | 13.00 | 10/9/2023 | 12.00 | Residential Sales | $986.77 | 11,841.24 |
| 9/27/2023 | 10/23/2023 | 27.00 | 10/23/2023 | 26.00 | Residential Sales | $32.82 | 853.32 |
| 9/27/2023 | 10/10/2023 | 14.00 | 10/10/2023 | 13.00 | Residential Sales | $395.52 | 5,141.76 |
| 9/27/2023 | 10/27/2023 | 31.00 | 10/27/2023 | 30.00 | Residential Sales | $162.64 | 4,879.20 |
| 9/27/2023 | 11/6/2023 | 41.00 | 11/6/2023 | 40.00 | Commercial Sales | $211.09 | 8,443.60 |
| 9/27/2023 | 2/28/2024 | 155.00 | 2/28/2024 | 154.00 | Commercial Sales | $1,843.93 | 283,965.22 |
| 9/27/2023 | 10/12/2023 | 16.00 | 10/12/2023 | 15.00 | Residential Sales | $98.50 | 1,477.50 |
| 9/27/2023 | 11/20/2023 | 55.00 | 11/20/2023 | 54.00 | Residential Sales | $56.78 | 3,066.12 |
| 9/27/2023 | 9/27/2023 | 1.00 | 9/27/2023 | 0.00 | Commercial Sales | $3,462.92 | - |
| 9/27/2023 | 9/28/2023 | 2.00 | 9/28/2023 | 1.00 | Industrial Service | $4,422.87 | 4,422.87 |
| 9/27/2023 | 9/28/2023 | 2.00 | 9/28/2023 | 1.00 | Commercial Sales | $246,941.71 | 246,941.71 |
| 9/27/2023 | 9/27/2023 | 1.00 | 9/27/2023 | 0.00 | Residential Sales | $1,582.08 | - |
| 9/27/2023 | 9/29/2023 | 3.00 | 9/29/2023 | 2.00 | Industrial Service | $247.14 | 494.28 |
| 9/27/2023 | 9/28/2023 | 2.00 | 9/28/2023 | 1.00 | Residential Sales | $737,515.98 | 737,515.98 |
| 9/27/2023 | 9/29/2023 | 3.00 | 9/29/2023 | 2.00 | Commercial Sales | $84,170.90 | 168,341.80 |
| 9/27/2023 | 9/29/2023 | 3.00 | 9/29/2023 | 2.00 | Residential Sales | $9,398.43 | 18,796.86 |
| 9/27/2023 | 10/30/2023 | 34.00 | 10/30/2023 | 33.00 | Residential Sales | $3.75 | 123.75 |
| 9/27/2023 | 9/28/2023 | 2.00 | 9/28/2023 | 1.00 | Other Sales to Public Authority | $1,972.81 | 1,972.81 |
| 9/27/2023 | 9/29/2023 | 3.00 | 9/29/2023 | 2.00 | Other Sales to Public Authority | $1,247.61 | 2,495.22 |
| 9/27/2023 | 9/27/2023 | 1.00 | 9/27/2023 | 0.00 | Public Street & Highway Lighting | $1,002.94 | - |
| 9/27/2023 | 10/3/2023 | 7.00 | 10/3/2023 | 6.00 | Industrial Service | $530,316.79 | 3,181,900.74 |
| 9/27/2023 | 10/2/2023 | 6.00 | 10/2/2023 | 5.00 | Commercial Sales | $11,258.04 | 56,290.20 |
| 9/27/2023 | 10/3/2023 | 7.00 | 10/3/2023 | 6.00 | Commercial Sales | $28,029.25 | 168,175.50 |
| 9/27/2023 | 10/2/2023 | 6.00 | 10/2/2023 | 5.00 | Residential Sales | $2,040.15 | 10,200.75 |
| 9/27/2023 | 10/4/2023 | 8.00 | 10/4/2023 | 7.00 | Commercial Sales | $173.56 | 1,214.92 |
| 9/27/2023 | 10/4/2023 | 8.00 | 10/4/2023 | 7.00 | Residential Sales | $517.99 | 3,625.93 |
| 9/27/2023 | 10/5/2023 | 9.00 | 10/5/2023 | 8.00 | Commercial Sales | $440.91 | 3,527.28 |
| 9/27/2023 | 3/27/2024 | 183.00 | 3/27/2024 | 182.00 | Residential Sales | $3.47 | 631.54 |
| 9/27/2023 | 10/3/2023 | 7.00 | 10/3/2023 | 6.00 | Other Sales to Public Authority | $14,610.82 | 87,664.92 |
| 9/27/2023 | 10/5/2023 | 9.00 | 10/5/2023 | 8.00 | Residential Sales | $8.71 | 69.68 |
| 9/27/2023 | 10/6/2023 | 10.00 | 10/6/2023 | 9.00 | Residential Sales | $86.47 | 778.23 |
| 9/27/2023 | 4/21/2024 | 208.00 | 4/21/2024 | 207.00 | Commercial Sales | $33.26 | 6,884.82 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 9/27/2023 | 10/9/2023 | 13.00 | 10/9/2023 | 12.00 | Industrial Service | $1,818.69 | 21,824.28 |
| 9/27/2023 | 10/9/2023 | 13.00 | 10/9/2023 | 12.00 | Commercial Sales | $2,212.27 | 26,547.24 |
| 9/28/2023 | 10/3/2023 | 6.00 | 10/3/2023 | 5.00 | Other Sales to Public Authority | $53,749.20 | 268,746.00 |
| 9/28/2023 | 10/4/2023 | 7.00 | 10/4/2023 | 6.00 | Residential Sales | $688.69 | 4,132.14 |
| 9/28/2023 | 10/5/2023 | 8.00 | 10/5/2023 | 7.00 | Commercial Sales | $577.22 | 4,040.54 |
| 9/28/2023 | 10/6/2023 | 9.00 | 10/6/2023 | 8.00 | Commercial Sales | $451.80 | 3,614.40 |
| 9/28/2023 | 10/5/2023 | 8.00 | 10/5/2023 | 7.00 | Residential Sales | $62.10 | 434.70 |
| 9/28/2023 | 12/8/2023 | 72.00 | 12/8/2023 | 71.00 | Commercial Sales | $174.39 | 12,381.69 |
| 9/28/2023 | 10/6/2023 | 9.00 | 10/6/2023 | 8.00 | Residential Sales | $290.53 | 2,324.24 |
| 9/28/2023 | 10/9/2023 | 12.00 | 10/9/2023 | 11.00 | Industrial Service | $14,521.46 | 159,736.06 |
| 9/28/2023 | 10/9/2023 | 12.00 | 10/9/2023 | 11.00 | Commercial Sales | $303.67 | 3,340.37 |
| 9/28/2023 | 10/23/2023 | 26.00 | 10/23/2023 | 25.00 | Residential Sales | $6.61 | 165.25 |
| 9/28/2023 | 10/9/2023 | 12.00 | 10/9/2023 | 11.00 | Residential Sales | $20.27 | 222.97 |
| 9/28/2023 | 5/31/2024 | 247.00 | 5/31/2024 | 246.00 | Residential Sales | $86.17 | 21,197.82 |
| 9/28/2023 | 10/10/2023 | 13.00 | 10/10/2023 | 12.00 | Commercial Sales | $333.32 | 3,999.84 |
| 9/28/2023 | 10/10/2023 | 13.00 | 10/10/2023 | 12.00 | Residential Sales | $1,422.09 | 17,065.08 |
| 9/28/2023 | 10/11/2023 | 14.00 | 10/11/2023 | 13.00 | Commercial Sales | $18,392.54 | 239,103.02 |
| 9/28/2023 | 10/2/2023 | 5.00 | 10/2/2023 | 4.00 | Company Use | -$36.46 | (145.84) |
| 9/28/2023 | 10/12/2023 | 15.00 | 10/12/2023 | 14.00 | Commercial Sales | $190.57 | 2,667.98 |
| 9/28/2023 | 10/10/2023 | 13.00 | 10/10/2023 | 12.00 | Other Sales to Public Authority | $125.62 | 1,507.44 |
| 9/28/2023 | 10/11/2023 | 14.00 | 10/11/2023 | 13.00 | Residential Sales | $39.87 | 518.31 |
| 9/28/2023 | 10/12/2023 | 15.00 | 10/12/2023 | 14.00 | Residential Sales | $47.22 | 661.08 |
| 9/28/2023 | 9/29/2023 | 2.00 | 9/29/2023 | 1.00 | Industrial Service | $287,595.48 | 287,595.48 |
| 9/28/2023 | 9/28/2023 | 1.00 | 9/28/2023 | 0.00 | Commercial Sales | $1,179.05 | - |
| 9/28/2023 | 11/8/2023 | 42.00 | 11/8/2023 | 41.00 | Residential Sales | $42.33 | 1,735.53 |
| 9/28/2023 | 9/29/2023 | 2.00 | 9/29/2023 | 1.00 | Commercial Sales | $456,236.06 | 456,236.06 |
| 9/28/2023 | 9/28/2023 | 1.00 | 9/28/2023 | 0.00 | Residential Sales | $2,040.76 | - |
| 9/28/2023 | 9/29/2023 | 2.00 | 9/29/2023 | 1.00 | Residential Sales | $589,243.20 | 589,243.20 |
| 9/28/2023 | 9/28/2023 | 1.00 | 9/28/2023 | 0.00 | Other Sales to Public Authority | $65.58 | - |
| 9/28/2023 | 9/29/2023 | 2.00 | 9/29/2023 | 1.00 | Other Sales to Public Authority | $135,672.89 | 135,672.89 |
| 9/28/2023 | 10/2/2023 | 5.00 | 10/2/2023 | 4.00 | Industrial Service | $5,469.77 | 21,879.08 |
| 9/28/2023 | 10/2/2023 | 5.00 | 10/2/2023 | 4.00 | Commercial Sales | $10,885.83 | 43,543.32 |
| 9/28/2023 | 9/28/2023 | 1.00 | 9/28/2023 | 0.00 | Public Street & Highway Lighting | $537.32 | - |
| 9/28/2023 | 10/3/2023 | 6.00 | 10/3/2023 | 5.00 | Industrial Service | $270.13 | 1,350.65 |
| 9/28/2023 | 10/3/2023 | 6.00 | 10/3/2023 | 5.00 | Commercial Sales | $57,061.22 | 285,306.10 |
| 9/28/2023 | 10/2/2023 | 5.00 | 10/2/2023 | 4.00 | Residential Sales | $7,017.04 | 28,068.16 |
| 9/28/2023 | 1/9/2024 | 104.00 | 1/9/2024 | 103.00 | Residential Sales | $146.34 | 15,073.02 |
| 9/28/2023 | 10/3/2023 | 6.00 | 10/3/2023 | 5.00 | Residential Sales | $7,268.13 | 36,340.65 |
| 9/28/2023 | 10/4/2023 | 7.00 | 10/4/2023 | 6.00 | Commercial Sales | $1,292.51 | 7,755.06 |
| 9/29/2023 | 10/2/2023 | 4.00 | 10/2/2023 | 3.00 | Commercial Sales | $106.95 | 320.85 |
| 9/29/2023 | 10/2/2023 | 4.00 | 10/2/2023 | 3.00 | Residential Sales | $5,514.90 | 16,544.70 |
| 9/29/2023 | 10/4/2023 | 6.00 | 10/4/2023 | 5.00 | Commercial Sales | $26.65 | 133.25 |
| 9/29/2023 | 10/3/2023 | 5.00 | 10/3/2023 | 4.00 | Residential Sales | $66.34 | 265.36 |
| 9/29/2023 | 10/4/2023 | 6.00 | 10/4/2023 | 5.00 | Residential Sales | $14.31 | 71.55 |
| 9/29/2023 | 10/9/2023 | 11.00 | 10/9/2023 | 10.00 | Residential Sales | $12.04 | 120.40 |
| 9/29/2023 | 10/10/2023 | 12.00 | 10/10/2023 | 11.00 | Residential Sales | $14.31 | 157.41 |
| 9/30/2023 | 10/2/2023 | 3.00 | 10/2/2023 | 2.00 | Commercial Sales | $31.78 | 63.56 |
| 9/30/2023 | 10/2/2023 | 3.00 | 10/2/2023 | 2.00 | Residential Sales | $2,408.99 | 4,817.98 |
| 9/30/2023 | 11/14/2023 | 46.00 | 11/14/2023 | 45.00 | Commercial Sales | $17.99 | 809.55 |
| 9/30/2023 | 11/14/2023 | 46.00 | 11/14/2023 | 45.00 | Residential Sales | $45.17 | 2,032.65 |
| 9/30/2023 | 10/9/2023 | 10.00 | 10/9/2023 | 9.00 | Commercial Sales | $31.08 | 279.72 |
| 9/30/2023 | 10/11/2023 | 12.00 | 10/11/2023 | 11.00 | Residential Sales | $10.07 | 110.77 |
| 9/30/2023 | 10/13/2023 | 14.00 | 10/13/2023 | 13.00 | Residential Sales | $5.43 | 70.59 |
| 10/1/2023 | 1/8/2024 | 100.00 | 1/8/2024 | 99.00 | Residential Sales | $67.98 | 6,730.02 |
| 10/1/2023 | 10/2/2023 | 2.00 | 10/2/2023 | 1.00 | Residential Sales | $9,594.44 | 9,594.44 |
| 10/1/2023 | 10/3/2023 | 3.00 | 10/3/2023 | 2.00 | Residential Sales | $454.12 | 908.24 |
| 10/1/2023 | 10/4/2023 | 4.00 | 10/4/2023 | 3.00 | Residential Sales | $542.63 | 1,627.89 |
| 10/1/2023 | 10/2/2023 | 2.00 | 10/2/2023 | 1.00 | Commercial Sales | $1,452.40 | 1,452.40 |
| 10/1/2023 | 10/5/2023 | 5.00 | 10/5/2023 | 4.00 | Residential Sales | $62.24 | 248.96 |
| 10/1/2023 | 12/7/2023 | 68.00 | 12/7/2023 | 67.00 | Residential Sales | $19.53 | 1,308.51 |
| 10/1/2023 | 10/6/2023 | 6.00 | 10/6/2023 | 5.00 | Residential Sales | $85.16 | 425.80 |
| 10/1/2023 | 10/20/2023 | 20.00 | 10/20/2023 | 19.00 | Residential Sales | $199.07 | 3,782.33 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 10/1/2023 | 10/4/2023 | 4.00 | 10/4/2023 | 3.00 | Commercial Sales | $179.74 | 539.22 |
| 10/1/2023 | 12/7/2023 | 68.00 | 12/7/2023 | 67.00 | Commercial Sales | $21.77 | 1,458.59 |
| 10/1/2023 | 10/5/2023 | 5.00 | 10/5/2023 | 4.00 | Commercial Sales | $250.76 | 1,003.04 |
| 10/1/2023 | 10/9/2023 | 9.00 | 10/9/2023 | 8.00 | Residential Sales | $58.81 | 470.48 |
| 10/1/2023 | 10/24/2023 | 24.00 | 10/24/2023 | 23.00 | Residential Sales | $161.85 | 3,722.55 |
| 10/1/2023 | 10/10/2023 | 10.00 | 10/10/2023 | 9.00 | Residential Sales | $73.11 | 657.99 |
| 10/1/2023 | 10/25/2023 | 25.00 | 10/25/2023 | 24.00 | Commercial Sales | $21.38 | 513.12 |
| 10/1/2023 | 10/12/2023 | 12.00 | 10/12/2023 | 11.00 | Residential Sales | $80.61 | 886.71 |
| 10/1/2023 | 10/31/2023 | 31.00 | 10/31/2023 | 30.00 | Residential Sales | $10.26 | 307.80 |
| 10/2/2023 | 10/13/2023 | 12.00 | 10/13/2023 | 11.00 | Residential Sales | $413.52 | 4,548.72 |
| 10/2/2023 | 10/11/2023 | 10.00 | 10/11/2023 | 9.00 | Industrial Service | $211,521.68 | 1,903,695.12 |
| 10/2/2023 | 10/10/2023 | 9.00 | 10/10/2023 | 8.00 | Commercial Sales | $12,607.92 | 100,863.36 |
| 10/2/2023 | 10/11/2023 | 10.00 | 10/11/2023 | 9.00 | Commercial Sales | $36,062.04 | 324,558.36 |
| 10/2/2023 | 2/12/2024 | 134.00 | 2/12/2024 | 133.00 | Residential Sales | $14.25 | 1,895.25 |
| 10/2/2023 | 11/6/2023 | 36.00 | 11/6/2023 | 35.00 | Industrial Service | $607.55 | 21,264.25 |
| 10/2/2023 | 10/10/2023 | 9.00 | 10/10/2023 | 8.00 | Other Sales to Public Authority | $44,403.66 | 355,229.28 |
| 10/2/2023 | 10/12/2023 | 11.00 | 10/12/2023 | 10.00 | Commercial Sales | $2,862.97 | 28,629.70 |
| 10/2/2023 | 12/14/2023 | 74.00 | 12/14/2023 | 73.00 | Commercial Sales | $484.27 | 35,351.71 |
| 10/2/2023 | 11/6/2023 | 36.00 | 11/6/2023 | 35.00 | Commercial Sales | $169.01 | 5,915.35 |
| 10/2/2023 | 10/13/2023 | 12.00 | 10/13/2023 | 11.00 | Commercial Sales | $233.67 | 2,570.37 |
| 10/2/2023 | 10/30/2023 | 29.00 | 10/30/2023 | 28.00 | Residential Sales | $60.91 | 1,705.48 |
| 10/2/2023 | 3/20/2024 | 171.00 | 3/20/2024 | 170.00 | Commercial Sales | $17.88 | 3,039.60 |
| 10/2/2023 | 10/18/2023 | 17.00 | 10/18/2023 | 16.00 | Residential Sales | $109.94 | 1,759.04 |
| 10/2/2023 | 10/16/2023 | 15.00 | 10/16/2023 | 14.00 | Industrial Service | $11.59 | 162.26 |
| 10/2/2023 | 1/9/2024 | 100.00 | 1/9/2024 | 99.00 | Residential Sales | $660.17 | 65,356.83 |
| 10/2/2023 | 10/2/2023 | 1.00 | 10/2/2023 | 0.00 | Residential Sales | $389.32 | - |
| 10/2/2023 | 4/2/2024 | 184.00 | 4/2/2024 | 183.00 | Residential Sales | $106.66 | 19,518.78 |
| 10/2/2023 | 10/16/2023 | 15.00 | 10/16/2023 | 14.00 | Commercial Sales | $5.96 | 83.44 |
| 10/2/2023 | 10/19/2023 | 18.00 | 10/19/2023 | 17.00 | Residential Sales | $435.90 | 7,410.30 |
| 10/2/2023 | 10/17/2023 | 16.00 | 10/17/2023 | 15.00 | Commercial Sales | $204.25 | 3,063.75 |
| 10/2/2023 | 10/3/2023 | 2.00 | 10/3/2023 | 1.00 | Residential Sales | $81.09 | 81.09 |
| 10/2/2023 | 12/5/2023 | 65.00 | 12/5/2023 | 64.00 | Residential Sales | $113.68 | 7,275.52 |
| 10/2/2023 | 4/3/2024 | 185.00 | 4/3/2024 | 184.00 | Residential Sales | $16.16 | 2,973.44 |
| 10/2/2023 | 10/4/2023 | 3.00 | 10/4/2023 | 2.00 | Residential Sales | $655,492.07 | 1,310,984.14 |
| 10/2/2023 | 10/18/2023 | 17.00 | 10/18/2023 | 16.00 | Commercial Sales | $467.57 | 7,481.12 |
| 10/2/2023 | 12/6/2023 | 66.00 | 12/6/2023 | 65.00 | Residential Sales | $127.83 | 8,308.95 |
| 10/2/2023 | 10/5/2023 | 4.00 | 10/5/2023 | 3.00 | Residential Sales | $2,841.78 | 8,525.34 |
| 10/2/2023 | 10/2/2023 | 1.00 | 10/2/2023 | 0.00 | Commercial Sales | $753.15 | - |
| 10/2/2023 | 10/2/2023 | 1.00 | 10/2/2023 | 0.00 | Public Street & Highway Lighting | $113.56 | - |
| 10/2/2023 | 10/3/2023 | 2.00 | 10/3/2023 | 1.00 | Industrial Service | $93,442.76 | 93,442.76 |
| 10/2/2023 | 11/13/2023 | 43.00 | 11/13/2023 | 42.00 | Residential Sales | $15.42 | 647.64 |
| 10/2/2023 | 12/7/2023 | 67.00 | 12/7/2023 | 66.00 | Residential Sales | $75.90 | 5,009.40 |
| 10/2/2023 | 10/3/2023 | 2.00 | 10/3/2023 | 1.00 | Commercial Sales | $49,519.68 | 49,519.68 |
| 10/2/2023 | 10/6/2023 | 5.00 | 10/6/2023 | 4.00 | Residential Sales | $5,727.66 | 22,910.64 |
| 10/2/2023 | 11/14/2023 | 44.00 | 11/14/2023 | 43.00 | Residential Sales | $184.17 | 7,919.31 |
| 10/2/2023 | 10/20/2023 | 19.00 | 10/20/2023 | 18.00 | Residential Sales | $186.71 | 3,360.78 |
| 10/2/2023 | 10/5/2023 | 4.00 | 10/5/2023 | 3.00 | Industrial Service | $5,658.24 | 16,974.72 |
| 10/2/2023 | 10/2/2023 | 1.00 | 10/2/2023 | 0.00 | Other Sales to Public Authority | $421.26 | - |
| 10/2/2023 | 10/4/2023 | 3.00 | 10/4/2023 | 2.00 | Commercial Sales | $10,052.36 | 20,104.72 |
| 10/2/2023 | 11/15/2023 | 45.00 | 11/15/2023 | 44.00 | Residential Sales | $46.58 | 2,049.52 |
| 10/2/2023 | 10/6/2023 | 5.00 | 10/6/2023 | 4.00 | Industrial Service | $8,371.40 | 33,485.60 |
| 10/2/2023 | 10/5/2023 | 4.00 | 10/5/2023 | 3.00 | Commercial Sales | $32,785.35 | 98,356.05 |
| 10/2/2023 | 10/3/2023 | 2.00 | 10/3/2023 | 1.00 | Other Sales to Public Authority | $98.75 | 98.75 |
| 10/2/2023 | 10/6/2023 | 5.00 | 10/6/2023 | 4.00 | Commercial Sales | $249,415.25 | 997,661.00 |
| 10/2/2023 | 10/23/2023 | 22.00 | 10/23/2023 | 21.00 | Residential Sales | $207.31 | 4,353.51 |
| 10/2/2023 | 10/9/2023 | 8.00 | 10/9/2023 | 7.00 | Residential Sales | $1,625.97 | 11,381.79 |
| 10/2/2023 | 11/14/2023 | 44.00 | 11/14/2023 | 43.00 | Commercial Sales | $13.70 | 589.10 |
| 10/2/2023 | 2/7/2024 | 129.00 | 2/7/2024 | 128.00 | Residential Sales | $92.04 | 11,781.12 |
| 10/2/2023 | 10/5/2023 | 4.00 | 10/5/2023 | 3.00 | Other Sales to Public Authority | $26,270.49 | 78,811.47 |
| 10/2/2023 | 10/24/2023 | 23.00 | 10/24/2023 | 22.00 | Residential Sales | $250.03 | 5,500.66 |
| 10/2/2023 | 10/9/2023 | 8.00 | 10/9/2023 | 7.00 | Industrial Service | $962.72 | 6,739.04 |
| 10/2/2023 | 10/6/2023 | 5.00 | 10/6/2023 | 4.00 | Other Sales to Public Authority | $24,241.38 | 96,965.52 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 10/2/2023 | 12/27/2023 | 87.00 | 12/27/2023 | 86.00 | Residential Sales | $17.74 | 1,525.64 |
| 10/2/2023 | 10/9/2023 | 8.00 | 10/9/2023 | 7.00 | Commercial Sales | $75,571.89 | 529,003.23 |
| 10/2/2023 | 10/23/2023 | 22.00 | 10/23/2023 | 21.00 | Commercial Sales | $6,225.95 | 130,744.95 |
| 10/2/2023 | 10/10/2023 | 9.00 | 10/10/2023 | 8.00 | Residential Sales | $317.94 | 2,543.52 |
| 10/2/2023 | 10/9/2023 | 8.00 | 10/9/2023 | 7.00 | Other Sales to Public Authority | $2,172.98 | 15,210.86 |
| 10/2/2023 | 10/11/2023 | 10.00 | 10/11/2023 | 9.00 | Residential Sales | $494.36 | 4,449.24 |
| 10/2/2023 | 10/25/2023 | 24.00 | 10/25/2023 | 23.00 | Commercial Sales | $4.48 | 103.04 |
| 10/2/2023 | 10/23/2023 | 22.00 | 10/23/2023 | 21.00 | Other Sales to Public Authority | $11,479.64 | 241,072.44 |
| 10/2/2023 | 10/12/2023 | 11.00 | 10/12/2023 | 10.00 | Residential Sales | $598.11 | 5,981.10 |
| 10/2/2023 | 10/10/2023 | 9.00 | 10/10/2023 | 8.00 | Industrial Service | $397,485.93 | 3,179,887.44 |
| 10/3/2023 | 10/9/2023 | 7.00 | 10/9/2023 | 6.00 | Industrial Service | $189.81 | 1,138.86 |
| 10/3/2023 | 10/6/2023 | 4.00 | 10/6/2023 | 3.00 | Other Sales to Public Authority | $10,575.26 | 31,725.78 |
| 10/3/2023 | 10/9/2023 | 7.00 | 10/9/2023 | 6.00 | Commercial Sales | $19,876.98 | 119,261.88 |
| 10/3/2023 | 10/23/2023 | 21.00 | 10/23/2023 | 20.00 | Commercial Sales | $1,657.41 | 33,148.20 |
| 10/3/2023 | 10/26/2023 | 24.00 | 10/26/2023 | 23.00 | Residential Sales | $174.89 | 4,022.47 |
| 10/3/2023 | 10/24/2023 | 22.00 | 10/24/2023 | 21.00 | Commercial Sales | $132.02 | 2,772.42 |
| 10/3/2023 | 10/10/2023 | 8.00 | 10/10/2023 | 7.00 | Residential Sales | $249.42 | 1,745.94 |
| 10/3/2023 | 10/9/2023 | 7.00 | 10/9/2023 | 6.00 | Other Sales to Public Authority | $1,744.71 | 10,468.26 |
| 10/3/2023 | 10/11/2023 | 9.00 | 10/11/2023 | 8.00 | Residential Sales | $1,469.01 | 11,752.08 |
| 10/3/2023 | 10/23/2023 | 21.00 | 10/23/2023 | 20.00 | Other Sales to Public Authority | $139.40 | 2,788.00 |
| 10/3/2023 | 10/12/2023 | 10.00 | 10/12/2023 | 9.00 | Residential Sales | $4,628.47 | 41,656.23 |
| 10/3/2023 | 10/10/2023 | 8.00 | 10/10/2023 | 7.00 | Industrial Service | $10,775.31 | 75,427.17 |
| 10/3/2023 | 10/26/2023 | 24.00 | 10/26/2023 | 23.00 | Commercial Sales | $77.91 | 1,791.93 |
| 10/3/2023 | 10/10/2023 | 8.00 | 10/10/2023 | 7.00 | Commercial Sales | $16,022.33 | 112,156.31 |
| 10/3/2023 | 10/13/2023 | 11.00 | 10/13/2023 | 10.00 | Residential Sales | $95.74 | 957.40 |
| 10/3/2023 | 10/11/2023 | 9.00 | 10/11/2023 | 8.00 | Commercial Sales | $441.83 | 3,534.64 |
| 10/3/2023 | 10/12/2023 | 10.00 | 10/12/2023 | 9.00 | Industrial Service | $629.98 | 5,669.82 |
| 10/3/2023 | 10/12/2023 | 10.00 | 10/12/2023 | 9.00 | Commercial Sales | $17,319.42 | 155,874.78 |
| 10/3/2023 | 11/9/2023 | 38.00 | 11/9/2023 | 37.00 | Residential Sales | $154.00 | 5,698.00 |
| 10/3/2023 | 10/13/2023 | 11.00 | 10/13/2023 | 10.00 | Commercial Sales | $1,994.93 | 19,949.30 |
| 10/3/2023 | 10/11/2023 | 9.00 | 10/11/2023 | 8.00 | Other Sales to Public Authority | $51.10 | 408.80 |
| 10/3/2023 | 10/12/2023 | 10.00 | 10/12/2023 | 9.00 | Other Sales to Public Authority | $32,552.94 | 292,976.46 |
| 10/3/2023 | 10/17/2023 | 15.00 | 10/17/2023 | 14.00 | Residential Sales | $117.47 | 1,644.58 |
| 10/3/2023 | 10/13/2023 | 11.00 | 10/13/2023 | 10.00 | Other Sales to Public Authority | $66.62 | 666.20 |
| 10/3/2023 | 10/16/2023 | 14.00 | 10/16/2023 | 13.00 | Commercial Sales | $0.98 | 12.74 |
| 10/3/2023 | 10/19/2023 | 17.00 | 10/19/2023 | 16.00 | Residential Sales | $8.29 | 132.64 |
| 10/3/2023 | 10/4/2023 | 2.00 | 10/4/2023 | 1.00 | Residential Sales | $619,668.49 | 619,668.49 |
| 10/3/2023 | 10/5/2023 | 3.00 | 10/5/2023 | 2.00 | Residential Sales | $5,799.86 | 11,599.72 |
| 10/3/2023 | 10/6/2023 | 4.00 | 10/6/2023 | 3.00 | Residential Sales | $1,311.98 | 3,935.94 |
| 10/3/2023 | 11/10/2023 | 39.00 | 11/10/2023 | 38.00 | Other Sales to Public Authority | $6,094.96 | 231,608.48 |
| 10/3/2023 | 10/6/2023 | 4.00 | 10/6/2023 | 3.00 | Industrial Service | $16,287.12 | 48,861.36 |
| 10/3/2023 | 10/5/2023 | 3.00 | 10/5/2023 | 2.00 | Commercial Sales | $122.65 | 245.30 |
| 10/3/2023 | 11/30/2023 | 59.00 | 11/30/2023 | 58.00 | Residential Sales | $129.19 | 7,493.02 |
| 10/3/2023 | 10/6/2023 | 4.00 | 10/6/2023 | 3.00 | Commercial Sales | $95,311.22 | 285,933.66 |
| 10/3/2023 | 10/9/2023 | 7.00 | 10/9/2023 | 6.00 | Residential Sales | $1,670.77 | 10,024.62 |
| 10/3/2023 | 11/16/2023 | 45.00 | 11/16/2023 | 44.00 | Industrial Service | $882.64 | 38,836.16 |
| 10/4/2023 | 10/6/2023 | 3.00 | 10/6/2023 | 2.00 | Residential Sales | $14,032.72 | 28,065.44 |
| 10/4/2023 | 10/20/2023 | 17.00 | 10/20/2023 | 16.00 | Residential Sales | $98.80 | 1,580.80 |
| 10/4/2023 | 10/6/2023 | 3.00 | 10/6/2023 | 2.00 | Industrial Service | $8,114.84 | 16,229.68 |
| 10/4/2023 | 10/6/2023 | 3.00 | 10/6/2023 | 2.00 | Commercial Sales | $132,879.00 | 265,758.00 |
| 10/4/2023 | 10/9/2023 | 6.00 | 10/9/2023 | 5.00 | Residential Sales | $952.12 | 4,760.60 |
| 10/4/2023 | 10/23/2023 | 20.00 | 10/23/2023 | 19.00 | Residential Sales | $337.06 | 6,404.14 |
| 10/4/2023 | 10/6/2023 | 3.00 | 10/6/2023 | 2.00 | Other Sales to Public Authority | $18,970.50 | 37,941.00 |
| 10/4/2023 | 10/9/2023 | 6.00 | 10/9/2023 | 5.00 | Commercial Sales | $46,869.20 | 234,346.00 |
| 10/4/2023 | 10/23/2023 | 20.00 | 10/23/2023 | 19.00 | Commercial Sales | $8,787.71 | 166,966.49 |
| 10/4/2023 | 10/10/2023 | 7.00 | 10/10/2023 | 6.00 | Residential Sales | $213.69 | 1,282.14 |
| 10/4/2023 | 10/9/2023 | 6.00 | 10/9/2023 | 5.00 | Other Sales to Public Authority | $668.51 | 3,342.55 |
| 10/4/2023 | 10/11/2023 | 8.00 | 10/11/2023 | 7.00 | Residential Sales | $1,078.43 | 7,549.01 |
| 10/4/2023 | 10/23/2023 | 20.00 | 10/23/2023 | 19.00 | Other Sales to Public Authority | $10,162.55 | 193,088.45 |
| 10/4/2023 | 10/26/2023 | 23.00 | 10/26/2023 | 22.00 | Commercial Sales | $189.82 | 4,176.04 |
| 10/4/2023 | 10/12/2023 | 9.00 | 10/12/2023 | 8.00 | Residential Sales | $2,033.25 | 16,266.00 |
| 10/4/2023 | 11/1/2023 | 29.00 | 11/1/2023 | 28.00 | Other Sales to Public Authority | $83,351.98 | 2,333,855.44 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 10/4/2023 | 10/10/2023 | 7.00 | 10/10/2023 | 6.00 | Commercial Sales | $129,391.87 | 776,351.22 |
| 10/4/2023 | 10/13/2023 | 10.00 | 10/13/2023 | 9.00 | Residential Sales | $397.26 | 3,575.34 |
| 10/4/2023 | 10/11/2023 | 8.00 | 10/11/2023 | 7.00 | Commercial Sales | $619.22 | 4,334.54 |
| 10/4/2023 | 10/12/2023 | 9.00 | 10/12/2023 | 8.00 | Commercial Sales | $9,888.91 | 79,111.28 |
| 10/4/2023 | 10/10/2023 | 7.00 | 10/10/2023 | 6.00 | Other Sales to Public Authority | $22,560.20 | 135,361.20 |
| 10/4/2023 | 10/13/2023 | 10.00 | 10/13/2023 | 9.00 | Commercial Sales | $87,192.03 | 784,728.27 |
| 10/4/2023 | 10/12/2023 | 9.00 | 10/12/2023 | 8.00 | Other Sales to Public Authority | $135.36 | 1,082.88 |
| 10/4/2023 | 10/13/2023 | 10.00 | 10/13/2023 | 9.00 | Other Sales to Public Authority | $2,172.08 | 19,548.72 |
| 10/4/2023 | 3/25/2024 | 174.00 | 3/25/2024 | 173.00 | Residential Sales | $21.96 | 3,799.08 |
| 10/4/2023 | 10/4/2023 | 1.00 | 10/4/2023 | 0.00 | Residential Sales | $76.94 | - |
| 10/4/2023 | 10/18/2023 | 15.00 | 10/18/2023 | 14.00 | Commercial Sales | $312.39 | 4,373.46 |
| 10/4/2023 | 10/5/2023 | 2.00 | 10/5/2023 | 1.00 | Residential Sales | $595,080.27 | 595,080.27 |
| 10/5/2023 | 10/13/2023 | 9.00 | 10/13/2023 | 8.00 | Other Sales to Public Authority | $19,715.59 | 157,724.72 |
| 10/5/2023 | 10/30/2023 | 26.00 | 10/30/2023 | 25.00 | Commercial Sales | $382.72 | 9,568.00 |
| 10/5/2023 | 10/16/2023 | 12.00 | 10/16/2023 | 11.00 | Commercial Sales | $58.47 | 643.17 |
| 10/5/2023 | 10/17/2023 | 13.00 | 10/17/2023 | 12.00 | Commercial Sales | $383.57 | 4,602.84 |
| 10/5/2023 | 12/6/2023 | 63.00 | 12/6/2023 | 62.00 | Residential Sales | $22.50 | 1,395.00 |
| 10/5/2023 | 10/18/2023 | 14.00 | 10/18/2023 | 13.00 | Commercial Sales | $267.59 | 3,478.67 |
| 10/5/2023 | 10/5/2023 | 1.00 | 10/5/2023 | 0.00 | Residential Sales | $777.75 | - |
| 10/5/2023 | 10/6/2023 | 2.00 | 10/6/2023 | 1.00 | Residential Sales | $924,038.49 | 924,038.49 |
| 10/5/2023 | 11/14/2023 | 41.00 | 11/14/2023 | 40.00 | Residential Sales | $54.42 | 2,176.80 |
| 10/5/2023 | 10/6/2023 | 2.00 | 10/6/2023 | 1.00 | Industrial Service | $868.92 | 868.92 |
| 10/5/2023 | 3/14/2024 | 162.00 | 3/14/2024 | 161.00 | Residential Sales | $14.37 | 2,313.57 |
| 10/5/2023 | 10/9/2023 | 5.00 | 10/9/2023 | 4.00 | Residential Sales | $13,785.68 | 55,142.72 |
| 10/5/2023 | 10/6/2023 | 2.00 | 10/6/2023 | 1.00 | Commercial Sales | $155,164.79 | 155,164.79 |
| 10/5/2023 | 10/23/2023 | 19.00 | 10/23/2023 | 18.00 | Residential Sales | $123.70 | 2,226.60 |
| 10/5/2023 | 10/24/2023 | 20.00 | 10/24/2023 | 19.00 | Residential Sales | $190.21 | 3,613.99 |
| 10/5/2023 | 10/6/2023 | 2.00 | 10/6/2023 | 1.00 | Other Sales to Public Authority | $4,683.55 | 4,683.55 |
| 10/5/2023 | 10/9/2023 | 5.00 | 10/9/2023 | 4.00 | Industrial Service | $181.61 | 726.44 |
| 10/5/2023 | 10/9/2023 | 5.00 | 10/9/2023 | 4.00 | Commercial Sales | $53,470.97 | 213,883.88 |
| 10/5/2023 | 10/23/2023 | 19.00 | 10/23/2023 | 18.00 | Commercial Sales | $635.67 | 11,442.06 |
| 10/5/2023 | 10/26/2023 | 22.00 | 10/26/2023 | 21.00 | Residential Sales | $335.46 | 7,044.66 |
| 10/5/2023 | 12/11/2023 | 68.00 | 12/11/2023 | 67.00 | Residential Sales | $54.57 | 3,656.19 |
| 10/5/2023 | 11/1/2023 | 28.00 | 11/1/2023 | 27.00 | Industrial Service | $9.54 | 257.58 |
| 10/5/2023 | 10/10/2023 | 6.00 | 10/10/2023 | 5.00 | Residential Sales | $478.66 | 2,393.30 |
| 10/5/2023 | 10/27/2023 | 23.00 | 10/27/2023 | 22.00 | Residential Sales | $20.59 | 452.98 |
| 10/5/2023 | 10/9/2023 | 5.00 | 10/9/2023 | 4.00 | Other Sales to Public Authority | $1,976.90 | 7,907.60 |
| 10/5/2023 | 10/11/2023 | 7.00 | 10/11/2023 | 6.00 | Residential Sales | $999.05 | 5,994.30 |
| 10/5/2023 | 10/23/2023 | 19.00 | 10/23/2023 | 18.00 | Other Sales to Public Authority | $5,547.25 | 99,850.50 |
| 10/5/2023 | 10/12/2023 | 8.00 | 10/12/2023 | 7.00 | Residential Sales | $4,047.86 | 28,335.02 |
| 10/5/2023 | 10/26/2023 | 22.00 | 10/26/2023 | 21.00 | Commercial Sales | $514.47 | 10,803.87 |
| 10/5/2023 | 10/13/2023 | 9.00 | 10/13/2023 | 8.00 | Residential Sales | $627.82 | 5,022.56 |
| 10/5/2023 | 10/10/2023 | 6.00 | 10/10/2023 | 5.00 | Commercial Sales | $27,215.73 | 136,078.65 |
| 10/5/2023 | 11/7/2023 | 34.00 | 11/7/2023 | 33.00 | Residential Sales | $18.92 | 624.36 |
| 10/5/2023 | 10/11/2023 | 7.00 | 10/11/2023 | 6.00 | Commercial Sales | $17,418.90 | 104,513.40 |
| 10/5/2023 | 10/12/2023 | 8.00 | 10/12/2023 | 7.00 | Commercial Sales | $15,574.66 | 109,022.62 |
| 10/5/2023 | 10/10/2023 | 6.00 | 10/10/2023 | 5.00 | Other Sales to Public Authority | $25,491.73 | 127,458.65 |
| 10/5/2023 | 11/6/2023 | 33.00 | 11/6/2023 | 32.00 | Commercial Sales | $98.27 | 3,144.64 |
| 10/5/2023 | 10/13/2023 | 9.00 | 10/13/2023 | 8.00 | Commercial Sales | $1,845.43 | 14,763.44 |
| 10/5/2023 | 10/11/2023 | 7.00 | 10/11/2023 | 6.00 | Other Sales to Public Authority | $2,993.21 | 17,959.26 |
| 10/5/2023 | 12/1/2023 | 58.00 | 12/1/2023 | 57.00 | Residential Sales | $237.69 | 13,548.33 |
| 10/5/2023 | 10/16/2023 | 12.00 | 10/16/2023 | 11.00 | Residential Sales | $102.84 | 1,131.24 |
| 10/5/2023 | 11/21/2023 | 48.00 | 11/21/2023 | 47.00 | Commercial Sales | $16.39 | 770.33 |
| 10/5/2023 | 10/12/2023 | 8.00 | 10/12/2023 | 7.00 | Other Sales to Public Authority | $836.90 | 5,858.30 |
| 10/6/2023 | 10/10/2023 | 5.00 | 10/10/2023 | 4.00 | Commercial Sales | $74,522.94 | 298,091.76 |
| 10/6/2023 | 10/13/2023 | 8.00 | 10/13/2023 | 7.00 | Residential Sales | $254.33 | 1,780.31 |
| 10/6/2023 | 10/27/2023 | 22.00 | 10/27/2023 | 21.00 | Commercial Sales | $335.30 | 7,041.30 |
| 10/6/2023 | 10/11/2023 | 6.00 | 10/11/2023 | 5.00 | Commercial Sales | $59,731.43 | 298,657.15 |
| 10/6/2023 | 11/8/2023 | 34.00 | 11/8/2023 | 33.00 | Residential Sales | $84.88 | 2,801.04 |
| 10/6/2023 | 12/13/2023 | 69.00 | 12/13/2023 | 68.00 | Commercial Sales | $41.72 | 2,836.96 |
| 10/6/2023 | 10/12/2023 | 7.00 | 10/12/2023 | 6.00 | Industrial Service | $151.17 | 907.02 |
| 10/6/2023 | 10/12/2023 | 7.00 | 10/12/2023 | 6.00 | Commercial Sales | $77,026.18 | 462,157.08 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 10/6/2023 | 10/10/2023 | 5.00 | 10/10/2023 | 4.00 | Other Sales to Public Authority | $4,179.73 | 16,718.92 |
| 10/6/2023 | 3/4/2024 | 151.00 | 3/4/2024 | 150.00 | Commercial Sales | $53.91 | 8,086.50 |
| 10/6/2023 | 10/13/2023 | 8.00 | 10/13/2023 | 7.00 | Commercial Sales | $7,866.03 | 55,062.21 |
| 10/6/2023 | 10/13/2023 | 8.00 | 10/13/2023 | 7.00 | Public Street & Highway Lighting | $58.01 | 406.07 |
| 10/6/2023 | 10/16/2023 | 11.00 | 10/16/2023 | 10.00 | Residential Sales | $470.85 | 4,708.50 |
| 10/6/2023 | 10/11/2023 | 6.00 | 10/11/2023 | 5.00 | Other Sales to Public Authority | $9,941.57 | 49,707.85 |
| 10/6/2023 | 10/17/2023 | 12.00 | 10/17/2023 | 11.00 | Residential Sales | $549.83 | 6,048.13 |
| 10/6/2023 | 10/12/2023 | 7.00 | 10/12/2023 | 6.00 | Other Sales to Public Authority | $12,708.16 | 76,248.96 |
| 10/6/2023 | 12/19/2023 | 75.00 | 12/19/2023 | 74.00 | Residential Sales | $108.92 | 8,060.08 |
| 10/6/2023 | 10/13/2023 | 8.00 | 10/13/2023 | 7.00 | Other Sales to Public Authority | $359.83 | 2,518.81 |
| 10/6/2023 | 10/18/2023 | 13.00 | 10/18/2023 | 12.00 | Residential Sales | $1,616.18 | 19,394.16 |
| 10/6/2023 | 10/17/2023 | 12.00 | 10/17/2023 | 11.00 | Industrial Service | $230.72 | 2,537.92 |
| 10/6/2023 | 10/16/2023 | 11.00 | 10/16/2023 | 10.00 | Commercial Sales | $1,606.15 | 16,061.50 |
| 10/6/2023 | 11/27/2023 | 53.00 | 11/27/2023 | 52.00 | Residential Sales | $51.50 | 2,678.00 |
| 10/6/2023 | 10/19/2023 | 14.00 | 10/19/2023 | 13.00 | Residential Sales | $58.06 | 754.78 |
| 10/6/2023 | 10/17/2023 | 12.00 | 10/17/2023 | 11.00 | Commercial Sales | $13,648.22 | 150,130.42 |
| 10/6/2023 | 12/6/2023 | 62.00 | 12/6/2023 | 61.00 | Residential Sales | $132.36 | 8,073.96 |
| 10/6/2023 | 10/18/2023 | 13.00 | 10/18/2023 | 12.00 | Commercial Sales | $9,438.05 | 113,256.60 |
| 10/6/2023 | 10/17/2023 | 12.00 | 10/17/2023 | 11.00 | Other Sales to Public Authority | $2,601.72 | 28,618.92 |
| 10/6/2023 | 3/25/2024 | 172.00 | 3/25/2024 | 171.00 | Commercial Sales | $35.76 | 6,114.96 |
| 10/6/2023 | 11/13/2023 | 39.00 | 11/13/2023 | 38.00 | Residential Sales | $52.67 | 2,001.46 |
| 10/6/2023 | 10/6/2023 | 1.00 | 10/6/2023 | 0.00 | Residential Sales | $907.19 | - |
| 10/6/2023 | 11/15/2023 | 41.00 | 11/15/2023 | 40.00 | Residential Sales | $132.88 | 5,315.20 |
| 10/6/2023 | 10/9/2023 | 4.00 | 10/9/2023 | 3.00 | Residential Sales | $731,061.30 | 2,193,183.90 |
| 10/6/2023 | 10/23/2023 | 18.00 | 10/23/2023 | 17.00 | Residential Sales | $603.34 | 10,256.78 |
| 10/6/2023 | 11/14/2023 | 40.00 | 11/14/2023 | 39.00 | Commercial Sales | $165.33 | 6,447.87 |
| 10/6/2023 | 10/6/2023 | 1.00 | 10/6/2023 | 0.00 | Commercial Sales | $1,940.58 | - |
| 10/6/2023 | 10/24/2023 | 19.00 | 10/24/2023 | 18.00 | Residential Sales | $194.04 | 3,492.72 |
| 10/6/2023 | 11/1/2023 | 27.00 | 11/1/2023 | 26.00 | Residential Sales | $84.65 | 2,200.90 |
| 10/6/2023 | 10/9/2023 | 4.00 | 10/9/2023 | 3.00 | Industrial Service | $14,004.51 | 42,013.53 |
| 10/6/2023 | 10/9/2023 | 4.00 | 10/9/2023 | 3.00 | Commercial Sales | $391,929.05 | 1,175,787.15 |
| 10/6/2023 | 10/23/2023 | 18.00 | 10/23/2023 | 17.00 | Commercial Sales | $3,828.66 | 65,087.22 |
| 10/6/2023 | 12/11/2023 | 67.00 | 12/11/2023 | 66.00 | Residential Sales | $87.72 | 5,789.52 |
| 10/6/2023 | 1/30/2024 | 117.00 | 1/30/2024 | 116.00 | Residential Sales | $113.68 | 13,186.88 |
| 10/6/2023 | 10/10/2023 | 5.00 | 10/10/2023 | 4.00 | Residential Sales | $2,801.36 | 11,205.44 |
| 10/6/2023 | 10/24/2023 | 19.00 | 10/24/2023 | 18.00 | Commercial Sales | $9,618.12 | 173,126.16 |
| 10/6/2023 | 11/1/2023 | 27.00 | 11/1/2023 | 26.00 | Commercial Sales | $100.51 | 2,613.26 |
| 10/6/2023 | 10/27/2023 | 22.00 | 10/27/2023 | 21.00 | Residential Sales | $186.71 | 3,920.91 |
| 10/6/2023 | 10/11/2023 | 6.00 | 10/11/2023 | 5.00 | Residential Sales | $5,440.94 | 27,204.70 |
| 10/6/2023 | 10/9/2023 | 4.00 | 10/9/2023 | 3.00 | Other Sales to Public Authority | $12,067.32 | 36,201.96 |
| 10/6/2023 | 10/10/2023 | 5.00 | 10/10/2023 | 4.00 | Industrial Service | $989.82 | 3,959.28 |
| 10/6/2023 | 10/12/2023 | 7.00 | 10/12/2023 | 6.00 | Residential Sales | $3,031.16 | 18,186.96 |
| 10/6/2023 | 10/26/2023 | 21.00 | 10/26/2023 | 20.00 | Commercial Sales | $904.68 | 18,093.60 |
| 10/6/2023 | 11/6/2023 | 32.00 | 11/6/2023 | 31.00 | Residential Sales | $67.39 | 2,089.09 |
| 10/7/2023 | 10/10/2023 | 4.00 | 10/10/2023 | 3.00 | Residential Sales | $84.97 | 254.91 |
| 10/7/2023 | 11/2/2023 | 27.00 | 11/2/2023 | 26.00 | Commercial Sales | $545.08 | 14,172.08 |
| 10/7/2023 | 11/27/2023 | 52.00 | 11/27/2023 | 51.00 | Residential Sales | $54.90 | 2,799.90 |
| 10/7/2023 | 10/9/2023 | 3.00 | 10/9/2023 | 2.00 | Residential Sales | $1,775.53 | 3,551.06 |
| 10/8/2023 | 10/9/2023 | 2.00 | 10/9/2023 | 1.00 | Residential Sales | $1,133.31 | 1,133.31 |
| 10/8/2023 | 10/9/2023 | 2.00 | 10/9/2023 | 1.00 | Commercial Sales | $208.29 | 208.29 |
| 10/8/2023 | 10/10/2023 | 3.00 | 10/10/2023 | 2.00 | Residential Sales | $401.33 | 802.66 |
| 10/8/2023 | 11/2/2023 | 26.00 | 11/2/2023 | 25.00 | Commercial Sales | $142.68 | 3,567.00 |
| 10/8/2023 | 10/11/2023 | 4.00 | 10/11/2023 | 3.00 | Residential Sales | $59.39 | 178.17 |
| 10/8/2023 | 10/12/2023 | 5.00 | 10/12/2023 | 4.00 | Residential Sales | $166.80 | 667.20 |
| 10/8/2023 | 10/10/2023 | 3.00 | 10/10/2023 | 2.00 | Commercial Sales | $12.90 | 25.80 |
| 10/8/2023 | 4/10/2024 | 186.00 | 4/10/2024 | 185.00 | Commercial Sales | $637.65 | 117,965.25 |
| 10/8/2023 | 10/13/2023 | 6.00 | 10/13/2023 | 5.00 | Residential Sales | $24.03 | 120.15 |
| 10/8/2023 | 10/17/2023 | 10.00 | 10/17/2023 | 9.00 | Commercial Sales | $13.75 | 123.75 |
| 10/8/2023 | 10/18/2023 | 11.00 | 10/18/2023 | 10.00 | Commercial Sales | $6.64 | 66.40 |
| 10/9/2023 | 11/9/2023 | 32.00 | 11/9/2023 | 31.00 | Commercial Sales | $496.68 | 15,397.08 |
| 10/9/2023 | 10/18/2023 | 10.00 | 10/18/2023 | 9.00 | Residential Sales | $176.55 | 1,588.95 |
| 10/9/2023 | 10/30/2023 | 22.00 | 10/30/2023 | 21.00 | Commercial Sales | $13,025.23 | 273,529.83 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 10/9/2023 | 10/16/2023 | 8.00 | 10/16/2023 | 7.00 | Commercial Sales | $460.65 | 3,224.55 |
| 10/9/2023 | 10/17/2023 | 9.00 | 10/17/2023 | 8.00 | Commercial Sales | $256.07 | 2,048.56 |
| 10/9/2023 | 10/13/2023 | 5.00 | 10/13/2023 | 4.00 | Public Street & Highway Lighting | $20.93 | 83.72 |
| 10/9/2023 | 10/18/2023 | 10.00 | 10/18/2023 | 9.00 | Commercial Sales | $1,380.78 | 12,427.02 |
| 10/9/2023 | 11/27/2023 | 50.00 | 11/27/2023 | 49.00 | Commercial Sales | $56.44 | 2,765.56 |
| 10/9/2023 | 10/17/2023 | 9.00 | 10/17/2023 | 8.00 | Other Sales to Public Authority | $215.88 | 1,727.04 |
| 10/9/2023 | 1/10/2024 | 94.00 | 1/10/2024 | 93.00 | Residential Sales | $32.82 | 3,052.26 |
| 10/9/2023 | 11/14/2023 | 37.00 | 11/14/2023 | 36.00 | Residential Sales | $11.73 | 422.28 |
| 10/9/2023 | 11/16/2023 | 39.00 | 11/16/2023 | 38.00 | Residential Sales | $67.56 | 2,567.28 |
| 10/9/2023 | 10/23/2023 | 15.00 | 10/23/2023 | 14.00 | Residential Sales | $441.26 | 6,177.64 |
| 10/9/2023 | 10/9/2023 | 1.00 | 10/9/2023 | 0.00 | Residential Sales | $945.04 | - |
| 10/9/2023 | 10/11/2023 | 3.00 | 10/11/2023 | 2.00 | Company Use | $0.00 | - |
| 10/9/2023 | 11/14/2023 | 37.00 | 11/14/2023 | 36.00 | Commercial Sales | $1,924.98 | 69,299.28 |
| 10/9/2023 | 11/1/2023 | 24.00 | 11/1/2023 | 23.00 | Residential Sales | $36.11 | 830.53 |
| 10/9/2023 | 10/24/2023 | 16.00 | 10/24/2023 | 15.00 | Residential Sales | $171.53 | 2,572.95 |
| 10/9/2023 | 10/9/2023 | 1.00 | 10/9/2023 | 0.00 | Commercial Sales | $12,330.08 | - |
| 10/9/2023 | 10/23/2023 | 15.00 | 10/23/2023 | 14.00 | Commercial Sales | $2,113.28 | 29,585.92 |
| 10/9/2023 | 10/24/2023 | 16.00 | 10/24/2023 | 15.00 | Industrial Service | $65,526.54 | 982,898.10 |
| 10/9/2023 | 10/26/2023 | 18.00 | 10/26/2023 | 17.00 | Residential Sales | $153.13 | 2,603.21 |
| 10/9/2023 | 12/11/2023 | 64.00 | 12/11/2023 | 63.00 | Residential Sales | $84.47 | 5,321.61 |
| 10/9/2023 | 10/10/2023 | 2.00 | 10/10/2023 | 1.00 | Residential Sales | $300,184.56 | 300,184.56 |
| 10/9/2023 | 10/24/2023 | 16.00 | 10/24/2023 | 15.00 | Commercial Sales | $99.66 | 1,494.90 |
| 10/9/2023 | 10/11/2023 | 3.00 | 10/11/2023 | 2.00 | Residential Sales | $5,374.39 | 10,748.78 |
| 10/9/2023 | 2/9/2024 | 124.00 | 2/9/2024 | 123.00 | Commercial Sales | $61.73 | 7,592.79 |
| 10/9/2023 | 10/23/2023 | 15.00 | 10/23/2023 | 14.00 | Other Sales to Public Authority | $220.10 | 3,081.40 |
| 10/9/2023 | 10/26/2023 | 18.00 | 10/26/2023 | 17.00 | Commercial Sales | $48,320.47 | 821,447.99 |
| 10/9/2023 | 10/12/2023 | 4.00 | 10/12/2023 | 3.00 | Residential Sales | $5,284.90 | 15,854.70 |
| 10/9/2023 | 10/10/2023 | 2.00 | 10/10/2023 | 1.00 | Industrial Service | $41,323.58 | 41,323.58 |
| 10/9/2023 | 10/13/2023 | 5.00 | 10/13/2023 | 4.00 | Residential Sales | $147.24 | 588.96 |
| 10/9/2023 | 10/10/2023 | 2.00 | 10/10/2023 | 1.00 | Commercial Sales | $264,781.33 | 264,781.33 |
| 10/9/2023 | 10/11/2023 | 3.00 | 10/11/2023 | 2.00 | Industrial Service | $25,328.08 | 50,656.16 |
| 10/9/2023 | 10/25/2023 | 17.00 | 10/25/2023 | 16.00 | Other Sales to Public Authority | $11,463.97 | 183,423.52 |
| 10/9/2023 | 10/11/2023 | 3.00 | 10/11/2023 | 2.00 | Commercial Sales | $84,576.62 | 169,153.24 |
| 10/9/2023 | 10/12/2023 | 4.00 | 10/12/2023 | 3.00 | Industrial Service | $13,960.50 | 41,881.50 |
| 10/9/2023 | 10/26/2023 | 18.00 | 10/26/2023 | 17.00 | Other Sales to Public Authority | $82,435.12 | 1,401,397.04 |
| 10/9/2023 | 10/12/2023 | 4.00 | 10/12/2023 | 3.00 | Commercial Sales | $235,741.91 | 707,225.73 |
| 10/9/2023 | 10/10/2023 | 2.00 | 10/10/2023 | 1.00 | Other Sales to Public Authority | $24,874.99 | 24,874.99 |
| 10/9/2023 | 11/9/2023 | 32.00 | 11/9/2023 | 31.00 | Residential Sales | $90.38 | 2,801.78 |
| 10/9/2023 | 10/13/2023 | 5.00 | 10/13/2023 | 4.00 | Industrial Service | $13,289.26 | 53,157.04 |
| 10/9/2023 | 10/13/2023 | 5.00 | 10/13/2023 | 4.00 | Commercial Sales | $4,212.28 | 16,849.12 |
| 10/9/2023 | 10/11/2023 | 3.00 | 10/11/2023 | 2.00 | Other Sales to Public Authority | $31,824.79 | 63,649.58 |
| 10/9/2023 | 10/16/2023 | 8.00 | 10/16/2023 | 7.00 | Residential Sales | $395.93 | 2,771.51 |
| 10/9/2023 | 10/12/2023 | 4.00 | 10/12/2023 | 3.00 | Other Sales to Public Authority | $19,745.32 | 59,235.96 |
| 10/9/2023 | 10/17/2023 | 9.00 | 10/17/2023 | 8.00 | Residential Sales | $21.23 | 169.84 |
| 10/10/2023 | 10/13/2023 | 4.00 | 10/13/2023 | 3.00 | Other Sales to Public Authority | $338.15 | 1,014.45 |
| 10/10/2023 | 10/30/2023 | 21.00 | 10/30/2023 | 20.00 | Commercial Sales | $17.93 | 358.60 |
| 10/10/2023 | 10/16/2023 | 7.00 | 10/16/2023 | 6.00 | Residential Sales | $401.75 | 2,410.50 |
| 10/10/2023 | 10/13/2023 | 4.00 | 10/13/2023 | 3.00 | Public Street & Highway Lighting | $54.77 | 164.31 |
| 10/10/2023 | 10/30/2023 | 21.00 | 10/30/2023 | 20.00 | Other Sales to Public Authority | $323.85 | 6,477.00 |
| 10/10/2023 | 10/17/2023 | 8.00 | 10/17/2023 | 7.00 | Residential Sales | $13.23 | 92.61 |
| 10/10/2023 | 10/19/2023 | 10.00 | 10/19/2023 | 9.00 | Commercial Sales | $2,019.24 | 18,173.16 |
| 10/10/2023 | 10/18/2023 | 9.00 | 10/18/2023 | 8.00 | Residential Sales | $170.11 | 1,360.88 |
| 10/10/2023 | 4/2/2024 | 176.00 | 4/2/2024 | 175.00 | Residential Sales | $16.26 | 2,845.50 |
| 10/10/2023 | 1/9/2024 | 92.00 | 1/9/2024 | 91.00 | Residential Sales | $14.16 | 1,288.56 |
| 10/10/2023 | 10/18/2023 | 9.00 | 10/18/2023 | 8.00 | Other Sales to Public Authority | $13,736.66 | 109,893.28 |
| 10/10/2023 | 10/19/2023 | 10.00 | 10/19/2023 | 9.00 | Residential Sales | $45.49 | 409.41 |
| 10/10/2023 | 11/29/2023 | 51.00 | 11/29/2023 | 50.00 | Residential Sales | $10.02 | 501.00 |
| 10/10/2023 | 10/20/2023 | 11.00 | 10/20/2023 | 10.00 | Residential Sales | $86.02 | 860.20 |
| 10/10/2023 | 11/15/2023 | 37.00 | 11/15/2023 | 36.00 | Residential Sales | $46.87 | 1,687.32 |
| 10/10/2023 | 10/23/2023 | 14.00 | 10/23/2023 | 13.00 | Commercial Sales | $240.14 | 3,121.82 |
| 10/10/2023 | 11/16/2023 | 38.00 | 11/16/2023 | 37.00 | Residential Sales | $109.35 | 4,045.95 |
| 10/10/2023 | 2/20/2024 | 134.00 | 2/20/2024 | 133.00 | Residential Sales | $20.00 | 2,660.00 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 10/10/2023 | 10/23/2023 | 14.00 | 10/23/2023 | 13.00 | Residential Sales | $957.64 | 12,449.32 |
| 10/10/2023 | 10/24/2023 | 15.00 | 10/24/2023 | 14.00 | Commercial Sales | $71.52 | 1,001.28 |
| 10/10/2023 | 10/24/2023 | 15.00 | 10/24/2023 | 14.00 | Residential Sales | $122.66 | 1,717.24 |
| 10/10/2023 | 10/23/2023 | 14.00 | 10/23/2023 | 13.00 | Other Sales to Public Authority | $9,474.99 | 123,174.87 |
| 10/10/2023 | 11/1/2023 | 23.00 | 11/1/2023 | 22.00 | Residential Sales | $85.88 | 1,889.36 |
| 10/10/2023 | 10/26/2023 | 17.00 | 10/26/2023 | 16.00 | Commercial Sales | $39,038.36 | 624,613.76 |
| 10/10/2023 | 10/25/2023 | 16.00 | 10/25/2023 | 15.00 | Residential Sales | $426.88 | 6,403.20 |
| 10/10/2023 | 10/11/2023 | 2.00 | 10/11/2023 | 1.00 | Industrial Service | $78,112.83 | 78,112.83 |
| 10/10/2023 | 10/10/2023 | 1.00 | 10/10/2023 | 0.00 | Commercial Sales | $8,854.68 | - |
| 10/10/2023 | 10/26/2023 | 17.00 | 10/26/2023 | 16.00 | Residential Sales | $677.09 | 10,833.44 |
| 10/10/2023 | 10/11/2023 | 2.00 | 10/11/2023 | 1.00 | Commercial Sales | $349,553.24 | 349,553.24 |
| 10/10/2023 | 10/10/2023 | 1.00 | 10/10/2023 | 0.00 | Residential Sales | $1,701.87 | - |
| 10/10/2023 | 10/12/2023 | 3.00 | 10/12/2023 | 2.00 | Industrial Service | $4,793.74 | 9,587.48 |
| 10/10/2023 | 10/26/2023 | 17.00 | 10/26/2023 | 16.00 | Other Sales to Public Authority | $505.30 | 8,084.80 |
| 10/10/2023 | 10/11/2023 | 2.00 | 10/11/2023 | 1.00 | Residential Sales | $277,186.59 | 277,186.59 |
| 10/10/2023 | 10/12/2023 | 3.00 | 10/12/2023 | 2.00 | Commercial Sales | $149,205.07 | 298,410.14 |
| 10/10/2023 | 10/27/2023 | 18.00 | 10/27/2023 | 17.00 | Other Sales to Public Authority | $10,886.72 | 185,074.24 |
| 10/10/2023 | 10/13/2023 | 4.00 | 10/13/2023 | 3.00 | Industrial Service | $26,779.43 | 80,338.29 |
| 10/10/2023 | 10/12/2023 | 3.00 | 10/12/2023 | 2.00 | Residential Sales | $9,677.26 | 19,354.52 |
| 10/10/2023 | 10/13/2023 | 4.00 | 10/13/2023 | 3.00 | Commercial Sales | $85,787.37 | 257,362.11 |
| 10/10/2023 | 10/11/2023 | 2.00 | 10/11/2023 | 1.00 | Other Sales to Public Authority | $24,213.54 | 24,213.54 |
| 10/10/2023 | 10/12/2023 | 3.00 | 10/12/2023 | 2.00 | Other Sales to Public Authority | $13,117.62 | 26,235.24 |
| 10/10/2023 | 10/13/2023 | 4.00 | 10/13/2023 | 3.00 | Residential Sales | $871.12 | 2,613.36 |
| 10/11/2023 | 10/26/2023 | 16.00 | 10/26/2023 | 15.00 | Residential Sales | $590.80 | 8,862.00 |
| 10/11/2023 | 10/27/2023 | 17.00 | 10/27/2023 | 16.00 | Commercial Sales | $1,064.56 | 17,032.96 |
| 10/11/2023 | 10/23/2023 | 13.00 | 10/23/2023 | 12.00 | Public Street & Highway Lighting | $86.30 | 1,035.60 |
| 10/11/2023 | 10/12/2023 | 2.00 | 10/12/2023 | 1.00 | Industrial Service | $110,673.31 | 110,673.31 |
| 10/11/2023 | 12/12/2023 | 63.00 | 12/12/2023 | 62.00 | Residential Sales | $33.39 | 2,070.18 |
| 10/11/2023 | 10/11/2023 | 1.00 | 10/11/2023 | 0.00 | Commercial Sales | $1,018.12 | - |
| 10/11/2023 | 10/24/2023 | 14.00 | 10/24/2023 | 13.00 | Public Street & Highway Lighting | $58,959.32 | 766,471.16 |
| 10/11/2023 | 10/26/2023 | 16.00 | 10/26/2023 | 15.00 | Other Sales to Public Authority | $407.16 | 6,107.40 |
| 10/11/2023 | 10/27/2023 | 17.00 | 10/27/2023 | 16.00 | Residential Sales | $175.00 | 2,800.00 |
| 10/11/2023 | 10/12/2023 | 2.00 | 10/12/2023 | 1.00 | Commercial Sales | $202,213.06 | 202,213.06 |
| 10/11/2023 | 10/11/2023 | 1.00 | 10/11/2023 | 0.00 | Residential Sales | $2,021.58 | - |
| 10/11/2023 | 10/13/2023 | 3.00 | 10/13/2023 | 2.00 | Industrial Service | $834,604.27 | 1,669,208.54 |
| 10/11/2023 | 11/20/2023 | 41.00 | 11/20/2023 | 40.00 | Commercial Sales | $8.94 | 357.60 |
| 10/11/2023 | 10/12/2023 | 2.00 | 10/12/2023 | 1.00 | Residential Sales | $490,548.49 | 490,548.49 |
| 10/11/2023 | 10/13/2023 | 3.00 | 10/13/2023 | 2.00 | Commercial Sales | $210,802.93 | 421,605.86 |
| 10/11/2023 | 10/26/2023 | 16.00 | 10/26/2023 | 15.00 | Public Street & Highway Lighting | $10,112.54 | 151,688.10 |
| 10/11/2023 | 10/13/2023 | 3.00 | 10/13/2023 | 2.00 | Residential Sales | $6,549.00 | 13,098.00 |
| 10/11/2023 | 10/12/2023 | 2.00 | 10/12/2023 | 1.00 | Other Sales to Public Authority | $30,330.88 | 30,330.88 |
| 10/11/2023 | 11/8/2023 | 29.00 | 11/8/2023 | 28.00 | Residential Sales | $4.09 | 114.52 |
| 10/11/2023 | 10/13/2023 | 3.00 | 10/13/2023 | 2.00 | Other Sales to Public Authority | $1,802.75 | 3,605.50 |
| 10/11/2023 | 10/11/2023 | 1.00 | 10/11/2023 | 0.00 | Public Street & Highway Lighting | $92.47 | - |
| 10/11/2023 | 11/9/2023 | 30.00 | 11/9/2023 | 29.00 | Residential Sales | $79.69 | 2,311.01 |
| 10/11/2023 | 10/16/2023 | 6.00 | 10/16/2023 | 5.00 | Commercial Sales | $332.90 | 1,664.50 |
| 10/11/2023 | 10/30/2023 | 20.00 | 10/30/2023 | 19.00 | Commercial Sales | $425.15 | 8,077.85 |
| 10/11/2023 | 10/17/2023 | 7.00 | 10/17/2023 | 6.00 | Industrial Service | $11,861.52 | 71,169.12 |
| 10/11/2023 | 1/5/2024 | 87.00 | 1/5/2024 | 86.00 | Residential Sales | $95.95 | 8,251.70 |
| 10/11/2023 | 10/13/2023 | 3.00 | 10/13/2023 | 2.00 | Public Street & Highway Lighting | $42,726.81 | 85,453.62 |
| 10/11/2023 | 10/17/2023 | 7.00 | 10/17/2023 | 6.00 | Commercial Sales | $3,605.46 | 21,632.76 |
| 10/11/2023 | 10/16/2023 | 6.00 | 10/16/2023 | 5.00 | Residential Sales | $1,159.97 | 5,799.85 |
| 10/11/2023 | 10/31/2023 | 21.00 | 10/31/2023 | 20.00 | Commercial Sales | $141.13 | 2,822.60 |
| 10/11/2023 | 10/30/2023 | 20.00 | 10/30/2023 | 19.00 | Residential Sales | $84.17 | 1,599.23 |
| 10/11/2023 | 10/17/2023 | 7.00 | 10/17/2023 | 6.00 | Residential Sales | $323.69 | 1,942.14 |
| 10/11/2023 | 10/18/2023 | 8.00 | 10/18/2023 | 7.00 | Commercial Sales | $18.99 | 132.93 |
| 10/11/2023 | 10/19/2023 | 9.00 | 10/19/2023 | 8.00 | Industrial Service | $32,960.76 | 263,686.08 |
| 10/11/2023 | 10/17/2023 | 7.00 | 10/17/2023 | 6.00 | Other Sales to Public Authority | $12,067.43 | 72,404.58 |
| 10/11/2023 | 10/18/2023 | 8.00 | 10/18/2023 | 7.00 | Residential Sales | $143.88 | 1,007.16 |
| 10/11/2023 | 10/19/2023 | 9.00 | 10/19/2023 | 8.00 | Commercial Sales | $8,162.18 | 65,297.44 |
| 10/11/2023 | 10/19/2023 | 9.00 | 10/19/2023 | 8.00 | Residential Sales | $225.09 | 1,800.72 |
| 10/11/2023 | 10/16/2023 | 6.00 | 10/16/2023 | 5.00 | Public Street & Highway Lighting | $3,698.52 | 18,492.60 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 10/11/2023 | 11/28/2023 | 49.00 | 11/28/2023 | 48.00 | Residential Sales | $6.13 | 294.24 |
| 10/11/2023 | 12/7/2023 | 58.00 | 12/7/2023 | 57.00 | Commercial Sales | $44.19 | 2,518.83 |
| 10/11/2023 | 11/10/2023 | 31.00 | 11/10/2023 | 30.00 | Public Street & Highway Lighting | $952.94 | 28,588.20 |
| 10/11/2023 | 11/13/2023 | 34.00 | 11/13/2023 | 33.00 | Residential Sales | $184.40 | 6,085.20 |
| 10/11/2023 | 12/8/2023 | 59.00 | 12/8/2023 | 58.00 | Commercial Sales | $530.65 | 30,777.70 |
| 10/11/2023 | 11/15/2023 | 36.00 | 11/15/2023 | 35.00 | Commercial Sales | $63.60 | 2,226.00 |
| 10/11/2023 | 10/20/2023 | 10.00 | 10/20/2023 | 9.00 | Residential Sales | $113.80 | 1,024.20 |
| 10/11/2023 | 11/14/2023 | 35.00 | 11/14/2023 | 34.00 | Residential Sales | $159.21 | 5,413.14 |
| 10/11/2023 | 3/4/2024 | 146.00 | 3/4/2024 | 145.00 | Company Use | $321.47 | 46,613.15 |
| 10/11/2023 | 11/15/2023 | 36.00 | 11/15/2023 | 35.00 | Residential Sales | $81.17 | 2,840.95 |
| 10/11/2023 | 5/15/2024 | 218.00 | 5/15/2024 | 217.00 | Residential Sales | $105.76 | 22,949.92 |
| 10/11/2023 | 1/11/2024 | 93.00 | 1/11/2024 | 92.00 | Residential Sales | $112.62 | 10,361.04 |
| 10/11/2023 | 10/24/2023 | 14.00 | 10/24/2023 | 13.00 | Industrial Service | $7,253.55 | 94,296.15 |
| 10/11/2023 | 11/30/2023 | 51.00 | 11/30/2023 | 50.00 | Residential Sales | $15.53 | 776.50 |
| 10/11/2023 | 11/16/2023 | 37.00 | 11/16/2023 | 36.00 | Residential Sales | $96.58 | 3,476.88 |
| 10/11/2023 | 10/23/2023 | 13.00 | 10/23/2023 | 12.00 | Residential Sales | $905.78 | 10,869.36 |
| 10/11/2023 | 10/24/2023 | 14.00 | 10/24/2023 | 13.00 | Commercial Sales | $1,616.88 | 21,019.44 |
| 10/11/2023 | 11/1/2023 | 22.00 | 11/1/2023 | 21.00 | Commercial Sales | $92.98 | 1,952.58 |
| 10/11/2023 | 10/25/2023 | 15.00 | 10/25/2023 | 14.00 | Industrial Service | $200,803.80 | 2,811,253.20 |
| 10/11/2023 | 10/26/2023 | 16.00 | 10/26/2023 | 15.00 | Industrial Service | $60,518.83 | 907,782.45 |
| 10/11/2023 | 10/24/2023 | 14.00 | 10/24/2023 | 13.00 | Residential Sales | $471.89 | 6,134.57 |
| 10/11/2023 | 10/23/2023 | 13.00 | 10/23/2023 | 12.00 | Other Sales to Public Authority | $3,282.48 | 39,389.76 |
| 10/11/2023 | 10/26/2023 | 16.00 | 10/26/2023 | 15.00 | Commercial Sales | $28,147.98 | 422,219.70 |
| 10/11/2023 | 3/1/2024 | 143.00 | 3/1/2024 | 142.00 | Commercial Sales | $17.88 | 2,538.96 |
| 10/12/2023 | 11/17/2023 | 37.00 | 11/17/2023 | 36.00 | Industrial Service | $17,145.85 | 617,250.60 |
| 10/12/2023 | 11/15/2023 | 35.00 | 11/15/2023 | 34.00 | Residential Sales | $26.34 | 895.56 |
| 10/12/2023 | 11/30/2023 | 50.00 | 11/30/2023 | 49.00 | Commercial Sales | $439.20 | 21,520.80 |
| 10/12/2023 | 11/16/2023 | 36.00 | 11/16/2023 | 35.00 | Commercial Sales | $108.53 | 3,798.55 |
| 10/12/2023 | 10/23/2023 | 12.00 | 10/23/2023 | 11.00 | Industrial Service | $7,615.57 | 83,771.27 |
| 10/12/2023 | 11/17/2023 | 37.00 | 11/17/2023 | 36.00 | Commercial Sales | $17,108.46 | 615,904.56 |
| 10/12/2023 | 2/7/2024 | 119.00 | 2/7/2024 | 118.00 | Commercial Sales | $247.23 | 29,173.14 |
| 10/12/2023 | 10/24/2023 | 13.00 | 10/24/2023 | 12.00 | Industrial Service | $45,114.74 | 541,376.88 |
| 10/12/2023 | 11/16/2023 | 36.00 | 11/16/2023 | 35.00 | Residential Sales | $41.49 | 1,452.15 |
| 10/12/2023 | 10/23/2023 | 12.00 | 10/23/2023 | 11.00 | Commercial Sales | $8,422.46 | 92,647.06 |
| 10/12/2023 | 10/24/2023 | 13.00 | 10/24/2023 | 12.00 | Commercial Sales | $31,596.19 | 379,154.28 |
| 10/12/2023 | 10/23/2023 | 12.00 | 10/23/2023 | 11.00 | Residential Sales | $2,815.09 | 30,965.99 |
| 10/12/2023 | 10/25/2023 | 14.00 | 10/25/2023 | 13.00 | Industrial Service | $47,300.32 | 614,904.16 |
| 10/12/2023 | 11/17/2023 | 37.00 | 11/17/2023 | 36.00 | Residential Sales | $85.94 | 3,093.84 |
| 10/12/2023 | 10/25/2023 | 14.00 | 10/25/2023 | 13.00 | Commercial Sales | $26,290.16 | 341,772.08 |
| 10/12/2023 | 10/24/2023 | 13.00 | 10/24/2023 | 12.00 | Residential Sales | $2,185.34 | 26,224.08 |
| 10/12/2023 | 11/1/2023 | 21.00 | 11/1/2023 | 20.00 | Residential Sales | $93.24 | 1,864.80 |
| 10/12/2023 | 10/25/2023 | 14.00 | 10/25/2023 | 13.00 | Residential Sales | $132.37 | 1,720.81 |
| 10/12/2023 | 11/3/2023 | 23.00 | 11/3/2023 | 22.00 | Commercial Sales | $78.26 | 1,721.72 |
| 10/12/2023 | 10/26/2023 | 15.00 | 10/26/2023 | 14.00 | Commercial Sales | $401.58 | 5,622.12 |
| 10/12/2023 | 11/3/2023 | 23.00 | 11/3/2023 | 22.00 | Residential Sales | $6.77 | 148.94 |
| 10/12/2023 | 10/26/2023 | 15.00 | 10/26/2023 | 14.00 | Residential Sales | $36.00 | 504.00 |
| 10/12/2023 | 10/27/2023 | 16.00 | 10/27/2023 | 15.00 | Residential Sales | $45.29 | 679.35 |
| 10/12/2023 | 12/13/2023 | 63.00 | 12/13/2023 | 62.00 | Commercial Sales | $35.76 | 2,217.12 |
| 10/12/2023 | 10/12/2023 | 1.00 | 10/12/2023 | 0.00 | Commercial Sales | $497.95 | - |
| 10/12/2023 | 10/13/2023 | 2.00 | 10/13/2023 | 1.00 | Industrial Service | $601,628.10 | 601,628.10 |
| 10/12/2023 | 11/20/2023 | 40.00 | 11/20/2023 | 39.00 | Commercial Sales | $70,233.47 | 2,739,105.33 |
| 10/12/2023 | 11/6/2023 | 26.00 | 11/6/2023 | 25.00 | Commercial Sales | $135.26 | 3,381.50 |
| 10/12/2023 | 12/14/2023 | 64.00 | 12/14/2023 | 63.00 | Commercial Sales | $1,745.86 | 109,989.18 |
| 10/12/2023 | 10/13/2023 | 2.00 | 10/13/2023 | 1.00 | Commercial Sales | $642,261.06 | 642,261.06 |
| 10/12/2023 | 10/12/2023 | 1.00 | 10/12/2023 | 0.00 | Residential Sales | $519.17 | - |
| 10/12/2023 | 5/6/2024 | 208.00 | 5/6/2024 | 207.00 | Residential Sales | $187.99 | 38,913.93 |
| 10/12/2023 | 1/2/2024 | 83.00 | 1/2/2024 | 82.00 | Residential Sales | $79.06 | 6,482.92 |
| 10/12/2023 | 10/13/2023 | 2.00 | 10/13/2023 | 1.00 | Residential Sales | $712,121.69 | 712,121.69 |
| 10/12/2023 | 11/7/2023 | 27.00 | 11/7/2023 | 26.00 | Residential Sales | $4.22 | 109.72 |
| 10/12/2023 | 3/5/2024 | 146.00 | 3/5/2024 | 145.00 | Residential Sales | $21.65 | 3,139.25 |
| 10/12/2023 | 10/12/2023 | 1.00 | 10/12/2023 | 0.00 | Other Sales to Public Authority | $18.81 | - |
| 10/12/2023 | 12/30/2023 | 80.00 | 12/30/2023 | 79.00 | Commercial Sales | $828.88 | 65,481.52 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 10/12/2023 | 10/30/2023 | 19.00 | 10/30/2023 | 18.00 | Industrial Service | $7,782.11 | 140,077.98 |
| 10/12/2023 | 10/16/2023 | 5.00 | 10/16/2023 | 4.00 | Industrial Service | $28,781.54 | 115,126.16 |
| 10/12/2023 | 10/13/2023 | 2.00 | 10/13/2023 | 1.00 | Other Sales to Public Authority | $1,576.38 | 1,576.38 |
| 10/12/2023 | 10/16/2023 | 5.00 | 10/16/2023 | 4.00 | Commercial Sales | $71,149.62 | 284,598.48 |
| 10/12/2023 | 10/30/2023 | 19.00 | 10/30/2023 | 18.00 | Commercial Sales | $1,141.44 | 20,545.92 |
| 10/12/2023 | 10/17/2023 | 6.00 | 10/17/2023 | 5.00 | Industrial Service | $41,102.30 | 205,511.50 |
| 10/12/2023 | 12/18/2023 | 68.00 | 12/18/2023 | 67.00 | Commercial Sales | $671.61 | 44,997.87 |
| 10/12/2023 | 10/16/2023 | 5.00 | 10/16/2023 | 4.00 | Residential Sales | $7,811.72 | 31,246.88 |
| 10/12/2023 | 10/17/2023 | 6.00 | 10/17/2023 | 5.00 | Commercial Sales | $150,166.87 | 750,834.35 |
| 10/12/2023 | 10/30/2023 | 19.00 | 10/30/2023 | 18.00 | Residential Sales | $44.96 | 809.28 |
| 10/12/2023 | 10/13/2023 | 2.00 | 10/13/2023 | 1.00 | Public Street & Highway Lighting | $9.17 | 9.17 |
| 10/12/2023 | 10/17/2023 | 6.00 | 10/17/2023 | 5.00 | Residential Sales | $1,026.09 | 5,130.45 |
| 10/12/2023 | 10/18/2023 | 7.00 | 10/18/2023 | 6.00 | Commercial Sales | $890.78 | 5,344.68 |
| 10/12/2023 | 10/16/2023 | 5.00 | 10/16/2023 | 4.00 | Other Sales to Public Authority | $0.72 | 2.88 |
| 10/12/2023 | 1/8/2024 | 89.00 | 1/8/2024 | 88.00 | Residential Sales | $32.55 | 2,864.40 |
| 10/12/2023 | 10/18/2023 | 7.00 | 10/18/2023 | 6.00 | Residential Sales | $29.88 | 179.28 |
| 10/12/2023 | 10/19/2023 | 8.00 | 10/19/2023 | 7.00 | Residential Sales | $148.18 | 1,037.26 |
| 10/12/2023 | 11/27/2023 | 47.00 | 11/27/2023 | 46.00 | Residential Sales | $579.30 | 26,647.80 |
| 10/12/2023 | 10/18/2023 | 7.00 | 10/18/2023 | 6.00 | Other Sales to Public Authority | $27.94 | 167.64 |
| 10/12/2023 | 10/16/2023 | 5.00 | 10/16/2023 | 4.00 | Public Street & Highway Lighting | $3.79 | 15.16 |
| 10/12/2023 | 11/28/2023 | 48.00 | 11/28/2023 | 47.00 | Residential Sales | $125.87 | 5,915.89 |
| 10/12/2023 | 12/20/2023 | 70.00 | 12/20/2023 | 69.00 | Commercial Sales | $466.62 | 32,196.78 |
| 10/12/2023 | 11/14/2023 | 34.00 | 11/14/2023 | 33.00 | Industrial Service | $4,932.93 | 162,786.69 |
| 10/12/2023 | 11/14/2023 | 34.00 | 11/14/2023 | 33.00 | Commercial Sales | $19,227.78 | 634,516.74 |
| 10/12/2023 | 10/20/2023 | 9.00 | 10/20/2023 | 8.00 | Commercial Sales | $1,806.56 | 14,452.48 |
| 10/12/2023 | 10/20/2023 | 9.00 | 10/20/2023 | 8.00 | Residential Sales | $177.57 | 1,420.56 |
| 10/12/2023 | 11/14/2023 | 34.00 | 11/14/2023 | 33.00 | Residential Sales | $976.90 | 32,237.70 |
| 10/12/2023 | 11/15/2023 | 35.00 | 11/15/2023 | 34.00 | Commercial Sales | $40,276.47 | 1,369,399.98 |
| 10/13/2023 | 10/25/2023 | 13.00 | 10/25/2023 | 12.00 | Company Use | $0.00 | - |
| 10/13/2023 | 3/25/2024 | 165.00 | 3/25/2024 | 164.00 | Residential Sales | $31.37 | 5,144.68 |
| 10/13/2023 | 10/26/2023 | 14.00 | 10/26/2023 | 13.00 | Company Use | $0.00 | - |
| 10/13/2023 | 12/20/2023 | 69.00 | 12/20/2023 | 68.00 | Commercial Sales | $154.42 | 10,500.56 |
| 10/13/2023 | 12/22/2023 | 71.00 | 12/22/2023 | 70.00 | Industrial Service | $7,405.84 | 518,408.80 |
| 10/13/2023 | 11/14/2023 | 33.00 | 11/14/2023 | 32.00 | Commercial Sales | $11,039.77 | 353,272.64 |
| 10/13/2023 | 11/15/2023 | 34.00 | 11/15/2023 | 33.00 | Commercial Sales | $9,950.90 | 328,379.70 |
| 10/13/2023 | 11/14/2023 | 33.00 | 11/14/2023 | 32.00 | Residential Sales | $28.36 | 907.52 |
| 10/13/2023 | 10/23/2023 | 11.00 | 10/23/2023 | 10.00 | Industrial Service | $8,023.63 | 80,236.30 |
| 10/13/2023 | 11/15/2023 | 34.00 | 11/15/2023 | 33.00 | Residential Sales | $232.69 | 7,678.77 |
| 10/13/2023 | 10/23/2023 | 11.00 | 10/23/2023 | 10.00 | Commercial Sales | $163,449.85 | 1,634,498.50 |
| 10/13/2023 | 2/6/2024 | 117.00 | 2/6/2024 | 116.00 | Residential Sales | $51.28 | 5,948.48 |
| 10/13/2023 | 11/16/2023 | 35.00 | 11/16/2023 | 34.00 | Residential Sales | $53.60 | 1,822.40 |
| 10/13/2023 | 10/24/2023 | 12.00 | 10/24/2023 | 11.00 | Industrial Service | $27,091.90 | 298,010.90 |
| 10/13/2023 | 1/12/2024 | 92.00 | 1/12/2024 | 91.00 | Residential Sales | $408.88 | 37,208.08 |
| 10/13/2023 | 10/23/2023 | 11.00 | 10/23/2023 | 10.00 | Residential Sales | $526,275.84 | 5,262,758.40 |
| 10/13/2023 | 10/24/2023 | 12.00 | 10/24/2023 | 11.00 | Commercial Sales | $287,152.04 | 3,158,672.44 |
| 10/13/2023 | 10/25/2023 | 13.00 | 10/25/2023 | 12.00 | Industrial Service | $2,155.56 | 25,866.72 |
| 10/13/2023 | 11/17/2023 | 36.00 | 11/17/2023 | 35.00 | Residential Sales | $31.44 | 1,100.40 |
| 10/13/2023 | 10/23/2023 | 11.00 | 10/23/2023 | 10.00 | Other Sales to Public Authority | $20,222.20 | 202,222.00 |
| 10/13/2023 | 10/24/2023 | 12.00 | 10/24/2023 | 11.00 | Residential Sales | $2,448.66 | 26,935.26 |
| 10/13/2023 | 10/30/2023 | 18.00 | 10/30/2023 | 17.00 | Company Use | $0.00 | - |
| 10/13/2023 | 10/25/2023 | 13.00 | 10/25/2023 | 12.00 | Commercial Sales | $105,623.83 | 1,267,485.96 |
| 10/13/2023 | 5/1/2024 | 202.00 | 5/1/2024 | 201.00 | Residential Sales | $59.75 | 12,009.75 |
| 10/13/2023 | 10/26/2023 | 14.00 | 10/26/2023 | 13.00 | Industrial Service | $21,163.99 | 275,131.87 |
| 10/13/2023 | 10/25/2023 | 13.00 | 10/25/2023 | 12.00 | Residential Sales | $259.40 | 3,112.80 |
| 10/13/2023 | 10/26/2023 | 14.00 | 10/26/2023 | 13.00 | Commercial Sales | $13,056.43 | 169,733.59 |
| 10/13/2023 | 10/24/2023 | 12.00 | 10/24/2023 | 11.00 | Other Sales to Public Authority | $196.35 | 2,159.85 |
| 10/13/2023 | 10/26/2023 | 14.00 | 10/26/2023 | 13.00 | Residential Sales | $58.22 | 756.86 |
| 10/13/2023 | 10/23/2023 | 11.00 | 10/23/2023 | 10.00 | Public Street & Highway Lighting | $414.84 | 4,148.40 |
| 10/13/2023 | 10/27/2023 | 15.00 | 10/27/2023 | 14.00 | Residential Sales | $278.35 | 3,896.90 |
| 10/13/2023 | 10/27/2023 | 15.00 | 10/27/2023 | 14.00 | Other Sales to Public Authority | $14,335.48 | 200,696.72 |
| 10/13/2023 | 12/20/2023 | 69.00 | 12/20/2023 | 68.00 | Company Use | $0.00 | - |
| 10/13/2023 | 11/7/2023 | 26.00 | 11/7/2023 | 25.00 | Commercial Sales | $116.43 | 2,910.75 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 10/13/2023 | 11/21/2023 | 40.00 | 11/21/2023 | 39.00 | Residential Sales | $36.74 | 1,432.86 |
| 10/13/2023 | 10/30/2023 | 18.00 | 10/30/2023 | 17.00 | Industrial Service | $437.13 | 7,431.21 |
| 10/13/2023 | 10/30/2023 | 18.00 | 10/30/2023 | 17.00 | Commercial Sales | $42,718.48 | 726,214.16 |
| 10/13/2023 | 10/30/2023 | 18.00 | 10/30/2023 | 17.00 | Residential Sales | $659.24 | 11,207.08 |
| 10/13/2023 | 10/16/2023 | 4.00 | 10/16/2023 | 3.00 | Residential Sales | $43.36 | 130.08 |
| 10/13/2023 | 10/17/2023 | 5.00 | 10/17/2023 | 4.00 | Commercial Sales | $3.70 | 14.80 |
| 10/13/2023 | 10/23/2023 | 11.00 | 10/23/2023 | 10.00 | Other Public Authority Transportation On | $36.04 | 360.40 |
| 10/13/2023 | 10/23/2023 | 11.00 | 10/23/2023 | 10.00 | Company Use | $0.00 | - |
| 10/13/2023 | 10/24/2023 | 12.00 | 10/24/2023 | 11.00 | Company Use | -$9,028.10 | (99,309.10) |
| 10/14/2023 | 10/16/2023 | 3.00 | 10/16/2023 | 2.00 | Residential Sales | $19.83 | 39.66 |
| 10/14/2023 | 10/23/2023 | 10.00 | 10/23/2023 | 9.00 | Commercial Sales | $8.49 | 76.41 |
| 10/14/2023 | 10/23/2023 | 10.00 | 10/23/2023 | 9.00 | Residential Sales | $391.25 | 3,521.25 |
| 10/14/2023 | 10/24/2023 | 11.00 | 10/24/2023 | 10.00 | Commercial Sales | $4.38 | 43.80 |
| 10/15/2023 | 11/3/2023 | 20.00 | 11/3/2023 | 19.00 | Residential Sales | $14.19 | 269.61 |
| 10/15/2023 | 10/27/2023 | 13.00 | 10/27/2023 | 12.00 | Residential Sales | $18.94 | 227.28 |
| 10/15/2023 | 11/9/2023 | 26.00 | 11/9/2023 | 25.00 | Commercial Sales | $34.76 | 869.00 |
| 10/15/2023 | 10/16/2023 | 2.00 | 10/16/2023 | 1.00 | Residential Sales | $5.32 | 5.32 |
| 10/15/2023 | 3/28/2024 | 166.00 | 3/28/2024 | 165.00 | Commercial Sales | $691.98 | 114,176.70 |
| 10/15/2023 | 11/13/2023 | 30.00 | 11/13/2023 | 29.00 | Residential Sales | $29.63 | 859.27 |
| 10/15/2023 | 10/23/2023 | 9.00 | 10/23/2023 | 8.00 | Commercial Sales | $1,253.88 | 10,031.04 |
| 10/15/2023 | 10/23/2023 | 9.00 | 10/23/2023 | 8.00 | Residential Sales | $2,531.92 | 20,255.36 |
| 10/15/2023 | 10/24/2023 | 10.00 | 10/24/2023 | 9.00 | Commercial Sales | $20.77 | 186.93 |
| 10/15/2023 | 10/24/2023 | 10.00 | 10/24/2023 | 9.00 | Residential Sales | $13.68 | 123.12 |
| 10/16/2023 | 10/23/2023 | 8.00 | 10/23/2023 | 7.00 | Commercial Sales | $1,253.79 | 8,776.53 |
| 10/16/2023 | 11/17/2023 | 33.00 | 11/17/2023 | 32.00 | Commercial Sales | $31.36 | 1,003.52 |
| 10/16/2023 | 10/23/2023 | 8.00 | 10/23/2023 | 7.00 | Residential Sales | $4,009.48 | 28,066.36 |
| 10/16/2023 | 10/27/2023 | 12.00 | 10/27/2023 | 11.00 | Residential Sales | $87.73 | 965.03 |
| 10/16/2023 | 10/30/2023 | 15.00 | 10/30/2023 | 14.00 | Commercial Sales | $230.91 | 3,232.74 |
| 10/16/2023 | 10/16/2023 | 1.00 | 10/16/2023 | 0.00 | Residential Sales | $4.20 | - |
| 10/16/2023 | 10/17/2023 | 2.00 | 10/17/2023 | 1.00 | Residential Sales | $1.51 | 1.51 |
| 10/16/2023 | 11/10/2023 | 26.00 | 11/10/2023 | 25.00 | Residential Sales | $28.33 | 708.25 |
| 10/17/2023 | 11/10/2023 | 25.00 | 11/10/2023 | 24.00 | Residential Sales | $20.67 | 496.08 |
| 10/17/2023 | 10/23/2023 | 7.00 | 10/23/2023 | 6.00 | Industrial Service | $493.78 | 2,962.68 |
| 10/17/2023 | 4/8/2024 | 175.00 | 4/8/2024 | 174.00 | Commercial Sales | $132.81 | 23,108.94 |
| 10/17/2023 | 11/16/2023 | 31.00 | 11/16/2023 | 30.00 | Commercial Sales | $40.79 | 1,223.70 |
| 10/17/2023 | 10/23/2023 | 7.00 | 10/23/2023 | 6.00 | Commercial Sales | $106,696.27 | 640,177.62 |
| 10/17/2023 | 10/24/2023 | 8.00 | 10/24/2023 | 7.00 | Industrial Service | $342.85 | 2,399.95 |
| 10/17/2023 | 11/16/2023 | 31.00 | 11/16/2023 | 30.00 | Residential Sales | $477.75 | 14,332.50 |
| 10/17/2023 | 11/17/2023 | 32.00 | 11/17/2023 | 31.00 | Commercial Sales | $44.99 | 1,394.69 |
| 10/17/2023 | 2/7/2024 | 114.00 | 2/7/2024 | 113.00 | Commercial Sales | $640.73 | 72,402.49 |
| 10/17/2023 | 10/23/2023 | 7.00 | 10/23/2023 | 6.00 | Residential Sales | $590,438.24 | 3,542,629.44 |
| 10/17/2023 | 10/24/2023 | 8.00 | 10/24/2023 | 7.00 | Commercial Sales | $22,716.77 | 159,017.39 |
| 10/17/2023 | 11/17/2023 | 32.00 | 11/17/2023 | 31.00 | Residential Sales | $507.64 | 15,736.84 |
| 10/17/2023 | 10/23/2023 | 7.00 | 10/23/2023 | 6.00 | Other Sales to Public Authority | $19,336.15 | 116,016.90 |
| 10/17/2023 | 10/24/2023 | 8.00 | 10/24/2023 | 7.00 | Residential Sales | $3,669.46 | 25,686.22 |
| 10/17/2023 | 11/1/2023 | 16.00 | 11/1/2023 | 15.00 | Residential Sales | $21.89 | 328.35 |
| 10/17/2023 | 10/25/2023 | 9.00 | 10/25/2023 | 8.00 | Commercial Sales | $20,247.20 | 161,977.60 |
| 10/17/2023 | 11/2/2023 | 17.00 | 11/2/2023 | 16.00 | Commercial Sales | $322.86 | 5,165.76 |
| 10/17/2023 | 10/24/2023 | 8.00 | 10/24/2023 | 7.00 | Other Sales to Public Authority | $43,088.00 | 301,616.00 |
| 10/17/2023 | 10/26/2023 | 10.00 | 10/26/2023 | 9.00 | Commercial Sales | $542.43 | 4,881.87 |
| 10/17/2023 | 10/25/2023 | 9.00 | 10/25/2023 | 8.00 | Residential Sales | $827.27 | 6,618.16 |
| 10/17/2023 | 10/26/2023 | 10.00 | 10/26/2023 | 9.00 | Residential Sales | $741.25 | 6,671.25 |
| 10/17/2023 | 10/23/2023 | 7.00 | 10/23/2023 | 6.00 | Public Street & Highway Lighting | $3.29 | 19.74 |
| 10/17/2023 | 10/27/2023 | 11.00 | 10/27/2023 | 10.00 | Residential Sales | $492.21 | 4,922.10 |
| 10/17/2023 | 11/20/2023 | 35.00 | 11/20/2023 | 34.00 | Commercial Sales | $88.34 | 3,003.56 |
| 10/17/2023 | 6/14/2024 | 242.00 | 6/14/2024 | 241.00 | Residential Sales | $27.50 | 6,627.50 |
| 10/17/2023 | 11/8/2023 | 23.00 | 11/8/2023 | 22.00 | Residential Sales | $14.31 | 314.82 |
| 10/17/2023 | 10/30/2023 | 14.00 | 10/30/2023 | 13.00 | Industrial Service | $43,687.48 | 567,937.24 |
| 10/17/2023 | 10/30/2023 | 14.00 | 10/30/2023 | 13.00 | Commercial Sales | $1,404.34 | 18,256.42 |
| 10/17/2023 | 11/9/2023 | 24.00 | 11/9/2023 | 23.00 | Residential Sales | $136.99 | 3,150.77 |
| 10/17/2023 | 10/30/2023 | 14.00 | 10/30/2023 | 13.00 | Residential Sales | $358.83 | 4,664.79 |
| 10/17/2023 | 12/19/2023 | 64.00 | 12/19/2023 | 63.00 | Commercial Sales | $35.76 | 2,252.88 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 10/18/2023 | 10/30/2023 | 13.00 | 10/30/2023 | 12.00 | Industrial Service | $16,298.37 | 195,580.44 |
| 10/18/2023 | 10/30/2023 | 13.00 | 10/30/2023 | 12.00 | Commercial Sales | $4,228.68 | 50,744.16 |
| 10/18/2023 | 12/19/2023 | 63.00 | 12/19/2023 | 62.00 | Commercial Sales | $11,646.21 | 722,065.02 |
| 10/18/2023 | 10/30/2023 | 13.00 | 10/30/2023 | 12.00 | Residential Sales | $591.25 | 7,095.00 |
| 10/18/2023 | 10/31/2023 | 14.00 | 10/31/2023 | 13.00 | Residential Sales | $50.78 | 660.14 |
| 10/18/2023 | 10/19/2023 | 2.00 | 10/19/2023 | 1.00 | Residential Sales | $33.86 | 33.86 |
| 10/18/2023 | 12/20/2023 | 64.00 | 12/20/2023 | 63.00 | Commercial Sales | $351.42 | 22,139.46 |
| 10/18/2023 | 11/14/2023 | 28.00 | 11/14/2023 | 27.00 | Residential Sales | $38.38 | 1,036.26 |
| 10/18/2023 | 10/23/2023 | 6.00 | 10/23/2023 | 5.00 | Industrial Service | $2,333.94 | 11,669.70 |
| 10/18/2023 | 4/8/2024 | 174.00 | 4/8/2024 | 173.00 | Commercial Sales | $102.30 | 17,697.90 |
| 10/18/2023 | 10/23/2023 | 6.00 | 10/23/2023 | 5.00 | Commercial Sales | $198,931.32 | 994,656.60 |
| 10/18/2023 | 10/24/2023 | 7.00 | 10/24/2023 | 6.00 | Industrial Service | $97,817.70 | 586,906.20 |
| 10/18/2023 | 11/17/2023 | 31.00 | 11/17/2023 | 30.00 | Commercial Sales | $176.14 | 5,284.20 |
| 10/18/2023 | 10/23/2023 | 6.00 | 10/23/2023 | 5.00 | Residential Sales | $823,227.10 | 4,116,135.50 |
| 10/18/2023 | 10/24/2023 | 7.00 | 10/24/2023 | 6.00 | Commercial Sales | $119,091.17 | 714,547.02 |
| 10/18/2023 | 11/17/2023 | 31.00 | 11/17/2023 | 30.00 | Residential Sales | $784.97 | 23,549.10 |
| 10/18/2023 | 10/25/2023 | 8.00 | 10/25/2023 | 7.00 | Industrial Service | $49,424.51 | 345,971.57 |
| 10/18/2023 | 10/24/2023 | 7.00 | 10/24/2023 | 6.00 | Residential Sales | $3,690.97 | 22,145.82 |
| 10/18/2023 | 10/25/2023 | 8.00 | 10/25/2023 | 7.00 | Commercial Sales | $214,753.79 | 1,503,276.53 |
| 10/18/2023 | 10/26/2023 | 9.00 | 10/26/2023 | 8.00 | Industrial Service | $38,572.18 | 308,577.44 |
| 10/18/2023 | 10/23/2023 | 6.00 | 10/23/2023 | 5.00 | Other Sales to Public Authority | $8,292.30 | 41,461.50 |
| 10/18/2023 | 10/25/2023 | 8.00 | 10/25/2023 | 7.00 | Residential Sales | $2,605.00 | 18,235.00 |
| 10/18/2023 | 11/16/2023 | 30.00 | 11/16/2023 | 29.00 | Public Street & Highway Lighting | $0.05 | 1.45 |
| 10/18/2023 | 12/11/2023 | 55.00 | 12/11/2023 | 54.00 | Commercial Sales | $150.84 | 8,145.36 |
| 10/18/2023 | 10/24/2023 | 7.00 | 10/24/2023 | 6.00 | Other Sales to Public Authority | $444.87 | 2,669.22 |
| 10/18/2023 | 11/2/2023 | 16.00 | 11/2/2023 | 15.00 | Residential Sales | $126.51 | 1,897.65 |
| 10/18/2023 | 10/23/2023 | 6.00 | 10/23/2023 | 5.00 | Public Street & Highway Lighting | $111.21 | 556.05 |
| 10/18/2023 | 10/26/2023 | 9.00 | 10/26/2023 | 8.00 | Residential Sales | $4,356.10 | 34,848.80 |
| 10/18/2023 | 10/27/2023 | 10.00 | 10/27/2023 | 9.00 | Commercial Sales | $1,321.96 | 11,897.64 |
| 10/18/2023 | 10/27/2023 | 10.00 | 10/27/2023 | 9.00 | Residential Sales | $619.10 | 5,571.90 |
| 10/18/2023 | 3/4/2024 | 139.00 | 3/4/2024 | 138.00 | Commercial Sales | $41.72 | 5,757.36 |
| 10/18/2023 | 11/20/2023 | 34.00 | 11/20/2023 | 33.00 | Residential Sales | $254.90 | 8,411.70 |
| 10/19/2023 | 10/26/2023 | 8.00 | 10/26/2023 | 7.00 | Residential Sales | $264.30 | 1,850.10 |
| 10/19/2023 | 10/25/2023 | 7.00 | 10/25/2023 | 6.00 | Other Sales to Public Authority | $23,047.34 | 138,284.04 |
| 10/19/2023 | 10/27/2023 | 9.00 | 10/27/2023 | 8.00 | Commercial Sales | $245.74 | 1,965.92 |
| 10/19/2023 | 10/23/2023 | 5.00 | 10/23/2023 | 4.00 | Public Street & Highway Lighting | $54.80 | 219.20 |
| 10/19/2023 | 10/27/2023 | 9.00 | 10/27/2023 | 8.00 | Residential Sales | $645.91 | 5,167.28 |
| 10/19/2023 | 10/24/2023 | 6.00 | 10/24/2023 | 5.00 | Public Street & Highway Lighting | $159.33 | 796.65 |
| 10/19/2023 | 1/2/2024 | 76.00 | 1/2/2024 | 75.00 | Commercial Sales | $2,399.08 | 179,931.00 |
| 10/19/2023 | 11/20/2023 | 33.00 | 11/20/2023 | 32.00 | Commercial Sales | $784.21 | 25,094.72 |
| 10/19/2023 | 11/20/2023 | 33.00 | 11/20/2023 | 32.00 | Residential Sales | $290.18 | 9,285.76 |
| 10/19/2023 | 11/21/2023 | 34.00 | 11/21/2023 | 33.00 | Residential Sales | $179.01 | 5,907.33 |
| 10/19/2023 | 10/30/2023 | 12.00 | 10/30/2023 | 11.00 | Commercial Sales | $21,030.68 | 231,337.48 |
| 10/19/2023 | 11/9/2023 | 22.00 | 11/9/2023 | 21.00 | Residential Sales | $131.95 | 2,770.95 |
| 10/19/2023 | 10/30/2023 | 12.00 | 10/30/2023 | 11.00 | Residential Sales | $312.64 | 3,439.04 |
| 10/19/2023 | 10/30/2023 | 12.00 | 10/30/2023 | 11.00 | Other Sales to Public Authority | $5.90 | 64.90 |
| 10/19/2023 | 11/10/2023 | 23.00 | 11/10/2023 | 22.00 | Commercial Sales | $76.10 | 1,674.20 |
| 10/19/2023 | 1/8/2024 | 82.00 | 1/8/2024 | 81.00 | Residential Sales | $116.19 | 9,411.39 |
| 10/19/2023 | 11/28/2023 | 41.00 | 11/28/2023 | 40.00 | Residential Sales | $82.55 | 3,302.00 |
| 10/19/2023 | 12/20/2023 | 63.00 | 12/20/2023 | 62.00 | Residential Sales | $165.85 | 10,282.70 |
| 10/19/2023 | 11/14/2023 | 27.00 | 11/14/2023 | 26.00 | Commercial Sales | $40.44 | 1,051.44 |
| 10/19/2023 | 12/22/2023 | 65.00 | 12/22/2023 | 64.00 | Residential Sales | $284.98 | 18,238.72 |
| 10/19/2023 | 10/23/2023 | 5.00 | 10/23/2023 | 4.00 | Industrial Service | $18,104.94 | 72,419.76 |
| 10/19/2023 | 4/8/2024 | 173.00 | 4/8/2024 | 172.00 | Commercial Sales | $6.01 | 1,033.72 |
| 10/19/2023 | 10/23/2023 | 5.00 | 10/23/2023 | 4.00 | Commercial Sales | $175,854.12 | 703,416.48 |
| 10/19/2023 | 10/24/2023 | 6.00 | 10/24/2023 | 5.00 | Industrial Service | $391.45 | 1,957.25 |
| 10/19/2023 | 10/23/2023 | 5.00 | 10/23/2023 | 4.00 | Residential Sales | $529,120.83 | 2,116,483.32 |
| 10/19/2023 | 10/24/2023 | 6.00 | 10/24/2023 | 5.00 | Commercial Sales | $76,345.85 | 381,729.25 |
| 10/19/2023 | 10/24/2023 | 6.00 | 10/24/2023 | 5.00 | Residential Sales | $3,877.83 | 19,389.15 |
| 10/19/2023 | 10/25/2023 | 7.00 | 10/25/2023 | 6.00 | Commercial Sales | $44,834.17 | 269,005.02 |
| 10/19/2023 | 11/1/2023 | 14.00 | 11/1/2023 | 13.00 | Residential Sales | $91.52 | 1,189.76 |
| 10/19/2023 | 11/2/2023 | 15.00 | 11/2/2023 | 14.00 | Commercial Sales | $4.66 | 65.24 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 10/19/2023 | 10/23/2023 | 5.00 | 10/23/2023 | 4.00 | Other Sales to Public Authority | $10,771.89 | 43,087.56 |
| 10/19/2023 | 10/24/2023 | 6.00 | 10/24/2023 | 5.00 | Other Sales to Public Authority | $381.33 | 1,906.65 |
| 10/19/2023 | 11/2/2023 | 15.00 | 11/2/2023 | 14.00 | Residential Sales | $65.18 | 912.52 |
| 10/19/2023 | 10/26/2023 | 8.00 | 10/26/2023 | 7.00 | Commercial Sales | $18,748.51 | 131,239.57 |
| 10/19/2023 | 10/25/2023 | 7.00 | 10/25/2023 | 6.00 | Residential Sales | $140.16 | 840.96 |
| 10/19/2023 | 10/27/2023 | 9.00 | 10/27/2023 | 8.00 | Industrial Service | $2,443.46 | 19,547.68 |
| 10/20/2023 | 10/23/2023 | 4.00 | 10/23/2023 | 3.00 | Public Street & Highway Lighting | $107.04 | 321.12 |
| 10/20/2023 | 10/27/2023 | 8.00 | 10/27/2023 | 7.00 | Commercial Sales | $3,025.49 | 21,178.43 |
| 10/20/2023 | 10/26/2023 | 7.00 | 10/26/2023 | 6.00 | Residential Sales | $182.63 | 1,095.78 |
| 10/20/2023 | 12/11/2023 | 53.00 | 12/11/2023 | 52.00 | Residential Sales | $138.26 | 7,189.52 |
| 10/20/2023 | 10/27/2023 | 8.00 | 10/27/2023 | 7.00 | Residential Sales | $1,091.60 | 7,641.20 |
| 10/20/2023 | 10/23/2023 | 4.00 | 10/23/2023 | 3.00 | Other Sales to Public Authority | $16,056.98 | 48,170.94 |
| 10/20/2023 | 10/24/2023 | 5.00 | 10/24/2023 | 4.00 | Other Sales to Public Authority | $480.64 | 1,922.56 |
| 10/20/2023 | 11/21/2023 | 33.00 | 11/21/2023 | 32.00 | Commercial Sales | $1,079.54 | 34,545.28 |
| 10/20/2023 | 11/21/2023 | 33.00 | 11/21/2023 | 32.00 | Residential Sales | $316.52 | 10,128.64 |
| 10/20/2023 | 11/22/2023 | 34.00 | 11/22/2023 | 33.00 | Residential Sales | $169.49 | 5,593.17 |
| 10/20/2023 | 10/30/2023 | 11.00 | 10/30/2023 | 10.00 | Commercial Sales | $815.34 | 8,153.40 |
| 10/20/2023 | 10/30/2023 | 11.00 | 10/30/2023 | 10.00 | Residential Sales | $617.68 | 6,176.80 |
| 10/20/2023 | 2/14/2024 | 118.00 | 2/14/2024 | 117.00 | Residential Sales | $47.36 | 5,541.12 |
| 10/20/2023 | 1/8/2024 | 81.00 | 1/8/2024 | 80.00 | Residential Sales | $74.46 | 5,956.80 |
| 10/20/2023 | 1/24/2024 | 97.00 | 1/24/2024 | 96.00 | Residential Sales | $29.02 | 2,785.92 |
| 10/20/2023 | 11/28/2023 | 40.00 | 11/28/2023 | 39.00 | Residential Sales | $333.72 | 13,015.08 |
| 10/20/2023 | 1/25/2024 | 98.00 | 1/25/2024 | 97.00 | Residential Sales | $61.24 | 5,940.28 |
| 10/20/2023 | 10/23/2023 | 4.00 | 10/23/2023 | 3.00 | Commercial Sales | $114,142.92 | 342,428.76 |
| 10/20/2023 | 10/23/2023 | 4.00 | 10/23/2023 | 3.00 | Residential Sales | $771,376.94 | 2,314,130.82 |
| 10/20/2023 | 10/24/2023 | 5.00 | 10/24/2023 | 4.00 | Commercial Sales | $29,774.24 | 119,096.96 |
| 10/20/2023 | 10/24/2023 | 5.00 | 10/24/2023 | 4.00 | Residential Sales | $5,600.39 | 22,401.56 |
| 10/20/2023 | 10/25/2023 | 6.00 | 10/25/2023 | 5.00 | Commercial Sales | $42,025.90 | 210,129.50 |
| 10/20/2023 | 11/1/2023 | 13.00 | 11/1/2023 | 12.00 | Residential Sales | $31.12 | 373.44 |
| 10/20/2023 | 10/26/2023 | 7.00 | 10/26/2023 | 6.00 | Commercial Sales | $29.67 | 178.02 |
| 10/20/2023 | 10/25/2023 | 6.00 | 10/25/2023 | 5.00 | Residential Sales | $596.61 | 2,983.05 |
| 10/20/2023 | 10/27/2023 | 8.00 | 10/27/2023 | 7.00 | Industrial Service | $35.76 | 250.32 |
| 10/21/2023 | 10/23/2023 | 3.00 | 10/23/2023 | 2.00 | Residential Sales | $876.46 | 1,752.92 |
| 10/21/2023 | 11/1/2023 | 12.00 | 11/1/2023 | 11.00 | Commercial Sales | $304.55 | 3,350.05 |
| 10/21/2023 | 10/24/2023 | 4.00 | 10/24/2023 | 3.00 | Residential Sales | $343.97 | 1,031.91 |
| 10/21/2023 | 10/30/2023 | 10.00 | 10/30/2023 | 9.00 | Residential Sales | $46.54 | 418.86 |
| 10/22/2023 | 4/2/2024 | 164.00 | 4/2/2024 | 163.00 | Residential Sales | $16.20 | 2,640.60 |
| 10/22/2023 | 4/3/2024 | 165.00 | 4/3/2024 | 164.00 | Residential Sales | $12.72 | 2,086.08 |
| 10/22/2023 | 11/13/2023 | 23.00 | 11/13/2023 | 22.00 | Residential Sales | $47.51 | 1,045.22 |
| 10/22/2023 | 12/22/2023 | 62.00 | 12/22/2023 | 61.00 | Commercial Sales | $172.13 | 10,499.93 |
| 10/22/2023 | 10/23/2023 | 2.00 | 10/23/2023 | 1.00 | Commercial Sales | $60.84 | 60.84 |
| 10/22/2023 | 10/23/2023 | 2.00 | 10/23/2023 | 1.00 | Residential Sales | $2,739.19 | 2,739.19 |
| 10/22/2023 | 10/24/2023 | 3.00 | 10/24/2023 | 2.00 | Commercial Sales | $24.29 | 48.58 |
| 10/22/2023 | 10/24/2023 | 3.00 | 10/24/2023 | 2.00 | Residential Sales | $401.80 | 803.60 |
| 10/22/2023 | 10/26/2023 | 5.00 | 10/26/2023 | 4.00 | Residential Sales | $60.31 | 241.24 |
| 10/23/2023 | 11/22/2023 | 31.00 | 11/22/2023 | 30.00 | Residential Sales | $268.03 | 8,040.90 |
| 10/23/2023 | 10/26/2023 | 4.00 | 10/26/2023 | 3.00 | Other Sales to Public Authority | $13,768.48 | 41,305.44 |
| 10/23/2023 | 10/27/2023 | 5.00 | 10/27/2023 | 4.00 | Other Sales to Public Authority | $18,246.70 | 72,986.80 |
| 10/23/2023 | 10/30/2023 | 8.00 | 10/30/2023 | 7.00 | Commercial Sales | $2,169.69 | 15,187.83 |
| 10/23/2023 | 10/30/2023 | 8.00 | 10/30/2023 | 7.00 | Residential Sales | $1,899.34 | 13,295.38 |
| 10/23/2023 | 10/31/2023 | 9.00 | 10/31/2023 | 8.00 | Commercial Sales | $214.06 | 1,712.48 |
| 10/23/2023 | 12/13/2023 | 52.00 | 12/13/2023 | 51.00 | Other Sales to Public Authority | $118.00 | 6,018.00 |
| 10/23/2023 | 10/31/2023 | 9.00 | 10/31/2023 | 8.00 | Residential Sales | $115.78 | 926.24 |
| 10/23/2023 | 11/10/2023 | 19.00 | 11/10/2023 | 18.00 | Residential Sales | $62.85 | 1,131.30 |
| 10/23/2023 | 11/28/2023 | 37.00 | 11/28/2023 | 36.00 | Commercial Sales | $842.32 | 30,323.52 |
| 10/23/2023 | 12/20/2023 | 59.00 | 12/20/2023 | 58.00 | Commercial Sales | $142.04 | 8,238.32 |
| 10/23/2023 | 12/5/2023 | 44.00 | 12/5/2023 | 43.00 | Residential Sales | $21.14 | 909.02 |
| 10/23/2023 | 10/30/2023 | 8.00 | 10/30/2023 | 7.00 | Other Sales to Public Authority | $150.86 | 1,056.02 |
| 10/23/2023 | 11/14/2023 | 23.00 | 11/14/2023 | 22.00 | Commercial Sales | $399.61 | 8,791.42 |
| 10/23/2023 | 12/22/2023 | 61.00 | 12/22/2023 | 60.00 | Commercial Sales | $79.33 | 4,759.80 |
| 10/23/2023 | 11/13/2023 | 22.00 | 11/13/2023 | 21.00 | Residential Sales | $52.71 | 1,106.91 |
| 10/23/2023 | 10/24/2023 | 2.00 | 10/24/2023 | 1.00 | Industrial Service | $87,179.60 | 87,179.60 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 10/23/2023 | 10/23/2023 | 1.00 | 10/23/2023 | 0.00 | Commercial Sales | $5,013.89 | - |
| 10/23/2023 | 10/24/2023 | 2.00 | 10/24/2023 | 1.00 | Commercial Sales | $353,011.69 | 353,011.69 |
| 10/23/2023 | 10/23/2023 | 1.00 | 10/23/2023 | 0.00 | Residential Sales | $4,661.45 | - |
| 10/23/2023 | 10/25/2023 | 3.00 | 10/25/2023 | 2.00 | Industrial Service | $4,581.53 | 9,163.06 |
| 10/23/2023 | 11/17/2023 | 26.00 | 11/17/2023 | 25.00 | Residential Sales | $5.35 | 133.75 |
| 10/23/2023 | 10/24/2023 | 2.00 | 10/24/2023 | 1.00 | Residential Sales | $764,373.66 | 764,373.66 |
| 10/23/2023 | 10/25/2023 | 3.00 | 10/25/2023 | 2.00 | Commercial Sales | $41,837.29 | 83,674.58 |
| 10/23/2023 | 4/24/2024 | 185.00 | 4/24/2024 | 184.00 | Residential Sales | $42.56 | 7,831.04 |
| 10/23/2023 | 11/1/2023 | 10.00 | 11/1/2023 | 9.00 | Residential Sales | $28.32 | 254.88 |
| 10/23/2023 | 10/26/2023 | 4.00 | 10/26/2023 | 3.00 | Industrial Service | $30,431.63 | 91,294.89 |
| 10/23/2023 | 10/25/2023 | 3.00 | 10/25/2023 | 2.00 | Residential Sales | $9,240.23 | 18,480.46 |
| 10/23/2023 | 10/26/2023 | 4.00 | 10/26/2023 | 3.00 | Commercial Sales | $76,339.88 | 229,019.64 |
| 10/23/2023 | 10/26/2023 | 4.00 | 10/26/2023 | 3.00 | Residential Sales | $961.53 | 2,884.59 |
| 10/23/2023 | 10/23/2023 | 1.00 | 10/23/2023 | 0.00 | Public Street & Highway Lighting | $20.81 | - |
| 10/23/2023 | 10/27/2023 | 5.00 | 10/27/2023 | 4.00 | Residential Sales | $1,210.97 | 4,843.88 |
| 10/23/2023 | 12/13/2023 | 52.00 | 12/13/2023 | 51.00 | Commercial Sales | $411.49 | 20,985.99 |
| 10/23/2023 | 12/14/2023 | 53.00 | 12/14/2023 | 52.00 | Commercial Sales | $248.87 | 12,941.24 |
| 10/23/2023 | 10/23/2023 | 1.00 | 10/23/2023 | 0.00 | Other Sales to Public Authority | $8.77 | - |
| 10/23/2023 | 10/24/2023 | 2.00 | 10/24/2023 | 1.00 | Other Sales to Public Authority | $9,428.07 | 9,428.07 |
| 10/23/2023 | 11/6/2023 | 15.00 | 11/6/2023 | 14.00 | Residential Sales | $91.06 | 1,274.84 |
| 10/23/2023 | 10/25/2023 | 3.00 | 10/25/2023 | 2.00 | Other Sales to Public Authority | $3,150.87 | 6,301.74 |
| 10/24/2023 | 10/26/2023 | 3.00 | 10/26/2023 | 2.00 | Residential Sales | $9,053.19 | 18,106.38 |
| 10/24/2023 | 10/27/2023 | 4.00 | 10/27/2023 | 3.00 | Commercial Sales | $132,157.92 | 396,473.76 |
| 10/24/2023 | 10/27/2023 | 4.00 | 10/27/2023 | 3.00 | Residential Sales | $855.50 | 2,566.50 |
| 10/24/2023 | 10/24/2023 | 1.00 | 10/24/2023 | 0.00 | Public Street & Highway Lighting | $11.02 | - |
| 10/24/2023 | 11/6/2023 | 14.00 | 11/6/2023 | 13.00 | Residential Sales | $63.29 | 822.77 |
| 10/24/2023 | 10/24/2023 | 1.00 | 10/24/2023 | 0.00 | Other Sales to Public Authority | $252.19 | - |
| 10/24/2023 | 10/25/2023 | 2.00 | 10/25/2023 | 1.00 | Other Sales to Public Authority | $28,159.31 | 28,159.31 |
| 10/24/2023 | 11/7/2023 | 15.00 | 11/7/2023 | 14.00 | Residential Sales | $19.92 | 278.88 |
| 10/24/2023 | 3/5/2024 | 134.00 | 3/5/2024 | 133.00 | Residential Sales | $44.80 | 5,958.40 |
| 10/24/2023 | 10/26/2023 | 3.00 | 10/26/2023 | 2.00 | Other Sales to Public Authority | $11,503.52 | 23,007.04 |
| 10/24/2023 | 10/30/2023 | 7.00 | 10/30/2023 | 6.00 | Commercial Sales | $2,627.26 | 15,763.56 |
| 10/24/2023 | 10/31/2023 | 8.00 | 10/31/2023 | 7.00 | Industrial Service | $87.63 | 613.41 |
| 10/24/2023 | 10/31/2023 | 8.00 | 10/31/2023 | 7.00 | Commercial Sales | $4,607.16 | 32,250.12 |
| 10/24/2023 | 10/30/2023 | 7.00 | 10/30/2023 | 6.00 | Residential Sales | $465.65 | 2,793.90 |
| 10/24/2023 | 10/31/2023 | 8.00 | 10/31/2023 | 7.00 | Residential Sales | $901.55 | 6,310.85 |
| 10/24/2023 | 11/27/2023 | 35.00 | 11/27/2023 | 34.00 | Commercial Sales | $898.01 | 30,532.34 |
| 10/24/2023 | 11/27/2023 | 35.00 | 11/27/2023 | 34.00 | Residential Sales | $438.68 | 14,915.12 |
| 10/24/2023 | 11/29/2023 | 37.00 | 11/29/2023 | 36.00 | Commercial Sales | $23.83 | 857.88 |
| 10/24/2023 | 11/29/2023 | 37.00 | 11/29/2023 | 36.00 | Residential Sales | $56.35 | 2,028.60 |
| 10/24/2023 | 10/30/2023 | 7.00 | 10/30/2023 | 6.00 | Other Sales to Public Authority | $2,814.49 | 16,886.94 |
| 10/24/2023 | 11/13/2023 | 21.00 | 11/13/2023 | 20.00 | Commercial Sales | $1,776.90 | 35,538.00 |
| 10/24/2023 | 10/31/2023 | 8.00 | 10/31/2023 | 7.00 | Other Sales to Public Authority | $11,503.11 | 80,521.77 |
| 10/24/2023 | 3/29/2024 | 158.00 | 3/29/2024 | 157.00 | Commercial Sales | $2,940.54 | 461,664.78 |
| 10/24/2023 | 11/14/2023 | 22.00 | 11/14/2023 | 21.00 | Commercial Sales | $5,409.35 | 113,596.35 |
| 10/24/2023 | 11/14/2023 | 22.00 | 11/14/2023 | 21.00 | Residential Sales | $211.85 | 4,448.85 |
| 10/24/2023 | 10/25/2023 | 2.00 | 10/25/2023 | 1.00 | Industrial Service | $62,250.29 | 62,250.29 |
| 10/24/2023 | 10/24/2023 | 1.00 | 10/24/2023 | 0.00 | Commercial Sales | $6,344.41 | - |
| 10/24/2023 | 10/25/2023 | 2.00 | 10/25/2023 | 1.00 | Commercial Sales | $402,296.25 | 402,296.25 |
| 10/24/2023 | 10/24/2023 | 1.00 | 10/24/2023 | 0.00 | Residential Sales | $1,434.86 | - |
| 10/24/2023 | 10/26/2023 | 3.00 | 10/26/2023 | 2.00 | Industrial Service | $9,642.53 | 19,285.06 |
| 10/24/2023 | 11/1/2023 | 9.00 | 11/1/2023 | 8.00 | Residential Sales | $43.51 | 348.08 |
| 10/24/2023 | 11/2/2023 | 10.00 | 11/2/2023 | 9.00 | Commercial Sales | $1,939.74 | 17,457.66 |
| 10/24/2023 | 10/25/2023 | 2.00 | 10/25/2023 | 1.00 | Residential Sales | $602,657.66 | 602,657.66 |
| 10/24/2023 | 10/26/2023 | 3.00 | 10/26/2023 | 2.00 | Commercial Sales | $127,056.42 | 254,112.84 |
| 10/24/2023 | 11/2/2023 | 10.00 | 11/2/2023 | 9.00 | Residential Sales | $43.85 | 394.65 |
| 10/24/2023 | 10/27/2023 | 4.00 | 10/27/2023 | 3.00 | Industrial Service | $30,066.98 | 90,200.94 |
| 10/25/2023 | 11/16/2023 | 23.00 | 11/16/2023 | 22.00 | Commercial Sales | $307.39 | 6,762.58 |
| 10/25/2023 | 11/15/2023 | 22.00 | 11/15/2023 | 21.00 | Residential Sales | $69.45 | 1,458.45 |
| 10/25/2023 | 1/11/2024 | 79.00 | 1/11/2024 | 78.00 | Residential Sales | $44.22 | 3,449.16 |
| 10/25/2023 | 11/30/2023 | 37.00 | 11/30/2023 | 36.00 | Commercial Sales | $80.72 | 2,905.92 |
| 10/25/2023 | 11/1/2023 | 8.00 | 11/1/2023 | 7.00 | Industrial Service | $94.97 | 664.79 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 10/25/2023 | 11/1/2023 | 8.00 | 11/1/2023 | 7.00 | Commercial Sales | $5,225.63 | 36,579.41 |
| 10/25/2023 | 10/25/2023 | 1.00 | 10/25/2023 | 0.00 | Commercial Sales | $19,755.58 | - |
| 10/25/2023 | 11/1/2023 | 8.00 | 11/1/2023 | 7.00 | Residential Sales | $2,754.93 | 19,284.51 |
| 10/25/2023 | 10/26/2023 | 2.00 | 10/26/2023 | 1.00 | Industrial Service | $93,978.84 | 93,978.84 |
| 10/25/2023 | 11/2/2023 | 9.00 | 11/2/2023 | 8.00 | Commercial Sales | $4,102.38 | 32,819.04 |
| 10/25/2023 | 10/26/2023 | 2.00 | 10/26/2023 | 1.00 | Commercial Sales | $929,639.07 | 929,639.07 |
| 10/25/2023 | 11/16/2023 | 23.00 | 11/16/2023 | 22.00 | Public Street & Highway Lighting | $4,275.35 | 94,057.70 |
| 10/25/2023 | 10/25/2023 | 1.00 | 10/25/2023 | 0.00 | Residential Sales | $2,201.34 | - |
| 10/25/2023 | 10/27/2023 | 3.00 | 10/27/2023 | 2.00 | Industrial Service | $571.35 | 1,142.70 |
| 10/25/2023 | 11/2/2023 | 9.00 | 11/2/2023 | 8.00 | Residential Sales | $30.78 | 246.24 |
| 10/25/2023 | 11/3/2023 | 10.00 | 11/3/2023 | 9.00 | Commercial Sales | $47.66 | 428.94 |
| 10/25/2023 | 10/26/2023 | 2.00 | 10/26/2023 | 1.00 | Residential Sales | $634,819.71 | 634,819.71 |
| 10/25/2023 | 10/27/2023 | 3.00 | 10/27/2023 | 2.00 | Commercial Sales | $330,684.30 | 661,368.60 |
| 10/25/2023 | 12/28/2023 | 65.00 | 12/28/2023 | 64.00 | Residential Sales | $21.21 | 1,357.44 |
| 10/25/2023 | 10/27/2023 | 3.00 | 10/27/2023 | 2.00 | Residential Sales | $8,603.80 | 17,207.60 |
| 10/25/2023 | 11/1/2023 | 8.00 | 11/1/2023 | 7.00 | Public Street & Highway Lighting | $3,353.86 | 23,477.02 |
| 10/25/2023 | 10/25/2023 | 1.00 | 10/25/2023 | 0.00 | Public Street & Highway Lighting | $4,668.06 | - |
| 10/25/2023 | 10/26/2023 | 2.00 | 10/26/2023 | 1.00 | Public Street & Highway Lighting | $1,285.20 | 1,285.20 |
| 10/25/2023 | 10/25/2023 | 1.00 | 10/25/2023 | 0.00 | Other Sales to Public Authority | $70.79 | - |
| 10/25/2023 | 11/21/2023 | 28.00 | 11/21/2023 | 27.00 | Residential Sales | $43.42 | 1,172.34 |
| 10/25/2023 | 11/7/2023 | 14.00 | 11/7/2023 | 13.00 | Residential Sales | $293.40 | 3,814.20 |
| 10/25/2023 | 10/26/2023 | 2.00 | 10/26/2023 | 1.00 | Other Sales to Public Authority | $53,749.05 | 53,749.05 |
| 10/25/2023 | 10/27/2023 | 3.00 | 10/27/2023 | 2.00 | Other Sales to Public Authority | $2,692.30 | 5,384.60 |
| 10/25/2023 | 10/30/2023 | 6.00 | 10/30/2023 | 5.00 | Commercial Sales | $2,272.79 | 11,363.95 |
| 10/25/2023 | 10/31/2023 | 7.00 | 10/31/2023 | 6.00 | Commercial Sales | $2,973.94 | 17,843.64 |
| 10/25/2023 | 10/30/2023 | 6.00 | 10/30/2023 | 5.00 | Residential Sales | $2,407.90 | 12,039.50 |
| 10/25/2023 | 12/13/2023 | 50.00 | 12/13/2023 | 49.00 | Other Sales to Public Authority | $474.83 | 23,266.67 |
| 10/25/2023 | 10/31/2023 | 7.00 | 10/31/2023 | 6.00 | Residential Sales | $872.26 | 5,233.56 |
| 10/25/2023 | 11/28/2023 | 35.00 | 11/28/2023 | 34.00 | Commercial Sales | $121.90 | 4,144.60 |
| 10/25/2023 | 2/1/2024 | 100.00 | 2/1/2024 | 99.00 | Commercial Sales | $45.17 | 4,471.83 |
| 10/25/2023 | 11/27/2023 | 34.00 | 11/27/2023 | 33.00 | Residential Sales | $72.67 | 2,398.11 |
| 10/25/2023 | 11/28/2023 | 35.00 | 11/28/2023 | 34.00 | Residential Sales | $333.06 | 11,324.04 |
| 10/25/2023 | 11/29/2023 | 36.00 | 11/29/2023 | 35.00 | Commercial Sales | $1,160.31 | 40,610.85 |
| 10/25/2023 | 10/31/2023 | 7.00 | 10/31/2023 | 6.00 | Public Street & Highway Lighting | $2,010.02 | 12,060.12 |
| 10/25/2023 | 11/13/2023 | 20.00 | 11/13/2023 | 19.00 | Commercial Sales | $288.32 | 5,478.08 |
| 10/25/2023 | 3/28/2024 | 156.00 | 3/28/2024 | 155.00 | Commercial Sales | $20.26 | 3,140.30 |
| 10/25/2023 | 11/13/2023 | 20.00 | 11/13/2023 | 19.00 | Residential Sales | $21.90 | 416.10 |
| 10/25/2023 | 10/31/2023 | 7.00 | 10/31/2023 | 6.00 | Other Sales to Public Authority | $1,118.30 | 6,709.80 |
| 10/25/2023 | 11/14/2023 | 21.00 | 11/14/2023 | 20.00 | Residential Sales | $16.90 | 338.00 |
| 10/26/2023 | 12/20/2023 | 56.00 | 12/20/2023 | 55.00 | Commercial Sales | $179.94 | 9,896.70 |
| 10/26/2023 | 11/29/2023 | 35.00 | 11/29/2023 | 34.00 | Commercial Sales | $55.45 | 1,885.30 |
| 10/26/2023 | 10/30/2023 | 5.00 | 10/30/2023 | 4.00 | Other Sales to Public Authority | $7,888.97 | 31,555.88 |
| 10/26/2023 | 11/29/2023 | 35.00 | 11/29/2023 | 34.00 | Residential Sales | $287.59 | 9,778.06 |
| 10/26/2023 | 11/13/2023 | 19.00 | 11/13/2023 | 18.00 | Commercial Sales | $279.83 | 5,036.94 |
| 10/26/2023 | 12/6/2023 | 42.00 | 12/6/2023 | 41.00 | Residential Sales | $150.98 | 6,190.18 |
| 10/26/2023 | 12/21/2023 | 57.00 | 12/21/2023 | 56.00 | Commercial Sales | $1,212.34 | 67,891.04 |
| 10/26/2023 | 12/20/2023 | 56.00 | 12/20/2023 | 55.00 | Residential Sales | $140.38 | 7,720.90 |
| 10/26/2023 | 10/31/2023 | 6.00 | 10/31/2023 | 5.00 | Other Sales to Public Authority | $13,856.94 | 69,284.70 |
| 10/26/2023 | 11/14/2023 | 20.00 | 11/14/2023 | 19.00 | Commercial Sales | $103.93 | 1,974.67 |
| 10/26/2023 | 11/15/2023 | 21.00 | 11/15/2023 | 20.00 | Residential Sales | $9.21 | 184.20 |
| 10/26/2023 | 11/16/2023 | 22.00 | 11/16/2023 | 21.00 | Commercial Sales | $1,201.02 | 25,221.42 |
| 10/26/2023 | 11/17/2023 | 23.00 | 11/17/2023 | 22.00 | Commercial Sales | $178.33 | 3,923.26 |
| 10/26/2023 | 11/1/2023 | 7.00 | 11/1/2023 | 6.00 | Industrial Service | $11,614.96 | 69,689.76 |
| 10/26/2023 | 11/1/2023 | 7.00 | 11/1/2023 | 6.00 | Commercial Sales | $11,307.18 | 67,843.08 |
| 10/26/2023 | 2/21/2024 | 119.00 | 2/21/2024 | 118.00 | Residential Sales | $43.50 | 5,133.00 |
| 10/26/2023 | 11/2/2023 | 8.00 | 11/2/2023 | 7.00 | Industrial Service | $230,376.60 | 1,612,636.20 |
| 10/26/2023 | 11/17/2023 | 23.00 | 11/17/2023 | 22.00 | Residential Sales | $285.66 | 6,284.52 |
| 10/26/2023 | 11/1/2023 | 7.00 | 11/1/2023 | 6.00 | Residential Sales | $730.80 | 4,384.80 |
| 10/26/2023 | 11/2/2023 | 8.00 | 11/2/2023 | 7.00 | Commercial Sales | $4,555.30 | 31,887.10 |
| 10/26/2023 | 10/26/2023 | 1.00 | 10/26/2023 | 0.00 | Commercial Sales | $58,570.08 | - |
| 10/26/2023 | 11/16/2023 | 22.00 | 11/16/2023 | 21.00 | Public Street & Highway Lighting | $1,440.09 | 30,241.89 |
| 10/26/2023 | 11/2/2023 | 8.00 | 11/2/2023 | 7.00 | Residential Sales | $833.83 | 5,836.81 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 10/26/2023 | 10/27/2023 | 2.00 | 10/27/2023 | 1.00 | Industrial Service | $183,620.82 | 183,620.82 |
| 10/26/2023 | 10/27/2023 | 2.00 | 10/27/2023 | 1.00 | Commercial Sales | $941,347.23 | 941,347.23 |
| 10/26/2023 | 11/3/2023 | 9.00 | 11/3/2023 | 8.00 | Residential Sales | $123.52 | 988.16 |
| 10/26/2023 | 10/26/2023 | 1.00 | 10/26/2023 | 0.00 | Residential Sales | $1,305.65 | - |
| 10/26/2023 | 6/11/2024 | 230.00 | 6/11/2024 | 229.00 | Residential Sales | $57.65 | 13,201.85 |
| 10/26/2023 | 10/27/2023 | 2.00 | 10/27/2023 | 1.00 | Residential Sales | $586,592.62 | 586,592.62 |
| 10/26/2023 | 11/6/2023 | 12.00 | 11/6/2023 | 11.00 | Commercial Sales | $1,248.66 | 13,735.26 |
| 10/26/2023 | 11/20/2023 | 26.00 | 11/20/2023 | 25.00 | Residential Sales | $60.02 | 1,500.50 |
| 10/26/2023 | 11/1/2023 | 7.00 | 11/1/2023 | 6.00 | Other Sales to Public Authority | $287.80 | 1,726.80 |
| 10/26/2023 | 10/26/2023 | 1.00 | 10/26/2023 | 0.00 | Public Street & Highway Lighting | $78.02 | - |
| 10/26/2023 | 11/21/2023 | 27.00 | 11/21/2023 | 26.00 | Commercial Sales | $10.61 | 275.86 |
| 10/26/2023 | 11/2/2023 | 8.00 | 11/2/2023 | 7.00 | Other Sales to Public Authority | $214.63 | 1,502.41 |
| 10/26/2023 | 10/30/2023 | 5.00 | 10/30/2023 | 4.00 | Industrial Service | $31,800.51 | 127,202.04 |
| 10/26/2023 | 11/22/2023 | 28.00 | 11/22/2023 | 27.00 | Residential Sales | $85.53 | 2,309.31 |
| 10/26/2023 | 11/9/2023 | 15.00 | 11/9/2023 | 14.00 | Residential Sales | $1.24 | 17.36 |
| 10/26/2023 | 10/30/2023 | 5.00 | 10/30/2023 | 4.00 | Commercial Sales | $32,607.06 | 130,428.24 |
| 10/26/2023 | 10/27/2023 | 2.00 | 10/27/2023 | 1.00 | Other Sales to Public Authority | $36,815.50 | 36,815.50 |
| 10/26/2023 | 10/31/2023 | 6.00 | 10/31/2023 | 5.00 | Industrial Service | $50,775.68 | 253,878.40 |
| 10/26/2023 | 10/30/2023 | 5.00 | 10/30/2023 | 4.00 | Residential Sales | $7,138.10 | 28,552.40 |
| 10/26/2023 | 10/31/2023 | 6.00 | 10/31/2023 | 5.00 | Commercial Sales | $314,172.18 | 1,570,860.90 |
| 10/26/2023 | 12/13/2023 | 49.00 | 12/13/2023 | 48.00 | Other Sales to Public Authority | $447.11 | 21,461.28 |
| 10/26/2023 | 10/31/2023 | 6.00 | 10/31/2023 | 5.00 | Residential Sales | $177.58 | 887.90 |
| 10/26/2023 | 1/2/2024 | 69.00 | 1/2/2024 | 68.00 | Other Sales to Public Authority | $218.46 | 14,855.28 |
| 10/26/2023 | 11/10/2023 | 16.00 | 11/10/2023 | 15.00 | Commercial Sales | $12,225.25 | 183,378.75 |
| 10/27/2023 | 10/30/2023 | 4.00 | 10/30/2023 | 3.00 | Industrial Service | $532,297.81 | 1,596,893.43 |
| 10/27/2023 | 10/30/2023 | 4.00 | 10/30/2023 | 3.00 | Commercial Sales | $214,230.99 | 642,692.97 |
| 10/27/2023 | 10/31/2023 | 5.00 | 10/31/2023 | 4.00 | Industrial Service | $242.67 | 970.68 |
| 10/27/2023 | 10/30/2023 | 4.00 | 10/30/2023 | 3.00 | Residential Sales | $654,979.81 | 1,964,939.43 |
| 10/27/2023 | 10/31/2023 | 5.00 | 10/31/2023 | 4.00 | Commercial Sales | $74,742.64 | 298,970.56 |
| 10/27/2023 | 10/31/2023 | 5.00 | 10/31/2023 | 4.00 | Residential Sales | $3,184.42 | 12,737.68 |
| 10/27/2023 | 11/10/2023 | 15.00 | 11/10/2023 | 14.00 | Commercial Sales | $1,071.06 | 14,994.84 |
| 10/27/2023 | 11/10/2023 | 15.00 | 11/10/2023 | 14.00 | Residential Sales | $235.10 | 3,291.40 |
| 10/27/2023 | 11/27/2023 | 32.00 | 11/27/2023 | 31.00 | Residential Sales | $55.73 | 1,727.63 |
| 10/27/2023 | 1/9/2024 | 75.00 | 1/9/2024 | 74.00 | Residential Sales | $186.10 | 13,771.40 |
| 10/27/2023 | 12/20/2023 | 55.00 | 12/20/2023 | 54.00 | Commercial Sales | $3,334.40 | 180,057.60 |
| 10/27/2023 | 11/13/2023 | 18.00 | 11/13/2023 | 17.00 | Commercial Sales | $373.17 | 6,343.89 |
| 10/27/2023 | 12/20/2023 | 55.00 | 12/20/2023 | 54.00 | Residential Sales | $141.78 | 7,656.12 |
| 10/27/2023 | 10/30/2023 | 4.00 | 10/30/2023 | 3.00 | Other Sales to Public Authority | $2,448.60 | 7,345.80 |
| 10/27/2023 | 12/7/2023 | 42.00 | 12/7/2023 | 41.00 | Commercial Sales | $112.64 | 4,618.24 |
| 10/27/2023 | 10/31/2023 | 5.00 | 10/31/2023 | 4.00 | Other Sales to Public Authority | $1,246.73 | 4,986.92 |
| 10/27/2023 | 11/13/2023 | 18.00 | 11/13/2023 | 17.00 | Residential Sales | $9.18 | 156.06 |
| 10/27/2023 | 4/21/2024 | 178.00 | 4/21/2024 | 177.00 | Commercial Sales | $33.91 | 6,002.07 |
| 10/27/2023 | 11/15/2023 | 20.00 | 11/15/2023 | 19.00 | Commercial Sales | $48.94 | 929.86 |
| 10/27/2023 | 11/15/2023 | 20.00 | 11/15/2023 | 19.00 | Residential Sales | $9.69 | 184.11 |
| 10/27/2023 | 3/14/2024 | 140.00 | 3/14/2024 | 139.00 | Commercial Sales | $118.45 | 16,464.55 |
| 10/27/2023 | 11/16/2023 | 21.00 | 11/16/2023 | 20.00 | Residential Sales | $29.75 | 595.00 |
| 10/27/2023 | 11/1/2023 | 6.00 | 11/1/2023 | 5.00 | Commercial Sales | $39,325.49 | 196,627.45 |
| 10/27/2023 | 11/1/2023 | 6.00 | 11/1/2023 | 5.00 | Residential Sales | $863.83 | 4,319.15 |
| 10/27/2023 | 11/2/2023 | 7.00 | 11/2/2023 | 6.00 | Commercial Sales | $1,440.54 | 8,643.24 |
| 10/27/2023 | 11/2/2023 | 7.00 | 11/2/2023 | 6.00 | Residential Sales | $951.95 | 5,711.70 |
| 10/27/2023 | 11/3/2023 | 8.00 | 11/3/2023 | 7.00 | Commercial Sales | $729.34 | 5,105.38 |
| 10/27/2023 | 10/27/2023 | 1.00 | 10/27/2023 | 0.00 | Industrial Service | $2,122.45 | - |
| 10/27/2023 | 11/3/2023 | 8.00 | 11/3/2023 | 7.00 | Residential Sales | $1,035.39 | 7,247.73 |
| 10/27/2023 | 10/27/2023 | 1.00 | 10/27/2023 | 0.00 | Commercial Sales | $10,378.39 | - |
| 10/27/2023 | 10/27/2023 | 1.00 | 10/27/2023 | 0.00 | Residential Sales | $1,490.64 | - |
| 10/27/2023 | 11/6/2023 | 11.00 | 11/6/2023 | 10.00 | Commercial Sales | $175.35 | 1,753.50 |
| 10/27/2023 | 11/6/2023 | 11.00 | 11/6/2023 | 10.00 | Residential Sales | $624.69 | 6,246.90 |
| 10/27/2023 | 11/7/2023 | 12.00 | 11/7/2023 | 11.00 | Commercial Sales | $19,703.44 | 216,737.84 |
| 10/27/2023 | 11/1/2023 | 6.00 | 11/1/2023 | 5.00 | Other Sales to Public Authority | $13,504.28 | 67,521.40 |
| 10/27/2023 | 2/28/2024 | 125.00 | 2/28/2024 | 124.00 | Commercial Sales | $752.38 | 93,295.12 |
| 10/27/2023 | 3/20/2024 | 146.00 | 3/20/2024 | 145.00 | Commercial Sales | $17.88 | 2,592.60 |
| 10/27/2023 | 10/27/2023 | 1.00 | 10/27/2023 | 0.00 | Public Street & Highway Lighting | $1,078.22 | - |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 10/27/2023 | 11/7/2023 | 12.00 | 11/7/2023 | 11.00 | Residential Sales | $354.05 | 3,894.55 |
| 10/27/2023 | 11/8/2023 | 13.00 | 11/8/2023 | 12.00 | Commercial Sales | $3.70 | 44.40 |
| 10/28/2023 | 10/30/2023 | 3.00 | 10/30/2023 | 2.00 | Commercial Sales | $7.66 | 15.32 |
| 10/28/2023 | 10/30/2023 | 3.00 | 10/30/2023 | 2.00 | Residential Sales | $474.22 | 948.44 |
| 10/29/2023 | 11/1/2023 | 4.00 | 11/1/2023 | 3.00 | Residential Sales | $23.00 | 69.00 |
| 10/29/2023 | 11/2/2023 | 5.00 | 11/2/2023 | 4.00 | Commercial Sales | $112.42 | 449.68 |
| 10/29/2023 | 11/3/2023 | 6.00 | 11/3/2023 | 5.00 | Residential Sales | $32.85 | 164.25 |
| 10/29/2023 | 11/7/2023 | 10.00 | 11/7/2023 | 9.00 | Residential Sales | $3.37 | 30.33 |
| 10/29/2023 | 10/30/2023 | 2.00 | 10/30/2023 | 1.00 | Residential Sales | $1,957.29 | 1,957.29 |
| 10/29/2023 | 10/31/2023 | 3.00 | 10/31/2023 | 2.00 | Commercial Sales | $1.29 | 2.58 |
| 10/29/2023 | 10/31/2023 | 3.00 | 10/31/2023 | 2.00 | Residential Sales | $97.86 | 195.72 |
| 10/30/2023 | 11/15/2023 | 17.00 | 11/15/2023 | 16.00 | Residential Sales | $95.45 | 1,527.20 |
| 10/30/2023 | 11/17/2023 | 19.00 | 11/17/2023 | 18.00 | Commercial Sales | $573.69 | 10,326.42 |
| 10/30/2023 | 11/1/2023 | 3.00 | 11/1/2023 | 2.00 | Industrial Service | $257,868.57 | 515,737.14 |
| 10/30/2023 | 11/1/2023 | 3.00 | 11/1/2023 | 2.00 | Commercial Sales | $99,291.64 | 198,583.28 |
| 10/30/2023 | 5/31/2024 | 215.00 | 5/31/2024 | 214.00 | Residential Sales | $102.42 | 21,917.88 |
| 10/30/2023 | 11/2/2023 | 4.00 | 11/2/2023 | 3.00 | Commercial Sales | $120,873.53 | 362,620.59 |
| 10/30/2023 | 11/1/2023 | 3.00 | 11/1/2023 | 2.00 | Residential Sales | $6,835.13 | 13,670.26 |
| 10/30/2023 | 11/3/2023 | 5.00 | 11/3/2023 | 4.00 | Industrial Service | $15,188.06 | 60,752.24 |
| 10/30/2023 | 11/13/2023 | 15.00 | 11/13/2023 | 14.00 | Other Sales to Public Authority | $152.28 | 2,131.92 |
| 10/30/2023 | 11/3/2023 | 5.00 | 11/3/2023 | 4.00 | Commercial Sales | $422.59 | 1,690.36 |
| 10/30/2023 | 11/2/2023 | 4.00 | 11/2/2023 | 3.00 | Residential Sales | $796.16 | 2,388.48 |
| 10/30/2023 | 11/3/2023 | 5.00 | 11/3/2023 | 4.00 | Residential Sales | $1,062.13 | 4,248.52 |
| 10/30/2023 | 4/10/2024 | 164.00 | 4/10/2024 | 163.00 | Commercial Sales | $1,259.57 | 205,309.91 |
| 10/30/2023 | 11/6/2023 | 8.00 | 11/6/2023 | 7.00 | Commercial Sales | $2,972.18 | 20,805.26 |
| 10/30/2023 | 12/13/2023 | 45.00 | 12/13/2023 | 44.00 | Residential Sales | $7.30 | 321.20 |
| 10/30/2023 | 11/20/2023 | 22.00 | 11/20/2023 | 21.00 | Commercial Sales | $43.49 | 913.29 |
| 10/30/2023 | 11/1/2023 | 3.00 | 11/1/2023 | 2.00 | Other Sales to Public Authority | $30,574.79 | 61,149.58 |
| 10/30/2023 | 11/6/2023 | 8.00 | 11/6/2023 | 7.00 | Residential Sales | $1,719.20 | 12,034.40 |
| 10/30/2023 | 11/7/2023 | 9.00 | 11/7/2023 | 8.00 | Commercial Sales | $373.50 | 2,988.00 |
| 10/30/2023 | 12/15/2023 | 47.00 | 12/15/2023 | 46.00 | Commercial Sales | $75.87 | 3,490.02 |
| 10/30/2023 | 11/2/2023 | 4.00 | 11/2/2023 | 3.00 | Other Sales to Public Authority | $57,215.07 | 171,645.21 |
| 10/30/2023 | 11/7/2023 | 9.00 | 11/7/2023 | 8.00 | Residential Sales | $981.26 | 7,850.08 |
| 10/30/2023 | 11/21/2023 | 23.00 | 11/21/2023 | 22.00 | Residential Sales | $12.59 | 276.98 |
| 10/30/2023 | 11/8/2023 | 10.00 | 11/8/2023 | 9.00 | Residential Sales | $94.85 | 853.65 |
| 10/30/2023 | 10/31/2023 | 2.00 | 10/31/2023 | 1.00 | Industrial Service | $225,975.16 | 225,975.16 |
| 10/30/2023 | 10/30/2023 | 1.00 | 10/30/2023 | 0.00 | Commercial Sales | $826.72 | - |
| 10/30/2023 | 10/31/2023 | 2.00 | 10/31/2023 | 1.00 | Commercial Sales | $431,103.45 | 431,103.45 |
| 10/30/2023 | 10/30/2023 | 1.00 | 10/30/2023 | 0.00 | Residential Sales | $739.06 | - |
| 10/30/2023 | 10/31/2023 | 2.00 | 10/31/2023 | 1.00 | Residential Sales | $576,770.09 | 576,770.09 |
| 10/30/2023 | 11/6/2023 | 8.00 | 11/6/2023 | 7.00 | Other Sales to Public Authority | $532.69 | 3,728.83 |
| 10/30/2023 | 11/1/2023 | 3.00 | 11/1/2023 | 2.00 | Company Use | $0.00 | - |
| 10/30/2023 | 10/30/2023 | 1.00 | 10/30/2023 | 0.00 | Public Street & Highway Lighting | $618.62 | - |
| 10/30/2023 | 12/5/2023 | 37.00 | 12/5/2023 | 36.00 | Commercial Sales | $312.30 | 11,242.80 |
| 10/30/2023 | 12/5/2023 | 37.00 | 12/5/2023 | 36.00 | Residential Sales | $25.79 | 928.44 |
| 10/30/2023 | 12/6/2023 | 38.00 | 12/6/2023 | 37.00 | Commercial Sales | $86.41 | 3,197.17 |
| 10/30/2023 | 12/20/2023 | 52.00 | 12/20/2023 | 51.00 | Residential Sales | $189.06 | 9,642.06 |
| 10/30/2023 | 10/30/2023 | 1.00 | 10/30/2023 | 0.00 | Other Sales to Public Authority | $70.71 | - |
| 10/30/2023 | 11/13/2023 | 15.00 | 11/13/2023 | 14.00 | Commercial Sales | $821.64 | 11,502.96 |
| 10/30/2023 | 10/31/2023 | 2.00 | 10/31/2023 | 1.00 | Other Sales to Public Authority | $115,759.53 | 115,759.53 |
| 10/30/2023 | 12/8/2023 | 40.00 | 12/8/2023 | 39.00 | Commercial Sales | $137.40 | 5,358.60 |
| 10/30/2023 | 11/14/2023 | 16.00 | 11/14/2023 | 15.00 | Commercial Sales | $286.84 | 4,302.60 |
| 10/30/2023 | 11/30/2023 | 32.00 | 11/30/2023 | 31.00 | Industrial Service | $51,162.45 | 1,586,035.95 |
| 10/30/2023 | 11/15/2023 | 17.00 | 11/15/2023 | 16.00 | Commercial Sales | $286.86 | 4,589.76 |
| 10/30/2023 | 1/10/2024 | 73.00 | 1/10/2024 | 72.00 | Residential Sales | $93.79 | 6,752.88 |
| 10/30/2023 | 11/14/2023 | 16.00 | 11/14/2023 | 15.00 | Residential Sales | $19.88 | 298.20 |
| 10/31/2023 | 11/27/2023 | 28.00 | 11/27/2023 | 27.00 | Residential Sales | $289.77 | 7,823.79 |
| 10/31/2023 | 11/10/2023 | 11.00 | 11/10/2023 | 10.00 | Residential Sales | $5.78 | 57.80 |
| 10/31/2023 | 4/2/2024 | 155.00 | 4/2/2024 | 154.00 | Residential Sales | $15.78 | 2,430.12 |
| 10/31/2023 | 12/20/2023 | 51.00 | 12/20/2023 | 50.00 | Residential Sales | $139.99 | 6,999.50 |
| 10/31/2023 | 12/7/2023 | 38.00 | 12/7/2023 | 37.00 | Commercial Sales | $8.48 | 313.76 |
| 10/31/2023 | 11/13/2023 | 14.00 | 11/13/2023 | 13.00 | Residential Sales | $71.09 | 924.17 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 10/31/2023 | 11/14/2023 | 15.00 | 11/14/2023 | 14.00 | Residential Sales | $1.36 | 19.04 |
| 10/31/2023 | 11/1/2023 | 2.00 | 11/1/2023 | 1.00 | Commercial Sales | $3,665.32 | 3,665.32 |
| 10/31/2023 | 11/1/2023 | 2.00 | 11/1/2023 | 1.00 | Residential Sales | $11,065.23 | 11,065.23 |
| 10/31/2023 | 11/2/2023 | 3.00 | 11/2/2023 | 2.00 | Commercial Sales | $41.33 | 82.66 |
| 10/31/2023 | 11/2/2023 | 3.00 | 11/2/2023 | 2.00 | Residential Sales | $731.85 | 1,463.70 |
| 10/31/2023 | 12/11/2023 | 42.00 | 12/11/2023 | 41.00 | Commercial Sales | $123.58 | 5,066.78 |
| 10/31/2023 | 11/3/2023 | 4.00 | 11/3/2023 | 3.00 | Residential Sales | $45.32 | 135.96 |
| 10/31/2023 | 11/7/2023 | 8.00 | 11/7/2023 | 7.00 | Commercial Sales | $126.15 | 883.05 |
| 10/31/2023 | 11/6/2023 | 7.00 | 11/6/2023 | 6.00 | Residential Sales | $35.00 | 210.00 |
| 10/31/2023 | 11/8/2023 | 9.00 | 11/8/2023 | 8.00 | Residential Sales | $66.59 | 532.72 |
| 10/31/2023 | 10/31/2023 | 1.00 | 10/31/2023 | 0.00 | Commercial Sales | $6,682.73 | - |
| 10/31/2023 | 10/31/2023 | 1.00 | 10/31/2023 | 0.00 | Residential Sales | $769.97 | - |
| 10/31/2023 | 11/7/2023 | 8.00 | 11/7/2023 | 7.00 | Other Sales to Public Authority | $159.99 | 1,119.93 |
| 10/31/2023 | 12/5/2023 | 36.00 | 12/5/2023 | 35.00 | Industrial Service | $26.94 | 942.90 |
| 11/1/2023 | 1/8/2024 | 69.00 | 1/8/2024 | 68.00 | Residential Sales | $119.49 | 8,125.32 |
| 11/1/2023 | 1/9/2024 | 70.00 | 1/9/2024 | 69.00 | Residential Sales | $981.16 | 67,700.04 |
| 11/1/2023 | 12/20/2023 | 50.00 | 12/20/2023 | 49.00 | Industrial Service | $9,319.09 | 456,635.41 |
| 11/1/2023 | 11/10/2023 | 10.00 | 11/10/2023 | 9.00 | Residential Sales | $596.83 | 5,371.47 |
| 11/1/2023 | 4/2/2024 | 154.00 | 4/2/2024 | 153.00 | Residential Sales | $73.83 | 11,295.99 |
| 11/1/2023 | 11/28/2023 | 28.00 | 11/28/2023 | 27.00 | Commercial Sales | $175.90 | 4,749.30 |
| 11/1/2023 | 12/20/2023 | 50.00 | 12/20/2023 | 49.00 | Commercial Sales | $160.47 | 7,863.03 |
| 11/1/2023 | 12/5/2023 | 35.00 | 12/5/2023 | 34.00 | Residential Sales | $192.63 | 6,549.42 |
| 11/1/2023 | 12/21/2023 | 51.00 | 12/21/2023 | 50.00 | Industrial Service | $5,248.37 | 262,418.50 |
| 11/1/2023 | 11/29/2023 | 29.00 | 11/29/2023 | 28.00 | Residential Sales | $60.58 | 1,696.24 |
| 11/1/2023 | 12/7/2023 | 37.00 | 12/7/2023 | 36.00 | Commercial Sales | $54.69 | 1,968.84 |
| 11/1/2023 | 12/6/2023 | 36.00 | 12/6/2023 | 35.00 | Residential Sales | $141.96 | 4,968.60 |
| 11/1/2023 | 12/21/2023 | 51.00 | 12/21/2023 | 50.00 | Commercial Sales | $225.77 | 11,288.50 |
| 11/1/2023 | 11/13/2023 | 13.00 | 11/13/2023 | 12.00 | Residential Sales | $458.43 | 5,501.16 |
| 11/1/2023 | 11/14/2023 | 14.00 | 11/14/2023 | 13.00 | Commercial Sales | $61.85 | 804.05 |
| 11/1/2023 | 12/7/2023 | 37.00 | 12/7/2023 | 36.00 | Residential Sales | $293.24 | 10,556.64 |
| 11/1/2023 | 1/11/2024 | 72.00 | 1/11/2024 | 71.00 | Commercial Sales | $201.34 | 14,295.14 |
| 11/1/2023 | 11/15/2023 | 15.00 | 11/15/2023 | 14.00 | Commercial Sales | $164.15 | 2,298.10 |
| 11/1/2023 | 11/16/2023 | 16.00 | 11/16/2023 | 15.00 | Industrial Service | $483,586.26 | 7,253,793.90 |
| 11/1/2023 | 11/14/2023 | 14.00 | 11/14/2023 | 13.00 | Residential Sales | $357.22 | 4,643.86 |
| 11/1/2023 | 11/13/2023 | 13.00 | 11/13/2023 | 12.00 | Other Sales to Public Authority | $6,571.30 | 78,855.60 |
| 11/1/2023 | 11/15/2023 | 15.00 | 11/15/2023 | 14.00 | Residential Sales | $290.40 | 4,065.60 |
| 11/1/2023 | 11/16/2023 | 16.00 | 11/16/2023 | 15.00 | Commercial Sales | $10,284.66 | 154,269.90 |
| 11/1/2023 | 11/17/2023 | 17.00 | 11/17/2023 | 16.00 | Industrial Service | $218,741.80 | 3,499,868.80 |
| 11/1/2023 | 11/16/2023 | 16.00 | 11/16/2023 | 15.00 | Residential Sales | $283.45 | 4,251.75 |
| 11/1/2023 | 11/17/2023 | 17.00 | 11/17/2023 | 16.00 | Commercial Sales | $32,851.35 | 525,621.60 |
| 11/1/2023 | 11/1/2023 | 1.00 | 11/1/2023 | 0.00 | Commercial Sales | $2,040.42 | - |
| 11/1/2023 | 11/16/2023 | 16.00 | 11/16/2023 | 15.00 | Other Sales to Public Authority | $319,640.57 | 4,794,608.55 |
| 11/1/2023 | 11/17/2023 | 17.00 | 11/17/2023 | 16.00 | Residential Sales | $278.28 | 4,452.48 |
| 11/1/2023 | 2/7/2024 | 99.00 | 2/7/2024 | 98.00 | Residential Sales | $76.94 | 7,540.12 |
| 11/1/2023 | 11/2/2023 | 2.00 | 11/2/2023 | 1.00 | Commercial Sales | $40,781.39 | 40,781.39 |
| 11/1/2023 | 11/1/2023 | 1.00 | 11/1/2023 | 0.00 | Residential Sales | $563.55 | - |
| 11/1/2023 | 11/1/2023 | 1.00 | 11/1/2023 | 0.00 | Other Sales to Public Authority | $95.66 | - |
| 11/1/2023 | 11/2/2023 | 2.00 | 11/2/2023 | 1.00 | Residential Sales | $145.83 | 145.83 |
| 11/1/2023 | 11/3/2023 | 3.00 | 11/3/2023 | 2.00 | Commercial Sales | $11,771.84 | 23,543.68 |
| 11/1/2023 | 12/27/2023 | 57.00 | 12/27/2023 | 56.00 | Residential Sales | $14.90 | 834.40 |
| 11/1/2023 | 11/3/2023 | 3.00 | 11/3/2023 | 2.00 | Residential Sales | $575,757.01 | 1,151,514.02 |
| 11/1/2023 | 11/2/2023 | 2.00 | 11/2/2023 | 1.00 | Other Sales to Public Authority | $7,946.68 | 7,946.68 |
| 11/1/2023 | 11/6/2023 | 6.00 | 11/6/2023 | 5.00 | Industrial Service | $9,399.49 | 46,997.45 |
| 11/1/2023 | 11/1/2023 | 1.00 | 11/1/2023 | 0.00 | Public Street & Highway Lighting | $121.80 | - |
| 11/1/2023 | 11/6/2023 | 6.00 | 11/6/2023 | 5.00 | Commercial Sales | $257,527.44 | 1,287,637.20 |
| 11/1/2023 | 11/7/2023 | 7.00 | 11/7/2023 | 6.00 | Industrial Service | $894.63 | 5,367.78 |
| 11/1/2023 | 12/14/2023 | 44.00 | 12/14/2023 | 43.00 | Commercial Sales | $453.24 | 19,489.32 |
| 11/1/2023 | 11/6/2023 | 6.00 | 11/6/2023 | 5.00 | Residential Sales | $4,958.66 | 24,793.30 |
| 11/1/2023 | 11/7/2023 | 7.00 | 11/7/2023 | 6.00 | Commercial Sales | $60,652.72 | 363,916.32 |
| 11/1/2023 | 11/20/2023 | 20.00 | 11/20/2023 | 19.00 | Residential Sales | $382.51 | 7,267.69 |
| 11/1/2023 | 11/8/2023 | 8.00 | 11/8/2023 | 7.00 | Industrial Service | $11.05 | 77.35 |
| 11/1/2023 | 11/7/2023 | 7.00 | 11/7/2023 | 6.00 | Residential Sales | $4,159.03 | 24,954.18 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 11/1/2023 | 11/9/2023 | 9.00 | 11/9/2023 | 8.00 | Industrial Service | $170.70 | 1,365.60 |
| 11/1/2023 | 11/6/2023 | 6.00 | 11/6/2023 | 5.00 | Other Sales to Public Authority | $17,325.80 | 86,629.00 |
| 11/1/2023 | 11/8/2023 | 8.00 | 11/8/2023 | 7.00 | Commercial Sales | $44,655.75 | 312,590.25 |
| 11/1/2023 | 11/21/2023 | 21.00 | 11/21/2023 | 20.00 | Residential Sales | $102.45 | 2,049.00 |
| 11/1/2023 | 3/20/2024 | 141.00 | 3/20/2024 | 140.00 | Commercial Sales | $18.03 | 2,524.20 |
| 11/1/2023 | 11/8/2023 | 8.00 | 11/8/2023 | 7.00 | Residential Sales | $1,037.34 | 7,261.38 |
| 11/1/2023 | 11/9/2023 | 9.00 | 11/9/2023 | 8.00 | Commercial Sales | $8,677.61 | 69,420.88 |
| 11/1/2023 | 11/7/2023 | 7.00 | 11/7/2023 | 6.00 | Other Sales to Public Authority | $6,981.96 | 41,891.76 |
| 11/1/2023 | 2/12/2024 | 104.00 | 2/12/2024 | 103.00 | Residential Sales | $16.59 | 1,708.77 |
| 11/1/2023 | 11/9/2023 | 9.00 | 11/9/2023 | 8.00 | Residential Sales | $429.83 | 3,438.64 |
| 11/1/2023 | 11/8/2023 | 8.00 | 11/8/2023 | 7.00 | Other Sales to Public Authority | $53,801.49 | 376,610.43 |
| 11/2/2023 | 11/7/2023 | 6.00 | 11/7/2023 | 5.00 | Commercial Sales | $26,100.02 | 130,500.10 |
| 11/2/2023 | 11/6/2023 | 5.00 | 11/6/2023 | 4.00 | Residential Sales | $8,693.12 | 34,772.48 |
| 11/2/2023 | 11/8/2023 | 7.00 | 11/8/2023 | 6.00 | Industrial Service | $11,389.27 | 68,335.62 |
| 11/2/2023 | 11/6/2023 | 5.00 | 11/6/2023 | 4.00 | Other Sales to Public Authority | $11,082.55 | 44,330.20 |
| 11/2/2023 | 11/7/2023 | 6.00 | 11/7/2023 | 5.00 | Residential Sales | $5,487.02 | 27,435.10 |
| 11/2/2023 | 11/8/2023 | 7.00 | 11/8/2023 | 6.00 | Commercial Sales | $15,701.04 | 94,206.24 |
| 11/2/2023 | 11/9/2023 | 8.00 | 11/9/2023 | 7.00 | Commercial Sales | $9,133.55 | 63,934.85 |
| 11/2/2023 | 11/8/2023 | 7.00 | 11/8/2023 | 6.00 | Residential Sales | $3,537.55 | 21,225.30 |
| 11/2/2023 | 11/7/2023 | 6.00 | 11/7/2023 | 5.00 | Other Sales to Public Authority | $1,611.04 | 8,055.20 |
| 11/2/2023 | 11/9/2023 | 8.00 | 11/9/2023 | 7.00 | Residential Sales | $3,975.18 | 27,826.26 |
| 11/2/2023 | 5/24/2024 | 205.00 | 5/24/2024 | 204.00 | Commercial Sales | $14.94 | 3,047.76 |
| 11/2/2023 | 11/9/2023 | 8.00 | 11/9/2023 | 7.00 | Other Sales to Public Authority | $1,690.57 | 11,833.99 |
| 11/2/2023 | 11/10/2023 | 9.00 | 11/10/2023 | 8.00 | Commercial Sales | $1,770.22 | 14,161.76 |
| 11/2/2023 | 11/10/2023 | 9.00 | 11/10/2023 | 8.00 | Residential Sales | $89.49 | 715.92 |
| 11/2/2023 | 12/5/2023 | 34.00 | 12/5/2023 | 33.00 | Residential Sales | $4.01 | 132.33 |
| 11/2/2023 | 11/10/2023 | 9.00 | 11/10/2023 | 8.00 | Other Sales to Public Authority | $5,359.27 | 42,874.16 |
| 11/2/2023 | 11/13/2023 | 12.00 | 11/13/2023 | 11.00 | Commercial Sales | $1,549.51 | 17,044.61 |
| 11/2/2023 | 11/29/2023 | 28.00 | 11/29/2023 | 27.00 | Residential Sales | $108.65 | 2,933.55 |
| 11/2/2023 | 12/6/2023 | 35.00 | 12/6/2023 | 34.00 | Residential Sales | $70.57 | 2,399.38 |
| 11/2/2023 | 12/20/2023 | 49.00 | 12/20/2023 | 48.00 | Residential Sales | $50.33 | 2,415.84 |
| 11/2/2023 | 11/14/2023 | 13.00 | 11/14/2023 | 12.00 | Commercial Sales | $222.67 | 2,672.04 |
| 11/2/2023 | 11/13/2023 | 12.00 | 11/13/2023 | 11.00 | Residential Sales | $403.31 | 4,436.41 |
| 11/2/2023 | 11/14/2023 | 13.00 | 11/14/2023 | 12.00 | Residential Sales | $597.22 | 7,166.64 |
| 11/2/2023 | 11/16/2023 | 15.00 | 11/16/2023 | 14.00 | Industrial Service | $510.52 | 7,147.28 |
| 11/2/2023 | 11/30/2023 | 29.00 | 11/30/2023 | 28.00 | Residential Sales | $164.90 | 4,617.20 |
| 11/2/2023 | 11/17/2023 | 16.00 | 11/17/2023 | 15.00 | Residential Sales | $246.41 | 3,696.15 |
| 11/2/2023 | 5/2/2024 | 183.00 | 5/2/2024 | 182.00 | Residential Sales | $7.64 | 1,390.48 |
| 11/2/2023 | 11/3/2023 | 2.00 | 11/3/2023 | 1.00 | Residential Sales | $539,223.99 | 539,223.99 |
| 11/2/2023 | 11/6/2023 | 5.00 | 11/6/2023 | 4.00 | Industrial Service | $16,617.69 | 66,470.76 |
| 11/2/2023 | 11/6/2023 | 5.00 | 11/6/2023 | 4.00 | Commercial Sales | $90,486.96 | 361,947.84 |
| 11/2/2023 | 11/7/2023 | 6.00 | 11/7/2023 | 5.00 | Industrial Service | $1,209.09 | 6,045.45 |
| 11/3/2023 | 12/28/2023 | 56.00 | 12/28/2023 | 55.00 | Residential Sales | $97.28 | 5,350.40 |
| 11/3/2023 | 11/3/2023 | 1.00 | 11/3/2023 | 0.00 | Residential Sales | $99.71 | - |
| 11/3/2023 | 11/6/2023 | 4.00 | 11/6/2023 | 3.00 | Industrial Service | $7,735.31 | 23,205.93 |
| 11/3/2023 | 11/6/2023 | 4.00 | 11/6/2023 | 3.00 | Commercial Sales | $127,694.10 | 383,082.30 |
| 11/3/2023 | 12/13/2023 | 41.00 | 12/13/2023 | 40.00 | Residential Sales | $73.09 | 2,923.60 |
| 11/3/2023 | 11/6/2023 | 4.00 | 11/6/2023 | 3.00 | Residential Sales | $596,759.39 | 1,790,278.17 |
| 11/3/2023 | 11/7/2023 | 5.00 | 11/7/2023 | 4.00 | Commercial Sales | $44,628.43 | 178,513.72 |
| 11/3/2023 | 11/21/2023 | 19.00 | 11/21/2023 | 18.00 | Commercial Sales | $84,253.19 | 1,516,557.42 |
| 11/3/2023 | 11/7/2023 | 5.00 | 11/7/2023 | 4.00 | Residential Sales | $5,893.98 | 23,575.92 |
| 11/3/2023 | 11/8/2023 | 6.00 | 11/8/2023 | 5.00 | Commercial Sales | $46,787.73 | 233,938.65 |
| 11/3/2023 | 11/6/2023 | 4.00 | 11/6/2023 | 3.00 | Other Sales to Public Authority | $20,462.99 | 61,388.97 |
| 11/3/2023 | 11/21/2023 | 19.00 | 11/21/2023 | 18.00 | Residential Sales | $42.81 | 770.58 |
| 11/3/2023 | 11/9/2023 | 7.00 | 11/9/2023 | 6.00 | Commercial Sales | $3,926.77 | 23,560.62 |
| 11/3/2023 | 11/8/2023 | 6.00 | 11/8/2023 | 5.00 | Residential Sales | $671.19 | 3,355.95 |
| 11/3/2023 | 11/7/2023 | 5.00 | 11/7/2023 | 4.00 | Other Sales to Public Authority | $732.37 | 2,929.48 |
| 11/3/2023 | 11/9/2023 | 7.00 | 11/9/2023 | 6.00 | Residential Sales | $452.79 | 2,716.74 |
| 11/3/2023 | 11/8/2023 | 6.00 | 11/8/2023 | 5.00 | Other Sales to Public Authority | $28.61 | 143.05 |
| 11/3/2023 | 11/9/2023 | 7.00 | 11/9/2023 | 6.00 | Other Sales to Public Authority | $181.24 | 1,087.44 |
| 11/3/2023 | 11/10/2023 | 8.00 | 11/10/2023 | 7.00 | Commercial Sales | $598.43 | 4,189.01 |
| 11/3/2023 | 11/10/2023 | 8.00 | 11/10/2023 | 7.00 | Residential Sales | $457.15 | 3,200.05 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 11/3/2023 | 1/9/2024 | 68.00 | 1/9/2024 | 67.00 | Residential Sales | $98.26 | 6,583.42 |
| 11/3/2023 | 3/25/2024 | 144.00 | 3/25/2024 | 143.00 | Residential Sales | $24.18 | 3,457.74 |
| 11/3/2023 | 11/10/2023 | 8.00 | 11/10/2023 | 7.00 | Other Sales to Public Authority | $2,252.83 | 15,769.81 |
| 11/3/2023 | 12/5/2023 | 33.00 | 12/5/2023 | 32.00 | Residential Sales | $69.90 | 2,236.80 |
| 11/3/2023 | 11/13/2023 | 11.00 | 11/13/2023 | 10.00 | Commercial Sales | $8,792.27 | 87,922.70 |
| 11/3/2023 | 11/13/2023 | 11.00 | 11/13/2023 | 10.00 | Residential Sales | $2,260.46 | 22,604.60 |
| 11/3/2023 | 11/13/2023 | 11.00 | 11/13/2023 | 10.00 | Other Sales to Public Authority | $9,587.38 | 95,873.80 |
| 11/3/2023 | 11/14/2023 | 12.00 | 11/14/2023 | 11.00 | Residential Sales | $32.93 | 362.23 |
| 11/3/2023 | 11/16/2023 | 14.00 | 11/16/2023 | 13.00 | Commercial Sales | $104,519.97 | 1,358,759.61 |
| 11/3/2023 | 11/15/2023 | 13.00 | 11/15/2023 | 12.00 | Residential Sales | $105.69 | 1,268.28 |
| 11/3/2023 | 11/16/2023 | 14.00 | 11/16/2023 | 13.00 | Other Sales to Public Authority | $22,302.52 | 289,932.76 |
| 11/4/2023 | 11/6/2023 | 3.00 | 11/6/2023 | 2.00 | Residential Sales | $455.40 | 910.80 |
| 11/4/2023 | 11/7/2023 | 4.00 | 11/7/2023 | 3.00 | Residential Sales | $14.94 | 44.82 |
| 11/5/2023 | 11/10/2023 | 6.00 | 11/10/2023 | 5.00 | Industrial Service | $11,186.79 | 55,933.95 |
| 11/5/2023 | 4/2/2024 | 150.00 | 4/2/2024 | 149.00 | Residential Sales | $23.51 | 3,502.99 |
| 11/5/2023 | 11/15/2023 | 11.00 | 11/15/2023 | 10.00 | Residential Sales | $3.50 | 35.00 |
| 11/5/2023 | 11/16/2023 | 12.00 | 11/16/2023 | 11.00 | Residential Sales | $16.28 | 179.08 |
| 11/5/2023 | 11/6/2023 | 2.00 | 11/6/2023 | 1.00 | Commercial Sales | $3,148.81 | 3,148.81 |
| 11/5/2023 | 11/6/2023 | 2.00 | 11/6/2023 | 1.00 | Residential Sales | $1,763.38 | 1,763.38 |
| 11/5/2023 | 11/7/2023 | 3.00 | 11/7/2023 | 2.00 | Commercial Sales | $441.27 | 882.54 |
| 11/5/2023 | 11/7/2023 | 3.00 | 11/7/2023 | 2.00 | Residential Sales | $415.97 | 831.94 |
| 11/5/2023 | 11/8/2023 | 4.00 | 11/8/2023 | 3.00 | Residential Sales | $47.55 | 142.65 |
| 11/5/2023 | 11/9/2023 | 5.00 | 11/9/2023 | 4.00 | Commercial Sales | $65.55 | 262.20 |
| 11/5/2023 | 11/9/2023 | 5.00 | 11/9/2023 | 4.00 | Residential Sales | $107.26 | 429.04 |
| 11/6/2023 | 11/7/2023 | 2.00 | 11/7/2023 | 1.00 | Commercial Sales | $147,926.50 | 147,926.50 |
| 11/6/2023 | 11/6/2023 | 1.00 | 11/6/2023 | 0.00 | Residential Sales | $809.35 | - |
| 11/6/2023 | 11/8/2023 | 3.00 | 11/8/2023 | 2.00 | Industrial Service | $556.32 | 1,112.64 |
| 11/6/2023 | 11/20/2023 | 15.00 | 11/20/2023 | 14.00 | Residential Sales | $83.20 | 1,164.80 |
| 11/6/2023 | 11/7/2023 | 2.00 | 11/7/2023 | 1.00 | Residential Sales | $979,180.93 | 979,180.93 |
| 11/6/2023 | 11/8/2023 | 3.00 | 11/8/2023 | 2.00 | Commercial Sales | $62,134.03 | 124,268.06 |
| 11/6/2023 | 11/20/2023 | 15.00 | 11/20/2023 | 14.00 | Other Sales to Public Authority | $18,443.47 | 258,208.58 |
| 11/6/2023 | 11/21/2023 | 16.00 | 11/21/2023 | 15.00 | Residential Sales | $164.81 | 2,472.15 |
| 11/6/2023 | 11/22/2023 | 17.00 | 11/22/2023 | 16.00 | Commercial Sales | $8,595.45 | 137,527.20 |
| 11/6/2023 | 11/8/2023 | 3.00 | 11/8/2023 | 2.00 | Residential Sales | $13,878.32 | 27,756.64 |
| 11/6/2023 | 11/9/2023 | 4.00 | 11/9/2023 | 3.00 | Commercial Sales | $28,474.68 | 85,424.04 |
| 11/6/2023 | 11/22/2023 | 17.00 | 11/22/2023 | 16.00 | Residential Sales | $253.87 | 4,061.92 |
| 11/6/2023 | 11/7/2023 | 2.00 | 11/7/2023 | 1.00 | Other Sales to Public Authority | $6,345.30 | 6,345.30 |
| 11/6/2023 | 11/8/2023 | 3.00 | 11/8/2023 | 2.00 | Other Sales to Public Authority | $1,822.67 | 3,645.34 |
| 11/6/2023 | 11/9/2023 | 4.00 | 11/9/2023 | 3.00 | Residential Sales | $3,122.06 | 9,366.18 |
| 11/6/2023 | 11/9/2023 | 4.00 | 11/9/2023 | 3.00 | Other Sales to Public Authority | $26,582.87 | 79,748.61 |
| 11/6/2023 | 12/1/2023 | 26.00 | 12/1/2023 | 25.00 | Residential Sales | $289.97 | 7,249.25 |
| 11/6/2023 | 11/10/2023 | 5.00 | 11/10/2023 | 4.00 | Commercial Sales | $18,991.92 | 75,967.68 |
| 11/6/2023 | 1/8/2024 | 64.00 | 1/8/2024 | 63.00 | Residential Sales | $20.05 | 1,263.15 |
| 11/6/2023 | 11/10/2023 | 5.00 | 11/10/2023 | 4.00 | Residential Sales | $1,458.73 | 5,834.92 |
| 11/6/2023 | 11/28/2023 | 23.00 | 11/28/2023 | 22.00 | Residential Sales | $90.53 | 1,991.66 |
| 11/6/2023 | 11/10/2023 | 5.00 | 11/10/2023 | 4.00 | Other Sales to Public Authority | $1,711.54 | 6,846.16 |
| 11/6/2023 | 4/4/2024 | 151.00 | 4/4/2024 | 150.00 | Commercial Sales | $18.03 | 2,704.50 |
| 11/6/2023 | 11/13/2023 | 8.00 | 11/13/2023 | 7.00 | Commercial Sales | $33,462.36 | 234,236.52 |
| 11/6/2023 | 11/29/2023 | 24.00 | 11/29/2023 | 23.00 | Residential Sales | $20.62 | 474.26 |
| 11/6/2023 | 12/20/2023 | 45.00 | 12/20/2023 | 44.00 | Residential Sales | $82.77 | 3,641.88 |
| 11/6/2023 | 12/22/2023 | 47.00 | 12/22/2023 | 46.00 | Commercial Sales | $71.06 | 3,268.76 |
| 11/6/2023 | 11/13/2023 | 8.00 | 11/13/2023 | 7.00 | Residential Sales | $210.85 | 1,475.95 |
| 11/6/2023 | 11/14/2023 | 9.00 | 11/14/2023 | 8.00 | Commercial Sales | $406.42 | 3,251.36 |
| 11/6/2023 | 12/7/2023 | 32.00 | 12/7/2023 | 31.00 | Residential Sales | $188.20 | 5,834.20 |
| 11/6/2023 | 11/14/2023 | 9.00 | 11/14/2023 | 8.00 | Residential Sales | $4,463.50 | 35,708.00 |
| 11/6/2023 | 11/13/2023 | 8.00 | 11/13/2023 | 7.00 | Other Sales to Public Authority | $5,517.87 | 38,625.09 |
| 11/6/2023 | 11/14/2023 | 9.00 | 11/14/2023 | 8.00 | Other Sales to Public Authority | $3,081.13 | 24,649.04 |
| 11/6/2023 | 11/15/2023 | 10.00 | 11/15/2023 | 9.00 | Residential Sales | $71.16 | 640.44 |
| 11/6/2023 | 11/16/2023 | 11.00 | 11/16/2023 | 10.00 | Residential Sales | $87.55 | 875.50 |
| 11/6/2023 | 3/14/2024 | 130.00 | 3/14/2024 | 129.00 | Residential Sales | $18.28 | 2,358.12 |
| 11/6/2023 | 11/17/2023 | 12.00 | 11/17/2023 | 11.00 | Residential Sales | $289.62 | 3,185.82 |
| 11/6/2023 | 12/27/2023 | 52.00 | 12/27/2023 | 51.00 | Commercial Sales | $140.69 | 7,175.19 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 11/6/2023 | 2/23/2024 | 110.00 | 2/23/2024 | 109.00 | Residential Sales | $65.98 | 7,191.82 |
| 11/6/2023 | 1/15/2024 | 71.00 | 1/15/2024 | 70.00 | Residential Sales | $868.99 | 60,829.30 |
| 11/6/2023 | 12/11/2023 | 36.00 | 12/11/2023 | 35.00 | Residential Sales | $311.19 | 10,891.65 |
| 11/6/2023 | 12/12/2023 | 37.00 | 12/12/2023 | 36.00 | Residential Sales | $123.72 | 4,453.92 |
| 11/6/2023 | 4/29/2024 | 176.00 | 4/29/2024 | 175.00 | Commercial Sales | $97.33 | 17,032.75 |
| 11/6/2023 | 11/6/2023 | 1.00 | 11/6/2023 | 0.00 | Commercial Sales | $4,360.61 | - |
| 11/7/2023 | 12/11/2023 | 35.00 | 12/11/2023 | 34.00 | Commercial Sales | $1,601.44 | 54,448.96 |
| 11/7/2023 | 12/11/2023 | 35.00 | 12/11/2023 | 34.00 | Residential Sales | $72.66 | 2,470.44 |
| 11/7/2023 | 1/30/2024 | 85.00 | 1/30/2024 | 84.00 | Residential Sales | $117.04 | 9,831.36 |
| 11/7/2023 | 12/12/2023 | 36.00 | 12/12/2023 | 35.00 | Residential Sales | $16.53 | 578.55 |
| 11/7/2023 | 12/13/2023 | 37.00 | 12/13/2023 | 36.00 | Commercial Sales | $42.07 | 1,514.52 |
| 11/7/2023 | 11/20/2023 | 14.00 | 11/20/2023 | 13.00 | Commercial Sales | $27,939.26 | 363,210.38 |
| 11/7/2023 | 11/7/2023 | 1.00 | 11/7/2023 | 0.00 | Commercial Sales | $1,918.51 | - |
| 11/7/2023 | 11/8/2023 | 2.00 | 11/8/2023 | 1.00 | Industrial Service | $14,719.38 | 14,719.38 |
| 11/7/2023 | 11/8/2023 | 2.00 | 11/8/2023 | 1.00 | Commercial Sales | $394,006.18 | 394,006.18 |
| 11/7/2023 | 11/9/2023 | 3.00 | 11/9/2023 | 2.00 | Industrial Service | $3,126.11 | 6,252.22 |
| 11/7/2023 | 11/7/2023 | 1.00 | 11/7/2023 | 0.00 | Residential Sales | $870.64 | - |
| 11/7/2023 | 11/21/2023 | 15.00 | 11/21/2023 | 14.00 | Residential Sales | $113.49 | 1,588.86 |
| 11/7/2023 | 11/8/2023 | 2.00 | 11/8/2023 | 1.00 | Residential Sales | $774,878.66 | 774,878.66 |
| 11/7/2023 | 11/9/2023 | 3.00 | 11/9/2023 | 2.00 | Commercial Sales | $142,211.79 | 284,423.58 |
| 11/7/2023 | 11/22/2023 | 16.00 | 11/22/2023 | 15.00 | Residential Sales | $166.88 | 2,503.20 |
| 11/7/2023 | 11/9/2023 | 3.00 | 11/9/2023 | 2.00 | Residential Sales | $14,443.75 | 28,887.50 |
| 11/7/2023 | 11/8/2023 | 2.00 | 11/8/2023 | 1.00 | Other Sales to Public Authority | $17,123.22 | 17,123.22 |
| 11/7/2023 | 5/24/2024 | 200.00 | 5/24/2024 | 199.00 | Commercial Sales | $261.92 | 52,122.08 |
| 11/7/2023 | 11/9/2023 | 3.00 | 11/9/2023 | 2.00 | Other Sales to Public Authority | $11,165.94 | 22,331.88 |
| 11/7/2023 | 12/19/2023 | 43.00 | 12/19/2023 | 42.00 | Residential Sales | $63.53 | 2,668.26 |
| 11/7/2023 | 11/10/2023 | 4.00 | 11/10/2023 | 3.00 | Commercial Sales | $37,816.58 | 113,449.74 |
| 11/7/2023 | 11/9/2023 | 3.00 | 11/9/2023 | 2.00 | Public Street & Highway Lighting | $72.07 | 144.14 |
| 11/7/2023 | 3/25/2024 | 140.00 | 3/25/2024 | 139.00 | Commercial Sales | $36.06 | 5,012.34 |
| 11/7/2023 | 11/10/2023 | 4.00 | 11/10/2023 | 3.00 | Residential Sales | $1,869.84 | 5,609.52 |
| 11/7/2023 | 11/27/2023 | 21.00 | 11/27/2023 | 20.00 | Residential Sales | $45.48 | 909.60 |
| 11/7/2023 | 11/13/2023 | 7.00 | 11/13/2023 | 6.00 | Industrial Service | $220.76 | 1,324.56 |
| 11/7/2023 | 11/28/2023 | 22.00 | 11/28/2023 | 21.00 | Residential Sales | $87.61 | 1,839.81 |
| 11/7/2023 | 11/10/2023 | 4.00 | 11/10/2023 | 3.00 | Other Sales to Public Authority | $191.54 | 574.62 |
| 11/7/2023 | 11/13/2023 | 7.00 | 11/13/2023 | 6.00 | Commercial Sales | $49,339.05 | 296,034.30 |
| 11/7/2023 | 12/6/2023 | 30.00 | 12/6/2023 | 29.00 | Residential Sales | $125.40 | 3,636.60 |
| 11/7/2023 | 12/21/2023 | 45.00 | 12/21/2023 | 44.00 | Commercial Sales | $143.53 | 6,315.32 |
| 11/7/2023 | 12/20/2023 | 44.00 | 12/20/2023 | 43.00 | Residential Sales | $286.13 | 12,303.59 |
| 11/7/2023 | 11/13/2023 | 7.00 | 11/13/2023 | 6.00 | Residential Sales | $1,867.94 | 11,207.64 |
| 11/7/2023 | 11/14/2023 | 8.00 | 11/14/2023 | 7.00 | Commercial Sales | $12,607.27 | 88,250.89 |
| 11/7/2023 | 11/14/2023 | 8.00 | 11/14/2023 | 7.00 | Residential Sales | $4,397.27 | 30,780.89 |
| 11/7/2023 | 11/13/2023 | 7.00 | 11/13/2023 | 6.00 | Other Sales to Public Authority | $14,641.61 | 87,849.66 |
| 11/7/2023 | 12/22/2023 | 46.00 | 12/22/2023 | 45.00 | Residential Sales | $89.79 | 4,040.55 |
| 11/7/2023 | 11/15/2023 | 9.00 | 11/15/2023 | 8.00 | Residential Sales | $5,331.61 | 42,652.88 |
| 11/7/2023 | 11/16/2023 | 10.00 | 11/16/2023 | 9.00 | Commercial Sales | $10,834.69 | 97,512.21 |
| 11/7/2023 | 4/9/2024 | 155.00 | 4/9/2024 | 154.00 | Commercial Sales | $64.57 | 9,943.78 |
| 11/7/2023 | 11/17/2023 | 11.00 | 11/17/2023 | 10.00 | Commercial Sales | $49,637.36 | 496,373.60 |
| 11/7/2023 | 11/16/2023 | 10.00 | 11/16/2023 | 9.00 | Residential Sales | $1,417.70 | 12,759.30 |
| 11/7/2023 | 11/17/2023 | 11.00 | 11/17/2023 | 10.00 | Residential Sales | $291.41 | 2,914.10 |
| 11/8/2023 | 11/13/2023 | 6.00 | 11/13/2023 | 5.00 | Residential Sales | $1,274.92 | 6,374.60 |
| 11/8/2023 | 11/14/2023 | 7.00 | 11/14/2023 | 6.00 | Commercial Sales | $70,161.37 | 420,968.22 |
| 11/8/2023 | 11/10/2023 | 3.00 | 11/10/2023 | 2.00 | Public Street & Highway Lighting | $24.03 | 48.06 |
| 11/8/2023 | 11/16/2023 | 9.00 | 11/16/2023 | 8.00 | Industrial Service | $25,308.18 | 202,465.44 |
| 11/8/2023 | 11/14/2023 | 7.00 | 11/14/2023 | 6.00 | Residential Sales | $1,645.71 | 9,874.26 |
| 11/8/2023 | 11/13/2023 | 6.00 | 11/13/2023 | 5.00 | Other Sales to Public Authority | $36,526.50 | 182,632.50 |
| 11/8/2023 | 1/10/2024 | 64.00 | 1/10/2024 | 63.00 | Residential Sales | $27.05 | 1,704.15 |
| 11/8/2023 | 12/8/2023 | 31.00 | 12/8/2023 | 30.00 | Residential Sales | $25.89 | 776.70 |
| 11/8/2023 | 11/14/2023 | 7.00 | 11/14/2023 | 6.00 | Other Sales to Public Authority | $13,942.40 | 83,654.40 |
| 11/8/2023 | 11/15/2023 | 8.00 | 11/15/2023 | 7.00 | Residential Sales | $504.70 | 3,532.90 |
| 11/8/2023 | 11/17/2023 | 10.00 | 11/17/2023 | 9.00 | Industrial Service | $27,582.70 | 248,244.30 |
| 11/8/2023 | 11/16/2023 | 9.00 | 11/16/2023 | 8.00 | Residential Sales | $1,727.00 | 13,816.00 |
| 11/8/2023 | 11/17/2023 | 10.00 | 11/17/2023 | 9.00 | Commercial Sales | $140,038.81 | 1,260,349.29 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 11/8/2023 | 11/17/2023 | 10.00 | 11/17/2023 | 9.00 | Residential Sales | $735.08 | 6,615.72 |
| 11/8/2023 | 11/16/2023 | 9.00 | 11/16/2023 | 8.00 | Other Sales to Public Authority | $351.54 | 2,812.32 |
| 11/8/2023 | 4/25/2024 | 170.00 | 4/25/2024 | 169.00 | Commercial Sales | $17.75 | 2,999.75 |
| 11/8/2023 | 11/17/2023 | 10.00 | 11/17/2023 | 9.00 | Other Sales to Public Authority | $13,533.38 | 121,800.42 |
| 11/8/2023 | 2/9/2024 | 94.00 | 2/9/2024 | 93.00 | Commercial Sales | $42.07 | 3,912.51 |
| 11/8/2023 | 12/11/2023 | 34.00 | 12/11/2023 | 33.00 | Commercial Sales | $949.44 | 31,331.52 |
| 11/8/2023 | 12/11/2023 | 34.00 | 12/11/2023 | 33.00 | Residential Sales | $51.54 | 1,700.82 |
| 11/8/2023 | 11/10/2023 | 3.00 | 11/10/2023 | 2.00 | Company Use | $0.00 | - |
| 11/8/2023 | 11/20/2023 | 13.00 | 11/20/2023 | 12.00 | Commercial Sales | $40,049.90 | 480,598.80 |
| 11/8/2023 | 11/20/2023 | 13.00 | 11/20/2023 | 12.00 | Residential Sales | $171.09 | 2,053.08 |
| 11/8/2023 | 11/8/2023 | 1.00 | 11/8/2023 | 0.00 | Commercial Sales | $12,956.06 | - |
| 11/8/2023 | 11/9/2023 | 2.00 | 11/9/2023 | 1.00 | Industrial Service | $22,208.92 | 22,208.92 |
| 11/8/2023 | 11/9/2023 | 2.00 | 11/9/2023 | 1.00 | Commercial Sales | $175,960.04 | 175,960.04 |
| 11/8/2023 | 11/22/2023 | 15.00 | 11/22/2023 | 14.00 | Residential Sales | $180.19 | 2,522.66 |
| 11/8/2023 | 11/8/2023 | 1.00 | 11/8/2023 | 0.00 | Residential Sales | $1,044.70 | - |
| 11/8/2023 | 11/9/2023 | 2.00 | 11/9/2023 | 1.00 | Residential Sales | $296,430.37 | 296,430.37 |
| 11/8/2023 | 11/9/2023 | 2.00 | 11/9/2023 | 1.00 | Other Sales to Public Authority | $25,299.46 | 25,299.46 |
| 11/8/2023 | 11/10/2023 | 3.00 | 11/10/2023 | 2.00 | Industrial Service | $1,253.96 | 2,507.92 |
| 11/8/2023 | 11/10/2023 | 3.00 | 11/10/2023 | 2.00 | Commercial Sales | $58,365.82 | 116,731.64 |
| 11/8/2023 | 11/27/2023 | 20.00 | 11/27/2023 | 19.00 | Commercial Sales | $64.31 | 1,221.89 |
| 11/8/2023 | 12/19/2023 | 42.00 | 12/19/2023 | 41.00 | Other Sales to Public Authority | $14,942.79 | 612,654.39 |
| 11/8/2023 | 11/10/2023 | 3.00 | 11/10/2023 | 2.00 | Residential Sales | $6,915.89 | 13,831.78 |
| 11/8/2023 | 11/10/2023 | 3.00 | 11/10/2023 | 2.00 | Other Sales to Public Authority | $4,444.53 | 8,889.06 |
| 11/8/2023 | 11/13/2023 | 6.00 | 11/13/2023 | 5.00 | Commercial Sales | $137,726.16 | 688,630.80 |
| 11/8/2023 | 11/14/2023 | 7.00 | 11/14/2023 | 6.00 | Industrial Service | $118,595.06 | 711,570.36 |
| 11/8/2023 | 11/29/2023 | 22.00 | 11/29/2023 | 21.00 | Residential Sales | $0.49 | 10.29 |
| 11/9/2023 | 11/10/2023 | 2.00 | 11/10/2023 | 1.00 | Industrial Service | $15,233.65 | 15,233.65 |
| 11/9/2023 | 11/10/2023 | 2.00 | 11/10/2023 | 1.00 | Commercial Sales | $311,729.09 | 311,729.09 |
| 11/9/2023 | 11/27/2023 | 19.00 | 11/27/2023 | 18.00 | Commercial Sales | $13,980.49 | 251,648.82 |
| 11/9/2023 | 11/10/2023 | 2.00 | 11/10/2023 | 1.00 | Residential Sales | $299,294.45 | 299,294.45 |
| 11/9/2023 | 1/9/2024 | 62.00 | 1/9/2024 | 61.00 | Residential Sales | $20.07 | 1,224.27 |
| 11/9/2023 | 11/27/2023 | 19.00 | 11/27/2023 | 18.00 | Residential Sales | $149.33 | 2,687.94 |
| 11/9/2023 | 11/9/2023 | 1.00 | 11/9/2023 | 0.00 | Other Sales to Public Authority | $253.43 | - |
| 11/9/2023 | 12/20/2023 | 42.00 | 12/20/2023 | 41.00 | Commercial Sales | $11,666.36 | 478,320.76 |
| 11/9/2023 | 11/13/2023 | 5.00 | 11/13/2023 | 4.00 | Industrial Service | $6,089.21 | 24,356.84 |
| 11/9/2023 | 12/6/2023 | 28.00 | 12/6/2023 | 27.00 | Commercial Sales | $17,331.78 | 467,958.06 |
| 11/9/2023 | 11/28/2023 | 20.00 | 11/28/2023 | 19.00 | Residential Sales | $160.64 | 3,052.16 |
| 11/9/2023 | 11/13/2023 | 5.00 | 11/13/2023 | 4.00 | Commercial Sales | $44,979.78 | 179,919.12 |
| 11/9/2023 | 12/1/2023 | 23.00 | 12/1/2023 | 22.00 | Other Sales to Public Authority | $11,352.07 | 249,745.54 |
| 11/9/2023 | 11/13/2023 | 5.00 | 11/13/2023 | 4.00 | Residential Sales | $5,755.94 | 23,023.76 |
| 11/9/2023 | 11/14/2023 | 6.00 | 11/14/2023 | 5.00 | Commercial Sales | $104,084.36 | 520,421.80 |
| 11/9/2023 | 12/21/2023 | 43.00 | 12/21/2023 | 42.00 | Residential Sales | $154.27 | 6,479.34 |
| 11/9/2023 | 11/14/2023 | 6.00 | 11/14/2023 | 5.00 | Residential Sales | $18,373.00 | 91,865.00 |
| 11/9/2023 | 11/15/2023 | 7.00 | 11/15/2023 | 6.00 | Commercial Sales | $42,217.26 | 253,303.56 |
| 11/9/2023 | 12/22/2023 | 44.00 | 12/22/2023 | 43.00 | Residential Sales | $107.93 | 4,640.99 |
| 11/9/2023 | 12/8/2023 | 30.00 | 12/8/2023 | 29.00 | Residential Sales | $4.81 | 139.49 |
| 11/9/2023 | 11/15/2023 | 7.00 | 11/15/2023 | 6.00 | Residential Sales | $1,937.67 | 11,626.02 |
| 11/9/2023 | 11/16/2023 | 8.00 | 11/16/2023 | 7.00 | Commercial Sales | $62,094.21 | 434,659.47 |
| 11/9/2023 | 11/10/2023 | 2.00 | 11/10/2023 | 1.00 | Other Sales to Public Authority | $27,409.53 | 27,409.53 |
| 11/9/2023 | 11/17/2023 | 9.00 | 11/17/2023 | 8.00 | Industrial Service | $71,407.28 | 571,258.24 |
| 11/9/2023 | 11/17/2023 | 9.00 | 11/17/2023 | 8.00 | Commercial Sales | $42,707.47 | 341,659.76 |
| 11/9/2023 | 2/20/2024 | 104.00 | 2/20/2024 | 103.00 | Residential Sales | $23.51 | 2,421.53 |
| 11/9/2023 | 11/17/2023 | 9.00 | 11/17/2023 | 8.00 | Residential Sales | $1,235.82 | 9,886.56 |
| 11/9/2023 | 11/13/2023 | 5.00 | 11/13/2023 | 4.00 | Other Sales to Public Authority | $11,706.70 | 46,826.80 |
| 11/9/2023 | 11/14/2023 | 6.00 | 11/14/2023 | 5.00 | Other Sales to Public Authority | $24,579.94 | 122,899.70 |
| 11/9/2023 | 11/15/2023 | 7.00 | 11/15/2023 | 6.00 | Other Sales to Public Authority | $288.42 | 1,730.52 |
| 11/9/2023 | 12/11/2023 | 33.00 | 12/11/2023 | 32.00 | Residential Sales | $39.79 | 1,273.28 |
| 11/9/2023 | 12/12/2023 | 34.00 | 12/12/2023 | 33.00 | Commercial Sales | $10,619.00 | 350,427.00 |
| 11/9/2023 | 11/20/2023 | 12.00 | 11/20/2023 | 11.00 | Industrial Service | $27,607.10 | 303,678.10 |
| 11/9/2023 | 11/16/2023 | 8.00 | 11/16/2023 | 7.00 | Other Sales to Public Authority | $113.93 | 797.51 |
| 11/9/2023 | 12/12/2023 | 34.00 | 12/12/2023 | 33.00 | Residential Sales | $19.59 | 646.47 |
| 11/9/2023 | 12/13/2023 | 35.00 | 12/13/2023 | 34.00 | Residential Sales | $63.86 | 2,171.24 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 11/9/2023 | 11/20/2023 | 12.00 | 11/20/2023 | 11.00 | Commercial Sales | $45,143.42 | 496,577.62 |
| 11/9/2023 | 11/20/2023 | 12.00 | 11/20/2023 | 11.00 | Residential Sales | $754.97 | 8,304.67 |
| 11/9/2023 | 1/2/2024 | 55.00 | 1/2/2024 | 54.00 | Residential Sales | $14.31 | 772.74 |
| 11/9/2023 | 11/9/2023 | 1.00 | 11/9/2023 | 0.00 | Commercial Sales | $3,458.77 | - |
| 11/9/2023 | 11/22/2023 | 14.00 | 11/22/2023 | 13.00 | Residential Sales | $167.64 | 2,179.32 |
| 11/9/2023 | 11/9/2023 | 1.00 | 11/9/2023 | 0.00 | Residential Sales | $2,424.09 | - |
| 11/9/2023 | 5/24/2024 | 198.00 | 5/24/2024 | 197.00 | Residential Sales | $227.78 | 44,872.66 |
| 11/10/2023 | 11/10/2023 | 1.00 | 11/10/2023 | 0.00 | Commercial Sales | $783.08 | - |
| 11/10/2023 | 11/10/2023 | 1.00 | 11/10/2023 | 0.00 | Residential Sales | $1,499.57 | - |
| 11/10/2023 | 1/9/2024 | 61.00 | 1/9/2024 | 60.00 | Residential Sales | $19.48 | 1,168.80 |
| 11/10/2023 | 11/13/2023 | 4.00 | 11/13/2023 | 3.00 | Industrial Service | $30,643.53 | 91,930.59 |
| 11/10/2023 | 11/28/2023 | 19.00 | 11/28/2023 | 18.00 | Residential Sales | $121.01 | 2,178.18 |
| 11/10/2023 | 12/20/2023 | 41.00 | 12/20/2023 | 40.00 | Commercial Sales | $3,017.32 | 120,692.80 |
| 11/10/2023 | 11/13/2023 | 4.00 | 11/13/2023 | 3.00 | Commercial Sales | $205,372.14 | 616,116.42 |
| 11/10/2023 | 11/14/2023 | 5.00 | 11/14/2023 | 4.00 | Industrial Service | $585.64 | 2,342.56 |
| 11/10/2023 | 12/7/2023 | 28.00 | 12/7/2023 | 27.00 | Commercial Sales | $79.21 | 2,138.67 |
| 11/10/2023 | 12/21/2023 | 42.00 | 12/21/2023 | 41.00 | Commercial Sales | $142.73 | 5,851.93 |
| 11/10/2023 | 12/6/2023 | 27.00 | 12/6/2023 | 26.00 | Residential Sales | $85.39 | 2,220.14 |
| 11/10/2023 | 11/29/2023 | 20.00 | 11/29/2023 | 19.00 | Residential Sales | $95.60 | 1,816.40 |
| 11/10/2023 | 11/13/2023 | 4.00 | 11/13/2023 | 3.00 | Residential Sales | $536,728.15 | 1,610,184.45 |
| 11/10/2023 | 11/14/2023 | 5.00 | 11/14/2023 | 4.00 | Commercial Sales | $77,742.55 | 310,970.20 |
| 11/10/2023 | 11/10/2023 | 1.00 | 11/10/2023 | 0.00 | Public Street & Highway Lighting | $5,599.00 | - |
| 11/10/2023 | 12/8/2023 | 29.00 | 12/8/2023 | 28.00 | Commercial Sales | $481.68 | 13,487.04 |
| 11/10/2023 | 11/15/2023 | 6.00 | 11/15/2023 | 5.00 | Industrial Service | $7,846.83 | 39,234.15 |
| 11/10/2023 | 12/7/2023 | 28.00 | 12/7/2023 | 27.00 | Residential Sales | $55.38 | 1,495.26 |
| 11/10/2023 | 11/14/2023 | 5.00 | 11/14/2023 | 4.00 | Residential Sales | $12,148.40 | 48,593.60 |
| 11/10/2023 | 5/28/2024 | 201.00 | 5/28/2024 | 200.00 | Public Street & Highway Lighting | $7,771.26 | 1,554,252.00 |
| 11/10/2023 | 11/15/2023 | 6.00 | 11/15/2023 | 5.00 | Commercial Sales | $86,962.03 | 434,810.15 |
| 11/10/2023 | 11/16/2023 | 7.00 | 11/16/2023 | 6.00 | Industrial Service | $272,575.11 | 1,635,450.66 |
| 11/10/2023 | 3/4/2024 | 116.00 | 3/4/2024 | 115.00 | Company Use | $374.60 | 43,079.00 |
| 11/10/2023 | 11/15/2023 | 6.00 | 11/15/2023 | 5.00 | Residential Sales | $644.29 | 3,221.45 |
| 11/10/2023 | 11/10/2023 | 1.00 | 11/10/2023 | 0.00 | Other Sales to Public Authority | $21.63 | - |
| 11/10/2023 | 11/16/2023 | 7.00 | 11/16/2023 | 6.00 | Commercial Sales | $39,293.44 | 235,760.64 |
| 11/10/2023 | 11/17/2023 | 8.00 | 11/17/2023 | 7.00 | Industrial Service | $204,446.05 | 1,431,122.35 |
| 11/10/2023 | 5/15/2024 | 188.00 | 5/15/2024 | 187.00 | Residential Sales | $148.06 | 27,687.22 |
| 11/10/2023 | 1/11/2024 | 63.00 | 1/11/2024 | 62.00 | Residential Sales | $121.89 | 7,557.18 |
| 11/10/2023 | 11/13/2023 | 4.00 | 11/13/2023 | 3.00 | Public Street & Highway Lighting | $47,399.03 | 142,197.09 |
| 11/10/2023 | 11/16/2023 | 7.00 | 11/16/2023 | 6.00 | Residential Sales | $716.10 | 4,296.60 |
| 11/10/2023 | 11/17/2023 | 8.00 | 11/17/2023 | 7.00 | Commercial Sales | $146,740.73 | 1,027,185.11 |
| 11/10/2023 | 2/6/2024 | 89.00 | 2/6/2024 | 88.00 | Residential Sales | $88.78 | 7,812.64 |
| 11/10/2023 | 11/30/2023 | 21.00 | 11/30/2023 | 20.00 | Residential Sales | $130.23 | 2,604.60 |
| 11/10/2023 | 11/14/2023 | 5.00 | 11/14/2023 | 4.00 | Public Street & Highway Lighting | $6,030.41 | 24,121.64 |
| 11/10/2023 | 11/17/2023 | 8.00 | 11/17/2023 | 7.00 | Residential Sales | $506.69 | 3,546.83 |
| 11/10/2023 | 11/13/2023 | 4.00 | 11/13/2023 | 3.00 | Other Sales to Public Authority | $35,438.58 | 106,315.74 |
| 11/10/2023 | 11/15/2023 | 6.00 | 11/15/2023 | 5.00 | Public Street & Highway Lighting | $13,317.92 | 66,589.60 |
| 11/10/2023 | 12/27/2023 | 48.00 | 12/27/2023 | 47.00 | Commercial Sales | $10,651.01 | 500,597.47 |
| 11/10/2023 | 11/14/2023 | 5.00 | 11/14/2023 | 4.00 | Other Sales to Public Authority | $1,541.29 | 6,165.16 |
| 11/10/2023 | 11/16/2023 | 7.00 | 11/16/2023 | 6.00 | Public Street & Highway Lighting | $3,939.25 | 23,635.50 |
| 11/10/2023 | 3/1/2024 | 113.00 | 3/1/2024 | 112.00 | Commercial Sales | $18.03 | 2,019.36 |
| 11/10/2023 | 5/2/2024 | 175.00 | 5/2/2024 | 174.00 | Residential Sales | $310.88 | 54,093.12 |
| 11/10/2023 | 11/17/2023 | 8.00 | 11/17/2023 | 7.00 | Public Street & Highway Lighting | $7,138.61 | 49,970.27 |
| 11/10/2023 | 11/20/2023 | 11.00 | 11/20/2023 | 10.00 | Industrial Service | $888,995.91 | 8,889,959.10 |
| 11/10/2023 | 11/16/2023 | 7.00 | 11/16/2023 | 6.00 | Other Sales to Public Authority | $18,239.40 | 109,436.40 |
| 11/10/2023 | 12/12/2023 | 33.00 | 12/12/2023 | 32.00 | Residential Sales | $654.08 | 20,930.56 |
| 11/10/2023 | 11/20/2023 | 11.00 | 11/20/2023 | 10.00 | Commercial Sales | $30,238.45 | 302,384.50 |
| 11/10/2023 | 11/21/2023 | 12.00 | 11/21/2023 | 11.00 | Industrial Service | $26,340.17 | 289,741.87 |
| 11/10/2023 | 4/26/2024 | 169.00 | 4/26/2024 | 168.00 | Public Street & Highway Lighting | $5,003.38 | 840,567.84 |
| 11/10/2023 | 11/20/2023 | 11.00 | 11/20/2023 | 10.00 | Residential Sales | $2,673.00 | 26,730.00 |
| 11/10/2023 | 12/14/2023 | 35.00 | 12/14/2023 | 34.00 | Residential Sales | $288.07 | 9,794.38 |
| 11/10/2023 | 6/14/2024 | 218.00 | 6/14/2024 | 217.00 | Residential Sales | $67.83 | 14,719.11 |
| 11/10/2023 | 11/21/2023 | 12.00 | 11/21/2023 | 11.00 | Residential Sales | $280.63 | 3,086.93 |
| 11/10/2023 | 11/20/2023 | 11.00 | 11/20/2023 | 10.00 | Public Street & Highway Lighting | $6,784.66 | 67,846.60 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 11/10/2023 | 4/29/2024 | 172.00 | 4/29/2024 | 171.00 | Public Street & Highway Lighting | $1,086.43 | 185,779.53 |
| 11/10/2023 | 5/24/2024 | 197.00 | 5/24/2024 | 196.00 | Commercial Sales | $509.89 | 99,938.44 |
| 11/10/2023 | 1/5/2024 | 57.00 | 1/5/2024 | 56.00 | Residential Sales | $95.97 | 5,374.32 |
| 11/10/2023 | 11/21/2023 | 12.00 | 11/21/2023 | 11.00 | Public Street & Highway Lighting | $4,906.18 | 53,967.98 |
| 11/11/2023 | 11/13/2023 | 3.00 | 11/13/2023 | 2.00 | Residential Sales | $364.98 | 729.96 |
| 11/12/2023 | 11/30/2023 | 19.00 | 11/30/2023 | 18.00 | Other Sales to Public Authority | $319.25 | 5,746.50 |
| 11/12/2023 | 11/20/2023 | 9.00 | 11/20/2023 | 8.00 | Residential Sales | $32.80 | 262.40 |
| 11/12/2023 | 1/8/2024 | 58.00 | 1/8/2024 | 57.00 | Residential Sales | $3.61 | 205.77 |
| 11/12/2023 | 11/13/2023 | 2.00 | 11/13/2023 | 1.00 | Residential Sales | $2,028.29 | 2,028.29 |
| 11/12/2023 | 11/14/2023 | 3.00 | 11/14/2023 | 2.00 | Residential Sales | $599.21 | 1,198.42 |
| 11/12/2023 | 11/15/2023 | 4.00 | 11/15/2023 | 3.00 | Residential Sales | $14.68 | 44.04 |
| 11/12/2023 | 11/16/2023 | 5.00 | 11/16/2023 | 4.00 | Commercial Sales | $13.72 | 54.88 |
| 11/13/2023 | 11/14/2023 | 2.00 | 11/14/2023 | 1.00 | Commercial Sales | $375,085.90 | 375,085.90 |
| 11/13/2023 | 11/13/2023 | 1.00 | 11/13/2023 | 0.00 | Residential Sales | $1,263.99 | - |
| 11/13/2023 | 11/15/2023 | 3.00 | 11/15/2023 | 2.00 | Industrial Service | $21,714.87 | 43,429.74 |
| 11/13/2023 | 1/26/2024 | 75.00 | 1/26/2024 | 74.00 | Residential Sales | $143.65 | 10,630.10 |
| 11/13/2023 | 11/14/2023 | 2.00 | 11/14/2023 | 1.00 | Residential Sales | $862,435.83 | 862,435.83 |
| 11/13/2023 | 11/15/2023 | 3.00 | 11/15/2023 | 2.00 | Commercial Sales | $96,421.41 | 192,842.82 |
| 11/13/2023 | 11/16/2023 | 4.00 | 11/16/2023 | 3.00 | Industrial Service | $97,224.25 | 291,672.75 |
| 11/13/2023 | 11/16/2023 | 4.00 | 11/16/2023 | 3.00 | Commercial Sales | $259,934.47 | 779,803.41 |
| 11/13/2023 | 11/15/2023 | 3.00 | 11/15/2023 | 2.00 | Residential Sales | $17,580.93 | 35,161.86 |
| 11/13/2023 | 11/17/2023 | 5.00 | 11/17/2023 | 4.00 | Industrial Service | $363,712.69 | 1,454,850.76 |
| 11/13/2023 | 11/30/2023 | 18.00 | 11/30/2023 | 17.00 | Commercial Sales | $540.54 | 9,189.18 |
| 11/13/2023 | 11/17/2023 | 5.00 | 11/17/2023 | 4.00 | Commercial Sales | $419,150.37 | 1,676,601.48 |
| 11/13/2023 | 11/16/2023 | 4.00 | 11/16/2023 | 3.00 | Residential Sales | $2,655.18 | 7,965.54 |
| 11/13/2023 | 11/13/2023 | 1.00 | 11/13/2023 | 0.00 | Public Street & Highway Lighting | $9.46 | - |
| 11/13/2023 | 2/7/2024 | 87.00 | 2/7/2024 | 86.00 | Commercial Sales | $288.77 | 24,834.22 |
| 11/13/2023 | 11/17/2023 | 5.00 | 11/17/2023 | 4.00 | Residential Sales | $2,421.80 | 9,687.20 |
| 11/13/2023 | 11/13/2023 | 1.00 | 11/13/2023 | 0.00 | Other Sales to Public Authority | $21.71 | - |
| 11/13/2023 | 2/9/2024 | 89.00 | 2/9/2024 | 88.00 | Residential Sales | $20.74 | 1,825.12 |
| 11/13/2023 | 11/14/2023 | 2.00 | 11/14/2023 | 1.00 | Other Sales to Public Authority | $2,137.20 | 2,137.20 |
| 11/13/2023 | 11/15/2023 | 3.00 | 11/15/2023 | 2.00 | Other Sales to Public Authority | $533.84 | 1,067.68 |
| 11/13/2023 | 12/12/2023 | 30.00 | 12/12/2023 | 29.00 | Residential Sales | $45.83 | 1,329.07 |
| 11/13/2023 | 11/20/2023 | 8.00 | 11/20/2023 | 7.00 | Industrial Service | $178,438.66 | 1,249,070.62 |
| 11/13/2023 | 12/13/2023 | 31.00 | 12/13/2023 | 30.00 | Commercial Sales | $36.06 | 1,081.80 |
| 11/13/2023 | 11/20/2023 | 8.00 | 11/20/2023 | 7.00 | Commercial Sales | $68,147.85 | 477,034.95 |
| 11/13/2023 | 11/17/2023 | 5.00 | 11/17/2023 | 4.00 | Other Sales to Public Authority | $81.18 | 324.72 |
| 11/13/2023 | 11/21/2023 | 9.00 | 11/21/2023 | 8.00 | Industrial Service | $8,737.82 | 69,902.56 |
| 11/13/2023 | 12/13/2023 | 31.00 | 12/13/2023 | 30.00 | Residential Sales | $261.95 | 7,858.50 |
| 11/13/2023 | 12/14/2023 | 32.00 | 12/14/2023 | 31.00 | Commercial Sales | $1,692.09 | 52,454.79 |
| 11/13/2023 | 11/20/2023 | 8.00 | 11/20/2023 | 7.00 | Residential Sales | $3,284.48 | 22,991.36 |
| 11/13/2023 | 5/6/2024 | 176.00 | 5/6/2024 | 175.00 | Residential Sales | $224.82 | 39,343.50 |
| 11/13/2023 | 12/14/2023 | 32.00 | 12/14/2023 | 31.00 | Residential Sales | $37.32 | 1,156.92 |
| 11/13/2023 | 1/2/2024 | 51.00 | 1/2/2024 | 50.00 | Residential Sales | $149.04 | 7,452.00 |
| 11/13/2023 | 11/21/2023 | 9.00 | 11/21/2023 | 8.00 | Residential Sales | $4,936.72 | 39,493.76 |
| 11/13/2023 | 12/15/2023 | 33.00 | 12/15/2023 | 32.00 | Residential Sales | $128.07 | 4,098.24 |
| 11/13/2023 | 3/5/2024 | 114.00 | 3/5/2024 | 113.00 | Residential Sales | $23.19 | 2,620.47 |
| 11/13/2023 | 12/30/2023 | 48.00 | 12/30/2023 | 47.00 | Commercial Sales | $985.96 | 46,340.12 |
| 11/13/2023 | 11/22/2023 | 10.00 | 11/22/2023 | 9.00 | Residential Sales | $399.97 | 3,599.73 |
| 11/13/2023 | 12/1/2023 | 19.00 | 12/1/2023 | 18.00 | Residential Sales | $55.95 | 1,007.10 |
| 11/13/2023 | 11/27/2023 | 15.00 | 11/27/2023 | 14.00 | Residential Sales | $922.21 | 12,910.94 |
| 11/13/2023 | 11/28/2023 | 16.00 | 11/28/2023 | 15.00 | Residential Sales | $157.94 | 2,369.10 |
| 11/13/2023 | 12/20/2023 | 38.00 | 12/20/2023 | 37.00 | Commercial Sales | $164.65 | 6,092.05 |
| 11/13/2023 | 11/13/2023 | 1.00 | 11/13/2023 | 0.00 | Commercial Sales | $574.86 | - |
| 11/13/2023 | 11/14/2023 | 2.00 | 11/14/2023 | 1.00 | Industrial Service | $37,363.57 | 37,363.57 |
| 11/13/2023 | 12/6/2023 | 24.00 | 12/6/2023 | 23.00 | Residential Sales | $112.08 | 2,577.84 |
| 11/13/2023 | 5/24/2024 | 194.00 | 5/24/2024 | 193.00 | Other Sales to Public Authority | $136.22 | 26,290.46 |
| 11/13/2023 | 11/29/2023 | 17.00 | 11/29/2023 | 16.00 | Residential Sales | $89.83 | 1,437.28 |
| 11/14/2023 | 11/17/2023 | 4.00 | 11/17/2023 | 3.00 | Company Use | -$8,904.95 | (26,714.85) |
| 11/14/2023 | 12/19/2023 | 36.00 | 12/19/2023 | 35.00 | Residential Sales | $30.11 | 1,053.85 |
| 11/14/2023 | 11/20/2023 | 7.00 | 11/20/2023 | 6.00 | Other Sales to Public Authority | $15,411.70 | 92,470.20 |
| 11/14/2023 | 5/24/2024 | 193.00 | 5/24/2024 | 192.00 | Public Street & Highway Lighting | $190.46 | 36,568.32 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 11/14/2023 | 5/28/2024 | 197.00 | 5/28/2024 | 196.00 | Commercial Sales | $1,244.16 | 243,855.36 |
| 11/14/2023 | 11/27/2023 | 14.00 | 11/27/2023 | 13.00 | Residential Sales | $252.75 | 3,285.75 |
| 11/14/2023 | 3/25/2024 | 133.00 | 3/25/2024 | 132.00 | Residential Sales | $51.42 | 6,787.44 |
| 11/14/2023 | 11/28/2023 | 15.00 | 11/28/2023 | 14.00 | Residential Sales | $70.57 | 987.98 |
| 11/14/2023 | 11/29/2023 | 16.00 | 11/29/2023 | 15.00 | Residential Sales | $129.60 | 1,944.00 |
| 11/14/2023 | 12/22/2023 | 39.00 | 12/22/2023 | 38.00 | Industrial Service | $9,563.33 | 363,406.54 |
| 11/14/2023 | 11/15/2023 | 2.00 | 11/15/2023 | 1.00 | Industrial Service | $10,292.62 | 10,292.62 |
| 11/14/2023 | 11/14/2023 | 1.00 | 11/14/2023 | 0.00 | Commercial Sales | $4,109.75 | - |
| 11/14/2023 | 12/7/2023 | 24.00 | 12/7/2023 | 23.00 | Residential Sales | $19.95 | 458.85 |
| 11/14/2023 | 11/15/2023 | 2.00 | 11/15/2023 | 1.00 | Commercial Sales | $163,105.82 | 163,105.82 |
| 11/14/2023 | 11/16/2023 | 3.00 | 11/16/2023 | 2.00 | Industrial Service | $42.95 | 85.90 |
| 11/14/2023 | 11/14/2023 | 1.00 | 11/14/2023 | 0.00 | Residential Sales | $807.30 | - |
| 11/14/2023 | 11/15/2023 | 2.00 | 11/15/2023 | 1.00 | Residential Sales | $639,621.34 | 639,621.34 |
| 11/14/2023 | 11/16/2023 | 3.00 | 11/16/2023 | 2.00 | Commercial Sales | $61,853.01 | 123,706.02 |
| 11/14/2023 | 11/17/2023 | 4.00 | 11/17/2023 | 3.00 | Industrial Service | $56,284.94 | 168,854.82 |
| 11/14/2023 | 11/16/2023 | 3.00 | 11/16/2023 | 2.00 | Residential Sales | $8,170.45 | 16,340.90 |
| 11/14/2023 | 11/17/2023 | 4.00 | 11/17/2023 | 3.00 | Commercial Sales | $380,211.38 | 1,140,634.14 |
| 11/14/2023 | 1/12/2024 | 60.00 | 1/12/2024 | 59.00 | Residential Sales | $149.29 | 8,808.11 |
| 11/14/2023 | 2/6/2024 | 85.00 | 2/6/2024 | 84.00 | Residential Sales | $50.01 | 4,200.84 |
| 11/14/2023 | 11/17/2023 | 4.00 | 11/17/2023 | 3.00 | Residential Sales | $1,685.41 | 5,056.23 |
| 11/14/2023 | 11/14/2023 | 1.00 | 11/14/2023 | 0.00 | Public Street & Highway Lighting | $328.42 | - |
| 11/14/2023 | 5/1/2024 | 170.00 | 5/1/2024 | 169.00 | Residential Sales | $190.73 | 32,233.37 |
| 11/14/2023 | 5/2/2024 | 171.00 | 5/2/2024 | 170.00 | Residential Sales | $132.28 | 22,487.60 |
| 11/14/2023 | 4/26/2024 | 165.00 | 4/26/2024 | 164.00 | Commercial Sales | $102.27 | 16,772.28 |
| 11/14/2023 | 11/15/2023 | 2.00 | 11/15/2023 | 1.00 | Other Sales to Public Authority | $23,002.28 | 23,002.28 |
| 11/14/2023 | 11/20/2023 | 7.00 | 11/20/2023 | 6.00 | Industrial Service | $447.96 | 2,687.76 |
| 11/14/2023 | 12/12/2023 | 29.00 | 12/12/2023 | 28.00 | Residential Sales | $7.06 | 197.68 |
| 11/14/2023 | 11/16/2023 | 3.00 | 11/16/2023 | 2.00 | Other Sales to Public Authority | $141.12 | 282.24 |
| 11/14/2023 | 11/20/2023 | 7.00 | 11/20/2023 | 6.00 | Commercial Sales | $101,011.63 | 606,069.78 |
| 11/14/2023 | 11/20/2023 | 7.00 | 11/20/2023 | 6.00 | Residential Sales | $950.24 | 5,701.44 |
| 11/14/2023 | 11/21/2023 | 8.00 | 11/21/2023 | 7.00 | Residential Sales | $656.32 | 4,594.24 |
| 11/14/2023 | 11/14/2023 | 1.00 | 11/14/2023 | 0.00 | Other Public Authority Transportation On | $41.58 | - |
| 11/14/2023 | 11/22/2023 | 9.00 | 11/22/2023 | 8.00 | Residential Sales | $4,584.32 | 36,674.56 |
| 11/14/2023 | 11/15/2023 | 2.00 | 11/15/2023 | 1.00 | Company Use | $0.00 | - |
| 11/14/2023 | 11/16/2023 | 3.00 | 11/16/2023 | 2.00 | Company Use | $0.00 | - |
| 11/15/2023 | 11/20/2023 | 6.00 | 11/20/2023 | 5.00 | Residential Sales | $2,312.72 | 11,563.60 |
| 11/15/2023 | 11/21/2023 | 7.00 | 11/21/2023 | 6.00 | Commercial Sales | $777.20 | 4,663.20 |
| 11/15/2023 | 6/14/2024 | 213.00 | 6/14/2024 | 212.00 | Residential Sales | $22.43 | 4,755.16 |
| 11/15/2023 | 11/21/2023 | 7.00 | 11/21/2023 | 6.00 | Residential Sales | $1,208.01 | 7,248.06 |
| 11/15/2023 | 11/22/2023 | 8.00 | 11/22/2023 | 7.00 | Residential Sales | $1,788.39 | 12,518.73 |
| 11/15/2023 | 12/19/2023 | 35.00 | 12/19/2023 | 34.00 | Commercial Sales | $402.67 | 13,690.78 |
| 11/15/2023 | 2/15/2024 | 93.00 | 2/15/2024 | 92.00 | Residential Sales | $83.33 | 7,666.36 |
| 11/15/2023 | 11/21/2023 | 7.00 | 11/21/2023 | 6.00 | Other Sales to Public Authority | $31,311.15 | 187,866.90 |
| 11/15/2023 | 11/27/2023 | 13.00 | 11/27/2023 | 12.00 | Residential Sales | $132.10 | 1,585.20 |
| 11/15/2023 | 1/9/2024 | 56.00 | 1/9/2024 | 55.00 | Residential Sales | $28.16 | 1,548.80 |
| 11/15/2023 | 11/28/2023 | 14.00 | 11/28/2023 | 13.00 | Residential Sales | $56.99 | 740.87 |
| 11/15/2023 | 12/7/2023 | 23.00 | 12/7/2023 | 22.00 | Residential Sales | $203.33 | 4,473.26 |
| 11/15/2023 | 11/15/2023 | 1.00 | 11/15/2023 | 0.00 | Commercial Sales | $2,492.99 | - |
| 11/15/2023 | 11/16/2023 | 2.00 | 11/16/2023 | 1.00 | Industrial Service | $778.99 | 778.99 |
| 11/15/2023 | 11/16/2023 | 2.00 | 11/16/2023 | 1.00 | Commercial Sales | $105,758.68 | 105,758.68 |
| 11/15/2023 | 11/15/2023 | 1.00 | 11/15/2023 | 0.00 | Residential Sales | $1,455.82 | - |
| 11/15/2023 | 4/8/2024 | 146.00 | 4/8/2024 | 145.00 | Commercial Sales | $247.68 | 35,913.60 |
| 11/15/2023 | 11/17/2023 | 3.00 | 11/17/2023 | 2.00 | Industrial Service | $164.50 | 329.00 |
| 11/15/2023 | 11/16/2023 | 2.00 | 11/16/2023 | 1.00 | Residential Sales | $580,233.03 | 580,233.03 |
| 11/15/2023 | 11/17/2023 | 3.00 | 11/17/2023 | 2.00 | Commercial Sales | $22,930.33 | 45,860.66 |
| 11/15/2023 | 2/7/2024 | 85.00 | 2/7/2024 | 84.00 | Commercial Sales | $495.99 | 41,663.16 |
| 11/15/2023 | 11/30/2023 | 16.00 | 11/30/2023 | 15.00 | Residential Sales | $32.32 | 484.80 |
| 11/15/2023 | 11/17/2023 | 3.00 | 11/17/2023 | 2.00 | Residential Sales | $12,466.50 | 24,933.00 |
| 11/15/2023 | 11/15/2023 | 1.00 | 11/15/2023 | 0.00 | Public Street & Highway Lighting | $3.66 | - |
| 11/15/2023 | 4/25/2024 | 163.00 | 4/25/2024 | 162.00 | Residential Sales | $30.28 | 4,905.36 |
| 11/15/2023 | 11/15/2023 | 1.00 | 11/15/2023 | 0.00 | Other Sales to Public Authority | $99.96 | - |
| 11/15/2023 | 12/13/2023 | 29.00 | 12/13/2023 | 28.00 | Commercial Sales | $1,196.83 | 33,511.24 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 11/15/2023 | 11/16/2023 | 2.00 | 11/16/2023 | 1.00 | Other Sales to Public Authority | $15,792.44 | 15,792.44 |
| 11/15/2023 | 11/20/2023 | 6.00 | 11/20/2023 | 5.00 | Commercial Sales | $22,716.89 | 113,584.45 |
| 11/15/2023 | 11/17/2023 | 3.00 | 11/17/2023 | 2.00 | Other Sales to Public Authority | $2,908.61 | 5,817.22 |
| 11/15/2023 | 11/21/2023 | 7.00 | 11/21/2023 | 6.00 | Industrial Service | $45,906.64 | 275,439.84 |
| 11/16/2023 | 12/27/2023 | 42.00 | 12/27/2023 | 41.00 | Commercial Sales | $9,226.03 | 378,267.23 |
| 11/16/2023 | 11/16/2023 | 1.00 | 11/16/2023 | 0.00 | Public Street & Highway Lighting | $168.87 | - |
| 11/16/2023 | 12/11/2023 | 26.00 | 12/11/2023 | 25.00 | Commercial Sales | $176.99 | 4,424.75 |
| 11/16/2023 | 11/20/2023 | 5.00 | 11/20/2023 | 4.00 | Industrial Service | $22,368.89 | 89,475.56 |
| 11/16/2023 | 11/16/2023 | 1.00 | 11/16/2023 | 0.00 | Other Sales to Public Authority | $43.44 | - |
| 11/16/2023 | 12/12/2023 | 27.00 | 12/12/2023 | 26.00 | Residential Sales | $6.23 | 161.98 |
| 11/16/2023 | 11/20/2023 | 5.00 | 11/20/2023 | 4.00 | Commercial Sales | $135,688.45 | 542,753.80 |
| 11/16/2023 | 11/21/2023 | 6.00 | 11/21/2023 | 5.00 | Industrial Service | $92,263.92 | 461,319.60 |
| 11/16/2023 | 11/17/2023 | 2.00 | 11/17/2023 | 1.00 | Other Sales to Public Authority | $7,012.98 | 7,012.98 |
| 11/16/2023 | 3/4/2024 | 110.00 | 3/4/2024 | 109.00 | Commercial Sales | $194.88 | 21,241.92 |
| 11/16/2023 | 12/14/2023 | 29.00 | 12/14/2023 | 28.00 | Commercial Sales | $263.47 | 7,377.16 |
| 11/16/2023 | 11/20/2023 | 5.00 | 11/20/2023 | 4.00 | Residential Sales | $15,191.39 | 60,765.56 |
| 11/16/2023 | 11/21/2023 | 6.00 | 11/21/2023 | 5.00 | Commercial Sales | $70,177.65 | 350,888.25 |
| 11/16/2023 | 11/22/2023 | 7.00 | 11/22/2023 | 6.00 | Industrial Service | $51,527.23 | 309,163.38 |
| 11/16/2023 | 1/2/2024 | 48.00 | 1/2/2024 | 47.00 | Residential Sales | $69.38 | 3,260.86 |
| 11/16/2023 | 11/21/2023 | 6.00 | 11/21/2023 | 5.00 | Residential Sales | $3,313.98 | 16,569.90 |
| 11/16/2023 | 11/22/2023 | 7.00 | 11/22/2023 | 6.00 | Commercial Sales | $570.62 | 3,423.72 |
| 11/16/2023 | 11/22/2023 | 7.00 | 11/22/2023 | 6.00 | Residential Sales | $1,680.81 | 10,084.86 |
| 11/16/2023 | 12/18/2023 | 33.00 | 12/18/2023 | 32.00 | Residential Sales | $58.40 | 1,868.80 |
| 11/16/2023 | 12/19/2023 | 34.00 | 12/19/2023 | 33.00 | Commercial Sales | $12,339.71 | 407,210.43 |
| 11/16/2023 | 11/20/2023 | 5.00 | 11/20/2023 | 4.00 | Other Sales to Public Authority | $454.85 | 1,819.40 |
| 11/16/2023 | 2/15/2024 | 92.00 | 2/15/2024 | 91.00 | Residential Sales | $144.32 | 13,133.12 |
| 11/16/2023 | 12/19/2023 | 34.00 | 12/19/2023 | 33.00 | Residential Sales | $18.71 | 617.43 |
| 11/16/2023 | 11/21/2023 | 6.00 | 11/21/2023 | 5.00 | Other Sales to Public Authority | $1,409.32 | 7,046.60 |
| 11/16/2023 | 11/27/2023 | 12.00 | 11/27/2023 | 11.00 | Residential Sales | $3,551.65 | 39,068.15 |
| 11/16/2023 | 1/9/2024 | 55.00 | 1/9/2024 | 54.00 | Residential Sales | $23.06 | 1,245.24 |
| 11/16/2023 | 11/22/2023 | 7.00 | 11/22/2023 | 6.00 | Other Sales to Public Authority | $4.81 | 28.86 |
| 11/16/2023 | 11/28/2023 | 13.00 | 11/28/2023 | 12.00 | Residential Sales | $287.70 | 3,452.40 |
| 11/16/2023 | 11/29/2023 | 14.00 | 11/29/2023 | 13.00 | Commercial Sales | $227.05 | 2,951.65 |
| 11/16/2023 | 12/20/2023 | 35.00 | 12/20/2023 | 34.00 | Commercial Sales | $371.18 | 12,620.12 |
| 11/16/2023 | 12/6/2023 | 21.00 | 12/6/2023 | 20.00 | Residential Sales | $41.10 | 822.00 |
| 11/16/2023 | 11/29/2023 | 14.00 | 11/29/2023 | 13.00 | Residential Sales | $307.89 | 4,002.57 |
| 11/16/2023 | 12/20/2023 | 35.00 | 12/20/2023 | 34.00 | Residential Sales | $93.76 | 3,187.84 |
| 11/16/2023 | 3/11/2024 | 117.00 | 3/11/2024 | 116.00 | Residential Sales | $39.20 | 4,547.20 |
| 11/16/2023 | 11/27/2023 | 12.00 | 11/27/2023 | 11.00 | Public Street & Highway Lighting | $13.53 | 148.83 |
| 11/16/2023 | 1/10/2024 | 56.00 | 1/10/2024 | 55.00 | Residential Sales | $108.10 | 5,945.50 |
| 11/16/2023 | 11/16/2023 | 1.00 | 11/16/2023 | 0.00 | Commercial Sales | $12,020.64 | - |
| 11/16/2023 | 11/17/2023 | 2.00 | 11/17/2023 | 1.00 | Industrial Service | $30,747.99 | 30,747.99 |
| 11/16/2023 | 11/17/2023 | 2.00 | 11/17/2023 | 1.00 | Commercial Sales | $232,184.98 | 232,184.98 |
| 11/16/2023 | 11/16/2023 | 1.00 | 11/16/2023 | 0.00 | Residential Sales | $961.21 | - |
| 11/16/2023 | 11/30/2023 | 15.00 | 11/30/2023 | 14.00 | Residential Sales | $41.54 | 581.56 |
| 11/16/2023 | 11/17/2023 | 2.00 | 11/17/2023 | 1.00 | Residential Sales | $844,023.73 | 844,023.73 |
| 11/17/2023 | 12/7/2023 | 21.00 | 12/7/2023 | 20.00 | Residential Sales | $26.22 | 524.40 |
| 11/17/2023 | 12/22/2023 | 36.00 | 12/22/2023 | 35.00 | Residential Sales | $168.67 | 5,903.45 |
| 11/17/2023 | 11/17/2023 | 1.00 | 11/17/2023 | 0.00 | Commercial Sales | $2,755.37 | - |
| 11/17/2023 | 11/30/2023 | 14.00 | 11/30/2023 | 13.00 | Residential Sales | $115.05 | 1,495.65 |
| 11/17/2023 | 4/9/2024 | 145.00 | 4/9/2024 | 144.00 | Commercial Sales | $220.89 | 31,808.16 |
| 11/17/2023 | 11/17/2023 | 1.00 | 11/17/2023 | 0.00 | Residential Sales | $5,905.87 | - |
| 11/17/2023 | 2/22/2024 | 98.00 | 2/22/2024 | 97.00 | Commercial Sales | $130.34 | 12,642.98 |
| 11/17/2023 | 11/17/2023 | 1.00 | 11/17/2023 | 0.00 | Public Street & Highway Lighting | $418.23 | - |
| 11/17/2023 | 12/12/2023 | 26.00 | 12/12/2023 | 25.00 | Residential Sales | $14.68 | 367.00 |
| 11/17/2023 | 11/20/2023 | 4.00 | 11/20/2023 | 3.00 | Industrial Service | $16,553.36 | 49,660.08 |
| 11/17/2023 | 11/20/2023 | 4.00 | 11/20/2023 | 3.00 | Commercial Sales | $170,917.72 | 512,753.16 |
| 11/17/2023 | 1/2/2024 | 47.00 | 1/2/2024 | 46.00 | Commercial Sales | $2,350.24 | 108,111.04 |
| 11/17/2023 | 11/20/2023 | 4.00 | 11/20/2023 | 3.00 | Residential Sales | $546,082.57 | 1,638,247.71 |
| 11/17/2023 | 11/21/2023 | 5.00 | 11/21/2023 | 4.00 | Commercial Sales | $67,878.78 | 271,515.12 |
| 11/17/2023 | 11/22/2023 | 6.00 | 11/22/2023 | 5.00 | Industrial Service | $2,306.19 | 11,530.95 |
| 11/17/2023 | 11/22/2023 | 6.00 | 11/22/2023 | 5.00 | Commercial Sales | $93,667.13 | 468,335.65 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 11/17/2023 | 11/21/2023 | 5.00 | 11/21/2023 | 4.00 | Residential Sales | $1,443.69 | 5,774.76 |
| 11/17/2023 | 11/22/2023 | 6.00 | 11/22/2023 | 5.00 | Residential Sales | $5,487.34 | 27,436.70 |
| 11/17/2023 | 12/19/2023 | 33.00 | 12/19/2023 | 32.00 | Commercial Sales | $755.08 | 24,162.56 |
| 11/17/2023 | 11/20/2023 | 4.00 | 11/20/2023 | 3.00 | Other Sales to Public Authority | $11,202.98 | 33,608.94 |
| 11/17/2023 | 11/21/2023 | 5.00 | 11/21/2023 | 4.00 | Other Sales to Public Authority | $570.51 | 2,282.04 |
| 11/17/2023 | 11/27/2023 | 11.00 | 11/27/2023 | 10.00 | Commercial Sales | $11,344.35 | 113,443.50 |
| 11/17/2023 | 1/8/2024 | 53.00 | 1/8/2024 | 52.00 | Residential Sales | $117.64 | 6,117.28 |
| 11/17/2023 | 11/27/2023 | 11.00 | 11/27/2023 | 10.00 | Residential Sales | $566.88 | 5,668.80 |
| 11/17/2023 | 1/9/2024 | 54.00 | 1/9/2024 | 53.00 | Residential Sales | $22.18 | 1,175.54 |
| 11/17/2023 | 11/22/2023 | 6.00 | 11/22/2023 | 5.00 | Other Sales to Public Authority | $23,366.19 | 116,830.95 |
| 11/17/2023 | 11/28/2023 | 12.00 | 11/28/2023 | 11.00 | Commercial Sales | $323.66 | 3,560.26 |
| 11/17/2023 | 11/28/2023 | 12.00 | 11/28/2023 | 11.00 | Residential Sales | $2,594.13 | 28,535.43 |
| 11/17/2023 | 12/20/2023 | 34.00 | 12/20/2023 | 33.00 | Commercial Sales | $124.56 | 4,110.48 |
| 11/17/2023 | 12/20/2023 | 34.00 | 12/20/2023 | 33.00 | Residential Sales | $222.79 | 7,352.07 |
| 11/18/2023 | 11/20/2023 | 3.00 | 11/20/2023 | 2.00 | Residential Sales | $61.66 | 123.32 |
| 11/19/2023 | 11/20/2023 | 2.00 | 11/20/2023 | 1.00 | Residential Sales | $1,968.86 | 1,968.86 |
| 11/19/2023 | 11/21/2023 | 3.00 | 11/21/2023 | 2.00 | Commercial Sales | $62.68 | 125.36 |
| 11/19/2023 | 11/21/2023 | 3.00 | 11/21/2023 | 2.00 | Residential Sales | $221.65 | 443.30 |
| 11/19/2023 | 11/22/2023 | 4.00 | 11/22/2023 | 3.00 | Residential Sales | $42.84 | 128.52 |
| 11/19/2023 | 11/27/2023 | 9.00 | 11/27/2023 | 8.00 | Residential Sales | $42.61 | 340.88 |
| 11/19/2023 | 12/5/2023 | 17.00 | 12/5/2023 | 16.00 | Commercial Sales | $90.91 | 1,454.56 |
| 11/19/2023 | 12/6/2023 | 18.00 | 12/6/2023 | 17.00 | Commercial Sales | $134.87 | 2,292.79 |
| 11/19/2023 | 12/20/2023 | 32.00 | 12/20/2023 | 31.00 | Commercial Sales | $953.71 | 29,565.01 |
| 11/19/2023 | 11/29/2023 | 11.00 | 11/29/2023 | 10.00 | Residential Sales | $171.15 | 1,711.50 |
| 11/20/2023 | 11/21/2023 | 2.00 | 11/21/2023 | 1.00 | Commercial Sales | $116,957.28 | 116,957.28 |
| 11/20/2023 | 11/20/2023 | 1.00 | 11/20/2023 | 0.00 | Residential Sales | $1,601.35 | - |
| 11/20/2023 | 11/21/2023 | 2.00 | 11/21/2023 | 1.00 | Residential Sales | $847,791.98 | 847,791.98 |
| 11/20/2023 | 11/22/2023 | 3.00 | 11/22/2023 | 2.00 | Commercial Sales | $31,494.88 | 62,989.76 |
| 11/20/2023 | 11/22/2023 | 3.00 | 11/22/2023 | 2.00 | Residential Sales | $14,944.50 | 29,889.00 |
| 11/20/2023 | 11/20/2023 | 1.00 | 11/20/2023 | 0.00 | Public Street & Highway Lighting | $131.34 | - |
| 11/20/2023 | 2/14/2024 | 87.00 | 2/14/2024 | 86.00 | Residential Sales | $43.15 | 3,710.90 |
| 11/20/2023 | 11/21/2023 | 2.00 | 11/21/2023 | 1.00 | Other Sales to Public Authority | $17,402.70 | 17,402.70 |
| 11/20/2023 | 11/27/2023 | 8.00 | 11/27/2023 | 7.00 | Commercial Sales | $3,451.28 | 24,158.96 |
| 11/20/2023 | 11/22/2023 | 3.00 | 11/22/2023 | 2.00 | Other Sales to Public Authority | $30,530.36 | 61,060.72 |
| 11/20/2023 | 11/27/2023 | 8.00 | 11/27/2023 | 7.00 | Residential Sales | $2,551.04 | 17,857.28 |
| 11/20/2023 | 5/28/2024 | 191.00 | 5/28/2024 | 190.00 | Commercial Sales | $1,331.92 | 253,064.80 |
| 11/20/2023 | 11/28/2023 | 9.00 | 11/28/2023 | 8.00 | Commercial Sales | $197.28 | 1,578.24 |
| 11/20/2023 | 11/28/2023 | 9.00 | 11/28/2023 | 8.00 | Residential Sales | $3,728.72 | 29,829.76 |
| 11/20/2023 | 1/24/2024 | 66.00 | 1/24/2024 | 65.00 | Residential Sales | $105.57 | 6,862.05 |
| 11/20/2023 | 11/29/2023 | 10.00 | 11/29/2023 | 9.00 | Commercial Sales | $1,796.93 | 16,172.37 |
| 11/20/2023 | 12/20/2023 | 31.00 | 12/20/2023 | 30.00 | Residential Sales | $119.81 | 3,594.30 |
| 11/20/2023 | 11/29/2023 | 10.00 | 11/29/2023 | 9.00 | Residential Sales | $137.64 | 1,238.76 |
| 11/20/2023 | 1/25/2024 | 67.00 | 1/25/2024 | 66.00 | Residential Sales | $62.86 | 4,148.76 |
| 11/20/2023 | 12/22/2023 | 33.00 | 12/22/2023 | 32.00 | Residential Sales | $32.10 | 1,027.20 |
| 11/20/2023 | 11/30/2023 | 11.00 | 11/30/2023 | 10.00 | Residential Sales | $112.75 | 1,127.50 |
| 11/20/2023 | 12/11/2023 | 22.00 | 12/11/2023 | 21.00 | Residential Sales | $141.80 | 2,977.80 |
| 11/20/2023 | 4/29/2024 | 162.00 | 4/29/2024 | 161.00 | Commercial Sales | $503.97 | 81,139.17 |
| 11/20/2023 | 1/18/2024 | 60.00 | 1/18/2024 | 59.00 | Residential Sales | $223.35 | 13,177.65 |
| 11/20/2023 | 11/21/2023 | 2.00 | 11/21/2023 | 1.00 | Industrial Service | $3,882.57 | 3,882.57 |
| 11/20/2023 | 11/20/2023 | 1.00 | 11/20/2023 | 0.00 | Commercial Sales | $50.31 | - |
| 11/21/2023 | 4/24/2024 | 156.00 | 4/24/2024 | 155.00 | Residential Sales | $115.49 | 17,900.95 |
| 11/21/2023 | 12/13/2023 | 23.00 | 12/13/2023 | 22.00 | Commercial Sales | $486.78 | 10,709.16 |
| 11/21/2023 | 12/14/2023 | 24.00 | 12/14/2023 | 23.00 | Commercial Sales | $294.41 | 6,771.43 |
| 11/21/2023 | 1/18/2024 | 59.00 | 1/18/2024 | 58.00 | Residential Sales | $11.16 | 647.28 |
| 11/21/2023 | 11/22/2023 | 2.00 | 11/22/2023 | 1.00 | Industrial Service | $73,879.75 | 73,879.75 |
| 11/21/2023 | 11/21/2023 | 1.00 | 11/21/2023 | 0.00 | Commercial Sales | $6,044.06 | - |
| 11/21/2023 | 12/14/2023 | 24.00 | 12/14/2023 | 23.00 | Residential Sales | $3.54 | 81.42 |
| 11/21/2023 | 11/22/2023 | 2.00 | 11/22/2023 | 1.00 | Commercial Sales | $337,481.23 | 337,481.23 |
| 11/21/2023 | 11/21/2023 | 1.00 | 11/21/2023 | 0.00 | Residential Sales | $3,905.74 | - |
| 11/21/2023 | 11/22/2023 | 2.00 | 11/22/2023 | 1.00 | Residential Sales | $770,010.05 | 770,010.05 |
| 11/21/2023 | 1/5/2024 | 46.00 | 1/5/2024 | 45.00 | Residential Sales | $6.66 | 299.70 |
| 11/21/2023 | 11/21/2023 | 1.00 | 11/21/2023 | 0.00 | Public Street & Highway Lighting | $22.49 | - |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 11/21/2023 | 12/13/2023 | 23.00 | 12/13/2023 | 22.00 | Other Sales to Public Authority | $139.57 | 3,070.54 |
| 11/21/2023 | 11/27/2023 | 7.00 | 11/27/2023 | 6.00 | Industrial Service | $32,178.79 | 193,072.74 |
| 11/21/2023 | 11/27/2023 | 7.00 | 11/27/2023 | 6.00 | Commercial Sales | $11,417.34 | 68,504.04 |
| 11/21/2023 | 11/21/2023 | 1.00 | 11/21/2023 | 0.00 | Other Sales to Public Authority | $573.47 | - |
| 11/21/2023 | 6/3/2024 | 196.00 | 6/3/2024 | 195.00 | Residential Sales | $67.66 | 13,193.70 |
| 11/21/2023 | 11/27/2023 | 7.00 | 11/27/2023 | 6.00 | Residential Sales | $12,483.65 | 74,901.90 |
| 11/21/2023 | 11/22/2023 | 2.00 | 11/22/2023 | 1.00 | Other Sales to Public Authority | $18,695.41 | 18,695.41 |
| 11/21/2023 | 11/28/2023 | 8.00 | 11/28/2023 | 7.00 | Commercial Sales | $39,709.27 | 277,964.89 |
| 11/21/2023 | 12/20/2023 | 30.00 | 12/20/2023 | 29.00 | Commercial Sales | $141.80 | 4,112.20 |
| 11/21/2023 | 11/28/2023 | 8.00 | 11/28/2023 | 7.00 | Residential Sales | $869.68 | 6,087.76 |
| 11/21/2023 | 12/5/2023 | 15.00 | 12/5/2023 | 14.00 | Residential Sales | $53.01 | 742.14 |
| 11/21/2023 | 11/29/2023 | 9.00 | 11/29/2023 | 8.00 | Commercial Sales | $33,785.05 | 270,280.40 |
| 11/21/2023 | 11/29/2023 | 9.00 | 11/29/2023 | 8.00 | Residential Sales | $556.49 | 4,451.92 |
| 11/21/2023 | 12/21/2023 | 31.00 | 12/21/2023 | 30.00 | Commercial Sales | $30.70 | 921.00 |
| 11/21/2023 | 12/20/2023 | 30.00 | 12/20/2023 | 29.00 | Residential Sales | $15.07 | 437.03 |
| 11/21/2023 | 11/27/2023 | 7.00 | 11/27/2023 | 6.00 | Other Sales to Public Authority | $5.70 | 34.20 |
| 11/21/2023 | 3/14/2024 | 115.00 | 3/14/2024 | 114.00 | Commercial Sales | $336.26 | 38,333.64 |
| 11/21/2023 | 11/30/2023 | 10.00 | 11/30/2023 | 9.00 | Commercial Sales | $10.94 | 98.46 |
| 11/21/2023 | 1/12/2024 | 53.00 | 1/12/2024 | 52.00 | Commercial Sales | $13.04 | 678.08 |
| 11/21/2023 | 11/30/2023 | 10.00 | 11/30/2023 | 9.00 | Residential Sales | $267.50 | 2,407.50 |
| 11/21/2023 | 11/28/2023 | 8.00 | 11/28/2023 | 7.00 | Other Sales to Public Authority | $13,356.09 | 93,492.63 |
| 11/21/2023 | 11/29/2023 | 9.00 | 11/29/2023 | 8.00 | Other Sales to Public Authority | $17,228.75 | 137,830.00 |
| 11/22/2023 | 3/29/2024 | 129.00 | 3/29/2024 | 128.00 | Commercial Sales | $2,800.00 | 358,400.00 |
| 11/22/2023 | 11/30/2023 | 9.00 | 11/30/2023 | 8.00 | Industrial Service | $30,422.27 | 243,378.16 |
| 11/22/2023 | 12/22/2023 | 31.00 | 12/22/2023 | 30.00 | Residential Sales | $114.07 | 3,422.10 |
| 11/22/2023 | 11/30/2023 | 9.00 | 11/30/2023 | 8.00 | Commercial Sales | $28,327.21 | 226,617.68 |
| 11/22/2023 | 11/27/2023 | 6.00 | 11/27/2023 | 5.00 | Other Sales to Public Authority | $36,643.22 | 183,216.10 |
| 11/22/2023 | 11/30/2023 | 9.00 | 11/30/2023 | 8.00 | Residential Sales | $14.80 | 118.40 |
| 11/22/2023 | 11/28/2023 | 7.00 | 11/28/2023 | 6.00 | Other Sales to Public Authority | $1,668.03 | 10,008.18 |
| 11/22/2023 | 11/29/2023 | 8.00 | 11/29/2023 | 7.00 | Other Sales to Public Authority | $25,135.18 | 175,946.26 |
| 11/22/2023 | 3/18/2024 | 118.00 | 3/18/2024 | 117.00 | Industrial Service | $9,690.26 | 1,133,760.42 |
| 11/22/2023 | 5/2/2024 | 163.00 | 5/2/2024 | 162.00 | Residential Sales | $115.53 | 18,715.86 |
| 11/22/2023 | 12/28/2023 | 37.00 | 12/28/2023 | 36.00 | Commercial Sales | $42.75 | 1,539.00 |
| 11/22/2023 | 12/12/2023 | 21.00 | 12/12/2023 | 20.00 | Residential Sales | $51.64 | 1,032.80 |
| 11/22/2023 | 12/14/2023 | 23.00 | 12/14/2023 | 22.00 | Commercial Sales | $16,451.09 | 361,923.98 |
| 11/22/2023 | 11/22/2023 | 1.00 | 11/22/2023 | 0.00 | Commercial Sales | $6,082.72 | - |
| 11/22/2023 | 3/5/2024 | 105.00 | 3/5/2024 | 104.00 | Residential Sales | $44.55 | 4,633.20 |
| 11/22/2023 | 11/22/2023 | 1.00 | 11/22/2023 | 0.00 | Residential Sales | $1,296.95 | - |
| 11/22/2023 | 5/24/2024 | 185.00 | 5/24/2024 | 184.00 | Commercial Sales | $455.85 | 83,876.40 |
| 11/22/2023 | 12/1/2023 | 10.00 | 12/1/2023 | 9.00 | Commercial Sales | $17,871.09 | 160,839.81 |
| 11/22/2023 | 12/18/2023 | 27.00 | 12/18/2023 | 26.00 | Residential Sales | $46.71 | 1,214.46 |
| 11/22/2023 | 12/1/2023 | 10.00 | 12/1/2023 | 9.00 | Residential Sales | $49.13 | 442.17 |
| 11/22/2023 | 11/22/2023 | 1.00 | 11/22/2023 | 0.00 | Public Street & Highway Lighting | $11.83 | - |
| 11/22/2023 | 11/27/2023 | 6.00 | 11/27/2023 | 5.00 | Industrial Service | $59,934.32 | 299,671.60 |
| 11/22/2023 | 12/2/2023 | 11.00 | 12/2/2023 | 10.00 | Residential Sales | $104.84 | 1,048.40 |
| 11/22/2023 | 1/22/2024 | 62.00 | 1/22/2024 | 61.00 | Commercial Sales | $8.20 | 500.20 |
| 11/22/2023 | 11/27/2023 | 6.00 | 11/27/2023 | 5.00 | Commercial Sales | $386,369.53 | 1,931,847.65 |
| 11/22/2023 | 11/28/2023 | 7.00 | 11/28/2023 | 6.00 | Industrial Service | $3,280.39 | 19,682.34 |
| 11/22/2023 | 11/27/2023 | 6.00 | 11/27/2023 | 5.00 | Residential Sales | $615,695.53 | 3,078,477.65 |
| 11/22/2023 | 11/28/2023 | 7.00 | 11/28/2023 | 6.00 | Commercial Sales | $119,050.27 | 714,301.62 |
| 11/22/2023 | 11/29/2023 | 8.00 | 11/29/2023 | 7.00 | Industrial Service | $187.13 | 1,309.91 |
| 11/22/2023 | 11/22/2023 | 1.00 | 11/22/2023 | 0.00 | Other Sales to Public Authority | $354.24 | - |
| 11/22/2023 | 11/29/2023 | 8.00 | 11/29/2023 | 7.00 | Commercial Sales | $83,569.28 | 584,984.96 |
| 11/22/2023 | 11/28/2023 | 7.00 | 11/28/2023 | 6.00 | Residential Sales | $2,845.18 | 17,071.08 |
| 11/22/2023 | 12/5/2023 | 14.00 | 12/5/2023 | 13.00 | Residential Sales | $100.64 | 1,308.32 |
| 11/22/2023 | 11/29/2023 | 8.00 | 11/29/2023 | 7.00 | Residential Sales | $1,167.01 | 8,169.07 |
| 11/23/2023 | 11/27/2023 | 5.00 | 11/27/2023 | 4.00 | Commercial Sales | $20.23 | 80.92 |
| 11/23/2023 | 11/27/2023 | 5.00 | 11/27/2023 | 4.00 | Residential Sales | $424.47 | 1,697.88 |
| 11/23/2023 | 11/29/2023 | 7.00 | 11/29/2023 | 6.00 | Commercial Sales | $28.95 | 173.70 |
| 11/24/2023 | 12/2/2023 | 9.00 | 12/2/2023 | 8.00 | Residential Sales | $5.43 | 43.44 |
| 11/24/2023 | 11/27/2023 | 4.00 | 11/27/2023 | 3.00 | Residential Sales | $822.61 | 2,467.83 |
| 11/24/2023 | 11/28/2023 | 5.00 | 11/28/2023 | 4.00 | Residential Sales | $56.66 | 226.64 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 11/24/2023 | 11/29/2023 | 6.00 | 11/29/2023 | 5.00 | Residential Sales | $21.16 | 105.80 |
| 11/24/2023 | 12/22/2023 | 29.00 | 12/22/2023 | 28.00 | Residential Sales | $92.04 | 2,577.12 |
| 11/25/2023 | 11/27/2023 | 3.00 | 11/27/2023 | 2.00 | Residential Sales | $500.03 | 1,000.06 |
| 11/26/2023 | 11/28/2023 | 3.00 | 11/28/2023 | 2.00 | Commercial Sales | $175.94 | 351.88 |
| 11/26/2023 | 11/29/2023 | 4.00 | 11/29/2023 | 3.00 | Commercial Sales | $54.07 | 162.21 |
| 11/26/2023 | 11/30/2023 | 5.00 | 11/30/2023 | 4.00 | Residential Sales | $77.42 | 309.68 |
| 11/26/2023 | 2/6/2024 | 73.00 | 2/6/2024 | 72.00 | Residential Sales | $11.22 | 807.84 |
| 11/26/2023 | 12/2/2023 | 7.00 | 12/2/2023 | 6.00 | Residential Sales | $82.01 | 492.06 |
| 11/26/2023 | 11/27/2023 | 2.00 | 11/27/2023 | 1.00 | Residential Sales | $2,186.82 | 2,186.82 |
| 11/26/2023 | 11/28/2023 | 3.00 | 11/28/2023 | 2.00 | Residential Sales | $226.40 | 452.80 |
| 11/27/2023 | 11/28/2023 | 2.00 | 11/28/2023 | 1.00 | Industrial Service | $99,846.47 | 99,846.47 |
| 11/27/2023 | 12/1/2023 | 5.00 | 12/1/2023 | 4.00 | Commercial Sales | $60,488.18 | 241,952.72 |
| 11/27/2023 | 11/27/2023 | 1.00 | 11/27/2023 | 0.00 | Residential Sales | $2,740.69 | - |
| 11/27/2023 | 11/29/2023 | 3.00 | 11/29/2023 | 2.00 | Industrial Service | $667.52 | 1,335.04 |
| 11/27/2023 | 11/28/2023 | 2.00 | 11/28/2023 | 1.00 | Residential Sales | $831,709.22 | 831,709.22 |
| 11/27/2023 | 12/5/2023 | 9.00 | 12/5/2023 | 8.00 | Residential Sales | $962.98 | 7,703.84 |
| 11/27/2023 | 11/29/2023 | 3.00 | 11/29/2023 | 2.00 | Residential Sales | $18,776.58 | 37,553.16 |
| 11/27/2023 | 12/1/2023 | 5.00 | 12/1/2023 | 4.00 | Other Sales to Public Authority | $2,120.93 | 8,483.72 |
| 11/27/2023 | 12/6/2023 | 10.00 | 12/6/2023 | 9.00 | Residential Sales | $53.76 | 483.84 |
| 11/27/2023 | 11/27/2023 | 1.00 | 11/27/2023 | 0.00 | Public Street & Highway Lighting | $9,892.08 | - |
| 11/27/2023 | 11/27/2023 | 1.00 | 11/27/2023 | 0.00 | Commercial Sales | $24,493.37 | - |
| 11/27/2023 | 11/28/2023 | 2.00 | 11/28/2023 | 1.00 | Commercial Sales | $973,906.36 | 973,906.36 |
| 11/27/2023 | 12/5/2023 | 9.00 | 12/5/2023 | 8.00 | Commercial Sales | $93,287.46 | 746,299.68 |
| 11/27/2023 | 11/28/2023 | 2.00 | 11/28/2023 | 1.00 | Public Street & Highway Lighting | $1,568.88 | 1,568.88 |
| 11/27/2023 | 2/1/2024 | 67.00 | 2/1/2024 | 66.00 | Commercial Sales | $47.28 | 3,120.48 |
| 11/27/2023 | 11/29/2023 | 3.00 | 11/29/2023 | 2.00 | Commercial Sales | $310,592.86 | 621,185.72 |
| 11/27/2023 | 11/27/2023 | 1.00 | 11/27/2023 | 0.00 | Other Sales to Public Authority | $75.62 | - |
| 11/27/2023 | 11/29/2023 | 3.00 | 11/29/2023 | 2.00 | Public Street & Highway Lighting | $5,412.53 | 10,825.06 |
| 11/27/2023 | 1/11/2024 | 46.00 | 1/11/2024 | 45.00 | Residential Sales | $46.84 | 2,107.80 |
| 11/27/2023 | 12/20/2023 | 24.00 | 12/20/2023 | 23.00 | Commercial Sales | $65.63 | 1,509.49 |
| 11/27/2023 | 11/30/2023 | 4.00 | 11/30/2023 | 3.00 | Residential Sales | $1,431.35 | 4,294.05 |
| 11/27/2023 | 11/28/2023 | 2.00 | 11/28/2023 | 1.00 | Other Sales to Public Authority | $52,423.02 | 52,423.02 |
| 11/27/2023 | 3/28/2024 | 123.00 | 3/28/2024 | 122.00 | Commercial Sales | $55.55 | 6,777.10 |
| 11/27/2023 | 11/29/2023 | 3.00 | 11/29/2023 | 2.00 | Other Sales to Public Authority | $4,814.91 | 9,629.82 |
| 11/27/2023 | 11/30/2023 | 4.00 | 11/30/2023 | 3.00 | Commercial Sales | $261,622.18 | 784,866.54 |
| 11/27/2023 | 12/27/2023 | 31.00 | 12/27/2023 | 30.00 | Residential Sales | $72.52 | 2,175.60 |
| 11/27/2023 | 12/28/2023 | 32.00 | 12/28/2023 | 31.00 | Residential Sales | $71.09 | 2,203.79 |
| 11/27/2023 | 11/30/2023 | 4.00 | 11/30/2023 | 3.00 | Other Sales to Public Authority | $14,892.48 | 44,677.44 |
| 11/27/2023 | 12/13/2023 | 17.00 | 12/13/2023 | 16.00 | Residential Sales | $40.63 | 650.08 |
| 11/27/2023 | 12/27/2023 | 31.00 | 12/27/2023 | 30.00 | Commercial Sales | $88.33 | 2,649.90 |
| 11/27/2023 | 5/6/2024 | 162.00 | 5/6/2024 | 161.00 | Residential Sales | $41.51 | 6,683.11 |
| 11/27/2023 | 12/2/2023 | 6.00 | 12/2/2023 | 5.00 | Industrial Service | $10,104.59 | 50,522.95 |
| 11/27/2023 | 12/18/2023 | 22.00 | 12/18/2023 | 21.00 | Residential Sales | $305.55 | 6,416.55 |
| 11/27/2023 | 12/13/2023 | 17.00 | 12/13/2023 | 16.00 | Other Sales to Public Authority | $548.74 | 8,779.84 |
| 11/27/2023 | 12/1/2023 | 5.00 | 12/1/2023 | 4.00 | Residential Sales | $128.20 | 512.80 |
| 11/28/2023 | 12/14/2023 | 17.00 | 12/14/2023 | 16.00 | Residential Sales | $67.56 | 1,080.96 |
| 11/28/2023 | 1/2/2024 | 36.00 | 1/2/2024 | 35.00 | Residential Sales | $110.39 | 3,863.65 |
| 11/28/2023 | 12/15/2023 | 18.00 | 12/15/2023 | 17.00 | Residential Sales | $80.36 | 1,366.12 |
| 11/28/2023 | 12/1/2023 | 4.00 | 12/1/2023 | 3.00 | Industrial Service | $95,660.86 | 286,982.58 |
| 11/28/2023 | 12/2/2023 | 5.00 | 12/2/2023 | 4.00 | Industrial Service | $21,613.67 | 86,454.68 |
| 11/28/2023 | 12/1/2023 | 4.00 | 12/1/2023 | 3.00 | Residential Sales | $203.97 | 611.91 |
| 11/28/2023 | 12/13/2023 | 16.00 | 12/13/2023 | 15.00 | Other Sales to Public Authority | $512.32 | 7,684.80 |
| 11/28/2023 | 12/2/2023 | 5.00 | 12/2/2023 | 4.00 | Residential Sales | $629.19 | 2,516.76 |
| 11/28/2023 | 1/2/2024 | 36.00 | 1/2/2024 | 35.00 | Other Sales to Public Authority | $250.33 | 8,761.55 |
| 11/28/2023 | 12/19/2023 | 22.00 | 12/19/2023 | 21.00 | Residential Sales | $7.61 | 159.81 |
| 11/28/2023 | 12/5/2023 | 8.00 | 12/5/2023 | 7.00 | Industrial Service | $1,892.48 | 13,247.36 |
| 11/28/2023 | 11/29/2023 | 2.00 | 11/29/2023 | 1.00 | Industrial Service | $184,937.58 | 184,937.58 |
| 11/28/2023 | 12/1/2023 | 4.00 | 12/1/2023 | 3.00 | Commercial Sales | $310,173.38 | 930,520.14 |
| 11/28/2023 | 5/24/2024 | 179.00 | 5/24/2024 | 178.00 | Commercial Sales | $677.39 | 120,575.42 |
| 11/28/2023 | 1/9/2024 | 43.00 | 1/9/2024 | 42.00 | Residential Sales | $138.36 | 5,811.12 |
| 11/28/2023 | 11/28/2023 | 1.00 | 11/28/2023 | 0.00 | Residential Sales | $1,318.23 | - |
| 11/28/2023 | 12/2/2023 | 5.00 | 12/2/2023 | 4.00 | Commercial Sales | $12,928.54 | 51,714.16 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 11/28/2023 | 12/5/2023 | 8.00 | 12/5/2023 | 7.00 | Residential Sales | $1,690.60 | 11,834.20 |
| 11/28/2023 | 1/24/2024 | 58.00 | 1/24/2024 | 57.00 | Residential Sales | $736.69 | 41,991.33 |
| 11/28/2023 | 11/29/2023 | 2.00 | 11/29/2023 | 1.00 | Residential Sales | $766,107.09 | 766,107.09 |
| 11/28/2023 | 12/6/2023 | 9.00 | 12/6/2023 | 8.00 | Residential Sales | $159.04 | 1,272.32 |
| 11/28/2023 | 12/1/2023 | 4.00 | 12/1/2023 | 3.00 | Other Sales to Public Authority | $36,261.77 | 108,785.31 |
| 11/28/2023 | 12/20/2023 | 23.00 | 12/20/2023 | 22.00 | Residential Sales | $16.04 | 352.88 |
| 11/28/2023 | 12/8/2023 | 11.00 | 12/8/2023 | 10.00 | Industrial Service | $6,151.28 | 61,512.80 |
| 11/28/2023 | 12/2/2023 | 5.00 | 12/2/2023 | 4.00 | Other Sales to Public Authority | $109.12 | 436.48 |
| 11/28/2023 | 11/28/2023 | 1.00 | 11/28/2023 | 0.00 | Public Street & Highway Lighting | $1,740.22 | - |
| 11/28/2023 | 11/30/2023 | 3.00 | 11/30/2023 | 2.00 | Industrial Service | $350,073.20 | 700,146.40 |
| 11/28/2023 | 11/28/2023 | 1.00 | 11/28/2023 | 0.00 | Commercial Sales | $58,413.54 | - |
| 11/28/2023 | 12/5/2023 | 8.00 | 12/5/2023 | 7.00 | Commercial Sales | $6,685.03 | 46,795.21 |
| 11/28/2023 | 11/29/2023 | 2.00 | 11/29/2023 | 1.00 | Commercial Sales | $610,661.01 | 610,661.01 |
| 11/28/2023 | 12/6/2023 | 9.00 | 12/6/2023 | 8.00 | Commercial Sales | $224.84 | 1,798.72 |
| 11/28/2023 | 12/20/2023 | 23.00 | 12/20/2023 | 22.00 | Commercial Sales | $160.85 | 3,538.70 |
| 11/28/2023 | 11/30/2023 | 3.00 | 11/30/2023 | 2.00 | Residential Sales | $19,081.70 | 38,163.40 |
| 11/28/2023 | 12/21/2023 | 24.00 | 12/21/2023 | 23.00 | Commercial Sales | $1,311.26 | 30,158.98 |
| 11/28/2023 | 12/5/2023 | 8.00 | 12/5/2023 | 7.00 | Other Sales to Public Authority | $2,864.85 | 20,053.95 |
| 11/28/2023 | 3/28/2024 | 122.00 | 3/28/2024 | 121.00 | Commercial Sales | $462.66 | 55,981.86 |
| 11/28/2023 | 12/7/2023 | 10.00 | 12/7/2023 | 9.00 | Commercial Sales | $159.33 | 1,433.97 |
| 11/28/2023 | 11/29/2023 | 2.00 | 11/29/2023 | 1.00 | Other Sales to Public Authority | $30,994.54 | 30,994.54 |
| 11/28/2023 | 2/21/2024 | 86.00 | 2/21/2024 | 85.00 | Residential Sales | $43.28 | 3,678.80 |
| 11/28/2023 | 11/30/2023 | 3.00 | 11/30/2023 | 2.00 | Commercial Sales | $1,103,929.31 | 2,207,858.62 |
| 11/28/2023 | 5/2/2024 | 157.00 | 5/2/2024 | 156.00 | Residential Sales | $194.43 | 30,331.08 |
| 11/28/2023 | 12/28/2023 | 31.00 | 12/28/2023 | 30.00 | Residential Sales | $147.70 | 4,431.00 |
| 11/28/2023 | 12/11/2023 | 14.00 | 12/11/2023 | 13.00 | Residential Sales | $163.52 | 2,125.76 |
| 11/28/2023 | 6/11/2024 | 197.00 | 6/11/2024 | 196.00 | Residential Sales | $65.01 | 12,741.96 |
| 11/28/2023 | 11/30/2023 | 3.00 | 11/30/2023 | 2.00 | Other Sales to Public Authority | $10,397.76 | 20,795.52 |
| 11/28/2023 | 12/29/2023 | 32.00 | 12/29/2023 | 31.00 | Residential Sales | $187.24 | 5,804.44 |
| 11/28/2023 | 12/12/2023 | 15.00 | 12/12/2023 | 14.00 | Residential Sales | $128.07 | 1,792.98 |
| 11/29/2023 | 4/21/2024 | 145.00 | 4/21/2024 | 144.00 | Commercial Sales | $36.23 | 5,217.12 |
| 11/29/2023 | 11/30/2023 | 2.00 | 11/30/2023 | 1.00 | Industrial Service | $58,119.41 | 58,119.41 |
| 11/29/2023 | 11/30/2023 | 2.00 | 11/30/2023 | 1.00 | Commercial Sales | $224,353.02 | 224,353.02 |
| 11/29/2023 | 3/14/2024 | 107.00 | 3/14/2024 | 106.00 | Commercial Sales | $139.41 | 14,777.46 |
| 11/29/2023 | 12/11/2023 | 13.00 | 12/11/2023 | 12.00 | Residential Sales | $360.43 | 4,325.16 |
| 11/29/2023 | 12/12/2023 | 14.00 | 12/12/2023 | 13.00 | Residential Sales | $322.96 | 4,198.48 |
| 11/29/2023 | 11/30/2023 | 2.00 | 11/30/2023 | 1.00 | Other Sales to Public Authority | $3,887.18 | 3,887.18 |
| 11/29/2023 | 12/13/2023 | 15.00 | 12/13/2023 | 14.00 | Residential Sales | $102.03 | 1,428.42 |
| 11/29/2023 | 12/11/2023 | 13.00 | 12/11/2023 | 12.00 | Commercial Sales | $2,787.96 | 33,455.52 |
| 11/29/2023 | 12/11/2023 | 13.00 | 12/11/2023 | 12.00 | Other Sales to Public Authority | $401.50 | 4,818.00 |
| 11/29/2023 | 12/30/2023 | 32.00 | 12/30/2023 | 31.00 | Residential Sales | $29.36 | 910.16 |
| 11/29/2023 | 12/14/2023 | 16.00 | 12/14/2023 | 15.00 | Industrial Service | $578,989.10 | 8,684,836.50 |
| 11/29/2023 | 12/1/2023 | 3.00 | 12/1/2023 | 2.00 | Residential Sales | $2,441.79 | 4,883.58 |
| 11/29/2023 | 2/28/2024 | 92.00 | 2/28/2024 | 91.00 | Commercial Sales | $541.51 | 49,277.41 |
| 11/29/2023 | 5/24/2024 | 178.00 | 5/24/2024 | 177.00 | Residential Sales | $105.76 | 18,719.52 |
| 11/29/2023 | 2/12/2024 | 76.00 | 2/12/2024 | 75.00 | Commercial Sales | $4,541.62 | 340,621.50 |
| 11/29/2023 | 3/20/2024 | 113.00 | 3/20/2024 | 112.00 | Commercial Sales | $18.03 | 2,019.36 |
| 11/29/2023 | 12/1/2023 | 3.00 | 12/1/2023 | 2.00 | Industrial Service | $254.30 | 508.60 |
| 11/29/2023 | 1/22/2024 | 55.00 | 1/22/2024 | 54.00 | Residential Sales | $246.41 | 13,306.14 |
| 11/29/2023 | 12/1/2023 | 3.00 | 12/1/2023 | 2.00 | Commercial Sales | $79,425.00 | 158,850.00 |
| 11/29/2023 | 1/9/2024 | 42.00 | 1/9/2024 | 41.00 | Residential Sales | $255.64 | 10,481.24 |
| 11/29/2023 | 12/5/2023 | 7.00 | 12/5/2023 | 6.00 | Residential Sales | $11,055.42 | 66,332.52 |
| 11/29/2023 | 12/2/2023 | 4.00 | 12/2/2023 | 3.00 | Commercial Sales | $70,623.95 | 211,871.85 |
| 11/29/2023 | 11/29/2023 | 1.00 | 11/29/2023 | 0.00 | Residential Sales | $2,393.74 | - |
| 11/29/2023 | 12/6/2023 | 8.00 | 12/6/2023 | 7.00 | Residential Sales | $5,669.99 | 39,689.93 |
| 11/29/2023 | 12/1/2023 | 3.00 | 12/1/2023 | 2.00 | Other Sales to Public Authority | $1,386.07 | 2,772.14 |
| 11/29/2023 | 12/21/2023 | 23.00 | 12/21/2023 | 22.00 | Residential Sales | $271.15 | 5,965.30 |
| 11/29/2023 | 12/7/2023 | 9.00 | 12/7/2023 | 8.00 | Residential Sales | $214.63 | 1,717.04 |
| 11/29/2023 | 12/2/2023 | 4.00 | 12/2/2023 | 3.00 | Other Sales to Public Authority | $13,717.14 | 41,151.42 |
| 11/29/2023 | 12/5/2023 | 7.00 | 12/5/2023 | 6.00 | Commercial Sales | $29,311.25 | 175,867.50 |
| 11/29/2023 | 12/8/2023 | 10.00 | 12/8/2023 | 9.00 | Residential Sales | $232.15 | 2,089.35 |
| 11/29/2023 | 11/29/2023 | 1.00 | 11/29/2023 | 0.00 | Industrial Service | $2,591.33 | - |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 11/29/2023 | 11/29/2023 | 1.00 | 11/29/2023 | 0.00 | Public Street & Highway Lighting | $1,157.46 | - |
| 11/29/2023 | 12/6/2023 | 8.00 | 12/6/2023 | 7.00 | Commercial Sales | $29,323.30 | 205,263.10 |
| 11/29/2023 | 11/29/2023 | 1.00 | 11/29/2023 | 0.00 | Commercial Sales | $5,861.85 | - |
| 11/29/2023 | 12/20/2023 | 22.00 | 12/20/2023 | 21.00 | Commercial Sales | $3,831.39 | 80,459.19 |
| 11/29/2023 | 11/30/2023 | 2.00 | 11/30/2023 | 1.00 | Residential Sales | $906,733.76 | 906,733.76 |
| 11/29/2023 | 12/7/2023 | 9.00 | 12/7/2023 | 8.00 | Commercial Sales | $86.53 | 692.24 |
| 11/29/2023 | 1/29/2024 | 62.00 | 1/29/2024 | 61.00 | Residential Sales | $127.57 | 7,781.77 |
| 11/30/2023 | 12/7/2023 | 8.00 | 12/7/2023 | 7.00 | Other Sales to Public Authority | $264.90 | 1,854.30 |
| 11/30/2023 | 11/30/2023 | 1.00 | 11/30/2023 | 0.00 | Public Street & Highway Lighting | $692.43 | - |
| 11/30/2023 | 11/30/2023 | 1.00 | 11/30/2023 | 0.00 | Commercial Sales | $736.19 | - |
| 11/30/2023 | 12/8/2023 | 9.00 | 12/8/2023 | 8.00 | Other Sales to Public Authority | $34,060.20 | 272,481.60 |
| 11/30/2023 | 5/2/2024 | 155.00 | 5/2/2024 | 154.00 | Residential Sales | $230.90 | 35,558.60 |
| 11/30/2023 | 12/11/2023 | 12.00 | 12/11/2023 | 11.00 | Residential Sales | $321.63 | 3,537.93 |
| 11/30/2023 | 1/31/2024 | 63.00 | 1/31/2024 | 62.00 | Residential Sales | $14.23 | 882.26 |
| 11/30/2023 | 11/30/2023 | 1.00 | 11/30/2023 | 0.00 | Other Sales to Public Authority | $74.73 | - |
| 11/30/2023 | 12/12/2023 | 13.00 | 12/12/2023 | 12.00 | Residential Sales | $99.78 | 1,197.36 |
| 11/30/2023 | 12/13/2023 | 14.00 | 12/13/2023 | 13.00 | Residential Sales | $34.00 | 442.00 |
| 11/30/2023 | 12/11/2023 | 12.00 | 12/11/2023 | 11.00 | Commercial Sales | $904.96 | 9,954.56 |
| 11/30/2023 | 4/29/2024 | 152.00 | 4/29/2024 | 151.00 | Residential Sales | $23.26 | 3,512.26 |
| 11/30/2023 | 12/14/2023 | 15.00 | 12/14/2023 | 14.00 | Residential Sales | $22.26 | 311.64 |
| 11/30/2023 | 12/12/2023 | 13.00 | 12/12/2023 | 12.00 | Commercial Sales | $368.94 | 4,427.28 |
| 11/30/2023 | 4/10/2024 | 133.00 | 4/10/2024 | 132.00 | Commercial Sales | $1,539.68 | 203,237.76 |
| 11/30/2023 | 12/13/2023 | 14.00 | 12/13/2023 | 13.00 | Commercial Sales | $15.57 | 202.41 |
| 11/30/2023 | 12/11/2023 | 12.00 | 12/11/2023 | 11.00 | Other Sales to Public Authority | $7,734.69 | 85,081.59 |
| 11/30/2023 | 12/14/2023 | 15.00 | 12/14/2023 | 14.00 | Commercial Sales | $18.59 | 260.26 |
| 11/30/2023 | 12/1/2023 | 2.00 | 12/1/2023 | 1.00 | Residential Sales | $12,042.15 | 12,042.15 |
| 11/30/2023 | 12/15/2023 | 16.00 | 12/15/2023 | 15.00 | Commercial Sales | $96.34 | 1,445.10 |
| 11/30/2023 | 12/13/2023 | 14.00 | 12/13/2023 | 13.00 | Other Sales to Public Authority | $63,338.23 | 823,396.99 |
| 11/30/2023 | 12/6/2023 | 7.00 | 12/6/2023 | 6.00 | Company Use | $0.00 | - |
| 11/30/2023 | 12/2/2023 | 3.00 | 12/2/2023 | 2.00 | Residential Sales | $242.52 | 485.04 |
| 11/30/2023 | 12/30/2023 | 31.00 | 12/30/2023 | 30.00 | Commercial Sales | $152.71 | 4,581.30 |
| 11/30/2023 | 12/15/2023 | 16.00 | 12/15/2023 | 15.00 | Other Sales to Public Authority | $23,124.25 | 346,863.75 |
| 11/30/2023 | 1/8/2024 | 40.00 | 1/8/2024 | 39.00 | Residential Sales | $217.61 | 8,486.79 |
| 11/30/2023 | 12/18/2023 | 19.00 | 12/18/2023 | 18.00 | Industrial Service | $16,169.96 | 291,059.28 |
| 11/30/2023 | 12/1/2023 | 2.00 | 12/1/2023 | 1.00 | Industrial Service | $59,741.47 | 59,741.47 |
| 11/30/2023 | 12/1/2023 | 2.00 | 12/1/2023 | 1.00 | Commercial Sales | $20,378.12 | 20,378.12 |
| 11/30/2023 | 5/24/2024 | 177.00 | 5/24/2024 | 176.00 | Commercial Sales | $291.60 | 51,321.60 |
| 11/30/2023 | 12/5/2023 | 6.00 | 12/5/2023 | 5.00 | Residential Sales | $743,347.79 | 3,716,738.95 |
| 11/30/2023 | 12/2/2023 | 3.00 | 12/2/2023 | 2.00 | Commercial Sales | $45,913.18 | 91,826.36 |
| 11/30/2023 | 12/6/2023 | 7.00 | 12/6/2023 | 6.00 | Residential Sales | $974.04 | 5,844.24 |
| 11/30/2023 | 12/1/2023 | 2.00 | 12/1/2023 | 1.00 | Other Sales to Public Authority | $7,680.32 | 7,680.32 |
| 11/30/2023 | 12/18/2023 | 19.00 | 12/18/2023 | 18.00 | Other Sales to Public Authority | $439.47 | 7,910.46 |
| 11/30/2023 | 12/7/2023 | 8.00 | 12/7/2023 | 7.00 | Residential Sales | $2,335.51 | 16,348.57 |
| 11/30/2023 | 12/5/2023 | 6.00 | 12/5/2023 | 5.00 | Industrial Service | $21,472.92 | 107,364.60 |
| 11/30/2023 | 12/2/2023 | 3.00 | 12/2/2023 | 2.00 | Other Sales to Public Authority | $23,837.80 | 47,675.60 |
| 11/30/2023 | 12/5/2023 | 6.00 | 12/5/2023 | 5.00 | Commercial Sales | $233,561.60 | 1,167,808.00 |
| 11/30/2023 | 12/8/2023 | 9.00 | 12/8/2023 | 8.00 | Residential Sales | $302.96 | 2,423.68 |
| 11/30/2023 | 12/6/2023 | 7.00 | 12/6/2023 | 6.00 | Industrial Service | $250,598.59 | 1,503,591.54 |
| 11/30/2023 | 1/10/2024 | 42.00 | 1/10/2024 | 41.00 | Residential Sales | $97.35 | 3,991.35 |
| 11/30/2023 | 12/6/2023 | 7.00 | 12/6/2023 | 6.00 | Commercial Sales | $88,320.90 | 529,925.40 |
| 11/30/2023 | 12/7/2023 | 8.00 | 12/7/2023 | 7.00 | Industrial Service | $159.56 | 1,116.92 |
| 11/30/2023 | 12/7/2023 | 8.00 | 12/7/2023 | 7.00 | Commercial Sales | $38,787.09 | 271,509.63 |
| 11/30/2023 | 12/5/2023 | 6.00 | 12/5/2023 | 5.00 | Other Sales to Public Authority | $42,093.32 | 210,466.60 |
| 11/30/2023 | 11/30/2023 | 1.00 | 11/30/2023 | 0.00 | Residential Sales | $1,174.78 | - |
| 11/30/2023 | 12/8/2023 | 9.00 | 12/8/2023 | 8.00 | Industrial Service | $136,623.97 | 1,092,991.76 |
| 11/30/2023 | 12/6/2023 | 7.00 | 12/6/2023 | 6.00 | Other Sales to Public Authority | $13,217.04 | 79,302.24 |
| 11/30/2023 | 12/8/2023 | 9.00 | 12/8/2023 | 8.00 | Commercial Sales | $244,163.82 | 1,953,310.56 |
| 11/30/2023 | 5/31/2024 | 184.00 | 5/31/2024 | 183.00 | Residential Sales | $107.35 | 19,645.05 |
| 12/1/2023 | 12/5/2023 | 5.00 | 12/5/2023 | 4.00 | Residential Sales | $675,973.78 | 2,703,895.12 |
| 12/1/2023 | 12/6/2023 | 6.00 | 12/6/2023 | 5.00 | Commercial Sales | $120,207.29 | 601,036.45 |
| 12/1/2023 | 12/21/2023 | 21.00 | 12/21/2023 | 20.00 | Industrial Service | $8,656.59 | 173,131.80 |
| 12/1/2023 | 12/7/2023 | 7.00 | 12/7/2023 | 6.00 | Industrial Service | $1,453.56 | 8,721.36 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 12/1/2023 | 12/20/2023 | 20.00 | 12/20/2023 | 19.00 | Commercial Sales | $466.18 | 8,857.42 |
| 12/1/2023 | 12/6/2023 | 6.00 | 12/6/2023 | 5.00 | Residential Sales | $14,777.47 | 73,887.35 |
| 12/1/2023 | 12/7/2023 | 7.00 | 12/7/2023 | 6.00 | Commercial Sales | $20,053.73 | 120,322.38 |
| 12/1/2023 | 4/4/2024 | 126.00 | 4/4/2024 | 125.00 | Residential Sales | $47.70 | 5,962.50 |
| 12/1/2023 | 12/20/2023 | 20.00 | 12/20/2023 | 19.00 | Residential Sales | $106.05 | 2,014.95 |
| 12/1/2023 | 12/21/2023 | 21.00 | 12/21/2023 | 20.00 | Commercial Sales | $234.62 | 4,692.40 |
| 12/1/2023 | 12/7/2023 | 7.00 | 12/7/2023 | 6.00 | Residential Sales | $12,654.25 | 75,925.50 |
| 12/1/2023 | 12/8/2023 | 8.00 | 12/8/2023 | 7.00 | Commercial Sales | $34,223.40 | 239,563.80 |
| 12/1/2023 | 12/8/2023 | 8.00 | 12/8/2023 | 7.00 | Residential Sales | $577.50 | 4,042.50 |
| 12/1/2023 | 1/11/2024 | 42.00 | 1/11/2024 | 41.00 | Commercial Sales | $181.34 | 7,434.94 |
| 12/1/2023 | 1/11/2024 | 42.00 | 1/11/2024 | 41.00 | Residential Sales | $18.77 | 769.57 |
| 12/1/2023 | 4/8/2024 | 130.00 | 4/8/2024 | 129.00 | Residential Sales | $101.50 | 13,093.50 |
| 12/1/2023 | 12/5/2023 | 5.00 | 12/5/2023 | 4.00 | Other Sales to Public Authority | $13,704.35 | 54,817.40 |
| 12/1/2023 | 1/29/2024 | 60.00 | 1/29/2024 | 59.00 | Residential Sales | $24.47 | 1,443.73 |
| 12/1/2023 | 12/6/2023 | 6.00 | 12/6/2023 | 5.00 | Other Sales to Public Authority | $5,004.29 | 25,021.45 |
| 12/1/2023 | 2/7/2024 | 69.00 | 2/7/2024 | 68.00 | Residential Sales | $76.04 | 5,170.72 |
| 12/1/2023 | 12/7/2023 | 7.00 | 12/7/2023 | 6.00 | Other Sales to Public Authority | $139.27 | 835.62 |
| 12/1/2023 | 1/15/2024 | 46.00 | 1/15/2024 | 45.00 | Commercial Sales | $9.46 | 425.70 |
| 12/1/2023 | 12/11/2023 | 11.00 | 12/11/2023 | 10.00 | Industrial Service | $494,192.75 | 4,941,927.50 |
| 12/1/2023 | 12/11/2023 | 11.00 | 12/11/2023 | 10.00 | Commercial Sales | $107,465.44 | 1,074,654.40 |
| 12/1/2023 | 5/2/2024 | 154.00 | 5/2/2024 | 153.00 | Residential Sales | $124.74 | 19,085.22 |
| 12/1/2023 | 12/8/2023 | 8.00 | 12/8/2023 | 7.00 | Other Sales to Public Authority | $34,953.33 | 244,673.31 |
| 12/1/2023 | 1/30/2024 | 61.00 | 1/30/2024 | 60.00 | Commercial Sales | $457.06 | 27,423.60 |
| 12/1/2023 | 12/27/2023 | 27.00 | 12/27/2023 | 26.00 | Residential Sales | $14.36 | 373.36 |
| 12/1/2023 | 5/3/2024 | 155.00 | 5/3/2024 | 154.00 | Commercial Sales | $46.56 | 7,170.24 |
| 12/1/2023 | 12/11/2023 | 11.00 | 12/11/2023 | 10.00 | Residential Sales | $2,198.86 | 21,988.60 |
| 12/1/2023 | 1/30/2024 | 61.00 | 1/30/2024 | 60.00 | Residential Sales | $35.67 | 2,140.20 |
| 12/1/2023 | 12/13/2023 | 13.00 | 12/13/2023 | 12.00 | Commercial Sales | $3,142.95 | 37,715.40 |
| 12/1/2023 | 1/18/2024 | 49.00 | 1/18/2024 | 48.00 | Commercial Sales | $7,518.66 | 360,895.68 |
| 12/1/2023 | 4/11/2024 | 133.00 | 4/11/2024 | 132.00 | Residential Sales | $51.81 | 6,838.92 |
| 12/1/2023 | 12/13/2023 | 13.00 | 12/13/2023 | 12.00 | Residential Sales | $791.06 | 9,492.72 |
| 12/1/2023 | 12/14/2023 | 14.00 | 12/14/2023 | 13.00 | Commercial Sales | $2,438.69 | 31,702.97 |
| 12/1/2023 | 12/14/2023 | 14.00 | 12/14/2023 | 13.00 | Residential Sales | $271.01 | 3,523.13 |
| 12/1/2023 | 12/15/2023 | 15.00 | 12/15/2023 | 14.00 | Residential Sales | $191.13 | 2,675.82 |
| 12/1/2023 | 3/20/2024 | 111.00 | 3/20/2024 | 110.00 | Commercial Sales | $16.69 | 1,835.90 |
| 12/1/2023 | 12/11/2023 | 11.00 | 12/11/2023 | 10.00 | Other Sales to Public Authority | $24,866.18 | 248,661.80 |
| 12/1/2023 | 2/12/2024 | 74.00 | 2/12/2024 | 73.00 | Residential Sales | $17.87 | 1,304.51 |
| 12/1/2023 | 12/12/2023 | 12.00 | 12/12/2023 | 11.00 | Other Sales to Public Authority | $275,891.54 | 3,034,806.94 |
| 12/1/2023 | 1/5/2024 | 36.00 | 1/5/2024 | 35.00 | Residential Sales | $72.30 | 2,530.50 |
| 12/1/2023 | 4/15/2024 | 137.00 | 4/15/2024 | 136.00 | Residential Sales | $50.03 | 6,804.08 |
| 12/1/2023 | 12/19/2023 | 19.00 | 12/19/2023 | 18.00 | Residential Sales | $560.99 | 10,097.82 |
| 12/1/2023 | 4/17/2024 | 139.00 | 4/17/2024 | 138.00 | Residential Sales | $71.92 | 9,924.96 |
| 12/1/2023 | 12/5/2023 | 5.00 | 12/5/2023 | 4.00 | Industrial Service | $7,349.16 | 29,396.64 |
| 12/1/2023 | 1/8/2024 | 39.00 | 1/8/2024 | 38.00 | Residential Sales | $119.00 | 4,522.00 |
| 12/1/2023 | 12/5/2023 | 5.00 | 12/5/2023 | 4.00 | Commercial Sales | $209,598.33 | 838,393.32 |
| 12/1/2023 | 1/9/2024 | 40.00 | 1/9/2024 | 39.00 | Residential Sales | $970.48 | 37,848.72 |
| 12/1/2023 | 12/6/2023 | 6.00 | 12/6/2023 | 5.00 | Industrial Service | $826.83 | 4,134.15 |
| 12/1/2023 | 4/2/2024 | 124.00 | 4/2/2024 | 123.00 | Residential Sales | $47.07 | 5,789.61 |
| 12/2/2023 | 5/24/2024 | 175.00 | 5/24/2024 | 174.00 | Commercial Sales | $15.17 | 2,639.58 |
| 12/2/2023 | 12/12/2023 | 11.00 | 12/12/2023 | 10.00 | Other Sales to Public Authority | $30,886.17 | 308,861.70 |
| 12/2/2023 | 12/13/2023 | 12.00 | 12/13/2023 | 11.00 | Other Sales to Public Authority | $53.25 | 585.75 |
| 12/2/2023 | 12/5/2023 | 4.00 | 12/5/2023 | 3.00 | Industrial Service | $2,080.37 | 6,241.11 |
| 12/2/2023 | 12/5/2023 | 4.00 | 12/5/2023 | 3.00 | Commercial Sales | $87,644.09 | 262,932.27 |
| 12/2/2023 | 12/6/2023 | 5.00 | 12/6/2023 | 4.00 | Industrial Service | $12,129.75 | 48,519.00 |
| 12/2/2023 | 12/5/2023 | 4.00 | 12/5/2023 | 3.00 | Residential Sales | $652,705.21 | 1,958,115.63 |
| 12/2/2023 | 12/6/2023 | 5.00 | 12/6/2023 | 4.00 | Commercial Sales | $23,419.10 | 93,676.40 |
| 12/2/2023 | 12/7/2023 | 6.00 | 12/7/2023 | 5.00 | Industrial Service | $11,961.94 | 59,809.70 |
| 12/2/2023 | 12/7/2023 | 6.00 | 12/7/2023 | 5.00 | Commercial Sales | $21,848.39 | 109,241.95 |
| 12/2/2023 | 12/6/2023 | 5.00 | 12/6/2023 | 4.00 | Residential Sales | $6,752.41 | 27,009.64 |
| 12/2/2023 | 12/20/2023 | 19.00 | 12/20/2023 | 18.00 | Residential Sales | $99.66 | 1,793.88 |
| 12/2/2023 | 12/7/2023 | 6.00 | 12/7/2023 | 5.00 | Residential Sales | $3,143.63 | 15,718.15 |
| 12/2/2023 | 12/8/2023 | 7.00 | 12/8/2023 | 6.00 | Commercial Sales | $984.76 | 5,908.56 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 12/2/2023 | 12/8/2023 | 7.00 | 12/8/2023 | 6.00 | Residential Sales | $391.71 | 2,350.26 |
| 12/2/2023 | 12/5/2023 | 4.00 | 12/5/2023 | 3.00 | Other Sales to Public Authority | $12,169.79 | 36,509.37 |
| 12/2/2023 | 12/6/2023 | 5.00 | 12/6/2023 | 4.00 | Other Sales to Public Authority | $1,511.22 | 6,044.88 |
| 12/2/2023 | 12/7/2023 | 6.00 | 12/7/2023 | 5.00 | Other Sales to Public Authority | $1,787.47 | 8,937.35 |
| 12/2/2023 | 12/11/2023 | 10.00 | 12/11/2023 | 9.00 | Industrial Service | $6,766.76 | 60,900.84 |
| 12/2/2023 | 12/11/2023 | 10.00 | 12/11/2023 | 9.00 | Commercial Sales | $1,707.64 | 15,368.76 |
| 12/2/2023 | 5/2/2024 | 153.00 | 5/2/2024 | 152.00 | Residential Sales | $7.97 | 1,211.44 |
| 12/2/2023 | 12/8/2023 | 7.00 | 12/8/2023 | 6.00 | Other Sales to Public Authority | $47.97 | 287.82 |
| 12/2/2023 | 12/11/2023 | 10.00 | 12/11/2023 | 9.00 | Residential Sales | $1,594.59 | 14,351.31 |
| 12/2/2023 | 12/12/2023 | 11.00 | 12/12/2023 | 10.00 | Commercial Sales | $5,151.60 | 51,516.00 |
| 12/2/2023 | 12/28/2023 | 27.00 | 12/28/2023 | 26.00 | Residential Sales | $90.98 | 2,365.48 |
| 12/2/2023 | 12/12/2023 | 11.00 | 12/12/2023 | 10.00 | Residential Sales | $78.82 | 788.20 |
| 12/2/2023 | 1/18/2024 | 48.00 | 1/18/2024 | 47.00 | Commercial Sales | $1,308.77 | 61,512.19 |
| 12/2/2023 | 12/13/2023 | 12.00 | 12/13/2023 | 11.00 | Commercial Sales | $1,695.52 | 18,650.72 |
| 12/2/2023 | 1/18/2024 | 48.00 | 1/18/2024 | 47.00 | Residential Sales | $89.34 | 4,198.98 |
| 12/2/2023 | 12/13/2023 | 12.00 | 12/13/2023 | 11.00 | Residential Sales | $74.56 | 820.16 |
| 12/2/2023 | 12/14/2023 | 13.00 | 12/14/2023 | 12.00 | Residential Sales | $37.22 | 446.64 |
| 12/2/2023 | 12/11/2023 | 10.00 | 12/11/2023 | 9.00 | Other Sales to Public Authority | $190.86 | 1,717.74 |
| 12/3/2023 | 12/14/2023 | 12.00 | 12/14/2023 | 11.00 | Commercial Sales | $27.62 | 303.82 |
| 12/3/2023 | 12/11/2023 | 9.00 | 12/11/2023 | 8.00 | Other Sales to Public Authority | $721.66 | 5,773.28 |
| 12/3/2023 | 12/19/2023 | 17.00 | 12/19/2023 | 16.00 | Commercial Sales | $71.14 | 1,138.24 |
| 12/3/2023 | 12/5/2023 | 3.00 | 12/5/2023 | 2.00 | Commercial Sales | $941.05 | 1,882.10 |
| 12/3/2023 | 12/5/2023 | 3.00 | 12/5/2023 | 2.00 | Residential Sales | $9,842.32 | 19,684.64 |
| 12/3/2023 | 12/6/2023 | 4.00 | 12/6/2023 | 3.00 | Commercial Sales | $3.34 | 10.02 |
| 12/3/2023 | 12/20/2023 | 18.00 | 12/20/2023 | 17.00 | Commercial Sales | $145.49 | 2,473.33 |
| 12/3/2023 | 12/6/2023 | 4.00 | 12/6/2023 | 3.00 | Residential Sales | $53.54 | 160.62 |
| 12/3/2023 | 12/7/2023 | 5.00 | 12/7/2023 | 4.00 | Commercial Sales | $3.80 | 15.20 |
| 12/3/2023 | 12/20/2023 | 18.00 | 12/20/2023 | 17.00 | Residential Sales | $193.55 | 3,290.35 |
| 12/3/2023 | 12/7/2023 | 5.00 | 12/7/2023 | 4.00 | Residential Sales | $36.46 | 145.84 |
| 12/3/2023 | 12/8/2023 | 6.00 | 12/8/2023 | 5.00 | Residential Sales | $0.05 | 0.25 |
| 12/3/2023 | 12/11/2023 | 9.00 | 12/11/2023 | 8.00 | Residential Sales | $22.62 | 180.96 |
| 12/4/2023 | 12/5/2023 | 2.00 | 12/5/2023 | 1.00 | Other Sales to Public Authority | $20,178.51 | 20,178.51 |
| 12/4/2023 | 12/6/2023 | 3.00 | 12/6/2023 | 2.00 | Other Sales to Public Authority | $1,745.77 | 3,491.54 |
| 12/4/2023 | 4/9/2024 | 128.00 | 4/9/2024 | 127.00 | Residential Sales | $11.70 | 1,485.90 |
| 12/4/2023 | 12/7/2023 | 4.00 | 12/7/2023 | 3.00 | Other Sales to Public Authority | $173.27 | 519.81 |
| 12/4/2023 | 12/11/2023 | 8.00 | 12/11/2023 | 7.00 | Commercial Sales | $75,478.33 | 528,348.31 |
| 12/4/2023 | 12/12/2023 | 9.00 | 12/12/2023 | 8.00 | Commercial Sales | $267.80 | 2,142.40 |
| 12/4/2023 | 12/11/2023 | 8.00 | 12/11/2023 | 7.00 | Residential Sales | $804.56 | 5,631.92 |
| 12/4/2023 | 12/28/2023 | 25.00 | 12/28/2023 | 24.00 | Residential Sales | $113.73 | 2,729.52 |
| 12/4/2023 | 1/17/2024 | 45.00 | 1/17/2024 | 44.00 | Commercial Sales | $91.85 | 4,041.40 |
| 12/4/2023 | 12/12/2023 | 9.00 | 12/12/2023 | 8.00 | Residential Sales | $107.19 | 857.52 |
| 12/4/2023 | 12/13/2023 | 10.00 | 12/13/2023 | 9.00 | Residential Sales | $259.76 | 2,337.84 |
| 12/4/2023 | 1/18/2024 | 46.00 | 1/18/2024 | 45.00 | Residential Sales | $87.03 | 3,916.35 |
| 12/4/2023 | 12/14/2023 | 11.00 | 12/14/2023 | 10.00 | Commercial Sales | $85,234.14 | 852,341.40 |
| 12/4/2023 | 3/4/2024 | 92.00 | 3/4/2024 | 91.00 | Residential Sales | $11.52 | 1,048.32 |
| 12/4/2023 | 12/14/2023 | 11.00 | 12/14/2023 | 10.00 | Residential Sales | $56.32 | 563.20 |
| 12/4/2023 | 12/11/2023 | 8.00 | 12/11/2023 | 7.00 | Other Sales to Public Authority | $28,354.15 | 198,479.05 |
| 12/4/2023 | 1/18/2024 | 46.00 | 1/18/2024 | 45.00 | Other Sales to Public Authority | $2,658.91 | 119,650.95 |
| 12/4/2023 | 4/17/2024 | 136.00 | 4/17/2024 | 135.00 | Residential Sales | $24.41 | 3,295.35 |
| 12/4/2023 | 12/19/2023 | 16.00 | 12/19/2023 | 15.00 | Residential Sales | $40.43 | 606.45 |
| 12/4/2023 | 12/5/2023 | 2.00 | 12/5/2023 | 1.00 | Commercial Sales | $120,604.19 | 120,604.19 |
| 12/4/2023 | 3/25/2024 | 113.00 | 3/25/2024 | 112.00 | Residential Sales | $24.03 | 2,691.36 |
| 12/4/2023 | 1/9/2024 | 37.00 | 1/9/2024 | 36.00 | Residential Sales | $102.55 | 3,691.80 |
| 12/4/2023 | 12/5/2023 | 2.00 | 12/5/2023 | 1.00 | Residential Sales | $755,931.48 | 755,931.48 |
| 12/4/2023 | 12/6/2023 | 3.00 | 12/6/2023 | 2.00 | Commercial Sales | $72,368.10 | 144,736.20 |
| 12/4/2023 | 12/7/2023 | 4.00 | 12/7/2023 | 3.00 | Commercial Sales | $3,312.59 | 9,937.77 |
| 12/4/2023 | 12/6/2023 | 3.00 | 12/6/2023 | 2.00 | Residential Sales | $11,798.87 | 23,597.74 |
| 12/4/2023 | 3/27/2024 | 115.00 | 3/27/2024 | 114.00 | Residential Sales | $2.71 | 308.94 |
| 12/4/2023 | 12/8/2023 | 5.00 | 12/8/2023 | 4.00 | Industrial Service | $9,642.53 | 38,570.12 |
| 12/4/2023 | 12/7/2023 | 4.00 | 12/7/2023 | 3.00 | Residential Sales | $2,085.43 | 6,256.29 |
| 12/4/2023 | 12/8/2023 | 5.00 | 12/8/2023 | 4.00 | Commercial Sales | $61,136.00 | 244,544.00 |
| 12/4/2023 | 12/8/2023 | 5.00 | 12/8/2023 | 4.00 | Residential Sales | $1,303.95 | 5,215.80 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 12/5/2023 | 12/6/2023 | 2.00 | 12/6/2023 | 1.00 | Commercial Sales | $153,740.12 | 153,740.12 |
| 12/5/2023 | 12/5/2023 | 1.00 | 12/5/2023 | 0.00 | Residential Sales | $999.06 | - |
| 12/5/2023 | 12/7/2023 | 3.00 | 12/7/2023 | 2.00 | Industrial Service | $166.60 | 333.20 |
| 12/5/2023 | 12/6/2023 | 2.00 | 12/6/2023 | 1.00 | Residential Sales | $1,112,430.11 | 1,112,430.11 |
| 12/5/2023 | 12/7/2023 | 3.00 | 12/7/2023 | 2.00 | Commercial Sales | $64,289.39 | 128,578.78 |
| 12/5/2023 | 12/8/2023 | 4.00 | 12/8/2023 | 3.00 | Industrial Service | $180.38 | 541.14 |
| 12/5/2023 | 1/25/2024 | 52.00 | 1/25/2024 | 51.00 | Residential Sales | $211.34 | 10,778.34 |
| 12/5/2023 | 12/20/2023 | 16.00 | 12/20/2023 | 15.00 | Residential Sales | $189.40 | 2,841.00 |
| 12/5/2023 | 12/7/2023 | 3.00 | 12/7/2023 | 2.00 | Residential Sales | $14,133.58 | 28,267.16 |
| 12/5/2023 | 12/8/2023 | 4.00 | 12/8/2023 | 3.00 | Commercial Sales | $47,180.57 | 141,541.71 |
| 12/5/2023 | 12/21/2023 | 17.00 | 12/21/2023 | 16.00 | Residential Sales | $183.70 | 2,939.20 |
| 12/5/2023 | 12/8/2023 | 4.00 | 12/8/2023 | 3.00 | Residential Sales | $4,722.28 | 14,166.84 |
| 12/5/2023 | 1/11/2024 | 38.00 | 1/11/2024 | 37.00 | Residential Sales | $398.42 | 14,741.54 |
| 12/5/2023 | 3/14/2024 | 101.00 | 3/14/2024 | 100.00 | Residential Sales | $18.39 | 1,839.00 |
| 12/5/2023 | 12/6/2023 | 2.00 | 12/6/2023 | 1.00 | Other Sales to Public Authority | $16,885.79 | 16,885.79 |
| 12/5/2023 | 2/21/2024 | 79.00 | 2/21/2024 | 78.00 | Residential Sales | $156.58 | 12,213.24 |
| 12/5/2023 | 12/7/2023 | 3.00 | 12/7/2023 | 2.00 | Other Sales to Public Authority | $2,685.85 | 5,371.70 |
| 12/5/2023 | 12/11/2023 | 7.00 | 12/11/2023 | 6.00 | Commercial Sales | $16,839.25 | 101,035.50 |
| 12/5/2023 | 1/15/2024 | 42.00 | 1/15/2024 | 41.00 | Residential Sales | $120.52 | 4,941.32 |
| 12/5/2023 | 12/8/2023 | 4.00 | 12/8/2023 | 3.00 | Other Sales to Public Authority | $14,143.33 | 42,429.99 |
| 12/5/2023 | 12/28/2023 | 24.00 | 12/28/2023 | 23.00 | Commercial Sales | $363.09 | 8,351.07 |
| 12/5/2023 | 2/23/2024 | 81.00 | 2/23/2024 | 80.00 | Residential Sales | $136.22 | 10,897.60 |
| 12/5/2023 | 12/11/2023 | 7.00 | 12/11/2023 | 6.00 | Residential Sales | $3,222.29 | 19,333.74 |
| 12/5/2023 | 12/28/2023 | 24.00 | 12/28/2023 | 23.00 | Residential Sales | $21.38 | 491.74 |
| 12/5/2023 | 12/12/2023 | 8.00 | 12/12/2023 | 7.00 | Commercial Sales | $214.86 | 1,504.02 |
| 12/5/2023 | 12/12/2023 | 8.00 | 12/12/2023 | 7.00 | Residential Sales | $386.76 | 2,707.32 |
| 12/5/2023 | 12/13/2023 | 9.00 | 12/13/2023 | 8.00 | Commercial Sales | $50.55 | 404.40 |
| 12/5/2023 | 4/29/2024 | 147.00 | 4/29/2024 | 146.00 | Commercial Sales | $98.29 | 14,350.34 |
| 12/5/2023 | 12/13/2023 | 9.00 | 12/13/2023 | 8.00 | Residential Sales | $257.66 | 2,061.28 |
| 12/5/2023 | 1/18/2024 | 45.00 | 1/18/2024 | 44.00 | Residential Sales | $237.92 | 10,468.48 |
| 12/5/2023 | 12/14/2023 | 10.00 | 12/14/2023 | 9.00 | Commercial Sales | $1,366.67 | 12,300.03 |
| 12/5/2023 | 12/11/2023 | 7.00 | 12/11/2023 | 6.00 | Other Sales to Public Authority | $6,087.55 | 36,525.30 |
| 12/5/2023 | 12/12/2023 | 8.00 | 12/12/2023 | 7.00 | Other Sales to Public Authority | $16,955.69 | 118,689.83 |
| 12/5/2023 | 1/5/2024 | 32.00 | 1/5/2024 | 31.00 | Residential Sales | $105.43 | 3,268.33 |
| 12/5/2023 | 12/13/2023 | 9.00 | 12/13/2023 | 8.00 | Other Sales to Public Authority | $387.19 | 3,097.52 |
| 12/5/2023 | 1/18/2024 | 45.00 | 1/18/2024 | 44.00 | Other Sales to Public Authority | $1,235.78 | 54,374.32 |
| 12/5/2023 | 1/8/2024 | 35.00 | 1/8/2024 | 34.00 | Residential Sales | $419.31 | 14,256.54 |
| 12/5/2023 | 12/6/2023 | 2.00 | 12/6/2023 | 1.00 | Industrial Service | $689.80 | 689.80 |
| 12/5/2023 | 1/9/2024 | 36.00 | 1/9/2024 | 35.00 | Residential Sales | $76.40 | 2,674.00 |
| 12/5/2023 | 12/5/2023 | 1.00 | 12/5/2023 | 0.00 | Commercial Sales | $4,274.86 | - |
| 12/6/2023 | 5/24/2024 | 171.00 | 5/24/2024 | 170.00 | Commercial Sales | $392.29 | 66,689.30 |
| 12/6/2023 | 12/12/2023 | 7.00 | 12/12/2023 | 6.00 | Other Sales to Public Authority | $11,958.64 | 71,751.84 |
| 12/6/2023 | 12/18/2023 | 13.00 | 12/18/2023 | 12.00 | Commercial Sales | $7,800.08 | 93,600.96 |
| 12/6/2023 | 12/18/2023 | 13.00 | 12/18/2023 | 12.00 | Residential Sales | $106.92 | 1,283.04 |
| 12/6/2023 | 12/13/2023 | 8.00 | 12/13/2023 | 7.00 | Other Sales to Public Authority | $13,072.91 | 91,510.37 |
| 12/6/2023 | 1/22/2024 | 48.00 | 1/22/2024 | 47.00 | Commercial Sales | $5,269.91 | 247,685.77 |
| 12/6/2023 | 12/19/2023 | 14.00 | 12/19/2023 | 13.00 | Residential Sales | $60.33 | 784.29 |
| 12/6/2023 | 3/25/2024 | 111.00 | 3/25/2024 | 110.00 | Commercial Sales | $33.39 | 3,672.90 |
| 12/6/2023 | 12/6/2023 | 1.00 | 12/6/2023 | 0.00 | Commercial Sales | $1,996.40 | - |
| 12/6/2023 | 12/7/2023 | 2.00 | 12/7/2023 | 1.00 | Industrial Service | $17,887.78 | 17,887.78 |
| 12/6/2023 | 12/7/2023 | 2.00 | 12/7/2023 | 1.00 | Commercial Sales | $375,329.49 | 375,329.49 |
| 12/6/2023 | 12/6/2023 | 1.00 | 12/6/2023 | 0.00 | Residential Sales | $785.81 | - |
| 12/6/2023 | 12/8/2023 | 3.00 | 12/8/2023 | 2.00 | Industrial Service | $1,445.56 | 2,891.12 |
| 12/6/2023 | 12/20/2023 | 15.00 | 12/20/2023 | 14.00 | Residential Sales | $575.84 | 8,061.76 |
| 12/6/2023 | 12/21/2023 | 16.00 | 12/21/2023 | 15.00 | Commercial Sales | $134.80 | 2,022.00 |
| 12/6/2023 | 12/7/2023 | 2.00 | 12/7/2023 | 1.00 | Residential Sales | $899,147.99 | 899,147.99 |
| 12/6/2023 | 12/8/2023 | 3.00 | 12/8/2023 | 2.00 | Commercial Sales | $130,292.65 | 260,585.30 |
| 12/6/2023 | 12/21/2023 | 16.00 | 12/21/2023 | 15.00 | Residential Sales | $117.50 | 1,762.50 |
| 12/6/2023 | 12/8/2023 | 3.00 | 12/8/2023 | 2.00 | Residential Sales | $13,587.54 | 27,175.08 |
| 12/6/2023 | 1/10/2024 | 36.00 | 1/10/2024 | 35.00 | Residential Sales | $374.55 | 13,109.25 |
| 12/6/2023 | 12/22/2023 | 17.00 | 12/22/2023 | 16.00 | Residential Sales | $18.62 | 297.92 |
| 12/6/2023 | 4/9/2024 | 126.00 | 4/9/2024 | 125.00 | Commercial Sales | $57.39 | 7,173.75 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 12/6/2023 | 12/7/2023 | 2.00 | 12/7/2023 | 1.00 | Other Sales to Public Authority | $15,092.54 | 15,092.54 |
| 12/6/2023 | 12/11/2023 | 6.00 | 12/11/2023 | 5.00 | Commercial Sales | $134,898.07 | 674,490.35 |
| 12/6/2023 | 12/8/2023 | 3.00 | 12/8/2023 | 2.00 | Other Sales to Public Authority | $2,134.40 | 4,268.80 |
| 12/6/2023 | 12/27/2023 | 22.00 | 12/27/2023 | 21.00 | Residential Sales | $23.16 | 486.36 |
| 12/6/2023 | 12/11/2023 | 6.00 | 12/11/2023 | 5.00 | Residential Sales | $10,206.70 | 51,033.50 |
| 12/6/2023 | 1/30/2024 | 56.00 | 1/30/2024 | 55.00 | Residential Sales | $89.10 | 4,900.50 |
| 12/6/2023 | 12/12/2023 | 7.00 | 12/12/2023 | 6.00 | Commercial Sales | $12,099.72 | 72,598.32 |
| 12/6/2023 | 12/13/2023 | 8.00 | 12/13/2023 | 7.00 | Commercial Sales | $1,664.21 | 11,649.47 |
| 12/6/2023 | 12/12/2023 | 7.00 | 12/12/2023 | 6.00 | Residential Sales | $608.91 | 3,653.46 |
| 12/6/2023 | 1/18/2024 | 44.00 | 1/18/2024 | 43.00 | Commercial Sales | $319.70 | 13,747.10 |
| 12/6/2023 | 12/13/2023 | 8.00 | 12/13/2023 | 7.00 | Residential Sales | $670.56 | 4,693.92 |
| 12/6/2023 | 12/14/2023 | 9.00 | 12/14/2023 | 8.00 | Residential Sales | $104.81 | 838.48 |
| 12/6/2023 | 12/13/2023 | 8.00 | 12/13/2023 | 7.00 | Public Street & Highway Lighting | $73.93 | 517.51 |
| 12/6/2023 | 5/9/2024 | 156.00 | 5/9/2024 | 155.00 | Commercial Sales | $79.28 | 12,288.40 |
| 12/7/2023 | 12/12/2023 | 6.00 | 12/12/2023 | 5.00 | Residential Sales | $3,924.91 | 19,624.55 |
| 12/7/2023 | 12/13/2023 | 7.00 | 12/13/2023 | 6.00 | Commercial Sales | $58,188.99 | 349,133.94 |
| 12/7/2023 | 1/18/2024 | 43.00 | 1/18/2024 | 42.00 | Commercial Sales | $204.73 | 8,598.66 |
| 12/7/2023 | 1/18/2024 | 43.00 | 1/18/2024 | 42.00 | Residential Sales | $20.90 | 877.80 |
| 12/7/2023 | 12/13/2023 | 7.00 | 12/13/2023 | 6.00 | Residential Sales | $158.05 | 948.30 |
| 12/7/2023 | 12/15/2023 | 9.00 | 12/15/2023 | 8.00 | Commercial Sales | $15,767.79 | 126,142.32 |
| 12/7/2023 | 12/15/2023 | 9.00 | 12/15/2023 | 8.00 | Residential Sales | $49.79 | 398.32 |
| 12/7/2023 | 12/11/2023 | 5.00 | 12/11/2023 | 4.00 | Other Sales to Public Authority | $4,156.77 | 16,627.08 |
| 12/7/2023 | 1/18/2024 | 43.00 | 1/18/2024 | 42.00 | Public Street & Highway Lighting | $24.33 | 1,021.86 |
| 12/7/2023 | 12/12/2023 | 6.00 | 12/12/2023 | 5.00 | Other Sales to Public Authority | $35,025.81 | 175,129.05 |
| 12/7/2023 | 12/13/2023 | 7.00 | 12/13/2023 | 6.00 | Other Sales to Public Authority | $114.17 | 685.02 |
| 12/7/2023 | 12/11/2023 | 5.00 | 12/11/2023 | 4.00 | Company Use | $0.00 | - |
| 12/7/2023 | 12/8/2023 | 2.00 | 12/8/2023 | 1.00 | Industrial Service | $51,327.76 | 51,327.76 |
| 12/7/2023 | 12/7/2023 | 1.00 | 12/7/2023 | 0.00 | Commercial Sales | $13,300.08 | - |
| 12/7/2023 | 12/21/2023 | 15.00 | 12/21/2023 | 14.00 | Commercial Sales | $1,165.50 | 16,317.00 |
| 12/7/2023 | 12/8/2023 | 2.00 | 12/8/2023 | 1.00 | Commercial Sales | $229,652.34 | 229,652.34 |
| 12/7/2023 | 12/19/2023 | 13.00 | 12/19/2023 | 12.00 | Other Sales to Public Authority | $17,923.66 | 215,083.92 |
| 12/7/2023 | 12/7/2023 | 1.00 | 12/7/2023 | 0.00 | Residential Sales | $1,222.81 | - |
| 12/7/2023 | 12/21/2023 | 15.00 | 12/21/2023 | 14.00 | Residential Sales | $87.47 | 1,224.58 |
| 12/7/2023 | 12/8/2023 | 2.00 | 12/8/2023 | 1.00 | Residential Sales | $367,178.55 | 367,178.55 |
| 12/7/2023 | 1/10/2024 | 35.00 | 1/10/2024 | 34.00 | Residential Sales | $23.52 | 799.68 |
| 12/7/2023 | 12/11/2023 | 5.00 | 12/11/2023 | 4.00 | Industrial Service | $36,042.28 | 144,169.12 |
| 12/7/2023 | 2/9/2024 | 65.00 | 2/9/2024 | 64.00 | Commercial Sales | $44.09 | 2,821.76 |
| 12/7/2023 | 4/25/2024 | 141.00 | 4/25/2024 | 140.00 | Commercial Sales | $17.99 | 2,518.60 |
| 12/7/2023 | 2/8/2024 | 64.00 | 2/8/2024 | 63.00 | Residential Sales | $28.98 | 1,825.74 |
| 12/7/2023 | 12/11/2023 | 5.00 | 12/11/2023 | 4.00 | Commercial Sales | $130,681.65 | 522,726.60 |
| 12/7/2023 | 12/8/2023 | 2.00 | 12/8/2023 | 1.00 | Other Sales to Public Authority | $43,540.14 | 43,540.14 |
| 12/7/2023 | 2/9/2024 | 65.00 | 2/9/2024 | 64.00 | Residential Sales | $68.77 | 4,401.28 |
| 12/7/2023 | 12/28/2023 | 22.00 | 12/28/2023 | 21.00 | Commercial Sales | $1,242.43 | 26,091.03 |
| 12/7/2023 | 12/11/2023 | 5.00 | 12/11/2023 | 4.00 | Residential Sales | $10,525.69 | 42,102.76 |
| 12/7/2023 | 12/12/2023 | 6.00 | 12/12/2023 | 5.00 | Commercial Sales | $200,195.03 | 1,000,975.15 |
| 12/7/2023 | 12/13/2023 | 7.00 | 12/13/2023 | 6.00 | Industrial Service | $94,385.95 | 566,315.70 |
| 12/7/2023 | 12/29/2023 | 23.00 | 12/29/2023 | 22.00 | Commercial Sales | $18.13 | 398.86 |
| 12/8/2023 | 2/20/2024 | 75.00 | 2/20/2024 | 74.00 | Residential Sales | $20.52 | 1,518.48 |
| 12/8/2023 | 12/11/2023 | 4.00 | 12/11/2023 | 3.00 | Industrial Service | $78,478.03 | 235,434.09 |
| 12/8/2023 | 12/11/2023 | 4.00 | 12/11/2023 | 3.00 | Commercial Sales | $363,346.04 | 1,090,038.12 |
| 12/8/2023 | 12/12/2023 | 5.00 | 12/12/2023 | 4.00 | Industrial Service | $4,533.77 | 18,135.08 |
| 12/8/2023 | 12/8/2023 | 1.00 | 12/8/2023 | 0.00 | Other Sales to Public Authority | $167.57 | - |
| 12/8/2023 | 12/27/2023 | 20.00 | 12/27/2023 | 19.00 | Residential Sales | $178.17 | 3,385.23 |
| 12/8/2023 | 12/11/2023 | 4.00 | 12/11/2023 | 3.00 | Residential Sales | $394,250.70 | 1,182,752.10 |
| 12/8/2023 | 12/12/2023 | 5.00 | 12/12/2023 | 4.00 | Commercial Sales | $126,273.82 | 505,095.28 |
| 12/8/2023 | 12/13/2023 | 6.00 | 12/13/2023 | 5.00 | Industrial Service | $26,814.90 | 134,074.50 |
| 12/8/2023 | 12/13/2023 | 6.00 | 12/13/2023 | 5.00 | Commercial Sales | $129,900.63 | 649,503.15 |
| 12/8/2023 | 12/12/2023 | 5.00 | 12/12/2023 | 4.00 | Residential Sales | $5,826.66 | 23,306.64 |
| 12/8/2023 | 12/13/2023 | 6.00 | 12/13/2023 | 5.00 | Residential Sales | $2,397.76 | 11,988.80 |
| 12/8/2023 | 1/18/2024 | 42.00 | 1/18/2024 | 41.00 | Residential Sales | $295.08 | 12,098.28 |
| 12/8/2023 | 12/14/2023 | 7.00 | 12/14/2023 | 6.00 | Commercial Sales | $31,132.89 | 186,797.34 |
| 12/8/2023 | 12/15/2023 | 8.00 | 12/15/2023 | 7.00 | Commercial Sales | $5,621.71 | 39,351.97 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 12/8/2023 | 12/14/2023 | 7.00 | 12/14/2023 | 6.00 | Residential Sales | $233.69 | 1,402.14 |
| 12/8/2023 | 12/11/2023 | 4.00 | 12/11/2023 | 3.00 | Public Street & Highway Lighting | $68.77 | 206.31 |
| 12/8/2023 | 12/15/2023 | 8.00 | 12/15/2023 | 7.00 | Residential Sales | $138.71 | 970.97 |
| 12/8/2023 | 12/11/2023 | 4.00 | 12/11/2023 | 3.00 | Other Sales to Public Authority | $44,234.43 | 132,703.29 |
| 12/8/2023 | 12/12/2023 | 5.00 | 12/12/2023 | 4.00 | Other Sales to Public Authority | $1,854.32 | 7,417.28 |
| 12/8/2023 | 12/13/2023 | 6.00 | 12/13/2023 | 5.00 | Other Sales to Public Authority | $23,032.32 | 115,161.60 |
| 12/8/2023 | 12/18/2023 | 11.00 | 12/18/2023 | 10.00 | Residential Sales | $709.38 | 7,093.80 |
| 12/8/2023 | 5/24/2024 | 169.00 | 5/24/2024 | 168.00 | Residential Sales | $251.86 | 42,312.48 |
| 12/8/2023 | 12/19/2023 | 12.00 | 12/19/2023 | 11.00 | Residential Sales | $331.44 | 3,645.84 |
| 12/8/2023 | 1/9/2024 | 33.00 | 1/9/2024 | 32.00 | Residential Sales | $20.13 | 644.16 |
| 12/8/2023 | 12/20/2023 | 13.00 | 12/20/2023 | 12.00 | Commercial Sales | $10,978.72 | 131,744.64 |
| 12/8/2023 | 12/20/2023 | 13.00 | 12/20/2023 | 12.00 | Residential Sales | $166.11 | 1,993.32 |
| 12/8/2023 | 4/4/2024 | 119.00 | 4/4/2024 | 118.00 | Residential Sales | $60.70 | 7,162.60 |
| 12/8/2023 | 12/8/2023 | 1.00 | 12/8/2023 | 0.00 | Commercial Sales | $17,986.60 | - |
| 12/8/2023 | 12/21/2023 | 14.00 | 12/21/2023 | 13.00 | Residential Sales | $253.56 | 3,296.28 |
| 12/8/2023 | 12/8/2023 | 1.00 | 12/8/2023 | 0.00 | Residential Sales | $2,677.70 | - |
| 12/8/2023 | 12/22/2023 | 15.00 | 12/22/2023 | 14.00 | Residential Sales | $201.75 | 2,824.50 |
| 12/9/2023 | 12/11/2023 | 3.00 | 12/11/2023 | 2.00 | Residential Sales | $402.25 | 804.50 |
| 12/9/2023 | 1/2/2024 | 25.00 | 1/2/2024 | 24.00 | Residential Sales | $9.75 | 234.00 |
| 12/9/2023 | 12/18/2023 | 10.00 | 12/18/2023 | 9.00 | Residential Sales | $60.29 | 542.61 |
| 12/10/2023 | 12/20/2023 | 11.00 | 12/20/2023 | 10.00 | Residential Sales | $177.99 | 1,779.90 |
| 12/10/2023 | 12/22/2023 | 13.00 | 12/22/2023 | 12.00 | Residential Sales | $57.68 | 692.16 |
| 12/10/2023 | 4/9/2024 | 122.00 | 4/9/2024 | 121.00 | Residential Sales | $147.11 | 17,800.31 |
| 12/10/2023 | 12/27/2023 | 18.00 | 12/27/2023 | 17.00 | Commercial Sales | $130.21 | 2,213.57 |
| 12/10/2023 | 12/11/2023 | 2.00 | 12/11/2023 | 1.00 | Industrial Service | $116.00 | 116.00 |
| 12/10/2023 | 12/11/2023 | 2.00 | 12/11/2023 | 1.00 | Residential Sales | $1,786.68 | 1,786.68 |
| 12/10/2023 | 12/12/2023 | 3.00 | 12/12/2023 | 2.00 | Residential Sales | $85.91 | 171.82 |
| 12/10/2023 | 12/13/2023 | 4.00 | 12/13/2023 | 3.00 | Residential Sales | $26.19 | 78.57 |
| 12/10/2023 | 12/14/2023 | 5.00 | 12/14/2023 | 4.00 | Residential Sales | $11.29 | 45.16 |
| 12/10/2023 | 12/18/2023 | 9.00 | 12/18/2023 | 8.00 | Residential Sales | $129.32 | 1,034.56 |
| 12/11/2023 | 12/12/2023 | 2.00 | 12/12/2023 | 1.00 | Other Sales to Public Authority | $27,440.89 | 27,440.89 |
| 12/11/2023 | 5/24/2024 | 166.00 | 5/24/2024 | 165.00 | Commercial Sales | $838.68 | 138,382.20 |
| 12/11/2023 | 12/18/2023 | 8.00 | 12/18/2023 | 7.00 | Commercial Sales | $5,220.01 | 36,540.07 |
| 12/11/2023 | 4/29/2024 | 141.00 | 4/29/2024 | 140.00 | Public Street & Highway Lighting | $1,063.60 | 148,904.00 |
| 12/11/2023 | 1/5/2024 | 26.00 | 1/5/2024 | 25.00 | Residential Sales | $102.55 | 2,563.75 |
| 12/11/2023 | 12/18/2023 | 8.00 | 12/18/2023 | 7.00 | Residential Sales | $554.16 | 3,879.12 |
| 12/11/2023 | 12/13/2023 | 3.00 | 12/13/2023 | 2.00 | Other Sales to Public Authority | $6,414.71 | 12,829.42 |
| 12/11/2023 | 12/19/2023 | 9.00 | 12/19/2023 | 8.00 | Residential Sales | $1,947.34 | 15,578.72 |
| 12/11/2023 | 1/22/2024 | 43.00 | 1/22/2024 | 42.00 | Commercial Sales | $75.40 | 3,166.80 |
| 12/11/2023 | 12/15/2023 | 5.00 | 12/15/2023 | 4.00 | Other Sales to Public Authority | $24,689.80 | 98,759.20 |
| 12/11/2023 | 1/9/2024 | 30.00 | 1/9/2024 | 29.00 | Residential Sales | $22.27 | 645.83 |
| 12/11/2023 | 12/20/2023 | 10.00 | 12/20/2023 | 9.00 | Commercial Sales | $5,559.82 | 50,038.38 |
| 12/11/2023 | 12/21/2023 | 11.00 | 12/21/2023 | 10.00 | Commercial Sales | $132.63 | 1,326.30 |
| 12/11/2023 | 12/20/2023 | 10.00 | 12/20/2023 | 9.00 | Residential Sales | $183.57 | 1,652.13 |
| 12/11/2023 | 5/28/2024 | 170.00 | 5/28/2024 | 169.00 | Public Street & Highway Lighting | $7,477.08 | 1,263,626.52 |
| 12/11/2023 | 5/15/2024 | 157.00 | 5/15/2024 | 156.00 | Residential Sales | $213.60 | 33,321.60 |
| 12/11/2023 | 1/11/2024 | 32.00 | 1/11/2024 | 31.00 | Residential Sales | $163.73 | 5,075.63 |
| 12/11/2023 | 1/25/2024 | 46.00 | 1/25/2024 | 45.00 | Public Street & Highway Lighting | $4,926.15 | 221,676.75 |
| 12/11/2023 | 1/26/2024 | 47.00 | 1/26/2024 | 46.00 | Public Street & Highway Lighting | $504.36 | 23,200.56 |
| 12/11/2023 | 1/12/2024 | 33.00 | 1/12/2024 | 32.00 | Residential Sales | $179.96 | 5,758.72 |
| 12/11/2023 | 12/22/2023 | 12.00 | 12/22/2023 | 11.00 | Public Street & Highway Lighting | $42,801.70 | 470,818.70 |
| 12/11/2023 | 3/4/2024 | 85.00 | 3/4/2024 | 84.00 | Company Use | $366.77 | 30,808.68 |
| 12/11/2023 | 12/27/2023 | 17.00 | 12/27/2023 | 16.00 | Commercial Sales | $11,104.37 | 177,669.92 |
| 12/11/2023 | 5/2/2024 | 144.00 | 5/2/2024 | 143.00 | Residential Sales | $335.51 | 47,977.93 |
| 12/11/2023 | 12/12/2023 | 2.00 | 12/12/2023 | 1.00 | Industrial Service | $141,428.54 | 141,428.54 |
| 12/11/2023 | 12/27/2023 | 17.00 | 12/27/2023 | 16.00 | Residential Sales | $207.23 | 3,315.68 |
| 12/11/2023 | 3/14/2024 | 95.00 | 3/14/2024 | 94.00 | Public Street & Highway Lighting | $6,853.33 | 644,213.02 |
| 12/11/2023 | 1/29/2024 | 50.00 | 1/29/2024 | 49.00 | Public Street & Highway Lighting | $5,204.01 | 254,996.49 |
| 12/11/2023 | 1/15/2024 | 36.00 | 1/15/2024 | 35.00 | Residential Sales | $40.91 | 1,431.85 |
| 12/11/2023 | 12/11/2023 | 1.00 | 12/11/2023 | 0.00 | Commercial Sales | $721.98 | - |
| 12/11/2023 | 3/1/2024 | 82.00 | 3/1/2024 | 81.00 | Commercial Sales | $16.69 | 1,351.89 |
| 12/11/2023 | 12/12/2023 | 2.00 | 12/12/2023 | 1.00 | Commercial Sales | $292,500.56 | 292,500.56 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 12/11/2023 | 12/11/2023 | 1.00 | 12/11/2023 | 0.00 | Residential Sales | $1,929.93 | - |
| 12/11/2023 | 12/28/2023 | 18.00 | 12/28/2023 | 17.00 | Residential Sales | $17.16 | 291.72 |
| 12/11/2023 | 12/13/2023 | 3.00 | 12/13/2023 | 2.00 | Industrial Service | $653,633.50 | 1,307,267.00 |
| 12/11/2023 | 12/12/2023 | 2.00 | 12/12/2023 | 1.00 | Residential Sales | $711,273.79 | 711,273.79 |
| 12/11/2023 | 12/13/2023 | 3.00 | 12/13/2023 | 2.00 | Commercial Sales | $167,557.99 | 335,115.98 |
| 12/11/2023 | 1/18/2024 | 39.00 | 1/18/2024 | 38.00 | Commercial Sales | $377.14 | 14,331.32 |
| 12/11/2023 | 12/29/2023 | 19.00 | 12/29/2023 | 18.00 | Residential Sales | $82.72 | 1,488.96 |
| 12/11/2023 | 12/14/2023 | 4.00 | 12/14/2023 | 3.00 | Industrial Service | $245,580.11 | 736,740.33 |
| 12/11/2023 | 1/18/2024 | 39.00 | 1/18/2024 | 38.00 | Residential Sales | $781.37 | 29,692.06 |
| 12/11/2023 | 12/13/2023 | 3.00 | 12/13/2023 | 2.00 | Residential Sales | $18,586.22 | 37,172.44 |
| 12/11/2023 | 12/14/2023 | 4.00 | 12/14/2023 | 3.00 | Commercial Sales | $136,984.85 | 410,954.55 |
| 12/11/2023 | 12/15/2023 | 5.00 | 12/15/2023 | 4.00 | Industrial Service | $11,956.48 | 47,825.92 |
| 12/11/2023 | 12/11/2023 | 1.00 | 12/11/2023 | 0.00 | Public Street & Highway Lighting | $4,544.40 | - |
| 12/11/2023 | 12/14/2023 | 4.00 | 12/14/2023 | 3.00 | Residential Sales | $5,411.99 | 16,235.97 |
| 12/11/2023 | 4/26/2024 | 138.00 | 4/26/2024 | 137.00 | Public Street & Highway Lighting | $4,794.36 | 656,827.32 |
| 12/11/2023 | 12/15/2023 | 5.00 | 12/15/2023 | 4.00 | Commercial Sales | $15,256.88 | 61,027.52 |
| 12/11/2023 | 12/15/2023 | 5.00 | 12/15/2023 | 4.00 | Residential Sales | $350.52 | 1,402.08 |
| 12/11/2023 | 12/12/2023 | 2.00 | 12/12/2023 | 1.00 | Public Street & Highway Lighting | $450.06 | 450.06 |
| 12/11/2023 | 2/9/2024 | 61.00 | 2/9/2024 | 60.00 | Other Sales to Public Authority | $4,907.17 | 294,430.20 |
| 12/11/2023 | 12/13/2023 | 3.00 | 12/13/2023 | 2.00 | Public Street & Highway Lighting | $17,762.82 | 35,525.64 |
| 12/11/2023 | 1/18/2024 | 39.00 | 1/18/2024 | 38.00 | Public Street & Highway Lighting | $44,846.13 | 1,704,152.94 |
| 12/11/2023 | 1/4/2024 | 25.00 | 1/4/2024 | 24.00 | Residential Sales | $95.01 | 2,280.24 |
| 12/11/2023 | 12/11/2023 | 1.00 | 12/11/2023 | 0.00 | Other Sales to Public Authority | $21.70 | - |
| 12/12/2023 | 12/13/2023 | 2.00 | 12/13/2023 | 1.00 | Commercial Sales | $677,807.55 | 677,807.55 |
| 12/12/2023 | 12/14/2023 | 3.00 | 12/14/2023 | 2.00 | Industrial Service | $223,742.38 | 447,484.76 |
| 12/12/2023 | 12/12/2023 | 1.00 | 12/12/2023 | 0.00 | Residential Sales | $1,709.48 | - |
| 12/12/2023 | 1/18/2024 | 38.00 | 1/18/2024 | 37.00 | Commercial Sales | $843.10 | 31,194.70 |
| 12/12/2023 | 12/29/2023 | 18.00 | 12/29/2023 | 17.00 | Residential Sales | $63.60 | 1,081.20 |
| 12/12/2023 | 12/13/2023 | 2.00 | 12/13/2023 | 1.00 | Residential Sales | $1,026,670.06 | 1,026,670.06 |
| 12/12/2023 | 12/14/2023 | 3.00 | 12/14/2023 | 2.00 | Commercial Sales | $207,950.39 | 415,900.78 |
| 12/12/2023 | 12/15/2023 | 4.00 | 12/15/2023 | 3.00 | Industrial Service | $74,598.52 | 223,795.56 |
| 12/12/2023 | 1/18/2024 | 38.00 | 1/18/2024 | 37.00 | Residential Sales | $1,252.47 | 46,341.39 |
| 12/12/2023 | 12/14/2023 | 3.00 | 12/14/2023 | 2.00 | Residential Sales | $10,985.99 | 21,971.98 |
| 12/12/2023 | 12/15/2023 | 4.00 | 12/15/2023 | 3.00 | Commercial Sales | $188,293.18 | 564,879.54 |
| 12/12/2023 | 1/2/2024 | 22.00 | 1/2/2024 | 21.00 | Residential Sales | $223.26 | 4,688.46 |
| 12/12/2023 | 5/6/2024 | 147.00 | 5/6/2024 | 146.00 | Residential Sales | $234.42 | 34,225.32 |
| 12/12/2023 | 12/15/2023 | 4.00 | 12/15/2023 | 3.00 | Residential Sales | $6,463.73 | 19,391.19 |
| 12/12/2023 | 12/12/2023 | 1.00 | 12/12/2023 | 0.00 | Public Street & Highway Lighting | $4.91 | - |
| 12/12/2023 | 12/30/2023 | 19.00 | 12/30/2023 | 18.00 | Commercial Sales | $882.45 | 15,884.10 |
| 12/12/2023 | 3/5/2024 | 85.00 | 3/5/2024 | 84.00 | Residential Sales | $23.02 | 1,933.68 |
| 12/12/2023 | 1/18/2024 | 38.00 | 1/18/2024 | 37.00 | Public Street & Highway Lighting | $9.46 | 350.02 |
| 12/12/2023 | 12/18/2023 | 7.00 | 12/18/2023 | 6.00 | Commercial Sales | $95,304.22 | 571,825.32 |
| 12/12/2023 | 12/12/2023 | 1.00 | 12/12/2023 | 0.00 | Other Sales to Public Authority | $21.70 | - |
| 12/12/2023 | 12/18/2023 | 7.00 | 12/18/2023 | 6.00 | Residential Sales | $1,497.70 | 8,986.20 |
| 12/12/2023 | 12/19/2023 | 8.00 | 12/19/2023 | 7.00 | Commercial Sales | $2,746.72 | 19,227.04 |
| 12/12/2023 | 12/13/2023 | 2.00 | 12/13/2023 | 1.00 | Other Sales to Public Authority | $1,290.13 | 1,290.13 |
| 12/12/2023 | 12/14/2023 | 3.00 | 12/14/2023 | 2.00 | Other Sales to Public Authority | $1,848.46 | 3,696.92 |
| 12/12/2023 | 12/19/2023 | 8.00 | 12/19/2023 | 7.00 | Residential Sales | $1,225.50 | 8,578.50 |
| 12/12/2023 | 1/8/2024 | 28.00 | 1/8/2024 | 27.00 | Residential Sales | $45.06 | 1,216.62 |
| 12/12/2023 | 12/15/2023 | 4.00 | 12/15/2023 | 3.00 | Other Sales to Public Authority | $62.64 | 187.92 |
| 12/12/2023 | 1/9/2024 | 29.00 | 1/9/2024 | 28.00 | Residential Sales | $35.09 | 982.52 |
| 12/12/2023 | 12/20/2023 | 9.00 | 12/20/2023 | 8.00 | Commercial Sales | $19.19 | 153.52 |
| 12/12/2023 | 12/20/2023 | 9.00 | 12/20/2023 | 8.00 | Residential Sales | $192.39 | 1,539.12 |
| 12/12/2023 | 5/24/2024 | 165.00 | 5/24/2024 | 164.00 | Other Sales to Public Authority | $134.16 | 22,002.24 |
| 12/12/2023 | 1/26/2024 | 46.00 | 1/26/2024 | 45.00 | Residential Sales | $161.56 | 7,270.20 |
| 12/12/2023 | 12/22/2023 | 11.00 | 12/22/2023 | 10.00 | Residential Sales | $89.79 | 897.90 |
| 12/12/2023 | 1/10/2024 | 30.00 | 1/10/2024 | 29.00 | Residential Sales | $68.87 | 1,997.23 |
| 12/12/2023 | 1/11/2024 | 31.00 | 1/11/2024 | 30.00 | Residential Sales | $1.88 | 56.40 |
| 12/12/2023 | 2/7/2024 | 58.00 | 2/7/2024 | 57.00 | Commercial Sales | $222.05 | 12,656.85 |
| 12/12/2023 | 1/29/2024 | 49.00 | 1/29/2024 | 48.00 | Residential Sales | $39.61 | 1,901.28 |
| 12/12/2023 | 12/27/2023 | 16.00 | 12/27/2023 | 15.00 | Industrial Service | $7,684.29 | 115,264.35 |
| 12/12/2023 | 1/15/2024 | 35.00 | 1/15/2024 | 34.00 | Residential Sales | $79.75 | 2,711.50 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 12/12/2023 | 2/9/2024 | 60.00 | 2/9/2024 | 59.00 | Residential Sales | $26.17 | 1,544.03 |
| 12/12/2023 | 12/13/2023 | 2.00 | 12/13/2023 | 1.00 | Industrial Service | $571,909.41 | 571,909.41 |
| 12/12/2023 | 12/12/2023 | 1.00 | 12/12/2023 | 0.00 | Commercial Sales | $359.80 | - |
| 12/12/2023 | 12/28/2023 | 17.00 | 12/28/2023 | 16.00 | Residential Sales | $183.45 | 2,935.20 |
| 12/13/2023 | 12/21/2023 | 9.00 | 12/21/2023 | 8.00 | Commercial Sales | $56.99 | 455.92 |
| 12/13/2023 | 2/6/2024 | 56.00 | 2/6/2024 | 55.00 | Residential Sales | $29.73 | 1,635.15 |
| 12/13/2023 | 1/12/2024 | 31.00 | 1/12/2024 | 30.00 | Residential Sales | $106.69 | 3,200.70 |
| 12/13/2023 | 12/22/2023 | 10.00 | 12/22/2023 | 9.00 | Commercial Sales | $2,043.27 | 18,389.43 |
| 12/13/2023 | 12/14/2023 | 2.00 | 12/14/2023 | 1.00 | Company Use | $0.00 | - |
| 12/13/2023 | 5/1/2024 | 141.00 | 5/1/2024 | 140.00 | Residential Sales | $360.58 | 50,481.20 |
| 12/13/2023 | 12/15/2023 | 3.00 | 12/15/2023 | 2.00 | Company Use | -$8,009.24 | (16,018.48) |
| 12/13/2023 | 5/2/2024 | 142.00 | 5/2/2024 | 141.00 | Residential Sales | $169.46 | 23,893.86 |
| 12/13/2023 | 1/16/2024 | 35.00 | 1/16/2024 | 34.00 | Residential Sales | $4.59 | 156.06 |
| 12/13/2023 | 12/28/2023 | 16.00 | 12/28/2023 | 15.00 | Residential Sales | $104.30 | 1,564.50 |
| 12/13/2023 | 12/14/2023 | 2.00 | 12/14/2023 | 1.00 | Industrial Service | $34,127.76 | 34,127.76 |
| 12/13/2023 | 12/15/2023 | 3.00 | 12/15/2023 | 2.00 | Industrial Service | $25,238.16 | 50,476.32 |
| 12/13/2023 | 12/13/2023 | 1.00 | 12/13/2023 | 0.00 | Residential Sales | $755.98 | - |
| 12/13/2023 | 12/18/2023 | 6.00 | 12/18/2023 | 5.00 | Company Use | $0.00 | - |
| 12/13/2023 | 1/18/2024 | 37.00 | 1/18/2024 | 36.00 | Residential Sales | $463.96 | 16,702.56 |
| 12/13/2023 | 1/15/2024 | 34.00 | 1/15/2024 | 33.00 | Commercial Sales | $299.98 | 9,899.34 |
| 12/13/2023 | 12/14/2023 | 2.00 | 12/14/2023 | 1.00 | Residential Sales | $752,799.40 | 752,799.40 |
| 12/13/2023 | 4/26/2024 | 136.00 | 4/26/2024 | 135.00 | Commercial Sales | $65.25 | 8,808.75 |
| 12/13/2023 | 1/2/2024 | 21.00 | 1/2/2024 | 20.00 | Residential Sales | $1.03 | 20.60 |
| 12/13/2023 | 12/15/2023 | 3.00 | 12/15/2023 | 2.00 | Residential Sales | $12,096.72 | 24,193.44 |
| 12/13/2023 | 12/13/2023 | 1.00 | 12/13/2023 | 0.00 | Public Street & Highway Lighting | $318.21 | - |
| 12/13/2023 | 12/13/2023 | 1.00 | 12/13/2023 | 0.00 | Commercial Sales | $5,997.96 | - |
| 12/13/2023 | 12/18/2023 | 6.00 | 12/18/2023 | 5.00 | Industrial Service | $337.73 | 1,688.65 |
| 12/13/2023 | 12/14/2023 | 2.00 | 12/14/2023 | 1.00 | Commercial Sales | $395,737.97 | 395,737.97 |
| 12/13/2023 | 12/15/2023 | 3.00 | 12/15/2023 | 2.00 | Commercial Sales | $69,728.11 | 139,456.22 |
| 12/13/2023 | 12/18/2023 | 6.00 | 12/18/2023 | 5.00 | Residential Sales | $4,766.47 | 23,832.35 |
| 12/13/2023 | 12/19/2023 | 7.00 | 12/19/2023 | 6.00 | Residential Sales | $708.95 | 4,253.70 |
| 12/13/2023 | 12/14/2023 | 2.00 | 12/14/2023 | 1.00 | Other Sales to Public Authority | $21,959.91 | 21,959.91 |
| 12/13/2023 | 12/15/2023 | 3.00 | 12/15/2023 | 2.00 | Other Sales to Public Authority | $1,557.09 | 3,114.18 |
| 12/13/2023 | 1/24/2024 | 43.00 | 1/24/2024 | 42.00 | Industrial Service | $2,157.27 | 90,605.34 |
| 12/13/2023 | 1/8/2024 | 27.00 | 1/8/2024 | 26.00 | Residential Sales | $75.71 | 1,968.46 |
| 12/13/2023 | 12/18/2023 | 6.00 | 12/18/2023 | 5.00 | Commercial Sales | $162,021.44 | 810,107.20 |
| 12/13/2023 | 5/24/2024 | 164.00 | 5/24/2024 | 163.00 | Public Street & Highway Lighting | $179.47 | 29,253.61 |
| 12/13/2023 | 5/10/2024 | 150.00 | 5/10/2024 | 149.00 | Residential Sales | $363.15 | 54,109.35 |
| 12/13/2023 | 1/9/2024 | 28.00 | 1/9/2024 | 27.00 | Residential Sales | $27.10 | 731.70 |
| 12/13/2023 | 3/25/2024 | 104.00 | 3/25/2024 | 103.00 | Residential Sales | $46.90 | 4,830.70 |
| 12/13/2023 | 12/19/2023 | 7.00 | 12/19/2023 | 6.00 | Commercial Sales | $15,235.51 | 91,413.06 |
| 12/13/2023 | 12/13/2023 | 1.00 | 12/13/2023 | 0.00 | Other Public Authority Transportation On | $41.54 | - |
| 12/13/2023 | 12/22/2023 | 10.00 | 12/22/2023 | 9.00 | Industrial Service | $9,773.84 | 87,964.56 |
| 12/13/2023 | 12/21/2023 | 9.00 | 12/21/2023 | 8.00 | Residential Sales | $27.18 | 217.44 |
| 12/13/2023 | 12/19/2023 | 7.00 | 12/19/2023 | 6.00 | Other Sales to Public Authority | $14,152.49 | 84,914.94 |
| 12/13/2023 | 5/28/2024 | 168.00 | 5/28/2024 | 167.00 | Commercial Sales | $1,100.27 | 183,745.09 |
| 12/13/2023 | 12/22/2023 | 10.00 | 12/22/2023 | 9.00 | Residential Sales | $505.05 | 4,545.45 |
| 12/13/2023 | 12/27/2023 | 15.00 | 12/27/2023 | 14.00 | Company Use | -$2,676.18 | (37,466.52) |
| 12/14/2023 | 12/19/2023 | 6.00 | 12/19/2023 | 5.00 | Commercial Sales | $19,035.98 | 95,179.90 |
| 12/14/2023 | 12/18/2023 | 5.00 | 12/18/2023 | 4.00 | Other Sales to Public Authority | $23,306.56 | 93,226.24 |
| 12/14/2023 | 12/20/2023 | 7.00 | 12/20/2023 | 6.00 | Residential Sales | $1,007.64 | 6,045.84 |
| 12/14/2023 | 12/19/2023 | 6.00 | 12/19/2023 | 5.00 | Other Sales to Public Authority | $10,202.71 | 51,013.55 |
| 12/14/2023 | 12/22/2023 | 9.00 | 12/22/2023 | 8.00 | Residential Sales | $31.86 | 254.88 |
| 12/14/2023 | 12/20/2023 | 7.00 | 12/20/2023 | 6.00 | Commercial Sales | $51.48 | 308.88 |
| 12/14/2023 | 4/25/2024 | 134.00 | 4/25/2024 | 133.00 | Residential Sales | $39.19 | 5,212.27 |
| 12/14/2023 | 4/8/2024 | 117.00 | 4/8/2024 | 116.00 | Commercial Sales | $268.07 | 31,096.12 |
| 12/14/2023 | 12/27/2023 | 14.00 | 12/27/2023 | 13.00 | Residential Sales | $63.85 | 830.05 |
| 12/14/2023 | 12/28/2023 | 15.00 | 12/28/2023 | 14.00 | Residential Sales | $133.32 | 1,866.48 |
| 12/14/2023 | 2/7/2024 | 56.00 | 2/7/2024 | 55.00 | Commercial Sales | $403.15 | 22,173.25 |
| 12/14/2023 | 12/29/2023 | 16.00 | 12/29/2023 | 15.00 | Residential Sales | $20.79 | 311.85 |
| 12/14/2023 | 12/15/2023 | 2.00 | 12/15/2023 | 1.00 | Industrial Service | $623.49 | 623.49 |
| 12/14/2023 | 1/18/2024 | 36.00 | 1/18/2024 | 35.00 | Residential Sales | $214.80 | 7,518.00 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 12/14/2023 | 12/14/2023 | 1.00 | 12/14/2023 | 0.00 | Residential Sales | $1,716.21 | - |
| 12/14/2023 | 6/14/2024 | 184.00 | 6/14/2024 | 183.00 | Residential Sales | $24.03 | 4,397.49 |
| 12/14/2023 | 1/2/2024 | 20.00 | 1/2/2024 | 19.00 | Residential Sales | $14.83 | 281.77 |
| 12/14/2023 | 12/15/2023 | 2.00 | 12/15/2023 | 1.00 | Residential Sales | $723,241.36 | 723,241.36 |
| 12/14/2023 | 1/18/2024 | 36.00 | 1/18/2024 | 35.00 | Commercial Sales | $394.17 | 13,795.95 |
| 12/14/2023 | 12/18/2023 | 5.00 | 12/18/2023 | 4.00 | Industrial Service | $45,114.19 | 180,456.76 |
| 12/14/2023 | 12/30/2023 | 17.00 | 12/30/2023 | 16.00 | Residential Sales | $7.05 | 112.80 |
| 12/14/2023 | 2/12/2024 | 61.00 | 2/12/2024 | 60.00 | Residential Sales | $8.37 | 502.20 |
| 12/14/2023 | 12/14/2023 | 1.00 | 12/14/2023 | 0.00 | Commercial Sales | $2,750.34 | - |
| 12/14/2023 | 12/14/2023 | 1.00 | 12/14/2023 | 0.00 | Public Street & Highway Lighting | $3.66 | - |
| 12/14/2023 | 12/19/2023 | 6.00 | 12/19/2023 | 5.00 | Industrial Service | $53.94 | 269.70 |
| 12/14/2023 | 12/15/2023 | 2.00 | 12/15/2023 | 1.00 | Commercial Sales | $118,829.50 | 118,829.50 |
| 12/14/2023 | 12/18/2023 | 5.00 | 12/18/2023 | 4.00 | Residential Sales | $18,454.82 | 73,819.28 |
| 12/14/2023 | 12/19/2023 | 6.00 | 12/19/2023 | 5.00 | Residential Sales | $1,888.60 | 9,443.00 |
| 12/14/2023 | 12/14/2023 | 1.00 | 12/14/2023 | 0.00 | Other Sales to Public Authority | $99.90 | - |
| 12/14/2023 | 2/15/2024 | 64.00 | 2/15/2024 | 63.00 | Residential Sales | $146.84 | 9,250.92 |
| 12/14/2023 | 12/15/2023 | 2.00 | 12/15/2023 | 1.00 | Other Sales to Public Authority | $4,414.99 | 4,414.99 |
| 12/14/2023 | 1/22/2024 | 40.00 | 1/22/2024 | 39.00 | Residential Sales | $61.34 | 2,392.26 |
| 12/14/2023 | 12/18/2023 | 5.00 | 12/18/2023 | 4.00 | Commercial Sales | $17,300.32 | 69,201.28 |
| 12/14/2023 | 1/9/2024 | 27.00 | 1/9/2024 | 26.00 | Residential Sales | $285.98 | 7,435.48 |
| 12/15/2023 | 12/19/2023 | 5.00 | 12/19/2023 | 4.00 | Industrial Service | $23,646.44 | 94,585.76 |
| 12/15/2023 | 3/4/2024 | 81.00 | 3/4/2024 | 80.00 | Commercial Sales | $172.60 | 13,808.00 |
| 12/15/2023 | 12/18/2023 | 4.00 | 12/18/2023 | 3.00 | Residential Sales | $1,061,004.53 | 3,183,013.59 |
| 12/15/2023 | 12/15/2023 | 1.00 | 12/15/2023 | 0.00 | Commercial Sales | $2,864.54 | - |
| 12/15/2023 | 5/24/2024 | 162.00 | 5/24/2024 | 161.00 | Residential Sales | $22.84 | 3,677.24 |
| 12/15/2023 | 12/15/2023 | 1.00 | 12/15/2023 | 0.00 | Public Street & Highway Lighting | $145.77 | - |
| 12/15/2023 | 12/19/2023 | 5.00 | 12/19/2023 | 4.00 | Residential Sales | $11,380.63 | 45,522.52 |
| 12/15/2023 | 2/15/2024 | 63.00 | 2/15/2024 | 62.00 | Residential Sales | $230.11 | 14,266.82 |
| 12/15/2023 | 1/4/2024 | 21.00 | 1/4/2024 | 20.00 | Commercial Sales | $215.42 | 4,308.40 |
| 12/15/2023 | 1/8/2024 | 25.00 | 1/8/2024 | 24.00 | Residential Sales | $44.15 | 1,059.60 |
| 12/15/2023 | 12/15/2023 | 1.00 | 12/15/2023 | 0.00 | Other Sales to Public Authority | $43.41 | - |
| 12/15/2023 | 12/18/2023 | 4.00 | 12/18/2023 | 3.00 | Commercial Sales | $267,014.75 | 801,044.25 |
| 12/15/2023 | 5/24/2024 | 162.00 | 5/24/2024 | 161.00 | Commercial Sales | $85.75 | 13,805.75 |
| 12/15/2023 | 1/9/2024 | 26.00 | 1/9/2024 | 25.00 | Residential Sales | $29.05 | 726.25 |
| 12/15/2023 | 12/20/2023 | 6.00 | 12/20/2023 | 5.00 | Industrial Service | $12,643.66 | 63,218.30 |
| 12/15/2023 | 12/19/2023 | 5.00 | 12/19/2023 | 4.00 | Commercial Sales | $139,912.82 | 559,651.28 |
| 12/15/2023 | 12/21/2023 | 7.00 | 12/21/2023 | 6.00 | Industrial Service | $25,676.74 | 154,060.44 |
| 12/15/2023 | 12/18/2023 | 4.00 | 12/18/2023 | 3.00 | Other Sales to Public Authority | $7,392.96 | 22,178.88 |
| 12/15/2023 | 12/20/2023 | 6.00 | 12/20/2023 | 5.00 | Residential Sales | $710.68 | 3,553.40 |
| 12/15/2023 | 12/22/2023 | 8.00 | 12/22/2023 | 7.00 | Industrial Service | $20,668.66 | 144,680.62 |
| 12/15/2023 | 12/21/2023 | 7.00 | 12/21/2023 | 6.00 | Residential Sales | $573.43 | 3,440.58 |
| 12/15/2023 | 12/19/2023 | 5.00 | 12/19/2023 | 4.00 | Other Sales to Public Authority | $24.02 | 96.08 |
| 12/15/2023 | 3/11/2024 | 88.00 | 3/11/2024 | 87.00 | Residential Sales | $58.95 | 5,128.65 |
| 12/15/2023 | 1/23/2024 | 40.00 | 1/23/2024 | 39.00 | Commercial Sales | $1,450.54 | 56,571.06 |
| 12/15/2023 | 1/10/2024 | 27.00 | 1/10/2024 | 26.00 | Residential Sales | $258.17 | 6,712.42 |
| 12/15/2023 | 12/22/2023 | 8.00 | 12/22/2023 | 7.00 | Residential Sales | $159.84 | 1,118.88 |
| 12/15/2023 | 12/20/2023 | 6.00 | 12/20/2023 | 5.00 | Commercial Sales | $48,002.29 | 240,011.45 |
| 12/15/2023 | 12/21/2023 | 7.00 | 12/21/2023 | 6.00 | Commercial Sales | $26,169.67 | 157,018.02 |
| 12/15/2023 | 12/22/2023 | 8.00 | 12/22/2023 | 7.00 | Public Street & Highway Lighting | $12.92 | 90.44 |
| 12/15/2023 | 12/27/2023 | 13.00 | 12/27/2023 | 12.00 | Residential Sales | $144.38 | 1,732.56 |
| 12/15/2023 | 12/28/2023 | 14.00 | 12/28/2023 | 13.00 | Residential Sales | $227.39 | 2,956.07 |
| 12/15/2023 | 1/16/2024 | 33.00 | 1/16/2024 | 32.00 | Residential Sales | $52.59 | 1,682.88 |
| 12/15/2023 | 12/29/2023 | 15.00 | 12/29/2023 | 14.00 | Residential Sales | $20.50 | 287.00 |
| 12/15/2023 | 1/18/2024 | 35.00 | 1/18/2024 | 34.00 | Residential Sales | $7.69 | 261.46 |
| 12/15/2023 | 12/27/2023 | 13.00 | 12/27/2023 | 12.00 | Commercial Sales | $8,357.91 | 100,294.92 |
| 12/15/2023 | 12/28/2023 | 14.00 | 12/28/2023 | 13.00 | Commercial Sales | $216.65 | 2,816.45 |
| 12/15/2023 | 1/2/2024 | 19.00 | 1/2/2024 | 18.00 | Residential Sales | $147.90 | 2,662.20 |
| 12/15/2023 | 12/15/2023 | 1.00 | 12/15/2023 | 0.00 | Residential Sales | $522.50 | - |
| 12/15/2023 | 3/5/2024 | 82.00 | 3/5/2024 | 81.00 | Residential Sales | $52.18 | 4,226.58 |
| 12/15/2023 | 1/18/2024 | 35.00 | 1/18/2024 | 34.00 | Commercial Sales | $1,848.36 | 62,844.24 |
| 12/15/2023 | 12/18/2023 | 4.00 | 12/18/2023 | 3.00 | Industrial Service | $106,866.04 | 320,598.12 |
| 12/15/2023 | 1/18/2024 | 35.00 | 1/18/2024 | 34.00 | Public Street & Highway Lighting | $18.85 | 640.90 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 12/15/2023 | 1/4/2024 | 21.00 | 1/4/2024 | 20.00 | Residential Sales | $24.07 | 481.40 |
| 12/16/2023 | 12/18/2023 | 3.00 | 12/18/2023 | 2.00 | Residential Sales | $974.35 | 1,948.70 |
| 12/16/2023 | 12/19/2023 | 4.00 | 12/19/2023 | 3.00 | Residential Sales | $3.59 | 10.77 |
| 12/17/2023 | 12/21/2023 | 5.00 | 12/21/2023 | 4.00 | Commercial Sales | $517.64 | 2,070.56 |
| 12/17/2023 | 12/27/2023 | 11.00 | 12/27/2023 | 10.00 | Residential Sales | $129.13 | 1,291.30 |
| 12/17/2023 | 12/28/2023 | 12.00 | 12/28/2023 | 11.00 | Residential Sales | $13.44 | 147.84 |
| 12/17/2023 | 12/18/2023 | 2.00 | 12/18/2023 | 1.00 | Residential Sales | $2,860.87 | 2,860.87 |
| 12/17/2023 | 12/19/2023 | 3.00 | 12/19/2023 | 2.00 | Residential Sales | $366.61 | 733.22 |
| 12/17/2023 | 1/8/2024 | 23.00 | 1/8/2024 | 22.00 | Residential Sales | $11.71 | 257.62 |
| 12/17/2023 | 12/18/2023 | 2.00 | 12/18/2023 | 1.00 | Commercial Sales | $45.61 | 45.61 |
| 12/17/2023 | 12/19/2023 | 3.00 | 12/19/2023 | 2.00 | Commercial Sales | $62.71 | 125.42 |
| 12/17/2023 | 12/21/2023 | 5.00 | 12/21/2023 | 4.00 | Residential Sales | $25.66 | 102.64 |
| 12/17/2023 | 12/22/2023 | 6.00 | 12/22/2023 | 5.00 | Residential Sales | $27.16 | 135.80 |
| 12/18/2023 | 12/19/2023 | 2.00 | 12/19/2023 | 1.00 | Commercial Sales | $181,594.66 | 181,594.66 |
| 12/18/2023 | 12/20/2023 | 3.00 | 12/20/2023 | 2.00 | Residential Sales | $13,992.39 | 27,984.78 |
| 12/18/2023 | 1/22/2024 | 36.00 | 1/22/2024 | 35.00 | Commercial Sales | $131.72 | 4,610.20 |
| 12/18/2023 | 12/21/2023 | 4.00 | 12/21/2023 | 3.00 | Residential Sales | $2,409.68 | 7,229.04 |
| 12/18/2023 | 12/19/2023 | 2.00 | 12/19/2023 | 1.00 | Other Sales to Public Authority | $7,958.55 | 7,958.55 |
| 12/18/2023 | 4/5/2024 | 110.00 | 4/5/2024 | 109.00 | Residential Sales | $15.74 | 1,715.66 |
| 12/18/2023 | 12/20/2023 | 3.00 | 12/20/2023 | 2.00 | Industrial Service | $2,390.60 | 4,781.20 |
| 12/18/2023 | 12/22/2023 | 5.00 | 12/22/2023 | 4.00 | Residential Sales | $645.31 | 2,581.24 |
| 12/18/2023 | 12/20/2023 | 3.00 | 12/20/2023 | 2.00 | Commercial Sales | $63,953.75 | 127,907.50 |
| 12/18/2023 | 12/21/2023 | 4.00 | 12/21/2023 | 3.00 | Industrial Service | $2,754.30 | 8,262.90 |
| 12/18/2023 | 12/21/2023 | 4.00 | 12/21/2023 | 3.00 | Commercial Sales | $102,540.38 | 307,621.14 |
| 12/18/2023 | 12/22/2023 | 5.00 | 12/22/2023 | 4.00 | Commercial Sales | $11,853.03 | 47,412.12 |
| 12/18/2023 | 12/20/2023 | 3.00 | 12/20/2023 | 2.00 | Other Sales to Public Authority | $3,875.07 | 7,750.14 |
| 12/18/2023 | 12/21/2023 | 4.00 | 12/21/2023 | 3.00 | Other Sales to Public Authority | $23,198.68 | 69,596.04 |
| 12/18/2023 | 12/27/2023 | 10.00 | 12/27/2023 | 9.00 | Residential Sales | $856.35 | 7,707.15 |
| 12/18/2023 | 1/15/2024 | 29.00 | 1/15/2024 | 28.00 | Residential Sales | $109.33 | 3,061.24 |
| 12/18/2023 | 12/28/2023 | 11.00 | 12/28/2023 | 10.00 | Residential Sales | $239.28 | 2,392.80 |
| 12/18/2023 | 4/9/2024 | 114.00 | 4/9/2024 | 113.00 | Commercial Sales | $244.42 | 27,619.46 |
| 12/18/2023 | 12/29/2023 | 12.00 | 12/29/2023 | 11.00 | Residential Sales | $87.35 | 960.85 |
| 12/18/2023 | 2/22/2024 | 67.00 | 2/22/2024 | 66.00 | Commercial Sales | $131.86 | 8,702.76 |
| 12/18/2023 | 1/15/2024 | 29.00 | 1/15/2024 | 28.00 | Commercial Sales | $159.63 | 4,469.64 |
| 12/18/2023 | 1/18/2024 | 32.00 | 1/18/2024 | 31.00 | Residential Sales | $121.13 | 3,755.03 |
| 12/18/2023 | 1/18/2024 | 32.00 | 1/18/2024 | 31.00 | Public Street & Highway Lighting | $162.33 | 5,032.23 |
| 12/18/2023 | 1/4/2024 | 18.00 | 1/4/2024 | 17.00 | Residential Sales | $121.44 | 2,064.48 |
| 12/18/2023 | 1/18/2024 | 32.00 | 1/18/2024 | 31.00 | Commercial Sales | $1,991.72 | 61,743.32 |
| 12/18/2023 | 1/2/2024 | 16.00 | 1/2/2024 | 15.00 | Commercial Sales | $2,116.40 | 31,746.00 |
| 12/18/2023 | 12/18/2023 | 1.00 | 12/18/2023 | 0.00 | Residential Sales | $7,158.57 | - |
| 12/18/2023 | 12/19/2023 | 2.00 | 12/19/2023 | 1.00 | Residential Sales | $730,842.84 | 730,842.84 |
| 12/18/2023 | 1/22/2024 | 36.00 | 1/22/2024 | 35.00 | Residential Sales | $14.10 | 493.50 |
| 12/18/2023 | 1/8/2024 | 22.00 | 1/8/2024 | 21.00 | Residential Sales | $133.70 | 2,807.70 |
| 12/18/2023 | 12/18/2023 | 1.00 | 12/18/2023 | 0.00 | Commercial Sales | $1,709.55 | - |
| 12/18/2023 | 12/19/2023 | 2.00 | 12/19/2023 | 1.00 | Industrial Service | $16,019.15 | 16,019.15 |
| 12/18/2023 | 12/18/2023 | 1.00 | 12/18/2023 | 0.00 | Public Street & Highway Lighting | $245.19 | - |
| 12/18/2023 | 1/9/2024 | 23.00 | 1/9/2024 | 22.00 | Residential Sales | $52.28 | 1,150.16 |
| 12/19/2023 | 4/29/2024 | 133.00 | 4/29/2024 | 132.00 | Commercial Sales | $446.78 | 58,974.96 |
| 12/19/2023 | 2/14/2024 | 58.00 | 2/14/2024 | 57.00 | Residential Sales | $43.50 | 2,479.50 |
| 12/19/2023 | 12/19/2023 | 1.00 | 12/19/2023 | 0.00 | Residential Sales | $1,730.71 | - |
| 12/19/2023 | 1/23/2024 | 36.00 | 1/23/2024 | 35.00 | Residential Sales | $26.11 | 913.85 |
| 12/19/2023 | 12/19/2023 | 1.00 | 12/19/2023 | 0.00 | Commercial Sales | $540.25 | - |
| 12/19/2023 | 1/24/2024 | 37.00 | 1/24/2024 | 36.00 | Residential Sales | $169.15 | 6,089.40 |
| 12/19/2023 | 12/19/2023 | 1.00 | 12/19/2023 | 0.00 | Public Street & Highway Lighting | $123.79 | - |
| 12/19/2023 | 12/20/2023 | 2.00 | 12/20/2023 | 1.00 | Residential Sales | $999,889.57 | 999,889.57 |
| 12/19/2023 | 1/25/2024 | 38.00 | 1/25/2024 | 37.00 | Residential Sales | $349.17 | 12,919.29 |
| 12/19/2023 | 2/16/2024 | 60.00 | 2/16/2024 | 59.00 | Commercial Sales | $4,945.10 | 291,760.90 |
| 12/19/2023 | 12/21/2023 | 3.00 | 12/21/2023 | 2.00 | Residential Sales | $17,962.43 | 35,924.86 |
| 12/19/2023 | 12/22/2023 | 4.00 | 12/22/2023 | 3.00 | Residential Sales | $2,129.75 | 6,389.25 |
| 12/19/2023 | 5/28/2024 | 162.00 | 5/28/2024 | 161.00 | Commercial Sales | $1,175.49 | 189,253.89 |
| 12/19/2023 | 12/20/2023 | 2.00 | 12/20/2023 | 1.00 | Commercial Sales | $96,289.41 | 96,289.41 |
| 12/19/2023 | 12/21/2023 | 3.00 | 12/21/2023 | 2.00 | Industrial Service | $970.62 | 1,941.24 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 12/19/2023 | 12/21/2023 | 3.00 | 12/21/2023 | 2.00 | Commercial Sales | $35,422.36 | 70,844.72 |
| 12/19/2023 | 12/22/2023 | 4.00 | 12/22/2023 | 3.00 | Commercial Sales | $32,870.79 | 98,612.37 |
| 12/19/2023 | 12/20/2023 | 2.00 | 12/20/2023 | 1.00 | Other Sales to Public Authority | $17,337.22 | 17,337.22 |
| 12/19/2023 | 12/21/2023 | 3.00 | 12/21/2023 | 2.00 | Other Sales to Public Authority | $32,948.90 | 65,897.80 |
| 12/19/2023 | 12/27/2023 | 9.00 | 12/27/2023 | 8.00 | Residential Sales | $11,950.55 | 95,604.40 |
| 12/19/2023 | 12/22/2023 | 4.00 | 12/22/2023 | 3.00 | Other Sales to Public Authority | $213.44 | 640.32 |
| 12/19/2023 | 12/28/2023 | 10.00 | 12/28/2023 | 9.00 | Residential Sales | $90.73 | 816.57 |
| 12/19/2023 | 12/29/2023 | 11.00 | 12/29/2023 | 10.00 | Residential Sales | $209.60 | 2,096.00 |
| 12/19/2023 | 12/27/2023 | 9.00 | 12/27/2023 | 8.00 | Commercial Sales | $2,003.11 | 16,024.88 |
| 12/19/2023 | 1/2/2024 | 15.00 | 1/2/2024 | 14.00 | Residential Sales | $177.92 | 2,490.88 |
| 12/19/2023 | 12/29/2023 | 11.00 | 12/29/2023 | 10.00 | Commercial Sales | $23.85 | 238.50 |
| 12/20/2023 | 1/5/2024 | 17.00 | 1/5/2024 | 16.00 | Residential Sales | $35.46 | 567.36 |
| 12/20/2023 | 2/27/2024 | 70.00 | 2/27/2024 | 69.00 | Commercial Sales | $2,262.01 | 156,078.69 |
| 12/20/2023 | 1/18/2024 | 30.00 | 1/18/2024 | 29.00 | Public Street & Highway Lighting | $22.48 | 651.92 |
| 12/20/2023 | 1/24/2024 | 36.00 | 1/24/2024 | 35.00 | Residential Sales | $13.01 | 455.35 |
| 12/20/2023 | 12/20/2023 | 1.00 | 12/20/2023 | 0.00 | Residential Sales | $4,559.28 | - |
| 12/20/2023 | 12/21/2023 | 2.00 | 12/21/2023 | 1.00 | Residential Sales | $974,274.02 | 974,274.02 |
| 12/20/2023 | 12/22/2023 | 3.00 | 12/22/2023 | 2.00 | Residential Sales | $16,577.36 | 33,154.72 |
| 12/20/2023 | 12/21/2023 | 2.00 | 12/21/2023 | 1.00 | Industrial Service | $71,524.50 | 71,524.50 |
| 12/20/2023 | 12/20/2023 | 1.00 | 12/20/2023 | 0.00 | Commercial Sales | $6,444.25 | - |
| 12/20/2023 | 1/11/2024 | 23.00 | 1/11/2024 | 22.00 | Residential Sales | $44.01 | 968.22 |
| 12/20/2023 | 12/21/2023 | 2.00 | 12/21/2023 | 1.00 | Commercial Sales | $312,156.37 | 312,156.37 |
| 12/20/2023 | 12/22/2023 | 3.00 | 12/22/2023 | 2.00 | Industrial Service | $5,058.38 | 10,116.76 |
| 12/20/2023 | 12/22/2023 | 3.00 | 12/22/2023 | 2.00 | Commercial Sales | $42,648.97 | 85,297.94 |
| 12/20/2023 | 12/20/2023 | 1.00 | 12/20/2023 | 0.00 | Other Sales to Public Authority | $1,273.85 | - |
| 12/20/2023 | 4/24/2024 | 127.00 | 4/24/2024 | 126.00 | Residential Sales | $150.64 | 18,980.64 |
| 12/20/2023 | 12/21/2023 | 2.00 | 12/21/2023 | 1.00 | Other Sales to Public Authority | $17,944.31 | 17,944.31 |
| 12/20/2023 | 12/27/2023 | 8.00 | 12/27/2023 | 7.00 | Residential Sales | $5,571.32 | 38,999.24 |
| 12/20/2023 | 3/14/2024 | 86.00 | 3/14/2024 | 85.00 | Commercial Sales | $284.64 | 24,194.40 |
| 12/20/2023 | 12/22/2023 | 3.00 | 12/22/2023 | 2.00 | Other Sales to Public Authority | $2,200.27 | 4,400.54 |
| 12/20/2023 | 12/28/2023 | 9.00 | 12/28/2023 | 8.00 | Residential Sales | $727.76 | 5,822.08 |
| 12/20/2023 | 12/29/2023 | 10.00 | 12/29/2023 | 9.00 | Residential Sales | $273.33 | 2,459.97 |
| 12/20/2023 | 12/27/2023 | 8.00 | 12/27/2023 | 7.00 | Commercial Sales | $2,777.07 | 19,439.49 |
| 12/20/2023 | 1/18/2024 | 30.00 | 1/18/2024 | 29.00 | Residential Sales | $441.30 | 12,797.70 |
| 12/20/2023 | 12/28/2023 | 9.00 | 12/28/2023 | 8.00 | Commercial Sales | $160.10 | 1,280.80 |
| 12/20/2023 | 12/29/2023 | 10.00 | 12/29/2023 | 9.00 | Commercial Sales | $140.24 | 1,262.16 |
| 12/20/2023 | 1/18/2024 | 30.00 | 1/18/2024 | 29.00 | Commercial Sales | $1,425.76 | 41,347.04 |
| 12/20/2023 | 12/28/2023 | 9.00 | 12/28/2023 | 8.00 | Other Sales to Public Authority | $15,777.32 | 126,218.56 |
| 12/21/2023 | 12/29/2023 | 9.00 | 12/29/2023 | 8.00 | Residential Sales | $547.66 | 4,381.28 |
| 12/21/2023 | 12/27/2023 | 7.00 | 12/27/2023 | 6.00 | Industrial Service | $125.84 | 755.04 |
| 12/21/2023 | 12/27/2023 | 7.00 | 12/27/2023 | 6.00 | Commercial Sales | $56,289.94 | 337,739.64 |
| 12/21/2023 | 12/28/2023 | 8.00 | 12/28/2023 | 7.00 | Industrial Service | $42,158.13 | 295,106.91 |
| 12/21/2023 | 3/18/2024 | 89.00 | 3/18/2024 | 88.00 | Industrial Service | $9,665.06 | 850,525.28 |
| 12/21/2023 | 12/28/2023 | 8.00 | 12/28/2023 | 7.00 | Commercial Sales | $161,661.43 | 1,131,630.01 |
| 12/21/2023 | 12/29/2023 | 9.00 | 12/29/2023 | 8.00 | Industrial Service | $12,067.01 | 96,536.08 |
| 12/21/2023 | 1/30/2024 | 41.00 | 1/30/2024 | 40.00 | Commercial Sales | $1,581.43 | 63,257.20 |
| 12/21/2023 | 1/2/2024 | 13.00 | 1/2/2024 | 12.00 | Residential Sales | $82.06 | 984.72 |
| 12/21/2023 | 12/27/2023 | 7.00 | 12/27/2023 | 6.00 | Other Sales to Public Authority | $1,101.01 | 6,606.06 |
| 12/21/2023 | 12/29/2023 | 9.00 | 12/29/2023 | 8.00 | Commercial Sales | $14,150.80 | 113,206.40 |
| 12/21/2023 | 3/5/2024 | 76.00 | 3/5/2024 | 75.00 | Residential Sales | $43.50 | 3,262.50 |
| 12/21/2023 | 1/18/2024 | 29.00 | 1/18/2024 | 28.00 | Commercial Sales | $1,256.30 | 35,176.40 |
| 12/21/2023 | 12/30/2023 | 10.00 | 12/30/2023 | 9.00 | Residential Sales | $36.10 | 324.90 |
| 12/21/2023 | 12/28/2023 | 8.00 | 12/28/2023 | 7.00 | Other Sales to Public Authority | $19,797.78 | 138,584.46 |
| 12/21/2023 | 1/4/2024 | 15.00 | 1/4/2024 | 14.00 | Residential Sales | $24.43 | 342.02 |
| 12/21/2023 | 1/2/2024 | 13.00 | 1/2/2024 | 12.00 | Commercial Sales | $1,931.16 | 23,173.92 |
| 12/21/2023 | 2/27/2024 | 69.00 | 2/27/2024 | 68.00 | Commercial Sales | $3,213.12 | 218,492.16 |
| 12/21/2023 | 1/18/2024 | 29.00 | 1/18/2024 | 28.00 | Other Sales to Public Authority | $6,464.41 | 181,003.48 |
| 12/21/2023 | 2/16/2024 | 58.00 | 2/16/2024 | 57.00 | Residential Sales | $78.13 | 4,453.41 |
| 12/21/2023 | 1/8/2024 | 19.00 | 1/8/2024 | 18.00 | Residential Sales | $95.88 | 1,725.84 |
| 12/21/2023 | 5/24/2024 | 156.00 | 5/24/2024 | 155.00 | Commercial Sales | $868.85 | 134,671.75 |
| 12/21/2023 | 4/3/2024 | 105.00 | 4/3/2024 | 104.00 | Residential Sales | $14.10 | 1,466.40 |
| 12/21/2023 | 1/22/2024 | 33.00 | 1/22/2024 | 32.00 | Commercial Sales | $1,808.91 | 57,885.12 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 12/21/2023 | 1/25/2024 | 36.00 | 1/25/2024 | 35.00 | Residential Sales | $207.93 | 7,277.55 |
| 12/21/2023 | 12/21/2023 | 1.00 | 12/21/2023 | 0.00 | Residential Sales | $1,209.92 | - |
| 12/21/2023 | 12/22/2023 | 2.00 | 12/22/2023 | 1.00 | Residential Sales | $761,586.88 | 761,586.88 |
| 12/21/2023 | 1/11/2024 | 22.00 | 1/11/2024 | 21.00 | Residential Sales | $48.19 | 1,011.99 |
| 12/21/2023 | 12/21/2023 | 1.00 | 12/21/2023 | 0.00 | Commercial Sales | $5,826.45 | - |
| 12/21/2023 | 12/22/2023 | 2.00 | 12/22/2023 | 1.00 | Industrial Service | $50,933.91 | 50,933.91 |
| 12/21/2023 | 1/29/2024 | 40.00 | 1/29/2024 | 39.00 | Residential Sales | $24.06 | 938.34 |
| 12/21/2023 | 12/22/2023 | 2.00 | 12/22/2023 | 1.00 | Commercial Sales | $375,263.92 | 375,263.92 |
| 12/21/2023 | 3/29/2024 | 100.00 | 3/29/2024 | 99.00 | Commercial Sales | $3,402.34 | 336,831.66 |
| 12/21/2023 | 12/21/2023 | 1.00 | 12/21/2023 | 0.00 | Other Sales to Public Authority | $354.12 | - |
| 12/21/2023 | 12/27/2023 | 7.00 | 12/27/2023 | 6.00 | Residential Sales | $16,658.48 | 99,950.88 |
| 12/21/2023 | 12/22/2023 | 2.00 | 12/22/2023 | 1.00 | Other Sales to Public Authority | $30,534.14 | 30,534.14 |
| 12/21/2023 | 5/2/2024 | 134.00 | 5/2/2024 | 133.00 | Residential Sales | $172.83 | 22,986.39 |
| 12/21/2023 | 12/28/2023 | 8.00 | 12/28/2023 | 7.00 | Residential Sales | $241.76 | 1,692.32 |
| 12/22/2023 | 3/28/2024 | 98.00 | 3/28/2024 | 97.00 | Commercial Sales | $46.24 | 4,485.28 |
| 12/22/2023 | 1/22/2024 | 32.00 | 1/22/2024 | 31.00 | Public Street & Highway Lighting | $1,084.33 | 33,614.23 |
| 12/22/2023 | 12/22/2023 | 1.00 | 12/22/2023 | 0.00 | Commercial Sales | $18,201.86 | - |
| 12/22/2023 | 1/10/2024 | 20.00 | 1/10/2024 | 19.00 | Commercial Sales | $22.04 | 418.76 |
| 12/22/2023 | 12/27/2023 | 6.00 | 12/27/2023 | 5.00 | Residential Sales | $795,997.39 | 3,979,986.95 |
| 12/22/2023 | 12/22/2023 | 1.00 | 12/22/2023 | 0.00 | Other Sales to Public Authority | $519.66 | - |
| 12/22/2023 | 12/28/2023 | 7.00 | 12/28/2023 | 6.00 | Residential Sales | $734.21 | 4,405.26 |
| 12/22/2023 | 1/16/2024 | 26.00 | 1/16/2024 | 25.00 | Residential Sales | $12.80 | 320.00 |
| 12/22/2023 | 12/22/2023 | 1.00 | 12/22/2023 | 0.00 | Public Street & Highway Lighting | $7,155.12 | - |
| 12/22/2023 | 12/29/2023 | 8.00 | 12/29/2023 | 7.00 | Residential Sales | $2,471.36 | 17,299.52 |
| 12/22/2023 | 12/27/2023 | 6.00 | 12/27/2023 | 5.00 | Industrial Service | $78,226.68 | 391,133.40 |
| 12/22/2023 | 2/8/2024 | 49.00 | 2/8/2024 | 48.00 | Commercial Sales | $90.44 | 4,341.12 |
| 12/22/2023 | 12/27/2023 | 6.00 | 12/27/2023 | 5.00 | Commercial Sales | $817,980.83 | 4,089,904.15 |
| 12/22/2023 | 12/28/2023 | 7.00 | 12/28/2023 | 6.00 | Industrial Service | $1,108.55 | 6,651.30 |
| 12/22/2023 | 1/18/2024 | 28.00 | 1/18/2024 | 27.00 | Residential Sales | $214.08 | 5,780.16 |
| 12/22/2023 | 12/28/2023 | 7.00 | 12/28/2023 | 6.00 | Commercial Sales | $350,711.99 | 2,104,271.94 |
| 12/22/2023 | 1/2/2024 | 12.00 | 1/2/2024 | 11.00 | Residential Sales | $26.29 | 289.19 |
| 12/22/2023 | 5/6/2024 | 137.00 | 5/6/2024 | 136.00 | Residential Sales | $31.60 | 4,297.60 |
| 12/22/2023 | 12/29/2023 | 8.00 | 12/29/2023 | 7.00 | Industrial Service | $105.81 | 740.67 |
| 12/22/2023 | 12/29/2023 | 8.00 | 12/29/2023 | 7.00 | Commercial Sales | $83,145.06 | 582,015.42 |
| 12/22/2023 | 12/27/2023 | 6.00 | 12/27/2023 | 5.00 | Other Sales to Public Authority | $45,384.99 | 226,924.95 |
| 12/22/2023 | 1/3/2024 | 13.00 | 1/3/2024 | 12.00 | Residential Sales | $33.26 | 399.12 |
| 12/22/2023 | 12/28/2023 | 7.00 | 12/28/2023 | 6.00 | Other Sales to Public Authority | $13,002.04 | 78,012.24 |
| 12/22/2023 | 12/30/2023 | 9.00 | 12/30/2023 | 8.00 | Residential Sales | $28.45 | 227.60 |
| 12/22/2023 | 1/18/2024 | 28.00 | 1/18/2024 | 27.00 | Commercial Sales | $1,973.43 | 53,282.61 |
| 12/22/2023 | 1/4/2024 | 14.00 | 1/4/2024 | 13.00 | Residential Sales | $190.15 | 2,471.95 |
| 12/22/2023 | 12/29/2023 | 8.00 | 12/29/2023 | 7.00 | Other Sales to Public Authority | $232.19 | 1,625.33 |
| 12/22/2023 | 1/2/2024 | 12.00 | 1/2/2024 | 11.00 | Commercial Sales | $30,685.13 | 337,536.43 |
| 12/22/2023 | 12/27/2023 | 6.00 | 12/27/2023 | 5.00 | Public Street & Highway Lighting | $2,810.68 | 14,053.40 |
| 12/22/2023 | 4/29/2024 | 130.00 | 4/29/2024 | 129.00 | Commercial Sales | $46,474.40 | 5,995,197.60 |
| 12/22/2023 | 12/30/2023 | 9.00 | 12/30/2023 | 8.00 | Commercial Sales | $36.99 | 295.92 |
| 12/22/2023 | 1/18/2024 | 28.00 | 1/18/2024 | 27.00 | Public Street & Highway Lighting | $2,966.50 | 80,095.50 |
| 12/22/2023 | 1/25/2024 | 35.00 | 1/25/2024 | 34.00 | Residential Sales | $157.31 | 5,348.54 |
| 12/22/2023 | 2/2/2024 | 43.00 | 2/2/2024 | 42.00 | Residential Sales | $5.29 | 222.18 |
| 12/22/2023 | 2/1/2024 | 42.00 | 2/1/2024 | 41.00 | Commercial Sales | $331.34 | 13,584.94 |
| 12/22/2023 | 12/22/2023 | 1.00 | 12/22/2023 | 0.00 | Residential Sales | $2,366.60 | - |
| 12/22/2023 | 1/11/2024 | 21.00 | 1/11/2024 | 20.00 | Residential Sales | $11.75 | 235.00 |
| 12/23/2023 | 12/27/2023 | 5.00 | 12/27/2023 | 4.00 | Commercial Sales | $29.03 | 116.12 |
| 12/23/2023 | 12/27/2023 | 5.00 | 12/27/2023 | 4.00 | Residential Sales | $1,025.85 | 4,103.40 |
| 12/23/2023 | 12/29/2023 | 7.00 | 12/29/2023 | 6.00 | Residential Sales | $14.25 | 85.50 |
| 12/24/2023 | 1/9/2024 | 17.00 | 1/9/2024 | 16.00 | Residential Sales | $11.88 | 190.08 |
| 12/24/2023 | 12/27/2023 | 4.00 | 12/27/2023 | 3.00 | Residential Sales | $8.26 | 24.78 |
| 12/25/2023 | 12/27/2023 | 3.00 | 12/27/2023 | 2.00 | Residential Sales | $297.16 | 594.32 |
| 12/26/2023 | 12/27/2023 | 2.00 | 12/27/2023 | 1.00 | Commercial Sales | $119.32 | 119.32 |
| 12/26/2023 | 12/27/2023 | 2.00 | 12/27/2023 | 1.00 | Residential Sales | $2,733.56 | 2,733.56 |
| 12/26/2023 | 12/28/2023 | 3.00 | 12/28/2023 | 2.00 | Commercial Sales | $11.17 | 22.34 |
| 12/26/2023 | 1/15/2024 | 21.00 | 1/15/2024 | 20.00 | Residential Sales | $109.60 | 2,192.00 |
| 12/26/2023 | 12/28/2023 | 3.00 | 12/28/2023 | 2.00 | Residential Sales | $246.56 | 493.12 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 12/26/2023 | 12/29/2023 | 4.00 | 12/29/2023 | 3.00 | Residential Sales | $184.41 | 553.23 |
| 12/26/2023 | 1/4/2024 | 10.00 | 1/4/2024 | 9.00 | Residential Sales | $53.97 | 485.73 |
| 12/26/2023 | 12/30/2023 | 5.00 | 12/30/2023 | 4.00 | Residential Sales | $16.69 | 66.76 |
| 12/26/2023 | 1/24/2024 | 30.00 | 1/24/2024 | 29.00 | Residential Sales | $20.67 | 599.43 |
| 12/26/2023 | 4/3/2024 | 100.00 | 4/3/2024 | 99.00 | Residential Sales | $2.35 | 232.65 |
| 12/27/2023 | 5/24/2024 | 150.00 | 5/24/2024 | 149.00 | Residential Sales | $16.89 | 2,516.61 |
| 12/27/2023 | 1/23/2024 | 28.00 | 1/23/2024 | 27.00 | Commercial Sales | $4,558.57 | 123,081.39 |
| 12/27/2023 | 1/8/2024 | 13.00 | 1/8/2024 | 12.00 | Residential Sales | $117.02 | 1,404.24 |
| 12/27/2023 | 1/9/2024 | 14.00 | 1/9/2024 | 13.00 | Residential Sales | $167.61 | 2,178.93 |
| 12/27/2023 | 1/24/2024 | 29.00 | 1/24/2024 | 28.00 | Residential Sales | $717.61 | 20,093.08 |
| 12/27/2023 | 3/28/2024 | 93.00 | 3/28/2024 | 92.00 | Commercial Sales | $456.81 | 42,026.52 |
| 12/27/2023 | 1/11/2024 | 16.00 | 1/11/2024 | 15.00 | Commercial Sales | $4,254.04 | 63,810.60 |
| 12/27/2023 | 1/12/2024 | 17.00 | 1/12/2024 | 16.00 | Industrial Service | $10,668.75 | 170,700.00 |
| 12/27/2023 | 3/14/2024 | 79.00 | 3/14/2024 | 78.00 | Commercial Sales | $213.02 | 16,615.56 |
| 12/27/2023 | 1/29/2024 | 34.00 | 1/29/2024 | 33.00 | Residential Sales | $33.56 | 1,107.48 |
| 12/27/2023 | 2/21/2024 | 57.00 | 2/21/2024 | 56.00 | Residential Sales | $40.24 | 2,253.44 |
| 12/27/2023 | 12/28/2023 | 2.00 | 12/28/2023 | 1.00 | Industrial Service | $152,650.10 | 152,650.10 |
| 12/27/2023 | 12/27/2023 | 1.00 | 12/27/2023 | 0.00 | Commercial Sales | $49,589.59 | - |
| 12/27/2023 | 12/28/2023 | 2.00 | 12/28/2023 | 1.00 | Commercial Sales | $1,233,520.61 | 1,233,520.61 |
| 12/27/2023 | 12/29/2023 | 3.00 | 12/29/2023 | 2.00 | Industrial Service | $343,437.92 | 686,875.84 |
| 12/27/2023 | 5/2/2024 | 128.00 | 5/2/2024 | 127.00 | Residential Sales | $204.32 | 25,948.64 |
| 12/27/2023 | 12/27/2023 | 1.00 | 12/27/2023 | 0.00 | Residential Sales | $1,869.42 | - |
| 12/27/2023 | 12/28/2023 | 2.00 | 12/28/2023 | 1.00 | Residential Sales | $807,392.81 | 807,392.81 |
| 12/27/2023 | 12/29/2023 | 3.00 | 12/29/2023 | 2.00 | Commercial Sales | $277,052.42 | 554,104.84 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 12/27/2023 | 12/27/2023 | 1.00 | 12/27/2023 | 0.00 | Other Sales to Public Authority | $820.26 | - |
| 12/27/2023 | 6/11/2024 | 168.00 | 6/11/2024 | 167.00 | Residential Sales | $60.70 | 10,136.90 |
| 12/27/2023 | 12/29/2023 | 3.00 | 12/29/2023 | 2.00 | Residential Sales | $9,772.71 | 19,545.42 |
| 12/27/2023 | 12/28/2023 | 2.00 | 12/28/2023 | 1.00 | Other Sales to Public Authority | $33,173.56 | 33,173.56 |
| 12/27/2023 | 1/18/2024 | 23.00 | 1/18/2024 | 22.00 | Commercial Sales | $1,162.45 | 25,573.90 |
| 12/27/2023 | 12/29/2023 | 3.00 | 12/29/2023 | 2.00 | Other Sales to Public Authority | $12,619.57 | 25,239.14 |
| 12/27/2023 | 1/2/2024 | 7.00 | 1/2/2024 | 6.00 | Commercial Sales | $1,330.15 | 7,980.90 |
| 12/27/2023 | 12/27/2023 | 1.00 | 12/27/2023 | 0.00 | Public Street & Highway Lighting | $1,737.52 | - |
| 12/27/2023 | 1/18/2024 | 23.00 | 1/18/2024 | 22.00 | Residential Sales | $463.84 | 10,204.48 |
| 12/27/2023 | 1/2/2024 | 7.00 | 1/2/2024 | 6.00 | Residential Sales | $572.94 | 3,437.64 |
| 12/27/2023 | 12/30/2023 | 4.00 | 12/30/2023 | 3.00 | Industrial Service | $54,305.10 | 162,915.30 |
| 12/27/2023 | 1/2/2024 | 7.00 | 1/2/2024 | 6.00 | Other Sales to Public Authority | $6,322.63 | 37,935.78 |
| 12/27/2023 | 12/30/2023 | 4.00 | 12/30/2023 | 3.00 | Commercial Sales | $276,874.06 | 830,622.18 |
| 12/27/2023 | 1/3/2024 | 8.00 | 1/3/2024 | 7.00 | Residential Sales | $71.42 | 499.94 |
| 12/27/2023 | 12/30/2023 | 4.00 | 12/30/2023 | 3.00 | Residential Sales | $1,166.27 | 3,498.81 |
| 12/27/2023 | 1/4/2024 | 9.00 | 1/4/2024 | 8.00 | Residential Sales | $1,032.86 | 8,262.88 |
| 12/27/2023 | 5/24/2024 | 150.00 | 5/24/2024 | 149.00 | Commercial Sales | $539.84 | 80,436.16 |
| 12/27/2023 | 1/11/2024 | 16.00 | 1/11/2024 | 15.00 | Company Use | -$19.73 | (295.95) |
| 12/27/2023 | 12/30/2023 | 4.00 | 12/30/2023 | 3.00 | Other Sales to Public Authority | $24,653.32 | 73,959.96 |
| 12/28/2023 | 1/2/2024 | 6.00 | 1/2/2024 | 5.00 | Commercial Sales | $16,123.91 | 80,619.55 |
| 12/28/2023 | 12/29/2023 | 2.00 | 12/29/2023 | 1.00 | Other Sales to Public Authority | $4,666.42 | 4,666.42 |
| 12/28/2023 | 12/28/2023 | 1.00 | 12/28/2023 | 0.00 | Public Street & Highway Lighting | $397.23 | - |
| 12/28/2023 | 1/2/2024 | 6.00 | 1/2/2024 | 5.00 | Residential Sales | $3,781.91 | 18,909.55 |
| 12/28/2023 | 12/30/2023 | 3.00 | 12/30/2023 | 2.00 | Industrial Service | $209.36 | 418.72 |
| 12/28/2023 | 2/28/2024 | 63.00 | 2/28/2024 | 62.00 | Commercial Sales | $389.64 | 24,157.68 |
| 12/28/2023 | 1/3/2024 | 7.00 | 1/3/2024 | 6.00 | Commercial Sales | $24,845.24 | 149,071.44 |
| 12/28/2023 | 12/30/2023 | 3.00 | 12/30/2023 | 2.00 | Commercial Sales | $23,498.68 | 46,997.36 |
| 12/28/2023 | 1/3/2024 | 7.00 | 1/3/2024 | 6.00 | Residential Sales | $256.69 | 1,540.14 |
| 12/28/2023 | 3/20/2024 | 84.00 | 3/20/2024 | 83.00 | Commercial Sales | $16.76 | 1,391.08 |
| 12/28/2023 | 2/12/2024 | 47.00 | 2/12/2024 | 46.00 | Commercial Sales | $4,054.66 | 186,514.36 |
| 12/28/2023 | 12/30/2023 | 3.00 | 12/30/2023 | 2.00 | Residential Sales | $9,342.58 | 18,685.16 |
| 12/28/2023 | 1/18/2024 | 22.00 | 1/18/2024 | 21.00 | Public Street & Highway Lighting | $752.27 | 15,797.67 |
| 12/28/2023 | 1/4/2024 | 8.00 | 1/4/2024 | 7.00 | Residential Sales | $3,069.18 | 21,484.26 |
| 12/28/2023 | 12/30/2023 | 3.00 | 12/30/2023 | 2.00 | Other Sales to Public Authority | $1,724.65 | 3,449.30 |
| 12/28/2023 | 1/5/2024 | 9.00 | 1/5/2024 | 8.00 | Residential Sales | $194.11 | 1,552.88 |
| 12/28/2023 | 5/24/2024 | 149.00 | 5/24/2024 | 148.00 | Residential Sales | $253.89 | 37,575.72 |
| 12/28/2023 | 1/22/2024 | 26.00 | 1/22/2024 | 25.00 | Residential Sales | $266.74 | 6,668.50 |
| 12/28/2023 | 1/8/2024 | 12.00 | 1/8/2024 | 11.00 | Residential Sales | $126.19 | 1,388.09 |
| 12/28/2023 | 1/9/2024 | 13.00 | 1/9/2024 | 12.00 | Residential Sales | $267.78 | 3,213.36 |
| 12/28/2023 | 1/26/2024 | 30.00 | 1/26/2024 | 29.00 | Residential Sales | $198.65 | 5,760.85 |
| 12/28/2023 | 1/10/2024 | 14.00 | 1/10/2024 | 13.00 | Commercial Sales | $21,540.53 | 280,026.89 |
| 12/28/2023 | 1/11/2024 | 15.00 | 1/11/2024 | 14.00 | Commercial Sales | $1,544.86 | 21,628.04 |
| 12/28/2023 | 1/10/2024 | 14.00 | 1/10/2024 | 13.00 | Residential Sales | $58.08 | 755.04 |
| 12/28/2023 | 4/21/2024 | 116.00 | 4/21/2024 | 115.00 | Commercial Sales | $31.89 | 3,667.35 |
| 12/28/2023 | 1/11/2024 | 15.00 | 1/11/2024 | 14.00 | Residential Sales | $143.29 | 2,006.06 |
| 12/28/2023 | 3/14/2024 | 78.00 | 3/14/2024 | 77.00 | Commercial Sales | $118.08 | 9,092.16 |
| 12/28/2023 | 1/12/2024 | 16.00 | 1/12/2024 | 15.00 | Commercial Sales | $22.65 | 339.75 |
| 12/28/2023 | 1/29/2024 | 33.00 | 1/29/2024 | 32.00 | Residential Sales | $100.41 | 3,213.12 |
| 12/28/2023 | 12/28/2023 | 1.00 | 12/28/2023 | 0.00 | Industrial Service | $2,330.75 | - |
| 12/28/2023 | 12/28/2023 | 1.00 | 12/28/2023 | 0.00 | Commercial Sales | $1,855.76 | - |
| 12/28/2023 | 12/29/2023 | 2.00 | 12/29/2023 | 1.00 | Industrial Service | $59,276.84 | 59,276.84 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 12/28/2023 | 1/30/2024 | 34.00 | 1/30/2024 | 33.00 | Commercial Sales | $621.77 | 20,518.41 |
| 12/28/2023 | 1/15/2024 | 19.00 | 1/15/2024 | 18.00 | Residential Sales | $131.19 | 2,361.42 |
| 12/28/2023 | 12/29/2023 | 2.00 | 12/29/2023 | 1.00 | Commercial Sales | $251,632.01 | 251,632.01 |
| 12/28/2023 | 1/17/2024 | 21.00 | 1/17/2024 | 20.00 | Commercial Sales | $172.26 | 3,445.20 |
| 12/28/2023 | 12/28/2023 | 1.00 | 12/28/2023 | 0.00 | Residential Sales | $1,781.60 | - |
| 12/28/2023 | 1/30/2024 | 34.00 | 1/30/2024 | 33.00 | Residential Sales | $4.70 | 155.10 |
| 12/28/2023 | 1/16/2024 | 20.00 | 1/16/2024 | 19.00 | Residential Sales | $44.64 | 848.16 |
| 12/28/2023 | 12/29/2023 | 2.00 | 12/29/2023 | 1.00 | Residential Sales | $936,923.98 | 936,923.98 |
| 12/28/2023 | 1/18/2024 | 22.00 | 1/18/2024 | 21.00 | Commercial Sales | $1,331.67 | 27,965.07 |
| 12/28/2023 | 1/2/2024 | 6.00 | 1/2/2024 | 5.00 | Industrial Service | $513,586.19 | 2,567,930.95 |
| 12/28/2023 | 1/31/2024 | 35.00 | 1/31/2024 | 34.00 | Residential Sales | $136.36 | 4,636.24 |
| 12/29/2023 | 5/31/2024 | 155.00 | 5/31/2024 | 154.00 | Residential Sales | $99.77 | 15,364.58 |
| 12/29/2023 | 2/21/2024 | 55.00 | 2/21/2024 | 54.00 | Other Sales to Public Authority | $20,697.50 | 1,117,665.00 |
| 12/29/2023 | 5/2/2024 | 126.00 | 5/2/2024 | 125.00 | Residential Sales | $234.89 | 29,361.25 |
| 12/29/2023 | 1/16/2024 | 19.00 | 1/16/2024 | 18.00 | Commercial Sales | $2,211.44 | 39,805.92 |
| 12/29/2023 | 12/29/2023 | 1.00 | 12/29/2023 | 0.00 | Commercial Sales | $1,616.15 | - |
| 12/29/2023 | 1/16/2024 | 19.00 | 1/16/2024 | 18.00 | Residential Sales | $62.09 | 1,117.62 |
| 12/29/2023 | 4/10/2024 | 104.00 | 4/10/2024 | 103.00 | Commercial Sales | $1,386.67 | 142,827.01 |
| 12/29/2023 | 12/29/2023 | 1.00 | 12/29/2023 | 0.00 | Residential Sales | $2,415.19 | - |
| 12/29/2023 | 1/2/2024 | 5.00 | 1/2/2024 | 4.00 | Industrial Service | $18,167.48 | 72,669.92 |
| 12/29/2023 | 1/18/2024 | 21.00 | 1/18/2024 | 20.00 | Commercial Sales | $289.17 | 5,783.40 |
| 12/29/2023 | 1/31/2024 | 34.00 | 1/31/2024 | 33.00 | Residential Sales | $218.45 | 7,208.85 |
| 12/29/2023 | 1/2/2024 | 5.00 | 1/2/2024 | 4.00 | Commercial Sales | $63,487.66 | 253,950.64 |
| 12/29/2023 | 1/18/2024 | 21.00 | 1/18/2024 | 20.00 | Residential Sales | $288.88 | 5,777.60 |
| 12/29/2023 | 12/29/2023 | 1.00 | 12/29/2023 | 0.00 | Other Sales to Public Authority | $74.69 | - |
| 12/29/2023 | 12/30/2023 | 2.00 | 12/30/2023 | 1.00 | Industrial Service | $181,446.71 | 181,446.71 |
| 12/29/2023 | 1/3/2024 | 6.00 | 1/3/2024 | 5.00 | Commercial Sales | $47,138.02 | 235,690.10 |
| 12/29/2023 | 1/2/2024 | 5.00 | 1/2/2024 | 4.00 | Residential Sales | $1,583.64 | 6,334.56 |
| 12/29/2023 | 4/29/2024 | 123.00 | 4/29/2024 | 122.00 | Residential Sales | $22.67 | 2,765.74 |
| 12/29/2023 | 12/30/2023 | 2.00 | 12/30/2023 | 1.00 | Commercial Sales | $392,065.93 | 392,065.93 |
| 12/29/2023 | 1/3/2024 | 6.00 | 1/3/2024 | 5.00 | Residential Sales | $15,754.34 | 78,771.70 |
| 12/29/2023 | 12/29/2023 | 1.00 | 12/29/2023 | 0.00 | Public Street & Highway Lighting | $626.64 | - |
| 12/29/2023 | 1/2/2024 | 5.00 | 1/2/2024 | 4.00 | Other Sales to Public Authority | $467.28 | 1,869.12 |
| 12/29/2023 | 12/30/2023 | 2.00 | 12/30/2023 | 1.00 | Residential Sales | $766,919.29 | 766,919.29 |
| 12/29/2023 | 1/4/2024 | 7.00 | 1/4/2024 | 6.00 | Residential Sales | $7,795.39 | 46,772.34 |
| 12/29/2023 | 1/3/2024 | 6.00 | 1/3/2024 | 5.00 | Other Sales to Public Authority | $29,504.35 | 147,521.75 |
| 12/29/2023 | 1/18/2024 | 21.00 | 1/18/2024 | 20.00 | Public Street & Highway Lighting | $26.88 | 537.60 |
| 12/29/2023 | 5/24/2024 | 148.00 | 5/24/2024 | 147.00 | Commercial Sales | $257.98 | 37,923.06 |
| 12/29/2023 | 12/30/2023 | 2.00 | 12/30/2023 | 1.00 | Other Sales to Public Authority | $33,170.02 | 33,170.02 |
| 12/29/2023 | 1/5/2024 | 8.00 | 1/5/2024 | 7.00 | Residential Sales | $65.38 | 457.66 |
| 12/29/2023 | 1/8/2024 | 11.00 | 1/8/2024 | 10.00 | Residential Sales | $79.57 | 795.70 |
| 12/29/2023 | 1/22/2024 | 25.00 | 1/22/2024 | 24.00 | Residential Sales | $191.46 | 4,595.04 |
| 12/29/2023 | 1/9/2024 | 12.00 | 1/9/2024 | 11.00 | Residential Sales | $83.07 | 913.77 |
| 12/29/2023 | 1/25/2024 | 28.00 | 1/25/2024 | 27.00 | Commercial Sales | $392.24 | 10,590.48 |
| 12/29/2023 | 1/24/2024 | 27.00 | 1/24/2024 | 26.00 | Other Sales to Public Authority | $59,920.00 | 1,557,920.00 |
| 12/29/2023 | 1/10/2024 | 13.00 | 1/10/2024 | 12.00 | Industrial Service | $6,082.47 | 72,989.64 |
| 12/29/2023 | 1/10/2024 | 13.00 | 1/10/2024 | 12.00 | Commercial Sales | $332.25 | 3,987.00 |
| 12/29/2023 | 1/10/2024 | 13.00 | 1/10/2024 | 12.00 | Residential Sales | $228.18 | 2,738.16 |
| 12/29/2023 | 1/11/2024 | 14.00 | 1/11/2024 | 13.00 | Commercial Sales | $2,086.71 | 27,127.23 |
| 12/29/2023 | 1/2/2024 | 5.00 | 1/2/2024 | 4.00 | Company Use | -$33.39 | (133.56) |
| 12/29/2023 | 1/11/2024 | 14.00 | 1/11/2024 | 13.00 | Residential Sales | $597.88 | 7,772.44 |
| 12/29/2023 | 1/12/2024 | 15.00 | 1/12/2024 | 14.00 | Commercial Sales | $670.88 | 9,392.32 |
| 12/29/2023 | 1/11/2024 | 14.00 | 1/11/2024 | 13.00 | Other Sales to Public Authority | $17,743.02 | 230,659.26 |
| 12/30/2023 | 1/2/2024 | 4.00 | 1/2/2024 | 3.00 | Residential Sales | $1,088.87 | 3,266.61 |
| 12/30/2023 | 1/3/2024 | 5.00 | 1/3/2024 | 4.00 | Residential Sales | $179.76 | 719.04 |
| 12/31/2023 | 1/11/2024 | 12.00 | 1/11/2024 | 11.00 | Commercial Sales | $2,701.04 | 29,711.44 |
| 12/31/2023 | 1/10/2024 | 11.00 | 1/10/2024 | 10.00 | Residential Sales | $15.81 | 158.10 |
| 12/31/2023 | 1/31/2024 | 32.00 | 1/31/2024 | 31.00 | Commercial Sales | $169.91 | 5,267.21 |
| 12/31/2023 | 1/31/2024 | 32.00 | 1/31/2024 | 31.00 | Residential Sales | $138.14 | 4,282.34 |
| 12/31/2023 | 1/2/2024 | 3.00 | 1/2/2024 | 2.00 | Industrial Service | $2,826.80 | 5,653.60 |
| 12/31/2023 | 1/2/2024 | 3.00 | 1/2/2024 | 2.00 | Commercial Sales | $105.66 | 211.32 |
| 12/31/2023 | 1/18/2024 | 19.00 | 1/18/2024 | 18.00 | Residential Sales | $25.84 | 465.12 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**BILLING LAG**

| Meter Read Date | Bill Generate Date | Total Days | Bill_Mail_Dt | Days | Customer Class | Bill Amount | Weighted |
|---|---|---|---|---|---|---|---|
| 12/31/2023 | 1/2/2024 | 3.00 | 1/2/2024 | 2.00 | Residential Sales | $1,239.42 | 2,478.84 |
| 12/31/2023 | 1/3/2024 | 4.00 | 1/3/2024 | 3.00 | Commercial Sales | $767.72 | 2,303.16 |
| 12/31/2023 | 1/8/2024 | 9.00 | 1/8/2024 | 8.00 | Residential Sales | $42.47 | 339.76 |
| 12/31/2023 | 2/2/2024 | 34.00 | 2/2/2024 | 33.00 | Commercial Sales | $21.15 | 697.95 |
| | | | | | | 379,521,159.22 | 1,074,915,386.71 |

2.83 days

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**COLLECTIONS LAG**

| Month | Current (0 - 30) | 30 Days (30 - 60) | 60 Days (60 - 90) | 180 Days (90 - 120) | 365 Days (120 - 150) | >150 Days | Total |
|---|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) |
| January 2023 | $ 59,010,859.18 | $ 2,122,830.91 | $ 1,071,638.41 | $ 724,303.24 | $ 542,591.31 | $ 2,606,660.01 | $ 66,078,883.06 |
| February 2023 | 53,131,798.70 | 2,537,790.28 | 1,077,056.07 | 711,933.82 | 460,754.01 | 2,278,228.77 | 60,197,561.65 |
| March 2023 | 37,764,842.61 | 2,901,960.99 | 1,435,914.85 | 703,468.83 | 539,296.56 | 2,017,272.45 | 45,362,756.29 |
| April 2023 | 34,843,300.33 | 2,509,457.37 | 1,816,907.13 | 1,047,405.49 | 514,826.10 | 1,965,937.53 | 42,697,833.95 |
| May 2023 | 28,811,225.34 | 1,421,982.46 | 1,409,640.85 | 1,323,770.46 | 749,691.06 | 1,828,309.09 | 35,544,619.26 |
| June 2023 | 33,862,592.28 | 1,785,584.84 | 929,679.62 | 1,085,250.37 | 976,281.50 | 1,944,637.13 | 40,584,025.74 |
| July 2023 | 33,781,022.74 | 1,361,251.97 | 891,053.02 | 674,848.57 | 773,638.11 | 2,275,222.45 | 39,757,036.86 |
| August 2023 | 32,901,447.68 | 1,315,708.69 | 602,137.66 | 553,232.71 | 513,566.34 | 2,292,292.02 | 38,178,385.10 |
| September 2023 | 37,258,962.28 | 1,542,367.80 | 657,524.95 | 392,485.06 | 399,217.30 | 2,171,295.53 | 42,421,852.92 |
| October 2023 | 31,072,583.96 | 1,274,826.98 | 701,404.60 | 443,446.73 | 243,975.36 | 1,941,747.70 | 35,677,985.33 |
| November 2023 | 34,061,587.36 | 1,307,345.48 | 684,107.10 | 464,304.78 | 300,797.99 | 1,740,239.60 | 38,558,382.31 |
| December 2023 | 45,836,972.14 | 1,436,912.52 | 764,855.22 | 462,930.75 | 307,674.16 | 1,700,903.46 | 50,510,248.25 |
| | $ 462,337,195 | $ 21,518,020.29 | $ 12,041,919.48 | $ 8,587,380.81 | $ 6,322,309.80 | $ 24,762,745.74 | $ 535,569,570.72 |
| Weighted Average | 86.33% | 4.02% | 2.25% | 1.60% | 1.18% | 4.62% | |
| Midpoint of Range | 15 | 45 | 75 | 105 | 135 | 150 | |
| Weighted Days | 12.95 | 1.81 | 1.69 | 1.68 | 1.59 | 6.94 | 26.66 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**GAS PURCHASES**

Weighted Lead Time: 40.63 days

| Vendor Name | Invoice Amount | Period Beginning | Period End | Payment Date | Service Lead Time | Payment Lead Time | Total Lead Time | Weighting Factor | Dollar-Weighted Days |
|---|---|---|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) |
| Eco-Energy | $ 36,500.00 | 1/1/2023 | 1/31/2023 | 2/25/2023 | 15.50 | 25.00 | 40.50 | 0.476% | 0.19 |
| Tenaska | 59,270.00 | 1/1/2023 | 1/31/2023 | 2/25/2023 | 15.50 | 25.00 | 40.50 | 0.773% | 0.31 |
| Vitol | 43,800.00 | 1/1/2023 | 1/31/2023 | 2/25/2023 | 15.50 | 25.00 | 40.50 | 0.571% | 0.23 |
| Eco-Energy | 184,500.00 | 2/1/2023 | 2/28/2023 | 3/25/2023 | 14.00 | 25.00 | 39.00 | 2.406% | 0.94 |
| Vitol | 69,500.00 | 2/1/2023 | 2/28/2023 | 3/25/2023 | 14.00 | 25.00 | 39.00 | 0.906% | 0.35 |
| Eco-Energy | 45,350.00 | 3/1/2023 | 3/31/2023 | 4/25/2023 | 15.50 | 25.00 | 40.50 | 0.592% | 0.24 |
| Tenaska | 79,000.00 | 3/1/2023 | 3/31/2023 | 4/25/2023 | 15.50 | 25.00 | 40.50 | 1.030% | 0.42 |
| Texas Eastern | 10,254.30 | 3/1/2023 | 3/31/2023 | 4/20/2023 | 15.50 | 20.00 | 35.50 | 0.134% | 0.05 |
| Vitol | 61,500.00 | 3/1/2023 | 3/31/2023 | 4/25/2023 | 15.50 | 25.00 | 40.50 | 0.802% | 0.32 |
| Eco-Energy | 539,072.83 | 4/1/2023 | 4/30/2023 | 5/25/2023 | 15.00 | 25.00 | 40.00 | 7.031% | 2.81 |
| Tenaska | 252,990.00 | 4/1/2023 | 4/30/2023 | 5/25/2023 | 15.00 | 25.00 | 40.00 | 3.300% | 1.32 |
| Twin Eagle | 242,860.00 | 4/1/2023 | 4/30/2023 | 5/25/2023 | 15.00 | 25.00 | 40.00 | 3.168% | 1.27 |
| Vitol | 359,626.80 | 4/1/2023 | 4/30/2023 | 5/25/2023 | 15.00 | 25.00 | 40.00 | 4.691% | 1.88 |
| Eco-Energy | 69,800.00 | 5/1/2023 | 5/31/2023 | 6/26/2023 | 15.50 | 26.00 | 41.50 | 0.910% | 0.38 |
| Tenaska | 137,600.00 | 5/1/2023 | 5/31/2023 | 6/26/2023 | 15.50 | 26.00 | 41.50 | 1.795% | 0.74 |
| Twin Eagle | 35,300.00 | 5/1/2023 | 5/31/2023 | 6/26/2023 | 15.50 | 26.00 | 41.50 | 0.460% | 0.19 |
| Vitol | 126,680.00 | 5/1/2023 | 5/31/2023 | 6/26/2023 | 15.50 | 26.00 | 41.50 | 1.652% | 0.69 |
| Eco-Energy | 168,452.50 | 6/1/2023 | 6/30/2023 | 7/25/2023 | 15.00 | 25.00 | 40.00 | 2.197% | 0.88 |
| Tenaska | 381,100.00 | 6/1/2023 | 6/30/2023 | 7/25/2023 | 15.00 | 25.00 | 40.00 | 4.971% | 1.99 |
| Vitol | 303,350.00 | 6/1/2023 | 6/30/2023 | 7/25/2023 | 15.00 | 25.00 | 40.00 | 3.957% | 1.58 |
| Eco-Energy | 367,400.00 | 7/1/2023 | 7/31/2023 | 8/25/2023 | 15.50 | 25.00 | 40.50 | 4.792% | 1.94 |
| Tenaska | 285,800.00 | 7/1/2023 | 7/31/2023 | 8/25/2023 | 15.50 | 25.00 | 40.50 | 3.728% | 1.51 |
| Twin Eagle | 175,300.00 | 7/1/2023 | 7/31/2023 | 8/25/2023 | 15.50 | 25.00 | 40.50 | 2.286% | 0.93 |
| Vitol | 136,500.00 | 7/1/2023 | 7/31/2023 | 8/25/2023 | 15.50 | 25.00 | 40.50 | 1.780% | 0.72 |
| Eco-Energy | 27,000.00 | 8/1/2023 | 8/31/2023 | 9/25/2023 | 15.50 | 25.00 | 40.50 | 0.352% | 0.14 |
| Tenaska | 248,500.00 | 8/1/2023 | 8/31/2023 | 9/25/2023 | 15.50 | 25.00 | 40.50 | 3.241% | 1.31 |
| Vitol | 324,500.00 | 8/1/2023 | 8/31/2023 | 9/25/2023 | 15.50 | 25.00 | 40.50 | 4.232% | 1.71 |
| Eco-Energy | 51,300.00 | 9/1/2023 | 9/30/2023 | 10/25/2023 | 15.00 | 25.00 | 40.00 | 0.669% | 0.27 |
| Tenaska | 48,800.00 | 9/1/2023 | 9/30/2023 | 10/25/2023 | 15.00 | 25.00 | 40.00 | 0.637% | 0.25 |
| Vitol | 69,000.00 | 9/1/2023 | 9/30/2023 | 10/25/2023 | 15.00 | 25.00 | 40.00 | 0.900% | 0.36 |
| Eco-Energy | 206,000.00 | 10/1/2023 | 10/31/2023 | 11/27/2023 | 15.50 | 27.00 | 42.50 | 2.687% | 1.14 |
| Tenaska | 279,000.00 | 10/1/2023 | 10/31/2023 | 11/27/2023 | 15.50 | 27.00 | 42.50 | 3.639% | 1.55 |
| Twin Eagle | 94,800.00 | 10/1/2023 | 10/31/2023 | 11/27/2023 | 15.50 | 27.00 | 42.50 | 1.236% | 0.53 |
| Vitol | 317,808.40 | 10/1/2023 | 10/31/2023 | 11/27/2023 | 15.50 | 27.00 | 42.50 | 4.145% | 1.76 |
| Eco-Energy | 98,839.50 | 11/1/2023 | 11/30/2023 | 12/26/2023 | 15.00 | 26.00 | 41.00 | 1.289% | 0.53 |
| Tenaska | 344,350.00 | 11/1/2023 | 11/30/2023 | 12/26/2023 | 15.00 | 26.00 | 41.00 | 4.491% | 1.84 |
| Twin Eagle | 97,442.00 | 11/1/2023 | 11/30/2023 | 12/26/2023 | 15.00 | 26.00 | 41.00 | 1.271% | 0.52 |
| Vitol | 427,882.20 | 11/1/2023 | 11/30/2023 | 12/26/2023 | 15.00 | 26.00 | 41.00 | 5.581% | 2.29 |
| Eco-Energy | 130,490.00 | 12/1/2023 | 12/31/2023 | 1/25/2024 | 15.50 | 25.00 | 40.50 | 1.702% | 0.69 |
| Tenaska | 338,450.00 | 12/1/2023 | 12/31/2023 | 1/25/2024 | 15.50 | 25.00 | 40.50 | 4.414% | 1.79 |
| Twin Eagle | 53,800.00 | 12/1/2023 | 12/31/2023 | 1/25/2024 | 15.50 | 25.00 | 40.50 | 0.702% | 0.28 |
| Vitol | 337,450.00 | 12/1/2023 | 12/31/2023 | 1/25/2024 | 15.50 | 25.00 | 40.50 | 4.401% | 1.78 |
| | $ 7,666,918.53 | | | | | | | | 40.63 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**OIL PURCHASES**

Weighted Lead Time: 9.26 days

| Vendor Name | Invoice Amount | Period Beginning | Period End | Payment Date | Service Lead Time | Payment Lead Time | Total Lead Time | Weighting Factor | Dollar-Weighted Days |
|---|---|---|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) |
| HIGHTOWERS PETROLEUM CO | $ 7.50 | 5/17/2023 | 5/17/2023 | 5/25/2023 | 0.63 | 7.74 | 8.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.93 | 5/17/2023 | 5/17/2023 | 5/25/2023 | 0.63 | 7.74 | 8.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.26 | 5/17/2023 | 5/17/2023 | 5/25/2023 | 0.63 | 7.74 | 8.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 452.66 | 5/17/2023 | 5/17/2023 | 5/25/2023 | 0.63 | 7.73 | 8.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 20,304.24 | 5/18/2023 | 5/18/2023 | 5/25/2023 | 0.68 | 6.63 | 7.32 | 0.19% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 449.82 | 5/18/2023 | 5/18/2023 | 5/25/2023 | 0.68 | 6.63 | 7.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.86 | 5/18/2023 | 5/18/2023 | 5/25/2023 | 0.68 | 6.63 | 7.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 448.67 | 5/19/2023 | 5/19/2023 | 6/1/2023 | 0.69 | 12.61 | 13.31 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 15.87 | 5/19/2023 | 5/19/2023 | 6/1/2023 | 0.69 | 12.61 | 13.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.92 | 5/19/2023 | 5/19/2023 | 6/1/2023 | 0.69 | 12.61 | 13.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 449.03 | 5/19/2023 | 5/19/2023 | 6/1/2023 | 0.69 | 12.62 | 13.31 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 449.45 | 5/19/2023 | 5/19/2023 | 6/1/2023 | 0.69 | 12.62 | 13.31 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 115.15 | 5/19/2023 | 5/19/2023 | 6/1/2023 | 0.69 | 12.62 | 13.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 20,253.93 | 5/16/2023 | 5/16/2023 | 6/1/2023 | 0.69 | 15.62 | 16.31 | 0.19% | 0.031 |
| HIGHTOWERS PETROLEUM CO | 28.95 | 5/24/2023 | 5/24/2023 | 6/1/2023 | 0.69 | 7.61 | 8.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.99 | 5/31/2023 | 5/31/2023 | 6/8/2023 | 0.67 | 7.67 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.12 | 5/31/2023 | 5/31/2023 | 6/8/2023 | 0.67 | 7.67 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.92 | 6/13/2023 | 6/13/2023 | 6/22/2023 | 0.70 | 8.60 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 479.40 | 6/13/2023 | 6/13/2023 | 6/22/2023 | 0.70 | 8.60 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.96 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.65 | 6.71 | 7.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 448.79 | 6/16/2023 | 6/16/2023 | 6/22/2023 | 0.65 | 5.70 | 6.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,665.28 | 6/21/2023 | 6/21/2023 | 6/29/2023 | 0.68 | 7.64 | 8.32 | 0.17% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 18,072.57 | 6/28/2023 | 6/28/2023 | 7/6/2023 | 0.71 | 7.58 | 8.29 | 0.17% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 7.45 | 6/28/2023 | 6/28/2023 | 7/6/2023 | 0.71 | 7.58 | 8.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.44 | 6/1/2023 | 6/1/2023 | 6/8/2023 | 0.66 | 6.67 | 7.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 450.36 | 6/1/2023 | 6/1/2023 | 6/8/2023 | 0.66 | 6.67 | 7.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.52 | 6/1/2023 | 6/1/2023 | 6/8/2023 | 0.67 | 6.67 | 7.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.87 | 6/7/2023 | 6/8/2023 | 6/15/2023 | 1.18 | 6.64 | 7.82 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.04 | 6/8/2023 | 6/8/2023 | 6/15/2023 | 0.68 | 6.64 | 7.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 449.27 | 6/6/2023 | 6/6/2023 | 6/15/2023 | 0.66 | 8.67 | 9.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.89 | 6/6/2023 | 6/6/2023 | 6/15/2023 | 0.66 | 8.67 | 9.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 448.97 | 6/6/2023 | 6/6/2023 | 6/15/2023 | 0.66 | 8.67 | 9.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,468.25 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.65 | 9.70 | 10.35 | 0.22% | 0.023 |
| HIGHTOWERS PETROLEUM CO | 200.80 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.64 | 8.71 | 9.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.31 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.64 | 8.71 | 9.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.64 | 8.71 | 9.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.90 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.65 | 7.71 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 395.34 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.75 | 5.49 | 6.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.08 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.75 | 5.49 | 6.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.39 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.77 | 9.45 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.43 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.80 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.41 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.77 | 9.45 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.60 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.17 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.55 | 1/3/2023 | 1/4/2023 | 1/12/2023 | 1.29 | 7.42 | 8.71 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 3,368.76 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.42 | 7.21 | 0.03% | 0.002 |
| HIGHTOWERS PETROLEUM CO | 322.10 | 12/31/2022 | 1/2/2023 | 1/12/2023 | 1.79 | 9.41 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 13.53 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.42 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 6.32 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.42 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 315.88 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,433.50 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.40 | 7.20 | 0.20% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 16.38 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.40 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 317.23 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.40 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.25 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.30 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.40 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 306.68 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.40 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,889.07 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.40 | 6.20 | 0.20% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 188.60 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.40 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.14 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.40 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.62 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.40 | 10.20 | 0.00% | 0.000 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 118.62 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.44 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 314.83 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.40 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.56 | 1/1/2023 | 1/1/2023 | 1/12/2023 | 0.77 | 10.46 | 11.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.39 | 1/1/2023 | 1/1/2023 | 1/12/2023 | 0.77 | 10.46 | 11.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.55 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 324.83 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,042.28 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.21% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 118.51 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.67 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.40 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,932.87 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.20% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,511.05 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.21% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 29.42 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.55 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.14 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.55 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.89 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.44 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.37 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.42 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.31 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.68 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,700.67 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 316.51 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.42 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,013.45 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.20% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 317.56 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.71 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.62 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.53 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.38 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.27 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.75 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.60 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 324.91 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.12 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.54 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.51 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.78 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.65 | 16.70 | 17.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.51 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.64 | 15.71 | 16.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.50 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.75 | 12.49 | 13.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.28 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.79 | 13.41 | 14.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.26 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.79 | 13.41 | 14.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.34 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.79 | 13.41 | 14.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 178.28 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.80 | 13.41 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.93 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.81 | 12.39 | 13.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.38 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.81 | 12.39 | 13.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.69 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.80 | 12.39 | 13.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.89 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.80 | 16.40 | 17.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.92 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.80 | 16.39 | 17.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.92 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.73 | 15.55 | 16.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.94 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.73 | 15.54 | 16.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.87 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.73 | 15.54 | 16.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.79 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.73 | 15.54 | 16.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.79 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.78 | 15.45 | 16.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.82 | 1/1/2023 | 1/1/2023 | 1/19/2023 | 0.77 | 17.46 | 18.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.93 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.80 | 16.40 | 17.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.34 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.43 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.38 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.43 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 178.70 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.42 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.08 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.42 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.35 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.42 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.85 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.00 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.39 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 488.64 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.27 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 121.42 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 16.18 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.33 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,700.96 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.22% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.19 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,666.43 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.22% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 118.59 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,628.62 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.21% | 0.021 |
| HIGHTOWERS PETROLEUM CO | 7.56 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.48 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.57 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.82 | 9.37 | 10.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.51 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.82 | 9.37 | 10.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.93 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 484.73 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.20 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.49 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,804.69 | 1/9/2023 | 1/10/2023 | 1/19/2023 | 1.26 | 8.49 | 9.74 | 0.21% | 0.021 |
| HIGHTOWERS PETROLEUM CO | 7.74 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 503.61 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.91 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,553.42 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.22% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 502.05 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.28 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 492.68 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.52 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 489.62 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.33 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.31 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,439.76 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.22% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 491.64 | 1/9/2023 | 1/11/2023 | 1/19/2023 | 1.70 | 7.60 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,502.89 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.21% | 0.021 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 489.36 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.16 | 1/9/2023 | 1/10/2023 | 1/19/2023 | 1.26 | 8.48 | 9.74 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.07 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.21 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.12 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.38 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.08 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.09 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,822.92 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 116.42 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.45 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 489.16 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.70 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.28 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.03 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.76 | 7.49 | 8.24 | 0.00% | 0.000 |
| CERES SOLUTIONS | 183.27 | 1/10/2023 | 1/10/2023 | 1/20/2023 | 0.76 | 9.49 | 10.24 | 0.00% | 0.000 |
| CERES SOLUTIONS | 7.37 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.69 | 8.61 | 9.31 | 0.00% | 0.000 |
| CERES SOLUTIONS | 28.75 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.70 | 8.61 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.37 | 1/9/2023 | 1/10/2023 | 1/20/2023 | 1.26 | 9.49 | 10.74 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 69.02 | 1/9/2023 | 1/9/2023 | 1/20/2023 | 0.81 | 10.37 | 11.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.72 | 1/2/2023 | 1/2/2023 | 1/20/2023 | 0.80 | 17.39 | 18.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.64 | 1/3/2023 | 1/3/2023 | 1/20/2023 | 0.73 | 16.54 | 17.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.64 | 1/3/2023 | 1/3/2023 | 1/20/2023 | 0.78 | 16.45 | 17.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.72 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.78 | 15.43 | 16.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 70.53 | 1/3/2023 | 1/4/2023 | 1/20/2023 | 1.29 | 15.42 | 16.71 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 70.17 | 1/5/2023 | 1/5/2023 | 1/20/2023 | 0.79 | 14.41 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.55 | 1/5/2023 | 1/5/2023 | 1/20/2023 | 0.80 | 14.41 | 15.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.61 | 1/5/2023 | 1/5/2023 | 1/20/2023 | 0.80 | 14.41 | 15.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.80 | 1/5/2023 | 1/5/2023 | 1/20/2023 | 0.80 | 14.41 | 15.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.89 | 1/5/2023 | 1/5/2023 | 1/20/2023 | 0.80 | 14.41 | 15.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 70.23 | 1/6/2023 | 1/6/2023 | 1/20/2023 | 0.81 | 13.39 | 14.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.72 | 1/6/2023 | 1/6/2023 | 1/20/2023 | 0.81 | 13.39 | 14.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 70.71 | 1/9/2023 | 1/9/2023 | 1/20/2023 | 0.81 | 10.37 | 11.19 | 0.00% | 0.000 |
| CERES SOLUTIONS | 28.68 | 1/12/2023 | 1/12/2023 | 1/23/2023 | 0.73 | 10.54 | 11.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 7.36 | 1/12/2023 | 1/12/2023 | 1/23/2023 | 0.73 | 10.54 | 11.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 28.69 | 1/13/2023 | 1/13/2023 | 1/23/2023 | 0.73 | 9.54 | 10.27 | 0.00% | 0.000 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CERES SOLUTIONS | 7.37 | 1/14/2023 | 1/14/2023 | 1/23/2023 | 0.73 | 8.53 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.26 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 490.66 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 16.14 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.16 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 491.64 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 63.27 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16,740.81 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.16% | 0.019 |
| HIGHTOWERS PETROLEUM CO | 5.10 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 331.88 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 484.67 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 16.12 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.30 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.09 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.72 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 192.14 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.61 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.77 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.74 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.48 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 487.34 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.03 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,786.12 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.23% | 0.028 |
| HIGHTOWERS PETROLEUM CO | 186.57 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 504.26 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 192.41 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.15 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.01 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 491.05 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 117.01 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.44 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.95 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.74 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.17 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.51 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.79 | 11.41 | 12.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.59 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.79 | 11.41 | 12.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,549.62 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.25% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 16.58 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 504.46 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.73 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/13/2023 | 1/14/2023 | 1/26/2023 | 1.30 | 11.41 | 12.70 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 462.99 | 1/16/2023 | 1/17/2023 | 1/26/2023 | 1.23 | 8.53 | 9.77 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,542.77 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.25% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 116.85 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,397.58 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.24% | 0.029 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,160.46 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.24% | 0.023 |
| HIGHTOWERS PETROLEUM CO | 7.59 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.33 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 190.83 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,340.23 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.24% | 0.029 |
| HIGHTOWERS PETROLEUM CO | 25,452.14 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.24% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 25,340.23 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.24% | 0.029 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.44 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.33 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.83 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.45 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,330.11 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.24% | 0.029 |
| HIGHTOWERS PETROLEUM CO | 491.96 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 181.35 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.58 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.45 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.58 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 489.75 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.58 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.57 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.57 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.79 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.58 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.57 | 10.29 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 189.55 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.57 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.52 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.57 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,536.87 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.24% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 490.53 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 490.33 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.39 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.73 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 183.78 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.67 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.37 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.60 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.85 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 493.26 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.12 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 192.51 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 491.77 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 491.37 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.49 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.44 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.59 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.13 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.70 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.50 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.74 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.32 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.10 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.55 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,768.45 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.24% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 489.62 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| CERES SOLUTIONS | 15.74 | 1/16/2023 | 1/16/2023 | 1/30/2023 | 0.73 | 13.53 | 14.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 182.80 | 1/16/2023 | 1/16/2023 | 1/30/2023 | 0.73 | 13.53 | 14.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 15.78 | 1/16/2023 | 1/16/2023 | 1/30/2023 | 0.73 | 13.53 | 14.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.56 | 1/25/2023 | 1/25/2023 | 2/2/2023 | 0.71 | 7.58 | 8.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.15 | 5/10/2023 | 5/10/2023 | 5/18/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 452.90 | 5/10/2023 | 5/10/2023 | 5/18/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 20,493.75 | 5/11/2023 | 5/11/2023 | 5/18/2023 | 0.75 | 6.50 | 7.25 | 0.19% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 124.00 | 4/6/2023 | 4/6/2023 | 4/13/2023 | 0.62 | 6.75 | 7.38 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.25 | 4/13/2023 | 4/13/2023 | 4/20/2023 | 0.76 | 6.47 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.30 | 4/12/2023 | 4/12/2023 | 4/20/2023 | 0.70 | 7.59 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.36 | 4/17/2023 | 4/17/2023 | 4/27/2023 | 0.77 | 9.47 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.25 | 4/17/2023 | 4/17/2023 | 4/27/2023 | 0.77 | 9.47 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 4/18/2023 | 4/18/2023 | 4/27/2023 | 0.68 | 8.64 | 9.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.49 | 4/18/2023 | 4/18/2023 | 4/27/2023 | 0.68 | 8.64 | 9.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.48 | 4/19/2023 | 4/19/2023 | 4/27/2023 | 0.68 | 7.63 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 483.09 | 4/19/2023 | 4/19/2023 | 4/27/2023 | 0.68 | 7.63 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.45 | 4/27/2023 | 4/27/2023 | 5/4/2023 | 0.67 | 6.65 | 7.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 452.66 | 3/1/2023 | 3/1/2023 | 3/9/2023 | 0.63 | 7.73 | 8.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.57 | 3/15/2023 | 3/15/2023 | 3/23/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.19 | 3/15/2023 | 3/15/2023 | 3/23/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 456.78 | 3/22/2023 | 3/22/2023 | 3/30/2023 | 0.75 | 7.49 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.58 | 2/1/2023 | 2/1/2023 | 2/9/2023 | 0.67 | 7.66 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.56 | 2/1/2023 | 2/1/2023 | 2/9/2023 | 0.67 | 7.66 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.15 | 2/1/2023 | 2/1/2023 | 2/9/2023 | 0.67 | 7.66 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.23 | 9/15/2022 | 9/15/2022 | 2/9/2023 | 0.76 | 146.47 | 147.24 | 0.00% | 0.002 |
| HIGHTOWERS PETROLEUM CO | 123.01 | 9/22/2022 | 9/22/2022 | 2/9/2023 | 0.65 | 139.70 | 140.35 | 0.00% | 0.002 |
| HIGHTOWERS PETROLEUM CO | 115.77 | 10/26/2022 | 10/26/2022 | 2/9/2023 | 0.77 | 105.46 | 106.23 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 115.91 | 11/7/2022 | 11/7/2022 | 2/9/2023 | 0.68 | 93.63 | 94.32 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.70 | 11/30/2022 | 11/30/2022 | 2/9/2023 | 0.62 | 70.75 | 71.38 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.06 | 12/15/2022 | 12/15/2022 | 2/9/2023 | 0.76 | 55.47 | 56.24 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 115.97 | 12/15/2022 | 12/15/2022 | 2/9/2023 | 0.76 | 55.47 | 56.24 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 114.96 | 6/16/2022 | 6/16/2022 | 2/9/2023 | 0.71 | 237.58 | 238.29 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 116.23 | 5/10/2022 | 5/10/2022 | 2/9/2023 | 0.74 | 274.53 | 275.26 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 116.02 | 5/11/2022 | 5/11/2022 | 2/9/2023 | 0.76 | 273.47 | 274.24 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 116.25 | 5/13/2022 | 5/13/2022 | 2/9/2023 | 0.67 | 271.67 | 272.33 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 116.22 | 5/13/2022 | 5/13/2022 | 2/9/2023 | 0.67 | 271.67 | 272.33 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 116.17 | 5/16/2022 | 5/16/2022 | 2/9/2023 | 0.67 | 268.66 | 269.33 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 116.03 | 5/31/2022 | 5/31/2022 | 2/9/2023 | 0.62 | 253.75 | 254.38 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 122.30 | 12/27/2022 | 12/27/2022 | 2/9/2023 | 0.72 | 43.57 | 44.28 | 0.00% | 0.001 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 124.19 | 12/30/2022 | 12/30/2022 | 2/9/2023 | 0.74 | 40.51 | 41.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 124.42 | 12/30/2022 | 12/30/2022 | 2/9/2023 | 0.74 | 40.51 | 41.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.57 | 12/30/2022 | 12/30/2022 | 2/9/2023 | 0.75 | 40.51 | 41.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.06 | 2/8/2023 | 2/8/2023 | 2/16/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,368.69 | 2/15/2023 | 2/15/2023 | 2/23/2023 | 0.76 | 7.47 | 8.24 | 0.22% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 16.12 | 2/15/2023 | 2/15/2023 | 2/23/2023 | 0.76 | 7.47 | 8.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.73 | 2/15/2023 | 2/15/2023 | 2/23/2023 | 0.76 | 7.47 | 8.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 456.17 | 2/15/2023 | 2/15/2023 | 2/23/2023 | 0.77 | 7.47 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 448.73 | 8/2/2023 | 8/2/2023 | 8/11/2023 | 0.72 | 8.56 | 9.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.87 | 8/2/2023 | 8/2/2023 | 8/11/2023 | 0.72 | 8.56 | 9.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 4.66 | 8/9/2023 | 8/9/2023 | 8/17/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 72.26 | 8/9/2023 | 8/9/2023 | 8/17/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 449.09 | 8/23/2023 | 8/23/2023 | 8/31/2023 | 0.65 | 7.70 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,804.34 | 8/30/2023 | 8/30/2023 | 9/7/2023 | 0.83 | 7.35 | 8.17 | 0.24% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 15.89 | 8/30/2023 | 8/30/2023 | 9/7/2023 | 0.83 | 7.35 | 8.17 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.43 | 8/30/2023 | 8/30/2023 | 9/11/2023 | 0.79 | 11.43 | 12.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 448.79 | 9/6/2023 | 9/6/2023 | 9/14/2023 | 0.81 | 7.38 | 8.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 114.98 | 9/6/2023 | 9/6/2023 | 9/14/2023 | 0.81 | 7.38 | 8.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.30 | 9/20/2023 | 9/20/2023 | 9/28/2023 | 0.84 | 7.31 | 8.16 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.35 | 9/27/2023 | 9/27/2023 | 10/5/2023 | 0.82 | 7.36 | 8.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.05 | 11/9/2023 | 11/9/2023 | 11/16/2023 | 0.80 | 6.40 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.04 | 12/1/2023 | 12/1/2023 | 12/7/2023 | 0.71 | 5.58 | 6.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.17 | 12/4/2023 | 12/4/2023 | 12/14/2023 | 0.54 | 9.91 | 10.46 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 19,807.24 | 12/4/2023 | 12/4/2023 | 12/14/2023 | 0.53 | 9.94 | 10.47 | 0.18% | 0.019 |
| HIGHTOWERS PETROLEUM CO | 453.99 | 12/5/2023 | 12/5/2023 | 12/14/2023 | 0.66 | 8.67 | 9.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.27 | 12/5/2023 | 12/5/2023 | 12/14/2023 | 0.66 | 8.67 | 9.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 19,276.18 | 12/5/2023 | 12/5/2023 | 12/14/2023 | 0.74 | 8.51 | 9.26 | 0.18% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 16.27 | 12/6/2023 | 12/6/2023 | 12/14/2023 | 0.74 | 7.53 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 190.13 | 12/6/2023 | 12/6/2023 | 12/14/2023 | 0.74 | 7.53 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.88 | 12/6/2023 | 12/6/2023 | 12/14/2023 | 0.74 | 7.53 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 12/7/2023 | 12/7/2023 | 12/14/2023 | 0.80 | 6.39 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 12/7/2023 | 12/7/2023 | 12/14/2023 | 0.80 | 6.39 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,524.04 | 11/10/2023 | 11/10/2023 | 11/20/2023 | 0.74 | 9.52 | 10.26 | 0.23% | 0.023 |
| HIGHTOWERS PETROLEUM CO | 187.33 | 11/10/2023 | 11/10/2023 | 11/21/2023 | 0.81 | 10.38 | 11.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,935.57 | 11/15/2023 | 11/15/2023 | 11/22/2023 | 0.71 | 6.59 | 7.29 | 0.23% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 16.05 | 11/15/2023 | 11/15/2023 | 11/22/2023 | 0.71 | 6.59 | 7.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.27 | 11/15/2023 | 11/15/2023 | 11/22/2023 | 0.71 | 6.59 | 7.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.50 | 11/14/2023 | 11/14/2023 | 11/22/2023 | 0.65 | 7.70 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 11/16/2023 | 11/16/2023 | 11/22/2023 | 0.75 | 5.50 | 6.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.33 | 11/16/2023 | 11/16/2023 | 11/22/2023 | 0.75 | 5.50 | 6.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.84 | 8.32 | 9.16 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,555.87 | 11/22/2023 | 11/22/2023 | 11/30/2023 | 0.79 | 7.41 | 8.21 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 7.47 | 11/22/2023 | 11/22/2023 | 11/30/2023 | 0.79 | 7.41 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 452.42 | 11/22/2023 | 11/22/2023 | 11/30/2023 | 0.81 | 7.38 | 8.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.00 | 11/22/2023 | 11/22/2023 | 11/30/2023 | 0.81 | 7.38 | 8.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.00 | 11/24/2023 | 11/24/2023 | 11/30/2023 | 0.74 | 5.52 | 6.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 11/20/2023 | 11/20/2023 | 11/30/2023 | 0.71 | 9.57 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.05 | 11/30/2023 | 11/30/2023 | 12/7/2023 | 0.82 | 6.37 | 7.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.05 | 11/30/2023 | 11/30/2023 | 12/7/2023 | 0.77 | 6.46 | 7.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 12/27/2023 | 12/27/2023 | 1/5/2024 | 0.78 | 8.44 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.75 | 12/27/2023 | 12/27/2023 | 1/5/2024 | 0.78 | 8.44 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.25 | 12/27/2023 | 12/27/2023 | 1/5/2024 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.45 | 12/20/2023 | 12/20/2023 | 1/5/2024 | 0.84 | 15.33 | 16.16 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.30 | 12/20/2023 | 12/20/2023 | 1/5/2024 | 0.84 | 15.33 | 16.16 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 451.27 | 10/11/2023 | 10/11/2023 | 10/19/2023 | 0.64 | 7.73 | 8.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.09 | 10/11/2023 | 10/11/2023 | 10/19/2023 | 0.64 | 7.73 | 8.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.05 | 10/18/2023 | 10/18/2023 | 10/26/2023 | 0.65 | 7.70 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.11 | 10/25/2023 | 10/25/2023 | 11/2/2023 | 0.73 | 7.55 | 8.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.27 | 10/25/2023 | 10/25/2023 | 11/2/2023 | 0.74 | 7.52 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 114.67 | 7/12/2023 | 7/12/2023 | 7/20/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.41 | 7/19/2023 | 7/19/2023 | 7/27/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.41 | 7/19/2023 | 7/19/2023 | 7/27/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.95 | 7/27/2023 | 7/27/2023 | 8/4/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.18 | 5/17/2023 | 5/17/2023 | 5/25/2023 | 0.63 | 7.73 | 8.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 114.90 | 5/18/2023 | 5/18/2023 | 5/25/2023 | 0.68 | 6.63 | 7.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.15 | 5/16/2023 | 5/16/2023 | 5/25/2023 | 0.72 | 8.56 | 9.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.42 | 5/24/2023 | 5/24/2023 | 6/1/2023 | 0.69 | 7.61 | 8.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 451.94 | 5/31/2023 | 5/31/2023 | 6/8/2023 | 0.67 | 7.67 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.79 | 5/31/2023 | 5/31/2023 | 6/8/2023 | 0.67 | 7.67 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 19,516.02 | 6/13/2023 | 6/13/2023 | 6/22/2023 | 0.70 | 8.60 | 9.30 | 0.18% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 116.56 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.65 | 6.71 | 7.35 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 18,062.06 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.65 | 6.71 | 7.35 | 0.17% | 0.012 |
| HIGHTOWERS PETROLEUM CO | 449.21 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.65 | 6.71 | 7.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.95 | 6/16/2023 | 6/16/2023 | 6/22/2023 | 0.65 | 5.70 | 6.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 450.24 | 6/21/2023 | 6/21/2023 | 6/29/2023 | 0.68 | 7.64 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.12 | 6/21/2023 | 6/21/2023 | 6/29/2023 | 0.68 | 7.64 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,731.62 | 6/1/2023 | 6/1/2023 | 6/8/2023 | 0.67 | 6.67 | 7.33 | 0.17% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 15.95 | 6/1/2023 | 6/1/2023 | 6/8/2023 | 0.67 | 6.67 | 7.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.97 | 6/2/2023 | 6/2/2023 | 6/8/2023 | 0.67 | 5.67 | 6.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.85 | 6/8/2023 | 6/8/2023 | 6/15/2023 | 0.67 | 6.65 | 7.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.10 | 6/6/2023 | 6/6/2023 | 6/15/2023 | 0.66 | 8.67 | 9.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 422.48 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.64 | 8.71 | 9.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 31.32 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.64 | 8.71 | 9.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,390.44 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.64 | 8.71 | 9.36 | 0.22% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 395.39 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.64 | 8.71 | 9.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.30 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.65 | 7.71 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.37 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.65 | 7.71 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.31 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.65 | 7.71 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,095.29 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.75 | 6.49 | 7.25 | 0.21% | 0.015 |
| HIGHTOWERS PETROLEUM CO | 16.28 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.53 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.38 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.39 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.55 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.15 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.14 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.77 | 9.45 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.50 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.77 | 9.45 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.45 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.40 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 121.67 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,996.45 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 325.16 | 1/3/2023 | 1/4/2023 | 1/12/2023 | 1.29 | 7.42 | 8.71 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.19 | 1/3/2023 | 1/4/2023 | 1/12/2023 | 1.29 | 7.42 | 8.71 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.95 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.09 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.16 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.40 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.83 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.40 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.74 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.44 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 315.04 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.93 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.40 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.25 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.40 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.14 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.40 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.33 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.44 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.38 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.44 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.53 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.44 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.48 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.53 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.40 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.53 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.39 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.44 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,703.55 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 118.95 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.39 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.78 | 1/5/2023 | 1/6/2023 | 1/12/2023 | 1.31 | 5.39 | 6.69 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.41 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.73 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.35 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,723.70 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.85 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,706.42 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 118.12 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.62 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.55 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.78 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.12 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 121.26 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.15 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.85 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.60 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 22,078.88 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.21% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 23,042.28 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.18 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.03 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.35 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,938.71 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.20% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.77 | 9.45 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,650.34 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.22% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 121.75 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.44 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.24 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,027.45 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.20% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 315.38 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.83 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.30 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.30 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 324.16 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.95 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.47 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 191.23 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.18 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.56 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 59.57 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.65 | 16.70 | 17.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.89 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.75 | 13.49 | 14.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.51 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.79 | 13.41 | 14.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.46 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.79 | 13.41 | 14.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.93 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.79 | 13.41 | 14.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.31 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.79 | 13.41 | 14.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 178.08 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.81 | 12.39 | 13.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.49 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.81 | 12.39 | 13.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.01 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.81 | 12.39 | 13.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.44 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.81 | 12.38 | 13.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.19 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.80 | 12.40 | 13.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 178.65 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.80 | 16.39 | 17.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.51 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.73 | 15.55 | 16.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.24 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.73 | 15.55 | 16.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.85 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.78 | 15.45 | 16.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.01 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.78 | 14.44 | 15.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.29 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.43 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.97 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.43 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.81 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.43 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.51 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.42 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.91 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.42 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.03 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.42 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 176.69 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.42 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.99 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.42 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.06 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.42 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 146.02 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.79 | 13.42 | 14.21 | 0.00% | 0.000 |
| CERES SOLUTIONS | 23,572.71 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.49 | 9.24 | 0.22% | 0.020 |
| CERES SOLUTIONS | 15.79 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.49 | 9.24 | 0.00% | 0.000 |
| CERES SOLUTIONS | 28.77 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.49 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.30 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.29 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.72 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.03 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,297.41 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.23% | 0.019 |
| HIGHTOWERS PETROLEUM CO | 118.79 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.10 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.18 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.85 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.40 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.36 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,101.61 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.22% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 188.80 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,938.39 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.49 | 9.24 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 117.13 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.15 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.34 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.63 | 1/9/2023 | 1/10/2023 | 1/19/2023 | 1.26 | 8.49 | 9.74 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.21 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 192.80 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.20 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.82 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.02 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 489.94 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.51 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 121.34 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.00 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 192.85 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.13 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.93 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.26 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.57 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.15 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.57 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.34 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.30 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.88 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.10 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.46 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.79 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.26 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.12 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.75 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.76 | 7.49 | 8.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.76 | 7.49 | 8.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.50 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.76 | 7.49 | 8.24 | 0.00% | 0.000 |
| CERES SOLUTIONS | 24,294.04 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.69 | 8.61 | 9.31 | 0.23% | 0.021 |
| HIGHTOWERS PETROLEUM CO | 68.77 | 1/10/2023 | 1/10/2023 | 1/20/2023 | 0.76 | 9.49 | 10.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.51 | 1/10/2023 | 1/10/2023 | 1/20/2023 | 0.76 | 9.48 | 10.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.93 | 1/10/2023 | 1/10/2023 | 1/20/2023 | 0.76 | 9.48 | 10.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.42 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.70 | 8.61 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 70.47 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.70 | 8.61 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.40 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.70 | 8.60 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 70.51 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.70 | 8.60 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.96 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.70 | 8.60 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.66 | 1/2/2023 | 1/2/2023 | 1/20/2023 | 0.77 | 17.45 | 18.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.67 | 1/2/2023 | 1/2/2023 | 1/20/2023 | 0.77 | 17.45 | 18.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.69 | 1/2/2023 | 1/2/2023 | 1/20/2023 | 0.77 | 17.45 | 18.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.72 | 1/3/2023 | 1/3/2023 | 1/20/2023 | 0.73 | 16.55 | 17.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 70.51 | 1/3/2023 | 1/3/2023 | 1/20/2023 | 0.73 | 16.54 | 17.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.67 | 1/3/2023 | 1/3/2023 | 1/20/2023 | 0.78 | 16.45 | 17.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.57 | 1/3/2023 | 1/3/2023 | 1/20/2023 | 0.78 | 16.45 | 17.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.67 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.78 | 15.43 | 16.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.74 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.79 | 15.43 | 16.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.61 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.79 | 15.43 | 16.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 66.52 | 1/6/2023 | 1/6/2023 | 1/20/2023 | 0.80 | 13.40 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 70.24 | 1/6/2023 | 1/6/2023 | 1/20/2023 | 0.80 | 13.40 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.40 | 1/6/2023 | 1/6/2023 | 1/20/2023 | 0.81 | 13.39 | 14.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.44 | 1/6/2023 | 1/6/2023 | 1/20/2023 | 0.81 | 13.38 | 14.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.48 | 1/9/2023 | 1/9/2023 | 1/20/2023 | 0.81 | 10.37 | 11.19 | 0.00% | 0.000 |
| CERES SOLUTIONS | 28.69 | 1/13/2023 | 1/13/2023 | 1/23/2023 | 0.73 | 9.54 | 10.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 25,428.80 | 1/13/2023 | 1/13/2023 | 1/23/2023 | 0.73 | 9.54 | 10.27 | 0.24% | 0.024 |
| CERES SOLUTIONS | 15.77 | 1/14/2023 | 1/14/2023 | 1/23/2023 | 0.73 | 8.53 | 9.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 28.74 | 1/14/2023 | 1/14/2023 | 1/23/2023 | 0.73 | 8.53 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,447.89 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.23% | 0.028 |
| HIGHTOWERS PETROLEUM CO | 188.43 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.32 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.80 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 493.33 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 29.04 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 5.45 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 488.58 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 188.24 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 504.79 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.001 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 30.24 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 19.88 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.23 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.74 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,802.54 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.23% | 0.028 |
| HIGHTOWERS PETROLEUM CO | 187.62 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.32 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.56 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.66 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.42 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.56 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 491.44 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 24,648.20 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.23% | 0.028 |
| HIGHTOWERS PETROLEUM CO | 193.65 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.38 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.52 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.44 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.37 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.44 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.63 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,154.02 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.23% | 0.026 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.38 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.55 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.75 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 457.14 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,224.03 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.24% | 0.030 |
| HIGHTOWERS PETROLEUM CO | 116.62 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.55 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.77 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.15 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.43 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.27 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,350.35 | 1/13/2023 | 1/14/2023 | 1/26/2023 | 1.30 | 11.41 | 12.70 | 0.24% | 0.030 |
| HIGHTOWERS PETROLEUM CO | 16.08 | 1/13/2023 | 1/14/2023 | 1/26/2023 | 1.30 | 11.41 | 12.70 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.11 | 1/16/2023 | 1/17/2023 | 1/26/2023 | 1.23 | 8.53 | 9.77 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.48 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 27,898.77 | 1/20/2023 | 1/20/2023 | 1/26/2023 | 0.76 | 5.48 | 6.24 | 0.26% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 116.48 | 1/13/2023 | 1/14/2023 | 1/26/2023 | 1.30 | 11.41 | 12.70 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,380.71 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.24% | 0.029 |
| HIGHTOWERS PETROLEUM CO | 192.96 | 1/20/2023 | 1/20/2023 | 1/26/2023 | 0.76 | 5.48 | 6.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 194.20 | 1/20/2023 | 1/20/2023 | 1/26/2023 | 0.76 | 5.48 | 6.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.90 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.10 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,586.48 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.24% | 0.029 |
| HIGHTOWERS PETROLEUM CO | 188.41 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 502.51 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,869.00 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.24% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 29.58 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.61 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.76 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.55 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.41 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,530.09 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.24% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 489.03 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 187.80 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 490.40 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.12 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.08 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.35 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.52 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.93 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.52 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 24,469.92 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.58 | 10.29 | 0.23% | 0.023 |
| HIGHTOWERS PETROLEUM CO | 15.52 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.58 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.71 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 477.57 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.39 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.57 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.52 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.51 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 490.53 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,216.61 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.24% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 16.23 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.57 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.34 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.57 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,224.03 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.24% | 0.025 |
| HIGHTOWERS PETROLEUM CO | 16.64 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.36 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.09 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.08 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 489.29 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.35 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.28 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,223.56 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.24% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 29.31 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.76 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.53 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.98 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.20 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.21 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.21 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.15 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.19 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 492.48 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,481.91 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.24% | 0.024 |
| HIGHTOWERS PETROLEUM CO | 181.35 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.45 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.27 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.64 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.29 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.17 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.47 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.17 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,761.53 | 1/13/2023 | 1/14/2023 | 1/26/2023 | 1.29 | 11.41 | 12.71 | 0.22% | 0.028 |
| HIGHTOWERS PETROLEUM CO | 29.41 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.96 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.82 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.15 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| CERES SOLUTIONS | 28.69 | 1/16/2023 | 1/16/2023 | 1/30/2023 | 0.73 | 13.53 | 14.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 457.62 | 1/25/2023 | 1/25/2023 | 2/2/2023 | 0.71 | 7.58 | 8.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.57 | 1/25/2023 | 1/25/2023 | 2/2/2023 | 0.71 | 7.58 | 8.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.10 | 5/10/2023 | 5/10/2023 | 5/18/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.55 | 5/11/2023 | 5/11/2023 | 5/18/2023 | 0.75 | 6.50 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 4/5/2023 | 4/5/2023 | 4/13/2023 | 0.79 | 7.41 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.99 | 4/5/2023 | 4/5/2023 | 4/13/2023 | 0.79 | 7.41 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,283.46 | 4/14/2023 | 4/14/2023 | 4/20/2023 | 0.76 | 5.47 | 6.24 | 0.21% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 7.49 | 4/14/2023 | 4/14/2023 | 4/20/2023 | 0.76 | 5.47 | 6.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 4/14/2023 | 4/14/2023 | 4/20/2023 | 0.76 | 5.47 | 6.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.22 | 4/14/2023 | 4/14/2023 | 4/20/2023 | 0.76 | 5.47 | 6.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.24 | 4/14/2023 | 4/14/2023 | 4/20/2023 | 0.76 | 5.47 | 6.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,196.41 | 4/12/2023 | 4/12/2023 | 4/20/2023 | 0.70 | 7.59 | 8.30 | 0.21% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 16.10 | 4/12/2023 | 4/12/2023 | 4/20/2023 | 0.70 | 7.59 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.62 | 4/12/2023 | 4/12/2023 | 4/20/2023 | 0.70 | 7.59 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.34 | 4/12/2023 | 4/12/2023 | 4/20/2023 | 0.70 | 7.59 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,310.27 | 4/13/2023 | 4/13/2023 | 4/20/2023 | 0.76 | 6.47 | 7.24 | 0.21% | 0.015 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 4/17/2023 | 4/17/2023 | 4/27/2023 | 0.77 | 9.47 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,834.84 | 4/17/2023 | 4/17/2023 | 4/27/2023 | 0.77 | 9.47 | 10.23 | 0.20% | 0.021 |
| HIGHTOWERS PETROLEUM CO | 453.69 | 4/17/2023 | 4/17/2023 | 4/27/2023 | 0.77 | 9.47 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,454.69 | 4/18/2023 | 4/18/2023 | 4/27/2023 | 0.68 | 8.64 | 9.32 | 0.20% | 0.019 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 4/19/2023 | 4/19/2023 | 4/27/2023 | 0.68 | 7.63 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.39 | 4/19/2023 | 4/19/2023 | 4/27/2023 | 0.68 | 7.63 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.81 | 4/26/2023 | 4/26/2023 | 5/4/2023 | 0.67 | 7.67 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 4/27/2023 | 4/27/2023 | 5/4/2023 | 0.67 | 6.65 | 7.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.28 | 4/27/2023 | 4/27/2023 | 5/4/2023 | 0.67 | 6.65 | 7.33 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 21,320.51 | 3/15/2023 | 3/15/2023 | 3/23/2023 | 0.77 | 7.46 | 8.23 | 0.20% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 7.56 | 3/15/2023 | 3/15/2023 | 3/23/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.20 | 3/15/2023 | 3/15/2023 | 3/23/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.51 | 3/15/2023 | 3/15/2023 | 3/23/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.96 | 3/29/2023 | 3/29/2023 | 4/6/2023 | 0.66 | 7.69 | 8.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,744.78 | 3/29/2023 | 3/29/2023 | 4/6/2023 | 0.66 | 7.69 | 8.34 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 7.49 | 3/29/2023 | 3/29/2023 | 4/6/2023 | 0.66 | 7.69 | 8.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,794.80 | 2/1/2023 | 2/1/2023 | 2/9/2023 | 0.67 | 7.66 | 8.33 | 0.25% | 0.021 |
| HIGHTOWERS PETROLEUM CO | 115.77 | 6/2/2022 | 6/2/2022 | 2/9/2023 | 0.79 | 251.42 | 252.21 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 123.47 | 6/9/2022 | 6/9/2022 | 2/9/2023 | 0.65 | 244.70 | 245.35 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 123.30 | 6/15/2022 | 6/15/2022 | 2/9/2023 | 0.69 | 238.63 | 239.31 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 115.43 | 6/15/2022 | 6/15/2022 | 2/9/2023 | 0.69 | 238.63 | 239.31 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 122.70 | 8/18/2022 | 8/18/2022 | 2/9/2023 | 0.79 | 174.42 | 175.21 | 0.00% | 0.002 |
| HIGHTOWERS PETROLEUM CO | 115.72 | 11/11/2022 | 11/11/2022 | 2/9/2023 | 0.76 | 89.49 | 90.24 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.10 | 11/30/2022 | 11/30/2022 | 2/9/2023 | 0.62 | 70.75 | 71.38 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.28 | 12/7/2022 | 12/7/2022 | 2/9/2023 | 0.77 | 63.45 | 64.23 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.59 | 12/14/2022 | 12/14/2022 | 2/9/2023 | 0.77 | 56.47 | 57.23 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 114.84 | 6/21/2022 | 6/21/2022 | 2/9/2023 | 0.77 | 232.46 | 233.23 | 0.00% | 0.002 |
| HIGHTOWERS PETROLEUM CO | 116.05 | 5/25/2022 | 5/25/2022 | 2/9/2023 | 0.71 | 259.57 | 260.29 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 123.61 | 5/26/2022 | 5/26/2022 | 2/9/2023 | 0.63 | 258.74 | 259.37 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 117.77 | 12/27/2022 | 12/27/2022 | 2/9/2023 | 0.72 | 43.56 | 44.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.51 | 12/27/2022 | 12/27/2022 | 2/9/2023 | 0.72 | 43.56 | 44.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.83 | 12/28/2022 | 12/28/2022 | 2/9/2023 | 0.72 | 42.55 | 43.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.71 | 12/28/2022 | 12/28/2022 | 2/9/2023 | 0.73 | 42.54 | 43.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.54 | 12/28/2022 | 12/28/2022 | 2/9/2023 | 0.73 | 42.54 | 43.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.30 | 12/29/2022 | 12/29/2022 | 2/9/2023 | 0.74 | 41.52 | 42.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 457.08 | 2/8/2023 | 2/8/2023 | 2/16/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.17 | 2/8/2023 | 2/8/2023 | 2/16/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.16 | 2/8/2023 | 2/8/2023 | 2/16/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.43 | 8/10/2023 | 8/10/2023 | 8/17/2023 | 0.77 | 6.46 | 7.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 449.45 | 8/10/2023 | 8/10/2023 | 8/17/2023 | 0.77 | 6.46 | 7.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.92 | 8/16/2023 | 8/16/2023 | 8/24/2023 | 0.64 | 7.72 | 8.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 449.27 | 8/16/2023 | 8/16/2023 | 8/24/2023 | 0.64 | 7.72 | 8.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.89 | 8/16/2023 | 8/16/2023 | 8/24/2023 | 0.64 | 7.72 | 8.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.06 | 8/23/2023 | 8/23/2023 | 8/31/2023 | 0.65 | 7.70 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.56 | 8/23/2023 | 8/23/2023 | 8/31/2023 | 0.51 | 7.98 | 8.49 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.67 | 8/23/2023 | 8/23/2023 | 8/31/2023 | 0.51 | 7.98 | 8.49 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.07 | 8/30/2023 | 8/30/2023 | 9/7/2023 | 0.83 | 7.35 | 8.17 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.89 | 8/30/2023 | 8/30/2023 | 9/11/2023 | 0.79 | 11.43 | 12.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.87 | 9/6/2023 | 9/6/2023 | 9/14/2023 | 0.81 | 7.38 | 8.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 449.03 | 9/6/2023 | 9/6/2023 | 9/14/2023 | 0.74 | 7.53 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 450.42 | 9/13/2023 | 9/13/2023 | 9/21/2023 | 0.80 | 7.39 | 8.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.93 | 9/13/2023 | 9/13/2023 | 9/21/2023 | 0.80 | 7.39 | 8.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.04 | 9/13/2023 | 9/13/2023 | 9/21/2023 | 0.80 | 7.39 | 8.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.45 | 9/13/2023 | 9/13/2023 | 9/21/2023 | 0.72 | 7.56 | 8.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.95 | 9/13/2023 | 9/13/2023 | 9/21/2023 | 0.72 | 7.56 | 8.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.44 | 9/20/2023 | 9/20/2023 | 9/28/2023 | 0.84 | 7.31 | 8.16 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.92 | 9/20/2023 | 9/20/2023 | 9/28/2023 | 0.84 | 7.31 | 8.16 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.43 | 9/20/2023 | 9/20/2023 | 9/28/2023 | 0.96 | 7.08 | 8.04 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.01 | 9/20/2023 | 9/20/2023 | 9/28/2023 | 0.84 | 7.31 | 8.16 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.99 | 11/1/2023 | 11/1/2023 | 11/9/2023 | 0.76 | 7.47 | 8.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.27 | 11/9/2023 | 11/9/2023 | 11/16/2023 | 0.80 | 6.40 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.27 | 11/8/2023 | 11/8/2023 | 11/17/2023 | 0.61 | 8.77 | 9.39 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,332.00 | 11/8/2023 | 11/8/2023 | 11/17/2023 | 0.81 | 8.38 | 9.19 | 0.24% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 453.45 | 12/1/2023 | 12/1/2023 | 12/7/2023 | 0.72 | 5.56 | 6.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.04 | 12/1/2023 | 12/1/2023 | 12/7/2023 | 0.72 | 5.56 | 6.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 19,762.56 | 12/4/2023 | 12/4/2023 | 12/14/2023 | 0.67 | 9.66 | 10.33 | 0.18% | 0.019 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 12/4/2023 | 12/4/2023 | 12/14/2023 | 0.67 | 9.66 | 10.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.60 | 12/5/2023 | 12/5/2023 | 12/14/2023 | 0.66 | 8.67 | 9.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 12/5/2023 | 12/5/2023 | 12/14/2023 | 0.74 | 8.51 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.25 | 12/5/2023 | 12/5/2023 | 12/14/2023 | 0.74 | 8.51 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 12/6/2023 | 12/6/2023 | 12/14/2023 | 0.81 | 7.38 | 8.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 455.57 | 12/7/2023 | 12/7/2023 | 12/14/2023 | 0.73 | 6.54 | 7.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.27 | 12/7/2023 | 12/7/2023 | 12/14/2023 | 0.80 | 6.39 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.49 | 12/8/2023 | 12/8/2023 | 12/14/2023 | 0.77 | 5.46 | 6.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.20 | 12/8/2023 | 12/8/2023 | 12/14/2023 | 0.77 | 5.46 | 6.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 17,764.91 | 12/8/2023 | 12/8/2023 | 12/14/2023 | 0.92 | 5.15 | 6.08 | 0.17% | 0.010 |
| HIGHTOWERS PETROLEUM CO | 187.28 | 12/8/2023 | 12/8/2023 | 12/14/2023 | 0.92 | 5.15 | 6.08 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 11/10/2023 | 11/10/2023 | 11/20/2023 | 0.74 | 9.52 | 10.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.68 | 11/1/2023 | 11/1/2023 | 11/21/2023 | 0.82 | 19.35 | 20.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.50 | 11/8/2023 | 11/8/2023 | 11/21/2023 | 0.81 | 12.38 | 13.19 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 116.33 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.84 | 8.32 | 9.16 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,873.43 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.76 | 8.47 | 9.24 | 0.23% | 0.021 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.76 | 8.47 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 11/15/2023 | 11/15/2023 | 11/22/2023 | 0.95 | 6.09 | 7.05 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 11/15/2023 | 11/15/2023 | 11/22/2023 | 0.71 | 6.59 | 7.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.80 | 11/14/2023 | 11/14/2023 | 11/22/2023 | 0.78 | 7.45 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 11/16/2023 | 11/16/2023 | 11/22/2023 | 0.75 | 5.50 | 6.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.63 | 11/16/2023 | 11/16/2023 | 11/22/2023 | 0.75 | 5.50 | 6.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,653.43 | 11/17/2023 | 11/17/2023 | 11/22/2023 | 0.61 | 4.78 | 5.39 | 0.20% | 0.011 |
| HIGHTOWERS PETROLEUM CO | 187.63 | 11/17/2023 | 11/17/2023 | 11/22/2023 | 0.61 | 4.78 | 5.39 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.27 | 11/17/2023 | 11/17/2023 | 11/22/2023 | 0.61 | 4.78 | 5.39 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 11/17/2023 | 11/17/2023 | 11/22/2023 | 0.80 | 4.39 | 5.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.05 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.84 | 8.32 | 9.16 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.84 | 8.32 | 9.16 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.48 | 11/20/2023 | 11/20/2023 | 11/30/2023 | 0.71 | 9.57 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 20,805.50 | 11/21/2023 | 11/21/2023 | 11/30/2023 | 0.80 | 8.39 | 9.20 | 0.19% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 15.99 | 11/22/2023 | 11/22/2023 | 11/30/2023 | 0.79 | 7.41 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.83 | 11/22/2023 | 11/22/2023 | 11/30/2023 | 0.79 | 7.41 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.91 | 11/22/2023 | 11/22/2023 | 11/30/2023 | 0.81 | 7.38 | 8.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 452.72 | 11/24/2023 | 11/24/2023 | 11/30/2023 | 0.68 | 5.65 | 6.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.86 | 11/20/2023 | 11/20/2023 | 11/30/2023 | 0.79 | 9.43 | 10.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.69 | 11/20/2023 | 11/20/2023 | 11/30/2023 | 0.71 | 9.57 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.05 | 11/20/2023 | 11/20/2023 | 11/30/2023 | 0.71 | 9.57 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 11/28/2023 | 11/28/2023 | 12/7/2023 | 0.75 | 8.49 | 9.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.05 | 11/28/2023 | 11/28/2023 | 12/7/2023 | 0.75 | 8.49 | 9.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 20,535.22 | 11/29/2023 | 11/29/2023 | 12/7/2023 | 0.62 | 7.77 | 8.38 | 0.19% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 187.45 | 11/30/2023 | 11/30/2023 | 12/7/2023 | 0.82 | 6.37 | 7.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.24 | 11/30/2023 | 11/30/2023 | 12/7/2023 | 0.82 | 6.37 | 7.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.13 | 10/4/2023 | 10/4/2023 | 10/12/2023 | 0.58 | 7.84 | 8.42 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,777.95 | 10/19/2023 | 10/19/2023 | 10/26/2023 | 0.81 | 6.38 | 7.19 | 0.22% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 24,106.26 | 10/25/2023 | 10/25/2023 | 11/2/2023 | 0.74 | 7.52 | 8.26 | 0.22% | 0.019 |
| HIGHTOWERS PETROLEUM CO | 29.22 | 10/25/2023 | 10/25/2023 | 11/2/2023 | 0.74 | 7.52 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.88 | 7/5/2023 | 7/5/2023 | 7/13/2023 | 0.67 | 7.66 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.40 | 7/12/2023 | 7/12/2023 | 7/20/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 447.58 | 7/12/2023 | 7/12/2023 | 7/20/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.85 | 7/19/2023 | 7/19/2023 | 7/27/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.93 | 7/26/2023 | 7/26/2023 | 8/3/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 20,281.19 | 5/16/2023 | 5/16/2023 | 5/25/2023 | 0.63 | 8.75 | 9.37 | 0.19% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 450.00 | 5/16/2023 | 5/16/2023 | 5/25/2023 | 0.63 | 8.75 | 9.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.01 | 5/17/2023 | 5/17/2023 | 5/25/2023 | 0.63 | 7.73 | 8.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.44 | 5/18/2023 | 5/18/2023 | 5/25/2023 | 0.68 | 6.63 | 7.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.85 | 5/16/2023 | 5/16/2023 | 5/25/2023 | 0.72 | 8.56 | 9.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 20,108.48 | 5/19/2023 | 5/19/2023 | 6/1/2023 | 0.69 | 12.61 | 13.31 | 0.19% | 0.025 |
| HIGHTOWERS PETROLEUM CO | 20,124.75 | 5/19/2023 | 5/19/2023 | 6/1/2023 | 0.69 | 12.62 | 13.31 | 0.19% | 0.025 |
| HIGHTOWERS PETROLEUM CO | 7.42 | 5/19/2023 | 5/19/2023 | 6/1/2023 | 0.69 | 12.62 | 13.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 449.39 | 5/16/2023 | 5/16/2023 | 6/1/2023 | 0.69 | 15.62 | 16.31 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 15.90 | 5/16/2023 | 5/16/2023 | 6/1/2023 | 0.69 | 15.62 | 16.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.13 | 5/16/2023 | 5/16/2023 | 6/1/2023 | 0.69 | 15.62 | 16.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.90 | 5/19/2023 | 5/19/2023 | 6/1/2023 | 0.69 | 12.62 | 13.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 19,752.14 | 5/24/2023 | 5/24/2023 | 6/1/2023 | 0.69 | 7.61 | 8.31 | 0.18% | 0.015 |
| HIGHTOWERS PETROLEUM CO | 19,114.03 | 5/31/2023 | 5/31/2023 | 6/8/2023 | 0.67 | 7.67 | 8.33 | 0.18% | 0.015 |
| HIGHTOWERS PETROLEUM CO | 28.97 | 6/12/2023 | 6/12/2023 | 6/22/2023 | 0.69 | 9.63 | 10.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.14 | 6/13/2023 | 6/13/2023 | 6/22/2023 | 0.72 | 8.57 | 9.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 448.61 | 6/14/2023 | 6/14/2023 | 6/22/2023 | 0.64 | 7.72 | 8.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 452.30 | 6/14/2023 | 6/14/2023 | 6/22/2023 | 0.64 | 7.71 | 8.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.88 | 6/14/2023 | 6/14/2023 | 6/22/2023 | 0.64 | 7.71 | 8.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 449.15 | 6/16/2023 | 6/16/2023 | 6/22/2023 | 0.65 | 5.70 | 6.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.97 | 6/21/2023 | 6/21/2023 | 6/29/2023 | 0.68 | 7.64 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.94 | 6/28/2023 | 6/28/2023 | 7/6/2023 | 0.71 | 7.58 | 8.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 450.91 | 6/1/2023 | 6/1/2023 | 6/8/2023 | 0.67 | 6.67 | 7.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,553.39 | 6/2/2023 | 6/2/2023 | 6/8/2023 | 0.67 | 5.67 | 6.33 | 0.17% | 0.011 |
| HIGHTOWERS PETROLEUM CO | 15.89 | 6/2/2023 | 6/2/2023 | 6/8/2023 | 0.67 | 5.67 | 6.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.43 | 6/2/2023 | 6/2/2023 | 6/8/2023 | 0.68 | 5.64 | 6.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,771.82 | 6/8/2023 | 6/8/2023 | 6/15/2023 | 0.68 | 6.64 | 7.32 | 0.18% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 28.93 | 6/7/2023 | 6/8/2023 | 6/15/2023 | 1.18 | 6.64 | 7.82 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,449.58 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.65 | 9.70 | 10.35 | 0.22% | 0.023 |
| HIGHTOWERS PETROLEUM CO | 16.12 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.65 | 9.70 | 10.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.08 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.64 | 8.71 | 9.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.09 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.64 | 8.71 | 9.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 396.18 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.65 | 7.71 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 395.34 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.65 | 7.71 | 8.35 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 400.13 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,903.59 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.75 | 6.49 | 7.25 | 0.20% | 0.015 |
| HIGHTOWERS PETROLEUM CO | 118.53 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.56 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.16 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.77 | 9.45 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.55 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 50.53 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.42 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.05 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.63 | 12/31/2022 | 1/2/2023 | 1/12/2023 | 1.79 | 9.41 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 191.73 | 12/31/2022 | 1/2/2023 | 1/12/2023 | 1.79 | 9.41 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 318.19 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.41 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.38 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.49 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.65 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.40 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.40 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.40 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 325.79 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.40 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.40 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.81 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.40 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.67 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.40 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,042.28 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.40 | 10.20 | 0.21% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 16.14 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.44 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.44 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.41 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.44 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.13 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.44 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.55 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.44 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 315.46 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.04 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,081.80 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.39 | 6.20 | 0.21% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 16.18 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.39 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/1/2023 | 1/1/2023 | 1/12/2023 | 0.77 | 10.46 | 11.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.05 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.39 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.35 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.48 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.65 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.13 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 320.75 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.55 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,683.39 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 118.45 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,726.58 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 118.68 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.75 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.39 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.63 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.08 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.45 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.25 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,042.28 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 16.14 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.13 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.14 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.67 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.72 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.12 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.15 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,043.83 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.21% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 317.06 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 315.55 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.56 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.77 | 9.45 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,039.22 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.21% | 0.020 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 16.14 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.50 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 317.06 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.93 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.73 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,069.46 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.20% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 16.10 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.12 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.17 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,700.67 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 16.13 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.01 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.35 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.35 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.37 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,023.95 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 16.12 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 321.26 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.83 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.38 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.79 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 59.52 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.65 | 16.70 | 17.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 59.39 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.64 | 15.71 | 16.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.75 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.65 | 14.71 | 15.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 177.94 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.79 | 13.41 | 14.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.40 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.79 | 13.41 | 14.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.21 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.80 | 13.41 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.42 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.81 | 12.39 | 13.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.06 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.80 | 13.41 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.23 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.80 | 13.40 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 168.68 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.80 | 12.40 | 13.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 113.18 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.80 | 12.40 | 13.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.21 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.80 | 12.39 | 13.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.99 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.80 | 16.39 | 17.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.16 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.81 | 12.39 | 13.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.03 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.73 | 15.54 | 16.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 178.79 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.73 | 15.54 | 16.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.06 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.78 | 15.45 | 16.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.84 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.78 | 15.45 | 16.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.26 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.78 | 15.44 | 16.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.11 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.78 | 14.44 | 15.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.26 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.78 | 14.43 | 15.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.26 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.80 | 16.40 | 17.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.72 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.43 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.65 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.43 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.65 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.42 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.85 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.42 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.46 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.42 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 178.84 | 1/3/2023 | 1/4/2023 | 1/19/2023 | 1.29 | 14.42 | 15.71 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.17 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.58 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.97 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.74 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.90 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 492.35 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.50 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,565.97 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.22% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 192.93 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.61 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.10 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,514.87 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.21% | 0.021 |
| HIGHTOWERS PETROLEUM CO | 29.45 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,649.58 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.82 | 9.37 | 10.18 | 0.21% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 492.55 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.82 | 9.37 | 10.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.27 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.82 | 9.37 | 10.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,374.48 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.22% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 115.41 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 29.04 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 121.86 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 504.33 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.58 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.73 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.49 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.01 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.49 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 488.58 | 1/9/2023 | 1/10/2023 | 1/19/2023 | 1.26 | 8.49 | 9.74 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 121.69 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.40 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,209.51 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.23% | 0.019 |
| HIGHTOWERS PETROLEUM CO | 29.27 | 1/9/2023 | 1/10/2023 | 1/19/2023 | 1.26 | 8.49 | 9.74 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.38 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.04 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.03 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.58 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.56 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,941.43 | 1/9/2023 | 1/10/2023 | 1/19/2023 | 1.26 | 8.48 | 9.74 | 0.21% | 0.021 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/9/2023 | 1/10/2023 | 1/19/2023 | 1.26 | 8.48 | 9.74 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 493.59 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.57 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,646.69 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 7.45 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.19 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,011.32 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.61 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.85 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.84 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 488.97 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.82 | 1/10/2023 | 1/10/2023 | 1/20/2023 | 0.76 | 9.48 | 10.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.51 | 1/10/2023 | 1/10/2023 | 1/20/2023 | 0.76 | 9.48 | 10.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 67.83 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.70 | 8.61 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.38 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.70 | 8.60 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 70.26 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.70 | 8.60 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.57 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.70 | 8.60 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.72 | 1/2/2023 | 1/2/2023 | 1/20/2023 | 0.80 | 17.40 | 18.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.63 | 1/3/2023 | 1/3/2023 | 1/20/2023 | 0.73 | 16.54 | 17.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.72 | 1/3/2023 | 1/3/2023 | 1/20/2023 | 0.78 | 16.44 | 17.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.66 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.78 | 15.44 | 16.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.63 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.79 | 15.42 | 16.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.51 | 1/5/2023 | 1/5/2023 | 1/20/2023 | 0.79 | 14.41 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.33 | 1/5/2023 | 1/5/2023 | 1/20/2023 | 0.79 | 14.41 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.42 | 1/5/2023 | 1/5/2023 | 1/20/2023 | 0.79 | 14.41 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.42 | 1/5/2023 | 1/6/2023 | 1/20/2023 | 1.31 | 13.39 | 14.69 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.51 | 1/9/2023 | 1/9/2023 | 1/20/2023 | 0.81 | 10.38 | 11.19 | 0.00% | 0.000 |
| CERES SOLUTIONS | 15.74 | 1/12/2023 | 1/12/2023 | 1/23/2023 | 0.73 | 10.54 | 11.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 182.70 | 1/12/2023 | 1/12/2023 | 1/23/2023 | 0.73 | 10.54 | 11.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 15.75 | 1/12/2023 | 1/12/2023 | 1/23/2023 | 0.73 | 10.54 | 11.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 28.70 | 1/12/2023 | 1/12/2023 | 1/23/2023 | 0.73 | 10.54 | 11.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 15.74 | 1/12/2023 | 1/12/2023 | 1/23/2023 | 0.73 | 10.54 | 11.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 15.76 | 1/13/2023 | 1/13/2023 | 1/23/2023 | 0.73 | 9.54 | 10.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 15.74 | 1/13/2023 | 1/13/2023 | 1/23/2023 | 0.73 | 9.54 | 10.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 15.75 | 1/13/2023 | 1/13/2023 | 1/23/2023 | 0.73 | 9.54 | 10.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 28.74 | 1/14/2023 | 1/14/2023 | 1/23/2023 | 0.73 | 8.53 | 9.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 15.77 | 1/14/2023 | 1/14/2023 | 1/23/2023 | 0.73 | 8.53 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.22 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.24 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 165.81 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.27 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 192.61 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 39.48 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.40 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 493.59 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 188.34 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.52 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.09 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.38 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.88 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 491.70 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.001 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 116.51 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 492.09 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 188.98 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.33 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.49 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.75 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.11 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,154.02 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.23% | 0.026 |
| HIGHTOWERS PETROLEUM CO | 491.44 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.92 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,140.69 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.23% | 0.026 |
| HIGHTOWERS PETROLEUM CO | 16.15 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 491.18 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 187.52 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.14 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,635.07 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.23% | 0.028 |
| HIGHTOWERS PETROLEUM CO | 187.52 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.73 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.15 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.91 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.55 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 504.72 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 29.32 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.55 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.73 | 8.53 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.41 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.73 | 8.53 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,195.76 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.24% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.22 | 1/16/2023 | 1/17/2023 | 1/26/2023 | 1.23 | 8.53 | 9.77 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.21 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.08 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.11 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.02 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 110.24 | 1/16/2023 | 1/17/2023 | 1/26/2023 | 1.23 | 8.53 | 9.77 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.06 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 493.78 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 118.31 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.08 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.60 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.80 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.38 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.62 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 488.84 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 7.73 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 192.11 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,377.34 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.58 | 10.29 | 0.24% | 0.024 |
| HIGHTOWERS PETROLEUM CO | 186.52 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.39 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.70 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 113.71 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.95 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.08 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.20 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 492.68 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.39 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.55 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.57 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,509.76 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.24% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.95 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.43 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,913.27 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.23% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 26,862.91 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.25% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 7.73 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 192.04 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.42 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.33 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 191.86 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 491.31 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 192.63 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.88 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.59 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.23 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,333.48 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.24% | 0.024 |
| HIGHTOWERS PETROLEUM CO | 488.64 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.34 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.91 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,143.08 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.24% | 0.025 |
| HIGHTOWERS PETROLEUM CO | 25,926.06 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.24% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 26,254.83 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.24% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 15.07 | 1/13/2023 | 1/14/2023 | 1/26/2023 | 1.29 | 11.41 | 12.71 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 458.56 | 1/13/2023 | 1/14/2023 | 1/26/2023 | 1.29 | 11.41 | 12.71 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 174.97 | 1/13/2023 | 1/14/2023 | 1/26/2023 | 1.29 | 11.41 | 12.71 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.89 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.51 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.58 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.95 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 502.25 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,216.61 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.24% | 0.018 |
| CERES SOLUTIONS | 28.72 | 1/16/2023 | 1/16/2023 | 1/30/2023 | 0.73 | 13.53 | 14.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 183.15 | 1/16/2023 | 1/16/2023 | 1/30/2023 | 0.73 | 13.53 | 14.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.50 | 1/25/2023 | 1/25/2023 | 2/2/2023 | 0.71 | 7.58 | 8.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 5/3/2023 | 5/3/2023 | 5/11/2023 | 0.72 | 7.55 | 8.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.03 | 5/10/2023 | 5/10/2023 | 5/18/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.02 | 5/10/2023 | 5/10/2023 | 5/18/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 452.66 | 5/11/2023 | 5/11/2023 | 5/18/2023 | 0.75 | 6.50 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.08 | 4/12/2023 | 4/12/2023 | 4/20/2023 | 0.70 | 7.59 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 4/12/2023 | 4/12/2023 | 4/20/2023 | 0.70 | 7.59 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.08 | 4/13/2023 | 4/13/2023 | 4/20/2023 | 0.76 | 6.47 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.05 | 4/13/2023 | 4/13/2023 | 4/20/2023 | 0.76 | 6.47 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 123.77 | 4/19/2023 | 4/19/2023 | 4/27/2023 | 0.68 | 7.63 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 4/26/2023 | 4/26/2023 | 5/4/2023 | 0.67 | 7.67 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 4/26/2023 | 4/26/2023 | 5/4/2023 | 0.67 | 7.67 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.23 | 4/27/2023 | 4/27/2023 | 5/4/2023 | 0.67 | 6.65 | 7.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.48 | 3/1/2023 | 3/1/2023 | 3/9/2023 | 0.63 | 7.73 | 8.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.01 | 3/1/2023 | 3/1/2023 | 3/9/2023 | 0.63 | 7.73 | 8.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.97 | 3/1/2023 | 3/1/2023 | 3/9/2023 | 0.63 | 7.73 | 8.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,326.25 | 3/22/2023 | 3/22/2023 | 3/30/2023 | 0.75 | 7.49 | 8.25 | 0.20% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 3/22/2023 | 3/22/2023 | 3/30/2023 | 0.75 | 7.49 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 3/29/2023 | 3/29/2023 | 4/6/2023 | 0.66 | 7.69 | 8.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.43 | 3/29/2023 | 3/29/2023 | 4/6/2023 | 0.66 | 7.69 | 8.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,901.51 | 3/29/2023 | 3/29/2023 | 4/6/2023 | 0.66 | 7.69 | 8.34 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 457.74 | 2/1/2023 | 2/1/2023 | 2/9/2023 | 0.67 | 7.66 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.19 | 2/1/2023 | 2/1/2023 | 2/9/2023 | 0.67 | 7.66 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.61 | 6/9/2022 | 6/9/2022 | 2/9/2023 | 0.65 | 244.70 | 245.35 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 115.09 | 8/25/2022 | 8/25/2022 | 2/9/2023 | 0.64 | 167.73 | 168.36 | 0.00% | 0.002 |
| HIGHTOWERS PETROLEUM CO | 115.46 | 9/8/2022 | 9/8/2022 | 2/9/2023 | 0.80 | 153.40 | 154.20 | 0.00% | 0.002 |
| HIGHTOWERS PETROLEUM CO | 115.79 | 11/8/2022 | 11/8/2022 | 2/9/2023 | 0.67 | 92.66 | 93.33 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 115.69 | 11/10/2022 | 11/10/2022 | 2/9/2023 | 0.75 | 90.50 | 91.25 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 115.88 | 12/15/2022 | 12/15/2022 | 2/9/2023 | 0.76 | 55.47 | 56.24 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 122.53 | 6/22/2022 | 6/22/2022 | 2/9/2023 | 0.77 | 231.46 | 232.23 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 116.05 | 5/12/2022 | 5/12/2022 | 2/9/2023 | 0.67 | 272.67 | 273.33 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 117.75 | 12/27/2022 | 12/27/2022 | 2/9/2023 | 0.72 | 43.56 | 44.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.55 | 12/27/2022 | 12/27/2022 | 2/9/2023 | 0.72 | 43.56 | 44.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.54 | 12/28/2022 | 12/28/2022 | 2/9/2023 | 0.73 | 42.54 | 43.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.10 | 12/28/2022 | 12/28/2022 | 2/9/2023 | 0.73 | 42.53 | 43.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.40 | 12/30/2022 | 12/30/2022 | 2/9/2023 | 0.75 | 40.51 | 41.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.38 | 12/31/2022 | 12/31/2022 | 2/9/2023 | 0.75 | 39.50 | 40.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.16 | 12/31/2022 | 12/31/2022 | 2/9/2023 | 0.75 | 39.50 | 40.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 124.28 | 12/31/2022 | 12/31/2022 | 2/9/2023 | 0.75 | 39.50 | 40.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 455.63 | 2/15/2023 | 2/15/2023 | 2/23/2023 | 0.76 | 7.47 | 8.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.37 | 2/15/2023 | 2/15/2023 | 2/23/2023 | 0.76 | 7.47 | 8.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.14 | 2/15/2023 | 2/15/2023 | 2/23/2023 | 0.77 | 7.47 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,870.81 | 8/10/2023 | 8/10/2023 | 8/17/2023 | 0.77 | 6.46 | 7.23 | 0.23% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 3.28 | 8/9/2023 | 8/9/2023 | 8/17/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 198.26 | 8/9/2023 | 8/9/2023 | 8/17/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.01 | 8/9/2023 | 8/9/2023 | 8/17/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.43 | 8/16/2023 | 8/16/2023 | 8/24/2023 | 0.64 | 7.72 | 8.36 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 323.49 | 8/23/2023 | 8/23/2023 | 8/31/2023 | 0.72 | 7.57 | 8.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 449.15 | 8/30/2023 | 8/30/2023 | 9/7/2023 | 0.83 | 7.35 | 8.17 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.95 | 8/30/2023 | 8/30/2023 | 9/7/2023 | 0.83 | 7.35 | 8.17 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.88 | 9/6/2023 | 9/6/2023 | 9/14/2023 | 0.74 | 7.53 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.95 | 9/6/2023 | 9/6/2023 | 9/14/2023 | 0.74 | 7.53 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.42 | 9/6/2023 | 9/6/2023 | 9/14/2023 | 0.74 | 7.53 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.07 | 9/13/2023 | 9/13/2023 | 9/21/2023 | 0.72 | 7.56 | 8.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,470.59 | 9/20/2023 | 9/20/2023 | 9/28/2023 | 0.84 | 7.31 | 8.16 | 0.23% | 0.019 |
| HIGHTOWERS PETROLEUM CO | 450.06 | 9/20/2023 | 9/20/2023 | 9/28/2023 | 0.84 | 7.31 | 8.16 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.94 | 9/20/2023 | 9/20/2023 | 9/28/2023 | 0.96 | 7.08 | 8.04 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 450.24 | 9/27/2023 | 9/27/2023 | 10/5/2023 | 0.82 | 7.36 | 8.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.02 | 9/27/2023 | 9/27/2023 | 10/5/2023 | 0.82 | 7.36 | 8.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.03 | 9/27/2023 | 9/27/2023 | 10/5/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,673.32 | 11/1/2023 | 11/1/2023 | 11/9/2023 | 0.82 | 7.35 | 8.18 | 0.22% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 25,284.37 | 11/9/2023 | 11/9/2023 | 11/16/2023 | 0.80 | 6.40 | 7.20 | 0.24% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 11/9/2023 | 11/9/2023 | 11/16/2023 | 0.80 | 6.40 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.30 | 11/9/2023 | 11/9/2023 | 11/16/2023 | 0.72 | 6.56 | 7.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.26 | 11/9/2023 | 11/9/2023 | 11/16/2023 | 0.72 | 6.56 | 7.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 11/8/2023 | 11/8/2023 | 11/17/2023 | 0.61 | 8.77 | 9.39 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.23 | 12/1/2023 | 12/1/2023 | 12/7/2023 | 0.71 | 5.58 | 6.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 12/1/2023 | 12/1/2023 | 12/7/2023 | 0.72 | 5.56 | 6.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 12/6/2023 | 12/6/2023 | 12/14/2023 | 0.81 | 7.38 | 8.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.27 | 12/6/2023 | 12/6/2023 | 12/14/2023 | 0.81 | 7.38 | 8.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 12/7/2023 | 12/7/2023 | 12/14/2023 | 0.73 | 6.54 | 7.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 17,906.93 | 12/7/2023 | 12/7/2023 | 12/14/2023 | 0.80 | 6.39 | 7.20 | 0.17% | 0.012 |
| HIGHTOWERS PETROLEUM CO | 452.96 | 12/8/2023 | 12/8/2023 | 12/14/2023 | 0.77 | 5.46 | 6.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.03 | 12/8/2023 | 12/8/2023 | 12/14/2023 | 0.92 | 5.15 | 6.08 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.28 | 11/10/2023 | 11/10/2023 | 11/20/2023 | 0.74 | 9.52 | 10.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.26 | 11/10/2023 | 11/10/2023 | 11/20/2023 | 0.74 | 9.52 | 10.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.14 | 11/10/2023 | 11/10/2023 | 11/20/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.63 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.84 | 8.32 | 9.16 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.76 | 8.47 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.42 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.76 | 8.47 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,234.85 | 11/16/2023 | 11/16/2023 | 11/22/2023 | 0.74 | 5.52 | 6.26 | 0.23% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 11/16/2023 | 11/16/2023 | 11/22/2023 | 0.74 | 5.52 | 6.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.23 | 11/20/2023 | 11/20/2023 | 11/30/2023 | 0.71 | 9.57 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.98 | 11/21/2023 | 11/21/2023 | 11/30/2023 | 0.80 | 8.39 | 9.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.83 | 11/22/2023 | 11/22/2023 | 11/30/2023 | 0.79 | 7.41 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 452.36 | 11/24/2023 | 11/24/2023 | 11/30/2023 | 0.74 | 5.52 | 6.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.89 | 11/24/2023 | 11/24/2023 | 11/30/2023 | 0.74 | 5.52 | 6.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,022.69 | 11/20/2023 | 11/20/2023 | 11/30/2023 | 0.79 | 9.43 | 10.21 | 0.20% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 11/28/2023 | 11/28/2023 | 12/7/2023 | 0.77 | 8.47 | 9.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.27 | 11/28/2023 | 11/28/2023 | 12/7/2023 | 0.77 | 8.47 | 9.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.26 | 11/29/2023 | 11/29/2023 | 12/7/2023 | 0.62 | 7.77 | 8.38 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 20,540.77 | 11/30/2023 | 11/30/2023 | 12/7/2023 | 0.82 | 6.37 | 7.18 | 0.19% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 11/30/2023 | 11/30/2023 | 12/7/2023 | 0.77 | 6.46 | 7.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.48 | 12/20/2023 | 12/20/2023 | 1/5/2024 | 0.69 | 15.61 | 16.31 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 29.30 | 12/20/2023 | 12/20/2023 | 1/5/2024 | 0.69 | 15.61 | 16.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.27 | 12/27/2023 | 12/27/2023 | 1/5/2024 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 19,007.89 | 12/20/2023 | 12/20/2023 | 1/5/2024 | 0.84 | 15.33 | 16.16 | 0.18% | 0.029 |
| HIGHTOWERS PETROLEUM CO | 187.83 | 12/20/2023 | 12/20/2023 | 1/5/2024 | 0.84 | 15.33 | 16.16 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.48 | 10/11/2023 | 10/11/2023 | 10/23/2023 | 0.83 | 11.34 | 12.17 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.21 | 10/25/2023 | 10/25/2023 | 11/2/2023 | 0.73 | 7.55 | 8.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.89 | 7/5/2023 | 7/5/2023 | 7/13/2023 | 0.67 | 7.65 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 447.58 | 7/12/2023 | 7/12/2023 | 7/20/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.83 | 7/12/2023 | 7/12/2023 | 7/20/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.40 | 7/12/2023 | 7/12/2023 | 7/20/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 114.67 | 7/12/2023 | 7/12/2023 | 7/20/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.85 | 7/19/2023 | 7/19/2023 | 7/27/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 114.79 | 7/19/2023 | 7/19/2023 | 7/27/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.44 | 5/16/2023 | 5/16/2023 | 5/25/2023 | 0.63 | 8.75 | 9.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.43 | 5/17/2023 | 5/17/2023 | 5/25/2023 | 0.63 | 7.74 | 8.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.97 | 5/17/2023 | 5/17/2023 | 5/25/2023 | 0.63 | 7.73 | 8.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.35 | 5/18/2023 | 5/18/2023 | 5/25/2023 | 0.74 | 6.52 | 7.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 20,244.16 | 5/18/2023 | 5/18/2023 | 5/25/2023 | 0.68 | 6.63 | 7.32 | 0.19% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 448.49 | 5/18/2023 | 5/18/2023 | 5/25/2023 | 0.68 | 6.63 | 7.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.91 | 5/18/2023 | 5/18/2023 | 5/25/2023 | 0.68 | 6.63 | 7.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 20,379.36 | 5/16/2023 | 5/16/2023 | 5/25/2023 | 0.72 | 8.56 | 9.28 | 0.19% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 115.04 | 5/19/2023 | 5/19/2023 | 6/1/2023 | 0.69 | 12.62 | 13.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 114.95 | 5/19/2023 | 5/19/2023 | 6/1/2023 | 0.69 | 12.61 | 13.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.43 | 5/16/2023 | 5/16/2023 | 6/1/2023 | 0.69 | 15.62 | 16.31 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 7.43 | 5/19/2023 | 5/19/2023 | 6/1/2023 | 0.69 | 12.62 | 13.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.91 | 5/24/2023 | 5/24/2023 | 6/1/2023 | 0.69 | 7.61 | 8.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.06 | 5/24/2023 | 5/24/2023 | 6/1/2023 | 0.69 | 7.61 | 8.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.13 | 5/31/2023 | 5/31/2023 | 6/8/2023 | 0.67 | 7.67 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.47 | 5/31/2023 | 5/31/2023 | 6/8/2023 | 0.67 | 7.67 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.98 | 5/31/2023 | 5/31/2023 | 6/8/2023 | 0.67 | 7.67 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.13 | 6/12/2023 | 6/12/2023 | 6/22/2023 | 0.69 | 9.63 | 10.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 122.82 | 6/13/2023 | 6/13/2023 | 6/22/2023 | 0.70 | 8.60 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.90 | 6/13/2023 | 6/13/2023 | 6/22/2023 | 0.70 | 8.60 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.99 | 6/13/2023 | 6/13/2023 | 6/22/2023 | 0.72 | 8.57 | 9.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,629.44 | 6/14/2023 | 6/14/2023 | 6/22/2023 | 0.64 | 7.71 | 8.36 | 0.17% | 0.015 |
| HIGHTOWERS PETROLEUM CO | 115.09 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.65 | 6.71 | 7.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,959.41 | 6/16/2023 | 6/16/2023 | 6/22/2023 | 0.65 | 5.70 | 6.35 | 0.18% | 0.011 |
| HIGHTOWERS PETROLEUM CO | 7.42 | 6/16/2023 | 6/16/2023 | 6/22/2023 | 0.65 | 5.70 | 6.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,627.66 | 6/21/2023 | 6/21/2023 | 6/29/2023 | 0.68 | 7.64 | 8.32 | 0.17% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 7.41 | 6/28/2023 | 6/28/2023 | 7/6/2023 | 0.66 | 7.69 | 8.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.93 | 6/1/2023 | 6/1/2023 | 6/8/2023 | 0.66 | 6.67 | 7.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.94 | 6/6/2023 | 6/6/2023 | 6/15/2023 | 0.66 | 8.67 | 9.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.41 | 6/8/2023 | 6/8/2023 | 6/15/2023 | 0.67 | 6.65 | 7.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 114.93 | 6/7/2023 | 6/8/2023 | 6/15/2023 | 1.18 | 6.64 | 7.82 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.42 | 6/7/2023 | 6/8/2023 | 6/15/2023 | 1.18 | 6.64 | 7.82 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.43 | 6/6/2023 | 6/6/2023 | 6/15/2023 | 0.66 | 8.67 | 9.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.65 | 9.70 | 10.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.41 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.65 | 9.70 | 10.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 396.66 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.41 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,033.11 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.77 | 9.45 | 10.23 | 0.21% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.77 | 9.45 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.70 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,746.74 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 118.79 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,147.87 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.20% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 18.92 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.42 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.56 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.58 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.41 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.40 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.41 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.67 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.44 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,721.93 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.40 | 7.20 | 0.20% | 0.015 |
| HIGHTOWERS PETROLEUM CO | 16.60 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.40 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 324.79 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.41 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.12 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.44 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.44 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.39 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.44 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 182.55 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.40 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.46 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.40 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.42 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.40 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.72 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.40 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.15 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 192.58 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.91 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.40 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,513.97 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.40 | 6.20 | 0.21% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 16.13 | 1/1/2023 | 1/1/2023 | 1/12/2023 | 0.77 | 10.46 | 11.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,045.34 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.21% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 118.56 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.44 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.55 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.56 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.39 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,932.87 | 1/5/2023 | 1/6/2023 | 1/12/2023 | 1.31 | 5.39 | 6.69 | 0.20% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 1/5/2023 | 1/6/2023 | 1/12/2023 | 1.31 | 5.39 | 6.69 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.55 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.78 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.55 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.65 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.55 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.37 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,008.67 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 21,686.27 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 21,732.34 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 21,947.47 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.20% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 187.90 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 316.97 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.40 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 315.38 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.49 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.41 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.35 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.38 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,671.87 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 16.11 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.60 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.73 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.44 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.18 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.56 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.74 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 325.08 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.50 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.68 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.47 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.32 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.43 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.65 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,175.87 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.20% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.15 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.98 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.48 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.64 | 15.71 | 16.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 59.38 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.65 | 14.71 | 15.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.39 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.79 | 13.41 | 14.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.62 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.80 | 13.41 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.39 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.81 | 12.39 | 13.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.50 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.81 | 12.38 | 13.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.46 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.80 | 13.41 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.69 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.80 | 13.41 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 176.81 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.80 | 13.40 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.20 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.80 | 16.40 | 17.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 178.10 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.80 | 12.40 | 13.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.22 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.80 | 16.39 | 17.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.20 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.80 | 16.39 | 17.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.61 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.81 | 12.39 | 13.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.46 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.81 | 12.39 | 13.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.17 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.73 | 15.54 | 16.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.99 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.73 | 15.54 | 16.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.11 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.77 | 16.45 | 17.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.82 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.77 | 16.45 | 17.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.12 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.77 | 16.45 | 17.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.89 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.78 | 15.45 | 16.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 177.15 | 12/31/2022 | 1/2/2023 | 1/19/2023 | 1.79 | 16.41 | 18.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.76 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.78 | 14.44 | 15.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.78 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.78 | 14.43 | 15.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 176.42 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.43 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.95 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.43 | 15.21 | 0.00% | 0.000 |
| CERES SOLUTIONS | 28.77 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.49 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,850.27 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 118.07 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.65 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.34 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,741.77 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.22% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 16.16 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.16 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 192.98 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.64 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.98 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,578.53 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.22% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.78 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.68 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 23,578.53 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.22% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 488.97 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.58 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 491.44 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.49 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.44 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.49 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/9/2023 | 1/10/2023 | 1/19/2023 | 1.26 | 8.49 | 9.74 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 121.31 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.33 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,953.58 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 491.77 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.20 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.58 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 489.62 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,707.24 | 1/9/2023 | 1/11/2023 | 1/19/2023 | 1.70 | 7.60 | 9.30 | 0.22% | 0.021 |
| HIGHTOWERS PETROLEUM CO | 492.16 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 502.18 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,473.19 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.22% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 16.53 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.13 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.61 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 122.10 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 491.51 | 1/9/2023 | 1/10/2023 | 1/19/2023 | 1.26 | 8.48 | 9.74 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.23 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 485.19 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 492.55 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.53 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,859.39 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 489.75 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 491.83 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.80 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.58 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,054.35 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.76 | 7.49 | 8.24 | 0.22% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 29.21 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.76 | 7.49 | 8.24 | 0.00% | 0.000 |
| CERES SOLUTIONS | 183.20 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.69 | 8.61 | 9.31 | 0.00% | 0.000 |
| CERES SOLUTIONS | 28.76 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.69 | 8.61 | 9.31 | 0.00% | 0.000 |
| CERES SOLUTIONS | 183.15 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.69 | 8.61 | 9.31 | 0.00% | 0.000 |
| CERES SOLUTIONS | 28.75 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.69 | 8.61 | 9.31 | 0.00% | 0.000 |
| CERES SOLUTIONS | 15.77 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.70 | 8.61 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.93 | 1/9/2023 | 1/9/2023 | 1/20/2023 | 0.82 | 10.37 | 11.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.99 | 1/10/2023 | 1/10/2023 | 1/20/2023 | 0.76 | 9.48 | 10.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.45 | 1/10/2023 | 1/10/2023 | 1/20/2023 | 0.76 | 9.48 | 10.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.80 | 1/10/2023 | 1/10/2023 | 1/20/2023 | 0.76 | 9.48 | 10.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.78 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.70 | 8.61 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.66 | 1/1/2023 | 1/1/2023 | 1/20/2023 | 0.77 | 18.46 | 19.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.70 | 1/2/2023 | 1/2/2023 | 1/20/2023 | 0.80 | 17.39 | 18.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.61 | 1/3/2023 | 1/3/2023 | 1/20/2023 | 0.73 | 16.54 | 17.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.60 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.79 | 15.43 | 16.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.65 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.79 | 15.43 | 16.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.48 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.79 | 15.42 | 16.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 10.96 | 1/5/2023 | 1/5/2023 | 1/20/2023 | 0.79 | 14.42 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.42 | 1/5/2023 | 1/5/2023 | 1/20/2023 | 0.79 | 14.41 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.87 | 1/5/2023 | 1/5/2023 | 1/20/2023 | 0.80 | 14.41 | 15.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 69.73 | 1/5/2023 | 1/5/2023 | 1/20/2023 | 0.80 | 14.40 | 15.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 70.66 | 1/5/2023 | 1/5/2023 | 1/20/2023 | 0.80 | 14.40 | 15.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.29 | 1/6/2023 | 1/6/2023 | 1/20/2023 | 0.80 | 13.40 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.42 | 1/6/2023 | 1/6/2023 | 1/20/2023 | 0.81 | 13.39 | 14.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.89 | 1/6/2023 | 1/6/2023 | 1/20/2023 | 0.81 | 13.38 | 14.19 | 0.00% | 0.000 |
| CERES SOLUTIONS | 28.69 | 1/12/2023 | 1/12/2023 | 1/23/2023 | 0.73 | 10.54 | 11.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 25,167.78 | 1/12/2023 | 1/12/2023 | 1/23/2023 | 0.73 | 10.54 | 11.27 | 0.23% | 0.026 |
| CERES SOLUTIONS | 25,439.17 | 1/13/2023 | 1/13/2023 | 1/23/2023 | 0.73 | 9.54 | 10.27 | 0.24% | 0.024 |
| CERES SOLUTIONS | 182.90 | 1/13/2023 | 1/13/2023 | 1/23/2023 | 0.73 | 9.54 | 10.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 25,414.98 | 1/13/2023 | 1/13/2023 | 1/23/2023 | 0.73 | 9.54 | 10.27 | 0.24% | 0.024 |
| CERES SOLUTIONS | 182.72 | 1/13/2023 | 1/13/2023 | 1/23/2023 | 0.73 | 9.54 | 10.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 7.36 | 1/13/2023 | 1/13/2023 | 1/23/2023 | 0.73 | 9.54 | 10.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 183.05 | 1/14/2023 | 1/14/2023 | 1/23/2023 | 0.73 | 8.53 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.93 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.82 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.53 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 2.55 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 63.68 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.89 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.41 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.33 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.59 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 9.93 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.55 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 184.93 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.04 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 490.33 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 503.55 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 24,973.30 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.23% | 0.028 |
| HIGHTOWERS PETROLEUM CO | 117.07 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 192.24 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.15 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.15 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.35 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.28 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 488.64 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 25,233.99 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.24% | 0.026 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.14 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.42 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.29 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.41 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.15 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 491.37 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.99 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 492.48 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 187.65 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,400.19 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.24% | 0.029 |
| HIGHTOWERS PETROLEUM CO | 503.55 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 488.90 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 187.75 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,833.77 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.24% | 0.027 |
| HIGHTOWERS PETROLEUM CO | 192.58 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.83 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,172.69 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.77 | 7.46 | 8.23 | 0.24% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 117.12 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.73 | 8.53 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,580.93 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.73 | 8.53 | 9.27 | 0.24% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 120.11 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,625.00 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.25% | 0.021 |
| HIGHTOWERS PETROLEUM CO | 188.63 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.32 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.64 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.77 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 506.09 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 194.35 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.49 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.73 | 8.53 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.70 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.73 | 8.53 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.03 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.08 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.40 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.88 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.36 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 27.74 | 1/16/2023 | 1/17/2023 | 1/26/2023 | 1.23 | 8.53 | 9.77 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.19 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.31 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 489.81 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 16.23 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.63 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.08 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,533.48 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.24% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 16.12 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 490.46 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.14 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.35 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 116.50 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 488.84 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,891.79 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.24% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 7.56 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,134.60 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.23% | 0.019 |
| HIGHTOWERS PETROLEUM CO | 16.51 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 182.23 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.61 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.08 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.58 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.58 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.57 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 493.72 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.57 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.30 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.30 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.58 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.57 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.97 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.67 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.77 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 506.09 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,435.20 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.24% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 16.15 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 503.35 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.90 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.75 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 488.90 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.75 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 472.24 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 112.44 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.70 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 504.53 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.90 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.56 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.69 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,438.06 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.24% | 0.024 |
| HIGHTOWERS PETROLEUM CO | 16.14 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,380.71 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.55 | 10.28 | 0.24% | 0.024 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.55 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.18 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,807.31 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.25% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 119.58 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.09 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| CERES SOLUTIONS | 25,712.72 | 1/16/2023 | 1/16/2023 | 1/30/2023 | 0.73 | 13.53 | 14.27 | 0.24% | 0.034 |
| HIGHTOWERS PETROLEUM CO | 27,869.46 | 1/25/2023 | 1/25/2023 | 2/2/2023 | 0.71 | 7.58 | 8.29 | 0.26% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 16.19 | 1/25/2023 | 1/25/2023 | 2/2/2023 | 0.71 | 7.58 | 8.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.01 | 5/3/2023 | 5/3/2023 | 5/11/2023 | 0.72 | 7.56 | 8.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.17 | 5/3/2023 | 5/3/2023 | 5/11/2023 | 0.72 | 7.55 | 8.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.49 | 5/10/2023 | 5/10/2023 | 5/18/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.49 | 5/10/2023 | 5/10/2023 | 5/18/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,102.98 | 5/11/2023 | 5/11/2023 | 5/18/2023 | 0.75 | 6.50 | 7.25 | 0.20% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 439.59 | 5/11/2023 | 5/11/2023 | 5/18/2023 | 0.75 | 6.50 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 1,362.60 | 1/3/2023 | 1/4/2023 | 4/12/2023 | 1.29 | 97.42 | 98.71 | 0.01% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 21,743.59 | 4/5/2023 | 4/5/2023 | 4/13/2023 | 0.79 | 7.41 | 8.21 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 484.00 | 4/6/2023 | 4/6/2023 | 4/13/2023 | 0.62 | 6.75 | 7.38 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.03 | 4/14/2023 | 4/14/2023 | 4/20/2023 | 0.76 | 5.47 | 6.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.54 | 4/12/2023 | 4/12/2023 | 4/20/2023 | 0.70 | 7.59 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,228.91 | 4/12/2023 | 4/12/2023 | 4/20/2023 | 0.70 | 7.59 | 8.30 | 0.21% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 7.49 | 4/13/2023 | 4/13/2023 | 4/20/2023 | 0.76 | 6.47 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.69 | 4/13/2023 | 4/13/2023 | 4/20/2023 | 0.76 | 6.47 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.23 | 4/13/2023 | 4/13/2023 | 4/20/2023 | 0.76 | 6.47 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 4/13/2023 | 4/13/2023 | 4/20/2023 | 0.76 | 6.47 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.48 | 4/17/2023 | 4/17/2023 | 4/27/2023 | 0.77 | 9.47 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 4/17/2023 | 4/17/2023 | 4/27/2023 | 0.77 | 9.47 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.23 | 4/17/2023 | 4/17/2023 | 4/27/2023 | 0.77 | 9.47 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.22 | 4/18/2023 | 4/18/2023 | 4/27/2023 | 0.68 | 8.64 | 9.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.08 | 4/19/2023 | 4/19/2023 | 4/27/2023 | 0.68 | 7.63 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.25 | 4/26/2023 | 4/26/2023 | 5/4/2023 | 0.67 | 7.67 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 441.41 | 4/27/2023 | 4/27/2023 | 5/4/2023 | 0.67 | 6.65 | 7.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 4/27/2023 | 4/27/2023 | 5/4/2023 | 0.67 | 6.65 | 7.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.05 | 3/1/2023 | 3/1/2023 | 3/9/2023 | 0.63 | 7.73 | 8.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.18 | 3/15/2023 | 3/15/2023 | 3/23/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 457.08 | 3/22/2023 | 3/22/2023 | 3/30/2023 | 0.75 | 7.49 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.17 | 3/22/2023 | 3/22/2023 | 3/30/2023 | 0.75 | 7.49 | 8.25 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 188.88 | 3/22/2023 | 3/22/2023 | 3/30/2023 | 0.75 | 7.49 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.45 | 3/22/2023 | 3/22/2023 | 3/30/2023 | 0.75 | 7.49 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.47 | 2/1/2023 | 2/1/2023 | 2/9/2023 | 0.67 | 7.66 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,748.84 | 2/1/2023 | 2/1/2023 | 2/9/2023 | 0.67 | 7.66 | 8.33 | 0.25% | 0.021 |
| HIGHTOWERS PETROLEUM CO | 114.73 | 7/21/2022 | 7/21/2022 | 2/9/2023 | 0.79 | 202.42 | 203.21 | 0.00% | 0.002 |
| HIGHTOWERS PETROLEUM CO | 45.88 | 7/21/2022 | 7/21/2022 | 2/9/2023 | 0.79 | 202.42 | 203.21 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 114.98 | 9/1/2022 | 9/1/2022 | 2/9/2023 | 0.72 | 160.56 | 161.28 | 0.00% | 0.002 |
| HIGHTOWERS PETROLEUM CO | 114.90 | 9/22/2022 | 9/22/2022 | 2/9/2023 | 0.65 | 139.70 | 140.35 | 0.00% | 0.002 |
| HIGHTOWERS PETROLEUM CO | 115.63 | 10/27/2022 | 10/27/2022 | 2/9/2023 | 0.80 | 104.40 | 105.20 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 115.68 | 11/3/2022 | 11/3/2022 | 2/9/2023 | 0.68 | 97.64 | 98.32 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 115.85 | 11/7/2022 | 11/7/2022 | 2/9/2023 | 0.68 | 93.63 | 94.32 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.20 | 11/10/2022 | 11/10/2022 | 2/9/2023 | 0.75 | 90.51 | 91.25 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 115.88 | 11/11/2022 | 11/11/2022 | 2/9/2023 | 0.75 | 89.49 | 90.25 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.19 | 12/20/2022 | 12/20/2022 | 2/9/2023 | 0.72 | 50.56 | 51.28 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 114.93 | 7/14/2022 | 7/14/2022 | 2/9/2023 | 0.79 | 209.43 | 210.21 | 0.00% | 0.002 |
| HIGHTOWERS PETROLEUM CO | 116.37 | 5/9/2022 | 5/9/2022 | 2/9/2023 | 0.64 | 275.71 | 276.36 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 116.19 | 5/16/2022 | 5/16/2022 | 2/9/2023 | 0.67 | 268.66 | 269.33 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 116.17 | 5/19/2022 | 5/19/2022 | 2/9/2023 | 0.72 | 265.56 | 266.28 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 117.60 | 12/28/2022 | 12/28/2022 | 2/9/2023 | 0.73 | 42.54 | 43.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 124.59 | 12/28/2022 | 12/28/2022 | 2/9/2023 | 0.73 | 42.54 | 43.27 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 117.74 | 12/28/2022 | 12/28/2022 | 2/9/2023 | 0.73 | 42.53 | 43.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.57 | 12/29/2022 | 12/29/2022 | 2/9/2023 | 0.74 | 41.52 | 42.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.46 | 12/29/2022 | 12/29/2022 | 2/9/2023 | 0.74 | 41.52 | 42.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.51 | 12/29/2022 | 12/29/2022 | 2/9/2023 | 0.74 | 41.52 | 42.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.20 | 12/31/2022 | 12/31/2022 | 2/9/2023 | 0.75 | 39.50 | 40.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.56 | 2/8/2023 | 2/8/2023 | 2/16/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 2/8/2023 | 2/8/2023 | 2/16/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 2/15/2023 | 2/15/2023 | 2/23/2023 | 0.77 | 7.47 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.50 | 2/15/2023 | 2/15/2023 | 2/23/2023 | 0.77 | 7.47 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.87 | 2/15/2023 | 2/15/2023 | 2/23/2023 | 0.77 | 7.47 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,136.80 | 8/2/2023 | 8/2/2023 | 8/11/2023 | 0.72 | 8.56 | 9.28 | 0.23% | 0.021 |
| HIGHTOWERS PETROLEUM CO | 15.88 | 8/2/2023 | 8/2/2023 | 8/11/2023 | 0.72 | 8.56 | 9.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 9.98 | 8/9/2023 | 8/9/2023 | 8/17/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.95 | 8/23/2023 | 8/23/2023 | 8/31/2023 | 0.65 | 7.70 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.32 | 8/23/2023 | 8/23/2023 | 8/31/2023 | 0.51 | 7.98 | 8.49 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 443.04 | 8/23/2023 | 8/23/2023 | 8/31/2023 | 0.51 | 7.98 | 8.49 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.12 | 8/30/2023 | 8/30/2023 | 9/11/2023 | 0.79 | 11.43 | 12.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,147.71 | 9/6/2023 | 9/6/2023 | 9/14/2023 | 0.74 | 7.53 | 8.26 | 0.24% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 23,885.60 | 9/13/2023 | 9/13/2023 | 9/21/2023 | 0.72 | 7.56 | 8.28 | 0.22% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 29.04 | 9/20/2023 | 9/20/2023 | 9/28/2023 | 0.96 | 7.08 | 8.04 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,153.55 | 9/27/2023 | 9/27/2023 | 10/5/2023 | 0.79 | 7.42 | 8.21 | 0.23% | 0.019 |
| HIGHTOWERS PETROLEUM CO | 115.38 | 9/27/2023 | 9/27/2023 | 10/5/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.31 | 11/1/2023 | 11/1/2023 | 11/9/2023 | 0.76 | 7.47 | 8.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.27 | 11/1/2023 | 11/1/2023 | 11/9/2023 | 0.76 | 7.47 | 8.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.93 | 11/9/2023 | 11/9/2023 | 11/16/2023 | 0.72 | 6.56 | 7.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 20,214.76 | 12/1/2023 | 12/1/2023 | 12/7/2023 | 0.72 | 5.56 | 6.28 | 0.19% | 0.012 |
| HIGHTOWERS PETROLEUM CO | 187.38 | 12/1/2023 | 12/1/2023 | 12/7/2023 | 0.72 | 5.56 | 6.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.09 | 12/4/2023 | 12/4/2023 | 12/14/2023 | 0.67 | 9.66 | 10.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.00 | 12/4/2023 | 12/4/2023 | 12/14/2023 | 0.67 | 9.66 | 10.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 12/4/2023 | 12/4/2023 | 12/14/2023 | 0.54 | 9.91 | 10.46 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.45 | 12/4/2023 | 12/4/2023 | 12/14/2023 | 0.54 | 9.91 | 10.46 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.04 | 12/4/2023 | 12/4/2023 | 12/14/2023 | 0.54 | 9.91 | 10.46 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.56 | 12/4/2023 | 12/4/2023 | 12/14/2023 | 0.67 | 9.66 | 10.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.39 | 12/4/2023 | 12/4/2023 | 12/14/2023 | 0.53 | 9.94 | 10.47 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.31 | 12/5/2023 | 12/5/2023 | 12/14/2023 | 0.66 | 8.67 | 9.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.33 | 12/6/2023 | 12/6/2023 | 12/14/2023 | 0.81 | 7.38 | 8.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.21 | 12/8/2023 | 12/8/2023 | 12/14/2023 | 0.92 | 5.15 | 6.08 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.05 | 11/10/2023 | 11/10/2023 | 11/20/2023 | 0.74 | 9.52 | 10.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.65 | 11/8/2023 | 11/8/2023 | 11/21/2023 | 0.61 | 12.77 | 13.39 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.42 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.76 | 8.47 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.81 | 11/15/2023 | 11/15/2023 | 11/22/2023 | 0.71 | 6.59 | 7.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.25 | 11/15/2023 | 11/15/2023 | 11/22/2023 | 0.71 | 6.59 | 7.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,143.42 | 11/14/2023 | 11/14/2023 | 11/22/2023 | 0.78 | 7.45 | 8.22 | 0.23% | 0.019 |
| HIGHTOWERS PETROLEUM CO | 16.08 | 11/14/2023 | 11/14/2023 | 11/22/2023 | 0.78 | 7.45 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,156.80 | 11/14/2023 | 11/14/2023 | 11/22/2023 | 0.65 | 7.70 | 8.35 | 0.23% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 11/17/2023 | 11/17/2023 | 11/22/2023 | 0.61 | 4.78 | 5.39 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 11/17/2023 | 11/17/2023 | 11/22/2023 | 0.61 | 4.78 | 5.39 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.05 | 11/17/2023 | 11/17/2023 | 11/22/2023 | 0.80 | 4.39 | 5.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.65 | 11/21/2023 | 11/21/2023 | 11/30/2023 | 0.80 | 8.39 | 9.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,117.77 | 11/24/2023 | 11/24/2023 | 11/30/2023 | 0.68 | 5.65 | 6.32 | 0.20% | 0.012 |
| HIGHTOWERS PETROLEUM CO | 115.99 | 11/24/2023 | 11/24/2023 | 11/30/2023 | 0.68 | 5.65 | 6.32 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 186.93 | 11/24/2023 | 11/24/2023 | 11/30/2023 | 0.74 | 5.52 | 6.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.63 | 11/28/2023 | 11/28/2023 | 12/7/2023 | 0.75 | 8.49 | 9.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.22 | 11/30/2023 | 11/30/2023 | 12/7/2023 | 0.82 | 6.37 | 7.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.27 | 11/30/2023 | 11/30/2023 | 12/7/2023 | 0.77 | 6.46 | 7.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 12/27/2023 | 12/27/2023 | 1/5/2024 | 0.78 | 8.44 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.80 | 12/20/2023 | 12/20/2023 | 1/5/2024 | 0.69 | 15.61 | 16.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 19,005.36 | 12/20/2023 | 12/20/2023 | 1/5/2024 | 0.69 | 15.61 | 16.31 | 0.18% | 0.029 |
| HIGHTOWERS PETROLEUM CO | 7.47 | 10/4/2023 | 10/4/2023 | 10/12/2023 | 0.58 | 7.84 | 8.42 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.98 | 10/4/2023 | 10/4/2023 | 10/12/2023 | 0.58 | 7.84 | 8.42 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,523.94 | 10/11/2023 | 10/11/2023 | 10/19/2023 | 0.64 | 7.73 | 8.36 | 0.21% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 15.96 | 10/11/2023 | 10/11/2023 | 10/19/2023 | 0.64 | 7.73 | 8.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.61 | 10/11/2023 | 10/11/2023 | 10/19/2023 | 0.64 | 7.73 | 8.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.86 | 10/11/2023 | 10/11/2023 | 10/23/2023 | 0.83 | 11.34 | 12.17 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 10/18/2023 | 10/18/2023 | 10/26/2023 | 0.65 | 7.70 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,609.40 | 10/18/2023 | 10/18/2023 | 10/26/2023 | 0.65 | 7.70 | 8.35 | 0.22% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 452.00 | 10/19/2023 | 10/19/2023 | 10/26/2023 | 0.81 | 6.38 | 7.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.99 | 10/19/2023 | 10/19/2023 | 10/26/2023 | 0.81 | 6.38 | 7.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 17,851.06 | 7/5/2023 | 7/5/2023 | 7/13/2023 | 0.67 | 7.65 | 8.33 | 0.17% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 15.85 | 7/5/2023 | 7/5/2023 | 7/13/2023 | 0.67 | 7.65 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 17,063.49 | 7/12/2023 | 7/12/2023 | 7/20/2023 | 0.77 | 7.46 | 8.23 | 0.16% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 114.82 | 7/19/2023 | 7/19/2023 | 7/27/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,460.20 | 7/19/2023 | 7/19/2023 | 7/27/2023 | 0.79 | 7.43 | 8.21 | 0.17% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 28.88 | 7/19/2023 | 7/19/2023 | 7/27/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.06 | 7/27/2023 | 7/27/2023 | 8/4/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.01 | 5/16/2023 | 5/16/2023 | 5/25/2023 | 0.63 | 8.75 | 9.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.90 | 5/17/2023 | 5/17/2023 | 5/25/2023 | 0.63 | 7.74 | 8.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.18 | 5/17/2023 | 5/17/2023 | 5/25/2023 | 0.63 | 7.74 | 8.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 20,218.61 | 5/17/2023 | 5/17/2023 | 5/25/2023 | 0.63 | 7.73 | 8.37 | 0.19% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 7.48 | 5/17/2023 | 5/17/2023 | 5/25/2023 | 0.63 | 7.73 | 8.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.44 | 5/18/2023 | 5/18/2023 | 5/25/2023 | 0.74 | 6.52 | 7.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 450.24 | 5/18/2023 | 5/18/2023 | 5/25/2023 | 0.74 | 6.52 | 7.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.02 | 5/18/2023 | 5/18/2023 | 5/25/2023 | 0.74 | 6.52 | 7.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.24 | 5/18/2023 | 5/18/2023 | 5/25/2023 | 0.68 | 6.63 | 7.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.00 | 5/18/2023 | 5/18/2023 | 5/25/2023 | 0.68 | 6.63 | 7.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.88 | 5/19/2023 | 5/19/2023 | 6/1/2023 | 0.69 | 12.62 | 13.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.43 | 5/24/2023 | 5/24/2023 | 6/1/2023 | 0.69 | 7.61 | 8.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 449.76 | 5/24/2023 | 5/24/2023 | 6/1/2023 | 0.69 | 7.61 | 8.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.23 | 5/24/2023 | 5/24/2023 | 6/1/2023 | 0.69 | 7.61 | 8.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 19,121.71 | 5/31/2023 | 5/31/2023 | 6/8/2023 | 0.67 | 7.67 | 8.33 | 0.18% | 0.015 |
| HIGHTOWERS PETROLEUM CO | 451.75 | 5/31/2023 | 5/31/2023 | 6/8/2023 | 0.67 | 7.67 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.74 | 5/31/2023 | 5/31/2023 | 6/8/2023 | 0.67 | 7.67 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.98 | 6/12/2023 | 6/12/2023 | 6/22/2023 | 0.69 | 9.63 | 10.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.90 | 6/12/2023 | 6/12/2023 | 6/22/2023 | 0.69 | 9.63 | 10.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.96 | 6/13/2023 | 6/13/2023 | 6/22/2023 | 0.70 | 8.60 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,405.25 | 6/13/2023 | 6/13/2023 | 6/22/2023 | 0.72 | 8.57 | 9.28 | 0.17% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 18,293.15 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.65 | 6.71 | 7.35 | 0.17% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.65 | 6.71 | 7.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.89 | 6/16/2023 | 6/16/2023 | 6/22/2023 | 0.65 | 5.70 | 6.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.07 | 6/16/2023 | 6/16/2023 | 6/22/2023 | 0.65 | 5.70 | 6.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.93 | 6/16/2023 | 6/16/2023 | 6/22/2023 | 0.65 | 5.70 | 6.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 449.33 | 6/21/2023 | 6/21/2023 | 6/29/2023 | 0.68 | 7.64 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.44 | 6/28/2023 | 6/28/2023 | 7/6/2023 | 0.71 | 7.58 | 8.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.91 | 6/28/2023 | 6/28/2023 | 7/6/2023 | 0.66 | 7.69 | 8.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.38 | 6/1/2023 | 6/1/2023 | 6/8/2023 | 0.66 | 6.67 | 7.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.89 | 6/2/2023 | 6/2/2023 | 6/8/2023 | 0.68 | 5.64 | 6.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 448.18 | 6/8/2023 | 6/8/2023 | 6/15/2023 | 0.67 | 6.65 | 7.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 114.82 | 6/8/2023 | 6/8/2023 | 6/15/2023 | 0.67 | 6.65 | 7.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.42 | 6/7/2023 | 6/8/2023 | 6/15/2023 | 1.18 | 6.64 | 7.82 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.45 | 6/8/2023 | 6/8/2023 | 6/15/2023 | 0.68 | 6.64 | 7.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,831.59 | 6/6/2023 | 6/6/2023 | 6/15/2023 | 0.66 | 8.67 | 9.34 | 0.18% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 188.50 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.65 | 9.70 | 10.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 396.29 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.65 | 9.70 | 10.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.65 | 9.70 | 10.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.64 | 8.71 | 9.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.32 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.64 | 8.71 | 9.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,121.48 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.65 | 7.71 | 8.35 | 0.21% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.65 | 7.71 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.61 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,664.50 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.75 | 5.49 | 6.25 | 0.21% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 29.31 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.75 | 5.49 | 6.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.39 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 23,033.11 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 29.45 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.57 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.77 | 9.45 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.45 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.77 | 9.45 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,039.22 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.77 | 9.45 | 10.23 | 0.21% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 16.41 | 12/31/2022 | 1/2/2023 | 1/12/2023 | 1.79 | 9.41 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.74 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.38 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,293.86 | 1/3/2023 | 1/4/2023 | 1/12/2023 | 1.29 | 7.42 | 8.71 | 0.21% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 7.74 | 1/3/2023 | 1/4/2023 | 1/12/2023 | 1.29 | 7.42 | 8.71 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.67 | 12/31/2022 | 1/2/2023 | 1/12/2023 | 1.79 | 9.41 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,051.45 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.44 | 9.22 | 0.22% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.44 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 17,700.70 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.42 | 7.21 | 0.17% | 0.012 |
| HIGHTOWERS PETROLEUM CO | 21,061.06 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.20% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 7.76 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.40 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.55 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.41 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.73 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.41 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.16 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.41 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,078.95 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.40 | 10.20 | 0.22% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 23,656.46 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.44 | 9.22 | 0.22% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 193.55 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.44 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.49 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.44 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.33 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.05 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.99 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.40 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.44 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.70 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 323.53 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 323.82 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.40 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.43 | 1/1/2023 | 1/1/2023 | 1/12/2023 | 0.77 | 10.46 | 11.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,653.40 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.22% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 325.12 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.43 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.15 | 1/5/2023 | 1/6/2023 | 1/12/2023 | 1.31 | 5.39 | 6.69 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.16 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.56 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.14 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.53 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.41 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,048.39 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.21% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 16.14 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.81 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.45 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,991.51 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.21% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 16.34 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.64 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.15 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.73 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,043.83 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.21% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 22,029.23 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.21% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 118.46 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 315.67 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.62 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.41 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.43 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.56 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.93 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.49 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 121.22 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.05 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.43 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.51 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.15 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.19 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.73 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 29.37 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.51 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,612.72 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.20% | 0.015 |
| HIGHTOWERS PETROLEUM CO | 7.72 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 121.40 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.10 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.39 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.30 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.56 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.35 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,735.22 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 317.18 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.45 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.90 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 124.50 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.64 | 15.71 | 16.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 59.57 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.75 | 13.49 | 14.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.42 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.79 | 13.41 | 14.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.80 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.80 | 13.41 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.69 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.80 | 13.41 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.61 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.80 | 13.41 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.16 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.80 | 13.41 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.51 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.80 | 12.40 | 13.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 178.82 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.80 | 16.39 | 17.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.42 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.73 | 15.55 | 16.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.78 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.73 | 15.54 | 16.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.11 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.78 | 15.45 | 16.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.82 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.78 | 15.45 | 16.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 178.84 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.78 | 15.44 | 16.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.87 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.77 | 16.45 | 17.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.87 | 12/31/2022 | 1/2/2023 | 1/19/2023 | 1.79 | 16.41 | 18.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.82 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.78 | 14.44 | 15.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.82 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.78 | 14.43 | 15.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.03 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.78 | 14.43 | 15.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.37 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.43 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.08 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.43 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.03 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.43 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.78 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.43 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.81 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.42 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.56 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.42 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.65 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.42 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 27.79 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.79 | 13.42 | 14.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 97.98 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.79 | 13.42 | 14.21 | 0.00% | 0.000 |
| CERES SOLUTIONS | 15.79 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.49 | 9.24 | 0.00% | 0.000 |
| CERES SOLUTIONS | 7.38 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.49 | 9.24 | 0.00% | 0.000 |
| CERES SOLUTIONS | 23,569.52 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.49 | 9.24 | 0.22% | 0.020 |
| CERES SOLUTIONS | 7.38 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.49 | 9.24 | 0.00% | 0.000 |
| CERES SOLUTIONS | 116.04 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.49 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.47 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.09 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 488.84 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,562.84 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.22% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 23,107.60 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.22% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 502.51 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.45 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.50 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 489.55 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,607.67 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.21% | 0.021 |
| HIGHTOWERS PETROLEUM CO | 117.23 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.42 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 121.39 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 502.38 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.19 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.82 | 9.37 | 10.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.75 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.49 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.15 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.25 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,319.38 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.23% | 0.019 |
| HIGHTOWERS PETROLEUM CO | 187.78 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 116.42 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.68 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.71 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,664.55 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.21% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 119.09 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.57 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.46 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.20 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,853.31 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 29.33 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.35 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.16 | 1/9/2023 | 1/11/2023 | 1/19/2023 | 1.70 | 7.60 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.18 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.57 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.73 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 502.90 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 194.05 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.76 | 1/9/2023 | 1/10/2023 | 1/19/2023 | 1.26 | 8.48 | 9.74 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.45 | 1/9/2023 | 1/10/2023 | 1/19/2023 | 1.26 | 8.48 | 9.74 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.55 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.95 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.24 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.33 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.34 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,832.04 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 491.64 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.06 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.30 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.20 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,569.11 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.22% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 488.77 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.37 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.25 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.76 | 7.49 | 8.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.28 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.76 | 7.49 | 8.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.11 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.76 | 7.49 | 8.24 | 0.00% | 0.000 |
| CERES SOLUTIONS | 183.10 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.70 | 8.61 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 69.08 | 1/10/2023 | 1/10/2023 | 1/20/2023 | 0.76 | 9.48 | 10.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.83 | 1/10/2023 | 1/10/2023 | 1/20/2023 | 0.76 | 9.48 | 10.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.42 | 1/10/2023 | 1/10/2023 | 1/20/2023 | 0.76 | 9.48 | 10.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.42 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.70 | 8.61 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.38 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.70 | 8.60 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.66 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.78 | 15.43 | 16.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 69.57 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.79 | 15.43 | 16.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.76 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.79 | 15.43 | 16.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.63 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.79 | 15.43 | 16.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.76 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.79 | 15.42 | 16.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 70.32 | 1/5/2023 | 1/5/2023 | 1/20/2023 | 0.80 | 14.41 | 15.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.89 | 1/6/2023 | 1/6/2023 | 1/20/2023 | 0.80 | 13.39 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.87 | 1/6/2023 | 1/6/2023 | 1/20/2023 | 0.81 | 13.39 | 14.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.47 | 1/6/2023 | 1/6/2023 | 1/20/2023 | 0.81 | 13.38 | 14.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.45 | 1/9/2023 | 1/9/2023 | 1/20/2023 | 0.81 | 10.37 | 11.19 | 0.00% | 0.000 |
| CERES SOLUTIONS | 7.36 | 1/13/2023 | 1/13/2023 | 1/23/2023 | 0.73 | 9.54 | 10.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 182.82 | 1/13/2023 | 1/13/2023 | 1/23/2023 | 0.73 | 9.54 | 10.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 28.70 | 1/13/2023 | 1/13/2023 | 1/23/2023 | 0.73 | 9.54 | 10.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.50 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 490.92 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 117.06 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.40 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.45 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.46 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,263.98 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.24% | 0.026 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,047.40 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.23% | 0.026 |
| HIGHTOWERS PETROLEUM CO | 25,134.03 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.23% | 0.026 |
| HIGHTOWERS PETROLEUM CO | 187.93 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.48 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,644.92 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.23% | 0.028 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 185.95 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 493.00 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,759.85 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.23% | 0.028 |
| HIGHTOWERS PETROLEUM CO | 490.85 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 188.50 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.49 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.44 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.34 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.17 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,750.00 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.23% | 0.028 |
| HIGHTOWERS PETROLEUM CO | 116.41 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.47 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 176.10 | 1/13/2023 | 1/14/2023 | 1/26/2023 | 1.29 | 11.41 | 12.71 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.63 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.79 | 11.41 | 12.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 488.90 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.73 | 8.53 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.75 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.42 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.48 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,103.28 | 1/16/2023 | 1/17/2023 | 1/26/2023 | 1.23 | 8.53 | 9.77 | 0.22% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 177.80 | 1/16/2023 | 1/17/2023 | 1/26/2023 | 1.23 | 8.53 | 9.77 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 504.33 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 192.44 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.62 | 1/20/2023 | 1/20/2023 | 1/26/2023 | 0.76 | 5.48 | 6.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.23 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.70 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.75 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 192.61 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 194.30 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 505.96 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.62 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.34 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.57 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.60 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.70 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 489.03 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 186.60 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.78 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.31 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,052.37 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.23% | 0.019 |
| HIGHTOWERS PETROLEUM CO | 25,343.60 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.24% | 0.029 |
| HIGHTOWERS PETROLEUM CO | 489.10 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 16.55 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 503.48 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 112.44 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.58 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.73 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 183.40 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,893.46 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.24% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 185.11 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.87 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.58 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.34 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.58 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.06 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.38 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,576.36 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.57 | 10.29 | 0.24% | 0.025 |
| HIGHTOWERS PETROLEUM CO | 29.57 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.57 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.18 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.17 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.42 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.79 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 113.94 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.15 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.67 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.10 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,866.38 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.25% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 30.24 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.58 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,472.48 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.24% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 186.70 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.57 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.55 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 116.41 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 180.19 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,853.65 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.23% | 0.019 |
| HIGHTOWERS PETROLEUM CO | 26,227.04 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.24% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 29.46 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.75 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 489.29 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.57 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 489.81 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.55 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.90 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.55 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.09 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 192.88 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| CERES SOLUTIONS | 15.76 | 1/16/2023 | 1/16/2023 | 1/30/2023 | 0.73 | 13.53 | 14.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 7.36 | 1/16/2023 | 1/16/2023 | 1/30/2023 | 0.73 | 13.53 | 14.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 28.75 | 1/16/2023 | 1/16/2023 | 1/30/2023 | 0.73 | 13.53 | 14.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 27,865.78 | 1/25/2023 | 1/25/2023 | 2/2/2023 | 0.71 | 7.58 | 8.29 | 0.26% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 16.19 | 1/25/2023 | 1/25/2023 | 2/2/2023 | 0.71 | 7.58 | 8.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.26 | 1/25/2023 | 1/25/2023 | 2/2/2023 | 0.71 | 7.58 | 8.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.18 | 5/3/2023 | 5/3/2023 | 5/11/2023 | 0.72 | 7.56 | 8.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.03 | 5/10/2023 | 5/10/2023 | 5/18/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.97 | 5/11/2023 | 5/11/2023 | 5/18/2023 | 0.75 | 6.50 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,550.40 | 4/6/2023 | 4/6/2023 | 4/13/2023 | 0.62 | 6.75 | 7.38 | 0.22% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 453.27 | 4/14/2023 | 4/14/2023 | 4/20/2023 | 0.76 | 5.47 | 6.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.03 | 4/13/2023 | 4/13/2023 | 4/20/2023 | 0.76 | 6.47 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.21 | 4/13/2023 | 4/13/2023 | 4/20/2023 | 0.76 | 6.47 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 4/17/2023 | 4/17/2023 | 4/27/2023 | 0.77 | 9.47 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 4/17/2023 | 4/17/2023 | 4/27/2023 | 0.77 | 9.47 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 4/17/2023 | 4/17/2023 | 4/27/2023 | 0.77 | 9.47 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.62 | 4/18/2023 | 4/18/2023 | 4/27/2023 | 0.68 | 8.64 | 9.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.13 | 4/18/2023 | 4/18/2023 | 4/27/2023 | 0.68 | 8.64 | 9.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.30 | 4/19/2023 | 4/19/2023 | 4/27/2023 | 0.68 | 7.63 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.56 | 4/26/2023 | 4/26/2023 | 5/4/2023 | 0.67 | 7.67 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 19,080.50 | 4/27/2023 | 4/27/2023 | 5/4/2023 | 0.67 | 6.65 | 7.33 | 0.18% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 15.61 | 4/27/2023 | 4/27/2023 | 5/4/2023 | 0.67 | 6.65 | 7.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 113.09 | 4/27/2023 | 4/27/2023 | 5/4/2023 | 0.67 | 6.65 | 7.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.37 | 4/27/2023 | 4/27/2023 | 5/4/2023 | 0.67 | 6.65 | 7.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.18 | 3/1/2023 | 3/1/2023 | 3/9/2023 | 0.63 | 7.73 | 8.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 457.44 | 3/15/2023 | 3/15/2023 | 3/23/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.03 | 3/15/2023 | 3/15/2023 | 3/23/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.49 | 3/15/2023 | 3/15/2023 | 3/23/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.18 | 3/15/2023 | 3/15/2023 | 3/23/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.29 | 3/15/2023 | 3/15/2023 | 3/23/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,312.14 | 3/22/2023 | 3/22/2023 | 3/30/2023 | 0.75 | 7.49 | 8.25 | 0.20% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 453.27 | 3/29/2023 | 3/29/2023 | 4/6/2023 | 0.66 | 7.69 | 8.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.13 | 3/29/2023 | 3/29/2023 | 4/6/2023 | 0.66 | 7.69 | 8.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 456.53 | 3/29/2023 | 3/29/2023 | 4/6/2023 | 0.66 | 7.69 | 8.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 458.53 | 2/1/2023 | 2/1/2023 | 2/9/2023 | 0.67 | 7.66 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.96 | 7/21/2022 | 7/21/2022 | 2/9/2023 | 0.79 | 202.42 | 203.21 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 114.92 | 7/28/2022 | 7/28/2022 | 2/9/2023 | 0.64 | 195.73 | 196.36 | 0.00% | 0.002 |
| HIGHTOWERS PETROLEUM CO | 114.65 | 7/28/2022 | 7/28/2022 | 2/9/2023 | 0.64 | 195.73 | 196.36 | 0.00% | 0.002 |
| HIGHTOWERS PETROLEUM CO | 115.21 | 8/25/2022 | 8/25/2022 | 2/9/2023 | 0.64 | 167.73 | 168.36 | 0.00% | 0.002 |
| HIGHTOWERS PETROLEUM CO | 115.44 | 9/8/2022 | 9/8/2022 | 2/9/2023 | 0.80 | 153.40 | 154.20 | 0.00% | 0.002 |
| HIGHTOWERS PETROLEUM CO | 115.75 | 10/6/2022 | 10/6/2022 | 2/9/2023 | 0.69 | 125.62 | 126.31 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 118.76 | 10/27/2022 | 10/27/2022 | 2/9/2023 | 0.77 | 104.46 | 105.23 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 115.61 | 11/11/2022 | 11/11/2022 | 2/9/2023 | 0.62 | 89.75 | 90.38 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.39 | 12/8/2022 | 12/8/2022 | 2/9/2023 | 0.70 | 62.59 | 63.30 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.34 | 12/21/2022 | 12/21/2022 | 2/9/2023 | 0.72 | 49.56 | 50.28 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.67 | 12/29/2022 | 12/29/2022 | 2/9/2023 | 0.68 | 41.63 | 42.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.16 | 5/12/2022 | 5/12/2022 | 2/9/2023 | 0.67 | 272.67 | 273.33 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 116.14 | 5/18/2022 | 5/18/2022 | 2/9/2023 | 0.67 | 266.66 | 267.33 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 124.87 | 12/25/2022 | 12/25/2022 | 2/9/2023 | 0.70 | 45.59 | 46.30 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 119.04 | 12/28/2022 | 12/28/2022 | 2/9/2023 | 0.73 | 42.54 | 43.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.59 | 12/29/2022 | 12/29/2022 | 2/9/2023 | 0.74 | 41.52 | 42.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 124.54 | 12/29/2022 | 12/29/2022 | 2/9/2023 | 0.74 | 41.52 | 42.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.10 | 2/8/2023 | 2/8/2023 | 2/16/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.80 | 2/8/2023 | 2/8/2023 | 2/16/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.03 | 8/2/2023 | 8/2/2023 | 8/11/2023 | 0.72 | 8.56 | 9.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.15 | 8/10/2023 | 8/10/2023 | 8/17/2023 | 0.77 | 6.46 | 7.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.97 | 8/10/2023 | 8/10/2023 | 8/17/2023 | 0.77 | 6.46 | 7.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.42 | 8/16/2023 | 8/16/2023 | 8/24/2023 | 0.64 | 7.72 | 8.36 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 448.61 | 8/16/2023 | 8/16/2023 | 8/24/2023 | 0.64 | 7.72 | 8.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,678.54 | 8/16/2023 | 8/16/2023 | 8/24/2023 | 0.64 | 7.72 | 8.36 | 0.22% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 115.10 | 8/16/2023 | 8/16/2023 | 8/24/2023 | 0.64 | 7.72 | 8.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 0.21 | 8/23/2023 | 8/23/2023 | 8/31/2023 | 0.72 | 7.57 | 8.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 113.51 | 8/23/2023 | 8/23/2023 | 8/31/2023 | 0.51 | 7.98 | 8.49 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.04 | 9/6/2023 | 9/6/2023 | 9/14/2023 | 0.74 | 7.53 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,856.76 | 9/13/2023 | 9/13/2023 | 9/21/2023 | 0.80 | 7.39 | 8.20 | 0.22% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 7.45 | 9/13/2023 | 9/13/2023 | 9/21/2023 | 0.80 | 7.39 | 8.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.40 | 9/13/2023 | 9/13/2023 | 9/21/2023 | 0.80 | 7.39 | 8.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.81 | 11/9/2023 | 11/9/2023 | 11/16/2023 | 0.80 | 6.40 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.25 | 11/9/2023 | 11/9/2023 | 11/16/2023 | 0.80 | 6.40 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,291.11 | 11/9/2023 | 11/9/2023 | 11/16/2023 | 0.72 | 6.56 | 7.28 | 0.24% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 116.34 | 11/8/2023 | 11/8/2023 | 11/17/2023 | 0.61 | 8.77 | 9.39 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.25 | 11/8/2023 | 11/8/2023 | 11/17/2023 | 0.81 | 8.38 | 9.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.16 | 12/1/2023 | 12/1/2023 | 12/7/2023 | 0.71 | 5.58 | 6.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.38 | 12/4/2023 | 12/4/2023 | 12/14/2023 | 0.54 | 9.91 | 10.46 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.61 | 12/6/2023 | 12/6/2023 | 12/14/2023 | 0.74 | 7.53 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.25 | 12/7/2023 | 12/7/2023 | 12/14/2023 | 0.73 | 6.54 | 7.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.37 | 12/7/2023 | 12/7/2023 | 12/14/2023 | 0.73 | 6.54 | 7.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 17,755.42 | 12/8/2023 | 12/8/2023 | 12/14/2023 | 0.77 | 5.46 | 6.23 | 0.17% | 0.010 |
| HIGHTOWERS PETROLEUM CO | 7.49 | 12/8/2023 | 12/8/2023 | 12/14/2023 | 0.92 | 5.15 | 6.08 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.76 | 8.47 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,962.17 | 11/15/2023 | 11/15/2023 | 11/22/2023 | 0.95 | 6.09 | 7.05 | 0.23% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 187.73 | 11/15/2023 | 11/15/2023 | 11/22/2023 | 0.95 | 6.09 | 7.05 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.48 | 11/14/2023 | 11/14/2023 | 11/22/2023 | 0.78 | 7.45 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.08 | 11/14/2023 | 11/14/2023 | 11/22/2023 | 0.65 | 7.70 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.31 | 11/14/2023 | 11/14/2023 | 11/22/2023 | 0.65 | 7.70 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,228.39 | 11/16/2023 | 11/16/2023 | 11/22/2023 | 0.75 | 5.50 | 6.25 | 0.23% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 11/16/2023 | 11/16/2023 | 11/22/2023 | 0.74 | 5.52 | 6.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.17 | 11/16/2023 | 11/16/2023 | 11/22/2023 | 0.74 | 5.52 | 6.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.28 | 11/16/2023 | 11/16/2023 | 11/22/2023 | 0.74 | 5.52 | 6.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,653.43 | 11/17/2023 | 11/17/2023 | 11/22/2023 | 0.80 | 4.39 | 5.20 | 0.20% | 0.010 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 11/17/2023 | 11/17/2023 | 11/22/2023 | 0.80 | 4.39 | 5.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.25 | 11/20/2023 | 11/20/2023 | 11/30/2023 | 0.71 | 9.57 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.47 | 11/21/2023 | 11/21/2023 | 11/30/2023 | 0.80 | 8.39 | 9.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.12 | 11/21/2023 | 11/21/2023 | 11/30/2023 | 0.80 | 8.39 | 9.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 20,813.86 | 11/21/2023 | 11/21/2023 | 11/30/2023 | 0.85 | 8.29 | 9.15 | 0.19% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 7.47 | 11/21/2023 | 11/21/2023 | 11/30/2023 | 0.85 | 8.29 | 9.15 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,570.29 | 11/22/2023 | 11/22/2023 | 11/30/2023 | 0.81 | 7.38 | 8.19 | 0.20% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 7.48 | 11/22/2023 | 11/22/2023 | 11/30/2023 | 0.81 | 7.38 | 8.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.95 | 11/22/2023 | 11/22/2023 | 11/30/2023 | 0.81 | 7.38 | 8.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.48 | 11/24/2023 | 11/24/2023 | 11/30/2023 | 0.68 | 5.65 | 6.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.48 | 11/24/2023 | 11/24/2023 | 11/30/2023 | 0.74 | 5.52 | 6.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 11/28/2023 | 11/28/2023 | 12/7/2023 | 0.77 | 8.47 | 9.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.05 | 11/28/2023 | 11/28/2023 | 12/7/2023 | 0.77 | 8.47 | 9.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.27 | 11/28/2023 | 11/28/2023 | 12/7/2023 | 0.75 | 8.49 | 9.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.87 | 11/29/2023 | 11/29/2023 | 12/7/2023 | 0.62 | 7.77 | 8.38 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.55 | 11/29/2023 | 11/29/2023 | 12/7/2023 | 0.62 | 7.77 | 8.38 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.63 | 11/30/2023 | 11/30/2023 | 12/7/2023 | 0.82 | 6.37 | 7.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 11/30/2023 | 11/30/2023 | 12/7/2023 | 0.77 | 6.46 | 7.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,872.63 | 12/27/2023 | 12/27/2023 | 1/5/2024 | 0.78 | 8.44 | 9.22 | 0.18% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 116.44 | 12/20/2023 | 12/20/2023 | 1/5/2024 | 0.69 | 15.61 | 16.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.53 | 12/27/2023 | 12/27/2023 | 1/5/2024 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 12/20/2023 | 12/20/2023 | 1/5/2024 | 0.84 | 15.33 | 16.16 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.89 | 10/4/2023 | 10/8/2023 | 10/12/2023 | 2.68 | 3.65 | 6.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.95 | 10/4/2023 | 10/8/2023 | 10/12/2023 | 2.68 | 3.65 | 6.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.00 | 10/11/2023 | 10/11/2023 | 10/23/2023 | 0.83 | 11.34 | 12.17 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.25 | 10/18/2023 | 10/18/2023 | 10/26/2023 | 0.65 | 7.70 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.47 | 10/19/2023 | 10/19/2023 | 10/26/2023 | 0.81 | 6.38 | 7.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.03 | 10/25/2023 | 10/25/2023 | 11/2/2023 | 0.73 | 7.55 | 8.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.03 | 10/25/2023 | 10/25/2023 | 11/2/2023 | 0.74 | 7.52 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.41 | 7/5/2023 | 7/5/2023 | 7/13/2023 | 0.67 | 7.66 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 17,063.49 | 7/12/2023 | 7/12/2023 | 7/20/2023 | 0.77 | 7.46 | 8.23 | 0.16% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 28.85 | 7/12/2023 | 7/12/2023 | 7/20/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 448.18 | 7/19/2023 | 7/19/2023 | 7/27/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,465.18 | 7/19/2023 | 7/19/2023 | 7/27/2023 | 0.75 | 7.50 | 8.25 | 0.17% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 15.89 | 7/27/2023 | 7/27/2023 | 8/4/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.92 | 5/16/2023 | 5/16/2023 | 5/25/2023 | 0.63 | 8.75 | 9.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 20,080.79 | 5/17/2023 | 5/17/2023 | 5/25/2023 | 0.63 | 7.74 | 8.37 | 0.19% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 449.58 | 5/17/2023 | 5/17/2023 | 5/25/2023 | 0.63 | 7.74 | 8.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 20,323.36 | 5/18/2023 | 5/18/2023 | 5/25/2023 | 0.74 | 6.52 | 7.26 | 0.19% | 0.014 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 28.97 | 5/19/2023 | 5/19/2023 | 6/1/2023 | 0.69 | 12.62 | 13.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.97 | 5/16/2023 | 5/16/2023 | 6/1/2023 | 0.69 | 15.62 | 16.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 449.09 | 5/24/2023 | 5/24/2023 | 6/1/2023 | 0.69 | 7.61 | 8.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.89 | 5/24/2023 | 5/24/2023 | 6/1/2023 | 0.69 | 7.61 | 8.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,541.09 | 6/12/2023 | 6/12/2023 | 6/22/2023 | 0.69 | 9.63 | 10.31 | 0.17% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 15.90 | 6/12/2023 | 6/12/2023 | 6/22/2023 | 0.69 | 9.63 | 10.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,533.60 | 6/12/2023 | 6/12/2023 | 6/22/2023 | 0.69 | 9.63 | 10.31 | 0.17% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 7.43 | 6/12/2023 | 6/12/2023 | 6/22/2023 | 0.69 | 9.63 | 10.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.42 | 6/14/2023 | 6/14/2023 | 6/22/2023 | 0.64 | 7.72 | 8.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.87 | 6/14/2023 | 6/14/2023 | 6/22/2023 | 0.64 | 7.72 | 8.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.48 | 6/14/2023 | 6/14/2023 | 6/22/2023 | 0.64 | 7.71 | 8.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.00 | 6/14/2023 | 6/14/2023 | 6/22/2023 | 0.64 | 7.71 | 8.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.33 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.65 | 6.71 | 7.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.89 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.65 | 6.71 | 7.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.42 | 6/16/2023 | 6/16/2023 | 6/22/2023 | 0.65 | 5.70 | 6.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,944.09 | 6/16/2023 | 6/16/2023 | 6/22/2023 | 0.65 | 5.70 | 6.35 | 0.18% | 0.011 |
| HIGHTOWERS PETROLEUM CO | 15.87 | 6/16/2023 | 6/16/2023 | 6/22/2023 | 0.65 | 5.70 | 6.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.02 | 6/21/2023 | 6/21/2023 | 6/29/2023 | 0.68 | 7.64 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.43 | 6/2/2023 | 6/2/2023 | 6/8/2023 | 0.67 | 5.67 | 6.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.12 | 6/2/2023 | 6/2/2023 | 6/8/2023 | 0.67 | 5.67 | 6.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.12 | 6/2/2023 | 6/2/2023 | 6/8/2023 | 0.68 | 5.64 | 6.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,678.53 | 6/8/2023 | 6/8/2023 | 6/15/2023 | 0.67 | 6.65 | 7.33 | 0.17% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 448.61 | 6/7/2023 | 6/8/2023 | 6/15/2023 | 1.18 | 6.64 | 7.82 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.89 | 6/8/2023 | 6/8/2023 | 6/15/2023 | 0.67 | 6.65 | 7.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,706.27 | 6/7/2023 | 6/8/2023 | 6/15/2023 | 1.18 | 6.64 | 7.82 | 0.17% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 28.96 | 6/6/2023 | 6/6/2023 | 6/15/2023 | 0.66 | 8.67 | 9.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 396.60 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.65 | 9.70 | 10.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 17.19 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.64 | 8.71 | 9.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,396.66 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.64 | 8.71 | 9.36 | 0.22% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.65 | 7.71 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.12 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.65 | 7.71 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.08 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.65 | 7.71 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 190.18 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.67 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.14 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.60 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.77 | 9.45 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,030.06 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 16.13 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.44 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.16 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.49 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 317.60 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,149.23 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.41 | 10.20 | 0.22% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 119.17 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.41 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.55 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.41 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.09 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.85 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.40 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.57 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.44 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 325.16 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.44 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 121.78 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.44 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.19 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.44 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.53 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.40 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,715.06 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.44 | 8.22 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 21,570.71 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.20% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 29.23 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.40 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 121.28 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.40 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,030.06 | 1/1/2023 | 1/1/2023 | 1/12/2023 | 0.77 | 10.46 | 11.23 | 0.21% | 0.024 |
| HIGHTOWERS PETROLEUM CO | 316.55 | 1/1/2023 | 1/1/2023 | 1/12/2023 | 0.77 | 10.46 | 11.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.41 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.40 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.43 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.44 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.12 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.49 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.39 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/5/2023 | 1/6/2023 | 1/12/2023 | 1.31 | 5.39 | 6.69 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 1/5/2023 | 1/6/2023 | 1/12/2023 | 1.31 | 5.39 | 6.69 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 121.66 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.60 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 317.48 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 315.38 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.58 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 190.93 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.50 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.71 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 323.78 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,030.06 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.77 | 9.45 | 10.23 | 0.21% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 16.13 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.77 | 9.45 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 315.46 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.55 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,048.39 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.55 | 9.27 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 192.73 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 317.06 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.12 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.11 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.14 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,694.91 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 16.12 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.60 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 323.65 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 192.65 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.43 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.04 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 315.46 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.15 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,645.95 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.78 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,014.78 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,023.95 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 16.56 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.38 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.39 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.46 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.28 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.18 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 317.60 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.05 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.09 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.48 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,175.87 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.20% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 63.46 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.64 | 15.71 | 16.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.50 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.65 | 14.71 | 15.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 60.09 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.75 | 13.49 | 14.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.58 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.79 | 13.41 | 14.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.51 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.79 | 13.41 | 14.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.73 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.80 | 13.41 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.26 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.81 | 12.39 | 13.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.62 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.81 | 12.38 | 13.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 179.19 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.80 | 13.40 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.38 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.81 | 12.38 | 13.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.45 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.81 | 12.38 | 13.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.90 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.80 | 16.39 | 17.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.01 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.73 | 15.54 | 16.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.89 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.73 | 15.54 | 16.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.00 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.78 | 15.44 | 16.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.84 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.77 | 16.45 | 17.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.17 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.77 | 16.45 | 17.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 178.63 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.80 | 16.41 | 17.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.20 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.78 | 14.44 | 15.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.89 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.78 | 14.44 | 15.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.93 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.78 | 14.43 | 15.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.12 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.78 | 14.43 | 15.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.84 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.78 | 14.43 | 15.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.86 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.80 | 16.41 | 17.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.94 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.43 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.98 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.43 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.78 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.42 | 15.21 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 120.00 | 1/3/2023 | 1/4/2023 | 1/19/2023 | 1.29 | 14.42 | 15.71 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18.65 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.79 | 13.42 | 14.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.74 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.79 | 13.41 | 14.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,679.51 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.21% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 489.55 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.43 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.76 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.56 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 121.75 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.13 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.29 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 488.97 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 490.79 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.09 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.28 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.01 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.82 | 9.37 | 10.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.08 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 492.81 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.52 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.03 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 1/9/2023 | 1/10/2023 | 1/19/2023 | 1.26 | 8.49 | 9.74 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.05 | 1/9/2023 | 1/10/2023 | 1/19/2023 | 1.26 | 8.49 | 9.74 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.56 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.17 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.50 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.08 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,625.62 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.22% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 16.11 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.17 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.09 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 492.87 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.30 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.79 | 1/9/2023 | 1/11/2023 | 1/19/2023 | 1.70 | 7.60 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.06 | 1/9/2023 | 1/11/2023 | 1/19/2023 | 1.70 | 7.60 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.48 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,236.32 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.22% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 505.31 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.58 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.52 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.52 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,511.87 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.21% | 0.021 |
| HIGHTOWERS PETROLEUM CO | 489.16 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.56 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.78 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 488.45 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.08 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,083.25 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.76 | 7.49 | 8.24 | 0.22% | 0.019 |
| HIGHTOWERS PETROLEUM CO | 16.05 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.76 | 7.49 | 8.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.25 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.76 | 7.49 | 8.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.49 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.76 | 7.49 | 8.24 | 0.00% | 0.000 |
| CERES SOLUTIONS | 183.24 | 1/10/2023 | 1/10/2023 | 1/20/2023 | 0.76 | 9.49 | 10.24 | 0.00% | 0.000 |
| CERES SOLUTIONS | 15.78 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.69 | 8.61 | 9.31 | 0.00% | 0.000 |
| CERES SOLUTIONS | 7.38 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.69 | 8.61 | 9.31 | 0.00% | 0.000 |
| CERES SOLUTIONS | 15.78 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.69 | 8.61 | 9.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 70.38 | 1/10/2023 | 1/10/2023 | 1/20/2023 | 0.76 | 9.48 | 10.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.53 | 1/10/2023 | 1/10/2023 | 1/20/2023 | 0.76 | 9.48 | 10.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.40 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.70 | 8.61 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.68 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.70 | 8.60 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 70.58 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.70 | 8.60 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.81 | 1/2/2023 | 1/2/2023 | 1/20/2023 | 0.80 | 17.40 | 18.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.70 | 1/2/2023 | 1/2/2023 | 1/20/2023 | 0.80 | 17.40 | 18.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.63 | 1/3/2023 | 1/3/2023 | 1/20/2023 | 0.73 | 16.54 | 17.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.60 | 1/3/2023 | 1/3/2023 | 1/20/2023 | 0.73 | 16.54 | 17.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.70 | 1/3/2023 | 1/3/2023 | 1/20/2023 | 0.73 | 16.54 | 17.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 70.53 | 1/3/2023 | 1/3/2023 | 1/20/2023 | 0.78 | 16.44 | 17.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.77 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.79 | 15.43 | 16.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 70.47 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.79 | 15.42 | 16.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.51 | 1/9/2023 | 1/9/2023 | 1/20/2023 | 0.81 | 10.38 | 11.19 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| CERES SOLUTIONS | 25,154.10 | 1/12/2023 | 1/12/2023 | 1/23/2023 | 0.73 | 10.54 | 11.27 | 0.23% | 0.026 |
| CERES SOLUTIONS | 7.36 | 1/12/2023 | 1/12/2023 | 1/23/2023 | 0.73 | 10.54 | 11.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 182.80 | 1/12/2023 | 1/12/2023 | 1/23/2023 | 0.73 | 10.54 | 11.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 25,418.44 | 1/13/2023 | 1/13/2023 | 1/23/2023 | 0.73 | 9.54 | 10.27 | 0.24% | 0.024 |
| CERES SOLUTIONS | 7.36 | 1/13/2023 | 1/13/2023 | 1/23/2023 | 0.73 | 9.54 | 10.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 184.93 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,763.14 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.23% | 0.028 |
| HIGHTOWERS PETROLEUM CO | 29.45 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,250.65 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.24% | 0.026 |
| HIGHTOWERS PETROLEUM CO | 186.13 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.63 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.93 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.45 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,837.10 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.24% | 0.027 |
| HIGHTOWERS PETROLEUM CO | 7.75 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.19 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 10.91 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.58 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.37 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.27 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.91 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.42 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,413.33 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.24% | 0.029 |
| HIGHTOWERS PETROLEUM CO | 503.81 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 24,789.41 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.23% | 0.028 |
| HIGHTOWERS PETROLEUM CO | 24,582.53 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.23% | 0.028 |
| HIGHTOWERS PETROLEUM CO | 29.20 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.05 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.26 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.21 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.58 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.73 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.87 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,810.45 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.24% | 0.027 |
| HIGHTOWERS PETROLEUM CO | 16.58 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.43 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.09 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,308.48 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.77 | 7.46 | 8.23 | 0.25% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 27.47 | 1/13/2023 | 1/14/2023 | 1/26/2023 | 1.29 | 11.41 | 12.71 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.24 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.79 | 11.41 | 12.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 192.49 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.22 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 491.18 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.13 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.67 | 1/13/2023 | 1/14/2023 | 1/26/2023 | 1.30 | 11.41 | 12.70 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.73 | 8.53 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 491.37 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.73 | 8.53 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.99 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.73 | 8.53 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.75 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.68 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.31 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 490.14 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 16.10 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.85 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.77 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.77 | 1/20/2023 | 1/20/2023 | 1/26/2023 | 0.76 | 5.48 | 6.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 192.98 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.64 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 496.91 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.28 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 488.90 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 489.29 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.90 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.30 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.38 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.65 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 476.01 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.30 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.16 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,448.75 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.24% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 181.63 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.17 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.13 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.39 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 472.24 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.58 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 180.19 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.58 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.29 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.58 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 502.18 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 485.13 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.10 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.58 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.61 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.58 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,583.11 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.57 | 10.29 | 0.24% | 0.025 |
| HIGHTOWERS PETROLEUM CO | 192.85 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.20 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.17 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.60 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.57 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 493.59 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.57 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 490.01 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.63 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.11 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 182.60 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.75 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.54 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.83 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.17 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.56 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 491.83 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.88 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 502.83 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.68 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.43 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 192.06 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.44 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.08 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.50 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,928.93 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.25% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 7.75 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.52 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.25 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.65 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.50 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.15 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.08 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.31 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.19 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.12 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.33 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.51 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.72 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 191.64 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| CERES SOLUTIONS | 25,733.69 | 1/16/2023 | 1/16/2023 | 1/30/2023 | 0.73 | 13.53 | 14.27 | 0.24% | 0.034 |
| CERES SOLUTIONS | 182.90 | 1/16/2023 | 1/16/2023 | 1/30/2023 | 0.73 | 13.53 | 14.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 15.75 | 1/16/2023 | 1/16/2023 | 1/30/2023 | 0.73 | 13.53 | 14.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 7.37 | 1/16/2023 | 1/16/2023 | 1/30/2023 | 0.73 | 13.53 | 14.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.24 | 1/25/2023 | 1/25/2023 | 2/2/2023 | 0.71 | 7.58 | 8.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 457.68 | 1/25/2023 | 1/25/2023 | 2/2/2023 | 0.71 | 7.58 | 8.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 19,156.48 | 5/3/2023 | 5/3/2023 | 5/11/2023 | 0.72 | 7.56 | 8.28 | 0.18% | 0.015 |
| HIGHTOWERS PETROLEUM CO | 452.72 | 5/3/2023 | 5/3/2023 | 5/11/2023 | 0.72 | 7.56 | 8.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.04 | 5/3/2023 | 5/3/2023 | 5/11/2023 | 0.72 | 7.55 | 8.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 20,668.66 | 5/10/2023 | 5/10/2023 | 5/18/2023 | 0.75 | 7.50 | 8.25 | 0.19% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 7.48 | 5/11/2023 | 5/11/2023 | 5/18/2023 | 0.75 | 6.50 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.18 | 5/11/2023 | 5/11/2023 | 5/18/2023 | 0.75 | 6.50 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.27 | 4/5/2023 | 4/5/2023 | 4/13/2023 | 0.79 | 7.41 | 8.21 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 31.20 | 4/6/2023 | 4/6/2023 | 4/13/2023 | 0.62 | 6.75 | 7.38 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.13 | 4/14/2023 | 4/14/2023 | 4/20/2023 | 0.76 | 5.47 | 6.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,301.30 | 4/14/2023 | 4/14/2023 | 4/20/2023 | 0.76 | 5.47 | 6.24 | 0.21% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 116.45 | 4/12/2023 | 4/12/2023 | 4/20/2023 | 0.70 | 7.59 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.08 | 4/17/2023 | 4/17/2023 | 4/27/2023 | 0.77 | 9.47 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.30 | 4/17/2023 | 4/17/2023 | 4/27/2023 | 0.77 | 9.47 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.10 | 4/18/2023 | 4/18/2023 | 4/27/2023 | 0.68 | 8.64 | 9.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.34 | 4/18/2023 | 4/18/2023 | 4/27/2023 | 0.68 | 8.64 | 9.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,216.89 | 4/19/2023 | 4/19/2023 | 4/27/2023 | 0.68 | 7.63 | 8.32 | 0.20% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 21,208.42 | 4/19/2023 | 4/19/2023 | 4/27/2023 | 0.68 | 7.63 | 8.32 | 0.20% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 4/19/2023 | 4/19/2023 | 4/27/2023 | 0.68 | 7.63 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 4/19/2023 | 4/19/2023 | 4/27/2023 | 0.68 | 7.63 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.99 | 4/19/2023 | 4/19/2023 | 4/27/2023 | 0.68 | 7.63 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 17.09 | 4/19/2023 | 4/19/2023 | 4/27/2023 | 0.68 | 7.63 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 20,239.33 | 4/26/2023 | 4/26/2023 | 5/4/2023 | 0.67 | 7.67 | 8.33 | 0.19% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 16.09 | 4/26/2023 | 4/26/2023 | 5/4/2023 | 0.67 | 7.67 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.30 | 4/27/2023 | 4/27/2023 | 5/4/2023 | 0.67 | 6.65 | 7.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 19,634.92 | 4/27/2023 | 4/27/2023 | 5/4/2023 | 0.67 | 6.65 | 7.33 | 0.18% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 21,393.28 | 3/1/2023 | 3/1/2023 | 3/9/2023 | 0.63 | 7.73 | 8.37 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 7.56 | 3/22/2023 | 3/22/2023 | 3/30/2023 | 0.75 | 7.49 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.46 | 3/22/2023 | 3/22/2023 | 3/30/2023 | 0.75 | 7.49 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.22 | 3/29/2023 | 3/29/2023 | 4/6/2023 | 0.66 | 7.69 | 8.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.48 | 2/1/2023 | 2/1/2023 | 2/9/2023 | 0.67 | 7.66 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 123.15 | 6/1/2022 | 6/1/2022 | 2/9/2023 | 0.64 | 252.72 | 253.36 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 114.89 | 8/11/2022 | 8/11/2022 | 2/9/2023 | 0.76 | 181.47 | 182.24 | 0.00% | 0.002 |
| HIGHTOWERS PETROLEUM CO | 115.46 | 9/29/2022 | 9/29/2022 | 2/9/2023 | 0.63 | 132.74 | 133.37 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 115.79 | 10/25/2022 | 10/25/2022 | 2/9/2023 | 0.77 | 106.46 | 107.23 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.08 | 11/16/2022 | 11/16/2022 | 2/9/2023 | 0.80 | 84.39 | 85.20 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.78 | 11/23/2022 | 11/23/2022 | 2/9/2023 | 0.70 | 77.59 | 78.30 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.73 | 11/23/2022 | 11/23/2022 | 2/9/2023 | 0.70 | 77.59 | 78.30 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 125.35 | 12/25/2022 | 12/25/2022 | 2/9/2023 | 0.71 | 45.59 | 46.29 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 124.90 | 12/26/2022 | 12/26/2022 | 2/9/2023 | 0.71 | 44.58 | 45.29 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 124.96 | 12/26/2022 | 12/26/2022 | 2/9/2023 | 0.71 | 44.58 | 45.29 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 119.40 | 12/26/2022 | 12/26/2022 | 2/9/2023 | 0.71 | 44.58 | 45.29 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 117.29 | 12/27/2022 | 12/27/2022 | 2/9/2023 | 0.71 | 43.57 | 44.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 121.16 | 12/27/2022 | 12/27/2022 | 2/9/2023 | 0.72 | 43.56 | 44.28 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 119.58 | 12/27/2022 | 12/27/2022 | 2/9/2023 | 0.72 | 43.55 | 44.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.08 | 12/28/2022 | 12/28/2022 | 2/9/2023 | 0.73 | 42.55 | 43.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.65 | 12/28/2022 | 12/28/2022 | 2/9/2023 | 0.73 | 42.54 | 43.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.29 | 12/30/2022 | 12/30/2022 | 2/9/2023 | 0.75 | 40.51 | 41.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 124.22 | 12/31/2022 | 12/31/2022 | 2/9/2023 | 0.75 | 39.50 | 40.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,645.17 | 2/8/2023 | 2/8/2023 | 2/16/2023 | 0.79 | 7.43 | 8.21 | 0.23% | 0.019 |
| HIGHTOWERS PETROLEUM CO | 188.88 | 2/8/2023 | 2/8/2023 | 2/16/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,635.38 | 2/8/2023 | 2/8/2023 | 2/16/2023 | 0.79 | 7.42 | 8.21 | 0.23% | 0.019 |
| HIGHTOWERS PETROLEUM CO | 23,396.62 | 2/15/2023 | 2/15/2023 | 2/23/2023 | 0.77 | 7.47 | 8.23 | 0.22% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 29.41 | 2/15/2023 | 2/15/2023 | 2/23/2023 | 0.77 | 7.47 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 114.96 | 8/2/2023 | 8/2/2023 | 8/11/2023 | 0.72 | 8.56 | 9.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.93 | 8/2/2023 | 8/2/2023 | 8/11/2023 | 0.72 | 8.56 | 9.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.94 | 8/2/2023 | 8/2/2023 | 8/11/2023 | 0.72 | 8.56 | 9.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15,310.94 | 8/9/2023 | 8/9/2023 | 8/17/2023 | 0.75 | 7.50 | 8.25 | 0.14% | 0.012 |
| HIGHTOWERS PETROLEUM CO | 282.05 | 8/9/2023 | 8/9/2023 | 8/17/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18.18 | 8/9/2023 | 8/9/2023 | 8/17/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.87 | 8/16/2023 | 8/16/2023 | 8/24/2023 | 0.64 | 7.72 | 8.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 114.93 | 8/16/2023 | 8/16/2023 | 8/24/2023 | 0.64 | 7.72 | 8.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.42 | 8/23/2023 | 8/23/2023 | 8/31/2023 | 0.65 | 7.70 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,255.39 | 8/23/2023 | 8/23/2023 | 8/31/2023 | 0.65 | 7.70 | 8.35 | 0.23% | 0.019 |
| HIGHTOWERS PETROLEUM CO | 0.10 | 8/23/2023 | 8/23/2023 | 8/31/2023 | 0.72 | 7.57 | 8.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 1.53 | 8/23/2023 | 8/23/2023 | 8/31/2023 | 0.72 | 7.57 | 8.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,814.77 | 8/30/2023 | 8/30/2023 | 9/11/2023 | 0.79 | 11.43 | 12.21 | 0.24% | 0.029 |
| HIGHTOWERS PETROLEUM CO | 28.97 | 8/30/2023 | 8/30/2023 | 9/11/2023 | 0.79 | 11.43 | 12.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.45 | 9/20/2023 | 9/20/2023 | 9/28/2023 | 0.96 | 7.08 | 8.04 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 450.54 | 9/20/2023 | 9/20/2023 | 9/28/2023 | 0.96 | 7.08 | 8.04 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,147.06 | 9/27/2023 | 9/27/2023 | 10/5/2023 | 0.82 | 7.36 | 8.18 | 0.23% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 450.36 | 9/27/2023 | 9/27/2023 | 10/5/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,663.86 | 11/1/2023 | 11/1/2023 | 11/9/2023 | 0.76 | 7.47 | 8.24 | 0.22% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 454.17 | 11/1/2023 | 11/1/2023 | 11/9/2023 | 0.82 | 7.35 | 8.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 11/1/2023 | 11/1/2023 | 11/9/2023 | 0.82 | 7.35 | 8.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 11/8/2023 | 11/8/2023 | 11/17/2023 | 0.81 | 8.38 | 9.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.75 | 11/8/2023 | 11/8/2023 | 11/17/2023 | 0.81 | 8.38 | 9.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.05 | 11/8/2023 | 11/8/2023 | 11/17/2023 | 0.81 | 8.38 | 9.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.39 | 12/1/2023 | 12/1/2023 | 12/7/2023 | 0.71 | 5.58 | 6.29 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 187.35 | 12/1/2023 | 12/1/2023 | 12/7/2023 | 0.71 | 5.58 | 6.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.17 | 12/1/2023 | 12/1/2023 | 12/7/2023 | 0.72 | 5.56 | 6.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.96 | 12/4/2023 | 12/4/2023 | 12/14/2023 | 0.67 | 9.66 | 10.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 19,696.86 | 12/4/2023 | 12/4/2023 | 12/14/2023 | 0.54 | 9.91 | 10.46 | 0.18% | 0.019 |
| HIGHTOWERS PETROLEUM CO | 455.99 | 12/4/2023 | 12/4/2023 | 12/14/2023 | 0.53 | 9.94 | 10.47 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.82 | 12/4/2023 | 12/4/2023 | 12/14/2023 | 0.53 | 9.94 | 10.47 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 19,289.03 | 12/5/2023 | 12/5/2023 | 12/14/2023 | 0.66 | 8.67 | 9.34 | 0.18% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 453.69 | 12/5/2023 | 12/5/2023 | 12/14/2023 | 0.74 | 8.51 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.05 | 12/5/2023 | 12/5/2023 | 12/14/2023 | 0.74 | 8.51 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.63 | 12/7/2023 | 12/7/2023 | 12/14/2023 | 0.80 | 6.39 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.02 | 12/8/2023 | 12/8/2023 | 12/14/2023 | 0.77 | 5.46 | 6.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.18 | 12/8/2023 | 12/8/2023 | 12/14/2023 | 0.77 | 5.46 | 6.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.11 | 12/8/2023 | 12/8/2023 | 12/14/2023 | 0.92 | 5.15 | 6.08 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.04 | 11/10/2023 | 11/10/2023 | 11/20/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 11/15/2023 | 11/15/2023 | 11/22/2023 | 0.95 | 6.09 | 7.05 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.29 | 11/15/2023 | 11/15/2023 | 11/22/2023 | 0.95 | 6.09 | 7.05 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 11/15/2023 | 11/15/2023 | 11/22/2023 | 0.95 | 6.09 | 7.05 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.39 | 11/15/2023 | 11/15/2023 | 11/22/2023 | 0.95 | 6.09 | 7.05 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 11/14/2023 | 11/14/2023 | 11/22/2023 | 0.65 | 7.70 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.90 | 11/14/2023 | 11/14/2023 | 11/22/2023 | 0.65 | 7.70 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.27 | 11/16/2023 | 11/16/2023 | 11/22/2023 | 0.75 | 5.50 | 6.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.68 | 11/16/2023 | 11/16/2023 | 11/22/2023 | 0.74 | 5.52 | 6.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.36 | 11/16/2023 | 11/16/2023 | 11/22/2023 | 0.74 | 5.52 | 6.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.63 | 11/17/2023 | 11/17/2023 | 11/22/2023 | 0.80 | 4.39 | 5.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.27 | 11/17/2023 | 11/17/2023 | 11/22/2023 | 0.80 | 4.39 | 5.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 451.69 | 11/21/2023 | 11/21/2023 | 11/30/2023 | 0.80 | 8.39 | 9.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 451.87 | 11/21/2023 | 11/21/2023 | 11/30/2023 | 0.85 | 8.29 | 9.15 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.98 | 11/21/2023 | 11/21/2023 | 11/30/2023 | 0.85 | 8.29 | 9.15 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.13 | 11/21/2023 | 11/21/2023 | 11/30/2023 | 0.85 | 8.29 | 9.15 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.16 | 11/22/2023 | 11/22/2023 | 11/30/2023 | 0.81 | 7.38 | 8.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.01 | 11/24/2023 | 11/24/2023 | 11/30/2023 | 0.68 | 5.65 | 6.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.18 | 11/24/2023 | 11/24/2023 | 11/30/2023 | 0.68 | 5.65 | 6.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,100.84 | 11/24/2023 | 11/24/2023 | 11/30/2023 | 0.74 | 5.52 | 6.26 | 0.20% | 0.012 |
| HIGHTOWERS PETROLEUM CO | 16.00 | 11/20/2023 | 11/20/2023 | 11/30/2023 | 0.79 | 9.43 | 10.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 20,077.38 | 11/28/2023 | 11/28/2023 | 12/7/2023 | 0.77 | 8.47 | 9.23 | 0.19% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 116.33 | 11/28/2023 | 11/28/2023 | 12/7/2023 | 0.77 | 8.47 | 9.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 20,077.38 | 11/28/2023 | 11/28/2023 | 12/7/2023 | 0.75 | 8.49 | 9.25 | 0.19% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 20,559.95 | 11/30/2023 | 11/30/2023 | 12/7/2023 | 0.77 | 6.46 | 7.23 | 0.19% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 116.33 | 11/30/2023 | 11/30/2023 | 12/7/2023 | 0.77 | 6.46 | 7.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.36 | 12/27/2023 | 12/27/2023 | 1/5/2024 | 0.78 | 8.44 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 12/27/2023 | 12/27/2023 | 1/5/2024 | 0.78 | 8.44 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 12/27/2023 | 12/27/2023 | 1/5/2024 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.42 | 10/4/2023 | 10/8/2023 | 10/12/2023 | 2.68 | 3.65 | 6.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 449.09 | 10/4/2023 | 10/8/2023 | 10/12/2023 | 2.68 | 3.65 | 6.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,834.09 | 10/4/2023 | 10/4/2023 | 10/12/2023 | 0.58 | 7.84 | 8.42 | 0.23% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 115.75 | 10/4/2023 | 10/4/2023 | 10/12/2023 | 0.58 | 7.84 | 8.42 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.80 | 10/19/2023 | 10/19/2023 | 10/26/2023 | 0.81 | 6.38 | 7.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.13 | 10/25/2023 | 10/25/2023 | 11/2/2023 | 0.74 | 7.52 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.41 | 7/5/2023 | 7/5/2023 | 7/13/2023 | 0.67 | 7.65 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 114.79 | 7/5/2023 | 7/5/2023 | 7/13/2023 | 0.67 | 7.66 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 448.18 | 7/5/2023 | 7/5/2023 | 7/13/2023 | 0.67 | 7.65 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,003.13 | 7/27/2023 | 7/27/2023 | 8/4/2023 | 0.70 | 7.61 | 8.30 | 0.21% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 20,275.36 | 5/17/2023 | 5/17/2023 | 5/25/2023 | 0.63 | 7.74 | 8.37 | 0.19% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 116.30 | 5/17/2023 | 5/17/2023 | 5/25/2023 | 0.63 | 7.74 | 8.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.91 | 5/18/2023 | 5/18/2023 | 5/25/2023 | 0.68 | 6.63 | 7.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.41 | 5/18/2023 | 5/18/2023 | 5/25/2023 | 0.68 | 6.63 | 7.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.47 | 5/16/2023 | 5/16/2023 | 5/25/2023 | 0.72 | 8.56 | 9.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 452.18 | 5/16/2023 | 5/16/2023 | 5/25/2023 | 0.72 | 8.56 | 9.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.99 | 5/16/2023 | 5/16/2023 | 5/25/2023 | 0.72 | 8.56 | 9.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.42 | 5/19/2023 | 5/19/2023 | 6/1/2023 | 0.69 | 12.61 | 13.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 19,722.91 | 5/24/2023 | 5/24/2023 | 6/1/2023 | 0.69 | 7.61 | 8.31 | 0.18% | 0.015 |
| HIGHTOWERS PETROLEUM CO | 28.99 | 5/24/2023 | 5/24/2023 | 6/1/2023 | 0.69 | 7.61 | 8.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.43 | 6/12/2023 | 6/12/2023 | 6/22/2023 | 0.69 | 9.63 | 10.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.47 | 6/13/2023 | 6/13/2023 | 6/22/2023 | 0.72 | 8.57 | 9.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 452.12 | 6/13/2023 | 6/13/2023 | 6/22/2023 | 0.72 | 8.57 | 9.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.83 | 6/13/2023 | 6/13/2023 | 6/22/2023 | 0.72 | 8.57 | 9.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.16 | 6/14/2023 | 6/14/2023 | 6/22/2023 | 0.64 | 7.71 | 8.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.09 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.65 | 6.71 | 7.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.96 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.65 | 6.71 | 7.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 114.98 | 6/16/2023 | 6/16/2023 | 6/22/2023 | 0.65 | 5.70 | 6.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.44 | 6/21/2023 | 6/21/2023 | 6/29/2023 | 0.68 | 7.64 | 8.32 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 15.89 | 6/21/2023 | 6/21/2023 | 6/29/2023 | 0.68 | 7.64 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 17,987.64 | 6/28/2023 | 6/28/2023 | 7/6/2023 | 0.66 | 7.69 | 8.34 | 0.17% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 114.90 | 6/28/2023 | 6/28/2023 | 7/6/2023 | 0.66 | 7.69 | 8.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.07 | 6/1/2023 | 6/1/2023 | 6/8/2023 | 0.67 | 6.67 | 7.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 449.33 | 6/2/2023 | 6/2/2023 | 6/8/2023 | 0.67 | 5.67 | 6.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.97 | 6/2/2023 | 6/2/2023 | 6/8/2023 | 0.68 | 5.64 | 6.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.93 | 6/8/2023 | 6/8/2023 | 6/15/2023 | 0.68 | 6.64 | 7.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.40 | 6/8/2023 | 6/8/2023 | 6/15/2023 | 0.68 | 6.64 | 7.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.88 | 6/7/2023 | 6/8/2023 | 6/15/2023 | 1.18 | 6.64 | 7.82 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.35 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.65 | 9.70 | 10.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.38 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.65 | 9.70 | 10.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 8.03 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.64 | 8.71 | 9.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.93 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.64 | 8.71 | 9.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.75 | 5.49 | 6.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.13 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.77 | 9.45 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.73 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.40 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.77 | 9.45 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.68 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.77 | 9.45 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.60 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.77 | 9.45 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,433.40 | 12/31/2022 | 1/2/2023 | 1/12/2023 | 1.79 | 9.41 | 11.21 | 0.22% | 0.024 |
| HIGHTOWERS PETROLEUM CO | 16.57 | 1/3/2023 | 1/4/2023 | 1/12/2023 | 1.29 | 7.42 | 8.71 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 2.57 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.42 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.35 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.42 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.44 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 265.48 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.42 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24.65 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.42 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 122.02 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.40 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.33 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.41 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,692.03 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.44 | 8.22 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 118.31 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,033.05 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.20% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 16.04 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.40 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.85 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.40 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.72 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.44 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.78 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,027.45 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.20% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 187.40 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.40 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.57 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.74 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 121.77 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.19 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 315.46 | 1/5/2023 | 1/6/2023 | 1/12/2023 | 1.31 | 5.39 | 6.69 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.43 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.38 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.14 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,073.04 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.21% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 118.90 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,927.03 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.20% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 187.73 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.57 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.13 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 315.46 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.15 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,950.61 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.55 | 9.27 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 187.78 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.55 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.26 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.25 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.73 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.58 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.55 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.42 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.55 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.38 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.43 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.12 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.67 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.23 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.26 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.53 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.71 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 118.54 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,125.46 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.20% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 118.51 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.35 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.38 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.09 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 315.17 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,033.05 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.20% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 316.55 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.77 | 9.45 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.15 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.75 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 315.71 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.12 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.41 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.34 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.48 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,276.59 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.21% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 7.74 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.52 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 192.95 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.53 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.12 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,026.06 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.21% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 16.37 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.32 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,671.87 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 16.11 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.80 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,167.47 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.20% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 116.87 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.65 | 16.70 | 17.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 59.51 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.65 | 14.71 | 15.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.27 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.79 | 13.41 | 14.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.39 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.80 | 13.41 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.63 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.80 | 13.41 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.66 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.81 | 12.38 | 13.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.21 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.80 | 13.41 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.01 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.81 | 12.38 | 13.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.55 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.81 | 12.38 | 13.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.16 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.80 | 12.40 | 13.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.24 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.80 | 16.39 | 17.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.51 | 1/5/2023 | 1/6/2023 | 1/19/2023 | 1.31 | 12.39 | 13.69 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.42 | 1/5/2023 | 1/6/2023 | 1/19/2023 | 1.31 | 12.39 | 13.69 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.72 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.73 | 15.54 | 16.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.89 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.73 | 15.54 | 16.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.97 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.73 | 15.54 | 16.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.75 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.73 | 15.54 | 16.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.06 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.73 | 15.54 | 16.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.12 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.78 | 15.45 | 16.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 178.68 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.78 | 15.45 | 16.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.93 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.78 | 15.44 | 16.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 175.01 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.80 | 16.41 | 17.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.11 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.78 | 14.43 | 15.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.47 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.80 | 16.40 | 17.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.07 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.80 | 16.40 | 17.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.73 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.43 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.85 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.43 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.01 | 1/4/2023 | 1/4/2023 | 1/19/2023 | 0.79 | 14.43 | 15.21 | 0.00% | 0.000 |
| CERES SOLUTIONS | 116.06 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.49 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.56 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.55 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.56 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 503.87 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.00 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.33 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 491.64 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.15 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 188.48 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,763.74 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.22% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 16.51 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.72 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.16 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.15 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.82 | 9.37 | 10.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.15 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.49 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.75 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.33 | 1/9/2023 | 1/10/2023 | 1/19/2023 | 1.26 | 8.49 | 9.74 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,284.85 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.23% | 0.019 |
| HIGHTOWERS PETROLEUM CO | 120.08 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.54 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.09 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,853.31 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 118.31 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.35 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.53 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,655.56 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.21% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 7.57 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.71 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/9/2023 | 1/11/2023 | 1/19/2023 | 1.70 | 7.60 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,631.62 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.21% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 16.18 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.24 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.08 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 121.51 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.74 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.31 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,493.91 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.21% | 0.021 |
| HIGHTOWERS PETROLEUM CO | 117.03 | 1/9/2023 | 1/10/2023 | 1/19/2023 | 1.26 | 8.48 | 9.74 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,038.67 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 186.33 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.01 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.51 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 493.00 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.20 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.47 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,956.62 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,947.51 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 16.16 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.10 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.21 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.76 | 7.49 | 8.24 | 0.00% | 0.000 |
| CERES SOLUTIONS | 7.37 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.70 | 8.61 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 70.32 | 1/9/2023 | 1/9/2023 | 1/20/2023 | 0.81 | 10.37 | 11.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.51 | 1/10/2023 | 1/10/2023 | 1/20/2023 | 0.76 | 9.48 | 10.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.78 | 1/9/2023 | 1/10/2023 | 1/20/2023 | 1.26 | 9.48 | 10.74 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.89 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.70 | 8.61 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 67.89 | 1/10/2023 | 1/10/2023 | 1/20/2023 | 0.76 | 9.48 | 10.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.35 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.70 | 8.61 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.80 | 1/9/2023 | 1/11/2023 | 1/20/2023 | 1.70 | 8.60 | 10.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 70.45 | 1/2/2023 | 1/2/2023 | 1/20/2023 | 0.80 | 17.41 | 18.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 70.52 | 1/2/2023 | 1/2/2023 | 1/20/2023 | 0.80 | 17.39 | 18.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 70.45 | 1/2/2023 | 1/2/2023 | 1/20/2023 | 0.80 | 17.39 | 18.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.70 | 1/2/2023 | 1/2/2023 | 1/20/2023 | 0.80 | 17.39 | 18.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.66 | 1/3/2023 | 1/3/2023 | 1/20/2023 | 0.78 | 16.45 | 17.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 70.47 | 1/3/2023 | 1/3/2023 | 1/20/2023 | 0.78 | 16.45 | 17.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.70 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.78 | 15.44 | 16.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.57 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.79 | 15.43 | 16.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.65 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.79 | 15.42 | 16.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 69.68 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.79 | 15.42 | 16.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.80 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.79 | 15.42 | 16.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.72 | 1/5/2023 | 1/5/2023 | 1/20/2023 | 0.79 | 14.41 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.89 | 1/5/2023 | 1/5/2023 | 1/20/2023 | 0.80 | 14.41 | 15.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.77 | 1/6/2023 | 1/6/2023 | 1/20/2023 | 0.81 | 13.38 | 14.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 70.30 | 1/9/2023 | 1/9/2023 | 1/20/2023 | 0.81 | 10.38 | 11.19 | 0.00% | 0.000 |
| CERES SOLUTIONS | 25,160.94 | 1/12/2023 | 1/12/2023 | 1/23/2023 | 0.73 | 10.54 | 11.27 | 0.23% | 0.026 |
| CERES SOLUTIONS | 15.74 | 1/13/2023 | 1/13/2023 | 1/23/2023 | 0.73 | 9.54 | 10.27 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| CERES SOLUTIONS | 182.75 | 1/13/2023 | 1/13/2023 | 1/23/2023 | 0.73 | 9.54 | 10.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 25,754.66 | 1/14/2023 | 1/14/2023 | 1/23/2023 | 0.73 | 8.53 | 9.27 | 0.24% | 0.022 |
| CERES SOLUTIONS | 25,758.15 | 1/14/2023 | 1/14/2023 | 1/23/2023 | 0.73 | 8.53 | 9.27 | 0.24% | 0.022 |
| CERES SOLUTIONS | 7.37 | 1/14/2023 | 1/14/2023 | 1/23/2023 | 0.73 | 8.53 | 9.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 183.07 | 1/14/2023 | 1/14/2023 | 1/23/2023 | 0.73 | 8.53 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.13 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.39 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,164.02 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.23% | 0.026 |
| HIGHTOWERS PETROLEUM CO | 7.58 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.42 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.85 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 79.02 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,400.19 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.24% | 0.029 |
| HIGHTOWERS PETROLEUM CO | 186.13 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 489.36 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 495.09 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 188.83 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.46 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,187.34 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.23% | 0.026 |
| HIGHTOWERS PETROLEUM CO | 16.18 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 488.58 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 187.63 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,664.62 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.23% | 0.028 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.95 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.18 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.55 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.45 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.06 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.33 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.73 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.01 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.70 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.89 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.13 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.78 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.93 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.56 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.90 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,599.97 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.79 | 11.41 | 12.21 | 0.24% | 0.029 |
| HIGHTOWERS PETROLEUM CO | 494.04 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.79 | 11.41 | 12.21 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 189.73 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.79 | 11.41 | 12.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.73 | 8.53 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.73 | 8.53 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.75 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.73 | 8.53 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.63 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 505.89 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.88 | 1/13/2023 | 1/14/2023 | 1/26/2023 | 1.30 | 11.41 | 12.70 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.15 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.73 | 8.53 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.44 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.73 | 8.53 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 194.28 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.45 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.58 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,628.43 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.25% | 0.021 |
| HIGHTOWERS PETROLEUM CO | 489.23 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.67 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.31 | 1/13/2023 | 1/14/2023 | 1/26/2023 | 1.30 | 11.41 | 12.70 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.24 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.47 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.63 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 505.70 | 1/20/2023 | 1/20/2023 | 1/26/2023 | 0.76 | 5.48 | 6.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 191.74 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.10 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,186.93 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.24% | 0.030 |
| HIGHTOWERS PETROLEUM CO | 505.37 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 192.83 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.77 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 187.75 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.12 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.76 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.88 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 182.80 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 113.34 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.72 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.25 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.58 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.23 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.71 | 9.57 | 10.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 191.62 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,648.71 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.24% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 187.99 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.12 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.15 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 491.18 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,171.44 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.24% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 16.12 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.30 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.32 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,353.72 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.24% | 0.024 |
| HIGHTOWERS PETROLEUM CO | 186.70 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.38 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 478.55 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 503.29 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,485.28 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.24% | 0.024 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.63 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.27 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,177.41 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.24% | 0.023 |
| HIGHTOWERS PETROLEUM CO | 193.10 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 504.85 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.43 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.72 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 489.29 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.31 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,438.58 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.24% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 26,286.11 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.25% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 186.55 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.13 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.26 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.85 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.23 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 491.90 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,261.78 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.24% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 7.56 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.04 | 1/13/2023 | 1/14/2023 | 1/26/2023 | 1.29 | 11.41 | 12.71 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 492.61 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.03 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.48 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| CERES SOLUTIONS | 182.75 | 1/16/2023 | 1/16/2023 | 1/30/2023 | 0.73 | 13.53 | 14.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 25,719.71 | 1/16/2023 | 1/16/2023 | 1/30/2023 | 0.73 | 13.53 | 14.27 | 0.24% | 0.034 |
| CERES SOLUTIONS | 7.36 | 1/16/2023 | 1/16/2023 | 1/30/2023 | 0.73 | 13.53 | 14.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 25,768.64 | 1/16/2023 | 1/16/2023 | 1/30/2023 | 0.73 | 13.53 | 14.27 | 0.24% | 0.034 |
| HIGHTOWERS PETROLEUM CO | 29.20 | 5/10/2023 | 5/10/2023 | 5/18/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 112.62 | 5/11/2023 | 5/11/2023 | 5/18/2023 | 0.75 | 6.50 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.34 | 5/11/2023 | 5/11/2023 | 5/18/2023 | 0.75 | 6.50 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.31 | 4/5/2023 | 4/5/2023 | 4/13/2023 | 0.79 | 7.41 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 8.00 | 4/6/2023 | 4/6/2023 | 4/13/2023 | 0.62 | 6.75 | 7.38 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 17.12 | 4/6/2023 | 4/6/2023 | 4/13/2023 | 0.62 | 6.75 | 7.38 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.22 | 4/14/2023 | 4/14/2023 | 4/20/2023 | 0.76 | 5.47 | 6.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.63 | 4/14/2023 | 4/14/2023 | 4/20/2023 | 0.76 | 5.47 | 6.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 4/12/2023 | 4/12/2023 | 4/20/2023 | 0.70 | 7.59 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.44 | 4/17/2023 | 4/17/2023 | 4/27/2023 | 0.77 | 9.47 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.41 | 4/17/2023 | 4/17/2023 | 4/27/2023 | 0.77 | 9.47 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 455.20 | 4/18/2023 | 4/18/2023 | 4/27/2023 | 0.68 | 8.64 | 9.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.03 | 4/18/2023 | 4/18/2023 | 4/27/2023 | 0.68 | 8.64 | 9.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.96 | 4/26/2023 | 4/26/2023 | 5/4/2023 | 0.67 | 7.67 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.27 | 4/26/2023 | 4/26/2023 | 5/4/2023 | 0.67 | 7.67 | 8.33 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 29.33 | 4/26/2023 | 4/26/2023 | 5/4/2023 | 0.67 | 7.67 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 20,188.19 | 4/26/2023 | 4/26/2023 | 5/4/2023 | 0.67 | 7.67 | 8.33 | 0.19% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 16.05 | 4/26/2023 | 4/26/2023 | 5/4/2023 | 0.67 | 7.67 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,337.43 | 3/15/2023 | 3/15/2023 | 3/23/2023 | 0.77 | 7.46 | 8.23 | 0.20% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 16.16 | 3/22/2023 | 3/22/2023 | 3/30/2023 | 0.75 | 7.49 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.03 | 3/29/2023 | 3/29/2023 | 4/6/2023 | 0.66 | 7.69 | 8.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.22 | 2/1/2023 | 2/1/2023 | 2/9/2023 | 0.67 | 7.66 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.57 | 2/1/2023 | 2/1/2023 | 2/9/2023 | 0.67 | 7.66 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 114.93 | 7/14/2022 | 7/14/2022 | 2/9/2023 | 0.79 | 209.43 | 210.21 | 0.00% | 0.002 |
| HIGHTOWERS PETROLEUM CO | 115.51 | 9/15/2022 | 9/15/2022 | 2/9/2023 | 0.76 | 146.48 | 147.24 | 0.00% | 0.002 |
| HIGHTOWERS PETROLEUM CO | 115.41 | 9/29/2022 | 9/29/2022 | 2/9/2023 | 0.63 | 132.74 | 133.37 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 115.94 | 10/13/2022 | 10/13/2022 | 2/9/2023 | 0.72 | 118.56 | 119.28 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 123.64 | 10/13/2022 | 10/13/2022 | 2/9/2023 | 0.72 | 118.56 | 119.28 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 115.77 | 10/24/2022 | 10/24/2022 | 2/9/2023 | 0.78 | 107.45 | 108.22 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 115.68 | 10/27/2022 | 10/27/2022 | 2/9/2023 | 0.80 | 104.40 | 105.20 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.06 | 11/16/2022 | 11/16/2022 | 2/9/2023 | 0.80 | 84.39 | 85.20 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.22 | 12/14/2022 | 12/14/2022 | 2/9/2023 | 0.76 | 56.48 | 57.24 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 115.34 | 6/16/2022 | 6/16/2022 | 2/9/2023 | 0.71 | 237.58 | 238.29 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 115.40 | 6/22/2022 | 6/22/2022 | 2/9/2023 | 0.77 | 231.45 | 232.23 | 0.00% | 0.002 |
| HIGHTOWERS PETROLEUM CO | 116.14 | 5/9/2022 | 5/9/2022 | 2/9/2023 | 0.64 | 275.71 | 276.36 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 116.25 | 5/11/2022 | 5/11/2022 | 2/9/2023 | 0.76 | 273.47 | 274.24 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 116.20 | 5/19/2022 | 5/19/2022 | 2/9/2023 | 0.72 | 265.56 | 266.28 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 125.44 | 12/25/2022 | 12/25/2022 | 2/9/2023 | 0.71 | 45.59 | 46.29 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 125.07 | 12/26/2022 | 12/26/2022 | 2/9/2023 | 0.71 | 44.58 | 45.29 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 124.98 | 12/26/2022 | 12/26/2022 | 2/9/2023 | 0.71 | 44.58 | 45.29 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 124.98 | 12/26/2022 | 12/26/2022 | 2/9/2023 | 0.71 | 44.57 | 45.29 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 124.74 | 12/27/2022 | 12/27/2022 | 2/9/2023 | 0.72 | 43.56 | 44.28 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 117.69 | 12/28/2022 | 12/28/2022 | 2/9/2023 | 0.73 | 42.55 | 43.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.67 | 12/29/2022 | 12/29/2022 | 2/9/2023 | 0.74 | 41.52 | 42.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 124.28 | 12/30/2022 | 12/30/2022 | 2/9/2023 | 0.74 | 40.51 | 41.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.30 | 12/30/2022 | 12/30/2022 | 2/9/2023 | 0.75 | 40.51 | 41.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.45 | 2/8/2023 | 2/8/2023 | 2/16/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 2/15/2023 | 2/15/2023 | 2/23/2023 | 0.76 | 7.47 | 8.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 50.79 | 8/9/2023 | 8/9/2023 | 8/17/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 449.33 | 8/30/2023 | 8/30/2023 | 9/11/2023 | 0.79 | 11.43 | 12.21 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 26,133.61 | 9/6/2023 | 9/6/2023 | 9/14/2023 | 0.81 | 7.38 | 8.19 | 0.24% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 7.42 | 9/6/2023 | 9/6/2023 | 9/14/2023 | 0.81 | 7.38 | 8.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 450.97 | 9/13/2023 | 9/13/2023 | 9/21/2023 | 0.72 | 7.56 | 8.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.54 | 9/13/2023 | 9/13/2023 | 9/21/2023 | 0.72 | 7.56 | 8.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.44 | 9/27/2023 | 9/27/2023 | 10/5/2023 | 0.82 | 7.36 | 8.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.44 | 9/27/2023 | 9/27/2023 | 10/5/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.93 | 9/27/2023 | 9/27/2023 | 10/5/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 11/1/2023 | 11/1/2023 | 11/9/2023 | 0.76 | 7.47 | 8.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 11/1/2023 | 11/1/2023 | 11/9/2023 | 0.76 | 7.47 | 8.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.36 | 11/1/2023 | 11/1/2023 | 11/9/2023 | 0.82 | 7.35 | 8.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 11/9/2023 | 11/9/2023 | 11/16/2023 | 0.72 | 6.56 | 7.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 11/9/2023 | 11/9/2023 | 11/16/2023 | 0.72 | 6.56 | 7.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,352.27 | 11/8/2023 | 11/8/2023 | 11/17/2023 | 0.61 | 8.77 | 9.39 | 0.24% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 116.25 | 11/8/2023 | 11/8/2023 | 11/17/2023 | 0.81 | 8.38 | 9.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 20,212.07 | 12/1/2023 | 12/1/2023 | 12/7/2023 | 0.71 | 5.58 | 6.29 | 0.19% | 0.012 |
| HIGHTOWERS PETROLEUM CO | 29.23 | 12/1/2023 | 12/1/2023 | 12/7/2023 | 0.72 | 5.56 | 6.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.23 | 12/4/2023 | 12/4/2023 | 12/14/2023 | 0.54 | 9.91 | 10.46 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.43 | 12/4/2023 | 12/4/2023 | 12/14/2023 | 0.53 | 9.94 | 10.47 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 12/5/2023 | 12/5/2023 | 12/14/2023 | 0.66 | 8.67 | 9.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.48 | 12/5/2023 | 12/5/2023 | 12/14/2023 | 0.74 | 8.51 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.23 | 12/5/2023 | 12/5/2023 | 12/14/2023 | 0.74 | 8.51 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,499.92 | 12/6/2023 | 12/6/2023 | 12/14/2023 | 0.74 | 7.53 | 8.26 | 0.17% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 460.10 | 12/6/2023 | 12/6/2023 | 12/14/2023 | 0.74 | 7.53 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.05 | 12/6/2023 | 12/6/2023 | 12/14/2023 | 0.81 | 7.38 | 8.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.63 | 12/6/2023 | 12/6/2023 | 12/14/2023 | 0.81 | 7.38 | 8.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.11 | 12/7/2023 | 12/7/2023 | 12/14/2023 | 0.73 | 6.54 | 7.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.72 | 12/7/2023 | 12/7/2023 | 12/14/2023 | 0.73 | 6.54 | 7.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.05 | 12/7/2023 | 12/7/2023 | 12/14/2023 | 0.80 | 6.39 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.05 | 12/8/2023 | 12/8/2023 | 12/14/2023 | 0.77 | 5.46 | 6.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.21 | 12/8/2023 | 12/8/2023 | 12/14/2023 | 0.92 | 5.15 | 6.08 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.33 | 11/10/2023 | 11/10/2023 | 11/20/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.22 | 11/10/2023 | 11/10/2023 | 11/20/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.60 | 11/1/2023 | 11/1/2023 | 11/21/2023 | 0.76 | 19.47 | 20.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.53 | 11/9/2023 | 11/9/2023 | 11/21/2023 | 0.80 | 11.40 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.27 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.84 | 8.32 | 9.16 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.44 | 11/14/2023 | 11/14/2023 | 11/22/2023 | 0.78 | 7.45 | 8.22 | 0.00% | 0.000 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 7.51 | 11/14/2023 | 11/14/2023 | 11/22/2023 | 0.78 | 7.45 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.05 | 11/17/2023 | 11/17/2023 | 11/22/2023 | 0.61 | 4.78 | 5.39 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.33 | 11/17/2023 | 11/17/2023 | 11/22/2023 | 0.61 | 4.78 | 5.39 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.72 | 11/21/2023 | 11/21/2023 | 11/30/2023 | 0.80 | 8.39 | 9.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.73 | 11/21/2023 | 11/21/2023 | 11/30/2023 | 0.85 | 8.29 | 9.15 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.48 | 11/20/2023 | 11/20/2023 | 11/30/2023 | 0.79 | 9.43 | 10.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 186.88 | 11/20/2023 | 11/20/2023 | 11/30/2023 | 0.79 | 9.43 | 10.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,090.19 | 11/20/2023 | 11/20/2023 | 11/30/2023 | 0.71 | 9.57 | 10.29 | 0.20% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 11/29/2023 | 11/29/2023 | 12/7/2023 | 0.62 | 7.77 | 8.38 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.63 | 11/30/2023 | 11/30/2023 | 12/7/2023 | 0.77 | 6.46 | 7.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,850.01 | 12/27/2023 | 12/27/2023 | 1/5/2024 | 0.76 | 8.48 | 9.24 | 0.18% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 454.54 | 12/20/2023 | 12/20/2023 | 1/5/2024 | 0.84 | 15.33 | 16.16 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 16.08 | 12/20/2023 | 12/20/2023 | 1/5/2024 | 0.84 | 15.33 | 16.16 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.46 | 10/11/2023 | 10/11/2023 | 10/19/2023 | 0.64 | 7.73 | 8.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.81 | 10/18/2023 | 10/18/2023 | 10/26/2023 | 0.65 | 7.70 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,103.04 | 10/25/2023 | 10/25/2023 | 11/2/2023 | 0.73 | 7.55 | 8.27 | 0.22% | 0.019 |
| HIGHTOWERS PETROLEUM CO | 17,846.24 | 7/5/2023 | 7/5/2023 | 7/13/2023 | 0.67 | 7.66 | 8.33 | 0.17% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 15.85 | 7/5/2023 | 7/5/2023 | 7/13/2023 | 0.67 | 7.66 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 448.06 | 7/5/2023 | 7/5/2023 | 7/13/2023 | 0.67 | 7.66 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.83 | 7/12/2023 | 7/12/2023 | 7/20/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.89 | 7/19/2023 | 7/19/2023 | 7/27/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 448.06 | 7/19/2023 | 7/19/2023 | 7/27/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,150.87 | 7/26/2023 | 7/26/2023 | 8/3/2023 | 0.75 | 7.51 | 8.25 | 0.21% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 448.73 | 7/26/2023 | 7/26/2023 | 8/3/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.29 | 5/16/2023 | 5/16/2023 | 5/25/2023 | 0.63 | 8.75 | 9.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 5/17/2023 | 5/17/2023 | 5/25/2023 | 0.63 | 7.74 | 8.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.98 | 5/17/2023 | 5/17/2023 | 5/25/2023 | 0.63 | 7.74 | 8.37 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.93 | 5/18/2023 | 5/18/2023 | 5/25/2023 | 0.74 | 6.52 | 7.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.95 | 5/19/2023 | 5/19/2023 | 6/1/2023 | 0.69 | 12.62 | 13.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 20,143.73 | 5/19/2023 | 5/19/2023 | 6/1/2023 | 0.69 | 12.62 | 13.31 | 0.19% | 0.025 |
| HIGHTOWERS PETROLEUM CO | 7.47 | 5/31/2023 | 5/31/2023 | 6/8/2023 | 0.67 | 7.67 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 449.58 | 6/12/2023 | 6/12/2023 | 6/22/2023 | 0.69 | 9.63 | 10.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.18 | 6/12/2023 | 6/12/2023 | 6/22/2023 | 0.69 | 9.63 | 10.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 449.39 | 6/12/2023 | 6/12/2023 | 6/22/2023 | 0.69 | 9.63 | 10.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,477.44 | 6/14/2023 | 6/14/2023 | 6/22/2023 | 0.64 | 7.72 | 8.36 | 0.17% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 114.93 | 6/14/2023 | 6/14/2023 | 6/22/2023 | 0.64 | 7.72 | 8.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.92 | 6/14/2023 | 6/14/2023 | 6/22/2023 | 0.64 | 7.72 | 8.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.43 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.65 | 6.71 | 7.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.93 | 6/21/2023 | 6/21/2023 | 6/29/2023 | 0.68 | 7.64 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.35 | 6/21/2023 | 6/21/2023 | 6/29/2023 | 0.68 | 7.64 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.43 | 6/21/2023 | 6/21/2023 | 6/29/2023 | 0.68 | 7.64 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 450.60 | 6/28/2023 | 6/28/2023 | 7/6/2023 | 0.71 | 7.58 | 8.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.05 | 6/28/2023 | 6/28/2023 | 7/6/2023 | 0.71 | 7.58 | 8.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 448.49 | 6/28/2023 | 6/28/2023 | 7/6/2023 | 0.66 | 7.69 | 8.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.86 | 6/28/2023 | 6/28/2023 | 7/6/2023 | 0.66 | 7.69 | 8.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,709.01 | 6/1/2023 | 6/1/2023 | 6/8/2023 | 0.66 | 6.67 | 7.34 | 0.17% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 29.03 | 6/1/2023 | 6/1/2023 | 6/8/2023 | 0.66 | 6.67 | 7.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.45 | 6/1/2023 | 6/1/2023 | 6/8/2023 | 0.67 | 6.67 | 7.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,553.39 | 6/2/2023 | 6/2/2023 | 6/8/2023 | 0.68 | 5.64 | 6.32 | 0.17% | 0.011 |
| HIGHTOWERS PETROLEUM CO | 449.33 | 6/2/2023 | 6/2/2023 | 6/8/2023 | 0.68 | 5.64 | 6.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.03 | 6/6/2023 | 6/6/2023 | 6/15/2023 | 0.66 | 8.67 | 9.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.92 | 6/7/2023 | 6/8/2023 | 6/15/2023 | 1.18 | 6.64 | 7.82 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 450.42 | 6/8/2023 | 6/8/2023 | 6/15/2023 | 0.68 | 6.64 | 7.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 448.85 | 6/7/2023 | 6/8/2023 | 6/15/2023 | 1.18 | 6.64 | 7.82 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 114.99 | 6/7/2023 | 6/8/2023 | 6/15/2023 | 1.18 | 6.64 | 7.82 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,696.18 | 6/7/2023 | 6/8/2023 | 6/15/2023 | 1.18 | 6.64 | 7.82 | 0.17% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 18,818.91 | 6/6/2023 | 6/6/2023 | 6/15/2023 | 0.66 | 8.67 | 9.34 | 0.18% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 7.42 | 6/6/2023 | 6/6/2023 | 6/15/2023 | 0.66 | 8.67 | 9.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.88 | 6/6/2023 | 6/6/2023 | 6/15/2023 | 0.66 | 8.67 | 9.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.14 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.65 | 9.70 | 10.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,999.60 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.64 | 8.71 | 9.36 | 0.23% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 395.29 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.64 | 8.71 | 9.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.88 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.64 | 8.71 | 9.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,074.49 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.65 | 7.71 | 8.35 | 0.21% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.90 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.75 | 5.49 | 6.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.43 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.77 | 9.45 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.13 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 317.02 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 317.18 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.57 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,635.07 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.22% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 324.87 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 121.78 | 1/3/2023 | 1/4/2023 | 1/12/2023 | 1.29 | 7.42 | 8.71 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 1.20 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.42 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.18 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.91 | 12/31/2022 | 1/2/2023 | 1/12/2023 | 1.79 | 9.41 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.21 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.41 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,628.95 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.41 | 10.20 | 0.22% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 16.11 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.15 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.45 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.14 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.44 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.85 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.44 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.60 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.78 | 8.44 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.08 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.42 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 4.69 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.42 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 99.43 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.42 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 158.03 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.42 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 321.47 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.40 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 191.35 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.40 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 121.64 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.41 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.03 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,005.05 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.20% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 21,322.57 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.40 | 6.20 | 0.20% | 0.012 |
| HIGHTOWERS PETROLEUM CO | 15.63 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.40 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 114.86 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.40 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.48 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.40 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,051.45 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.40 | 10.20 | 0.22% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.40 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,703.55 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.44 | 8.22 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 121.17 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.50 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.40 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.71 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.40 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 192.75 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.40 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.07 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.40 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.14 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.13 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.56 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.39 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,694.91 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 317.60 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.80 | 5.39 | 6.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.76 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.64 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,632.01 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.22% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.42 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.18 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.98 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.72 | 1/2/2023 | 1/2/2023 | 1/12/2023 | 0.80 | 9.39 | 10.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.60 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.78 | 7.43 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.15 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.55 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.81 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.55 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.11 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.07 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.14 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.39 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,017.83 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 118.49 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.33 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.30 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.28 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.15 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.37 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.72 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.39 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 316.85 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,502.29 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.21% | 0.013 |
| HIGHTOWERS PETROLEUM CO | 23,020.89 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 7.53 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.79 | 6.41 | 7.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.08 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/6/2023 | 1/6/2023 | 1/12/2023 | 0.81 | 5.38 | 6.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,738.10 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.43 | 8.21 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 16.09 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.12 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/3/2023 | 1/3/2023 | 1/12/2023 | 0.73 | 8.54 | 9.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 121.69 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.40 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.10 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.34 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,089.06 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.20% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 188.40 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,694.91 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.20% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 29.38 | 1/4/2023 | 1/4/2023 | 1/12/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 317.48 | 1/5/2023 | 1/5/2023 | 1/12/2023 | 0.80 | 6.41 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 59.37 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.64 | 15.71 | 16.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.91 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.75 | 13.49 | 14.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 59.38 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.75 | 12.49 | 13.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.42 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.79 | 13.41 | 14.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.46 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.80 | 13.41 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.97 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.80 | 13.41 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 173.51 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.81 | 12.39 | 13.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.64 | 1/5/2023 | 1/5/2023 | 1/19/2023 | 0.80 | 13.40 | 14.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.20 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.81 | 12.38 | 13.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 178.01 | 1/6/2023 | 1/6/2023 | 1/19/2023 | 0.81 | 12.38 | 13.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.88 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.80 | 16.39 | 17.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.89 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.80 | 16.39 | 17.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.76 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.73 | 15.54 | 16.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.20 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.73 | 15.54 | 16.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.20 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.73 | 15.54 | 16.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 174.11 | 1/1/2023 | 1/1/2023 | 1/19/2023 | 0.77 | 17.46 | 18.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.65 | 1/3/2023 | 1/3/2023 | 1/19/2023 | 0.78 | 15.45 | 16.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.43 | 1/2/2023 | 1/2/2023 | 1/19/2023 | 0.80 | 16.41 | 17.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.21 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 493.20 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.73 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.40 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.52 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 491.51 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.75 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.97 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.56 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 492.09 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.08 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 488.71 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.06 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.45 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.57 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.31 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 489.62 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.09 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.85 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.09 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.03 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.15 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.65 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.80 | 1/9/2023 | 1/11/2023 | 1/19/2023 | 1.70 | 7.60 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.45 | 1/9/2023 | 1/11/2023 | 1/19/2023 | 1.70 | 7.60 | 9.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.92 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.09 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.51 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.32 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.76 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 30.27 | 1/9/2023 | 1/9/2023 | 1/19/2023 | 0.81 | 9.37 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.75 | 1/9/2023 | 1/10/2023 | 1/19/2023 | 1.26 | 8.48 | 9.74 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,990.05 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.21% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 117.27 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.10 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.08 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.17 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 118.15 | 1/10/2023 | 1/10/2023 | 1/19/2023 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,572.25 | 1/11/2023 | 1/11/2023 | 1/19/2023 | 0.70 | 7.60 | 8.30 | 0.22% | 0.018 |
| CERES SOLUTIONS | 24,300.63 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.69 | 8.61 | 9.31 | 0.23% | 0.021 |
| CERES SOLUTIONS | 24,287.45 | 1/11/2023 | 1/11/2023 | 1/20/2023 | 0.70 | 8.61 | 9.30 | 0.23% | 0.021 |
| HIGHTOWERS PETROLEUM CO | 68.87 | 1/9/2023 | 1/9/2023 | 1/20/2023 | 0.81 | 10.37 | 11.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 70.28 | 1/10/2023 | 1/10/2023 | 1/20/2023 | 0.76 | 9.48 | 10.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 69.87 | 12/31/2022 | 1/2/2023 | 1/20/2023 | 1.79 | 17.41 | 19.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 69.02 | 1/2/2023 | 1/2/2023 | 1/20/2023 | 0.80 | 17.41 | 18.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.42 | 1/3/2023 | 1/3/2023 | 1/20/2023 | 0.73 | 16.55 | 17.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.70 | 1/3/2023 | 1/3/2023 | 1/20/2023 | 0.73 | 16.54 | 17.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.69 | 1/3/2023 | 1/3/2023 | 1/20/2023 | 0.73 | 16.54 | 17.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.63 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.78 | 15.44 | 16.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.63 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.78 | 15.43 | 16.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.57 | 1/4/2023 | 1/4/2023 | 1/20/2023 | 0.79 | 15.42 | 16.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 57.58 | 1/5/2023 | 1/5/2023 | 1/20/2023 | 0.79 | 14.42 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.40 | 1/5/2023 | 1/5/2023 | 1/20/2023 | 0.79 | 14.41 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.36 | 1/5/2023 | 1/5/2023 | 1/20/2023 | 0.79 | 14.41 | 15.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.40 | 1/5/2023 | 1/5/2023 | 1/20/2023 | 0.80 | 14.41 | 15.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.77 | 1/6/2023 | 1/6/2023 | 1/20/2023 | 0.81 | 13.39 | 14.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 70.20 | 1/6/2023 | 1/6/2023 | 1/20/2023 | 0.81 | 13.38 | 14.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.80 | 1/9/2023 | 1/9/2023 | 1/20/2023 | 0.81 | 10.38 | 11.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.97 | 1/9/2023 | 1/9/2023 | 1/20/2023 | 0.81 | 10.38 | 11.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.95 | 1/9/2023 | 1/9/2023 | 1/20/2023 | 0.81 | 10.38 | 11.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 68.87 | 1/9/2023 | 1/9/2023 | 1/20/2023 | 0.81 | 10.37 | 11.19 | 0.00% | 0.000 |
| CERES SOLUTIONS | 182.75 | 1/12/2023 | 1/12/2023 | 1/23/2023 | 0.73 | 10.54 | 11.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 7.36 | 1/12/2023 | 1/12/2023 | 1/23/2023 | 0.73 | 10.54 | 11.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 28.72 | 1/13/2023 | 1/13/2023 | 1/23/2023 | 0.73 | 9.54 | 10.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 7.36 | 1/13/2023 | 1/13/2023 | 1/23/2023 | 0.73 | 9.54 | 10.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.45 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 484.67 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 187.59 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.22 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 8,363.84 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.08% | 0.010 |
| HIGHTOWERS PETROLEUM CO | 24,644.92 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.23% | 0.028 |
| HIGHTOWERS PETROLEUM CO | 24,807.48 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.23% | 0.026 |
| HIGHTOWERS PETROLEUM CO | 29.55 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 126.63 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 127.45 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.55 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,097.38 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.23% | 0.026 |
| HIGHTOWERS PETROLEUM CO | 116.75 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.52 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.89 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.17 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 190.13 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.16 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.57 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.16 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.42 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.27 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.02 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.78 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 488.97 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 488.38 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 16.21 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.57 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.53 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,024.07 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.23% | 0.026 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.42 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.45 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 491.44 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 7.55 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.78 | 10.43 | 11.22 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 24,841.95 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.23% | 0.028 |
| HIGHTOWERS PETROLEUM CO | 16.19 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.57 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.77 | 11.46 | 12.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.27 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 192.14 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.78 | 11.45 | 12.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.59 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.79 | 10.43 | 11.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.51 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.17 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 109.18 | 1/13/2023 | 1/14/2023 | 1/26/2023 | 1.29 | 11.41 | 12.71 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.60 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.79 | 11.41 | 12.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.10 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.55 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.34 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.55 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,452.14 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.73 | 8.53 | 9.27 | 0.24% | 0.022 |
| HIGHTOWERS PETROLEUM CO | 116.95 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 490.79 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.11 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 489.23 | 1/13/2023 | 1/14/2023 | 1/26/2023 | 1.30 | 11.41 | 12.70 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 120.50 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 176.66 | 1/16/2023 | 1/17/2023 | 1/26/2023 | 1.23 | 8.53 | 9.77 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.31 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,112.37 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.24% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 26,279.08 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.25% | 0.023 |
| HIGHTOWERS PETROLEUM CO | 16.59 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 504.79 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.52 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,751.32 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.24% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 16.08 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.40 | 1/20/2023 | 1/20/2023 | 1/26/2023 | 0.76 | 5.48 | 6.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 30.30 | 1/20/2023 | 1/20/2023 | 1/26/2023 | 0.76 | 5.48 | 6.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.72 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.63 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 194.08 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.33 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.44 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.41 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.30 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.31 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,211.30 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.24% | 0.023 |
| HIGHTOWERS PETROLEUM CO | 29.47 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.73 | 1/14/2023 | 1/14/2023 | 1/26/2023 | 0.80 | 11.40 | 12.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,143.52 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.53 | 9.26 | 0.24% | 0.023 |
| HIGHTOWERS PETROLEUM CO | 7.34 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,181.86 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.24% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.11 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.12 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 194.35 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.50 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.90 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.50 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.46 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 26,159.94 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.24% | 0.025 |
| HIGHTOWERS PETROLEUM CO | 488.58 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.72 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.47 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.55 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.73 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 193.30 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.75 | 6.49 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,559.49 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.24% | 0.025 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 1/17/2023 | 1/17/2023 | 1/26/2023 | 0.74 | 8.52 | 9.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 504.53 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 120.13 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.29 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.17 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.99 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.09 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.75 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 192.51 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 25,751.32 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.24% | 0.020 |
| HIGHTOWERS PETROLEUM CO | 188.90 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 492.03 | 1/19/2023 | 1/19/2023 | 1/26/2023 | 0.76 | 6.49 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 490.92 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.53 | 1/16/2023 | 1/16/2023 | 1/26/2023 | 0.72 | 9.56 | 10.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.29 | 1/18/2023 | 1/18/2023 | 1/26/2023 | 0.74 | 7.51 | 8.26 | 0.00% | 0.000 |
| CERES SOLUTIONS | 7.36 | 1/16/2023 | 1/16/2023 | 1/30/2023 | 0.73 | 13.53 | 14.27 | 0.00% | 0.000 |
| CERES SOLUTIONS | 28.70 | 1/16/2023 | 1/16/2023 | 1/30/2023 | 0.73 | 13.53 | 14.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.10 | 1/25/2023 | 1/25/2023 | 2/2/2023 | 0.71 | 7.58 | 8.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.50 | 1/25/2023 | 1/25/2023 | 2/2/2023 | 0.71 | 7.58 | 8.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 189.13 | 1/25/2023 | 1/25/2023 | 2/2/2023 | 0.71 | 7.58 | 8.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.48 | 5/3/2023 | 5/3/2023 | 5/11/2023 | 0.72 | 7.56 | 8.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.99 | 5/3/2023 | 5/3/2023 | 5/11/2023 | 0.72 | 7.56 | 8.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 19,187.20 | 5/3/2023 | 5/3/2023 | 5/11/2023 | 0.72 | 7.55 | 8.28 | 0.18% | 0.015 |
| HIGHTOWERS PETROLEUM CO | 453.45 | 5/3/2023 | 5/3/2023 | 5/11/2023 | 0.72 | 7.55 | 8.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.23 | 5/3/2023 | 5/3/2023 | 5/11/2023 | 0.72 | 7.55 | 8.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.21 | 5/10/2023 | 5/10/2023 | 5/18/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 20,657.62 | 5/10/2023 | 5/10/2023 | 5/18/2023 | 0.75 | 7.50 | 8.25 | 0.19% | 0.016 |
| HIGHTOWERS PETROLEUM CO | 16.01 | 5/11/2023 | 5/11/2023 | 5/18/2023 | 0.75 | 6.50 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.27 | 5/11/2023 | 5/11/2023 | 5/18/2023 | 0.75 | 6.50 | 7.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 4/5/2023 | 4/5/2023 | 4/13/2023 | 0.79 | 7.41 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.05 | 4/14/2023 | 4/14/2023 | 4/20/2023 | 0.76 | 5.47 | 6.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 455.20 | 4/12/2023 | 4/12/2023 | 4/20/2023 | 0.70 | 7.59 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,280.52 | 4/13/2023 | 4/13/2023 | 4/20/2023 | 0.76 | 6.47 | 7.24 | 0.21% | 0.015 |
| HIGHTOWERS PETROLEUM CO | 116.08 | 4/13/2023 | 4/13/2023 | 4/20/2023 | 0.76 | 6.47 | 7.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,872.69 | 4/17/2023 | 4/17/2023 | 4/27/2023 | 0.77 | 9.47 | 10.23 | 0.20% | 0.021 |
| HIGHTOWERS PETROLEUM CO | 21,866.87 | 4/17/2023 | 4/17/2023 | 4/27/2023 | 0.77 | 9.47 | 10.23 | 0.20% | 0.021 |
| HIGHTOWERS PETROLEUM CO | 16.05 | 4/17/2023 | 4/17/2023 | 4/27/2023 | 0.77 | 9.47 | 10.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 21,363.44 | 4/18/2023 | 4/18/2023 | 4/27/2023 | 0.68 | 8.64 | 9.32 | 0.20% | 0.019 |
| HIGHTOWERS PETROLEUM CO | 453.27 | 4/18/2023 | 4/18/2023 | 4/27/2023 | 0.68 | 8.64 | 9.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.44 | 4/19/2023 | 4/19/2023 | 4/27/2023 | 0.68 | 7.63 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.29 | 4/19/2023 | 4/19/2023 | 4/27/2023 | 0.68 | 7.63 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.07 | 4/19/2023 | 4/19/2023 | 4/27/2023 | 0.68 | 7.63 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,552.83 | 4/19/2023 | 4/19/2023 | 4/27/2023 | 0.68 | 7.63 | 8.32 | 0.21% | 0.017 |
| HIGHTOWERS PETROLEUM CO | 31.14 | 4/19/2023 | 4/19/2023 | 4/27/2023 | 0.68 | 7.63 | 8.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 457.80 | 3/15/2023 | 3/15/2023 | 3/23/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.10 | 3/22/2023 | 3/22/2023 | 3/30/2023 | 0.75 | 7.49 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.75 | 3/22/2023 | 3/22/2023 | 3/30/2023 | 0.75 | 7.49 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.03 | 3/22/2023 | 3/22/2023 | 3/30/2023 | 0.75 | 7.49 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.15 | 3/29/2023 | 3/29/2023 | 4/6/2023 | 0.66 | 7.69 | 8.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.65 | 3/29/2023 | 3/29/2023 | 4/6/2023 | 0.66 | 7.69 | 8.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.30 | 3/29/2023 | 3/29/2023 | 4/6/2023 | 0.66 | 7.69 | 8.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.51 | 2/1/2023 | 2/1/2023 | 2/9/2023 | 0.67 | 7.66 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.27 | 2/1/2023 | 2/1/2023 | 2/9/2023 | 0.67 | 7.66 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 115.43 | 6/14/2022 | 6/14/2022 | 2/9/2023 | 0.69 | 239.63 | 240.31 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 114.90 | 8/18/2022 | 8/18/2022 | 2/9/2023 | 0.79 | 174.42 | 175.21 | 0.00% | 0.002 |
| HIGHTOWERS PETROLEUM CO | 122.50 | 9/1/2022 | 9/1/2022 | 2/9/2023 | 0.72 | 160.56 | 161.28 | 0.00% | 0.002 |
| HIGHTOWERS PETROLEUM CO | 115.79 | 10/6/2022 | 10/6/2022 | 2/9/2023 | 0.69 | 125.62 | 126.31 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 123.47 | 10/24/2022 | 10/24/2022 | 2/9/2023 | 0.78 | 107.45 | 108.22 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.06 | 11/14/2022 | 11/14/2022 | 2/9/2023 | 0.75 | 86.50 | 87.25 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.17 | 12/13/2022 | 12/13/2022 | 2/9/2023 | 0.76 | 57.48 | 58.24 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 117.09 | 12/13/2022 | 12/13/2022 | 2/9/2023 | 0.76 | 57.48 | 58.24 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.78 | 12/14/2022 | 12/14/2022 | 2/9/2023 | 0.76 | 56.47 | 57.24 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.16 | 12/15/2022 | 12/15/2022 | 2/9/2023 | 0.76 | 55.47 | 56.24 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.03 | 12/16/2022 | 12/16/2022 | 2/9/2023 | 0.77 | 54.47 | 55.23 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 116.19 | 12/20/2022 | 12/20/2022 | 2/9/2023 | 0.72 | 50.56 | 51.28 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 122.87 | 6/16/2022 | 6/16/2022 | 2/9/2023 | 0.71 | 237.58 | 238.29 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 116.19 | 5/10/2022 | 5/10/2022 | 2/9/2023 | 0.74 | 274.53 | 275.26 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 116.14 | 5/11/2022 | 5/11/2022 | 2/9/2023 | 0.76 | 273.48 | 274.24 | 0.00% | 0.003 |
| HIGHTOWERS PETROLEUM CO | 117.63 | 12/28/2022 | 12/28/2022 | 2/9/2023 | 0.73 | 42.55 | 43.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.85 | 12/28/2022 | 12/28/2022 | 2/9/2023 | 0.73 | 42.54 | 43.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 117.57 | 12/28/2022 | 12/28/2022 | 2/9/2023 | 0.73 | 42.53 | 43.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 119.02 | 12/30/2022 | 12/30/2022 | 2/9/2023 | 0.75 | 40.50 | 41.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.46 | 2/8/2023 | 2/8/2023 | 2/16/2023 | 0.79 | 7.43 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 456.90 | 2/8/2023 | 2/8/2023 | 2/16/2023 | 0.79 | 7.42 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 188.28 | 2/15/2023 | 2/15/2023 | 2/23/2023 | 0.76 | 7.47 | 8.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,123.79 | 8/2/2023 | 8/2/2023 | 8/11/2023 | 0.72 | 8.56 | 9.28 | 0.23% | 0.021 |
| HIGHTOWERS PETROLEUM CO | 7.42 | 8/2/2023 | 8/2/2023 | 8/11/2023 | 0.72 | 8.56 | 9.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.42 | 8/2/2023 | 8/2/2023 | 8/11/2023 | 0.72 | 8.56 | 9.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 448.97 | 8/2/2023 | 8/2/2023 | 8/11/2023 | 0.72 | 8.56 | 9.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 12.78 | 8/9/2023 | 8/9/2023 | 8/17/2023 | 0.75 | 7.50 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.90 | 8/10/2023 | 8/10/2023 | 8/17/2023 | 0.77 | 6.46 | 7.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 10,762.32 | 8/9/2023 | 8/9/2023 | 8/17/2023 | 0.75 | 7.50 | 8.25 | 0.10% | 0.008 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| HIGHTOWERS PETROLEUM CO | 23,643.47 | 8/16/2023 | 8/16/2023 | 8/24/2023 | 0.64 | 7.72 | 8.36 | 0.22% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 28.96 | 8/16/2023 | 8/16/2023 | 8/24/2023 | 0.64 | 7.72 | 8.36 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.89 | 8/23/2023 | 8/23/2023 | 8/31/2023 | 0.65 | 7.70 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 23,928.63 | 8/23/2023 | 8/23/2023 | 8/31/2023 | 0.51 | 7.98 | 8.49 | 0.22% | 0.019 |
| HIGHTOWERS PETROLEUM CO | 5.99 | 8/23/2023 | 8/23/2023 | 8/31/2023 | 0.72 | 7.57 | 8.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 0.39 | 8/23/2023 | 8/23/2023 | 8/31/2023 | 0.72 | 7.57 | 8.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.42 | 8/30/2023 | 8/30/2023 | 9/7/2023 | 0.83 | 7.35 | 8.17 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.93 | 9/6/2023 | 9/6/2023 | 9/14/2023 | 0.81 | 7.38 | 8.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,496.91 | 9/20/2023 | 9/20/2023 | 9/28/2023 | 0.96 | 7.08 | 8.04 | 0.23% | 0.018 |
| HIGHTOWERS PETROLEUM CO | 15.93 | 9/27/2023 | 9/27/2023 | 10/5/2023 | 0.82 | 7.36 | 8.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 11/1/2023 | 11/1/2023 | 11/9/2023 | 0.82 | 7.35 | 8.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.28 | 11/1/2023 | 11/1/2023 | 11/9/2023 | 0.82 | 7.35 | 8.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.11 | 11/8/2023 | 11/8/2023 | 11/17/2023 | 0.61 | 8.77 | 9.39 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 11/8/2023 | 11/8/2023 | 11/17/2023 | 0.61 | 8.77 | 9.39 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.49 | 12/1/2023 | 12/1/2023 | 12/7/2023 | 0.71 | 5.58 | 6.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.33 | 12/4/2023 | 12/4/2023 | 12/14/2023 | 0.67 | 9.66 | 10.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.54 | 12/4/2023 | 12/4/2023 | 12/14/2023 | 0.53 | 9.94 | 10.47 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.13 | 12/4/2023 | 12/4/2023 | 12/14/2023 | 0.53 | 9.94 | 10.47 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 12/5/2023 | 12/5/2023 | 12/14/2023 | 0.66 | 8.67 | 9.34 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.66 | 12/6/2023 | 12/6/2023 | 12/14/2023 | 0.74 | 7.53 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 18,256.66 | 12/6/2023 | 12/6/2023 | 12/14/2023 | 0.81 | 7.38 | 8.19 | 0.17% | 0.014 |
| HIGHTOWERS PETROLEUM CO | 17,966.58 | 12/7/2023 | 12/7/2023 | 12/14/2023 | 0.73 | 6.54 | 7.27 | 0.17% | 0.012 |
| HIGHTOWERS PETROLEUM CO | 116.33 | 12/7/2023 | 12/7/2023 | 12/14/2023 | 0.80 | 6.39 | 7.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.87 | 11/10/2023 | 11/10/2023 | 11/20/2023 | 0.74 | 9.52 | 10.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,494.62 | 11/10/2023 | 11/10/2023 | 11/20/2023 | 0.81 | 9.38 | 10.19 | 0.23% | 0.023 |
| HIGHTOWERS PETROLEUM CO | 7.49 | 11/10/2023 | 11/10/2023 | 11/20/2023 | 0.81 | 9.38 | 10.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.58 | 11/9/2023 | 11/9/2023 | 11/21/2023 | 0.72 | 11.56 | 12.28 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.55 | 11/10/2023 | 11/10/2023 | 11/21/2023 | 0.74 | 10.52 | 11.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.78 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.76 | 8.47 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.53 | 11/15/2023 | 11/15/2023 | 11/22/2023 | 0.71 | 6.59 | 7.29 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.30 | 11/14/2023 | 11/14/2023 | 11/22/2023 | 0.78 | 7.45 | 8.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.72 | 11/14/2023 | 11/14/2023 | 11/22/2023 | 0.65 | 7.70 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 454.05 | 11/16/2023 | 11/16/2023 | 11/22/2023 | 0.75 | 5.50 | 6.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.33 | 11/17/2023 | 11/17/2023 | 11/22/2023 | 0.80 | 4.39 | 5.20 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,853.56 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.84 | 8.32 | 9.16 | 0.23% | 0.021 |
| HIGHTOWERS PETROLEUM CO | 115.77 | 11/21/2023 | 11/21/2023 | 11/30/2023 | 0.85 | 8.29 | 9.15 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 452.12 | 11/22/2023 | 11/22/2023 | 11/30/2023 | 0.79 | 7.41 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.14 | 11/22/2023 | 11/22/2023 | 11/30/2023 | 0.79 | 7.41 | 8.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.08 | 11/24/2023 | 11/24/2023 | 11/30/2023 | 0.68 | 5.65 | 6.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.16 | 11/24/2023 | 11/24/2023 | 11/30/2023 | 0.74 | 5.52 | 6.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 452.24 | 11/20/2023 | 11/20/2023 | 11/30/2023 | 0.79 | 9.43 | 10.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.15 | 11/20/2023 | 11/20/2023 | 11/30/2023 | 0.79 | 9.43 | 10.21 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 187.63 | 11/28/2023 | 11/28/2023 | 12/7/2023 | 0.77 | 8.47 | 9.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.06 | 11/28/2023 | 11/28/2023 | 12/7/2023 | 0.75 | 8.49 | 9.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.33 | 11/28/2023 | 11/28/2023 | 12/7/2023 | 0.75 | 8.49 | 9.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.05 | 11/29/2023 | 11/29/2023 | 12/7/2023 | 0.62 | 7.77 | 8.38 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.28 | 11/29/2023 | 11/29/2023 | 12/7/2023 | 0.62 | 7.77 | 8.38 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.50 | 11/30/2023 | 11/30/2023 | 12/7/2023 | 0.82 | 6.37 | 7.18 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.41 | 12/27/2023 | 12/27/2023 | 1/5/2024 | 0.78 | 8.44 | 9.22 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.51 | 12/20/2023 | 12/20/2023 | 1/5/2024 | 0.69 | 15.61 | 16.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.08 | 12/20/2023 | 12/20/2023 | 1/5/2024 | 0.69 | 15.61 | 16.31 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 453.81 | 12/27/2023 | 12/27/2023 | 1/5/2024 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 16.05 | 12/27/2023 | 12/27/2023 | 1/5/2024 | 0.76 | 8.48 | 9.24 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 24,684.44 | 10/4/2023 | 10/8/2023 | 10/12/2023 | 2.68 | 3.65 | 6.32 | 0.23% | 0.015 |
| HIGHTOWERS PETROLEUM CO | 115.06 | 10/4/2023 | 10/8/2023 | 10/12/2023 | 2.68 | 3.65 | 6.32 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 451.81 | 10/4/2023 | 10/4/2023 | 10/12/2023 | 0.58 | 7.84 | 8.42 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 22,572.26 | 10/11/2023 | 10/11/2023 | 10/23/2023 | 0.83 | 11.34 | 12.17 | 0.21% | 0.026 |
| HIGHTOWERS PETROLEUM CO | 452.24 | 10/11/2023 | 10/11/2023 | 10/23/2023 | 0.83 | 11.34 | 12.17 | 0.00% | 0.001 |
| HIGHTOWERS PETROLEUM CO | 29.15 | 10/11/2023 | 10/11/2023 | 10/23/2023 | 0.83 | 11.34 | 12.17 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 116.27 | 10/18/2023 | 10/18/2023 | 10/26/2023 | 0.65 | 7.70 | 8.35 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.14 | 10/19/2023 | 10/19/2023 | 10/26/2023 | 0.81 | 6.38 | 7.19 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.49 | 10/25/2023 | 10/25/2023 | 11/2/2023 | 0.73 | 7.55 | 8.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 29.21 | 10/25/2023 | 10/25/2023 | 11/2/2023 | 0.73 | 7.55 | 8.27 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.49 | 10/25/2023 | 10/25/2023 | 11/2/2023 | 0.74 | 7.52 | 8.26 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 114.82 | 7/5/2023 | 7/5/2023 | 7/13/2023 | 0.67 | 7.65 | 8.33 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 28.85 | 7/12/2023 | 7/12/2023 | 7/20/2023 | 0.77 | 7.46 | 8.23 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.42 | 7/26/2023 | 7/26/2023 | 8/3/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 15.87 | 7/26/2023 | 7/26/2023 | 8/3/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 114.96 | 7/26/2023 | 7/26/2023 | 8/3/2023 | 0.75 | 7.51 | 8.25 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 7.42 | 7/27/2023 | 7/27/2023 | 8/4/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |
| HIGHTOWERS PETROLEUM CO | 449.09 | 7/27/2023 | 7/27/2023 | 8/4/2023 | 0.70 | 7.61 | 8.30 | 0.00% | 0.000 |

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|---|---|
| $ 10,720,323.86 | 9.26 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**COAL PURCHASES**

Weighted Lead Time: 13.28 days

| Vendor Name | Invoice Amount | Period Beginning | Period End | Payment Date | Service Lead Time | Payment Lead Time | Total Lead Time | Weighting Factor | Dollar-Weighted Days |
|---|---|---|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) |
| ALLIANCE COAL LLC | $ 4.63 | 7/9/2023 | 7/21/2023 | 8/29/2023 | 6.75 | 38.51 | 45.25 | 0.0000% | 0.000 |
| ALLIANCE COAL LLC | 4.67 | 7/22/2023 | 8/4/2023 | 8/29/2023 | 7.27 | 24.46 | 31.73 | 0.0000% | 0.000 |
| ALLIANCE COAL LLC | 4.67 | 7/9/2023 | 7/20/2023 | 8/29/2023 | 6.25 | 39.51 | 45.75 | 0.0000% | 0.000 |
| ALLIANCE COAL LLC | 4.78 | 7/20/2023 | 8/4/2023 | 8/29/2023 | 8.15 | 24.70 | 32.85 | 0.0000% | 0.000 |
| ALLIANCE COAL LLC | 5.10 | 7/24/2023 | 8/26/2023 | 8/29/2023 | 17.17 | 2.65 | 19.83 | 0.0000% | 0.000 |
| ALLIANCE COAL LLC | 5.13 | 7/20/2023 | 8/5/2023 | 8/29/2023 | 8.77 | 23.45 | 32.23 | 0.0000% | 0.000 |
| ALLIANCE COAL LLC | 5.18 | 7/22/2023 | 8/9/2023 | 8/29/2023 | 9.68 | 19.63 | 29.32 | 0.0000% | 0.000 |
| ALLIANCE COAL LLC | 5.19 | 7/24/2023 | 8/25/2023 | 8/29/2023 | 16.67 | 3.66 | 20.33 | 0.0000% | 0.000 |
| ALLIANCE COAL LLC | 5.22 | 7/20/2023 | 8/3/2023 | 8/29/2023 | 7.71 | 25.57 | 33.29 | 0.0000% | 0.000 |
| ALLIANCE COAL LLC | 5.27 | 7/9/2023 | 7/21/2023 | 8/29/2023 | 6.75 | 38.51 | 45.25 | 0.0000% | 0.000 |
| ALLIANCE COAL LLC | 5.28 | 7/9/2023 | 7/19/2023 | 8/29/2023 | 5.74 | 40.51 | 46.26 | 0.0000% | 0.000 |
| ALLIANCE COAL LLC | 5.31 | 7/20/2023 | 8/5/2023 | 8/29/2023 | 8.77 | 23.45 | 32.23 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.07 | 7/7/2023 | 7/19/2023 | 8/14/2023 | 6.74 | 25.51 | 32.26 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.36 | 7/24/2023 | 8/7/2023 | 8/14/2023 | 7.65 | 6.70 | 14.35 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.37 | 7/25/2023 | 8/9/2023 | 8/14/2023 | 8.18 | 4.64 | 12.82 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.44 | 7/25/2023 | 8/6/2023 | 8/14/2023 | 6.78 | 7.45 | 14.22 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.47 | 7/31/2023 | 8/12/2023 | 8/14/2023 | 6.77 | 1.46 | 8.23 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.51 | 7/25/2023 | 8/19/2023 | 8/14/2023 | 13.21 | (5.42) | 7.79 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.54 | 7/17/2023 | 7/27/2023 | 8/14/2023 | 5.69 | 17.62 | 23.31 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.64 | 7/11/2023 | 8/13/2023 | 8/14/2023 | 17.27 | 0.45 | 17.73 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.71 | 7/6/2023 | 7/17/2023 | 8/14/2023 | 6.28 | 27.44 | 33.72 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.72 | 7/10/2023 | 7/31/2023 | 8/14/2023 | 11.21 | 13.58 | 24.79 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.75 | 7/25/2023 | 8/5/2023 | 8/14/2023 | 6.27 | 8.45 | 14.73 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.76 | 7/24/2023 | 8/8/2023 | 8/14/2023 | 8.15 | 5.69 | 13.85 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.78 | 7/6/2023 | 7/18/2023 | 8/14/2023 | 6.65 | 26.70 | 33.35 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.78 | 7/17/2023 | 7/28/2023 | 8/14/2023 | 6.19 | 16.62 | 22.81 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.81 | 7/24/2023 | 8/8/2023 | 8/14/2023 | 8.15 | 5.69 | 13.85 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.83 | 7/5/2023 | 7/17/2023 | 8/14/2023 | 6.78 | 27.44 | 34.22 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.85 | 7/31/2023 | 8/12/2023 | 8/14/2023 | 6.77 | 1.46 | 8.23 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.91 | 7/6/2023 | 7/20/2023 | 8/14/2023 | 7.75 | 24.51 | 32.25 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.94 | 7/25/2023 | 8/13/2023 | 8/14/2023 | 10.27 | 0.45 | 10.73 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.94 | 7/11/2023 | 7/27/2023 | 8/14/2023 | 8.69 | 17.62 | 26.31 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.95 | 7/25/2023 | 8/12/2023 | 8/14/2023 | 9.77 | 1.46 | 11.23 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.97 | 7/6/2023 | 7/15/2023 | 8/14/2023 | 5.25 | 29.50 | 34.75 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.97 | 7/7/2023 | 7/20/2023 | 8/14/2023 | 7.25 | 24.51 | 31.75 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.99 | 7/10/2023 | 8/27/2023 | 8/14/2023 | 24.67 | (13.35) | 11.33 | 0.0000% | 0.000 |
| KNIGHTHAWK | 19.99 | 7/5/2023 | 7/16/2023 | 8/14/2023 | 6.28 | 28.44 | 34.72 | 0.0000% | 0.000 |
| KNIGHTHAWK | 20.05 | 7/11/2023 | 8/7/2023 | 8/14/2023 | 14.15 | 6.70 | 20.85 | 0.0000% | 0.000 |
| KNIGHTHAWK | 20.07 | 7/10/2023 | 7/31/2023 | 8/14/2023 | 11.21 | 13.58 | 24.79 | 0.0000% | 0.000 |
| KNIGHTHAWK | 20.16 | 7/25/2023 | 8/8/2023 | 8/14/2023 | 7.65 | 5.69 | 13.35 | 0.0000% | 0.000 |
| KNIGHTHAWK | 20.19 | 7/25/2023 | 8/9/2023 | 8/14/2023 | 8.18 | 4.64 | 12.82 | 0.0000% | 0.000 |
| ALLIANCE COAL LLC | 27.94 | 3/11/2023 | 3/31/2023 | 4/14/2023 | 10.62 | 13.76 | 24.38 | 0.0000% | 0.000 |
| ALLIANCE COAL LLC | 31.40 | 3/12/2023 | 4/2/2023 | 4/14/2023 | 11.11 | 11.77 | 22.89 | 0.0000% | 0.000 |
| ALLIANCE COAL LLC | 31.85 | 3/11/2023 | 4/2/2023 | 4/14/2023 | 11.62 | 11.77 | 23.38 | 0.0000% | 0.000 |
| ALLIANCE COAL LLC | 31.86 | 3/11/2023 | 4/2/2023 | 4/14/2023 | 11.62 | 11.77 | 23.38 | 0.0000% | 0.000 |
| ALLIANCE COAL LLC | 31.90 | 3/11/2023 | 3/31/2023 | 4/14/2023 | 10.62 | 13.77 | 24.38 | 0.0000% | 0.000 |
| ALLIANCE COAL LLC | 50.61 | 8/20/2023 | 9/7/2023 | 9/14/2023 | 9.67 | 6.65 | 16.33 | 0.0001% | 0.000 |
| ALLIANCE COAL LLC | 51.18 | 8/11/2023 | 8/29/2023 | 9/14/2023 | 9.75 | 15.49 | 25.25 | 0.0001% | 0.000 |
| ALLIANCE COAL LLC | 51.58 | 8/7/2023 | 8/21/2023 | 9/14/2023 | 7.69 | 23.61 | 31.31 | 0.0001% | 0.000 |
| ALLIANCE COAL LLC | 52.64 | 8/20/2023 | 9/14/2023 | 9/14/2023 | 13.29 | (0.58) | 12.71 | 0.0001% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| ALLIANCE COAL LLC | 52.88 | 8/7/2023 | 8/21/2023 | 9/14/2023 | 7.69 | 23.61 | 31.31 | 0.0001% | 0.000 |
| ALLIANCE COAL LLC | 101.93 | 10/25/2023 | 11/19/2023 | 11/14/2023 | 13.20 | (5.40) | 7.80 | 0.0001% | 0.000 |
| ALLIANCE COAL LLC | 108.99 | 10/30/2023 | 11/17/2023 | 11/14/2023 | 9.70 | (3.40) | 6.30 | 0.0001% | 0.000 |
| ALLIANCE COAL LLC | 110.77 | 10/30/2023 | 11/16/2023 | 11/14/2023 | 9.17 | (2.34) | 6.83 | 0.0001% | 0.000 |
| ALLIANCE COAL LLC | 111.79 | 10/25/2023 | 11/20/2023 | 11/14/2023 | 13.78 | (6.57) | 7.22 | 0.0002% | 0.000 |
| ALLIANCE COAL LLC | 122.07 | 1/19/2023 | 2/5/2023 | 2/14/2023 | 9.12 | 8.77 | 17.88 | 0.0002% | 0.000 |
| ALLIANCE COAL LLC | 123.61 | 1/30/2023 | 2/6/2023 | 2/14/2023 | 4.18 | 7.64 | 11.82 | 0.0002% | 0.000 |
| ALLIANCE COAL LLC | 124.37 | 1/30/2023 | 2/7/2023 | 2/14/2023 | 4.68 | 6.63 | 11.32 | 0.0002% | 0.000 |
| ALLIANCE COAL LLC | 124.38 | 1/24/2023 | 2/5/2023 | 2/14/2023 | 6.62 | 8.77 | 15.38 | 0.0002% | 0.000 |
| ALLIANCE COAL LLC | 128.18 | 1/19/2023 | 2/6/2023 | 2/14/2023 | 9.68 | 7.64 | 17.32 | 0.0002% | 0.000 |
| ALLIANCE COAL LLC | 128.92 | 1/26/2023 | 2/7/2023 | 2/14/2023 | 6.68 | 6.63 | 13.32 | 0.0002% | 0.000 |
| ALLIANCE COAL LLC | 130.29 | 1/19/2023 | 2/5/2023 | 2/14/2023 | 9.12 | 8.77 | 17.88 | 0.0002% | 0.000 |
| ALLIANCE COAL LLC | 131.34 | 1/30/2023 | 2/8/2023 | 2/14/2023 | 5.17 | 5.66 | 10.83 | 0.0002% | 0.000 |
| ALLIANCE COAL LLC | 132.37 | 1/26/2023 | 2/8/2023 | 2/14/2023 | 7.17 | 5.66 | 12.83 | 0.0002% | 0.000 |
| ALLIANCE COAL LLC | 197.02 | 5/30/2023 | 6/7/2023 | 6/14/2023 | 4.62 | 6.77 | 11.38 | 0.0003% | 0.000 |
| ALLIANCE COAL LLC | 199.35 | 5/22/2023 | 5/28/2023 | 6/14/2023 | 3.65 | 16.70 | 20.35 | 0.0003% | 0.000 |
| ALLIANCE COAL LLC | 205.14 | 5/19/2023 | 5/29/2023 | 6/14/2023 | 5.63 | 15.74 | 21.37 | 0.0003% | 0.000 |
| ALLIANCE COAL LLC | 207.74 | 5/21/2023 | 5/29/2023 | 6/14/2023 | 4.63 | 15.74 | 20.37 | 0.0003% | 0.000 |
| ALLIANCE COAL LLC | 208.81 | 5/9/2023 | 5/24/2023 | 6/14/2023 | 8.12 | 20.77 | 28.88 | 0.0003% | 0.000 |
| ALLIANCE COAL LLC | 216.02 | 5/30/2023 | 6/7/2023 | 6/14/2023 | 4.62 | 6.77 | 11.38 | 0.0003% | 0.000 |
| ALLIANCE COAL LLC | 222.26 | 7/10/2023 | 8/7/2023 | 8/14/2023 | 14.65 | 6.70 | 21.35 | 0.0003% | 0.000 |
| ALLIANCE COAL LLC | 225.60 | 7/5/2023 | 7/16/2023 | 8/14/2023 | 6.28 | 28.44 | 34.72 | 0.0003% | 0.000 |
| ALLIANCE COAL LLC | 227.93 | 7/17/2023 | 7/27/2023 | 8/14/2023 | 5.69 | 17.62 | 23.31 | 0.0003% | 0.000 |
| ALLIANCE COAL LLC | 230.77 | 7/31/2023 | 8/14/2023 | 8/14/2023 | 7.78 | (0.55) | 7.22 | 0.0003% | 0.000 |
| ALLIANCE COAL LLC | 233.49 | 7/31/2023 | 8/13/2023 | 8/14/2023 | 7.27 | 0.45 | 7.73 | 0.0003% | 0.000 |
| ALLIANCE COAL LLC | 233.60 | 7/25/2023 | 8/13/2023 | 8/14/2023 | 10.27 | 0.45 | 10.73 | 0.0003% | 0.000 |
| ALLIANCE COAL LLC | 234.92 | 7/31/2023 | 8/25/2023 | 8/14/2023 | 13.15 | (11.30) | 1.85 | 0.0003% | 0.000 |
| ALLIANCE COAL LLC | 247.23 | 7/5/2023 | 7/22/2023 | 8/14/2023 | 9.25 | 22.50 | 31.75 | 0.0003% | 0.000 |
| KNIGHTHAWK | 311.45 | 5/30/2023 | 6/11/2023 | 6/29/2023 | 6.68 | 17.64 | 24.32 | 0.0004% | 0.000 |
| KNIGHTHAWK | 312.78 | 5/31/2023 | 6/10/2023 | 6/29/2023 | 5.68 | 18.65 | 24.32 | 0.0004% | 0.000 |
| KNIGHTHAWK | 324.59 | 5/30/2023 | 6/9/2023 | 6/29/2023 | 5.68 | 19.65 | 25.32 | 0.0004% | 0.000 |
| KNIGHTHAWK | 328.65 | 5/31/2023 | 6/12/2023 | 6/29/2023 | 6.79 | 16.43 | 23.21 | 0.0004% | 0.000 |
| KNIGHTHAWK | 330.75 | 5/3/2023 | 5/24/2023 | 6/29/2023 | 11.12 | 35.77 | 46.88 | 0.0004% | 0.000 |
| KNIGHTHAWK | 331.04 | 5/31/2023 | 6/9/2023 | 6/29/2023 | 5.18 | 19.65 | 24.82 | 0.0004% | 0.000 |
| KNIGHTHAWK | 332.82 | 5/4/2023 | 5/26/2023 | 6/29/2023 | 11.62 | 33.77 | 45.38 | 0.0004% | 0.000 |
| KNIGHTHAWK | 333.23 | 5/3/2023 | 5/24/2023 | 6/29/2023 | 11.12 | 35.77 | 46.88 | 0.0004% | 0.000 |
| KNIGHTHAWK | 333.80 | 5/1/2023 | 5/8/2023 | 6/29/2023 | 4.12 | 51.76 | 55.88 | 0.0004% | 0.000 |
| KNIGHTHAWK | 334.03 | 5/4/2023 | 5/25/2023 | 6/29/2023 | 11.11 | 34.77 | 45.89 | 0.0004% | 0.000 |
| KNIGHTHAWK | 335.22 | 5/1/2023 | 5/19/2023 | 6/29/2023 | 9.62 | 40.76 | 50.38 | 0.0005% | 0.000 |
| KNIGHTHAWK | 337.06 | 5/31/2023 | 6/14/2023 | 6/29/2023 | 7.63 | 14.73 | 22.37 | 0.0005% | 0.000 |
| KNIGHTHAWK | 339.50 | 5/31/2023 | 6/12/2023 | 6/29/2023 | 6.79 | 16.43 | 23.21 | 0.0005% | 0.000 |
| KNIGHTHAWK | 347.24 | 5/17/2023 | 6/8/2023 | 6/29/2023 | 11.68 | 20.65 | 32.32 | 0.0005% | 0.000 |
| KNIGHTHAWK | 348.46 | 5/23/2023 | 6/5/2023 | 6/29/2023 | 7.12 | 23.75 | 30.88 | 0.0005% | 0.000 |
| KNIGHTHAWK | 349.25 | 5/23/2023 | 6/11/2023 | 6/29/2023 | 10.18 | 17.64 | 27.82 | 0.0005% | 0.000 |
| KNIGHTHAWK | 349.95 | 5/17/2023 | 6/7/2023 | 6/29/2023 | 11.12 | 21.77 | 32.88 | 0.0005% | 0.000 |
| KNIGHTHAWK | 350.34 | 5/17/2023 | 6/3/2023 | 6/29/2023 | 9.13 | 25.75 | 34.87 | 0.0005% | 0.000 |
| KNIGHTHAWK | 352.23 | 5/23/2023 | 6/6/2023 | 6/29/2023 | 7.63 | 22.74 | 30.37 | 0.0005% | 0.000 |
| KNIGHTHAWK | 352.33 | 5/23/2023 | 6/4/2023 | 6/29/2023 | 6.63 | 24.74 | 31.37 | 0.0005% | 0.000 |
| KNIGHTHAWK | 353.28 | 5/23/2023 | 6/5/2023 | 6/29/2023 | 7.12 | 23.75 | 30.88 | 0.0005% | 0.000 |
| KNIGHTHAWK | 353.47 | 5/23/2023 | 6/6/2023 | 6/29/2023 | 7.63 | 22.74 | 30.37 | 0.0005% | 0.000 |
| KNIGHTHAWK | 354.21 | 5/23/2023 | 6/4/2023 | 6/29/2023 | 6.63 | 24.74 | 31.37 | 0.0005% | 0.000 |
| KNIGHTHAWK | 354.64 | 5/10/2023 | 6/1/2023 | 6/29/2023 | 11.63 | 27.75 | 39.38 | 0.0005% | 0.000 |
| KNIGHTHAWK | 355.05 | 5/17/2023 | 6/8/2023 | 6/29/2023 | 11.67 | 20.65 | 32.33 | 0.0005% | 0.000 |
| KNIGHTHAWK | 360.35 | 5/10/2023 | 6/1/2023 | 6/29/2023 | 11.62 | 27.75 | 39.38 | 0.0005% | 0.000 |
| KNIGHTHAWK | 387.25 | 6/26/2023 | 7/9/2023 | 7/28/2023 | 7.19 | 18.63 | 25.81 | 0.0005% | 0.000 |
| KNIGHTHAWK | 393.73 | 6/13/2023 | 6/26/2023 | 7/28/2023 | 7.24 | 31.53 | 38.76 | 0.0005% | 0.000 |
| KNIGHTHAWK | 397.41 | 6/20/2023 | 7/4/2023 | 7/28/2023 | 7.70 | 23.61 | 31.30 | 0.0005% | 0.000 |
| KNIGHTHAWK | 397.99 | 6/20/2023 | 7/7/2023 | 7/28/2023 | 9.19 | 20.62 | 29.81 | 0.0005% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| KNIGHTHAWK | 398.82 | 6/29/2023 | 7/10/2023 | 7/28/2023 | 6.19 | 17.63 | 23.81 | 0.0005% | 0.000 |
| KNIGHTHAWK | 399.80 | 6/20/2023 | 7/5/2023 | 7/28/2023 | 8.18 | 22.65 | 30.82 | 0.0005% | 0.000 |
| KNIGHTHAWK | 399.83 | 6/20/2023 | 7/10/2023 | 7/28/2023 | 10.69 | 17.63 | 28.31 | 0.0005% | 0.000 |
| KNIGHTHAWK | 399.89 | 6/28/2023 | 7/24/2023 | 7/28/2023 | 13.75 | 3.49 | 17.25 | 0.0005% | 0.000 |
| KNIGHTHAWK | 401.12 | 6/28/2023 | 7/12/2023 | 7/28/2023 | 7.65 | 15.71 | 23.35 | 0.0005% | 0.000 |
| KNIGHTHAWK | 401.33 | 6/13/2023 | 6/28/2023 | 7/28/2023 | 8.17 | 29.66 | 37.83 | 0.0005% | 0.000 |
| KNIGHTHAWK | 401.80 | 6/14/2023 | 6/30/2023 | 7/28/2023 | 8.62 | 27.77 | 36.38 | 0.0005% | 0.000 |
| KNIGHTHAWK | 402.04 | 6/23/2023 | 7/8/2023 | 7/28/2023 | 8.19 | 19.62 | 27.81 | 0.0005% | 0.000 |
| KNIGHTHAWK | 403.35 | 6/23/2023 | 7/8/2023 | 7/28/2023 | 8.19 | 19.62 | 27.81 | 0.0005% | 0.000 |
| KNIGHTHAWK | 403.87 | 6/13/2023 | 6/25/2023 | 7/28/2023 | 6.78 | 32.44 | 39.22 | 0.0005% | 0.000 |
| KNIGHTHAWK | 404.07 | 6/23/2023 | 7/11/2023 | 7/28/2023 | 9.69 | 16.62 | 26.31 | 0.0005% | 0.000 |
| KNIGHTHAWK | 404.34 | 6/20/2023 | 7/4/2023 | 7/28/2023 | 7.70 | 23.61 | 31.30 | 0.0005% | 0.000 |
| KNIGHTHAWK | 404.97 | 6/13/2023 | 6/23/2023 | 7/28/2023 | 5.77 | 34.45 | 40.23 | 0.0005% | 0.000 |
| KNIGHTHAWK | 405.34 | 6/14/2023 | 6/26/2023 | 7/28/2023 | 6.74 | 31.53 | 38.26 | 0.0005% | 0.000 |
| KNIGHTHAWK | 405.51 | 6/14/2023 | 6/24/2023 | 7/28/2023 | 5.78 | 33.45 | 39.22 | 0.0005% | 0.000 |
| KNIGHTHAWK | 407.27 | 6/26/2023 | 7/9/2023 | 7/28/2023 | 7.19 | 18.63 | 25.81 | 0.0005% | 0.000 |
| KNIGHTHAWK | 408.08 | 6/28/2023 | 7/23/2023 | 7/28/2023 | 13.25 | 4.50 | 17.75 | 0.0005% | 0.000 |
| KNIGHTHAWK | 418.45 | 6/5/2023 | 6/30/2023 | 7/28/2023 | 13.12 | 27.77 | 40.88 | 0.0006% | 0.000 |
| KNIGHTHAWK | 419.03 | 6/5/2023 | 6/19/2023 | 7/28/2023 | 7.76 | 38.48 | 46.24 | 0.0006% | 0.000 |
| KNIGHTHAWK | 420.20 | 6/5/2023 | 6/27/2023 | 7/28/2023 | 11.72 | 30.56 | 42.28 | 0.0006% | 0.000 |
| KNIGHTHAWK | 420.38 | 6/5/2023 | 6/29/2023 | 7/28/2023 | 12.64 | 28.71 | 41.36 | 0.0006% | 0.000 |
| KNIGHTHAWK | 425.02 | 6/5/2023 | 7/2/2023 | 7/28/2023 | 14.19 | 25.62 | 39.81 | 0.0006% | 0.000 |
| KNIGHTHAWK | 425.05 | 6/5/2023 | 6/28/2023 | 7/28/2023 | 12.17 | 29.65 | 41.83 | 0.0006% | 0.000 |
| KNIGHTHAWK | 425.44 | 6/1/2023 | 6/18/2023 | 7/28/2023 | 9.13 | 39.73 | 48.87 | 0.0006% | 0.000 |
| KNIGHTHAWK | 425.99 | 6/5/2023 | 7/1/2023 | 7/28/2023 | 13.69 | 26.62 | 40.31 | 0.0006% | 0.000 |
| ALLIANCE COAL LLC | 430.49 | 11/28/2023 | 12/4/2023 | 12/14/2023 | 3.72 | 9.56 | 13.28 | 0.0006% | 0.000 |
| KNIGHTHAWK | 431.00 | 6/5/2023 | 6/19/2023 | 7/28/2023 | 7.76 | 38.48 | 46.24 | 0.0006% | 0.000 |
| KNIGHTHAWK | 435.80 | 6/5/2023 | 6/20/2023 | 7/28/2023 | 8.17 | 37.65 | 45.83 | 0.0006% | 0.000 |
| KNIGHTHAWK | 438.23 | 6/5/2023 | 6/19/2023 | 7/28/2023 | 7.76 | 38.48 | 46.24 | 0.0006% | 0.000 |
| KNIGHTHAWK | 439.10 | 6/1/2023 | 6/17/2023 | 7/28/2023 | 8.63 | 40.73 | 49.37 | 0.0006% | 0.000 |
| KNIGHTHAWK | 441.23 | 6/1/2023 | 7/2/2023 | 7/28/2023 | 16.19 | 25.62 | 41.81 | 0.0006% | 0.000 |
| ALLIANCE COAL LLC | 441.67 | 11/13/2023 | 11/27/2023 | 12/14/2023 | 7.77 | 16.45 | 24.23 | 0.0006% | 0.000 |
| ALLIANCE COAL LLC | 441.82 | 11/13/2023 | 11/30/2023 | 12/14/2023 | 9.16 | 13.68 | 22.84 | 0.0006% | 0.000 |
| ALLIANCE COAL LLC | 447.33 | 11/22/2023 | 11/28/2023 | 12/14/2023 | 3.74 | 15.53 | 19.26 | 0.0006% | 0.000 |
| ALLIANCE COAL LLC | 447.89 | 11/22/2023 | 12/10/2023 | 12/14/2023 | 9.80 | 3.40 | 13.20 | 0.0006% | 0.000 |
| ALLIANCE COAL LLC | 457.21 | 11/6/2023 | 11/22/2023 | 12/14/2023 | 8.77 | 21.46 | 30.23 | 0.0006% | 0.000 |
| ALLIANCE COAL LLC | 461.71 | 11/28/2023 | 12/3/2023 | 12/14/2023 | 3.22 | 10.57 | 13.78 | 0.0006% | 0.000 |
| ALLIANCE COAL LLC | 465.52 | 11/6/2023 | 11/27/2023 | 12/14/2023 | 11.27 | 16.45 | 27.73 | 0.0006% | 0.000 |
| ALLIANCE COAL LLC | 500.09 | 6/4/2023 | 6/23/2023 | 7/14/2023 | 10.27 | 20.45 | 30.73 | 0.0007% | 0.000 |
| ALLIANCE COAL LLC | 520.37 | 6/26/2023 | 7/22/2023 | 7/14/2023 | 13.75 | (8.50) | 5.25 | 0.0007% | 0.000 |
| ALLIANCE COAL LLC | 522.49 | 6/11/2023 | 6/24/2023 | 7/14/2023 | 7.28 | 19.45 | 26.72 | 0.0007% | 0.000 |
| ALLIANCE COAL LLC | 535.67 | 6/4/2023 | 6/23/2023 | 7/14/2023 | 10.27 | 20.45 | 30.73 | 0.0007% | 0.000 |
| ALLIANCE COAL LLC | 548.43 | 6/19/2023 | 7/6/2023 | 7/14/2023 | 9.18 | 7.64 | 16.82 | 0.0007% | 0.000 |
| KNIGHTHAWK | 725.25 | 12/28/2022 | 4/7/2023 | 1/27/2023 | 50.62 | (70.24) | (19.62) | 0.0010% | 0.000 |
| KNIGHTHAWK | 731.38 | 12/28/2022 | 1/17/2023 | 1/27/2023 | 10.67 | 9.66 | 20.33 | 0.0010% | 0.000 |
| KNIGHTHAWK | 733.03 | 12/28/2022 | 4/19/2023 | 1/27/2023 | 56.62 | (82.24) | (25.62) | 0.0010% | 0.000 |
| CASE COAL SALES, LLC | 1,073.10 | 11/1/2023 | 11/18/2023 | 12/29/2023 | 9.20 | 40.60 | 49.80 | 0.0014% | 0.001 |
| KNIGHTHAWK | 1,094.21 | 7/7/2023 | 7/19/2023 | 7/28/2023 | 6.74 | 8.51 | 15.26 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,104.80 | 8/9/2023 | 8/29/2023 | 8/29/2023 | 10.76 | (0.51) | 10.24 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,110.86 | 7/24/2023 | 8/7/2023 | 8/14/2023 | 7.65 | 6.70 | 14.35 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,111.61 | 7/25/2023 | 8/9/2023 | 8/14/2023 | 8.18 | 4.64 | 12.82 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,112.30 | 8/2/2023 | 9/15/2023 | 8/29/2023 | 22.79 | (17.59) | 5.21 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,115.65 | 7/25/2023 | 8/6/2023 | 8/14/2023 | 6.78 | 7.45 | 14.22 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,115.78 | 8/7/2023 | 8/28/2023 | 8/29/2023 | 11.20 | 0.61 | 11.80 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,116.88 | 7/31/2023 | 8/12/2023 | 8/14/2023 | 6.77 | 1.46 | 8.23 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,119.50 | 7/25/2023 | 8/19/2023 | 8/14/2023 | 13.21 | (5.42) | 7.79 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,121.12 | 7/17/2023 | 7/27/2023 | 8/14/2023 | 5.69 | 17.62 | 23.31 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,125.25 | 8/16/2023 | 9/6/2023 | 9/14/2023 | 11.28 | 7.45 | 18.72 | 0.0015% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| KNIGHTHAWK | 1,127.01 | 7/11/2023 | 8/13/2023 | 7/28/2023 | 17.27 | (16.55) | 0.73 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,127.29 | 8/1/2023 | 8/28/2023 | 8/29/2023 | 14.20 | 0.61 | 14.80 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,127.59 | 8/9/2023 | 9/6/2023 | 8/29/2023 | 14.78 | (8.55) | 6.22 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,127.73 | 8/16/2023 | 8/28/2023 | 9/14/2023 | 6.70 | 16.61 | 23.30 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,127.92 | 8/2/2023 | 9/15/2023 | 8/29/2023 | 22.79 | (17.59) | 5.21 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,128.62 | 8/16/2023 | 9/13/2023 | 9/14/2023 | 14.77 | 0.45 | 15.23 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,128.76 | 8/9/2023 | 9/8/2023 | 8/29/2023 | 15.68 | (10.36) | 5.32 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,131.06 | 7/6/2023 | 7/17/2023 | 7/28/2023 | 6.28 | 10.44 | 16.72 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,131.38 | 8/1/2023 | 8/24/2023 | 8/29/2023 | 12.15 | 4.70 | 16.85 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,131.65 | 7/10/2023 | 7/31/2023 | 7/28/2023 | 11.21 | (3.42) | 7.79 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,133.34 | 7/25/2023 | 8/5/2023 | 8/14/2023 | 6.27 | 8.45 | 14.73 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,133.97 | 7/24/2023 | 8/8/2023 | 8/14/2023 | 8.15 | 5.69 | 13.85 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,135.02 | 7/17/2023 | 7/28/2023 | 8/14/2023 | 6.19 | 16.62 | 22.81 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,135.09 | 7/6/2023 | 7/18/2023 | 7/28/2023 | 6.65 | 9.70 | 16.35 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,136.66 | 7/24/2023 | 8/8/2023 | 8/14/2023 | 8.15 | 5.69 | 13.85 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,138.01 | 7/5/2023 | 7/17/2023 | 7/28/2023 | 6.78 | 10.44 | 17.22 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,138.35 | 8/1/2023 | 8/27/2023 | 8/29/2023 | 13.68 | 1.65 | 15.32 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,138.35 | 8/1/2023 | 8/24/2023 | 8/29/2023 | 12.15 | 4.70 | 16.85 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,138.37 | 8/16/2023 | 9/4/2023 | 9/14/2023 | 10.27 | 9.46 | 19.73 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,138.57 | 8/9/2023 | 9/13/2023 | 8/29/2023 | 18.27 | (15.55) | 2.73 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,139.05 | 7/31/2023 | 8/12/2023 | 8/14/2023 | 6.77 | 1.46 | 8.23 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,141.07 | 8/16/2023 | 9/7/2023 | 9/14/2023 | 11.67 | 6.66 | 18.33 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,141.57 | 8/2/2023 | 9/14/2023 | 8/29/2023 | 22.29 | (16.58) | 5.71 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,142.60 | 7/6/2023 | 7/20/2023 | 7/28/2023 | 7.75 | 7.51 | 15.25 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,143.93 | 7/25/2023 | 8/13/2023 | 8/14/2023 | 10.27 | 0.45 | 10.73 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,144.17 | 7/11/2023 | 7/27/2023 | 7/28/2023 | 8.69 | 0.62 | 9.31 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,144.49 | 7/25/2023 | 8/12/2023 | 8/14/2023 | 9.77 | 1.46 | 11.23 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,145.71 | 7/6/2023 | 7/15/2023 | 7/28/2023 | 5.25 | 12.50 | 17.75 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,146.09 | 7/7/2023 | 7/20/2023 | 7/28/2023 | 7.25 | 7.51 | 14.75 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,146.37 | 8/2/2023 | 9/15/2023 | 8/29/2023 | 22.79 | (17.58) | 5.21 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,146.79 | 7/10/2023 | 8/27/2023 | 7/28/2023 | 24.67 | (30.35) | (5.67) | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,147.03 | 7/5/2023 | 7/16/2023 | 7/28/2023 | 6.28 | 11.44 | 17.72 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,149.79 | 8/1/2023 | 8/27/2023 | 8/29/2023 | 13.67 | 1.65 | 15.33 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,150.34 | 7/11/2023 | 8/7/2023 | 7/28/2023 | 14.15 | (10.30) | 3.85 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,151.77 | 7/10/2023 | 7/31/2023 | 7/28/2023 | 11.21 | (3.42) | 7.79 | 0.0015% | 0.000 |
| KNIGHTHAWK | 1,156.81 | 7/25/2023 | 8/8/2023 | 8/14/2023 | 7.65 | 5.69 | 13.35 | 0.0016% | 0.000 |
| KNIGHTHAWK | 1,158.40 | 7/25/2023 | 8/9/2023 | 8/14/2023 | 8.18 | 4.64 | 12.82 | 0.0016% | 0.000 |
| KNIGHTHAWK | 1,381.59 | 11/20/2023 | 12/1/2023 | 12/14/2023 | 6.21 | 12.57 | 18.79 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,382.35 | 12/4/2023 | 1/9/2024 | 12/29/2023 | 18.70 | (11.39) | 7.30 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,387.31 | 10/31/2023 | 11/14/2023 | 11/14/2023 | 7.71 | (0.42) | 7.29 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,387.43 | 12/19/2023 | 12/28/2023 | 1/12/2024 | 5.19 | 14.62 | 19.81 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,388.71 | 11/20/2023 | 12/1/2023 | 12/14/2023 | 6.21 | 12.57 | 18.79 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,389.70 | 11/8/2023 | 11/25/2023 | 11/29/2023 | 9.28 | 3.45 | 12.72 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,390.13 | 11/27/2023 | 12/18/2023 | 12/14/2023 | 11.00 | (4.00) | 7.00 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,390.33 | 12/22/2023 | 1/1/2024 | 1/12/2024 | 5.73 | 10.53 | 16.27 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,391.94 | 12/13/2023 | 1/1/2024 | 12/29/2023 | 10.24 | (3.47) | 6.76 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,393.60 | 10/24/2023 | 11/11/2023 | 11/14/2023 | 9.68 | 2.63 | 12.32 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,394.16 | 11/30/2023 | 2/21/2024 | 12/14/2023 | 42.23 | (69.46) | (27.23) | 0.0019% | -0.001 |
| KNIGHTHAWK | 1,394.51 | 11/21/2023 | 12/4/2023 | 12/14/2023 | 7.22 | 9.56 | 16.78 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,394.52 | 11/27/2023 | 12/19/2023 | 12/14/2023 | 11.75 | (5.51) | 6.25 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,394.60 | 11/14/2023 | 11/24/2023 | 11/29/2023 | 5.77 | 4.45 | 10.23 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,394.65 | 12/13/2023 | 12/26/2023 | 12/29/2023 | 7.21 | 2.58 | 9.79 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,394.70 | 12/27/2023 | 1/12/2024 | 1/12/2024 | 8.70 | (0.39) | 8.30 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,394.90 | 12/6/2023 | 12/23/2023 | 12/29/2023 | 9.21 | 5.59 | 14.79 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,395.61 | 12/27/2023 | 1/7/2024 | 1/12/2024 | 6.19 | 4.62 | 10.81 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,395.85 | 12/6/2023 | 12/22/2023 | 12/29/2023 | 8.81 | 6.37 | 15.19 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,396.13 | 12/4/2023 | 12/14/2023 | 12/29/2023 | 5.78 | 14.44 | 20.22 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,396.13 | 12/18/2023 | 12/29/2023 | 1/12/2024 | 6.17 | 13.66 | 19.83 | 0.0019% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| KNIGHTHAWK | 1,396.79 | 11/27/2023 | 12/14/2023 | 12/14/2023 | 9.28 | (0.55) | 8.72 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,397.49 | 12/22/2023 | 12/31/2023 | 1/12/2024 | 5.17 | 11.65 | 16.83 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,397.76 | 12/6/2023 | 12/25/2023 | 12/29/2023 | 10.21 | 3.58 | 13.79 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,397.77 | 12/18/2023 | 12/30/2023 | 1/12/2024 | 6.67 | 12.65 | 19.33 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,398.33 | 12/13/2023 | 1/1/2024 | 12/29/2023 | 10.23 | (3.47) | 6.77 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,398.34 | 12/6/2023 | 12/23/2023 | 12/29/2023 | 9.20 | 5.59 | 14.80 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,398.54 | 11/8/2023 | 11/25/2023 | 11/29/2023 | 9.28 | 3.45 | 12.72 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,398.72 | 11/27/2023 | 12/14/2023 | 12/14/2023 | 9.28 | (0.56) | 8.72 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,398.84 | 12/13/2023 | 12/27/2023 | 12/29/2023 | 7.71 | 1.58 | 9.29 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,399.39 | 11/20/2023 | 12/2/2023 | 12/14/2023 | 6.72 | 11.57 | 18.28 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,399.51 | 12/11/2023 | 1/11/2024 | 12/29/2023 | 16.31 | (13.63) | 2.69 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,399.82 | 12/27/2023 | 1/7/2024 | 1/12/2024 | 6.19 | 4.62 | 10.81 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,400.15 | 11/8/2023 | 11/21/2023 | 11/29/2023 | 7.27 | 7.46 | 14.73 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,400.24 | 11/14/2023 | 11/22/2023 | 11/29/2023 | 4.77 | 6.45 | 11.23 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,400.58 | 11/21/2023 | 12/9/2023 | 12/14/2023 | 9.80 | 4.40 | 14.20 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,400.62 | 12/13/2023 | 1/2/2024 | 12/29/2023 | 10.74 | (4.48) | 6.26 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,400.78 | 12/19/2023 | 1/4/2024 | 1/12/2024 | 8.71 | 7.59 | 16.29 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,401.16 | 12/12/2023 | 12/22/2023 | 12/29/2023 | 5.81 | 6.37 | 12.19 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,401.20 | 11/14/2023 | 11/28/2023 | 11/29/2023 | 7.73 | 0.53 | 8.27 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,401.42 | 11/8/2023 | 11/22/2023 | 11/29/2023 | 7.77 | 6.45 | 14.23 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,401.55 | 12/6/2023 | 12/24/2023 | 12/29/2023 | 9.71 | 4.59 | 14.29 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,401.66 | 12/20/2023 | 1/5/2024 | 1/12/2024 | 8.81 | 6.38 | 15.19 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,402.78 | 12/27/2023 | 4/1/2024 | 1/12/2024 | 48.76 | (80.52) | (31.76) | 0.0019% | -0.001 |
| KNIGHTHAWK | 1,403.02 | 11/30/2023 | 2/25/2024 | 12/14/2023 | 44.26 | (73.52) | (29.26) | 0.0019% | -0.001 |
| KNIGHTHAWK | 1,403.18 | 12/27/2023 | 4/1/2024 | 1/12/2024 | 48.76 | (80.52) | (31.76) | 0.0019% | -0.001 |
| KNIGHTHAWK | 1,404.08 | 11/21/2023 | 12/2/2023 | 12/14/2023 | 6.22 | 11.57 | 17.78 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,404.09 | 12/13/2023 | 1/6/2024 | 12/29/2023 | 12.69 | (8.37) | 4.31 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,404.15 | 11/8/2023 | 11/24/2023 | 11/29/2023 | 8.78 | 4.45 | 13.22 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,404.32 | 12/4/2023 | 12/11/2023 | 12/29/2023 | 4.26 | 17.47 | 21.74 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,404.52 | 12/19/2023 | 12/30/2023 | 1/12/2024 | 6.17 | 12.65 | 18.83 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,404.57 | 11/20/2023 | 12/1/2023 | 12/14/2023 | 6.21 | 12.57 | 18.79 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,404.82 | 12/12/2023 | 1/8/2024 | 12/29/2023 | 14.19 | (10.38) | 3.81 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,404.88 | 12/11/2023 | 1/9/2024 | 12/29/2023 | 15.19 | (11.39) | 3.81 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,405.02 | 10/31/2023 | 11/14/2023 | 11/14/2023 | 7.71 | (0.42) | 7.29 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,405.09 | 10/24/2023 | 11/10/2023 | 11/14/2023 | 9.18 | 3.64 | 12.82 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,405.13 | 11/30/2023 | 12/13/2023 | 12/14/2023 | 7.23 | 0.54 | 7.77 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,405.34 | 12/4/2023 | 12/15/2023 | 12/29/2023 | 6.23 | 13.54 | 19.77 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,405.42 | 12/19/2023 | 1/3/2024 | 1/12/2024 | 8.24 | 8.52 | 16.76 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,405.71 | 12/19/2023 | 1/4/2024 | 1/12/2024 | 8.71 | 7.59 | 16.29 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,406.36 | 11/8/2023 | 11/28/2023 | 11/29/2023 | 10.73 | 0.54 | 11.27 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,406.45 | 12/14/2023 | 12/28/2023 | 12/29/2023 | 7.69 | 0.62 | 8.31 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,406.72 | 11/14/2023 | 11/22/2023 | 11/29/2023 | 4.77 | 6.46 | 11.23 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,406.99 | 12/14/2023 | 12/28/2023 | 12/29/2023 | 7.69 | 0.62 | 8.31 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,407.01 | 10/30/2023 | 11/13/2023 | 11/14/2023 | 7.81 | 0.37 | 8.19 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,407.65 | 12/11/2023 | 12/21/2023 | 12/29/2023 | 5.81 | 7.38 | 13.19 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,407.99 | 11/14/2023 | 11/21/2023 | 11/29/2023 | 4.27 | 7.46 | 11.73 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,408.18 | 12/11/2023 | 12/23/2023 | 12/29/2023 | 6.71 | 5.59 | 12.29 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,408.22 | 10/24/2023 | 11/10/2023 | 11/14/2023 | 9.18 | 3.64 | 12.82 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,408.23 | 10/24/2023 | 11/9/2023 | 11/14/2023 | 8.71 | 4.57 | 13.29 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,408.45 | 11/17/2023 | 11/29/2023 | 12/14/2023 | 6.74 | 14.53 | 21.26 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,408.55 | 11/21/2023 | 12/9/2023 | 12/14/2023 | 9.80 | 4.40 | 14.20 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,408.64 | 12/19/2023 | 1/6/2024 | 1/12/2024 | 9.69 | 5.63 | 15.31 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,408.79 | 11/21/2023 | 12/4/2023 | 12/14/2023 | 7.22 | 9.56 | 16.78 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,408.79 | 12/27/2023 | 1/11/2024 | 1/12/2024 | 8.32 | 0.37 | 8.68 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,408.91 | 11/20/2023 | 12/3/2023 | 12/14/2023 | 7.22 | 10.57 | 17.78 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,409.23 | 12/14/2023 | 1/15/2024 | 12/29/2023 | 16.71 | (17.41) | (0.71) | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,409.71 | 10/30/2023 | 11/13/2023 | 11/14/2023 | 7.65 | 0.70 | 8.35 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,409.92 | 11/14/2023 | 11/23/2023 | 11/29/2023 | 5.27 | 5.45 | 10.73 | 0.0019% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| KNIGHTHAWK | 1,410.47 | 11/17/2023 | 11/29/2023 | 12/14/2023 | 6.74 | 14.53 | 21.26 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,410.48 | 11/27/2023 | 12/17/2023 | 12/14/2023 | 10.73 | (3.46) | 7.27 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,410.53 | 11/17/2023 | 11/28/2023 | 12/14/2023 | 6.24 | 15.53 | 21.76 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,410.78 | 11/14/2023 | 11/21/2023 | 11/29/2023 | 4.27 | 7.46 | 11.73 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,412.01 | 11/22/2023 | 12/12/2023 | 12/14/2023 | 10.77 | 1.47 | 12.23 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,412.55 | 12/11/2023 | 1/9/2024 | 12/29/2023 | 15.20 | (11.39) | 3.80 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,413.01 | 10/24/2023 | 11/10/2023 | 11/14/2023 | 9.18 | 3.65 | 12.82 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,413.60 | 11/20/2023 | 12/3/2023 | 12/14/2023 | 7.22 | 10.57 | 17.78 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,418.68 | 10/24/2023 | 11/16/2023 | 11/14/2023 | 12.17 | (2.34) | 9.83 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,421.14 | 10/31/2023 | 11/13/2023 | 11/14/2023 | 7.31 | 0.37 | 7.69 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,422.07 | 11/30/2023 | 12/13/2023 | 12/14/2023 | 7.23 | 0.54 | 7.77 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,431.04 | 11/17/2023 | 11/30/2023 | 12/14/2023 | 7.16 | 13.68 | 20.84 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,431.18 | 12/4/2023 | 1/9/2024 | 12/29/2023 | 18.70 | (11.39) | 7.30 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,432.00 | 12/19/2023 | 12/29/2023 | 1/12/2024 | 5.67 | 13.66 | 19.33 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,432.98 | 10/31/2023 | 11/14/2023 | 11/14/2023 | 7.71 | (0.42) | 7.29 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,434.74 | 11/20/2023 | 11/30/2023 | 12/14/2023 | 5.66 | 13.68 | 19.34 | 0.0019% | 0.000 |
| KNIGHTHAWK | 1,639.56 | 6/26/2023 | 7/9/2023 | 7/14/2023 | 7.19 | 4.63 | 11.81 | 0.0022% | 0.000 |
| KNIGHTHAWK | 1,667.01 | 6/13/2023 | 6/26/2023 | 6/29/2023 | 7.24 | 2.53 | 9.76 | 0.0022% | 0.000 |
| KNIGHTHAWK | 1,676.16 | 5/30/2023 | 6/11/2023 | 6/14/2023 | 6.68 | 2.64 | 9.32 | 0.0023% | 0.000 |
| KNIGHTHAWK | 1,682.58 | 6/20/2023 | 7/4/2023 | 7/14/2023 | 7.70 | 9.61 | 17.30 | 0.0023% | 0.000 |
| KNIGHTHAWK | 1,683.32 | 5/31/2023 | 6/10/2023 | 6/14/2023 | 5.68 | 3.65 | 9.32 | 0.0023% | 0.000 |
| KNIGHTHAWK | 1,685.05 | 6/20/2023 | 7/7/2023 | 7/14/2023 | 9.19 | 6.62 | 15.81 | 0.0023% | 0.000 |
| KNIGHTHAWK | 1,688.55 | 6/29/2023 | 7/10/2023 | 7/14/2023 | 6.19 | 3.63 | 9.81 | 0.0023% | 0.000 |
| KNIGHTHAWK | 1,692.69 | 6/20/2023 | 7/5/2023 | 7/14/2023 | 8.18 | 8.65 | 16.82 | 0.0023% | 0.000 |
| KNIGHTHAWK | 1,692.82 | 6/20/2023 | 7/10/2023 | 7/14/2023 | 10.69 | 3.63 | 14.31 | 0.0023% | 0.000 |
| KNIGHTHAWK | 1,693.09 | 6/28/2023 | 7/24/2023 | 7/14/2023 | 13.75 | (10.51) | 3.25 | 0.0023% | 0.000 |
| KNIGHTHAWK | 1,698.28 | 6/28/2023 | 7/12/2023 | 7/14/2023 | 7.65 | 1.71 | 9.35 | 0.0023% | 0.000 |
| KNIGHTHAWK | 1,699.16 | 6/13/2023 | 6/28/2023 | 6/29/2023 | 8.17 | 0.66 | 8.83 | 0.0023% | 0.000 |
| KNIGHTHAWK | 1,701.19 | 6/14/2023 | 6/30/2023 | 6/29/2023 | 8.62 | (1.23) | 7.38 | 0.0023% | 0.000 |
| KNIGHTHAWK | 1,702.19 | 6/23/2023 | 7/8/2023 | 7/14/2023 | 8.19 | 5.62 | 13.81 | 0.0023% | 0.000 |
| KNIGHTHAWK | 1,707.75 | 6/23/2023 | 7/8/2023 | 7/14/2023 | 8.19 | 5.62 | 13.81 | 0.0023% | 0.000 |
| KNIGHTHAWK | 1,709.91 | 6/13/2023 | 6/25/2023 | 6/29/2023 | 6.78 | 3.44 | 10.22 | 0.0023% | 0.000 |
| KNIGHTHAWK | 1,710.78 | 6/23/2023 | 7/11/2023 | 7/14/2023 | 9.69 | 2.62 | 12.31 | 0.0023% | 0.000 |
| KNIGHTHAWK | 1,711.94 | 6/20/2023 | 7/4/2023 | 7/14/2023 | 7.70 | 9.61 | 17.30 | 0.0023% | 0.000 |
| KNIGHTHAWK | 1,714.61 | 6/13/2023 | 6/23/2023 | 6/29/2023 | 5.77 | 5.45 | 11.23 | 0.0023% | 0.000 |
| KNIGHTHAWK | 1,716.15 | 6/14/2023 | 6/26/2023 | 6/29/2023 | 6.74 | 2.53 | 9.26 | 0.0023% | 0.000 |
| KNIGHTHAWK | 1,716.89 | 6/14/2023 | 6/24/2023 | 6/29/2023 | 5.78 | 4.45 | 10.22 | 0.0023% | 0.000 |
| KNIGHTHAWK | 1,724.33 | 6/26/2023 | 7/9/2023 | 7/14/2023 | 7.19 | 4.63 | 11.81 | 0.0023% | 0.000 |
| KNIGHTHAWK | 1,727.78 | 6/28/2023 | 7/23/2023 | 7/14/2023 | 13.25 | (9.50) | 3.75 | 0.0023% | 0.000 |
| KNIGHTHAWK | 1,746.92 | 5/30/2023 | 6/9/2023 | 6/14/2023 | 5.68 | 4.65 | 10.32 | 0.0023% | 0.000 |
| KNIGHTHAWK | 1,768.74 | 5/31/2023 | 6/12/2023 | 6/14/2023 | 6.79 | 1.43 | 8.21 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,771.68 | 6/5/2023 | 6/30/2023 | 6/29/2023 | 13.12 | (1.23) | 11.88 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,773.59 | 4/19/2023 | 5/19/2023 | 5/12/2023 | 15.62 | (7.24) | 8.38 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,774.12 | 6/5/2023 | 6/19/2023 | 6/29/2023 | 7.76 | 9.48 | 17.24 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,779.08 | 6/5/2023 | 6/27/2023 | 6/29/2023 | 11.72 | 1.56 | 13.28 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,779.84 | 6/5/2023 | 6/29/2023 | 6/29/2023 | 12.64 | (0.29) | 12.36 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,780.08 | 5/3/2023 | 5/24/2023 | 5/26/2023 | 11.12 | 1.77 | 12.88 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,780.11 | 4/7/2023 | 4/17/2023 | 4/28/2023 | 5.80 | 10.40 | 16.20 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,781.62 | 5/31/2023 | 6/9/2023 | 6/14/2023 | 5.18 | 4.65 | 9.82 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,782.92 | 4/19/2023 | 5/22/2023 | 5/12/2023 | 17.13 | (10.26) | 6.87 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,783.34 | 4/4/2023 | 4/18/2023 | 4/28/2023 | 7.62 | 9.77 | 17.38 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,783.78 | 4/4/2023 | 4/19/2023 | 4/28/2023 | 8.12 | 8.77 | 16.88 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,785.36 | 4/19/2023 | 5/9/2023 | 5/12/2023 | 10.61 | 2.77 | 13.39 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,785.50 | 4/6/2023 | 4/16/2023 | 4/28/2023 | 5.64 | 11.72 | 17.36 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,788.95 | 4/19/2023 | 5/21/2023 | 5/12/2023 | 16.62 | (9.24) | 7.38 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,790.04 | 4/11/2023 | 4/19/2023 | 4/28/2023 | 4.62 | 8.77 | 13.38 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,791.21 | 5/4/2023 | 5/26/2023 | 5/26/2023 | 11.62 | (0.23) | 11.38 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,791.83 | 4/4/2023 | 4/18/2023 | 4/28/2023 | 7.62 | 9.77 | 17.38 | 0.0024% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| KNIGHTHAWK | 1,793.38 | 5/3/2023 | 5/24/2023 | 5/26/2023 | 11.12 | 1.77 | 12.88 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,793.66 | 4/5/2023 | 4/14/2023 | 4/28/2023 | 5.14 | 13.73 | 18.86 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,796.46 | 5/1/2023 | 5/8/2023 | 5/26/2023 | 4.12 | 17.76 | 21.88 | 0.0024% | 0.001 |
| KNIGHTHAWK | 1,797.73 | 5/4/2023 | 5/25/2023 | 5/26/2023 | 11.11 | 0.77 | 11.89 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,797.75 | 4/10/2023 | 5/1/2023 | 4/28/2023 | 11.13 | (3.25) | 7.87 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,798.52 | 4/5/2023 | 4/15/2023 | 4/28/2023 | 5.64 | 12.72 | 18.36 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,799.48 | 6/5/2023 | 7/2/2023 | 6/29/2023 | 14.19 | (3.38) | 10.81 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,799.62 | 6/5/2023 | 6/28/2023 | 6/29/2023 | 12.17 | 0.65 | 12.83 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,800.00 | 4/6/2023 | 4/14/2023 | 4/28/2023 | 4.64 | 13.73 | 18.36 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,800.29 | 4/26/2023 | 5/7/2023 | 5/12/2023 | 6.20 | 4.61 | 10.80 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,800.36 | 4/3/2023 | 4/17/2023 | 4/28/2023 | 7.80 | 10.40 | 18.20 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,801.25 | 6/1/2023 | 6/18/2023 | 6/29/2023 | 9.13 | 10.73 | 19.87 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,801.42 | 4/3/2023 | 4/18/2023 | 4/28/2023 | 8.12 | 9.77 | 17.88 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,801.82 | 4/26/2023 | 5/8/2023 | 5/12/2023 | 6.62 | 3.76 | 10.38 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,803.60 | 6/5/2023 | 7/1/2023 | 6/29/2023 | 13.69 | (2.38) | 11.31 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,804.11 | 5/1/2023 | 5/19/2023 | 5/26/2023 | 9.62 | 6.76 | 16.38 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,807.30 | 4/4/2023 | 4/17/2023 | 4/28/2023 | 7.30 | 10.40 | 17.70 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,808.43 | 4/11/2023 | 5/3/2023 | 4/28/2023 | 11.66 | (5.31) | 6.34 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,808.54 | 4/11/2023 | 4/28/2023 | 4/28/2023 | 9.13 | (0.27) | 8.87 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,810.78 | 4/6/2023 | 4/16/2023 | 4/28/2023 | 5.64 | 11.72 | 17.36 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,812.45 | 4/5/2023 | 4/15/2023 | 4/28/2023 | 5.64 | 12.73 | 18.36 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,812.76 | 4/4/2023 | 4/17/2023 | 4/28/2023 | 7.30 | 10.40 | 17.70 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,814.00 | 5/31/2023 | 6/14/2023 | 6/14/2023 | 7.63 | (0.27) | 7.37 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,817.63 | 4/11/2023 | 5/2/2023 | 4/28/2023 | 11.13 | (4.25) | 6.87 | 0.0024% | 0.000 |
| KNIGHTHAWK | 1,824.82 | 6/5/2023 | 6/19/2023 | 6/29/2023 | 7.76 | 9.48 | 17.24 | 0.0025% | 0.000 |
| KNIGHTHAWK | 1,827.15 | 5/31/2023 | 6/12/2023 | 6/14/2023 | 6.79 | 1.43 | 8.21 | 0.0025% | 0.000 |
| KNIGHTHAWK | 1,845.11 | 6/5/2023 | 6/20/2023 | 6/29/2023 | 8.17 | 8.65 | 16.83 | 0.0025% | 0.000 |
| KNIGHTHAWK | 1,855.39 | 6/5/2023 | 6/19/2023 | 6/29/2023 | 7.76 | 9.48 | 17.24 | 0.0025% | 0.000 |
| KNIGHTHAWK | 1,859.09 | 6/1/2023 | 6/17/2023 | 6/29/2023 | 8.63 | 11.73 | 20.37 | 0.0025% | 0.001 |
| KNIGHTHAWK | 1,868.10 | 6/1/2023 | 7/2/2023 | 6/29/2023 | 16.19 | (3.38) | 12.81 | 0.0025% | 0.000 |
| KNIGHTHAWK | 1,868.77 | 5/17/2023 | 6/8/2023 | 6/14/2023 | 11.68 | 5.65 | 17.32 | 0.0025% | 0.000 |
| KNIGHTHAWK | 1,875.34 | 5/23/2023 | 6/5/2023 | 6/14/2023 | 7.12 | 8.75 | 15.88 | 0.0025% | 0.000 |
| KNIGHTHAWK | 1,879.64 | 5/23/2023 | 6/11/2023 | 6/14/2023 | 10.18 | 2.64 | 12.82 | 0.0025% | 0.000 |
| KNIGHTHAWK | 1,883.40 | 5/17/2023 | 6/7/2023 | 6/14/2023 | 11.12 | 6.77 | 17.88 | 0.0025% | 0.000 |
| KNIGHTHAWK | 1,885.46 | 5/17/2023 | 6/3/2023 | 6/14/2023 | 9.13 | 10.75 | 19.87 | 0.0025% | 0.001 |
| KNIGHTHAWK | 1,895.67 | 5/23/2023 | 6/6/2023 | 6/14/2023 | 7.63 | 7.74 | 15.37 | 0.0025% | 0.000 |
| KNIGHTHAWK | 1,896.18 | 5/23/2023 | 6/4/2023 | 6/14/2023 | 6.63 | 9.74 | 16.37 | 0.0025% | 0.000 |
| KNIGHTHAWK | 1,901.31 | 5/23/2023 | 6/5/2023 | 6/14/2023 | 7.12 | 8.75 | 15.88 | 0.0026% | 0.000 |
| KNIGHTHAWK | 1,902.33 | 5/23/2023 | 6/6/2023 | 6/14/2023 | 7.63 | 7.74 | 15.37 | 0.0026% | 0.000 |
| KNIGHTHAWK | 1,906.29 | 5/23/2023 | 6/4/2023 | 6/14/2023 | 6.63 | 9.74 | 16.37 | 0.0026% | 0.000 |
| KNIGHTHAWK | 1,908.60 | 5/10/2023 | 6/1/2023 | 5/26/2023 | 11.63 | (6.25) | 5.38 | 0.0026% | 0.000 |
| KNIGHTHAWK | 1,910.84 | 5/17/2023 | 6/8/2023 | 6/14/2023 | 11.67 | 5.65 | 17.33 | 0.0026% | 0.000 |
| KNIGHTHAWK | 1,939.36 | 5/10/2023 | 6/1/2023 | 5/26/2023 | 11.62 | (6.25) | 5.38 | 0.0026% | 0.000 |
| CASE COAL SALES, LLC | 2,559.19 | 8/2/2023 | 8/18/2023 | 9/29/2023 | 8.71 | 41.58 | 50.29 | 0.0034% | 0.002 |
| KNIGHTHAWK | 2,818.07 | 3/2/2023 | 3/25/2023 | 3/29/2023 | 12.12 | 3.76 | 15.88 | 0.0038% | 0.001 |
| KNIGHTHAWK | 2,834.29 | 1/5/2023 | 1/22/2023 | 1/27/2023 | 9.13 | 4.75 | 13.87 | 0.0038% | 0.001 |
| KNIGHTHAWK | 2,846.50 | 1/13/2023 | 4/5/2023 | 1/27/2023 | 41.62 | (68.24) | (26.62) | 0.0038% | -0.001 |
| KNIGHTHAWK | 2,854.49 | 1/5/2023 | 2/6/2023 | 1/27/2023 | 16.68 | (10.36) | 6.32 | 0.0038% | 0.000 |
| KNIGHTHAWK | 2,862.04 | 3/27/2023 | 4/13/2023 | 4/14/2023 | 9.14 | 0.73 | 9.86 | 0.0038% | 0.000 |
| KNIGHTHAWK | 2,863.87 | 1/13/2023 | 4/5/2023 | 1/27/2023 | 41.62 | (68.24) | (26.62) | 0.0038% | -0.001 |
| KNIGHTHAWK | 2,866.42 | 1/19/2023 | 2/10/2023 | 2/14/2023 | 11.63 | 3.75 | 15.37 | 0.0039% | 0.001 |
| KNIGHTHAWK | 2,867.99 | 1/27/2023 | 2/25/2023 | 2/14/2023 | 15.19 | (11.38) | 3.81 | 0.0039% | 0.000 |
| KNIGHTHAWK | 2,874.29 | 1/27/2023 | 2/8/2023 | 2/14/2023 | 6.67 | 5.66 | 12.33 | 0.0039% | 0.000 |
| KNIGHTHAWK | 2,882.57 | 1/20/2023 | 2/10/2023 | 2/14/2023 | 11.13 | 3.75 | 14.87 | 0.0039% | 0.001 |
| KNIGHTHAWK | 2,886.12 | 3/27/2023 | 4/12/2023 | 4/14/2023 | 8.67 | 1.67 | 10.33 | 0.0039% | 0.000 |
| KNIGHTHAWK | 2,888.84 | 1/27/2023 | 2/9/2023 | 2/14/2023 | 7.16 | 4.68 | 11.84 | 0.0039% | 0.000 |
| KNIGHTHAWK | 2,889.32 | 1/26/2023 | 4/15/2023 | 2/14/2023 | 40.14 | (60.28) | (20.14) | 0.0039% | -0.001 |
| KNIGHTHAWK | 2,895.10 | 3/27/2023 | 4/28/2023 | 4/14/2023 | 16.63 | (14.27) | 2.37 | 0.0039% | 0.000 |

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|---|---|---|---|---|---|---|---|---|---|
| KNIGHTHAWK | 2,895.10 | 1/27/2023 | 2/8/2023 | 2/14/2023 | 6.67 | 5.66 | 12.33 | 0.0039% | 0.000 |
| KNIGHTHAWK | 2,896.29 | 1/27/2023 | 2/9/2023 | 2/14/2023 | 7.16 | 4.68 | 11.84 | 0.0039% | 0.000 |
| KNIGHTHAWK | 2,900.39 | 1/5/2023 | 1/26/2023 | 1/27/2023 | 11.11 | 0.78 | 11.89 | 0.0039% | 0.000 |
| KNIGHTHAWK | 2,901.29 | 1/20/2023 | 2/4/2023 | 2/14/2023 | 8.11 | 9.77 | 17.89 | 0.0039% | 0.001 |
| KNIGHTHAWK | 2,901.44 | 1/20/2023 | 2/25/2023 | 2/14/2023 | 18.69 | (11.38) | 7.31 | 0.0039% | 0.000 |
| KNIGHTHAWK | 2,904.88 | 1/5/2023 | 1/24/2023 | 1/27/2023 | 10.12 | 2.77 | 12.88 | 0.0039% | 0.001 |
| KNIGHTHAWK | 2,906.27 | 1/5/2023 | 1/23/2023 | 1/27/2023 | 9.61 | 3.77 | 13.39 | 0.0039% | 0.001 |
| KNIGHTHAWK | 2,907.85 | 3/13/2023 | 3/24/2023 | 3/29/2023 | 6.12 | 4.76 | 10.88 | 0.0039% | 0.000 |
| KNIGHTHAWK | 2,909.65 | 3/10/2023 | 3/27/2023 | 3/29/2023 | 9.16 | 1.67 | 10.84 | 0.0039% | 0.000 |
| KNIGHTHAWK | 2,911.32 | 1/19/2023 | 1/28/2023 | 2/14/2023 | 5.13 | 16.75 | 21.87 | 0.0039% | 0.001 |
| KNIGHTHAWK | 2,911.56 | 1/20/2023 | 2/7/2023 | 2/14/2023 | 9.69 | 6.63 | 16.31 | 0.0039% | 0.001 |
| KNIGHTHAWK | 2,913.04 | 3/27/2023 | 4/12/2023 | 4/14/2023 | 8.67 | 1.67 | 10.33 | 0.0039% | 0.000 |
| KNIGHTHAWK | 2,913.63 | 1/20/2023 | 2/4/2023 | 2/14/2023 | 8.12 | 9.77 | 17.88 | 0.0039% | 0.001 |
| KNIGHTHAWK | 2,915.62 | 1/20/2023 | 2/4/2023 | 2/14/2023 | 8.11 | 9.77 | 17.89 | 0.0039% | 0.001 |
| KNIGHTHAWK | 2,915.91 | 3/13/2023 | 3/26/2023 | 3/29/2023 | 7.12 | 2.75 | 9.88 | 0.0039% | 0.000 |
| KNIGHTHAWK | 2,916.69 | 3/8/2023 | 3/25/2023 | 3/29/2023 | 9.12 | 3.75 | 12.88 | 0.0039% | 0.001 |
| KNIGHTHAWK | 2,917.05 | 1/27/2023 | 2/9/2023 | 2/14/2023 | 7.16 | 4.68 | 11.84 | 0.0039% | 0.000 |
| KNIGHTHAWK | 2,918.59 | 3/8/2023 | 3/26/2023 | 3/29/2023 | 9.62 | 2.75 | 12.38 | 0.0039% | 0.000 |
| KNIGHTHAWK | 2,921.04 | 3/8/2023 | 3/25/2023 | 3/29/2023 | 9.12 | 3.75 | 12.88 | 0.0039% | 0.001 |
| KNIGHTHAWK | 2,921.72 | 1/13/2023 | 4/6/2023 | 1/27/2023 | 42.17 | (69.35) | (27.17) | 0.0039% | -0.001 |
| KNIGHTHAWK | 2,922.49 | 3/2/2023 | 3/25/2023 | 3/29/2023 | 12.12 | 3.76 | 15.88 | 0.0039% | 0.001 |
| KNIGHTHAWK | 2,924.78 | 3/13/2023 | 3/24/2023 | 3/29/2023 | 6.12 | 4.76 | 10.88 | 0.0039% | 0.000 |
| KNIGHTHAWK | 2,934.78 | 1/26/2023 | 4/15/2023 | 2/14/2023 | 40.14 | (60.28) | (20.14) | 0.0039% | -0.001 |
| KNIGHTHAWK | 2,935.15 | 1/19/2023 | 2/22/2023 | 2/14/2023 | 17.68 | (8.36) | 9.32 | 0.0039% | 0.000 |
| CASE COAL SALES, LLC | 3,228.80 | 7/12/2023 | 7/21/2023 | 8/29/2023 | 5.25 | 38.51 | 43.75 | 0.0043% | 0.002 |
| IRON COAL SALES | 3,553.20 | 5/31/2023 | 6/27/2023 | 6/14/2023 | 14.22 | (13.44) | 0.78 | 0.0048% | 0.000 |
| IRON COAL SALES | 4,399.20 | 5/31/2023 | 6/27/2023 | 6/14/2023 | 14.22 | (13.44) | 0.78 | 0.0059% | 0.000 |
| CASE COAL SALES, LLC | 6,529.93 | 6/9/2023 | 6/16/2023 | 7/28/2023 | 4.14 | 41.73 | 45.86 | 0.0088% | 0.004 |
| IRON COAL SALES | 8,366.00 | 5/31/2023 | 6/16/2023 | 6/14/2023 | 8.64 | (2.27) | 6.36 | 0.0112% | 0.001 |
| CROUNSE CORPORATION | 9,308.40 | 11/1/2023 | 11/18/2023 | 11/29/2023 | 9.20 | 10.60 | 19.80 | 0.0125% | 0.002 |
| CROUNSE CORPORATION | 9,666.18 | 12/20/2023 | 12/25/2023 | 1/9/2024 | 3.21 | 14.58 | 17.79 | 0.0130% | 0.002 |
| CROUNSE CORPORATION | 9,755.49 | 7/12/2023 | 7/21/2023 | 8/9/2023 | 5.25 | 18.51 | 23.75 | 0.0131% | 0.003 |
| CROUNSE CORPORATION | 10,047.05 | 8/2/2023 | 8/18/2023 | 8/29/2023 | 8.71 | 10.58 | 19.29 | 0.0135% | 0.003 |
| CROUNSE CORPORATION | 10,149.58 | 6/9/2023 | 6/16/2023 | 6/29/2023 | 4.14 | 12.73 | 16.86 | 0.0136% | 0.002 |
| CROUNSE CORPORATION | 10,438.65 | 11/20/2023 | 12/1/2023 | 12/19/2023 | 6.21 | 17.57 | 23.79 | 0.0140% | 0.003 |
| CROUNSE CORPORATION | 10,530.28 | 5/2/2023 | 5/13/2023 | 5/26/2023 | 6.13 | 12.75 | 18.87 | 0.0142% | 0.003 |
| CROUNSE CORPORATION | 10,730.18 | 1/5/2023 | 1/28/2023 | 2/9/2023 | 12.13 | 11.75 | 23.88 | 0.0144% | 0.003 |
| CROUNSE CORPORATION | 10,745.26 | 11/10/2022 | 1/4/2023 | 1/19/2023 | 28.14 | 14.72 | 42.86 | 0.0144% | 0.006 |
| CROUNSE CORPORATION | 10,887.17 | 11/25/2023 | 12/6/2023 | 12/19/2023 | 6.30 | 12.40 | 18.70 | 0.0146% | 0.003 |
| CROUNSE CORPORATION | 10,936.76 | 11/19/2023 | 12/5/2023 | 12/19/2023 | 8.70 | 13.59 | 22.30 | 0.0147% | 0.003 |
| CROUNSE CORPORATION | 11,016.54 | 1/17/2023 | 1/27/2023 | 2/9/2023 | 5.62 | 12.75 | 18.38 | 0.0148% | 0.003 |
| CROUNSE CORPORATION | 11,058.26 | 11/20/2023 | 11/28/2023 | 12/7/2023 | 4.73 | 8.53 | 13.27 | 0.0149% | 0.002 |
| IRON COAL SALES | 11,167.20 | 10/31/2023 | 11/18/2023 | 11/14/2023 | 9.70 | (4.40) | 5.30 | 0.0150% | 0.001 |
| CROUNSE CORPORATION | 11,261.13 | 11/20/2023 | 12/13/2023 | 12/28/2023 | 12.23 | 14.54 | 26.77 | 0.0151% | 0.004 |
| CROUNSE CORPORATION | 11,390.58 | 12/1/2023 | 12/11/2023 | 12/28/2023 | 5.71 | 16.57 | 22.29 | 0.0153% | 0.003 |
| CROUNSE CORPORATION | 11,398.91 | 12/19/2023 | 12/26/2023 | 1/9/2024 | 4.21 | 13.58 | 17.79 | 0.0153% | 0.003 |
| CROUNSE CORPORATION | 11,468.93 | 11/20/2023 | 12/12/2023 | 12/28/2023 | 11.77 | 15.47 | 27.23 | 0.0154% | 0.004 |
| CROUNSE CORPORATION | 11,502.62 | 11/16/2023 | 11/23/2023 | 12/7/2023 | 4.27 | 13.45 | 17.73 | 0.0155% | 0.003 |
| CROUNSE CORPORATION | 11,532.90 | 11/26/2023 | 12/5/2023 | 12/19/2023 | 5.20 | 13.59 | 18.80 | 0.0155% | 0.003 |
| CROUNSE CORPORATION | 11,602.16 | 11/5/2023 | 11/14/2023 | 11/29/2023 | 5.21 | 14.58 | 19.79 | 0.0156% | 0.003 |
| CROUNSE CORPORATION | 11,650.23 | 12/1/2023 | 12/10/2023 | 12/19/2023 | 5.30 | 8.40 | 13.70 | 0.0157% | 0.002 |
| CROUNSE CORPORATION | 11,666.88 | 11/19/2023 | 11/27/2023 | 12/7/2023 | 4.78 | 9.45 | 14.22 | 0.0157% | 0.002 |
| CROUNSE CORPORATION | 11,784.71 | 8/7/2023 | 8/19/2023 | 8/29/2023 | 6.71 | 9.58 | 16.29 | 0.0158% | 0.003 |
| CROUNSE CORPORATION | 11,795.20 | 11/19/2023 | 11/25/2023 | 12/7/2023 | 3.78 | 11.45 | 15.22 | 0.0159% | 0.002 |
| CROUNSE CORPORATION | 11,823.87 | 7/9/2023 | 7/21/2023 | 8/9/2023 | 6.75 | 18.51 | 25.25 | 0.0159% | 0.004 |
| CROUNSE CORPORATION | 11,882.43 | 10/25/2023 | 11/19/2023 | 11/29/2023 | 13.20 | 9.60 | 22.80 | 0.0160% | 0.004 |
| CROUNSE CORPORATION | 11,897.83 | 7/22/2023 | 8/4/2023 | 8/17/2023 | 7.27 | 12.46 | 19.73 | 0.0160% | 0.003 |
| CROUNSE CORPORATION | 11,913.65 | 7/9/2023 | 7/20/2023 | 7/27/2023 | 6.25 | 6.51 | 12.75 | 0.0160% | 0.002 |

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|---|---|---|---|---|---|---|---|---|---|
| CROUNSE CORPORATION | 11,927.67 | 11/19/2023 | 12/2/2023 | 12/19/2023 | 7.22 | 16.57 | 23.78 | 0.0160% | 0.004 |
| CROUNSE CORPORATION | 12,109.42 | 8/7/2023 | 9/15/2023 | 9/28/2023 | 20.29 | 12.41 | 32.71 | 0.0163% | 0.005 |
| CROUNSE CORPORATION | 12,143.88 | 11/28/2023 | 12/4/2023 | 12/19/2023 | 3.72 | 14.56 | 18.28 | 0.0163% | 0.003 |
| CROUNSE CORPORATION | 12,218.18 | 7/20/2023 | 8/4/2023 | 8/17/2023 | 8.15 | 12.70 | 20.85 | 0.0164% | 0.003 |
| CROUNSE CORPORATION | 12,248.64 | 11/5/2023 | 11/12/2023 | 11/29/2023 | 4.15 | 16.70 | 20.85 | 0.0165% | 0.003 |
| CROUNSE CORPORATION | 12,256.55 | 8/1/2023 | 8/15/2023 | 8/29/2023 | 7.78 | 13.43 | 21.22 | 0.0165% | 0.003 |
| CROUNSE CORPORATION | 12,266.81 | 11/25/2023 | 12/7/2023 | 12/19/2023 | 6.80 | 11.41 | 18.20 | 0.0165% | 0.003 |
| CROUNSE CORPORATION | 12,305.59 | 8/7/2023 | 9/15/2023 | 9/28/2023 | 20.29 | 12.41 | 32.71 | 0.0165% | 0.005 |
| CROUNSE CORPORATION | 12,309.96 | 12/1/2023 | 12/9/2023 | 12/19/2023 | 4.80 | 9.40 | 14.20 | 0.0165% | 0.002 |
| CROUNSE CORPORATION | 12,337.59 | 12/5/2023 | 12/26/2023 | 1/9/2024 | 11.21 | 13.58 | 24.79 | 0.0166% | 0.004 |
| CROUNSE CORPORATION | 12,352.73 | 11/25/2023 | 12/7/2023 | 12/19/2023 | 6.80 | 11.41 | 18.20 | 0.0166% | 0.003 |
| CROUNSE CORPORATION | 12,358.40 | 11/25/2023 | 12/8/2023 | 12/19/2023 | 7.30 | 10.41 | 17.70 | 0.0166% | 0.003 |
| CROUNSE CORPORATION | 12,367.00 | 6/19/2023 | 7/7/2023 | 7/19/2023 | 9.69 | 11.62 | 21.31 | 0.0166% | 0.004 |
| CROUNSE CORPORATION | 12,398.90 | 11/5/2023 | 11/12/2023 | 11/29/2023 | 4.15 | 16.70 | 20.85 | 0.0167% | 0.003 |
| CROUNSE CORPORATION | 12,439.52 | 6/19/2023 | 7/8/2023 | 7/19/2023 | 10.19 | 10.62 | 20.81 | 0.0167% | 0.003 |
| CROUNSE CORPORATION | 12,442.05 | 11/5/2023 | 11/14/2023 | 11/29/2023 | 5.19 | 14.62 | 19.81 | 0.0167% | 0.003 |
| CROUNSE CORPORATION | 12,459.47 | 11/13/2023 | 11/27/2023 | 12/7/2023 | 7.77 | 9.45 | 17.23 | 0.0167% | 0.003 |
| CROUNSE CORPORATION | 12,462.87 | 12/1/2023 | 12/18/2023 | 12/28/2023 | 9.29 | 9.42 | 18.71 | 0.0167% | 0.003 |
| CROUNSE CORPORATION | 12,463.64 | 11/13/2023 | 11/30/2023 | 12/7/2023 | 9.16 | 6.68 | 15.84 | 0.0168% | 0.003 |
| CROUNSE CORPORATION | 12,563.17 | 10/27/2023 | 11/19/2023 | 11/29/2023 | 12.20 | 9.60 | 21.80 | 0.0169% | 0.004 |
| CROUNSE CORPORATION | 12,572.55 | 12/18/2023 | 12/29/2023 | 1/9/2024 | 6.17 | 10.66 | 16.83 | 0.0169% | 0.003 |
| CROUNSE CORPORATION | 12,604.73 | 6/20/2023 | 7/7/2023 | 7/19/2023 | 9.19 | 11.62 | 20.81 | 0.0169% | 0.004 |
| CROUNSE CORPORATION | 12,618.99 | 11/22/2023 | 11/28/2023 | 12/7/2023 | 3.74 | 8.53 | 12.26 | 0.0170% | 0.002 |
| CROUNSE CORPORATION | 12,633.57 | 10/27/2023 | 11/19/2023 | 12/7/2023 | 12.20 | 17.60 | 29.80 | 0.0170% | 0.005 |
| CROUNSE CORPORATION | 12,634.79 | 11/22/2023 | 12/10/2023 | 12/19/2023 | 9.80 | 8.40 | 18.20 | 0.0170% | 0.003 |
| CROUNSE CORPORATION | 12,675.21 | 11/18/2023 | 11/29/2023 | 12/7/2023 | 6.24 | 7.53 | 13.76 | 0.0170% | 0.002 |
| CROUNSE CORPORATION | 12,691.66 | 6/27/2023 | 7/13/2023 | 7/27/2023 | 8.78 | 13.45 | 22.22 | 0.0171% | 0.004 |
| CROUNSE CORPORATION | 12,703.60 | 12/18/2023 | 12/27/2023 | 1/9/2024 | 5.21 | 12.58 | 17.79 | 0.0171% | 0.003 |
| CROUNSE CORPORATION | 12,704.96 | 10/30/2023 | 11/17/2023 | 11/29/2023 | 9.70 | 11.60 | 21.30 | 0.0171% | 0.004 |
| CROUNSE CORPORATION | 12,722.15 | 6/12/2023 | 6/20/2023 | 6/29/2023 | 4.67 | 8.65 | 13.33 | 0.0171% | 0.002 |
| CROUNSE CORPORATION | 12,729.56 | 8/6/2023 | 8/27/2023 | 9/7/2023 | 11.18 | 10.65 | 21.82 | 0.0171% | 0.004 |
| CROUNSE CORPORATION | 12,735.12 | 12/18/2023 | 12/27/2023 | 1/9/2024 | 5.21 | 12.58 | 17.79 | 0.0171% | 0.003 |
| CROUNSE CORPORATION | 12,739.45 | 6/27/2023 | 7/14/2023 | 7/27/2023 | 9.28 | 12.44 | 21.72 | 0.0171% | 0.004 |
| CROUNSE CORPORATION | 12,749.75 | 6/2/2023 | 6/11/2023 | 6/29/2023 | 5.18 | 17.64 | 22.82 | 0.0171% | 0.004 |
| CROUNSE CORPORATION | 12,758.10 | 12/14/2023 | 12/22/2023 | 1/9/2024 | 4.81 | 17.37 | 22.19 | 0.0171% | 0.004 |
| CROUNSE CORPORATION | 12,763.18 | 8/18/2023 | 8/29/2023 | 9/7/2023 | 6.25 | 8.49 | 14.75 | 0.0172% | 0.003 |
| CROUNSE CORPORATION | 12,763.40 | 10/27/2023 | 11/4/2023 | 11/17/2023 | 4.72 | 12.56 | 17.28 | 0.0172% | 0.003 |
| CROUNSE CORPORATION | 12,777.78 | 11/5/2023 | 11/17/2023 | 11/29/2023 | 6.70 | 11.60 | 18.30 | 0.0172% | 0.003 |
| CROUNSE CORPORATION | 12,781.19 | 12/6/2023 | 12/21/2023 | 1/9/2024 | 8.31 | 18.38 | 26.69 | 0.0172% | 0.005 |
| CROUNSE CORPORATION | 12,792.45 | 8/14/2023 | 8/27/2023 | 9/7/2023 | 7.17 | 10.65 | 17.83 | 0.0172% | 0.003 |
| CROUNSE CORPORATION | 12,796.01 | 8/17/2023 | 9/13/2023 | 9/28/2023 | 14.27 | 14.45 | 28.73 | 0.0172% | 0.005 |
| CROUNSE CORPORATION | 12,822.46 | 12/5/2023 | 12/15/2023 | 12/28/2023 | 5.73 | 12.54 | 18.27 | 0.0172% | 0.003 |
| CROUNSE CORPORATION | 12,831.74 | 6/27/2023 | 7/24/2023 | 8/9/2023 | 14.25 | 15.49 | 29.75 | 0.0172% | 0.005 |
| CROUNSE CORPORATION | 12,840.99 | 12/1/2023 | 12/12/2023 | 12/28/2023 | 6.27 | 15.47 | 21.73 | 0.0173% | 0.004 |
| CROUNSE CORPORATION | 12,845.91 | 10/27/2023 | 11/11/2023 | 11/29/2023 | 8.18 | 17.63 | 25.82 | 0.0173% | 0.004 |
| CROUNSE CORPORATION | 12,878.46 | 11/26/2023 | 12/6/2023 | 12/19/2023 | 5.80 | 12.40 | 18.20 | 0.0173% | 0.003 |
| CROUNSE CORPORATION | 12,897.84 | 11/6/2023 | 11/22/2023 | 12/7/2023 | 8.77 | 14.46 | 23.23 | 0.0173% | 0.004 |
| CROUNSE CORPORATION | 12,901.21 | 8/18/2023 | 9/14/2023 | 9/28/2023 | 14.29 | 13.42 | 27.71 | 0.0173% | 0.005 |
| CROUNSE CORPORATION | 12,903.44 | 12/14/2023 | 12/23/2023 | 1/9/2024 | 5.20 | 16.59 | 21.80 | 0.0173% | 0.004 |
| CROUNSE CORPORATION | 12,904.76 | 3/11/2023 | 3/31/2023 | 4/7/2023 | 10.62 | 6.76 | 17.38 | 0.0173% | 0.003 |
| CROUNSE CORPORATION | 12,911.26 | 6/27/2023 | 7/16/2023 | 7/27/2023 | 10.28 | 10.44 | 20.72 | 0.0174% | 0.004 |
| CROUNSE CORPORATION | 12,912.68 | 10/30/2023 | 11/16/2023 | 11/29/2023 | 9.17 | 12.66 | 21.83 | 0.0174% | 0.004 |
| CROUNSE CORPORATION | 12,932.59 | 12/22/2023 | 12/31/2023 | 1/9/2024 | 5.17 | 8.65 | 13.83 | 0.0174% | 0.002 |
| CROUNSE CORPORATION | 12,935.22 | 12/5/2023 | 12/11/2023 | 12/28/2023 | 3.72 | 16.56 | 20.28 | 0.0174% | 0.004 |
| CROUNSE CORPORATION | 12,947.73 | 12/6/2023 | 12/19/2023 | 12/28/2023 | 7.26 | 8.49 | 15.74 | 0.0174% | 0.003 |
| CROUNSE CORPORATION | 12,953.50 | 12/11/2023 | 12/19/2023 | 12/28/2023 | 4.76 | 8.49 | 13.24 | 0.0174% | 0.002 |
| CROUNSE CORPORATION | 12,982.93 | 12/14/2023 | 12/22/2023 | 1/9/2024 | 4.81 | 17.37 | 22.19 | 0.0174% | 0.004 |
| CROUNSE CORPORATION | 12,989.74 | 12/1/2023 | 12/25/2023 | 1/9/2024 | 12.71 | 14.58 | 27.29 | 0.0175% | 0.005 |

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|---|---|---|---|---|---|---|---|---|---|
| CROUNSE CORPORATION | 12,990.36 | 4/26/2023 | 5/5/2023 | 5/18/2023 | 5.15 | 12.70 | 17.85 | 0.0175% | 0.003 |
| CROUNSE CORPORATION | 12,993.92 | 12/11/2023 | 12/24/2023 | 1/9/2024 | 7.21 | 15.59 | 22.79 | 0.0175% | 0.004 |
| CROUNSE CORPORATION | 13,001.90 | 6/30/2023 | 7/13/2023 | 7/27/2023 | 7.28 | 13.45 | 20.72 | 0.0175% | 0.004 |
| CROUNSE CORPORATION | 13,004.83 | 7/24/2023 | 8/26/2023 | 9/7/2023 | 17.17 | 11.65 | 28.83 | 0.0175% | 0.005 |
| CROUNSE CORPORATION | 13,022.29 | 10/27/2023 | 11/9/2023 | 11/17/2023 | 7.21 | 7.57 | 14.79 | 0.0175% | 0.003 |
| CROUNSE CORPORATION | 13,024.80 | 11/28/2023 | 12/3/2023 | 12/19/2023 | 3.22 | 15.57 | 18.78 | 0.0175% | 0.003 |
| CROUNSE CORPORATION | 13,031.70 | 10/25/2023 | 11/20/2023 | 11/29/2023 | 13.78 | 8.43 | 22.22 | 0.0175% | 0.004 |
| CROUNSE CORPORATION | 13,031.73 | 8/18/2023 | 9/4/2023 | 9/19/2023 | 9.27 | 14.45 | 23.73 | 0.0175% | 0.004 |
| CROUNSE CORPORATION | 13,031.97 | 6/20/2023 | 6/28/2023 | 7/7/2023 | 4.67 | 8.65 | 13.33 | 0.0175% | 0.002 |
| CROUNSE CORPORATION | 13,046.36 | 8/1/2023 | 8/11/2023 | 8/29/2023 | 5.80 | 17.41 | 23.20 | 0.0175% | 0.004 |
| CROUNSE CORPORATION | 13,071.40 | 1/22/2023 | 4/3/2023 | 4/19/2023 | 36.12 | 15.77 | 51.88 | 0.0176% | 0.009 |
| CROUNSE CORPORATION | 13,073.25 | 8/14/2023 | 8/27/2023 | 9/7/2023 | 7.17 | 10.65 | 17.83 | 0.0176% | 0.003 |
| CROUNSE CORPORATION | 13,074.41 | 6/12/2023 | 6/22/2023 | 7/7/2023 | 5.77 | 14.46 | 20.23 | 0.0176% | 0.004 |
| CROUNSE CORPORATION | 13,074.44 | 8/14/2023 | 8/23/2023 | 9/7/2023 | 5.14 | 14.71 | 19.86 | 0.0176% | 0.003 |
| CROUNSE CORPORATION | 13,080.96 | 12/22/2023 | 12/30/2023 | 1/9/2024 | 4.67 | 9.65 | 14.33 | 0.0176% | 0.003 |
| CROUNSE CORPORATION | 13,082.87 | 12/11/2023 | 12/18/2023 | 12/28/2023 | 4.00 | 10.00 | 14.00 | 0.0176% | 0.002 |
| CROUNSE CORPORATION | 13,094.21 | 7/20/2023 | 8/5/2023 | 8/17/2023 | 8.77 | 11.45 | 20.23 | 0.0176% | 0.004 |
| CROUNSE CORPORATION | 13,097.24 | 11/18/2023 | 12/11/2023 | 12/28/2023 | 12.22 | 16.57 | 28.78 | 0.0176% | 0.005 |
| CROUNSE CORPORATION | 13,105.31 | 6/29/2023 | 7/18/2023 | 7/27/2023 | 10.15 | 8.70 | 18.85 | 0.0176% | 0.003 |
| CROUNSE CORPORATION | 13,107.16 | 7/10/2023 | 8/7/2023 | 8/17/2023 | 14.65 | 9.70 | 24.35 | 0.0176% | 0.004 |
| CROUNSE CORPORATION | 13,129.81 | 8/13/2023 | 9/7/2023 | 9/19/2023 | 13.17 | 11.66 | 24.83 | 0.0176% | 0.004 |
| CROUNSE CORPORATION | 13,130.44 | 6/29/2023 | 7/18/2023 | 7/27/2023 | 10.15 | 8.70 | 18.85 | 0.0176% | 0.003 |
| CROUNSE CORPORATION | 13,132.11 | 11/6/2023 | 11/27/2023 | 12/7/2023 | 11.27 | 9.45 | 20.73 | 0.0176% | 0.004 |
| CROUNSE CORPORATION | 13,212.58 | 8/20/2023 | 9/7/2023 | 9/19/2023 | 9.67 | 11.65 | 21.33 | 0.0178% | 0.004 |
| CROUNSE CORPORATION | 13,220.73 | 12/5/2023 | 12/19/2023 | 12/28/2023 | 7.76 | 8.49 | 16.24 | 0.0178% | 0.003 |
| CROUNSE CORPORATION | 13,220.77 | 7/22/2023 | 8/9/2023 | 8/17/2023 | 9.68 | 7.63 | 17.32 | 0.0178% | 0.003 |
| CROUNSE CORPORATION | 13,245.35 | 1/3/2023 | 2/6/2023 | 2/16/2023 | 17.68 | 9.64 | 27.32 | 0.0178% | 0.005 |
| CROUNSE CORPORATION | 13,248.06 | 7/24/2023 | 8/25/2023 | 9/7/2023 | 16.67 | 12.66 | 29.33 | 0.0178% | 0.005 |
| CROUNSE CORPORATION | 13,287.82 | 6/30/2023 | 7/19/2023 | 7/27/2023 | 10.24 | 7.51 | 17.76 | 0.0179% | 0.003 |
| CROUNSE CORPORATION | 13,294.34 | 8/1/2023 | 8/11/2023 | 8/29/2023 | 5.80 | 17.41 | 23.20 | 0.0179% | 0.004 |
| CROUNSE CORPORATION | 13,304.09 | 7/5/2023 | 7/16/2023 | 7/27/2023 | 6.28 | 10.44 | 16.72 | 0.0179% | 0.003 |
| CROUNSE CORPORATION | 13,320.44 | 7/20/2023 | 8/3/2023 | 8/17/2023 | 7.71 | 13.57 | 21.29 | 0.0179% | 0.004 |
| CROUNSE CORPORATION | 13,340.22 | 8/7/2023 | 8/21/2023 | 9/7/2023 | 7.69 | 16.61 | 24.31 | 0.0179% | 0.004 |
| CROUNSE CORPORATION | 13,352.30 | 1/5/2023 | 2/21/2023 | 3/9/2023 | 24.15 | 15.69 | 39.85 | 0.0179% | 0.007 |
| CROUNSE CORPORATION | 13,358.31 | 1/18/2023 | 2/3/2023 | 2/16/2023 | 8.61 | 12.78 | 21.39 | 0.0180% | 0.004 |
| CROUNSE CORPORATION | 13,360.32 | 8/11/2023 | 8/29/2023 | 9/7/2023 | 9.75 | 8.49 | 18.25 | 0.0180% | 0.003 |
| CROUNSE CORPORATION | 13,383.22 | 1/3/2023 | 2/9/2023 | 2/16/2023 | 19.16 | 6.68 | 25.84 | 0.0180% | 0.005 |
| CROUNSE CORPORATION | 13,386.49 | 8/18/2023 | 9/14/2023 | 9/28/2023 | 14.29 | 13.42 | 27.71 | 0.0180% | 0.005 |
| CROUNSE CORPORATION | 13,441.52 | 7/17/2023 | 7/27/2023 | 8/9/2023 | 5.69 | 12.62 | 18.31 | 0.0181% | 0.003 |
| CROUNSE CORPORATION | 13,452.79 | 12/29/2022 | 1/5/2023 | 1/19/2023 | 4.13 | 13.74 | 17.87 | 0.0181% | 0.003 |
| CROUNSE CORPORATION | 13,454.51 | 8/1/2023 | 8/18/2023 | 8/29/2023 | 9.21 | 10.58 | 19.79 | 0.0181% | 0.004 |
| CROUNSE CORPORATION | 13,455.68 | 11/25/2023 | 12/8/2023 | 12/19/2023 | 7.30 | 10.40 | 17.70 | 0.0181% | 0.003 |
| CROUNSE CORPORATION | 13,457.24 | 12/27/2022 | 2/7/2023 | 2/16/2023 | 21.68 | 8.63 | 30.32 | 0.0181% | 0.005 |
| CROUNSE CORPORATION | 13,459.66 | 8/14/2023 | 8/20/2023 | 8/29/2023 | 3.67 | 8.66 | 12.33 | 0.0181% | 0.002 |
| CROUNSE CORPORATION | 13,460.45 | 7/9/2023 | 7/21/2023 | 8/9/2023 | 6.75 | 18.51 | 25.25 | 0.0181% | 0.005 |
| CROUNSE CORPORATION | 13,464.48 | 8/7/2023 | 8/21/2023 | 9/7/2023 | 7.69 | 16.61 | 24.31 | 0.0181% | 0.004 |
| CROUNSE CORPORATION | 13,464.80 | 7/9/2023 | 7/19/2023 | 7/27/2023 | 5.74 | 7.51 | 13.26 | 0.0181% | 0.002 |
| CROUNSE CORPORATION | 13,521.35 | 8/1/2023 | 8/15/2023 | 8/29/2023 | 7.78 | 13.43 | 21.22 | 0.0182% | 0.004 |
| CROUNSE CORPORATION | 13,546.67 | 7/20/2023 | 8/5/2023 | 8/17/2023 | 8.77 | 11.45 | 20.23 | 0.0182% | 0.004 |
| CROUNSE CORPORATION | 13,584.89 | 6/4/2023 | 6/23/2023 | 7/7/2023 | 10.27 | 13.45 | 23.73 | 0.0183% | 0.004 |
| CROUNSE CORPORATION | 13,608.87 | 7/31/2023 | 8/14/2023 | 8/29/2023 | 7.78 | 14.45 | 22.22 | 0.0183% | 0.004 |
| CROUNSE CORPORATION | 13,667.93 | 12/26/2022 | 2/2/2023 | 2/16/2023 | 19.67 | 13.67 | 33.33 | 0.0184% | 0.006 |
| CROUNSE CORPORATION | 13,720.01 | 6/2/2023 | 6/19/2023 | 6/29/2023 | 9.26 | 9.49 | 18.74 | 0.0184% | 0.003 |
| CROUNSE CORPORATION | 13,741.11 | 8/20/2023 | 9/14/2023 | 9/28/2023 | 13.29 | 13.42 | 26.71 | 0.0185% | 0.005 |
| CROUNSE CORPORATION | 13,769.35 | 7/31/2023 | 8/13/2023 | 8/29/2023 | 7.27 | 15.45 | 22.73 | 0.0185% | 0.004 |
| CROUNSE CORPORATION | 13,769.84 | 4/3/2023 | 4/13/2023 | 4/27/2023 | 5.64 | 13.73 | 19.36 | 0.0185% | 0.004 |
| CROUNSE CORPORATION | 13,775.88 | 7/25/2023 | 8/13/2023 | 8/29/2023 | 10.27 | 15.45 | 25.73 | 0.0185% | 0.005 |
| CROUNSE CORPORATION | 13,777.72 | 12/26/2022 | 1/24/2023 | 2/9/2023 | 15.12 | 15.77 | 30.88 | 0.0185% | 0.006 |

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|---|---|---|---|---|---|---|---|---|---|
| CROUNSE CORPORATION | 13,788.67 | 1/3/2023 | 2/20/2023 | 2/27/2023 | 24.65 | 6.70 | 31.35 | 0.0185% | 0.006 |
| CROUNSE CORPORATION | 13,798.17 | 12/30/2022 | 2/22/2023 | 3/9/2023 | 27.68 | 14.64 | 42.32 | 0.0185% | 0.008 |
| CROUNSE CORPORATION | 13,804.04 | 8/7/2023 | 8/21/2023 | 9/7/2023 | 7.69 | 16.61 | 24.31 | 0.0186% | 0.005 |
| CROUNSE CORPORATION | 13,811.50 | 12/18/2022 | 1/4/2023 | 1/19/2023 | 9.14 | 14.72 | 23.86 | 0.0186% | 0.004 |
| CROUNSE CORPORATION | 13,843.51 | 12/30/2022 | 2/22/2023 | 3/9/2023 | 27.68 | 14.64 | 42.32 | 0.0186% | 0.008 |
| CROUNSE CORPORATION | 13,853.65 | 7/31/2023 | 8/25/2023 | 9/7/2023 | 13.15 | 12.70 | 25.85 | 0.0186% | 0.005 |
| CROUNSE CORPORATION | 13,867.92 | 6/5/2023 | 6/17/2023 | 6/29/2023 | 6.63 | 11.74 | 18.37 | 0.0186% | 0.003 |
| CROUNSE CORPORATION | 13,877.01 | 5/30/2023 | 6/7/2023 | 6/16/2023 | 4.62 | 8.77 | 13.38 | 0.0186% | 0.002 |
| CROUNSE CORPORATION | 13,889.29 | 12/29/2022 | 1/4/2023 | 1/19/2023 | 3.67 | 14.66 | 18.33 | 0.0187% | 0.003 |
| CROUNSE CORPORATION | 13,895.31 | 12/22/2022 | 1/15/2023 | 1/27/2023 | 12.67 | 11.66 | 24.33 | 0.0187% | 0.005 |
| CROUNSE CORPORATION | 13,949.30 | 4/24/2023 | 5/24/2023 | 6/8/2023 | 15.62 | 14.77 | 30.38 | 0.0187% | 0.006 |
| CROUNSE CORPORATION | 13,982.19 | 12/18/2022 | 1/9/2023 | 1/19/2023 | 11.66 | 9.67 | 21.34 | 0.0188% | 0.004 |
| CROUNSE CORPORATION | 14,017.48 | 5/12/2023 | 5/28/2023 | 6/8/2023 | 8.65 | 10.70 | 19.35 | 0.0188% | 0.004 |
| CROUNSE CORPORATION | 14,025.30 | 6/12/2023 | 6/29/2023 | 7/7/2023 | 9.14 | 7.72 | 16.86 | 0.0188% | 0.003 |
| CROUNSE CORPORATION | 14,025.72 | 5/25/2023 | 6/2/2023 | 6/16/2023 | 4.63 | 13.75 | 18.37 | 0.0188% | 0.003 |
| CROUNSE CORPORATION | 14,041.55 | 5/22/2023 | 5/28/2023 | 6/8/2023 | 3.65 | 10.70 | 14.35 | 0.0189% | 0.003 |
| CROUNSE CORPORATION | 14,052.87 | 12/13/2022 | 1/29/2023 | 2/9/2023 | 24.13 | 10.73 | 34.87 | 0.0189% | 0.007 |
| CROUNSE CORPORATION | 14,053.32 | 5/4/2023 | 5/9/2023 | 5/18/2023 | 3.11 | 8.77 | 11.89 | 0.0189% | 0.002 |
| CROUNSE CORPORATION | 14,054.65 | 11/8/2022 | 1/17/2023 | 1/27/2023 | 35.67 | 9.66 | 45.33 | 0.0189% | 0.009 |
| CROUNSE CORPORATION | 14,061.97 | 4/26/2023 | 5/4/2023 | 5/18/2023 | 4.65 | 13.71 | 18.35 | 0.0189% | 0.003 |
| CROUNSE CORPORATION | 14,069.39 | 4/27/2023 | 5/9/2023 | 5/18/2023 | 6.46 | 8.78 | 15.23 | 0.0189% | 0.003 |
| CROUNSE CORPORATION | 14,071.04 | 4/26/2023 | 5/2/2023 | 5/18/2023 | 3.63 | 15.75 | 19.37 | 0.0189% | 0.004 |
| CROUNSE CORPORATION | 14,073.92 | 5/4/2023 | 5/10/2023 | 5/18/2023 | 3.61 | 7.77 | 11.39 | 0.0189% | 0.002 |
| CROUNSE CORPORATION | 14,076.80 | 4/26/2023 | 5/3/2023 | 5/18/2023 | 4.17 | 14.67 | 18.83 | 0.0189% | 0.004 |
| CROUNSE CORPORATION | 14,077.63 | 6/2/2023 | 6/9/2023 | 6/16/2023 | 4.18 | 6.65 | 10.82 | 0.0189% | 0.002 |
| CROUNSE CORPORATION | 14,081.34 | 6/6/2023 | 6/15/2023 | 6/29/2023 | 5.14 | 13.73 | 18.86 | 0.0189% | 0.004 |
| CROUNSE CORPORATION | 14,089.16 | 6/6/2023 | 6/15/2023 | 6/29/2023 | 5.14 | 13.73 | 18.86 | 0.0189% | 0.004 |
| CROUNSE CORPORATION | 14,090.40 | 6/12/2023 | 6/29/2023 | 7/7/2023 | 9.14 | 7.72 | 16.86 | 0.0189% | 0.003 |
| CROUNSE CORPORATION | 14,104.82 | 5/25/2023 | 6/3/2023 | 6/16/2023 | 5.13 | 12.75 | 17.87 | 0.0190% | 0.003 |
| CROUNSE CORPORATION | 14,124.43 | 12/22/2022 | 1/2/2023 | 1/19/2023 | 6.14 | 16.73 | 22.86 | 0.0190% | 0.004 |
| CROUNSE CORPORATION | 14,133.66 | 4/26/2023 | 5/1/2023 | 5/18/2023 | 3.13 | 16.75 | 19.87 | 0.0190% | 0.004 |
| CROUNSE CORPORATION | 14,135.90 | 6/26/2023 | 7/22/2023 | 8/9/2023 | 13.75 | 17.50 | 31.25 | 0.0190% | 0.006 |
| CROUNSE CORPORATION | 14,176.51 | 6/12/2023 | 6/30/2023 | 7/7/2023 | 9.62 | 6.77 | 16.38 | 0.0191% | 0.003 |
| CROUNSE CORPORATION | 14,193.63 | 6/11/2023 | 6/24/2023 | 7/7/2023 | 7.28 | 12.45 | 19.72 | 0.0191% | 0.004 |
| CROUNSE CORPORATION | 14,195.46 | 5/4/2023 | 5/9/2023 | 5/18/2023 | 3.11 | 8.77 | 11.89 | 0.0191% | 0.002 |
| CROUNSE CORPORATION | 14,221.33 | 12/30/2022 | 2/9/2023 | 2/16/2023 | 21.16 | 6.68 | 27.84 | 0.0191% | 0.005 |
| CROUNSE CORPORATION | 14,231.11 | 11/10/2022 | 1/27/2023 | 2/9/2023 | 39.62 | 12.75 | 52.38 | 0.0191% | 0.010 |
| CROUNSE CORPORATION | 14,233.36 | 5/18/2023 | 6/6/2023 | 6/16/2023 | 10.13 | 9.74 | 19.87 | 0.0191% | 0.004 |
| CROUNSE CORPORATION | 14,239.56 | 12/31/2022 | 3/1/2023 | 3/17/2023 | 30.62 | 15.75 | 46.38 | 0.0191% | 0.009 |
| CROUNSE CORPORATION | 14,247.11 | 12/30/2022 | 1/16/2023 | 1/27/2023 | 9.18 | 10.63 | 19.82 | 0.0191% | 0.004 |
| CROUNSE CORPORATION | 14,260.34 | 1/19/2023 | 2/5/2023 | 2/16/2023 | 9.12 | 10.77 | 19.88 | 0.0192% | 0.004 |
| CROUNSE CORPORATION | 14,268.01 | 12/28/2022 | 1/6/2023 | 1/19/2023 | 5.12 | 12.76 | 17.88 | 0.0192% | 0.003 |
| CROUNSE CORPORATION | 14,275.39 | 5/18/2023 | 5/26/2023 | 6/8/2023 | 4.62 | 12.77 | 17.38 | 0.0192% | 0.003 |
| CROUNSE CORPORATION | 14,301.79 | 12/30/2022 | 2/6/2023 | 2/16/2023 | 19.68 | 9.64 | 29.32 | 0.0192% | 0.006 |
| CROUNSE CORPORATION | 14,409.73 | 1/18/2023 | 1/29/2023 | 2/9/2023 | 6.13 | 10.74 | 16.87 | 0.0194% | 0.003 |
| CROUNSE CORPORATION | 14,440.24 | 1/30/2023 | 2/6/2023 | 2/16/2023 | 4.18 | 9.64 | 13.82 | 0.0194% | 0.003 |
| CROUNSE CORPORATION | 14,449.21 | 5/19/2023 | 5/29/2023 | 6/8/2023 | 5.63 | 9.74 | 15.37 | 0.0194% | 0.003 |
| CROUNSE CORPORATION | 14,465.91 | 3/13/2023 | 4/5/2023 | 4/19/2023 | 12.12 | 13.76 | 25.88 | 0.0194% | 0.005 |
| CROUNSE CORPORATION | 14,502.93 | 3/12/2023 | 4/2/2023 | 4/19/2023 | 11.11 | 16.77 | 27.89 | 0.0195% | 0.005 |
| CROUNSE CORPORATION | 14,528.06 | 1/30/2023 | 2/7/2023 | 2/16/2023 | 4.68 | 8.63 | 13.32 | 0.0195% | 0.003 |
| CROUNSE CORPORATION | 14,529.61 | 1/24/2023 | 2/5/2023 | 2/16/2023 | 6.62 | 10.77 | 17.38 | 0.0195% | 0.003 |
| CROUNSE CORPORATION | 14,551.59 | 6/4/2023 | 6/23/2023 | 7/7/2023 | 10.27 | 13.45 | 23.73 | 0.0196% | 0.005 |
| CROUNSE CORPORATION | 14,579.52 | 7/5/2023 | 7/22/2023 | 8/9/2023 | 9.25 | 17.50 | 26.75 | 0.0196% | 0.005 |
| CROUNSE CORPORATION | 14,603.90 | 12/22/2022 | 1/16/2023 | 1/27/2023 | 13.18 | 10.64 | 23.82 | 0.0196% | 0.005 |
| CROUNSE CORPORATION | 14,616.31 | 1/26/2023 | 4/4/2023 | 4/19/2023 | 34.62 | 14.76 | 49.38 | 0.0196% | 0.010 |
| CROUNSE CORPORATION | 14,627.05 | 1/4/2023 | 2/21/2023 | 3/9/2023 | 24.65 | 15.69 | 40.35 | 0.0197% | 0.008 |
| CROUNSE CORPORATION | 14,627.05 | 1/26/2023 | 4/5/2023 | 4/19/2023 | 35.12 | 13.76 | 48.88 | 0.0197% | 0.010 |
| CROUNSE CORPORATION | 14,632.42 | 5/21/2023 | 5/29/2023 | 6/8/2023 | 4.63 | 9.74 | 14.37 | 0.0197% | 0.003 |

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|---|---|---|---|---|---|---|---|---|---|
| CROUNSE CORPORATION | 14,640.27 | 4/24/2023 | 5/25/2023 | 6/8/2023 | 16.11 | 13.77 | 29.89 | 0.0197% | 0.006 |
| CROUNSE CORPORATION | 14,645.95 | 1/3/2023 | 2/22/2023 | 3/9/2023 | 25.68 | 14.64 | 40.32 | 0.0197% | 0.008 |
| CROUNSE CORPORATION | 14,657.12 | 1/18/2023 | 2/20/2023 | 2/27/2023 | 17.15 | 6.70 | 23.85 | 0.0197% | 0.005 |
| CROUNSE CORPORATION | 14,667.00 | 1/4/2023 | 2/9/2023 | 2/16/2023 | 18.66 | 6.68 | 25.34 | 0.0197% | 0.005 |
| CROUNSE CORPORATION | 14,676.44 | 1/4/2023 | 2/20/2023 | 2/27/2023 | 24.15 | 6.70 | 30.85 | 0.0197% | 0.006 |
| CROUNSE CORPORATION | 14,687.18 | 1/3/2023 | 2/20/2023 | 2/27/2023 | 24.65 | 6.70 | 31.35 | 0.0197% | 0.006 |
| CROUNSE CORPORATION | 14,707.85 | 5/9/2023 | 5/24/2023 | 6/8/2023 | 8.12 | 14.77 | 22.88 | 0.0198% | 0.005 |
| CROUNSE CORPORATION | 14,708.66 | 3/11/2023 | 4/2/2023 | 4/19/2023 | 11.62 | 16.77 | 28.38 | 0.0198% | 0.006 |
| CROUNSE CORPORATION | 14,713.81 | 3/11/2023 | 4/2/2023 | 4/19/2023 | 11.62 | 16.77 | 28.38 | 0.0198% | 0.006 |
| CROUNSE CORPORATION | 14,731.85 | 3/11/2023 | 3/31/2023 | 4/7/2023 | 10.62 | 6.77 | 17.38 | 0.0198% | 0.003 |
| CROUNSE CORPORATION | 14,898.03 | 6/19/2023 | 7/6/2023 | 7/19/2023 | 9.18 | 12.64 | 21.82 | 0.0200% | 0.004 |
| CROUNSE CORPORATION | 14,973.32 | 1/19/2023 | 2/6/2023 | 2/16/2023 | 9.68 | 9.64 | 19.32 | 0.0201% | 0.004 |
| CROUNSE CORPORATION | 15,059.59 | 1/26/2023 | 2/7/2023 | 2/16/2023 | 6.68 | 8.63 | 15.32 | 0.0202% | 0.003 |
| CROUNSE CORPORATION | 15,102.78 | 12/18/2022 | 1/3/2023 | 1/19/2023 | 8.64 | 15.72 | 24.36 | 0.0203% | 0.005 |
| CROUNSE CORPORATION | 15,125.45 | 11/10/2022 | 2/7/2023 | 2/16/2023 | 45.18 | 8.63 | 53.82 | 0.0203% | 0.011 |
| CROUNSE CORPORATION | 15,133.00 | 12/28/2022 | 1/21/2023 | 2/9/2023 | 12.63 | 18.75 | 31.37 | 0.0203% | 0.006 |
| CROUNSE CORPORATION | 15,138.34 | 12/28/2022 | 1/27/2023 | 2/9/2023 | 15.62 | 12.75 | 28.38 | 0.0203% | 0.006 |
| CROUNSE CORPORATION | 15,142.78 | 12/27/2022 | 2/6/2023 | 2/16/2023 | 21.18 | 9.63 | 30.82 | 0.0204% | 0.006 |
| CROUNSE CORPORATION | 15,150.34 | 12/27/2022 | 1/8/2023 | 1/19/2023 | 6.62 | 10.76 | 17.38 | 0.0204% | 0.004 |
| CROUNSE CORPORATION | 15,153.01 | 11/25/2022 | 2/22/2023 | 3/9/2023 | 45.18 | 14.64 | 59.82 | 0.0204% | 0.012 |
| CROUNSE CORPORATION | 15,154.34 | 12/18/2022 | 1/5/2023 | 1/19/2023 | 9.63 | 13.74 | 23.37 | 0.0204% | 0.005 |
| CROUNSE CORPORATION | 15,157.45 | 12/29/2022 | 1/5/2023 | 1/19/2023 | 4.13 | 13.74 | 17.87 | 0.0204% | 0.004 |
| CROUNSE CORPORATION | 15,161.45 | 12/28/2022 | 1/19/2023 | 1/27/2023 | 11.67 | 7.66 | 19.33 | 0.0204% | 0.004 |
| CROUNSE CORPORATION | 15,162.78 | 12/31/2022 | 4/2/2023 | 4/19/2023 | 46.62 | 16.77 | 63.38 | 0.0204% | 0.013 |
| CROUNSE CORPORATION | 15,164.12 | 12/26/2022 | 3/28/2023 | 4/7/2023 | 46.63 | 9.75 | 56.37 | 0.0204% | 0.011 |
| CROUNSE CORPORATION | 15,167.67 | 12/30/2022 | 1/15/2023 | 1/27/2023 | 8.68 | 11.64 | 20.32 | 0.0204% | 0.004 |
| CROUNSE CORPORATION | 15,169.01 | 12/18/2022 | 1/9/2023 | 1/19/2023 | 11.66 | 9.67 | 21.34 | 0.0204% | 0.004 |
| CROUNSE CORPORATION | 15,169.45 | 11/8/2022 | 1/9/2023 | 1/19/2023 | 31.67 | 9.67 | 41.33 | 0.0204% | 0.008 |
| CROUNSE CORPORATION | 15,171.23 | 12/22/2022 | 1/6/2023 | 1/19/2023 | 8.12 | 12.76 | 20.88 | 0.0204% | 0.004 |
| CROUNSE CORPORATION | 15,181.45 | 12/29/2022 | 1/5/2023 | 1/19/2023 | 4.13 | 13.74 | 17.87 | 0.0204% | 0.004 |
| CROUNSE CORPORATION | 15,189.01 | 12/18/2022 | 1/2/2023 | 1/19/2023 | 8.14 | 16.73 | 24.86 | 0.0204% | 0.005 |
| CROUNSE CORPORATION | 15,189.90 | 12/18/2022 | 1/1/2023 | 1/19/2023 | 7.64 | 17.73 | 25.36 | 0.0204% | 0.005 |
| CROUNSE CORPORATION | 15,191.68 | 12/30/2022 | 1/16/2023 | 1/27/2023 | 9.18 | 10.64 | 19.82 | 0.0204% | 0.004 |
| CROUNSE CORPORATION | 15,193.45 | 12/30/2022 | 1/24/2023 | 2/9/2023 | 13.12 | 15.77 | 28.88 | 0.0204% | 0.006 |
| CROUNSE CORPORATION | 15,193.90 | 12/27/2022 | 1/7/2023 | 1/19/2023 | 6.12 | 11.76 | 17.88 | 0.0204% | 0.004 |
| CROUNSE CORPORATION | 15,202.79 | 12/31/2022 | 2/7/2023 | 2/16/2023 | 19.69 | 8.63 | 28.31 | 0.0204% | 0.006 |
| CROUNSE CORPORATION | 15,204.57 | 12/31/2022 | 3/28/2023 | 4/7/2023 | 44.13 | 9.74 | 53.87 | 0.0204% | 0.011 |
| CROUNSE CORPORATION | 15,207.68 | 12/28/2022 | 1/21/2023 | 2/9/2023 | 12.63 | 18.75 | 31.37 | 0.0204% | 0.006 |
| CROUNSE CORPORATION | 15,210.79 | 12/26/2022 | 4/19/2023 | 4/27/2023 | 57.62 | 7.76 | 65.38 | 0.0204% | 0.013 |
| CROUNSE CORPORATION | 15,210.79 | 12/26/2022 | 1/29/2023 | 2/9/2023 | 17.63 | 10.73 | 28.37 | 0.0204% | 0.006 |
| CROUNSE CORPORATION | 15,213.46 | 12/30/2022 | 1/22/2023 | 2/9/2023 | 12.13 | 17.75 | 29.87 | 0.0204% | 0.006 |
| CROUNSE CORPORATION | 15,213.46 | 11/8/2022 | 1/26/2023 | 2/9/2023 | 40.11 | 13.78 | 53.89 | 0.0204% | 0.011 |
| CROUNSE CORPORATION | 15,215.24 | 12/27/2022 | 1/17/2023 | 1/27/2023 | 11.17 | 9.66 | 20.83 | 0.0204% | 0.004 |
| CROUNSE CORPORATION | 15,215.53 | 5/30/2023 | 6/7/2023 | 6/16/2023 | 4.62 | 8.77 | 13.38 | 0.0204% | 0.003 |
| CROUNSE CORPORATION | 15,220.48 | 1/19/2023 | 2/5/2023 | 2/16/2023 | 9.12 | 10.77 | 19.88 | 0.0205% | 0.004 |
| CROUNSE CORPORATION | 15,233.02 | 11/8/2022 | 2/6/2023 | 2/16/2023 | 45.68 | 9.63 | 55.32 | 0.0205% | 0.011 |
| CROUNSE CORPORATION | 15,241.46 | 12/29/2022 | 1/4/2023 | 1/19/2023 | 3.64 | 14.72 | 18.36 | 0.0205% | 0.004 |
| CROUNSE CORPORATION | 15,246.35 | 12/26/2022 | 2/22/2023 | 3/9/2023 | 29.68 | 14.64 | 44.32 | 0.0205% | 0.009 |
| CROUNSE CORPORATION | 15,259.69 | 12/27/2022 | 1/7/2023 | 1/19/2023 | 6.12 | 11.76 | 17.88 | 0.0205% | 0.004 |
| CROUNSE CORPORATION | 15,266.80 | 12/28/2022 | 1/6/2023 | 1/19/2023 | 5.12 | 12.76 | 17.88 | 0.0205% | 0.004 |
| CROUNSE CORPORATION | 15,307.69 | 12/18/2022 | 1/6/2023 | 1/19/2023 | 10.12 | 12.76 | 22.88 | 0.0206% | 0.005 |
| CROUNSE CORPORATION | 15,342.51 | 1/30/2023 | 2/8/2023 | 2/16/2023 | 5.17 | 7.66 | 12.83 | 0.0206% | 0.003 |
| CROUNSE CORPORATION | 15,418.95 | 2/27/2023 | 4/3/2023 | 4/19/2023 | 18.12 | 15.76 | 33.88 | 0.0207% | 0.007 |
| CROUNSE CORPORATION | 15,462.72 | 1/26/2023 | 2/8/2023 | 2/16/2023 | 7.17 | 7.66 | 14.83 | 0.0208% | 0.003 |
| CROUNSE CORPORATION | 15,483.27 | 12/30/2022 | 1/20/2023 | 1/27/2023 | 11.13 | 6.75 | 17.87 | 0.0208% | 0.004 |
| CROUNSE CORPORATION | 15,661.37 | 3/13/2023 | 4/6/2023 | 4/19/2023 | 12.67 | 12.65 | 25.33 | 0.0210% | 0.005 |
| CROUNSE CORPORATION | 17,669.87 | 11/20/2023 | 12/1/2023 | 12/19/2023 | 6.21 | 17.57 | 23.79 | 0.0237% | 0.006 |
| CROUNSE CORPORATION | 17,743.01 | 10/31/2023 | 11/14/2023 | 11/29/2023 | 7.71 | 14.58 | 22.29 | 0.0238% | 0.005 |

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| CROUNSE CORPORATION | 17,744.47 | 12/19/2023 | 12/28/2023 | 1/9/2024 | 5.19 | 11.62 | 16.81 | 0.0238% | 0.004 |
| CROUNSE CORPORATION | 17,760.87 | 11/20/2023 | 12/1/2023 | 12/19/2023 | 6.21 | 17.57 | 23.79 | 0.0239% | 0.006 |
| CROUNSE CORPORATION | 17,773.51 | 11/8/2023 | 11/25/2023 | 12/7/2023 | 9.28 | 11.45 | 20.72 | 0.0239% | 0.005 |
| CROUNSE CORPORATION | 17,778.97 | 11/27/2023 | 12/18/2023 | 12/28/2023 | 11.00 | 10.00 | 21.00 | 0.0239% | 0.005 |
| CROUNSE CORPORATION | 17,823.44 | 10/24/2023 | 11/11/2023 | 11/29/2023 | 9.68 | 17.63 | 27.32 | 0.0240% | 0.007 |
| CROUNSE CORPORATION | 17,834.99 | 11/21/2023 | 12/4/2023 | 12/19/2023 | 7.22 | 14.56 | 21.78 | 0.0240% | 0.005 |
| CROUNSE CORPORATION | 17,835.23 | 11/27/2023 | 12/19/2023 | 12/28/2023 | 11.75 | 8.49 | 20.25 | 0.0240% | 0.005 |
| CROUNSE CORPORATION | 17,836.20 | 11/14/2023 | 11/24/2023 | 12/7/2023 | 5.77 | 12.45 | 18.23 | 0.0240% | 0.004 |
| CROUNSE CORPORATION | 17,836.81 | 12/13/2023 | 12/26/2023 | 1/9/2024 | 7.21 | 13.58 | 20.79 | 0.0240% | 0.005 |
| CROUNSE CORPORATION | 17,840.09 | 12/6/2023 | 12/23/2023 | 1/9/2024 | 9.21 | 16.59 | 25.79 | 0.0240% | 0.006 |
| CROUNSE CORPORATION | 17,852.24 | 12/6/2023 | 12/22/2023 | 1/9/2024 | 8.81 | 17.37 | 26.19 | 0.0240% | 0.006 |
| CROUNSE CORPORATION | 17,855.76 | 12/4/2023 | 12/14/2023 | 12/28/2023 | 5.78 | 13.44 | 19.22 | 0.0240% | 0.005 |
| CROUNSE CORPORATION | 17,855.76 | 12/18/2023 | 12/29/2023 | 1/9/2024 | 6.17 | 10.66 | 16.83 | 0.0240% | 0.004 |
| CROUNSE CORPORATION | 17,864.27 | 11/27/2023 | 12/14/2023 | 12/28/2023 | 9.28 | 13.45 | 22.72 | 0.0240% | 0.005 |
| CROUNSE CORPORATION | 17,873.14 | 12/22/2023 | 12/31/2023 | 1/9/2024 | 5.17 | 8.65 | 13.83 | 0.0240% | 0.003 |
| CROUNSE CORPORATION | 17,876.66 | 12/6/2023 | 12/25/2023 | 1/9/2024 | 10.21 | 14.58 | 24.79 | 0.0240% | 0.006 |
| CROUNSE CORPORATION | 17,876.78 | 12/18/2023 | 12/30/2023 | 1/9/2024 | 6.67 | 9.65 | 16.33 | 0.0240% | 0.004 |
| CROUNSE CORPORATION | 17,883.95 | 12/13/2023 | 1/1/2024 | 1/18/2024 | 10.23 | 16.53 | 26.77 | 0.0240% | 0.006 |
| CROUNSE CORPORATION | 17,884.07 | 12/6/2023 | 12/23/2023 | 1/9/2024 | 9.20 | 16.59 | 25.80 | 0.0240% | 0.006 |
| CROUNSE CORPORATION | 17,886.62 | 11/8/2023 | 11/25/2023 | 12/7/2023 | 9.28 | 11.45 | 20.72 | 0.0240% | 0.005 |
| CROUNSE CORPORATION | 17,888.93 | 11/27/2023 | 12/14/2023 | 12/28/2023 | 9.28 | 13.44 | 22.72 | 0.0240% | 0.005 |
| CROUNSE CORPORATION | 17,890.39 | 12/13/2023 | 12/27/2023 | 1/9/2024 | 7.71 | 12.58 | 20.29 | 0.0240% | 0.005 |
| CROUNSE CORPORATION | 17,897.44 | 11/20/2023 | 12/2/2023 | 12/19/2023 | 6.72 | 16.57 | 23.28 | 0.0241% | 0.006 |
| CROUNSE CORPORATION | 17,907.16 | 11/8/2023 | 11/21/2023 | 12/7/2023 | 7.27 | 15.46 | 22.73 | 0.0241% | 0.005 |
| CROUNSE CORPORATION | 17,908.37 | 11/14/2023 | 11/22/2023 | 12/7/2023 | 4.77 | 14.45 | 19.23 | 0.0241% | 0.005 |
| CROUNSE CORPORATION | 17,912.62 | 11/21/2023 | 12/9/2023 | 12/19/2023 | 9.80 | 9.40 | 19.20 | 0.0241% | 0.005 |
| CROUNSE CORPORATION | 17,920.16 | 12/12/2023 | 12/22/2023 | 1/9/2024 | 5.81 | 17.37 | 23.19 | 0.0241% | 0.006 |
| CROUNSE CORPORATION | 17,920.64 | 11/14/2023 | 11/28/2023 | 12/7/2023 | 7.73 | 8.53 | 16.27 | 0.0241% | 0.004 |
| CROUNSE CORPORATION | 17,923.44 | 11/8/2023 | 11/22/2023 | 12/7/2023 | 7.77 | 14.45 | 22.23 | 0.0241% | 0.005 |
| CROUNSE CORPORATION | 17,925.14 | 12/6/2023 | 12/24/2023 | 1/9/2024 | 9.71 | 15.59 | 25.29 | 0.0241% | 0.006 |
| CROUNSE CORPORATION | 17,957.46 | 11/21/2023 | 12/2/2023 | 12/19/2023 | 6.22 | 16.57 | 22.78 | 0.0241% | 0.005 |
| CROUNSE CORPORATION | 17,958.31 | 11/8/2023 | 11/24/2023 | 12/7/2023 | 8.78 | 12.45 | 21.22 | 0.0241% | 0.005 |
| CROUNSE CORPORATION | 17,960.49 | 12/4/2023 | 12/11/2023 | 12/28/2023 | 4.26 | 16.47 | 20.74 | 0.0241% | 0.005 |
| CROUNSE CORPORATION | 17,963.05 | 12/19/2023 | 12/30/2023 | 1/9/2024 | 6.17 | 9.65 | 15.83 | 0.0241% | 0.004 |
| CROUNSE CORPORATION | 17,963.65 | 11/20/2023 | 12/1/2023 | 12/19/2023 | 6.21 | 17.57 | 23.79 | 0.0241% | 0.006 |
| CROUNSE CORPORATION | 17,969.49 | 10/31/2023 | 11/14/2023 | 11/29/2023 | 7.71 | 14.58 | 22.29 | 0.0241% | 0.005 |
| CROUNSE CORPORATION | 17,970.34 | 10/24/2023 | 11/10/2023 | 11/17/2023 | 9.18 | 6.64 | 15.82 | 0.0242% | 0.004 |
| CROUNSE CORPORATION | 17,970.82 | 11/30/2023 | 12/13/2023 | 12/28/2023 | 7.23 | 14.54 | 21.77 | 0.0242% | 0.005 |
| CROUNSE CORPORATION | 17,973.62 | 12/4/2023 | 12/15/2023 | 12/28/2023 | 6.23 | 12.54 | 18.77 | 0.0242% | 0.005 |
| CROUNSE CORPORATION | 17,986.62 | 11/8/2023 | 11/28/2023 | 12/7/2023 | 10.73 | 8.54 | 19.27 | 0.0242% | 0.005 |
| CROUNSE CORPORATION | 17,987.71 | 12/14/2023 | 12/28/2023 | 1/9/2024 | 7.69 | 11.62 | 19.31 | 0.0242% | 0.005 |
| CROUNSE CORPORATION | 17,991.23 | 11/14/2023 | 11/22/2023 | 12/7/2023 | 4.77 | 14.46 | 19.23 | 0.0242% | 0.005 |
| CROUNSE CORPORATION | 17,994.64 | 12/14/2023 | 12/28/2023 | 1/9/2024 | 7.69 | 11.62 | 19.31 | 0.0242% | 0.005 |
| CROUNSE CORPORATION | 17,994.88 | 10/30/2023 | 11/13/2023 | 12/7/2023 | 7.81 | 23.37 | 31.19 | 0.0242% | 0.008 |
| CROUNSE CORPORATION | 18,003.14 | 12/11/2023 | 12/21/2023 | 1/9/2024 | 5.81 | 18.38 | 24.19 | 0.0242% | 0.006 |
| CROUNSE CORPORATION | 18,007.39 | 11/14/2023 | 11/21/2023 | 12/7/2023 | 4.27 | 15.46 | 19.73 | 0.0242% | 0.005 |
| CROUNSE CORPORATION | 18,009.82 | 12/11/2023 | 12/23/2023 | 1/9/2024 | 6.71 | 16.59 | 23.29 | 0.0242% | 0.006 |
| CROUNSE CORPORATION | 18,010.43 | 10/24/2023 | 11/10/2023 | 11/17/2023 | 9.18 | 6.64 | 15.82 | 0.0242% | 0.004 |
| CROUNSE CORPORATION | 18,010.55 | 10/24/2023 | 11/9/2023 | 11/17/2023 | 8.71 | 7.57 | 16.29 | 0.0242% | 0.004 |
| CROUNSE CORPORATION | 18,013.35 | 11/17/2023 | 11/29/2023 | 12/7/2023 | 6.74 | 7.53 | 14.26 | 0.0242% | 0.003 |
| CROUNSE CORPORATION | 18,014.56 | 11/21/2023 | 12/9/2023 | 12/19/2023 | 9.80 | 9.40 | 19.20 | 0.0242% | 0.005 |
| CROUNSE CORPORATION | 18,017.72 | 11/21/2023 | 12/4/2023 | 12/19/2023 | 7.22 | 14.56 | 21.78 | 0.0242% | 0.005 |
| CROUNSE CORPORATION | 18,019.18 | 11/20/2023 | 12/3/2023 | 12/19/2023 | 7.22 | 15.57 | 22.78 | 0.0242% | 0.006 |
| CROUNSE CORPORATION | 18,029.39 | 10/30/2023 | 11/13/2023 | 12/7/2023 | 7.65 | 23.70 | 31.35 | 0.0242% | 0.008 |
| CROUNSE CORPORATION | 18,032.18 | 11/14/2023 | 11/23/2023 | 12/7/2023 | 5.27 | 13.45 | 18.73 | 0.0242% | 0.005 |
| CROUNSE CORPORATION | 18,039.11 | 11/17/2023 | 11/29/2023 | 12/7/2023 | 6.74 | 7.53 | 14.26 | 0.0242% | 0.003 |
| CROUNSE CORPORATION | 18,039.35 | 11/27/2023 | 12/17/2023 | 12/28/2023 | 10.73 | 10.54 | 21.27 | 0.0242% | 0.005 |
| CROUNSE CORPORATION | 18,039.96 | 11/17/2023 | 11/28/2023 | 12/7/2023 | 6.24 | 8.53 | 14.76 | 0.0242% | 0.004 |

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|---|---|---|---|---|---|---|---|---|---|
| CROUNSE CORPORATION | 18,043.11 | 11/14/2023 | 11/21/2023 | 12/7/2023 | 4.27 | 15.46 | 19.73 | 0.0242% | 0.005 |
| CROUNSE CORPORATION | 18,058.91 | 11/22/2023 | 12/12/2023 | 12/28/2023 | 10.77 | 15.47 | 26.23 | 0.0243% | 0.006 |
| CROUNSE CORPORATION | 18,071.67 | 10/24/2023 | 11/10/2023 | 11/17/2023 | 9.18 | 6.65 | 15.82 | 0.0243% | 0.004 |
| CROUNSE CORPORATION | 18,079.20 | 11/20/2023 | 12/3/2023 | 12/19/2023 | 7.22 | 15.57 | 22.78 | 0.0243% | 0.006 |
| CROUNSE CORPORATION | 18,144.20 | 10/24/2023 | 11/16/2023 | 11/29/2023 | 12.17 | 12.66 | 24.83 | 0.0244% | 0.006 |
| CROUNSE CORPORATION | 18,175.67 | 10/31/2023 | 11/13/2023 | 12/7/2023 | 7.31 | 23.37 | 30.69 | 0.0244% | 0.007 |
| CROUNSE CORPORATION | 18,187.58 | 11/30/2023 | 12/13/2023 | 12/28/2023 | 7.23 | 14.54 | 21.77 | 0.0244% | 0.005 |
| CROUNSE CORPORATION | 18,302.27 | 11/17/2023 | 11/30/2023 | 12/7/2023 | 7.16 | 6.68 | 13.84 | 0.0246% | 0.003 |
| CROUNSE CORPORATION | 18,314.55 | 12/19/2023 | 12/29/2023 | 1/9/2024 | 5.67 | 10.66 | 16.33 | 0.0246% | 0.004 |
| CROUNSE CORPORATION | 18,327.06 | 10/31/2023 | 11/14/2023 | 11/29/2023 | 7.71 | 14.58 | 22.29 | 0.0246% | 0.005 |
| CROUNSE CORPORATION | 18,349.54 | 11/20/2023 | 11/30/2023 | 12/7/2023 | 5.66 | 6.68 | 12.34 | 0.0247% | 0.003 |
| CROUNSE CORPORATION | 19,852.13 | 7/7/2023 | 7/19/2023 | 7/27/2023 | 6.74 | 7.51 | 14.26 | 0.0267% | 0.004 |
| CROUNSE CORPORATION | 20,044.16 | 8/9/2023 | 8/29/2023 | 9/7/2023 | 10.76 | 8.49 | 19.24 | 0.0269% | 0.005 |
| CROUNSE CORPORATION | 20,154.14 | 7/24/2023 | 8/7/2023 | 8/17/2023 | 7.65 | 9.70 | 17.35 | 0.0271% | 0.005 |
| CROUNSE CORPORATION | 20,167.85 | 7/25/2023 | 8/9/2023 | 8/17/2023 | 8.18 | 7.64 | 15.82 | 0.0271% | 0.004 |
| CROUNSE CORPORATION | 20,180.30 | 8/2/2023 | 9/15/2023 | 9/28/2023 | 22.79 | 12.41 | 35.21 | 0.0271% | 0.010 |
| CROUNSE CORPORATION | 20,241.01 | 7/25/2023 | 8/6/2023 | 8/17/2023 | 6.78 | 10.45 | 17.22 | 0.0272% | 0.005 |
| CROUNSE CORPORATION | 20,243.42 | 8/7/2023 | 8/28/2023 | 9/7/2023 | 11.20 | 9.61 | 20.80 | 0.0272% | 0.006 |
| CROUNSE CORPORATION | 20,263.36 | 7/31/2023 | 8/12/2023 | 8/29/2023 | 6.77 | 16.46 | 23.23 | 0.0272% | 0.006 |
| CROUNSE CORPORATION | 20,310.98 | 7/25/2023 | 8/19/2023 | 8/29/2023 | 13.21 | 9.58 | 22.79 | 0.0273% | 0.006 |
| CROUNSE CORPORATION | 20,340.32 | 7/17/2023 | 7/27/2023 | 8/9/2023 | 5.69 | 12.62 | 18.31 | 0.0273% | 0.005 |
| CROUNSE CORPORATION | 20,415.25 | 8/16/2023 | 9/6/2023 | 9/19/2023 | 11.28 | 12.45 | 23.72 | 0.0274% | 0.007 |
| CROUNSE CORPORATION | 20,447.13 | 7/11/2023 | 8/13/2023 | 8/29/2023 | 17.27 | 15.45 | 32.73 | 0.0275% | 0.009 |
| CROUNSE CORPORATION | 20,452.33 | 8/1/2023 | 8/28/2023 | 9/7/2023 | 14.20 | 9.61 | 23.80 | 0.0275% | 0.007 |
| CROUNSE CORPORATION | 20,457.67 | 8/9/2023 | 9/6/2023 | 9/19/2023 | 14.78 | 12.45 | 27.22 | 0.0275% | 0.007 |
| CROUNSE CORPORATION | 20,460.21 | 8/16/2023 | 8/28/2023 | 9/7/2023 | 6.70 | 9.61 | 16.30 | 0.0275% | 0.004 |
| CROUNSE CORPORATION | 20,463.64 | 8/2/2023 | 9/15/2023 | 9/28/2023 | 22.79 | 12.41 | 35.21 | 0.0275% | 0.010 |
| CROUNSE CORPORATION | 20,476.34 | 8/16/2023 | 9/13/2023 | 9/28/2023 | 14.77 | 14.45 | 29.23 | 0.0275% | 0.008 |
| CROUNSE CORPORATION | 20,478.88 | 8/9/2023 | 9/8/2023 | 9/19/2023 | 15.68 | 10.64 | 26.32 | 0.0275% | 0.007 |
| CROUNSE CORPORATION | 20,520.66 | 7/6/2023 | 7/17/2023 | 7/27/2023 | 6.28 | 9.44 | 15.72 | 0.0276% | 0.004 |
| CROUNSE CORPORATION | 20,526.38 | 8/1/2023 | 8/24/2023 | 9/7/2023 | 12.15 | 13.70 | 25.85 | 0.0276% | 0.007 |
| CROUNSE CORPORATION | 20,531.33 | 7/10/2023 | 7/31/2023 | 8/9/2023 | 11.21 | 8.58 | 19.79 | 0.0276% | 0.005 |
| CROUNSE CORPORATION | 20,561.94 | 7/25/2023 | 8/5/2023 | 8/17/2023 | 6.27 | 11.45 | 17.73 | 0.0276% | 0.005 |
| CROUNSE CORPORATION | 20,573.49 | 7/24/2023 | 8/8/2023 | 8/17/2023 | 8.15 | 8.69 | 16.85 | 0.0276% | 0.005 |
| CROUNSE CORPORATION | 20,592.54 | 7/17/2023 | 7/28/2023 | 8/9/2023 | 6.19 | 11.62 | 17.81 | 0.0277% | 0.005 |
| CROUNSE CORPORATION | 20,593.81 | 7/6/2023 | 7/18/2023 | 7/27/2023 | 6.65 | 8.70 | 15.35 | 0.0277% | 0.004 |
| CROUNSE CORPORATION | 20,622.26 | 7/24/2023 | 8/8/2023 | 8/17/2023 | 8.15 | 8.69 | 16.85 | 0.0277% | 0.005 |
| CROUNSE CORPORATION | 20,642.90 | 6/26/2023 | 7/9/2023 | 7/19/2023 | 7.19 | 9.63 | 16.81 | 0.0277% | 0.005 |
| CROUNSE CORPORATION | 20,646.77 | 7/5/2023 | 7/17/2023 | 7/27/2023 | 6.78 | 9.44 | 16.22 | 0.0277% | 0.005 |
| CROUNSE CORPORATION | 20,652.87 | 8/1/2023 | 8/24/2023 | 9/7/2023 | 12.15 | 13.70 | 25.85 | 0.0278% | 0.007 |
| CROUNSE CORPORATION | 20,652.87 | 8/1/2023 | 8/27/2023 | 9/7/2023 | 13.68 | 10.65 | 24.32 | 0.0278% | 0.007 |
| CROUNSE CORPORATION | 20,653.25 | 8/16/2023 | 9/4/2023 | 9/19/2023 | 10.27 | 14.46 | 24.73 | 0.0278% | 0.007 |
| CROUNSE CORPORATION | 20,656.93 | 8/9/2023 | 9/13/2023 | 9/28/2023 | 18.27 | 14.45 | 32.73 | 0.0278% | 0.009 |
| CROUNSE CORPORATION | 20,665.57 | 7/31/2023 | 8/12/2023 | 8/29/2023 | 6.77 | 16.46 | 23.23 | 0.0278% | 0.006 |
| CROUNSE CORPORATION | 20,702.27 | 8/16/2023 | 9/7/2023 | 9/19/2023 | 11.67 | 11.66 | 23.33 | 0.0278% | 0.006 |
| CROUNSE CORPORATION | 20,711.41 | 8/2/2023 | 9/14/2023 | 9/28/2023 | 22.29 | 13.42 | 35.71 | 0.0278% | 0.010 |
| CROUNSE CORPORATION | 20,730.08 | 7/6/2023 | 7/20/2023 | 7/27/2023 | 7.75 | 6.51 | 14.25 | 0.0279% | 0.004 |
| CROUNSE CORPORATION | 20,754.09 | 7/25/2023 | 8/13/2023 | 8/29/2023 | 10.27 | 15.45 | 25.73 | 0.0279% | 0.007 |
| CROUNSE CORPORATION | 20,758.53 | 7/11/2023 | 7/27/2023 | 8/9/2023 | 8.69 | 12.62 | 21.31 | 0.0279% | 0.006 |
| CROUNSE CORPORATION | 20,764.25 | 7/25/2023 | 8/12/2023 | 8/29/2023 | 9.77 | 16.46 | 26.23 | 0.0279% | 0.007 |
| CROUNSE CORPORATION | 20,786.47 | 7/6/2023 | 7/15/2023 | 7/27/2023 | 5.25 | 11.50 | 16.75 | 0.0279% | 0.005 |
| CROUNSE CORPORATION | 20,793.33 | 7/7/2023 | 7/20/2023 | 7/27/2023 | 7.25 | 6.51 | 13.75 | 0.0279% | 0.004 |
| CROUNSE CORPORATION | 20,798.41 | 8/2/2023 | 9/15/2023 | 9/28/2023 | 22.79 | 12.42 | 35.21 | 0.0280% | 0.010 |
| CROUNSE CORPORATION | 20,806.03 | 7/10/2023 | 8/27/2023 | 9/7/2023 | 24.67 | 10.65 | 35.33 | 0.0280% | 0.010 |
| CROUNSE CORPORATION | 20,810.47 | 7/5/2023 | 7/16/2023 | 7/27/2023 | 6.28 | 10.44 | 16.72 | 0.0280% | 0.005 |
| CROUNSE CORPORATION | 20,860.51 | 8/1/2023 | 8/27/2023 | 9/7/2023 | 13.67 | 10.65 | 24.33 | 0.0280% | 0.007 |
| CROUNSE CORPORATION | 20,870.42 | 7/11/2023 | 8/7/2023 | 8/17/2023 | 14.15 | 9.70 | 23.85 | 0.0280% | 0.007 |
| CROUNSE CORPORATION | 20,896.33 | 7/10/2023 | 7/31/2023 | 8/9/2023 | 11.21 | 8.58 | 19.79 | 0.0281% | 0.006 |

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|---|---|---|---|---|---|---|---|---|---|
| CROUNSE CORPORATION | 20,975.47 | 12/28/2022 | 4/7/2023 | 4/19/2023 | 50.62 | 11.76 | 62.38 | 0.0282% | 0.018 |
| CROUNSE CORPORATION | 20,987.77 | 7/25/2023 | 8/8/2023 | 8/17/2023 | 7.65 | 8.69 | 16.35 | 0.0282% | 0.005 |
| CROUNSE CORPORATION | 20,988.47 | 6/13/2023 | 6/26/2023 | 7/7/2023 | 7.24 | 10.53 | 17.76 | 0.0282% | 0.005 |
| CROUNSE CORPORATION | 21,016.72 | 7/25/2023 | 8/9/2023 | 8/17/2023 | 8.18 | 7.64 | 15.82 | 0.0282% | 0.004 |
| CROUNSE CORPORATION | 21,073.08 | 12/5/2022 | 1/3/2023 | 1/19/2023 | 15.14 | 15.73 | 30.86 | 0.0283% | 0.009 |
| CROUNSE CORPORATION | 21,095.77 | 12/28/2022 | 2/6/2023 | 2/16/2023 | 20.68 | 9.63 | 30.32 | 0.0284% | 0.009 |
| CROUNSE CORPORATION | 21,103.61 | 5/30/2023 | 6/11/2023 | 6/29/2023 | 6.68 | 17.64 | 24.32 | 0.0284% | 0.007 |
| CROUNSE CORPORATION | 21,152.71 | 12/28/2022 | 1/17/2023 | 1/27/2023 | 10.67 | 9.66 | 20.33 | 0.0284% | 0.006 |
| CROUNSE CORPORATION | 21,153.13 | 11/23/2022 | 1/2/2023 | 1/19/2023 | 20.64 | 16.73 | 37.36 | 0.0284% | 0.011 |
| CROUNSE CORPORATION | 21,184.52 | 6/20/2023 | 7/4/2023 | 7/19/2023 | 7.70 | 14.61 | 22.30 | 0.0285% | 0.006 |
| CROUNSE CORPORATION | 21,193.78 | 5/31/2023 | 6/10/2023 | 6/16/2023 | 5.68 | 5.65 | 11.32 | 0.0285% | 0.003 |
| CROUNSE CORPORATION | 21,200.51 | 12/28/2022 | 4/19/2023 | 4/27/2023 | 56.62 | 7.76 | 64.38 | 0.0285% | 0.018 |
| CROUNSE CORPORATION | 21,215.59 | 6/20/2023 | 7/7/2023 | 7/19/2023 | 9.19 | 11.62 | 20.81 | 0.0285% | 0.006 |
| CROUNSE CORPORATION | 21,259.61 | 6/29/2023 | 7/10/2023 | 7/19/2023 | 6.19 | 8.63 | 14.81 | 0.0286% | 0.004 |
| CROUNSE CORPORATION | 21,311.83 | 6/20/2023 | 7/5/2023 | 7/19/2023 | 8.18 | 13.65 | 21.82 | 0.0286% | 0.006 |
| CROUNSE CORPORATION | 21,313.42 | 6/20/2023 | 7/10/2023 | 7/19/2023 | 10.69 | 8.63 | 19.31 | 0.0286% | 0.006 |
| CROUNSE CORPORATION | 21,316.85 | 6/28/2023 | 7/24/2023 | 8/9/2023 | 13.75 | 15.49 | 29.25 | 0.0286% | 0.008 |
| CROUNSE CORPORATION | 21,382.16 | 6/28/2023 | 7/12/2023 | 7/27/2023 | 7.65 | 14.71 | 22.35 | 0.0287% | 0.006 |
| CROUNSE CORPORATION | 21,393.27 | 6/13/2023 | 6/28/2023 | 7/7/2023 | 8.17 | 8.66 | 16.83 | 0.0288% | 0.005 |
| CROUNSE CORPORATION | 21,418.78 | 6/14/2023 | 6/30/2023 | 7/7/2023 | 8.62 | 6.77 | 15.38 | 0.0288% | 0.004 |
| CROUNSE CORPORATION | 21,431.34 | 6/23/2023 | 7/8/2023 | 7/19/2023 | 8.19 | 10.62 | 18.81 | 0.0288% | 0.005 |
| CROUNSE CORPORATION | 21,501.40 | 6/23/2023 | 7/8/2023 | 7/19/2023 | 8.19 | 10.62 | 18.81 | 0.0289% | 0.005 |
| CROUNSE CORPORATION | 21,528.64 | 6/13/2023 | 6/25/2023 | 7/7/2023 | 6.78 | 11.44 | 18.22 | 0.0289% | 0.005 |
| CROUNSE CORPORATION | 21,539.48 | 6/23/2023 | 7/11/2023 | 8/9/2023 | 9.69 | 28.62 | 38.31 | 0.0289% | 0.011 |
| CROUNSE CORPORATION | 21,554.15 | 6/20/2023 | 7/4/2023 | 7/19/2023 | 7.70 | 14.61 | 22.30 | 0.0290% | 0.006 |
| CROUNSE CORPORATION | 21,587.73 | 6/13/2023 | 6/23/2023 | 7/7/2023 | 5.77 | 13.45 | 19.23 | 0.0290% | 0.006 |
| CROUNSE CORPORATION | 21,607.16 | 6/14/2023 | 6/26/2023 | 7/7/2023 | 6.74 | 10.53 | 17.26 | 0.0290% | 0.005 |
| CROUNSE CORPORATION | 21,616.42 | 6/14/2023 | 6/24/2023 | 7/7/2023 | 5.78 | 12.45 | 18.22 | 0.0291% | 0.005 |
| CROUNSE CORPORATION | 21,710.15 | 6/26/2023 | 7/9/2023 | 7/19/2023 | 7.19 | 9.63 | 16.81 | 0.0292% | 0.005 |
| CROUNSE CORPORATION | 21,753.51 | 6/28/2023 | 7/23/2023 | 8/9/2023 | 13.25 | 16.50 | 29.75 | 0.0292% | 0.009 |
| CROUNSE CORPORATION | 21,994.51 | 5/30/2023 | 6/9/2023 | 6/16/2023 | 5.68 | 6.65 | 12.32 | 0.0296% | 0.004 |
| CROUNSE CORPORATION | 22,269.22 | 5/31/2023 | 6/12/2023 | 6/29/2023 | 6.79 | 16.43 | 23.21 | 0.0299% | 0.007 |
| CROUNSE CORPORATION | 22,306.24 | 6/5/2023 | 6/30/2023 | 7/7/2023 | 13.12 | 6.77 | 19.88 | 0.0300% | 0.006 |
| CROUNSE CORPORATION | 22,330.30 | 4/19/2023 | 5/19/2023 | 5/26/2023 | 15.62 | 6.76 | 22.38 | 0.0300% | 0.007 |
| CROUNSE CORPORATION | 22,337.04 | 6/5/2023 | 6/19/2023 | 6/29/2023 | 7.76 | 9.48 | 17.24 | 0.0300% | 0.005 |
| CROUNSE CORPORATION | 22,399.44 | 6/5/2023 | 6/27/2023 | 7/7/2023 | 11.72 | 9.56 | 21.28 | 0.0301% | 0.006 |
| CROUNSE CORPORATION | 22,409.09 | 6/5/2023 | 6/29/2023 | 7/7/2023 | 12.64 | 7.71 | 20.36 | 0.0301% | 0.006 |
| CROUNSE CORPORATION | 22,412.00 | 5/3/2023 | 5/24/2023 | 6/8/2023 | 11.12 | 14.77 | 25.88 | 0.0301% | 0.008 |
| CROUNSE CORPORATION | 22,412.39 | 4/7/2023 | 4/17/2023 | 4/27/2023 | 5.80 | 9.40 | 15.20 | 0.0301% | 0.005 |
| CROUNSE CORPORATION | 22,431.43 | 5/31/2023 | 6/9/2023 | 6/16/2023 | 5.18 | 6.65 | 11.82 | 0.0301% | 0.004 |
| CROUNSE CORPORATION | 22,447.82 | 4/19/2023 | 5/22/2023 | 6/8/2023 | 17.13 | 16.74 | 33.87 | 0.0302% | 0.010 |
| CROUNSE CORPORATION | 22,453.11 | 4/4/2023 | 4/18/2023 | 4/27/2023 | 7.62 | 8.77 | 16.38 | 0.0302% | 0.005 |
| CROUNSE CORPORATION | 22,458.66 | 4/4/2023 | 4/19/2023 | 4/27/2023 | 8.12 | 7.77 | 15.88 | 0.0302% | 0.005 |
| CROUNSE CORPORATION | 22,478.49 | 4/19/2023 | 5/9/2023 | 5/18/2023 | 10.61 | 8.77 | 19.39 | 0.0302% | 0.006 |
| CROUNSE CORPORATION | 22,480.35 | 4/6/2023 | 4/16/2023 | 4/27/2023 | 5.64 | 10.72 | 16.36 | 0.0302% | 0.005 |
| CROUNSE CORPORATION | 22,523.71 | 4/19/2023 | 5/21/2023 | 6/8/2023 | 16.62 | 17.76 | 34.38 | 0.0303% | 0.010 |
| CROUNSE CORPORATION | 22,537.46 | 4/11/2023 | 4/19/2023 | 4/27/2023 | 4.62 | 7.77 | 12.38 | 0.0303% | 0.004 |
| CROUNSE CORPORATION | 22,552.13 | 5/4/2023 | 5/26/2023 | 6/8/2023 | 11.62 | 12.77 | 24.38 | 0.0303% | 0.007 |
| CROUNSE CORPORATION | 22,559.93 | 4/4/2023 | 4/18/2023 | 4/27/2023 | 7.62 | 8.77 | 16.38 | 0.0303% | 0.005 |
| CROUNSE CORPORATION | 22,579.50 | 5/3/2023 | 5/24/2023 | 6/8/2023 | 11.12 | 14.77 | 25.88 | 0.0303% | 0.008 |
| CROUNSE CORPORATION | 22,583.07 | 4/5/2023 | 4/14/2023 | 4/27/2023 | 5.14 | 12.73 | 17.86 | 0.0303% | 0.005 |
| CROUNSE CORPORATION | 22,618.23 | 5/1/2023 | 5/8/2023 | 5/18/2023 | 4.12 | 9.76 | 13.88 | 0.0304% | 0.004 |
| CROUNSE CORPORATION | 22,634.23 | 5/4/2023 | 5/25/2023 | 6/8/2023 | 11.11 | 13.77 | 24.89 | 0.0304% | 0.008 |
| CROUNSE CORPORATION | 22,634.49 | 4/10/2023 | 5/1/2023 | 5/18/2023 | 11.13 | 16.75 | 27.87 | 0.0304% | 0.008 |
| CROUNSE CORPORATION | 22,644.27 | 4/5/2023 | 4/15/2023 | 4/27/2023 | 5.64 | 11.72 | 17.36 | 0.0304% | 0.005 |
| CROUNSE CORPORATION | 22,656.30 | 6/5/2023 | 7/2/2023 | 7/19/2023 | 14.19 | 16.62 | 30.81 | 0.0304% | 0.009 |
| CROUNSE CORPORATION | 22,658.02 | 6/5/2023 | 6/28/2023 | 7/7/2023 | 12.17 | 8.65 | 20.83 | 0.0305% | 0.006 |
| CROUNSE CORPORATION | 22,662.91 | 4/6/2023 | 4/14/2023 | 4/27/2023 | 4.64 | 12.73 | 17.36 | 0.0305% | 0.005 |

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|---|---|---|---|---|---|---|---|---|---|
| CROUNSE CORPORATION | 22,666.48 | 4/26/2023 | 5/7/2023 | 5/18/2023 | 6.20 | 10.61 | 16.80 | 0.0305% | 0.005 |
| CROUNSE CORPORATION | 22,667.41 | 4/3/2023 | 4/17/2023 | 4/27/2023 | 7.80 | 9.40 | 17.20 | 0.0305% | 0.005 |
| CROUNSE CORPORATION | 22,678.65 | 6/1/2023 | 6/18/2023 | 6/29/2023 | 9.13 | 10.73 | 19.87 | 0.0305% | 0.006 |
| CROUNSE CORPORATION | 22,680.76 | 4/3/2023 | 4/18/2023 | 4/27/2023 | 8.12 | 8.77 | 16.88 | 0.0305% | 0.005 |
| CROUNSE CORPORATION | 22,685.78 | 4/26/2023 | 5/8/2023 | 5/18/2023 | 6.62 | 9.76 | 16.38 | 0.0305% | 0.005 |
| CROUNSE CORPORATION | 22,708.13 | 6/5/2023 | 7/1/2023 | 7/19/2023 | 13.69 | 17.62 | 31.31 | 0.0305% | 0.010 |
| CROUNSE CORPORATION | 22,714.60 | 5/1/2023 | 5/19/2023 | 5/26/2023 | 9.62 | 6.76 | 16.38 | 0.0305% | 0.005 |
| CROUNSE CORPORATION | 22,754.79 | 4/4/2023 | 4/17/2023 | 4/27/2023 | 7.30 | 9.40 | 16.70 | 0.0306% | 0.005 |
| CROUNSE CORPORATION | 22,768.94 | 4/11/2023 | 5/3/2023 | 5/18/2023 | 11.66 | 14.69 | 26.34 | 0.0306% | 0.008 |
| CROUNSE CORPORATION | 22,770.39 | 4/11/2023 | 4/28/2023 | 5/9/2023 | 9.13 | 10.73 | 19.87 | 0.0306% | 0.006 |
| CROUNSE CORPORATION | 22,798.55 | 4/6/2023 | 4/16/2023 | 4/27/2023 | 5.64 | 10.72 | 16.36 | 0.0306% | 0.005 |
| CROUNSE CORPORATION | 22,819.57 | 4/5/2023 | 4/15/2023 | 4/27/2023 | 5.64 | 11.73 | 17.36 | 0.0307% | 0.005 |
| CROUNSE CORPORATION | 22,823.54 | 4/4/2023 | 4/17/2023 | 4/27/2023 | 7.30 | 9.40 | 16.70 | 0.0307% | 0.005 |
| CROUNSE CORPORATION | 22,839.14 | 5/31/2023 | 6/14/2023 | 6/29/2023 | 7.63 | 14.73 | 22.37 | 0.0307% | 0.007 |
| CROUNSE CORPORATION | 22,859.55 | 3/2/2023 | 3/25/2023 | 4/7/2023 | 12.12 | 12.76 | 24.88 | 0.0307% | 0.008 |
| CROUNSE CORPORATION | 22,884.88 | 4/11/2023 | 5/2/2023 | 5/18/2023 | 11.13 | 15.75 | 26.87 | 0.0308% | 0.008 |
| CROUNSE CORPORATION | 22,975.30 | 6/5/2023 | 6/19/2023 | 6/29/2023 | 7.76 | 9.48 | 17.24 | 0.0309% | 0.005 |
| CROUNSE CORPORATION | 22,991.10 | 1/5/2023 | 1/22/2023 | 2/9/2023 | 9.13 | 17.75 | 26.87 | 0.0309% | 0.008 |
| CROUNSE CORPORATION | 23,004.65 | 5/31/2023 | 6/12/2023 | 6/29/2023 | 6.79 | 16.43 | 23.21 | 0.0309% | 0.007 |
| CROUNSE CORPORATION | 23,090.11 | 1/13/2023 | 4/5/2023 | 4/19/2023 | 41.62 | 13.76 | 55.38 | 0.0310% | 0.017 |
| CROUNSE CORPORATION | 23,154.93 | 1/5/2023 | 2/6/2023 | 2/16/2023 | 16.68 | 9.64 | 26.32 | 0.0311% | 0.008 |
| CROUNSE CORPORATION | 23,216.15 | 3/27/2023 | 4/13/2023 | 4/27/2023 | 9.14 | 13.73 | 22.86 | 0.0312% | 0.007 |
| CROUNSE CORPORATION | 23,230.85 | 6/5/2023 | 6/20/2023 | 6/29/2023 | 8.17 | 8.65 | 16.83 | 0.0312% | 0.005 |
| CROUNSE CORPORATION | 23,231.05 | 1/13/2023 | 4/5/2023 | 4/19/2023 | 41.62 | 13.76 | 55.38 | 0.0312% | 0.017 |
| CROUNSE CORPORATION | 23,251.73 | 1/19/2023 | 2/10/2023 | 2/16/2023 | 11.63 | 5.75 | 17.37 | 0.0312% | 0.005 |
| CROUNSE CORPORATION | 23,264.42 | 1/27/2023 | 2/25/2023 | 3/9/2023 | 15.19 | 11.62 | 26.81 | 0.0313% | 0.008 |
| CROUNSE CORPORATION | 23,315.58 | 1/27/2023 | 2/8/2023 | 2/16/2023 | 6.67 | 7.66 | 14.33 | 0.0313% | 0.004 |
| CROUNSE CORPORATION | 23,360.27 | 6/5/2023 | 6/19/2023 | 6/29/2023 | 7.76 | 9.48 | 17.24 | 0.0314% | 0.005 |
| CROUNSE CORPORATION | 23,382.74 | 1/20/2023 | 2/10/2023 | 2/16/2023 | 11.13 | 5.75 | 16.87 | 0.0314% | 0.005 |
| CROUNSE CORPORATION | 23,406.80 | 6/1/2023 | 6/17/2023 | 6/29/2023 | 8.63 | 11.73 | 20.37 | 0.0315% | 0.006 |
| CROUNSE CORPORATION | 23,411.56 | 3/27/2023 | 4/12/2023 | 4/27/2023 | 8.67 | 14.67 | 23.33 | 0.0315% | 0.007 |
| CROUNSE CORPORATION | 23,433.62 | 1/27/2023 | 2/9/2023 | 2/16/2023 | 7.16 | 6.68 | 13.84 | 0.0315% | 0.004 |
| CROUNSE CORPORATION | 23,437.48 | 1/26/2023 | 4/15/2023 | 4/27/2023 | 40.14 | 11.72 | 51.86 | 0.0315% | 0.016 |
| CROUNSE CORPORATION | 23,484.37 | 3/27/2023 | 4/28/2023 | 5/9/2023 | 16.63 | 10.73 | 27.37 | 0.0316% | 0.009 |
| CROUNSE CORPORATION | 23,484.37 | 1/27/2023 | 2/8/2023 | 2/16/2023 | 6.67 | 7.66 | 14.33 | 0.0316% | 0.005 |
| CROUNSE CORPORATION | 23,494.02 | 1/27/2023 | 2/9/2023 | 2/16/2023 | 7.16 | 6.68 | 13.84 | 0.0316% | 0.004 |
| CROUNSE CORPORATION | 23,520.23 | 6/1/2023 | 7/2/2023 | 7/19/2023 | 16.19 | 16.62 | 32.81 | 0.0316% | 0.010 |
| CROUNSE CORPORATION | 23,527.26 | 1/5/2023 | 1/26/2023 | 2/9/2023 | 11.11 | 13.78 | 24.89 | 0.0316% | 0.008 |
| CROUNSE CORPORATION | 23,528.69 | 5/17/2023 | 6/8/2023 | 6/16/2023 | 11.68 | 7.65 | 19.32 | 0.0316% | 0.006 |
| CROUNSE CORPORATION | 23,534.57 | 1/20/2023 | 2/4/2023 | 2/16/2023 | 8.11 | 11.77 | 19.89 | 0.0316% | 0.006 |
| CROUNSE CORPORATION | 23,535.81 | 1/20/2023 | 2/25/2023 | 3/9/2023 | 18.69 | 11.62 | 30.31 | 0.0316% | 0.010 |
| CROUNSE CORPORATION | 23,563.66 | 1/5/2023 | 1/24/2023 | 2/9/2023 | 10.12 | 15.77 | 25.88 | 0.0317% | 0.008 |
| CROUNSE CORPORATION | 23,574.97 | 1/5/2023 | 1/23/2023 | 2/9/2023 | 9.61 | 16.77 | 26.39 | 0.0317% | 0.008 |
| CROUNSE CORPORATION | 23,587.80 | 3/13/2023 | 3/24/2023 | 4/7/2023 | 6.12 | 13.76 | 19.88 | 0.0317% | 0.006 |
| CROUNSE CORPORATION | 23,602.41 | 3/10/2023 | 3/27/2023 | 4/7/2023 | 9.16 | 10.67 | 19.84 | 0.0317% | 0.006 |
| CROUNSE CORPORATION | 23,611.45 | 5/23/2023 | 6/5/2023 | 6/16/2023 | 7.12 | 10.75 | 17.88 | 0.0317% | 0.006 |
| CROUNSE CORPORATION | 23,615.93 | 1/19/2023 | 1/28/2023 | 2/9/2023 | 5.13 | 11.75 | 16.87 | 0.0317% | 0.005 |
| CROUNSE CORPORATION | 23,617.86 | 1/20/2023 | 2/7/2023 | 2/16/2023 | 9.69 | 8.63 | 18.31 | 0.0317% | 0.006 |
| CROUNSE CORPORATION | 23,629.85 | 3/27/2023 | 4/12/2023 | 4/27/2023 | 8.67 | 14.67 | 23.33 | 0.0318% | 0.007 |
| CROUNSE CORPORATION | 23,634.68 | 1/20/2023 | 2/4/2023 | 2/16/2023 | 8.12 | 11.77 | 19.88 | 0.0318% | 0.006 |
| CROUNSE CORPORATION | 23,650.82 | 1/20/2023 | 2/4/2023 | 2/16/2023 | 8.11 | 11.77 | 19.89 | 0.0318% | 0.006 |
| CROUNSE CORPORATION | 23,653.16 | 3/13/2023 | 3/26/2023 | 4/7/2023 | 7.12 | 11.75 | 18.88 | 0.0318% | 0.006 |
| CROUNSE CORPORATION | 23,659.50 | 3/8/2023 | 3/25/2023 | 4/7/2023 | 9.12 | 12.75 | 21.88 | 0.0318% | 0.007 |
| CROUNSE CORPORATION | 23,662.40 | 1/27/2023 | 2/9/2023 | 2/16/2023 | 7.16 | 6.68 | 13.84 | 0.0318% | 0.004 |
| CROUNSE CORPORATION | 23,665.52 | 5/23/2023 | 6/11/2023 | 6/29/2023 | 10.18 | 17.64 | 27.82 | 0.0318% | 0.009 |
| CROUNSE CORPORATION | 23,674.95 | 3/8/2023 | 3/26/2023 | 4/7/2023 | 9.62 | 11.75 | 21.38 | 0.0318% | 0.007 |
| CROUNSE CORPORATION | 23,694.81 | 3/8/2023 | 3/25/2023 | 4/7/2023 | 9.12 | 12.75 | 21.88 | 0.0318% | 0.007 |
| CROUNSE CORPORATION | 23,700.32 | 1/13/2023 | 4/6/2023 | 4/19/2023 | 42.17 | 12.65 | 54.83 | 0.0319% | 0.017 |

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|---|---|---|---|---|---|---|---|---|---|
| CROUNSE CORPORATION | 23,706.53 | 3/2/2023 | 3/25/2023 | 4/7/2023 | 12.12 | 12.76 | 24.88 | 0.0319% | 0.008 |
| CROUNSE CORPORATION | 23,712.85 | 5/17/2023 | 6/7/2023 | 6/16/2023 | 11.12 | 8.77 | 19.88 | 0.0319% | 0.006 |
| CROUNSE CORPORATION | 23,725.14 | 3/13/2023 | 3/24/2023 | 4/7/2023 | 6.12 | 13.76 | 19.88 | 0.0319% | 0.006 |
| CROUNSE CORPORATION | 23,738.89 | 5/17/2023 | 6/3/2023 | 6/16/2023 | 9.13 | 12.75 | 21.87 | 0.0319% | 0.007 |
| CROUNSE CORPORATION | 23,806.23 | 1/26/2023 | 4/15/2023 | 4/27/2023 | 40.14 | 11.72 | 51.86 | 0.0320% | 0.017 |
| CROUNSE CORPORATION | 23,809.26 | 1/19/2023 | 2/22/2023 | 3/9/2023 | 17.68 | 14.64 | 32.32 | 0.0320% | 0.010 |
| CROUNSE CORPORATION | 23,867.39 | 5/23/2023 | 6/6/2023 | 6/16/2023 | 7.63 | 9.74 | 17.37 | 0.0321% | 0.006 |
| CROUNSE CORPORATION | 23,873.87 | 5/23/2023 | 6/4/2023 | 6/16/2023 | 6.63 | 11.74 | 18.37 | 0.0321% | 0.006 |
| CROUNSE CORPORATION | 23,886.34 | 11/12/2023 | 12/4/2023 | 12/19/2023 | 11.72 | 14.56 | 26.28 | 0.0321% | 0.008 |
| CROUNSE CORPORATION | 23,938.38 | 5/23/2023 | 6/5/2023 | 6/16/2023 | 7.12 | 10.75 | 17.88 | 0.0322% | 0.006 |
| CROUNSE CORPORATION | 23,951.20 | 5/23/2023 | 6/6/2023 | 6/16/2023 | 7.63 | 9.74 | 17.37 | 0.0322% | 0.006 |
| CROUNSE CORPORATION | 24,001.04 | 5/23/2023 | 6/4/2023 | 6/16/2023 | 6.63 | 11.74 | 18.37 | 0.0323% | 0.006 |
| CROUNSE CORPORATION | 24,030.13 | 5/10/2023 | 6/1/2023 | 6/16/2023 | 11.63 | 14.75 | 26.38 | 0.0323% | 0.009 |
| CROUNSE CORPORATION | 24,058.42 | 5/17/2023 | 6/8/2023 | 6/16/2023 | 11.67 | 7.65 | 19.33 | 0.0323% | 0.006 |
| CROUNSE CORPORATION | 24,064.51 | 10/31/2023 | 11/24/2023 | 12/7/2023 | 12.78 | 12.45 | 25.22 | 0.0323% | 0.008 |
| CROUNSE CORPORATION | 24,265.10 | 6/1/2023 | 6/15/2023 | 6/29/2023 | 7.64 | 13.73 | 21.36 | 0.0326% | 0.007 |
| CROUNSE CORPORATION | 24,364.03 | 11/16/2023 | 12/7/2023 | 12/19/2023 | 11.30 | 11.40 | 22.70 | 0.0327% | 0.007 |
| CROUNSE CORPORATION | 24,417.47 | 5/10/2023 | 6/1/2023 | 6/16/2023 | 11.62 | 14.75 | 26.38 | 0.0328% | 0.009 |
| CROUNSE CORPORATION | 24,469.83 | 7/4/2023 | 7/14/2023 | 7/27/2023 | 5.78 | 12.44 | 18.22 | 0.0329% | 0.006 |
| CROUNSE CORPORATION | 24,496.13 | 11/18/2023 | 12/7/2023 | 12/19/2023 | 10.30 | 11.41 | 21.70 | 0.0329% | 0.007 |
| CROUNSE CORPORATION | 24,554.50 | 10/31/2023 | 11/20/2023 | 11/29/2023 | 10.78 | 8.43 | 19.22 | 0.0330% | 0.006 |
| CROUNSE CORPORATION | 24,605.78 | 4/23/2023 | 5/19/2023 | 5/26/2023 | 13.62 | 6.76 | 20.38 | 0.0331% | 0.007 |
| CROUNSE CORPORATION | 24,625.15 | 10/31/2023 | 11/30/2023 | 12/7/2023 | 15.66 | 6.68 | 22.34 | 0.0331% | 0.007 |
| CROUNSE CORPORATION | 24,704.16 | 7/16/2023 | 8/3/2023 | 8/17/2023 | 9.71 | 13.57 | 23.29 | 0.0332% | 0.008 |
| CROUNSE CORPORATION | 24,741.08 | 7/25/2023 | 8/25/2023 | 9/7/2023 | 16.15 | 12.70 | 28.85 | 0.0333% | 0.010 |
| CROUNSE CORPORATION | 24,864.77 | 10/31/2023 | 11/18/2023 | 11/29/2023 | 9.70 | 10.60 | 20.30 | 0.0334% | 0.007 |
| CROUNSE CORPORATION | 24,935.42 | 10/31/2023 | 11/16/2023 | 11/29/2023 | 8.67 | 12.66 | 21.33 | 0.0335% | 0.007 |
| CROUNSE CORPORATION | 24,956.93 | 11/25/2023 | 12/16/2023 | 12/28/2023 | 11.23 | 11.54 | 22.77 | 0.0335% | 0.008 |
| CROUNSE CORPORATION | 25,047.63 | 7/16/2023 | 7/30/2023 | 8/9/2023 | 7.70 | 9.61 | 17.30 | 0.0337% | 0.006 |
| CROUNSE CORPORATION | 25,083.74 | 7/4/2023 | 7/14/2023 | 7/27/2023 | 5.78 | 12.44 | 18.22 | 0.0337% | 0.006 |
| CROUNSE CORPORATION | 25,095.78 | 7/4/2023 | 7/15/2023 | 7/27/2023 | 6.25 | 11.50 | 17.75 | 0.0337% | 0.006 |
| CROUNSE CORPORATION | 25,134.30 | 7/10/2023 | 7/29/2023 | 8/9/2023 | 10.19 | 10.61 | 20.81 | 0.0338% | 0.007 |
| CROUNSE CORPORATION | 25,137.51 | 7/16/2023 | 7/29/2023 | 8/9/2023 | 7.20 | 10.61 | 17.80 | 0.0338% | 0.006 |
| CROUNSE CORPORATION | 25,153.56 | 7/16/2023 | 7/28/2023 | 8/9/2023 | 6.71 | 11.58 | 18.29 | 0.0338% | 0.006 |
| CROUNSE CORPORATION | 25,174.43 | 8/22/2023 | 9/5/2023 | 9/19/2023 | 7.77 | 13.45 | 21.23 | 0.0338% | 0.007 |
| CROUNSE CORPORATION | 25,224.18 | 8/13/2023 | 8/22/2023 | 9/7/2023 | 5.19 | 15.61 | 20.81 | 0.0339% | 0.007 |
| CROUNSE CORPORATION | 25,256.45 | 11/28/2023 | 12/16/2023 | 12/28/2023 | 9.73 | 11.54 | 21.27 | 0.0339% | 0.007 |
| CROUNSE CORPORATION | 25,261.06 | 11/25/2023 | 12/17/2023 | 12/28/2023 | 11.73 | 10.54 | 22.27 | 0.0339% | 0.008 |
| CROUNSE CORPORATION | 25,283.57 | 7/4/2023 | 7/13/2023 | 7/27/2023 | 5.28 | 13.45 | 18.72 | 0.0340% | 0.006 |
| CROUNSE CORPORATION | 25,298.01 | 7/16/2023 | 8/3/2023 | 8/17/2023 | 9.71 | 13.58 | 23.29 | 0.0340% | 0.008 |
| CROUNSE CORPORATION | 25,310.85 | 7/16/2023 | 7/28/2023 | 8/9/2023 | 6.69 | 11.62 | 18.31 | 0.0340% | 0.006 |
| CROUNSE CORPORATION | 25,352.58 | 7/16/2023 | 7/24/2023 | 8/9/2023 | 4.75 | 15.49 | 20.25 | 0.0341% | 0.007 |
| CROUNSE CORPORATION | 25,378.26 | 8/22/2023 | 9/5/2023 | 9/19/2023 | 7.77 | 13.45 | 21.23 | 0.0341% | 0.007 |
| CROUNSE CORPORATION | 25,384.68 | 7/4/2023 | 7/13/2023 | 7/27/2023 | 5.28 | 13.45 | 18.72 | 0.0341% | 0.006 |
| CROUNSE CORPORATION | 25,425.61 | 8/13/2023 | 9/12/2023 | 9/28/2023 | 15.66 | 15.67 | 31.34 | 0.0342% | 0.011 |
| CROUNSE CORPORATION | 25,429.62 | 7/4/2023 | 7/14/2023 | 7/27/2023 | 5.78 | 12.44 | 18.22 | 0.0342% | 0.006 |
| CROUNSE CORPORATION | 25,446.91 | 11/12/2023 | 12/5/2023 | 12/19/2023 | 12.20 | 13.59 | 25.80 | 0.0342% | 0.009 |
| CROUNSE CORPORATION | 25,545.18 | 7/23/2023 | 8/25/2023 | 9/7/2023 | 17.17 | 12.66 | 29.83 | 0.0343% | 0.010 |
| CROUNSE CORPORATION | 25,548.39 | 7/26/2023 | 8/6/2023 | 8/17/2023 | 6.27 | 10.45 | 16.73 | 0.0343% | 0.006 |
| CROUNSE CORPORATION | 25,550.00 | 8/4/2023 | 8/28/2023 | 9/7/2023 | 12.70 | 9.61 | 22.30 | 0.0343% | 0.008 |
| CROUNSE CORPORATION | 25,559.63 | 7/23/2023 | 8/26/2023 | 9/7/2023 | 17.67 | 11.66 | 29.33 | 0.0344% | 0.010 |
| CROUNSE CORPORATION | 25,602.96 | 8/6/2023 | 8/27/2023 | 9/7/2023 | 11.17 | 10.65 | 21.83 | 0.0344% | 0.008 |
| CROUNSE CORPORATION | 25,651.20 | 4/23/2023 | 5/10/2023 | 5/18/2023 | 9.11 | 7.77 | 16.89 | 0.0345% | 0.006 |
| CROUNSE CORPORATION | 25,681.26 | 5/31/2023 | 6/27/2023 | 7/7/2023 | 14.22 | 9.56 | 23.78 | 0.0345% | 0.008 |
| CROUNSE CORPORATION | 25,704.08 | 7/10/2023 | 7/28/2023 | 8/9/2023 | 9.69 | 11.61 | 21.31 | 0.0345% | 0.007 |
| CROUNSE CORPORATION | 25,738.04 | 4/29/2023 | 5/9/2023 | 5/18/2023 | 5.61 | 8.78 | 14.39 | 0.0346% | 0.005 |
| CROUNSE CORPORATION | 25,766.67 | 7/16/2023 | 7/29/2023 | 8/9/2023 | 7.19 | 10.61 | 17.81 | 0.0346% | 0.006 |
| CROUNSE CORPORATION | 25,803.59 | 7/23/2023 | 8/9/2023 | 8/17/2023 | 9.18 | 7.63 | 16.82 | 0.0347% | 0.006 |

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|---|---|---|---|---|---|---|---|---|---|
| CROUNSE CORPORATION | 25,814.82 | 7/16/2023 | 7/31/2023 | 8/9/2023 | 8.21 | 8.58 | 16.79 | 0.0347% | 0.006 |
| CROUNSE CORPORATION | 25,831.56 | 5/31/2023 | 6/27/2023 | 7/7/2023 | 14.22 | 9.56 | 23.78 | 0.0347% | 0.008 |
| CROUNSE CORPORATION | 25,886.21 | 11/12/2023 | 12/10/2023 | 12/19/2023 | 14.80 | 8.40 | 23.20 | 0.0348% | 0.008 |
| CROUNSE CORPORATION | 25,912.56 | 4/23/2023 | 5/13/2023 | 5/26/2023 | 10.63 | 12.75 | 23.38 | 0.0348% | 0.008 |
| CROUNSE CORPORATION | 26,015.26 | 4/27/2023 | 5/12/2023 | 5/26/2023 | 8.12 | 13.77 | 21.88 | 0.0350% | 0.008 |
| CROUNSE CORPORATION | 26,048.66 | 6/15/2023 | 6/22/2023 | 7/19/2023 | 4.27 | 26.46 | 30.73 | 0.0350% | 0.011 |
| CROUNSE CORPORATION | 26,074.83 | 7/23/2023 | 8/14/2023 | 8/29/2023 | 11.78 | 14.45 | 26.22 | 0.0350% | 0.009 |
| CROUNSE CORPORATION | 26,095.42 | 6/14/2023 | 6/26/2023 | 7/7/2023 | 6.74 | 10.53 | 17.26 | 0.0351% | 0.006 |
| CROUNSE CORPORATION | 26,107.11 | 6/28/2023 | 7/12/2023 | 7/27/2023 | 7.65 | 14.71 | 22.35 | 0.0351% | 0.008 |
| CROUNSE CORPORATION | 26,123.81 | 6/14/2023 | 6/22/2023 | 7/7/2023 | 4.77 | 14.46 | 19.23 | 0.0351% | 0.007 |
| CROUNSE CORPORATION | 26,133.83 | 6/1/2023 | 6/18/2023 | 6/29/2023 | 9.13 | 10.73 | 19.87 | 0.0351% | 0.007 |
| CROUNSE CORPORATION | 26,153.87 | 6/28/2023 | 7/24/2023 | 8/9/2023 | 13.75 | 15.49 | 29.25 | 0.0351% | 0.010 |
| CROUNSE CORPORATION | 26,183.97 | 8/13/2023 | 8/22/2023 | 9/7/2023 | 5.19 | 15.61 | 20.81 | 0.0352% | 0.007 |
| CROUNSE CORPORATION | 26,191.45 | 6/29/2023 | 7/24/2023 | 8/9/2023 | 13.25 | 15.49 | 28.75 | 0.0352% | 0.010 |
| CROUNSE CORPORATION | 26,193.95 | 6/30/2023 | 7/11/2023 | 7/27/2023 | 6.19 | 15.62 | 21.81 | 0.0352% | 0.008 |
| CROUNSE CORPORATION | 26,194.40 | 7/23/2023 | 8/14/2023 | 8/29/2023 | 11.77 | 14.45 | 26.23 | 0.0352% | 0.009 |
| CROUNSE CORPORATION | 26,199.80 | 6/22/2023 | 7/6/2023 | 7/19/2023 | 7.68 | 12.64 | 20.32 | 0.0352% | 0.007 |
| CROUNSE CORPORATION | 26,219.00 | 4/23/2023 | 5/11/2023 | 5/26/2023 | 9.61 | 14.77 | 24.39 | 0.0352% | 0.009 |
| CROUNSE CORPORATION | 26,260.75 | 6/8/2023 | 6/20/2023 | 6/29/2023 | 6.67 | 8.65 | 15.33 | 0.0353% | 0.005 |
| CROUNSE CORPORATION | 26,270.77 | 5/29/2023 | 6/10/2023 | 6/16/2023 | 6.68 | 5.65 | 12.32 | 0.0353% | 0.004 |
| CROUNSE CORPORATION | 26,277.45 | 6/14/2023 | 7/6/2023 | 7/19/2023 | 11.68 | 12.64 | 24.32 | 0.0353% | 0.009 |
| CROUNSE CORPORATION | 26,304.17 | 5/13/2023 | 6/1/2023 | 6/16/2023 | 10.13 | 14.75 | 24.87 | 0.0354% | 0.009 |
| CROUNSE CORPORATION | 26,313.36 | 6/7/2023 | 6/16/2023 | 6/29/2023 | 5.14 | 12.73 | 17.86 | 0.0354% | 0.006 |
| CROUNSE CORPORATION | 26,315.86 | 5/13/2023 | 5/27/2023 | 6/8/2023 | 7.62 | 11.77 | 19.38 | 0.0354% | 0.007 |
| CROUNSE CORPORATION | 26,318.79 | 7/23/2023 | 8/24/2023 | 9/7/2023 | 16.67 | 13.66 | 30.33 | 0.0354% | 0.011 |
| CROUNSE CORPORATION | 26,327.55 | 5/5/2023 | 6/8/2023 | 6/16/2023 | 17.67 | 7.66 | 25.33 | 0.0354% | 0.009 |
| CROUNSE CORPORATION | 26,335.90 | 5/13/2023 | 5/27/2023 | 6/8/2023 | 7.62 | 11.77 | 19.38 | 0.0354% | 0.007 |
| CROUNSE CORPORATION | 26,350.36 | 3/27/2023 | 4/14/2023 | 4/27/2023 | 9.64 | 12.73 | 22.36 | 0.0354% | 0.008 |
| CROUNSE CORPORATION | 26,369.30 | 6/14/2023 | 6/24/2023 | 7/7/2023 | 5.78 | 12.45 | 18.22 | 0.0354% | 0.006 |
| CROUNSE CORPORATION | 26,370.97 | 5/26/2023 | 6/4/2023 | 6/16/2023 | 5.13 | 11.74 | 16.87 | 0.0354% | 0.006 |
| CROUNSE CORPORATION | 26,455.31 | 6/22/2023 | 7/6/2023 | 7/19/2023 | 7.68 | 12.64 | 20.32 | 0.0356% | 0.007 |
| CROUNSE CORPORATION | 26,511.25 | 6/13/2023 | 6/26/2023 | 7/7/2023 | 7.24 | 10.53 | 17.76 | 0.0356% | 0.006 |
| CROUNSE CORPORATION | 26,526.28 | 6/13/2023 | 6/25/2023 | 7/7/2023 | 6.78 | 11.44 | 18.22 | 0.0356% | 0.006 |
| CROUNSE CORPORATION | 26,529.62 | 6/7/2023 | 6/19/2023 | 6/29/2023 | 6.76 | 9.48 | 16.24 | 0.0357% | 0.006 |
| CROUNSE CORPORATION | 26,536.30 | 5/31/2023 | 6/16/2023 | 6/29/2023 | 8.64 | 12.73 | 21.36 | 0.0357% | 0.008 |
| CROUNSE CORPORATION | 26,582.05 | 2/16/2023 | 4/12/2023 | 4/27/2023 | 28.17 | 14.67 | 42.83 | 0.0357% | 0.015 |
| CROUNSE CORPORATION | 26,593.08 | 4/29/2023 | 5/7/2023 | 5/18/2023 | 4.65 | 10.70 | 15.35 | 0.0357% | 0.005 |
| CROUNSE CORPORATION | 26,603.10 | 5/25/2023 | 6/3/2023 | 6/16/2023 | 5.13 | 12.75 | 17.87 | 0.0358% | 0.006 |
| CROUNSE CORPORATION | 26,623.14 | 4/23/2023 | 5/14/2023 | 5/26/2023 | 11.21 | 11.58 | 22.79 | 0.0358% | 0.008 |
| CROUNSE CORPORATION | 26,628.56 | 8/16/2023 | 8/27/2023 | 9/7/2023 | 6.17 | 10.65 | 16.83 | 0.0358% | 0.006 |
| CROUNSE CORPORATION | 26,659.88 | 5/26/2023 | 6/14/2023 | 6/29/2023 | 10.13 | 14.73 | 24.87 | 0.0358% | 0.009 |
| CROUNSE CORPORATION | 26,681.59 | 6/8/2023 | 6/19/2023 | 6/29/2023 | 6.26 | 9.48 | 15.74 | 0.0359% | 0.006 |
| CROUNSE CORPORATION | 26,701.63 | 4/27/2023 | 5/9/2023 | 5/18/2023 | 6.61 | 8.78 | 15.39 | 0.0359% | 0.006 |
| CROUNSE CORPORATION | 26,702.39 | 8/16/2023 | 9/6/2023 | 9/19/2023 | 11.28 | 12.45 | 23.72 | 0.0359% | 0.009 |
| CROUNSE CORPORATION | 26,713.57 | 2/16/2023 | 3/8/2023 | 3/17/2023 | 10.64 | 8.72 | 19.36 | 0.0359% | 0.007 |
| CROUNSE CORPORATION | 26,726.46 | 7/23/2023 | 8/15/2023 | 8/29/2023 | 12.28 | 13.43 | 25.72 | 0.0359% | 0.009 |
| CROUNSE CORPORATION | 26,733.36 | 6/28/2023 | 7/12/2023 | 7/27/2023 | 7.65 | 14.70 | 22.35 | 0.0359% | 0.008 |
| CROUNSE CORPORATION | 26,736.70 | 6/30/2023 | 7/11/2023 | 7/27/2023 | 6.19 | 15.62 | 21.81 | 0.0359% | 0.008 |
| CROUNSE CORPORATION | 26,751.73 | 4/29/2023 | 5/8/2023 | 5/18/2023 | 5.12 | 9.76 | 14.88 | 0.0360% | 0.005 |
| CROUNSE CORPORATION | 26,786.73 | 3/28/2023 | 4/9/2023 | 4/19/2023 | 6.67 | 9.67 | 16.33 | 0.0360% | 0.006 |
| CROUNSE CORPORATION | 26,786.80 | 6/13/2023 | 6/25/2023 | 7/7/2023 | 6.78 | 11.44 | 18.22 | 0.0360% | 0.007 |
| CROUNSE CORPORATION | 26,806.84 | 6/30/2023 | 7/10/2023 | 7/19/2023 | 5.69 | 8.62 | 14.31 | 0.0360% | 0.005 |
| CROUNSE CORPORATION | 26,816.03 | 6/22/2023 | 7/5/2023 | 7/19/2023 | 7.18 | 13.65 | 20.82 | 0.0360% | 0.008 |
| CROUNSE CORPORATION | 26,818.53 | 5/26/2023 | 6/17/2023 | 6/29/2023 | 11.63 | 11.74 | 23.37 | 0.0360% | 0.008 |
| CROUNSE CORPORATION | 26,822.76 | 7/23/2023 | 8/13/2023 | 8/29/2023 | 11.27 | 15.45 | 26.73 | 0.0360% | 0.010 |
| CROUNSE CORPORATION | 26,872.09 | 2/5/2023 | 2/27/2023 | 3/9/2023 | 11.70 | 9.59 | 21.30 | 0.0361% | 0.008 |
| CROUNSE CORPORATION | 26,882.54 | 2/16/2023 | 3/9/2023 | 3/17/2023 | 11.14 | 7.71 | 18.86 | 0.0361% | 0.007 |
| CROUNSE CORPORATION | 26,893.68 | 4/22/2023 | 5/14/2023 | 5/26/2023 | 11.71 | 11.58 | 23.29 | 0.0361% | 0.008 |

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|---|---|---|---|---|---|---|---|---|---|
| CROUNSE CORPORATION | 26,910.38 | 6/22/2023 | 7/2/2023 | 7/19/2023 | 5.69 | 16.61 | 22.31 | 0.0362% | 0.008 |
| CROUNSE CORPORATION | 26,962.15 | 6/7/2023 | 7/2/2023 | 7/19/2023 | 13.19 | 16.61 | 29.81 | 0.0362% | 0.011 |
| CROUNSE CORPORATION | 27,032.36 | 2/10/2023 | 3/8/2023 | 3/17/2023 | 13.64 | 8.72 | 22.36 | 0.0363% | 0.008 |
| CROUNSE CORPORATION | 27,050.66 | 5/22/2023 | 6/20/2023 | 6/29/2023 | 15.17 | 8.65 | 23.83 | 0.0364% | 0.009 |
| CROUNSE CORPORATION | 27,060.68 | 4/14/2023 | 4/28/2023 | 5/9/2023 | 7.63 | 10.73 | 18.37 | 0.0364% | 0.007 |
| CROUNSE CORPORATION | 27,079.05 | 5/3/2023 | 5/23/2023 | 6/8/2023 | 10.62 | 15.77 | 26.38 | 0.0364% | 0.010 |
| CROUNSE CORPORATION | 27,084.06 | 4/14/2023 | 5/6/2023 | 5/18/2023 | 11.65 | 11.70 | 23.35 | 0.0364% | 0.008 |
| CROUNSE CORPORATION | 27,089.84 | 3/28/2023 | 4/13/2023 | 4/27/2023 | 8.64 | 13.73 | 22.36 | 0.0364% | 0.008 |
| CROUNSE CORPORATION | 27,090.74 | 6/1/2023 | 6/15/2023 | 6/29/2023 | 7.64 | 13.73 | 21.36 | 0.0364% | 0.008 |
| CROUNSE CORPORATION | 27,095.07 | 2/5/2023 | 2/26/2023 | 3/9/2023 | 11.19 | 10.62 | 21.81 | 0.0364% | 0.008 |
| CROUNSE CORPORATION | 27,100.76 | 6/23/2023 | 7/3/2023 | 7/19/2023 | 5.69 | 15.61 | 21.31 | 0.0364% | 0.008 |
| CROUNSE CORPORATION | 27,114.12 | 4/14/2023 | 5/6/2023 | 5/18/2023 | 11.65 | 11.70 | 23.35 | 0.0364% | 0.009 |
| CROUNSE CORPORATION | 27,190.94 | 6/22/2023 | 7/3/2023 | 7/19/2023 | 6.19 | 15.61 | 21.81 | 0.0365% | 0.008 |
| CROUNSE CORPORATION | 27,192.61 | 5/13/2023 | 5/28/2023 | 6/8/2023 | 8.15 | 10.70 | 18.85 | 0.0365% | 0.007 |
| CROUNSE CORPORATION | 27,194.28 | 4/24/2023 | 5/12/2023 | 5/26/2023 | 9.62 | 13.77 | 23.38 | 0.0365% | 0.009 |
| CROUNSE CORPORATION | 27,221.00 | 4/27/2023 | 5/12/2023 | 5/26/2023 | 8.12 | 13.77 | 21.88 | 0.0366% | 0.008 |
| CROUNSE CORPORATION | 27,224.01 | 7/23/2023 | 8/5/2023 | 8/17/2023 | 7.27 | 11.45 | 18.73 | 0.0366% | 0.007 |
| CROUNSE CORPORATION | 27,241.04 | 4/23/2023 | 5/13/2023 | 5/26/2023 | 10.63 | 12.75 | 23.37 | 0.0366% | 0.009 |
| CROUNSE CORPORATION | 27,269.43 | 4/24/2023 | 5/12/2023 | 5/26/2023 | 9.62 | 13.77 | 23.38 | 0.0366% | 0.009 |
| CROUNSE CORPORATION | 27,287.80 | 5/13/2023 | 5/26/2023 | 6/8/2023 | 7.12 | 12.77 | 19.88 | 0.0367% | 0.007 |
| CROUNSE CORPORATION | 27,314.52 | 5/25/2023 | 6/2/2023 | 6/16/2023 | 4.63 | 13.75 | 18.37 | 0.0367% | 0.007 |
| CROUNSE CORPORATION | 27,334.59 | 3/27/2023 | 4/11/2023 | 4/27/2023 | 8.16 | 15.67 | 23.84 | 0.0367% | 0.009 |
| CROUNSE CORPORATION | 27,422.56 | 2/5/2023 | 2/27/2023 | 3/9/2023 | 11.70 | 9.59 | 21.30 | 0.0369% | 0.008 |
| CROUNSE CORPORATION | 27,434.76 | 4/24/2023 | 5/13/2023 | 5/26/2023 | 10.13 | 12.75 | 22.87 | 0.0369% | 0.008 |
| CROUNSE CORPORATION | 27,478.31 | 2/7/2023 | 2/26/2023 | 3/9/2023 | 10.19 | 10.62 | 20.81 | 0.0369% | 0.008 |
| CROUNSE CORPORATION | 27,481.79 | 2/7/2023 | 4/4/2023 | 4/19/2023 | 28.62 | 14.76 | 43.38 | 0.0369% | 0.016 |
| CROUNSE CORPORATION | 27,485.70 | 5/3/2023 | 5/22/2023 | 6/8/2023 | 10.13 | 16.74 | 26.87 | 0.0369% | 0.010 |
| CROUNSE CORPORATION | 27,495.73 | 3/27/2023 | 4/14/2023 | 4/27/2023 | 9.64 | 12.72 | 22.36 | 0.0370% | 0.008 |
| CROUNSE CORPORATION | 27,518.26 | 5/22/2023 | 6/28/2023 | 7/7/2023 | 19.19 | 8.63 | 27.81 | 0.0370% | 0.010 |
| CROUNSE CORPORATION | 27,544.98 | 6/22/2023 | 7/3/2023 | 7/19/2023 | 6.14 | 15.72 | 21.86 | 0.0370% | 0.008 |
| CROUNSE CORPORATION | 27,595.08 | 6/13/2023 | 6/25/2023 | 7/7/2023 | 6.78 | 11.44 | 18.22 | 0.0371% | 0.007 |
| CROUNSE CORPORATION | 27,603.43 | 4/22/2023 | 5/14/2023 | 5/26/2023 | 11.71 | 11.58 | 23.29 | 0.0371% | 0.009 |
| CROUNSE CORPORATION | 27,629.86 | 2/22/2023 | 4/7/2023 | 4/19/2023 | 22.62 | 11.76 | 34.38 | 0.0371% | 0.013 |
| CROUNSE CORPORATION | 27,638.50 | 5/22/2023 | 7/1/2023 | 7/19/2023 | 20.69 | 17.62 | 38.31 | 0.0371% | 0.014 |
| CROUNSE CORPORATION | 27,640.31 | 3/31/2023 | 4/13/2023 | 4/27/2023 | 7.14 | 13.73 | 20.86 | 0.0371% | 0.008 |
| CROUNSE CORPORATION | 27,646.85 | 6/29/2023 | 7/23/2023 | 8/9/2023 | 12.75 | 16.50 | 29.25 | 0.0372% | 0.011 |
| CROUNSE CORPORATION | 27,655.12 | 2/17/2023 | 3/28/2023 | 4/7/2023 | 20.13 | 9.75 | 29.87 | 0.0372% | 0.011 |
| CROUNSE CORPORATION | 27,673.41 | 2/7/2023 | 2/27/2023 | 3/9/2023 | 10.70 | 9.59 | 20.30 | 0.0372% | 0.008 |
| CROUNSE CORPORATION | 27,709.12 | 2/16/2023 | 3/24/2023 | 4/7/2023 | 18.62 | 13.76 | 32.38 | 0.0372% | 0.012 |
| CROUNSE CORPORATION | 27,729.52 | 6/29/2023 | 7/23/2023 | 8/9/2023 | 12.75 | 16.50 | 29.25 | 0.0373% | 0.011 |
| CROUNSE CORPORATION | 27,780.45 | 5/3/2023 | 5/23/2023 | 6/8/2023 | 10.61 | 15.77 | 26.39 | 0.0373% | 0.010 |
| CROUNSE CORPORATION | 27,794.48 | 2/17/2023 | 3/1/2023 | 3/17/2023 | 6.62 | 15.75 | 22.38 | 0.0374% | 0.008 |
| CROUNSE CORPORATION | 27,868.96 | 5/22/2023 | 6/28/2023 | 7/7/2023 | 19.19 | 8.63 | 27.81 | 0.0375% | 0.010 |
| CROUNSE CORPORATION | 27,895.68 | 4/22/2023 | 5/4/2023 | 5/18/2023 | 6.65 | 13.70 | 20.35 | 0.0375% | 0.008 |
| CROUNSE CORPORATION | 27,899.87 | 2/18/2023 | 3/26/2023 | 4/7/2023 | 18.62 | 11.75 | 30.38 | 0.0375% | 0.011 |
| CROUNSE CORPORATION | 27,957.47 | 5/25/2023 | 6/3/2023 | 6/16/2023 | 5.13 | 12.75 | 17.87 | 0.0376% | 0.007 |
| CROUNSE CORPORATION | 28,024.27 | 6/23/2023 | 7/4/2023 | 7/19/2023 | 6.20 | 14.61 | 20.80 | 0.0377% | 0.008 |
| CROUNSE CORPORATION | 28,119.36 | 2/17/2023 | 3/26/2023 | 4/7/2023 | 19.12 | 11.75 | 30.88 | 0.0378% | 0.012 |
| CROUNSE CORPORATION | 28,148.11 | 3/28/2023 | 4/11/2023 | 4/27/2023 | 7.66 | 15.67 | 23.34 | 0.0378% | 0.009 |
| CROUNSE CORPORATION | 28,297.05 | 2/24/2023 | 4/3/2023 | 4/19/2023 | 19.62 | 15.77 | 35.38 | 0.0380% | 0.013 |
| CROUNSE CORPORATION | 28,321.44 | 2/7/2023 | 2/27/2023 | 3/9/2023 | 10.70 | 9.59 | 20.30 | 0.0381% | 0.008 |
| CROUNSE CORPORATION | 28,324.92 | 3/30/2023 | 5/5/2023 | 5/18/2023 | 18.65 | 12.70 | 31.35 | 0.0381% | 0.012 |
| CROUNSE CORPORATION | 28,329.88 | 6/23/2023 | 7/6/2023 | 7/19/2023 | 7.18 | 12.64 | 19.82 | 0.0381% | 0.008 |
| CROUNSE CORPORATION | 28,352.79 | 2/7/2023 | 2/25/2023 | 3/9/2023 | 9.69 | 11.62 | 21.31 | 0.0381% | 0.008 |
| CROUNSE CORPORATION | 28,410.04 | 5/22/2023 | 6/4/2023 | 6/16/2023 | 7.13 | 11.74 | 18.87 | 0.0382% | 0.007 |
| CROUNSE CORPORATION | 28,657.64 | 2/22/2023 | 4/12/2023 | 4/27/2023 | 25.17 | 14.67 | 39.83 | 0.0385% | 0.015 |
| CROUNSE CORPORATION | 28,682.03 | 2/24/2023 | 3/27/2023 | 4/7/2023 | 16.16 | 10.67 | 26.84 | 0.0385% | 0.010 |
| CROUNSE CORPORATION | 28,760.42 | 2/25/2023 | 3/23/2023 | 4/7/2023 | 13.62 | 14.76 | 28.38 | 0.0387% | 0.011 |

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| CROUNSE CORPORATION | 28,927.65 | 2/24/2023 | 4/5/2023 | 4/19/2023 | 20.62 | 13.76 | 34.38 | 0.0389% | 0.013 |
| CROUNSE CORPORATION | 28,936.36 | 2/22/2023 | 4/12/2023 | 4/27/2023 | 25.17 | 14.67 | 39.83 | 0.0389% | 0.015 |
| CROUNSE CORPORATION | 29,069.63 | 2/7/2023 | 2/26/2023 | 3/9/2023 | 10.19 | 10.61 | 20.81 | 0.0391% | 0.008 |
| CROUNSE CORPORATION | 29,233.37 | 3/30/2023 | 4/13/2023 | 4/27/2023 | 7.64 | 13.73 | 21.36 | 0.0393% | 0.008 |
| ALLIANCE COAL LLC | 53,779.05 | 11/20/2023 | 12/1/2023 | 12/14/2023 | 6.21 | 12.57 | 18.79 | 0.0723% | 0.014 |
| ALLIANCE COAL LLC | 56,089.80 | 11/25/2023 | 12/6/2023 | 12/14/2023 | 6.30 | 7.40 | 13.70 | 0.0754% | 0.010 |
| ALLIANCE COAL LLC | 56,345.25 | 11/19/2023 | 12/5/2023 | 12/14/2023 | 8.70 | 8.59 | 17.30 | 0.0757% | 0.013 |
| ALLIANCE COAL LLC | 56,971.20 | 11/20/2023 | 11/28/2023 | 12/14/2023 | 4.73 | 15.53 | 20.27 | 0.0766% | 0.016 |
| ALLIANCE COAL LLC | 58,016.40 | 11/20/2023 | 12/13/2023 | 12/14/2023 | 12.23 | 0.54 | 12.77 | 0.0780% | 0.010 |
| ALLIANCE COAL LLC | 58,104.15 | 8/7/2023 | 8/19/2023 | 8/29/2023 | 6.71 | 9.58 | 16.29 | 0.0781% | 0.013 |
| ALLIANCE COAL LLC | 58,297.20 | 7/9/2023 | 7/21/2023 | 7/28/2023 | 6.75 | 6.51 | 13.25 | 0.0783% | 0.010 |
| ALLIANCE COAL LLC | 58,533.15 | 6/19/2023 | 7/7/2023 | 7/14/2023 | 9.69 | 6.62 | 16.31 | 0.0787% | 0.013 |
| ALLIANCE COAL LLC | 58,589.70 | 3/11/2023 | 3/31/2023 | 3/29/2023 | 10.62 | (2.24) | 8.38 | 0.0787% | 0.007 |
| ALLIANCE COAL LLC | 58,661.85 | 7/22/2023 | 8/4/2023 | 8/14/2023 | 7.27 | 9.46 | 16.73 | 0.0788% | 0.013 |
| ALLIANCE COAL LLC | 58,683.30 | 12/1/2023 | 12/11/2023 | 12/29/2023 | 5.71 | 17.57 | 23.29 | 0.0789% | 0.018 |
| ALLIANCE COAL LLC | 58,726.20 | 12/19/2023 | 12/26/2023 | 1/12/2024 | 4.21 | 16.58 | 20.79 | 0.0789% | 0.016 |
| ALLIANCE COAL LLC | 58,739.85 | 7/9/2023 | 7/20/2023 | 7/28/2023 | 6.25 | 7.51 | 13.75 | 0.0789% | 0.011 |
| ALLIANCE COAL LLC | 58,784.70 | 12/27/2023 | 1/8/2024 | 1/12/2024 | 6.69 | 3.62 | 10.31 | 0.0790% | 0.008 |
| ALLIANCE COAL LLC | 58,876.35 | 6/19/2023 | 7/8/2023 | 7/14/2023 | 10.19 | 5.62 | 15.81 | 0.0791% | 0.013 |
| ALLIANCE COAL LLC | 59,086.95 | 11/20/2023 | 12/12/2023 | 12/14/2023 | 11.77 | 1.47 | 13.23 | 0.0794% | 0.011 |
| ALLIANCE COAL LLC | 59,260.50 | 11/16/2023 | 11/23/2023 | 12/14/2023 | 4.27 | 20.45 | 24.73 | 0.0796% | 0.020 |
| ALLIANCE COAL LLC | 59,305.35 | 12/28/2023 | 1/5/2024 | 1/12/2024 | 4.81 | 6.38 | 11.19 | 0.0797% | 0.009 |
| ALLIANCE COAL LLC | 59,346.30 | 1/22/2023 | 4/3/2023 | 2/14/2023 | 36.12 | (48.23) | (12.12) | 0.0798% | -0.010 |
| ALLIANCE COAL LLC | 59,377.50 | 12/14/2023 | 1/6/2024 | 12/29/2023 | 12.19 | (8.37) | 3.81 | 0.0798% | 0.003 |
| ALLIANCE COAL LLC | 59,416.50 | 11/26/2023 | 12/5/2023 | 12/14/2023 | 5.20 | 8.59 | 13.80 | 0.0799% | 0.011 |
| ALLIANCE COAL LLC | 59,658.30 | 6/20/2023 | 7/7/2023 | 7/14/2023 | 9.19 | 6.62 | 15.81 | 0.0802% | 0.013 |
| ALLIANCE COAL LLC | 59,705.10 | 8/7/2023 | 9/15/2023 | 8/29/2023 | 20.29 | (17.59) | 2.71 | 0.0802% | 0.002 |
| ALLIANCE COAL LLC | 59,773.35 | 11/5/2023 | 11/14/2023 | 11/29/2023 | 5.21 | 14.58 | 19.79 | 0.0803% | 0.016 |
| ALLIANCE COAL LLC | 60,021.00 | 12/1/2023 | 12/10/2023 | 12/29/2023 | 5.30 | 18.40 | 23.70 | 0.0807% | 0.019 |
| ALLIANCE COAL LLC | 60,069.75 | 6/27/2023 | 7/13/2023 | 7/14/2023 | 8.78 | 0.45 | 9.22 | 0.0807% | 0.007 |
| ALLIANCE COAL LLC | 60,106.80 | 11/19/2023 | 11/27/2023 | 12/14/2023 | 4.78 | 16.45 | 21.22 | 0.0808% | 0.017 |
| ALLIANCE COAL LLC | 60,136.05 | 1/3/2023 | 2/6/2023 | 1/27/2023 | 17.68 | (10.36) | 7.32 | 0.0808% | 0.006 |
| ALLIANCE COAL LLC | 60,214.05 | 6/12/2023 | 6/20/2023 | 6/29/2023 | 4.67 | 8.65 | 13.33 | 0.0809% | 0.011 |
| ALLIANCE COAL LLC | 60,241.35 | 7/20/2023 | 8/4/2023 | 8/14/2023 | 8.15 | 9.70 | 17.85 | 0.0810% | 0.014 |
| ALLIANCE COAL LLC | 60,295.95 | 6/27/2023 | 7/14/2023 | 7/14/2023 | 9.28 | (0.56) | 8.72 | 0.0810% | 0.007 |
| ALLIANCE COAL LLC | 60,344.70 | 6/2/2023 | 6/11/2023 | 6/29/2023 | 5.18 | 17.64 | 22.82 | 0.0811% | 0.019 |
| ALLIANCE COAL LLC | 60,430.50 | 8/1/2023 | 8/15/2023 | 8/29/2023 | 7.78 | 13.43 | 21.22 | 0.0812% | 0.017 |
| ALLIANCE COAL LLC | 60,621.60 | 1/5/2023 | 2/21/2023 | 1/27/2023 | 24.15 | (25.31) | (1.15) | 0.0815% | -0.001 |
| ALLIANCE COAL LLC | 60,648.90 | 1/18/2023 | 2/3/2023 | 2/14/2023 | 8.61 | 10.78 | 19.39 | 0.0815% | 0.016 |
| ALLIANCE COAL LLC | 60,672.30 | 8/7/2023 | 9/15/2023 | 8/29/2023 | 20.29 | (17.59) | 2.71 | 0.0815% | 0.002 |
| ALLIANCE COAL LLC | 60,732.75 | 6/27/2023 | 7/24/2023 | 7/14/2023 | 14.25 | (10.51) | 3.75 | 0.0816% | 0.003 |
| ALLIANCE COAL LLC | 60,762.00 | 1/3/2023 | 2/9/2023 | 1/27/2023 | 19.16 | (13.32) | 5.84 | 0.0817% | 0.005 |
| ALLIANCE COAL LLC | 60,767.85 | 11/19/2023 | 11/25/2023 | 12/14/2023 | 3.78 | 18.45 | 22.22 | 0.0817% | 0.018 |
| ALLIANCE COAL LLC | 61,109.10 | 6/27/2023 | 7/16/2023 | 7/14/2023 | 10.28 | (2.56) | 7.72 | 0.0821% | 0.006 |
| ALLIANCE COAL LLC | 61,450.35 | 11/19/2023 | 12/2/2023 | 12/14/2023 | 7.22 | 11.57 | 18.78 | 0.0826% | 0.016 |
| ALLIANCE COAL LLC | 61,483.50 | 4/26/2023 | 5/5/2023 | 5/12/2023 | 5.15 | 6.70 | 11.85 | 0.0826% | 0.010 |
| ALLIANCE COAL LLC | 61,538.10 | 6/30/2023 | 7/13/2023 | 7/14/2023 | 7.28 | 0.45 | 7.72 | 0.0827% | 0.006 |
| ALLIANCE COAL LLC | 61,680.45 | 6/20/2023 | 6/28/2023 | 7/14/2023 | 4.67 | 15.65 | 20.33 | 0.0829% | 0.017 |
| ALLIANCE COAL LLC | 61,787.70 | 12/27/2023 | 1/2/2024 | 1/12/2024 | 3.74 | 9.53 | 13.26 | 0.0830% | 0.011 |
| ALLIANCE COAL LLC | 61,881.30 | 6/12/2023 | 6/22/2023 | 6/29/2023 | 5.77 | 6.46 | 12.23 | 0.0832% | 0.010 |
| ALLIANCE COAL LLC | 62,027.55 | 6/29/2023 | 7/18/2023 | 7/14/2023 | 10.15 | (4.30) | 5.85 | 0.0834% | 0.005 |
| ALLIANCE COAL LLC | 62,146.50 | 6/29/2023 | 7/18/2023 | 7/14/2023 | 10.15 | (4.30) | 5.85 | 0.0835% | 0.005 |
| ALLIANCE COAL LLC | 62,581.35 | 12/27/2023 | 1/7/2024 | 1/12/2024 | 6.19 | 4.62 | 10.81 | 0.0841% | 0.009 |
| ALLIANCE COAL LLC | 62,602.80 | 1/3/2023 | 2/20/2023 | 1/27/2023 | 24.65 | (24.30) | 0.35 | 0.0841% | 0.000 |
| ALLIANCE COAL LLC | 62,628.15 | 12/28/2023 | 1/4/2024 | 1/12/2024 | 4.21 | 7.59 | 11.79 | 0.0842% | 0.010 |
| ALLIANCE COAL LLC | 62,762.70 | 8/6/2023 | 8/27/2023 | 8/29/2023 | 11.18 | 1.65 | 12.82 | 0.0843% | 0.011 |
| ALLIANCE COAL LLC | 62,891.40 | 6/30/2023 | 7/19/2023 | 7/14/2023 | 10.24 | (5.49) | 4.76 | 0.0845% | 0.004 |
| ALLIANCE COAL LLC | 62,928.45 | 8/18/2023 | 8/29/2023 | 9/14/2023 | 6.25 | 15.49 | 21.75 | 0.0846% | 0.018 |

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|---|---|---|---|---|---|---|---|---|---|
| ALLIANCE COAL LLC | 63,072.75 | 8/14/2023 | 8/27/2023 | 8/29/2023 | 7.17 | 1.65 | 8.83 | 0.0848% | 0.007 |
| ALLIANCE COAL LLC | 63,090.30 | 8/17/2023 | 9/13/2023 | 9/14/2023 | 14.27 | 0.45 | 14.73 | 0.0848% | 0.012 |
| ALLIANCE COAL LLC | 63,103.95 | 11/5/2023 | 11/12/2023 | 11/29/2023 | 4.15 | 16.70 | 20.85 | 0.0848% | 0.018 |
| ALLIANCE COAL LLC | 63,197.55 | 11/25/2023 | 12/7/2023 | 12/14/2023 | 6.80 | 6.41 | 13.20 | 0.0849% | 0.011 |
| ALLIANCE COAL LLC | 63,279.45 | 12/28/2023 | 1/2/2024 | 1/12/2024 | 3.24 | 9.53 | 12.76 | 0.0850% | 0.011 |
| ALLIANCE COAL LLC | 63,419.85 | 12/1/2023 | 12/9/2023 | 12/29/2023 | 4.80 | 19.40 | 24.20 | 0.0852% | 0.021 |
| ALLIANCE COAL LLC | 63,503.70 | 12/27/2023 | 1/3/2024 | 1/12/2024 | 4.24 | 8.52 | 12.76 | 0.0853% | 0.011 |
| ALLIANCE COAL LLC | 63,562.20 | 12/5/2023 | 12/26/2023 | 12/29/2023 | 11.21 | 2.58 | 13.79 | 0.0854% | 0.012 |
| ALLIANCE COAL LLC | 63,609.00 | 8/18/2023 | 9/14/2023 | 9/14/2023 | 14.29 | (0.58) | 13.71 | 0.0855% | 0.012 |
| ALLIANCE COAL LLC | 63,640.20 | 11/25/2023 | 12/7/2023 | 12/14/2023 | 6.80 | 6.41 | 13.20 | 0.0855% | 0.011 |
| ALLIANCE COAL LLC | 63,669.45 | 11/25/2023 | 12/8/2023 | 12/14/2023 | 7.30 | 5.41 | 12.70 | 0.0856% | 0.011 |
| ALLIANCE COAL LLC | 63,878.10 | 11/5/2023 | 11/12/2023 | 11/29/2023 | 4.15 | 16.70 | 20.85 | 0.0858% | 0.018 |
| ALLIANCE COAL LLC | 64,100.40 | 11/5/2023 | 11/14/2023 | 11/29/2023 | 5.19 | 14.62 | 19.81 | 0.0861% | 0.017 |
| ALLIANCE COAL LLC | 64,119.90 | 7/24/2023 | 8/26/2023 | 8/14/2023 | 17.17 | (12.35) | 4.83 | 0.0862% | 0.004 |
| ALLIANCE COAL LLC | 64,207.65 | 12/1/2023 | 12/18/2023 | 12/29/2023 | 9.29 | 10.42 | 19.71 | 0.0863% | 0.017 |
| ALLIANCE COAL LLC | 64,252.50 | 8/18/2023 | 9/4/2023 | 9/14/2023 | 9.27 | 9.45 | 18.73 | 0.0864% | 0.016 |
| ALLIANCE COAL LLC | 64,324.65 | 8/1/2023 | 8/11/2023 | 8/29/2023 | 5.80 | 17.41 | 23.20 | 0.0864% | 0.020 |
| ALLIANCE COAL LLC | 64,457.25 | 8/14/2023 | 8/27/2023 | 8/29/2023 | 7.17 | 1.65 | 8.83 | 0.0866% | 0.008 |
| ALLIANCE COAL LLC | 64,463.10 | 8/14/2023 | 8/23/2023 | 8/29/2023 | 5.14 | 5.71 | 10.86 | 0.0866% | 0.009 |
| ALLIANCE COAL LLC | 64,560.60 | 7/20/2023 | 8/5/2023 | 8/14/2023 | 8.77 | 8.45 | 17.23 | 0.0868% | 0.015 |
| ALLIANCE COAL LLC | 64,724.40 | 10/27/2023 | 11/19/2023 | 11/14/2023 | 12.20 | (5.40) | 6.80 | 0.0870% | 0.006 |
| ALLIANCE COAL LLC | 64,736.10 | 8/13/2023 | 9/7/2023 | 8/29/2023 | 13.17 | (9.34) | 3.83 | 0.0870% | 0.003 |
| ALLIANCE COAL LLC | 64,936.95 | 6/2/2023 | 6/19/2023 | 6/29/2023 | 9.26 | 9.49 | 18.74 | 0.0873% | 0.016 |
| ALLIANCE COAL LLC | 65,011.05 | 12/5/2023 | 2/27/2024 | 12/29/2023 | 42.78 | (60.56) | (17.78) | 0.0874% | -0.016 |
| ALLIANCE COAL LLC | 65,055.90 | 12/5/2023 | 2/2/2024 | 12/29/2023 | 30.21 | (35.42) | (5.21) | 0.0874% | -0.005 |
| ALLIANCE COAL LLC | 65,087.10 | 10/27/2023 | 11/19/2023 | 11/14/2023 | 12.20 | (5.40) | 6.80 | 0.0875% | 0.006 |
| ALLIANCE COAL LLC | 65,184.60 | 7/22/2023 | 8/9/2023 | 8/14/2023 | 9.68 | 4.63 | 14.32 | 0.0876% | 0.013 |
| ALLIANCE COAL LLC | 65,301.60 | 11/18/2023 | 11/29/2023 | 12/14/2023 | 6.24 | 14.53 | 20.76 | 0.0878% | 0.018 |
| ALLIANCE COAL LLC | 65,319.15 | 7/24/2023 | 8/25/2023 | 8/14/2023 | 16.67 | (11.34) | 5.33 | 0.0878% | 0.005 |
| ALLIANCE COAL LLC | 65,410.80 | 12/1/2023 | 2/3/2024 | 12/29/2023 | 32.71 | (36.42) | (3.71) | 0.0879% | -0.003 |
| ALLIANCE COAL LLC | 65,422.50 | 1/18/2023 | 1/29/2023 | 2/14/2023 | 6.13 | 15.74 | 21.87 | 0.0879% | 0.019 |
| ALLIANCE COAL LLC | 65,547.30 | 8/1/2023 | 8/11/2023 | 8/29/2023 | 5.80 | 17.41 | 23.20 | 0.0881% | 0.020 |
| ALLIANCE COAL LLC | 65,637.00 | 6/5/2023 | 6/17/2023 | 6/29/2023 | 6.63 | 11.74 | 18.37 | 0.0882% | 0.016 |
| ALLIANCE COAL LLC | 65,676.00 | 7/20/2023 | 8/3/2023 | 8/14/2023 | 7.71 | 10.57 | 18.29 | 0.0883% | 0.016 |
| ALLIANCE COAL LLC | 65,728.65 | 12/14/2023 | 12/22/2023 | 12/29/2023 | 4.81 | 6.37 | 11.19 | 0.0883% | 0.010 |
| ALLIANCE COAL LLC | 65,755.95 | 10/27/2023 | 11/4/2023 | 11/14/2023 | 4.72 | 9.56 | 14.28 | 0.0884% | 0.013 |
| ALLIANCE COAL LLC | 65,773.50 | 8/7/2023 | 8/21/2023 | 8/29/2023 | 7.69 | 7.61 | 15.31 | 0.0884% | 0.014 |
| ALLIANCE COAL LLC | 65,830.05 | 11/5/2023 | 11/17/2023 | 11/29/2023 | 6.70 | 11.60 | 18.30 | 0.0885% | 0.016 |
| ALLIANCE COAL LLC | 65,845.65 | 3/12/2023 | 4/2/2023 | 3/29/2023 | 11.11 | (4.23) | 6.89 | 0.0885% | 0.006 |
| ALLIANCE COAL LLC | 65,847.60 | 12/6/2023 | 12/21/2023 | 12/29/2023 | 8.31 | 7.38 | 15.69 | 0.0885% | 0.014 |
| ALLIANCE COAL LLC | 65,921.70 | 12/5/2023 | 4/1/2024 | 12/29/2023 | 59.76 | (94.52) | (34.76) | 0.0886% | -0.031 |
| ALLIANCE COAL LLC | 66,001.65 | 8/18/2023 | 9/14/2023 | 9/14/2023 | 14.29 | (0.58) | 13.71 | 0.0887% | 0.012 |
| ALLIANCE COAL LLC | 66,155.70 | 12/1/2023 | 12/12/2023 | 12/29/2023 | 6.27 | 16.47 | 22.73 | 0.0889% | 0.020 |
| ALLIANCE COAL LLC | 66,181.05 | 10/27/2023 | 11/11/2023 | 11/14/2023 | 8.18 | 2.63 | 10.82 | 0.0889% | 0.010 |
| ALLIANCE COAL LLC | 66,202.50 | 12/4/2023 | 1/25/2024 | 12/29/2023 | 26.70 | (27.40) | (0.70) | 0.0890% | -0.001 |
| KNIGHTHAWK | 66,214.73 | 11/20/2023 | 12/1/2023 | 12/14/2023 | 6.21 | 12.57 | 18.79 | 0.0890% | 0.017 |
| KNIGHTHAWK | 66,251.16 | 12/4/2023 | 1/9/2024 | 12/29/2023 | 18.70 | (11.39) | 7.30 | 0.0890% | 0.007 |
| ALLIANCE COAL LLC | 66,337.05 | 8/1/2023 | 8/18/2023 | 8/29/2023 | 9.21 | 10.58 | 19.79 | 0.0892% | 0.018 |
| ALLIANCE COAL LLC | 66,344.85 | 5/12/2023 | 5/28/2023 | 5/26/2023 | 8.65 | (2.30) | 6.35 | 0.0892% | 0.006 |
| ALLIANCE COAL LLC | 66,348.75 | 11/26/2023 | 12/6/2023 | 12/14/2023 | 5.80 | 7.40 | 13.20 | 0.0892% | 0.012 |
| ALLIANCE COAL LLC | 66,360.45 | 1/26/2023 | 4/4/2023 | 2/14/2023 | 34.62 | (49.24) | (14.62) | 0.0892% | -0.013 |
| ALLIANCE COAL LLC | 66,362.40 | 8/14/2023 | 8/20/2023 | 8/29/2023 | 3.67 | 8.66 | 12.33 | 0.0892% | 0.011 |
| ALLIANCE COAL LLC | 66,366.30 | 7/9/2023 | 7/21/2023 | 7/28/2023 | 6.75 | 6.51 | 13.25 | 0.0892% | 0.012 |
| ALLIANCE COAL LLC | 66,381.90 | 6/12/2023 | 6/29/2023 | 6/29/2023 | 9.14 | (0.28) | 8.86 | 0.0892% | 0.008 |
| ALLIANCE COAL LLC | 66,383.85 | 5/25/2023 | 6/2/2023 | 6/14/2023 | 4.63 | 11.75 | 16.37 | 0.0892% | 0.015 |
| ALLIANCE COAL LLC | 66,387.75 | 7/9/2023 | 7/19/2023 | 7/28/2023 | 5.74 | 8.51 | 14.26 | 0.0892% | 0.013 |
| ALLIANCE COAL LLC | 66,409.20 | 1/26/2023 | 4/5/2023 | 2/14/2023 | 35.12 | (50.24) | (15.12) | 0.0892% | -0.013 |
| ALLIANCE COAL LLC | 66,409.20 | 1/4/2023 | 2/21/2023 | 1/27/2023 | 24.65 | (25.31) | (0.65) | 0.0892% | -0.001 |

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|---|---|---|---|---|---|---|---|---|---|
| ALLIANCE COAL LLC | 66,477.45 | 12/14/2023 | 12/23/2023 | 12/29/2023 | 5.20 | 5.59 | 10.80 | 0.0893% | 0.010 |
| KNIGHTHAWK | 66,488.82 | 10/31/2023 | 11/14/2023 | 11/14/2023 | 7.71 | (0.42) | 7.29 | 0.0894% | 0.007 |
| KNIGHTHAWK | 66,494.29 | 12/19/2023 | 12/28/2023 | 1/12/2024 | 5.19 | 14.62 | 19.81 | 0.0894% | 0.018 |
| ALLIANCE COAL LLC | 66,495.00 | 1/3/2023 | 2/22/2023 | 1/27/2023 | 25.68 | (26.36) | (0.68) | 0.0894% | -0.001 |
| ALLIANCE COAL LLC | 66,514.50 | 5/4/2023 | 5/9/2023 | 5/26/2023 | 3.11 | 16.77 | 19.89 | 0.0894% | 0.018 |
| ALLIANCE COAL LLC | 66,545.70 | 1/18/2023 | 2/20/2023 | 2/14/2023 | 17.15 | (6.30) | 10.85 | 0.0894% | 0.010 |
| ALLIANCE COAL LLC | 66,555.45 | 4/26/2023 | 5/4/2023 | 5/12/2023 | 4.65 | 7.71 | 12.35 | 0.0894% | 0.011 |
| KNIGHTHAWK | 66,555.75 | 11/20/2023 | 12/1/2023 | 12/14/2023 | 6.21 | 12.57 | 18.79 | 0.0894% | 0.017 |
| ALLIANCE COAL LLC | 66,590.55 | 4/27/2023 | 5/9/2023 | 5/12/2023 | 6.46 | 2.78 | 9.23 | 0.0895% | 0.008 |
| ALLIANCE COAL LLC | 66,598.35 | 4/26/2023 | 5/2/2023 | 5/12/2023 | 3.63 | 9.75 | 13.37 | 0.0895% | 0.012 |
| KNIGHTHAWK | 66,603.11 | 11/8/2023 | 11/25/2023 | 11/29/2023 | 9.28 | 3.45 | 12.72 | 0.0895% | 0.011 |
| ALLIANCE COAL LLC | 66,612.00 | 5/4/2023 | 5/10/2023 | 5/26/2023 | 3.61 | 15.77 | 19.39 | 0.0895% | 0.017 |
| ALLIANCE COAL LLC | 66,621.75 | 12/5/2023 | 1/16/2024 | 12/29/2023 | 21.71 | (18.41) | 3.29 | 0.0895% | 0.003 |
| KNIGHTHAWK | 66,623.59 | 11/27/2023 | 12/18/2023 | 12/14/2023 | 11.00 | (4.00) | 7.00 | 0.0895% | 0.006 |
| ALLIANCE COAL LLC | 66,625.65 | 4/26/2023 | 5/3/2023 | 5/12/2023 | 4.17 | 8.67 | 12.83 | 0.0895% | 0.011 |
| ALLIANCE COAL LLC | 66,627.60 | 12/22/2023 | 12/31/2023 | 1/12/2024 | 5.17 | 11.65 | 16.83 | 0.0895% | 0.015 |
| ALLIANCE COAL LLC | 66,629.55 | 6/2/2023 | 6/9/2023 | 6/29/2023 | 4.18 | 19.65 | 23.82 | 0.0895% | 0.021 |
| KNIGHTHAWK | 66,633.61 | 12/22/2023 | 1/1/2024 | 1/12/2024 | 5.73 | 10.53 | 16.27 | 0.0896% | 0.015 |
| ALLIANCE COAL LLC | 66,647.10 | 6/6/2023 | 6/15/2023 | 6/29/2023 | 5.14 | 13.73 | 18.86 | 0.0896% | 0.017 |
| ALLIANCE COAL LLC | 66,666.60 | 8/1/2023 | 8/15/2023 | 8/29/2023 | 7.78 | 13.43 | 21.22 | 0.0896% | 0.019 |
| ALLIANCE COAL LLC | 66,682.20 | 1/3/2023 | 2/20/2023 | 1/27/2023 | 24.65 | (24.30) | 0.35 | 0.0896% | 0.000 |
| ALLIANCE COAL LLC | 66,684.15 | 6/6/2023 | 6/15/2023 | 6/29/2023 | 5.14 | 13.73 | 18.86 | 0.0896% | 0.017 |
| ALLIANCE COAL LLC | 66,690.00 | 6/12/2023 | 6/29/2023 | 6/29/2023 | 9.14 | (0.28) | 8.86 | 0.0896% | 0.008 |
| ALLIANCE COAL LLC | 66,705.60 | 12/6/2023 | 12/19/2023 | 12/29/2023 | 7.26 | 9.49 | 16.74 | 0.0896% | 0.015 |
| KNIGHTHAWK | 66,710.56 | 12/13/2023 | 1/1/2024 | 12/29/2023 | 10.24 | (3.47) | 6.76 | 0.0897% | 0.006 |
| ALLIANCE COAL LLC | 66,758.25 | 5/25/2023 | 6/3/2023 | 6/14/2023 | 5.13 | 10.75 | 15.87 | 0.0897% | 0.014 |
| ALLIANCE COAL LLC | 66,779.70 | 3/11/2023 | 4/2/2023 | 3/29/2023 | 11.62 | (4.23) | 7.38 | 0.0897% | 0.007 |
| KNIGHTHAWK | 66,790.23 | 10/24/2023 | 11/11/2023 | 11/14/2023 | 9.68 | 2.63 | 12.32 | 0.0898% | 0.011 |
| ALLIANCE COAL LLC | 66,791.40 | 7/20/2023 | 8/5/2023 | 8/14/2023 | 8.77 | 8.45 | 17.23 | 0.0898% | 0.015 |
| ALLIANCE COAL LLC | 66,803.10 | 3/11/2023 | 4/2/2023 | 3/29/2023 | 11.62 | (4.23) | 7.38 | 0.0898% | 0.007 |
| KNIGHTHAWK | 66,817.10 | 11/30/2023 | 2/21/2024 | 12/14/2023 | 42.23 | (69.46) | (27.23) | 0.0898% | -0.024 |
| KNIGHTHAWK | 66,833.49 | 11/21/2023 | 12/4/2023 | 12/14/2023 | 7.22 | 9.56 | 16.78 | 0.0898% | 0.015 |
| KNIGHTHAWK | 66,834.40 | 11/27/2023 | 12/19/2023 | 12/14/2023 | 11.75 | (5.51) | 6.25 | 0.0898% | 0.006 |
| KNIGHTHAWK | 66,838.04 | 11/14/2023 | 11/24/2023 | 11/29/2023 | 5.77 | 4.45 | 10.23 | 0.0898% | 0.009 |
| KNIGHTHAWK | 66,840.32 | 12/13/2023 | 12/26/2023 | 12/29/2023 | 7.21 | 2.58 | 9.79 | 0.0898% | 0.009 |
| KNIGHTHAWK | 66,842.59 | 12/27/2023 | 1/12/2024 | 1/12/2024 | 8.70 | (0.39) | 8.30 | 0.0898% | 0.007 |
| KNIGHTHAWK | 66,852.61 | 12/6/2023 | 12/23/2023 | 12/29/2023 | 9.21 | 5.59 | 14.79 | 0.0898% | 0.013 |
| ALLIANCE COAL LLC | 66,885.00 | 3/11/2023 | 3/31/2023 | 3/29/2023 | 10.62 | (2.23) | 8.38 | 0.0899% | 0.008 |
| KNIGHTHAWK | 66,886.30 | 12/27/2023 | 1/7/2024 | 1/12/2024 | 6.19 | 4.62 | 10.81 | 0.0899% | 0.010 |
| ALLIANCE COAL LLC | 66,886.95 | 12/14/2023 | 12/22/2023 | 12/29/2023 | 4.81 | 6.37 | 11.19 | 0.0899% | 0.010 |
| ALLIANCE COAL LLC | 66,894.75 | 4/26/2023 | 5/1/2023 | 5/12/2023 | 3.13 | 10.75 | 13.87 | 0.0899% | 0.012 |
| KNIGHTHAWK | 66,898.14 | 12/6/2023 | 12/22/2023 | 12/29/2023 | 8.81 | 6.37 | 15.19 | 0.0899% | 0.014 |
| KNIGHTHAWK | 66,911.34 | 12/18/2023 | 12/29/2023 | 1/12/2024 | 6.17 | 13.66 | 19.83 | 0.0899% | 0.018 |
| KNIGHTHAWK | 66,911.34 | 12/4/2023 | 12/14/2023 | 12/29/2023 | 5.78 | 14.44 | 20.22 | 0.0899% | 0.018 |
| ALLIANCE COAL LLC | 66,922.05 | 12/1/2023 | 12/25/2023 | 12/29/2023 | 12.71 | 3.58 | 16.29 | 0.0899% | 0.015 |
| KNIGHTHAWK | 66,943.21 | 11/27/2023 | 12/14/2023 | 12/14/2023 | 9.28 | (0.55) | 8.72 | 0.0900% | 0.008 |
| KNIGHTHAWK | 66,976.45 | 12/22/2023 | 12/31/2023 | 1/12/2024 | 5.17 | 11.65 | 16.83 | 0.0900% | 0.015 |
| KNIGHTHAWK | 66,989.65 | 12/6/2023 | 12/25/2023 | 12/29/2023 | 10.21 | 3.58 | 13.79 | 0.0900% | 0.012 |
| KNIGHTHAWK | 66,990.11 | 12/18/2023 | 12/30/2023 | 1/12/2024 | 6.67 | 12.65 | 19.33 | 0.0900% | 0.017 |
| KNIGHTHAWK | 67,016.97 | 12/13/2023 | 1/1/2024 | 12/29/2023 | 10.23 | (3.47) | 6.77 | 0.0901% | 0.006 |
| KNIGHTHAWK | 67,017.43 | 12/6/2023 | 12/23/2023 | 12/29/2023 | 9.20 | 5.59 | 14.80 | 0.0901% | 0.013 |
| KNIGHTHAWK | 67,026.99 | 11/8/2023 | 11/25/2023 | 11/29/2023 | 9.28 | 3.45 | 12.72 | 0.0901% | 0.011 |
| KNIGHTHAWK | 67,035.64 | 11/27/2023 | 12/14/2023 | 12/14/2023 | 9.28 | (0.56) | 8.72 | 0.0901% | 0.008 |
| KNIGHTHAWK | 67,041.10 | 12/13/2023 | 12/27/2023 | 12/29/2023 | 7.71 | 1.58 | 9.29 | 0.0901% | 0.008 |
| KNIGHTHAWK | 67,067.51 | 11/20/2023 | 12/2/2023 | 12/14/2023 | 6.72 | 11.57 | 18.28 | 0.0901% | 0.016 |
| KNIGHTHAWK | 67,073.43 | 12/11/2023 | 1/11/2024 | 12/29/2023 | 16.31 | (13.63) | 2.69 | 0.0901% | 0.002 |
| KNIGHTHAWK | 67,088.00 | 12/27/2023 | 1/7/2024 | 1/12/2024 | 6.19 | 4.62 | 10.81 | 0.0902% | 0.010 |
| ALLIANCE COAL LLC | 67,089.75 | 10/27/2023 | 11/9/2023 | 11/14/2023 | 7.21 | 4.57 | 11.79 | 0.0902% | 0.011 |

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|---|---|---|---|---|---|---|---|---|---|
| ALLIANCE COAL LLC | 67,097.55 | 6/12/2023 | 6/30/2023 | 6/29/2023 | 9.62 | (1.23) | 8.38 | 0.0902% | 0.008 |
| KNIGHTHAWK | 67,103.94 | 11/8/2023 | 11/21/2023 | 11/29/2023 | 7.27 | 7.46 | 14.73 | 0.0902% | 0.013 |
| KNIGHTHAWK | 67,108.49 | 11/14/2023 | 11/22/2023 | 11/29/2023 | 4.77 | 6.45 | 11.23 | 0.0902% | 0.010 |
| KNIGHTHAWK | 67,124.42 | 11/21/2023 | 12/9/2023 | 12/14/2023 | 9.80 | 4.40 | 14.20 | 0.0902% | 0.013 |
| KNIGHTHAWK | 67,126.70 | 12/13/2023 | 1/2/2024 | 12/29/2023 | 10.74 | (4.48) | 6.26 | 0.0902% | 0.006 |
| KNIGHTHAWK | 67,133.99 | 12/19/2023 | 1/4/2024 | 1/12/2024 | 8.71 | 7.59 | 16.29 | 0.0902% | 0.015 |
| KNIGHTHAWK | 67,152.65 | 12/12/2023 | 12/22/2023 | 12/29/2023 | 5.81 | 6.37 | 12.19 | 0.0902% | 0.011 |
| KNIGHTHAWK | 67,154.47 | 11/14/2023 | 11/28/2023 | 11/29/2023 | 7.73 | 0.53 | 8.27 | 0.0903% | 0.007 |
| KNIGHTHAWK | 67,164.95 | 11/8/2023 | 11/22/2023 | 11/29/2023 | 7.77 | 6.45 | 14.23 | 0.0903% | 0.013 |
| KNIGHTHAWK | 67,171.32 | 12/6/2023 | 12/24/2023 | 12/29/2023 | 9.71 | 4.59 | 14.29 | 0.0903% | 0.013 |
| KNIGHTHAWK | 67,176.33 | 12/20/2023 | 1/5/2024 | 1/12/2024 | 8.81 | 6.38 | 15.19 | 0.0903% | 0.014 |
| ALLIANCE COAL LLC | 67,187.25 | 5/4/2023 | 5/9/2023 | 5/26/2023 | 3.11 | 16.77 | 19.89 | 0.0903% | 0.018 |
| KNIGHTHAWK | 67,230.05 | 12/27/2023 | 4/1/2024 | 1/12/2024 | 48.76 | (80.52) | (31.76) | 0.0904% | -0.029 |
| KNIGHTHAWK | 67,241.44 | 11/30/2023 | 2/25/2024 | 12/14/2023 | 44.26 | (73.52) | (29.26) | 0.0904% | -0.026 |
| KNIGHTHAWK | 67,249.18 | 12/27/2023 | 4/1/2024 | 1/12/2024 | 48.76 | (80.52) | (31.76) | 0.0904% | -0.029 |
| KNIGHTHAWK | 67,292.43 | 11/21/2023 | 12/2/2023 | 12/14/2023 | 6.22 | 11.57 | 17.78 | 0.0904% | 0.016 |
| KNIGHTHAWK | 67,292.88 | 12/13/2023 | 1/6/2024 | 12/29/2023 | 12.69 | (8.37) | 4.31 | 0.0904% | 0.004 |
| KNIGHTHAWK | 67,295.62 | 11/8/2023 | 11/24/2023 | 11/29/2023 | 8.78 | 4.45 | 13.22 | 0.0904% | 0.012 |
| KNIGHTHAWK | 67,303.81 | 12/4/2023 | 12/11/2023 | 12/29/2023 | 4.26 | 17.47 | 21.74 | 0.0905% | 0.020 |
| KNIGHTHAWK | 67,313.37 | 12/19/2023 | 12/30/2023 | 1/12/2024 | 6.17 | 12.65 | 18.83 | 0.0905% | 0.017 |
| KNIGHTHAWK | 67,315.65 | 11/20/2023 | 12/1/2023 | 12/14/2023 | 6.21 | 12.57 | 18.79 | 0.0905% | 0.017 |
| KNIGHTHAWK | 67,327.94 | 12/12/2023 | 1/8/2024 | 12/29/2023 | 14.19 | (10.38) | 3.81 | 0.0905% | 0.003 |
| KNIGHTHAWK | 67,330.67 | 12/11/2023 | 1/9/2024 | 12/29/2023 | 15.19 | (11.39) | 3.81 | 0.0905% | 0.003 |
| KNIGHTHAWK | 67,337.50 | 10/31/2023 | 11/14/2023 | 11/14/2023 | 7.71 | (0.42) | 7.29 | 0.0905% | 0.007 |
| KNIGHTHAWK | 67,340.69 | 10/24/2023 | 11/10/2023 | 11/14/2023 | 9.18 | 3.64 | 12.82 | 0.0905% | 0.012 |
| KNIGHTHAWK | 67,342.51 | 11/30/2023 | 12/13/2023 | 12/14/2023 | 7.23 | 0.54 | 7.77 | 0.0905% | 0.007 |
| KNIGHTHAWK | 67,352.98 | 12/4/2023 | 12/15/2023 | 12/29/2023 | 6.23 | 13.54 | 19.77 | 0.0905% | 0.018 |
| KNIGHTHAWK | 67,356.63 | 12/19/2023 | 1/3/2024 | 1/12/2024 | 8.24 | 8.52 | 16.76 | 0.0905% | 0.015 |
| ALLIANCE COAL LLC | 67,366.65 | 5/18/2023 | 6/6/2023 | 6/14/2023 | 10.13 | 7.74 | 17.87 | 0.0905% | 0.016 |
| KNIGHTHAWK | 67,370.29 | 12/19/2023 | 1/4/2024 | 1/12/2024 | 8.71 | 7.59 | 16.29 | 0.0905% | 0.015 |
| ALLIANCE COAL LLC | 67,392.00 | 12/22/2023 | 12/30/2023 | 1/12/2024 | 4.67 | 12.65 | 17.33 | 0.0906% | 0.016 |
| KNIGHTHAWK | 67,401.70 | 11/8/2023 | 11/28/2023 | 11/29/2023 | 10.73 | 0.54 | 11.27 | 0.0906% | 0.010 |
| KNIGHTHAWK | 67,405.80 | 12/14/2023 | 12/28/2023 | 12/29/2023 | 7.69 | 0.62 | 8.31 | 0.0906% | 0.008 |
| KNIGHTHAWK | 67,419.00 | 11/14/2023 | 11/22/2023 | 11/29/2023 | 4.77 | 6.46 | 11.23 | 0.0906% | 0.010 |
| KNIGHTHAWK | 67,431.75 | 12/14/2023 | 12/28/2023 | 12/29/2023 | 7.69 | 0.62 | 8.31 | 0.0906% | 0.008 |
| KNIGHTHAWK | 67,432.66 | 10/30/2023 | 11/13/2023 | 11/14/2023 | 7.81 | 0.37 | 8.19 | 0.0906% | 0.007 |
| KNIGHTHAWK | 67,463.62 | 12/11/2023 | 12/21/2023 | 12/29/2023 | 5.81 | 7.38 | 13.19 | 0.0907% | 0.012 |
| ALLIANCE COAL LLC | 67,475.85 | 11/18/2023 | 12/11/2023 | 12/14/2023 | 12.22 | 2.57 | 14.78 | 0.0907% | 0.013 |
| KNIGHTHAWK | 67,479.56 | 11/14/2023 | 11/21/2023 | 11/29/2023 | 4.27 | 7.46 | 11.73 | 0.0907% | 0.011 |
| KNIGHTHAWK | 67,488.66 | 12/11/2023 | 12/23/2023 | 12/29/2023 | 6.71 | 5.59 | 12.29 | 0.0907% | 0.011 |
| KNIGHTHAWK | 67,490.94 | 10/24/2023 | 11/10/2023 | 11/14/2023 | 9.18 | 3.64 | 12.82 | 0.0907% | 0.012 |
| KNIGHTHAWK | 67,491.40 | 10/24/2023 | 11/9/2023 | 11/14/2023 | 8.71 | 4.57 | 13.29 | 0.0907% | 0.012 |
| KNIGHTHAWK | 67,501.87 | 11/17/2023 | 11/29/2023 | 12/14/2023 | 6.74 | 14.53 | 21.26 | 0.0907% | 0.019 |
| KNIGHTHAWK | 67,506.42 | 11/21/2023 | 12/9/2023 | 12/14/2023 | 9.80 | 4.40 | 14.20 | 0.0907% | 0.013 |
| KNIGHTHAWK | 67,510.97 | 12/19/2023 | 1/6/2024 | 1/12/2024 | 9.69 | 5.63 | 15.31 | 0.0907% | 0.014 |
| KNIGHTHAWK | 67,518.26 | 12/27/2023 | 1/11/2024 | 1/12/2024 | 8.32 | 0.37 | 8.68 | 0.0907% | 0.008 |
| KNIGHTHAWK | 67,518.26 | 11/21/2023 | 12/4/2023 | 12/14/2023 | 7.22 | 9.56 | 16.78 | 0.0907% | 0.015 |
| KNIGHTHAWK | 67,523.72 | 11/20/2023 | 12/3/2023 | 12/14/2023 | 7.22 | 10.57 | 17.78 | 0.0907% | 0.016 |
| KNIGHTHAWK | 67,539.20 | 12/14/2023 | 1/15/2024 | 12/29/2023 | 16.71 | (17.41) | (0.71) | 0.0908% | -0.001 |
| ALLIANCE COAL LLC | 67,553.85 | 12/14/2023 | 1/11/2024 | 12/29/2023 | 14.81 | (13.63) | 1.19 | 0.0908% | 0.001 |
| KNIGHTHAWK | 67,561.97 | 10/30/2023 | 11/13/2023 | 11/14/2023 | 7.65 | 0.70 | 8.35 | 0.0908% | 0.008 |
| ALLIANCE COAL LLC | 67,565.55 | 5/18/2023 | 5/26/2023 | 6/14/2023 | 4.62 | 18.77 | 23.38 | 0.0908% | 0.021 |
| KNIGHTHAWK | 67,572.44 | 11/14/2023 | 11/23/2023 | 11/29/2023 | 5.27 | 5.45 | 10.73 | 0.0908% | 0.010 |
| KNIGHTHAWK | 67,598.39 | 11/17/2023 | 11/29/2023 | 12/14/2023 | 6.74 | 14.53 | 21.26 | 0.0908% | 0.019 |
| KNIGHTHAWK | 67,599.30 | 11/27/2023 | 12/17/2023 | 12/14/2023 | 10.73 | (3.46) | 7.27 | 0.0908% | 0.007 |
| KNIGHTHAWK | 67,601.58 | 11/17/2023 | 11/28/2023 | 12/14/2023 | 6.24 | 15.53 | 21.76 | 0.0909% | 0.020 |
| KNIGHTHAWK | 67,613.42 | 11/14/2023 | 11/21/2023 | 11/29/2023 | 4.27 | 7.46 | 11.73 | 0.0909% | 0.011 |
| KNIGHTHAWK | 67,672.60 | 11/22/2023 | 12/12/2023 | 12/14/2023 | 10.77 | 1.47 | 12.23 | 0.0909% | 0.011 |

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|---|---|---|---|---|---|---|---|---|---|
| KNIGHTHAWK | 67,698.10 | 12/11/2023 | 1/9/2024 | 12/29/2023 | 15.20 | (11.39) | 3.80 | 0.0910% | 0.003 |
| KNIGHTHAWK | 67,720.41 | 10/24/2023 | 11/10/2023 | 11/14/2023 | 9.18 | 3.65 | 12.82 | 0.0910% | 0.012 |
| KNIGHTHAWK | 67,748.64 | 11/20/2023 | 12/3/2023 | 12/14/2023 | 7.22 | 10.57 | 17.78 | 0.0910% | 0.016 |
| KNIGHTHAWK | 67,992.23 | 10/24/2023 | 11/16/2023 | 11/14/2023 | 12.17 | (2.34) | 9.83 | 0.0914% | 0.009 |
| KNIGHTHAWK | 68,110.15 | 10/31/2023 | 11/13/2023 | 11/14/2023 | 7.31 | 0.37 | 7.69 | 0.0915% | 0.007 |
| KNIGHTHAWK | 68,154.77 | 11/30/2023 | 12/13/2023 | 12/14/2023 | 7.23 | 0.54 | 7.77 | 0.0916% | 0.007 |
| KNIGHTHAWK | 68,584.57 | 11/17/2023 | 11/30/2023 | 12/14/2023 | 7.16 | 13.68 | 20.84 | 0.0922% | 0.019 |
| KNIGHTHAWK | 68,590.95 | 12/4/2023 | 1/9/2024 | 12/29/2023 | 18.70 | (11.39) | 7.30 | 0.0922% | 0.007 |
| KNIGHTHAWK | 68,630.56 | 12/19/2023 | 12/29/2023 | 1/12/2024 | 5.67 | 13.66 | 19.33 | 0.0922% | 0.018 |
| KNIGHTHAWK | 68,677.45 | 10/31/2023 | 11/14/2023 | 11/14/2023 | 7.71 | (0.42) | 7.29 | 0.0923% | 0.007 |
| KNIGHTHAWK | 68,761.68 | 11/20/2023 | 11/30/2023 | 12/14/2023 | 5.66 | 13.68 | 19.34 | 0.0924% | 0.018 |
| ALLIANCE COAL LLC | 69,322.50 | 11/25/2023 | 12/8/2023 | 12/14/2023 | 7.30 | 5.40 | 12.70 | 0.0932% | 0.012 |
| KNIGHTHAWK | 71,094.64 | 6/26/2023 | 7/9/2023 | 7/14/2023 | 7.19 | 4.63 | 11.81 | 0.0955% | 0.011 |
| KNIGHTHAWK | 71,170.67 | 7/7/2023 | 7/19/2023 | 7/28/2023 | 6.74 | 8.51 | 15.26 | 0.0956% | 0.015 |
| KNIGHTHAWK | 71,859.09 | 8/9/2023 | 8/29/2023 | 8/29/2023 | 10.76 | (0.51) | 10.24 | 0.0966% | 0.010 |
| KNIGHTHAWK | 72,253.38 | 7/24/2023 | 8/7/2023 | 8/14/2023 | 7.65 | 6.70 | 14.35 | 0.0971% | 0.014 |
| KNIGHTHAWK | 72,284.79 | 6/13/2023 | 6/26/2023 | 6/29/2023 | 7.24 | 2.53 | 9.76 | 0.0971% | 0.009 |
| KNIGHTHAWK | 72,302.55 | 7/25/2023 | 8/9/2023 | 8/14/2023 | 8.18 | 4.64 | 12.82 | 0.0972% | 0.012 |
| KNIGHTHAWK | 72,347.17 | 8/2/2023 | 9/15/2023 | 8/29/2023 | 22.79 | (17.59) | 5.21 | 0.0972% | 0.005 |
| KNIGHTHAWK | 72,564.80 | 7/25/2023 | 8/6/2023 | 8/14/2023 | 6.78 | 7.45 | 14.22 | 0.0975% | 0.014 |
| KNIGHTHAWK | 72,573.45 | 8/7/2023 | 8/28/2023 | 8/29/2023 | 11.20 | 0.61 | 11.80 | 0.0975% | 0.012 |
| KNIGHTHAWK | 72,644.94 | 7/31/2023 | 8/12/2023 | 8/14/2023 | 6.77 | 1.46 | 8.23 | 0.0976% | 0.008 |
| KNIGHTHAWK | 72,681.36 | 5/30/2023 | 6/11/2023 | 6/14/2023 | 6.68 | 2.64 | 9.32 | 0.0977% | 0.009 |
| KNIGHTHAWK | 72,815.67 | 7/25/2023 | 8/19/2023 | 8/14/2023 | 13.21 | (5.42) | 7.79 | 0.0979% | 0.008 |
| KNIGHTHAWK | 72,920.85 | 7/17/2023 | 7/27/2023 | 8/14/2023 | 5.69 | 17.62 | 23.31 | 0.0980% | 0.023 |
| KNIGHTHAWK | 72,938.36 | 3/2/2023 | 3/25/2023 | 3/29/2023 | 12.12 | 3.76 | 15.88 | 0.0980% | 0.016 |
| KNIGHTHAWK | 72,960.00 | 6/20/2023 | 7/4/2023 | 7/14/2023 | 7.70 | 9.61 | 17.30 | 0.0981% | 0.017 |
| KNIGHTHAWK | 72,991.87 | 5/31/2023 | 6/10/2023 | 6/14/2023 | 5.68 | 3.65 | 9.32 | 0.0981% | 0.009 |
| KNIGHTHAWK | 73,067.00 | 6/20/2023 | 7/7/2023 | 7/14/2023 | 9.19 | 6.62 | 15.81 | 0.0982% | 0.016 |
| KNIGHTHAWK | 73,189.48 | 8/16/2023 | 9/6/2023 | 9/14/2023 | 11.28 | 7.45 | 18.72 | 0.0984% | 0.018 |
| KNIGHTHAWK | 73,218.61 | 6/29/2023 | 7/10/2023 | 7/14/2023 | 6.19 | 3.63 | 9.81 | 0.0984% | 0.010 |
| KNIGHTHAWK | 73,303.76 | 7/11/2023 | 8/13/2023 | 7/28/2023 | 17.27 | (16.55) | 0.73 | 0.0985% | 0.001 |
| KNIGHTHAWK | 73,322.42 | 8/1/2023 | 8/28/2023 | 8/29/2023 | 14.20 | 0.61 | 14.80 | 0.0985% | 0.015 |
| KNIGHTHAWK | 73,341.55 | 8/9/2023 | 9/6/2023 | 8/29/2023 | 14.78 | (8.55) | 6.22 | 0.0986% | 0.006 |
| KNIGHTHAWK | 73,350.65 | 8/16/2023 | 8/28/2023 | 9/14/2023 | 6.70 | 16.61 | 23.30 | 0.0986% | 0.023 |
| KNIGHTHAWK | 73,358.12 | 1/5/2023 | 1/22/2023 | 1/27/2023 | 9.13 | 4.75 | 13.87 | 0.0986% | 0.014 |
| KNIGHTHAWK | 73,362.94 | 8/2/2023 | 9/15/2023 | 8/29/2023 | 22.79 | (17.59) | 5.21 | 0.0986% | 0.005 |
| KNIGHTHAWK | 73,398.46 | 6/20/2023 | 7/5/2023 | 7/14/2023 | 8.18 | 8.65 | 16.82 | 0.0986% | 0.017 |
| KNIGHTHAWK | 73,403.92 | 6/20/2023 | 7/10/2023 | 7/14/2023 | 10.69 | 3.63 | 14.31 | 0.0986% | 0.014 |
| KNIGHTHAWK | 73,408.47 | 8/16/2023 | 9/13/2023 | 9/14/2023 | 14.77 | 0.45 | 15.23 | 0.0987% | 0.015 |
| KNIGHTHAWK | 73,415.76 | 6/28/2023 | 7/24/2023 | 7/14/2023 | 13.75 | (10.51) | 3.25 | 0.0987% | 0.003 |
| KNIGHTHAWK | 73,417.58 | 8/9/2023 | 9/8/2023 | 8/29/2023 | 15.68 | (10.36) | 5.32 | 0.0987% | 0.005 |
| KNIGHTHAWK | 73,567.37 | 7/6/2023 | 7/17/2023 | 7/28/2023 | 6.28 | 10.44 | 16.72 | 0.0989% | 0.017 |
| KNIGHTHAWK | 73,587.86 | 8/1/2023 | 8/24/2023 | 8/29/2023 | 12.15 | 4.70 | 16.85 | 0.0989% | 0.017 |
| KNIGHTHAWK | 73,605.62 | 7/10/2023 | 7/31/2023 | 7/28/2023 | 11.21 | (3.42) | 7.79 | 0.0989% | 0.008 |
| KNIGHTHAWK | 73,640.68 | 6/28/2023 | 7/12/2023 | 7/14/2023 | 7.65 | 1.71 | 9.35 | 0.0990% | 0.009 |
| KNIGHTHAWK | 73,674.04 | 1/13/2023 | 4/5/2023 | 1/27/2023 | 41.62 | (68.24) | (26.62) | 0.0990% | -0.026 |
| KNIGHTHAWK | 73,678.92 | 6/13/2023 | 6/28/2023 | 6/29/2023 | 8.17 | 0.66 | 8.83 | 0.0990% | 0.009 |
| KNIGHTHAWK | 73,715.35 | 7/25/2023 | 8/5/2023 | 8/14/2023 | 6.27 | 8.45 | 14.73 | 0.0991% | 0.015 |
| KNIGHTHAWK | 73,756.78 | 7/24/2023 | 8/8/2023 | 8/14/2023 | 8.15 | 5.69 | 13.85 | 0.0991% | 0.014 |
| KNIGHTHAWK | 73,766.80 | 6/14/2023 | 6/30/2023 | 6/29/2023 | 8.62 | (1.23) | 7.38 | 0.0991% | 0.007 |
| KNIGHTHAWK | 73,810.05 | 6/23/2023 | 7/8/2023 | 7/14/2023 | 8.19 | 5.62 | 13.81 | 0.0992% | 0.014 |
| KNIGHTHAWK | 73,825.07 | 7/17/2023 | 7/28/2023 | 8/14/2023 | 6.19 | 16.62 | 22.81 | 0.0992% | 0.023 |
| KNIGHTHAWK | 73,829.63 | 7/6/2023 | 7/18/2023 | 7/28/2023 | 6.65 | 9.70 | 16.35 | 0.0992% | 0.016 |
| KNIGHTHAWK | 73,880.84 | 1/5/2023 | 2/6/2023 | 1/27/2023 | 16.68 | (10.36) | 6.32 | 0.0993% | 0.006 |
| KNIGHTHAWK | 73,931.61 | 7/24/2023 | 8/8/2023 | 8/14/2023 | 8.15 | 5.69 | 13.85 | 0.0994% | 0.014 |
| KNIGHTHAWK | 74,019.49 | 7/5/2023 | 7/17/2023 | 7/28/2023 | 6.78 | 10.44 | 17.22 | 0.0995% | 0.017 |
| KNIGHTHAWK | 74,041.34 | 8/1/2023 | 8/27/2023 | 8/29/2023 | 13.68 | 1.65 | 15.32 | 0.0995% | 0.015 |

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|---|---|---|---|---|---|---|---|---|---|
| KNIGHTHAWK | 74,041.34 | 8/1/2023 | 8/24/2023 | 8/29/2023 | 12.15 | 4.70 | 16.85 | 0.0995% | 0.017 |
| KNIGHTHAWK | 74,042.71 | 8/16/2023 | 9/4/2023 | 9/14/2023 | 10.27 | 9.46 | 19.73 | 0.0995% | 0.020 |
| KNIGHTHAWK | 74,051.36 | 6/23/2023 | 7/8/2023 | 7/14/2023 | 8.19 | 5.62 | 13.81 | 0.0995% | 0.014 |
| KNIGHTHAWK | 74,055.91 | 8/9/2023 | 9/13/2023 | 8/29/2023 | 18.27 | (15.55) | 2.73 | 0.0995% | 0.003 |
| KNIGHTHAWK | 74,086.87 | 7/31/2023 | 8/12/2023 | 8/14/2023 | 6.77 | 1.46 | 8.23 | 0.0996% | 0.008 |
| KNIGHTHAWK | 74,123.72 | 1/13/2023 | 4/5/2023 | 1/27/2023 | 41.62 | (68.24) | (26.62) | 0.0996% | -0.027 |
| KNIGHTHAWK | 74,145.15 | 6/13/2023 | 6/25/2023 | 6/29/2023 | 6.78 | 3.44 | 10.22 | 0.0996% | 0.010 |
| KNIGHTHAWK | 74,182.48 | 6/23/2023 | 7/11/2023 | 7/14/2023 | 9.69 | 2.62 | 12.31 | 0.0997% | 0.012 |
| KNIGHTHAWK | 74,189.72 | 1/19/2023 | 2/10/2023 | 2/14/2023 | 11.63 | 3.75 | 15.37 | 0.0997% | 0.015 |
| KNIGHTHAWK | 74,218.45 | 8/16/2023 | 9/7/2023 | 9/14/2023 | 11.67 | 6.66 | 18.33 | 0.0997% | 0.018 |
| KNIGHTHAWK | 74,230.20 | 1/27/2023 | 2/25/2023 | 2/14/2023 | 15.19 | (11.38) | 3.81 | 0.0998% | 0.004 |
| KNIGHTHAWK | 74,233.02 | 6/20/2023 | 7/4/2023 | 7/14/2023 | 7.70 | 9.61 | 17.30 | 0.0998% | 0.017 |
| KNIGHTHAWK | 74,251.23 | 8/2/2023 | 9/14/2023 | 8/29/2023 | 22.29 | (16.58) | 5.71 | 0.0998% | 0.006 |
| KNIGHTHAWK | 74,318.16 | 7/6/2023 | 7/20/2023 | 7/28/2023 | 7.75 | 7.51 | 15.25 | 0.0999% | 0.015 |
| KNIGHTHAWK | 74,348.67 | 6/13/2023 | 6/23/2023 | 6/29/2023 | 5.77 | 5.45 | 11.23 | 0.0999% | 0.011 |
| KNIGHTHAWK | 74,393.44 | 1/27/2023 | 2/8/2023 | 2/14/2023 | 6.67 | 5.66 | 12.33 | 0.1000% | 0.012 |
| KNIGHTHAWK | 74,404.22 | 7/25/2023 | 8/13/2023 | 8/14/2023 | 10.27 | 0.45 | 10.73 | 0.1000% | 0.011 |
| KNIGHTHAWK | 74,415.60 | 6/14/2023 | 6/26/2023 | 6/29/2023 | 6.74 | 2.53 | 9.26 | 0.1000% | 0.009 |
| KNIGHTHAWK | 74,420.15 | 7/11/2023 | 7/27/2023 | 7/28/2023 | 8.69 | 0.62 | 9.31 | 0.1000% | 0.009 |
| KNIGHTHAWK | 74,440.64 | 7/25/2023 | 8/12/2023 | 8/14/2023 | 9.77 | 1.46 | 11.23 | 0.1000% | 0.011 |
| KNIGHTHAWK | 74,447.47 | 6/14/2023 | 6/24/2023 | 6/29/2023 | 5.78 | 4.45 | 10.22 | 0.1001% | 0.010 |
| KNIGHTHAWK | 74,520.32 | 7/6/2023 | 7/15/2023 | 7/28/2023 | 5.25 | 12.50 | 17.75 | 0.1001% | 0.018 |
| KNIGHTHAWK | 74,544.90 | 7/7/2023 | 7/20/2023 | 7/28/2023 | 7.25 | 7.51 | 14.75 | 0.1002% | 0.015 |
| KNIGHTHAWK | 74,563.12 | 8/2/2023 | 9/15/2023 | 8/29/2023 | 22.79 | (17.58) | 5.21 | 0.1002% | 0.005 |
| KNIGHTHAWK | 74,590.43 | 7/10/2023 | 8/27/2023 | 7/28/2023 | 24.67 | (30.35) | (5.67) | 0.1002% | -0.006 |
| KNIGHTHAWK | 74,606.37 | 7/5/2023 | 7/16/2023 | 7/28/2023 | 6.28 | 11.44 | 17.72 | 0.1003% | 0.018 |
| KNIGHTHAWK | 74,607.72 | 1/20/2023 | 2/10/2023 | 2/14/2023 | 11.13 | 3.75 | 14.87 | 0.1003% | 0.015 |
| KNIGHTHAWK | 74,770.08 | 1/27/2023 | 2/9/2023 | 2/14/2023 | 7.16 | 4.68 | 11.84 | 0.1005% | 0.012 |
| KNIGHTHAWK | 74,770.28 | 6/26/2023 | 7/9/2023 | 7/14/2023 | 7.19 | 4.63 | 11.81 | 0.1005% | 0.012 |
| KNIGHTHAWK | 74,782.40 | 1/26/2023 | 4/15/2023 | 2/14/2023 | 40.14 | (60.28) | (20.14) | 0.1005% | -0.020 |
| KNIGHTHAWK | 74,785.76 | 8/1/2023 | 8/27/2023 | 8/29/2023 | 13.67 | 1.65 | 15.33 | 0.1005% | 0.015 |
| KNIGHTHAWK | 74,821.27 | 7/11/2023 | 8/7/2023 | 7/28/2023 | 14.15 | (10.30) | 3.85 | 0.1006% | 0.004 |
| KNIGHTHAWK | 74,914.15 | 7/10/2023 | 7/31/2023 | 7/28/2023 | 11.21 | (3.42) | 7.79 | 0.1007% | 0.008 |
| KNIGHTHAWK | 74,919.62 | 6/28/2023 | 7/23/2023 | 7/14/2023 | 13.25 | (9.50) | 3.75 | 0.1007% | 0.004 |
| KNIGHTHAWK | 74,932.00 | 1/27/2023 | 2/8/2023 | 2/14/2023 | 6.67 | 5.66 | 12.33 | 0.1007% | 0.012 |
| KNIGHTHAWK | 74,962.80 | 1/27/2023 | 2/9/2023 | 2/14/2023 | 7.16 | 4.68 | 11.84 | 0.1007% | 0.012 |
| KNIGHTHAWK | 75,068.84 | 1/5/2023 | 1/26/2023 | 1/27/2023 | 11.11 | 0.78 | 11.89 | 0.1009% | 0.012 |
| KNIGHTHAWK | 75,092.16 | 1/20/2023 | 2/4/2023 | 2/14/2023 | 8.11 | 9.77 | 17.89 | 0.1009% | 0.018 |
| KNIGHTHAWK | 75,096.12 | 1/20/2023 | 2/25/2023 | 2/14/2023 | 18.69 | (11.38) | 7.31 | 0.1009% | 0.007 |
| KNIGHTHAWK | 75,185.00 | 1/5/2023 | 1/24/2023 | 1/27/2023 | 10.12 | 2.77 | 12.88 | 0.1010% | 0.013 |
| KNIGHTHAWK | 75,221.08 | 1/5/2023 | 1/23/2023 | 1/27/2023 | 9.61 | 3.77 | 13.39 | 0.1011% | 0.014 |
| KNIGHTHAWK | 75,241.97 | 7/25/2023 | 8/8/2023 | 8/14/2023 | 7.65 | 5.69 | 13.35 | 0.1011% | 0.013 |
| KNIGHTHAWK | 75,262.00 | 3/13/2023 | 3/24/2023 | 3/29/2023 | 6.12 | 4.76 | 10.88 | 0.1011% | 0.011 |
| KNIGHTHAWK | 75,308.64 | 3/10/2023 | 3/27/2023 | 3/29/2023 | 9.16 | 1.67 | 10.84 | 0.1012% | 0.011 |
| KNIGHTHAWK | 75,345.78 | 7/25/2023 | 8/9/2023 | 8/14/2023 | 8.18 | 4.64 | 12.82 | 0.1013% | 0.013 |
| KNIGHTHAWK | 75,351.76 | 1/19/2023 | 1/28/2023 | 2/14/2023 | 5.13 | 16.75 | 21.87 | 0.1013% | 0.022 |
| KNIGHTHAWK | 75,357.92 | 1/20/2023 | 2/7/2023 | 2/14/2023 | 9.69 | 6.63 | 16.31 | 0.1013% | 0.017 |
| KNIGHTHAWK | 75,411.60 | 1/20/2023 | 2/4/2023 | 2/14/2023 | 8.12 | 9.77 | 17.88 | 0.1013% | 0.018 |
| KNIGHTHAWK | 75,463.08 | 1/20/2023 | 2/4/2023 | 2/14/2023 | 8.11 | 9.77 | 17.89 | 0.1014% | 0.018 |
| KNIGHTHAWK | 75,490.80 | 3/8/2023 | 3/25/2023 | 3/29/2023 | 9.12 | 3.75 | 12.88 | 0.1015% | 0.013 |
| KNIGHTHAWK | 75,500.04 | 1/27/2023 | 2/9/2023 | 2/14/2023 | 7.16 | 4.68 | 11.84 | 0.1015% | 0.012 |
| KNIGHTHAWK | 75,540.08 | 3/8/2023 | 3/26/2023 | 3/29/2023 | 9.62 | 2.75 | 12.38 | 0.1015% | 0.013 |
| KNIGHTHAWK | 75,603.44 | 3/8/2023 | 3/25/2023 | 3/29/2023 | 9.12 | 3.75 | 12.88 | 0.1016% | 0.013 |
| KNIGHTHAWK | 75,621.04 | 1/13/2023 | 4/6/2023 | 1/27/2023 | 42.17 | (69.35) | (27.17) | 0.1016% | -0.028 |
| KNIGHTHAWK | 75,640.84 | 3/2/2023 | 3/25/2023 | 3/29/2023 | 12.12 | 3.76 | 15.88 | 0.1017% | 0.016 |
| KNIGHTHAWK | 75,700.24 | 3/13/2023 | 3/24/2023 | 3/29/2023 | 6.12 | 4.76 | 10.88 | 0.1017% | 0.011 |
| KNIGHTHAWK | 75,749.63 | 5/30/2023 | 6/9/2023 | 6/14/2023 | 5.68 | 4.65 | 10.32 | 0.1018% | 0.011 |
| KNIGHTHAWK | 75,958.96 | 1/26/2023 | 4/15/2023 | 2/14/2023 | 40.14 | (60.28) | (20.14) | 0.1021% | -0.021 |

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|---|---|---|---|---|---|---|---|---|---|
| KNIGHTHAWK | 75,968.64 | 1/19/2023 | 2/22/2023 | 2/14/2023 | 17.68 | (8.36) | 9.32 | 0.1021% | 0.010 |
| KNIGHTHAWK | 76,652.03 | 3/27/2023 | 4/13/2023 | 4/14/2023 | 9.14 | 0.73 | 9.86 | 0.1030% | 0.010 |
| KNIGHTHAWK | 76,695.74 | 5/31/2023 | 6/12/2023 | 6/14/2023 | 6.79 | 1.43 | 8.21 | 0.1031% | 0.008 |
| KNIGHTHAWK | 76,823.22 | 6/5/2023 | 6/30/2023 | 6/29/2023 | 13.12 | (1.23) | 11.88 | 0.1032% | 0.012 |
| KNIGHTHAWK | 76,906.09 | 4/19/2023 | 5/19/2023 | 5/12/2023 | 15.62 | (7.24) | 8.38 | 0.1034% | 0.009 |
| KNIGHTHAWK | 76,929.31 | 6/5/2023 | 6/19/2023 | 6/29/2023 | 7.76 | 9.48 | 17.24 | 0.1034% | 0.018 |
| KNIGHTHAWK | 77,144.21 | 6/5/2023 | 6/27/2023 | 6/29/2023 | 11.72 | 1.56 | 13.28 | 0.1037% | 0.014 |
| KNIGHTHAWK | 77,177.45 | 6/5/2023 | 6/29/2023 | 6/29/2023 | 12.64 | (0.29) | 12.36 | 0.1037% | 0.013 |
| KNIGHTHAWK | 77,187.46 | 5/3/2023 | 5/24/2023 | 5/26/2023 | 11.12 | 1.77 | 12.88 | 0.1037% | 0.013 |
| KNIGHTHAWK | 77,188.83 | 4/7/2023 | 4/17/2023 | 4/28/2023 | 5.80 | 10.40 | 16.20 | 0.1037% | 0.017 |
| KNIGHTHAWK | 77,254.39 | 5/31/2023 | 6/9/2023 | 6/14/2023 | 5.18 | 4.65 | 9.82 | 0.1038% | 0.010 |
| KNIGHTHAWK | 77,297.19 | 3/27/2023 | 4/12/2023 | 4/14/2023 | 8.67 | 1.67 | 10.33 | 0.1039% | 0.011 |
| KNIGHTHAWK | 77,310.85 | 4/19/2023 | 5/22/2023 | 5/12/2023 | 17.13 | (10.26) | 6.87 | 0.1039% | 0.007 |
| KNIGHTHAWK | 77,329.06 | 4/4/2023 | 4/18/2023 | 4/28/2023 | 7.62 | 9.77 | 17.38 | 0.1039% | 0.018 |
| KNIGHTHAWK | 77,348.19 | 4/4/2023 | 4/19/2023 | 4/28/2023 | 8.12 | 8.77 | 16.88 | 0.1039% | 0.018 |
| KNIGHTHAWK | 77,416.48 | 4/19/2023 | 5/9/2023 | 5/12/2023 | 10.61 | 2.77 | 13.39 | 0.1040% | 0.014 |
| KNIGHTHAWK | 77,422.85 | 4/6/2023 | 4/16/2023 | 4/28/2023 | 5.64 | 11.72 | 17.36 | 0.1041% | 0.018 |
| KNIGHTHAWK | 77,537.59 | 3/27/2023 | 4/28/2023 | 4/14/2023 | 16.63 | (14.27) | 2.37 | 0.1042% | 0.002 |
| KNIGHTHAWK | 77,572.19 | 4/19/2023 | 5/21/2023 | 5/12/2023 | 16.62 | (9.24) | 7.38 | 0.1043% | 0.008 |
| KNIGHTHAWK | 77,619.54 | 4/11/2023 | 4/19/2023 | 4/28/2023 | 4.62 | 8.77 | 13.38 | 0.1043% | 0.014 |
| KNIGHTHAWK | 77,670.08 | 5/4/2023 | 5/26/2023 | 5/26/2023 | 11.62 | (0.23) | 11.38 | 0.1044% | 0.012 |
| KNIGHTHAWK | 77,696.95 | 4/4/2023 | 4/18/2023 | 4/28/2023 | 7.62 | 9.77 | 17.38 | 0.1044% | 0.018 |
| KNIGHTHAWK | 77,764.33 | 5/3/2023 | 5/24/2023 | 5/26/2023 | 11.12 | 1.77 | 12.88 | 0.1045% | 0.013 |
| KNIGHTHAWK | 77,776.62 | 4/5/2023 | 4/14/2023 | 4/28/2023 | 5.14 | 13.73 | 18.86 | 0.1045% | 0.020 |
| ALLIANCE COAL LLC | 77,784.00 | 10/25/2023 | 11/19/2023 | 11/14/2023 | 13.20 | (5.40) | 7.80 | 0.1045% | 0.008 |
| KNIGHTHAWK | 77,897.73 | 5/1/2023 | 5/8/2023 | 5/26/2023 | 4.12 | 17.76 | 21.88 | 0.1047% | 0.023 |
| KNIGHTHAWK | 77,952.82 | 5/4/2023 | 5/25/2023 | 5/26/2023 | 11.11 | 0.77 | 11.89 | 0.1048% | 0.012 |
| KNIGHTHAWK | 77,953.73 | 4/10/2023 | 5/1/2023 | 4/28/2023 | 11.13 | (3.25) | 7.87 | 0.1048% | 0.008 |
| KNIGHTHAWK | 77,987.43 | 4/5/2023 | 4/15/2023 | 4/28/2023 | 5.64 | 12.72 | 18.36 | 0.1048% | 0.019 |
| KNIGHTHAWK | 78,017.93 | 3/27/2023 | 4/12/2023 | 4/14/2023 | 8.67 | 1.67 | 10.33 | 0.1048% | 0.011 |
| KNIGHTHAWK | 78,028.86 | 6/5/2023 | 7/2/2023 | 6/29/2023 | 14.19 | (3.38) | 10.81 | 0.1049% | 0.011 |
| KNIGHTHAWK | 78,034.78 | 6/5/2023 | 6/28/2023 | 6/29/2023 | 12.17 | 0.65 | 12.83 | 0.1049% | 0.013 |
| KNIGHTHAWK | 78,051.62 | 4/6/2023 | 4/14/2023 | 4/28/2023 | 4.64 | 13.73 | 18.36 | 0.1049% | 0.019 |
| KNIGHTHAWK | 78,063.92 | 4/26/2023 | 5/7/2023 | 5/12/2023 | 6.20 | 4.61 | 10.80 | 0.1049% | 0.011 |
| KNIGHTHAWK | 78,067.10 | 4/3/2023 | 4/17/2023 | 4/28/2023 | 7.80 | 10.40 | 18.20 | 0.1049% | 0.019 |
| KNIGHTHAWK | 78,094.88 | 3/13/2023 | 3/26/2023 | 3/29/2023 | 7.12 | 2.75 | 9.88 | 0.1050% | 0.010 |
| KNIGHTHAWK | 78,105.80 | 6/1/2023 | 6/18/2023 | 6/29/2023 | 9.13 | 10.73 | 19.87 | 0.1050% | 0.021 |
| KNIGHTHAWK | 78,113.09 | 4/3/2023 | 4/18/2023 | 4/28/2023 | 8.12 | 9.77 | 17.88 | 0.1050% | 0.019 |
| KNIGHTHAWK | 78,130.39 | 4/26/2023 | 5/8/2023 | 5/12/2023 | 6.62 | 3.76 | 10.38 | 0.1050% | 0.011 |
| KNIGHTHAWK | 78,207.34 | 6/5/2023 | 7/1/2023 | 6/29/2023 | 13.69 | (2.38) | 11.31 | 0.1051% | 0.012 |
| KNIGHTHAWK | 78,229.65 | 5/1/2023 | 5/19/2023 | 5/26/2023 | 9.62 | 6.76 | 16.38 | 0.1051% | 0.017 |
| KNIGHTHAWK | 78,368.06 | 4/4/2023 | 4/17/2023 | 4/28/2023 | 7.30 | 10.40 | 17.70 | 0.1053% | 0.019 |
| KNIGHTHAWK | 78,416.77 | 4/11/2023 | 5/3/2023 | 4/28/2023 | 11.66 | (5.31) | 6.34 | 0.1054% | 0.007 |
| KNIGHTHAWK | 78,421.78 | 4/11/2023 | 4/28/2023 | 4/28/2023 | 9.13 | (0.27) | 8.87 | 0.1054% | 0.009 |
| KNIGHTHAWK | 78,518.76 | 4/6/2023 | 4/16/2023 | 4/28/2023 | 5.64 | 11.72 | 17.36 | 0.1055% | 0.018 |
| KNIGHTHAWK | 78,591.15 | 4/5/2023 | 4/15/2023 | 4/28/2023 | 5.64 | 12.73 | 18.36 | 0.1056% | 0.019 |
| KNIGHTHAWK | 78,604.81 | 4/4/2023 | 4/17/2023 | 4/28/2023 | 7.30 | 10.40 | 17.70 | 0.1056% | 0.019 |
| KNIGHTHAWK | 78,658.54 | 5/31/2023 | 6/14/2023 | 6/14/2023 | 7.63 | (0.27) | 7.37 | 0.1057% | 0.008 |
| KNIGHTHAWK | 78,816.07 | 4/11/2023 | 5/2/2023 | 4/28/2023 | 11.13 | (4.25) | 6.87 | 0.1059% | 0.007 |
| KNIGHTHAWK | 79,127.50 | 6/5/2023 | 6/19/2023 | 6/29/2023 | 7.76 | 9.48 | 17.24 | 0.1063% | 0.018 |
| KNIGHTHAWK | 79,228.57 | 5/31/2023 | 6/12/2023 | 6/14/2023 | 6.79 | 1.43 | 8.21 | 0.1065% | 0.009 |
| ALLIANCE COAL LLC | 79,495.50 | 11/28/2023 | 12/4/2023 | 12/14/2023 | 3.72 | 9.56 | 13.28 | 0.1068% | 0.014 |
| KNIGHTHAWK | 80,007.59 | 6/5/2023 | 6/20/2023 | 6/29/2023 | 8.17 | 8.65 | 16.83 | 0.1075% | 0.018 |
| KNIGHTHAWK | 80,453.33 | 6/5/2023 | 6/19/2023 | 6/29/2023 | 7.76 | 9.48 | 17.24 | 0.1081% | 0.019 |
| KNIGHTHAWK | 80,613.60 | 6/1/2023 | 6/17/2023 | 6/29/2023 | 8.63 | 11.73 | 20.37 | 0.1083% | 0.022 |
| KNIGHTHAWK | 81,004.24 | 6/1/2023 | 7/2/2023 | 6/29/2023 | 16.19 | (3.38) | 12.81 | 0.1089% | 0.014 |
| KNIGHTHAWK | 81,033.38 | 5/17/2023 | 6/8/2023 | 6/14/2023 | 11.68 | 5.65 | 17.32 | 0.1089% | 0.019 |
| KNIGHTHAWK | 81,318.40 | 5/23/2023 | 6/5/2023 | 6/14/2023 | 7.12 | 8.75 | 15.88 | 0.1093% | 0.017 |

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|---|---|---|---|---|---|---|---|---|---|
| KNIGHTHAWK | 81,504.62 | 5/23/2023 | 6/11/2023 | 6/14/2023 | 10.18 | 2.64 | 12.82 | 0.1095% | 0.014 |
| ALLIANCE COAL LLC | 81,561.38 | 11/13/2023 | 11/27/2023 | 11/29/2023 | 7.77 | 1.45 | 9.23 | 0.1096% | 0.010 |
| IRON COAL SALES | 81,566.10 | 7/4/2023 | 7/14/2023 | 7/28/2023 | 5.78 | 13.44 | 19.22 | 0.1096% | 0.021 |
| ALLIANCE COAL LLC | 81,588.68 | 11/13/2023 | 11/30/2023 | 11/29/2023 | 9.16 | (1.32) | 7.84 | 0.1096% | 0.009 |
| KNIGHTHAWK | 81,667.62 | 5/17/2023 | 6/7/2023 | 6/14/2023 | 11.12 | 6.77 | 17.88 | 0.1098% | 0.020 |
| KNIGHTHAWK | 81,757.31 | 5/17/2023 | 6/3/2023 | 6/14/2023 | 9.13 | 10.75 | 19.87 | 0.1099% | 0.022 |
| ALLIANCE COAL LLC | 81,789.75 | 6/4/2023 | 6/23/2023 | 6/29/2023 | 10.27 | 5.45 | 15.73 | 0.1099% | 0.017 |
| ALLIANCE COAL LLC | 82,115.25 | 7/10/2023 | 8/7/2023 | 7/28/2023 | 14.65 | (10.30) | 4.35 | 0.1104% | 0.005 |
| KNIGHTHAWK | 82,199.86 | 5/23/2023 | 6/6/2023 | 6/14/2023 | 7.63 | 7.74 | 15.37 | 0.1105% | 0.017 |
| KNIGHTHAWK | 82,222.17 | 5/23/2023 | 6/4/2023 | 6/14/2023 | 6.63 | 9.74 | 16.37 | 0.1105% | 0.018 |
| ALLIANCE COAL LLC | 82,271.18 | 1/19/2023 | 2/5/2023 | 2/14/2023 | 9.12 | 8.77 | 17.88 | 0.1106% | 0.020 |
| ALLIANCE COAL LLC | 82,301.63 | 12/18/2023 | 12/29/2023 | 1/12/2024 | 6.17 | 13.66 | 19.83 | 0.1106% | 0.022 |
| KNIGHTHAWK | 82,444.36 | 5/23/2023 | 6/5/2023 | 6/14/2023 | 7.12 | 8.75 | 15.88 | 0.1108% | 0.018 |
| KNIGHTHAWK | 82,488.52 | 5/23/2023 | 6/6/2023 | 6/14/2023 | 7.63 | 7.74 | 15.37 | 0.1109% | 0.017 |
| ALLIANCE COAL LLC | 82,605.60 | 11/22/2023 | 11/28/2023 | 12/14/2023 | 3.74 | 15.53 | 19.26 | 0.1110% | 0.021 |
| KNIGHTHAWK | 82,660.17 | 5/23/2023 | 6/4/2023 | 6/14/2023 | 6.63 | 9.74 | 16.37 | 0.1111% | 0.018 |
| ALLIANCE COAL LLC | 82,709.03 | 11/22/2023 | 12/10/2023 | 12/14/2023 | 9.80 | 3.40 | 13.20 | 0.1112% | 0.015 |
| KNIGHTHAWK | 82,760.34 | 5/10/2023 | 6/1/2023 | 5/26/2023 | 11.63 | (6.25) | 5.38 | 0.1112% | 0.006 |
| ALLIANCE COAL LLC | 82,775.70 | 8/20/2023 | 9/7/2023 | 9/14/2023 | 9.67 | 6.65 | 16.33 | 0.1112% | 0.018 |
| KNIGHTHAWK | 82,857.77 | 5/17/2023 | 6/8/2023 | 6/14/2023 | 11.67 | 5.65 | 17.33 | 0.1114% | 0.019 |
| ALLIANCE COAL LLC | 82,903.28 | 4/3/2023 | 4/13/2023 | 4/28/2023 | 5.64 | 14.73 | 20.36 | 0.1114% | 0.023 |
| ALLIANCE COAL LLC | 83,159.48 | 12/18/2023 | 12/27/2023 | 1/12/2024 | 5.21 | 15.58 | 20.79 | 0.1118% | 0.023 |
| ALLIANCE COAL LLC | 83,168.40 | 10/30/2023 | 11/17/2023 | 11/14/2023 | 9.70 | (3.40) | 6.30 | 0.1118% | 0.007 |
| ALLIANCE COAL LLC | 83,309.10 | 1/30/2023 | 2/6/2023 | 2/14/2023 | 4.18 | 7.64 | 11.82 | 0.1120% | 0.013 |
| ALLIANCE COAL LLC | 83,349.00 | 7/5/2023 | 7/16/2023 | 7/28/2023 | 6.28 | 11.44 | 17.72 | 0.1120% | 0.020 |
| ALLIANCE COAL LLC | 83,365.80 | 12/18/2023 | 12/27/2023 | 1/12/2024 | 5.21 | 15.58 | 20.79 | 0.1120% | 0.023 |
| IRON COAL SALES | 83,449.30 | 6/15/2023 | 6/22/2023 | 6/29/2023 | 4.27 | 6.46 | 10.73 | 0.1121% | 0.012 |
| ALLIANCE COAL LLC | 83,457.15 | 3/13/2023 | 4/5/2023 | 3/29/2023 | 12.12 | (7.24) | 4.88 | 0.1122% | 0.005 |
| ALLIANCE COAL LLC | 83,548.50 | 5/30/2023 | 6/7/2023 | 6/14/2023 | 4.62 | 6.77 | 11.38 | 0.1123% | 0.013 |
| IRON COAL SALES | 83,612.48 | 7/4/2023 | 7/14/2023 | 7/28/2023 | 5.78 | 13.44 | 19.22 | 0.1124% | 0.022 |
| IRON COAL SALES | 83,652.60 | 7/4/2023 | 7/15/2023 | 7/28/2023 | 6.25 | 12.50 | 18.75 | 0.1124% | 0.021 |
| ALLIANCE COAL LLC | 83,701.28 | 8/11/2023 | 8/29/2023 | 8/29/2023 | 9.75 | (0.51) | 9.25 | 0.1125% | 0.010 |
| ALLIANCE COAL LLC | 83,815.73 | 1/30/2023 | 2/7/2023 | 2/14/2023 | 4.68 | 6.63 | 11.32 | 0.1126% | 0.013 |
| ALLIANCE COAL LLC | 83,824.65 | 1/24/2023 | 2/5/2023 | 2/14/2023 | 6.62 | 8.77 | 15.38 | 0.1127% | 0.017 |
| IRON COAL SALES | 83,914.75 | 6/30/2023 | 7/11/2023 | 7/14/2023 | 6.19 | 2.62 | 8.81 | 0.1128% | 0.010 |
| ALLIANCE COAL LLC | 83,937.53 | 12/5/2023 | 12/15/2023 | 12/29/2023 | 5.73 | 13.54 | 19.27 | 0.1128% | 0.022 |
| ALLIANCE COAL LLC | 83,983.73 | 4/24/2023 | 5/24/2023 | 5/12/2023 | 15.62 | (12.23) | 3.38 | 0.1129% | 0.004 |
| KNIGHTHAWK | 84,094.37 | 5/10/2023 | 6/1/2023 | 5/26/2023 | 11.62 | (6.25) | 5.38 | 0.1130% | 0.006 |
| IRON COAL SALES | 84,160.85 | 5/29/2023 | 6/10/2023 | 6/14/2023 | 6.68 | 3.65 | 10.32 | 0.1131% | 0.012 |
| IRON COAL SALES | 84,182.25 | 6/14/2023 | 7/6/2023 | 6/29/2023 | 11.68 | (7.36) | 4.32 | 0.1131% | 0.005 |
| ALLIANCE COAL LLC | 84,210.00 | 7/17/2023 | 7/27/2023 | 8/14/2023 | 5.69 | 17.62 | 23.31 | 0.1132% | 0.026 |
| ALLIANCE COAL LLC | 84,246.23 | 12/26/2023 | 1/1/2024 | 1/12/2024 | 3.73 | 10.53 | 14.27 | 0.1132% | 0.016 |
| IRON COAL SALES | 84,278.55 | 7/4/2023 | 7/13/2023 | 7/28/2023 | 5.28 | 14.45 | 19.72 | 0.1133% | 0.022 |
| ALLIANCE COAL LLC | 84,353.85 | 8/7/2023 | 8/21/2023 | 8/29/2023 | 7.69 | 7.61 | 15.31 | 0.1134% | 0.017 |
| ALLIANCE COAL LLC | 84,431.03 | 11/6/2023 | 11/22/2023 | 11/29/2023 | 8.77 | 6.46 | 15.23 | 0.1135% | 0.017 |
| IRON COAL SALES | 84,481.85 | 5/26/2023 | 6/4/2023 | 6/14/2023 | 5.13 | 9.74 | 14.87 | 0.1135% | 0.017 |
| ALLIANCE COAL LLC | 84,528.15 | 10/30/2023 | 11/16/2023 | 11/14/2023 | 9.17 | (2.34) | 6.83 | 0.1136% | 0.008 |
| ALLIANCE COAL LLC | 84,539.18 | 5/22/2023 | 5/28/2023 | 6/14/2023 | 3.65 | 16.70 | 20.35 | 0.1136% | 0.023 |
| IRON COAL SALES | 84,615.60 | 7/4/2023 | 7/13/2023 | 7/28/2023 | 5.28 | 14.45 | 19.72 | 0.1137% | 0.022 |
| ALLIANCE COAL LLC | 84,675.68 | 12/5/2023 | 12/11/2023 | 12/29/2023 | 3.72 | 17.56 | 21.28 | 0.1138% | 0.024 |
| IRON COAL SALES | 84,765.40 | 7/4/2023 | 7/14/2023 | 7/28/2023 | 5.78 | 13.44 | 19.22 | 0.1139% | 0.022 |
| ALLIANCE COAL LLC | 84,795.38 | 12/11/2023 | 12/19/2023 | 12/29/2023 | 4.76 | 9.49 | 14.24 | 0.1140% | 0.016 |
| IRON COAL SALES | 84,990.10 | 6/7/2023 | 6/19/2023 | 6/29/2023 | 6.76 | 9.48 | 16.24 | 0.1142% | 0.019 |
| ALLIANCE COAL LLC | 85,059.98 | 12/11/2023 | 12/24/2023 | 12/29/2023 | 7.21 | 4.59 | 11.79 | 0.1143% | 0.013 |
| ALLIANCE COAL LLC | 85,107.23 | 6/26/2023 | 7/22/2023 | 7/14/2023 | 13.75 | (8.50) | 5.25 | 0.1144% | 0.006 |
| ALLIANCE COAL LLC | 85,258.43 | 7/31/2023 | 8/14/2023 | 8/14/2023 | 7.78 | (0.55) | 7.22 | 0.1146% | 0.008 |
| ALLIANCE COAL LLC | 85,262.10 | 11/28/2023 | 12/3/2023 | 12/14/2023 | 3.22 | 10.57 | 13.78 | 0.1146% | 0.016 |
| ALLIANCE COAL LLC | 85,307.25 | 10/25/2023 | 11/20/2023 | 11/14/2023 | 13.78 | (6.57) | 7.22 | 0.1146% | 0.008 |

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|---|---|---|---|---|---|---|---|---|---|
| ALLIANCE COAL LLC | 85,454.78 | 6/11/2023 | 6/24/2023 | 6/29/2023 | 7.28 | 4.45 | 11.72 | 0.1148% | 0.013 |
| ALLIANCE COAL LLC | 85,642.20 | 12/11/2023 | 12/18/2023 | 12/29/2023 | 4.00 | 11.00 | 15.00 | 0.1151% | 0.017 |
| IRON COAL SALES | 85,653.50 | 6/30/2023 | 7/11/2023 | 7/14/2023 | 6.19 | 2.62 | 8.81 | 0.1151% | 0.010 |
| IRON COAL SALES | 85,878.20 | 6/30/2023 | 7/10/2023 | 7/14/2023 | 5.69 | 3.62 | 9.31 | 0.1154% | 0.011 |
| ALLIANCE COAL LLC | 85,964.55 | 11/6/2023 | 11/27/2023 | 11/29/2023 | 11.27 | 1.45 | 12.73 | 0.1155% | 0.015 |
| ALLIANCE COAL LLC | 86,086.88 | 8/20/2023 | 9/14/2023 | 9/14/2023 | 13.29 | (0.58) | 12.71 | 0.1157% | 0.015 |
| ALLIANCE COAL LLC | 86,263.80 | 7/31/2023 | 8/13/2023 | 8/14/2023 | 7.27 | 0.45 | 7.73 | 0.1159% | 0.009 |
| ALLIANCE COAL LLC | 86,304.75 | 7/25/2023 | 8/13/2023 | 8/14/2023 | 10.27 | 0.45 | 10.73 | 0.1160% | 0.012 |
| ALLIANCE COAL LLC | 86,384.55 | 1/19/2023 | 2/6/2023 | 2/14/2023 | 9.68 | 7.64 | 17.32 | 0.1161% | 0.020 |
| ALLIANCE COAL LLC | 86,481.15 | 8/7/2023 | 8/21/2023 | 8/29/2023 | 7.69 | 7.61 | 15.31 | 0.1162% | 0.018 |
| ALLIANCE COAL LLC | 86,544.68 | 12/5/2023 | 12/19/2023 | 12/29/2023 | 7.76 | 9.49 | 17.24 | 0.1163% | 0.020 |
| IRON COAL SALES | 86,659.30 | 5/22/2023 | 6/20/2023 | 6/14/2023 | 15.17 | (6.35) | 8.83 | 0.1165% | 0.010 |
| ALLIANCE COAL LLC | 86,791.95 | 7/31/2023 | 8/25/2023 | 8/14/2023 | 13.15 | (11.30) | 1.85 | 0.1166% | 0.002 |
| IRON COAL SALES | 86,819.80 | 6/23/2023 | 7/3/2023 | 7/14/2023 | 5.69 | 10.61 | 16.31 | 0.1167% | 0.019 |
| ALLIANCE COAL LLC | 86,882.25 | 1/26/2023 | 2/7/2023 | 2/14/2023 | 6.68 | 6.63 | 13.32 | 0.1168% | 0.016 |
| ALLIANCE COAL LLC | 86,993.55 | 5/19/2023 | 5/29/2023 | 6/14/2023 | 5.63 | 15.74 | 21.37 | 0.1169% | 0.025 |
| ALLIANCE COAL LLC | 87,557.40 | 12/26/2023 | 1/3/2024 | 1/12/2024 | 4.74 | 8.52 | 13.26 | 0.1177% | 0.016 |
| ALLIANCE COAL LLC | 87,609.90 | 6/4/2023 | 6/23/2023 | 6/29/2023 | 10.27 | 5.45 | 15.73 | 0.1177% | 0.019 |
| ALLIANCE COAL LLC | 87,810.45 | 1/19/2023 | 2/5/2023 | 2/14/2023 | 9.12 | 8.77 | 17.88 | 0.1180% | 0.021 |
| ALLIANCE COAL LLC | 88,096.58 | 5/21/2023 | 5/29/2023 | 6/14/2023 | 4.63 | 15.74 | 20.37 | 0.1184% | 0.024 |
| ALLIANCE COAL LLC | 88,143.83 | 4/24/2023 | 5/25/2023 | 5/12/2023 | 16.11 | (13.23) | 2.89 | 0.1185% | 0.003 |
| ALLIANCE COAL LLC | 88,514.48 | 1/30/2023 | 2/8/2023 | 2/14/2023 | 5.17 | 5.66 | 10.83 | 0.1190% | 0.013 |
| ALLIANCE COAL LLC | 88,550.70 | 5/9/2023 | 5/24/2023 | 5/26/2023 | 8.12 | 1.77 | 9.88 | 0.1190% | 0.012 |
| ALLIANCE COAL LLC | 88,955.48 | 2/27/2023 | 4/3/2023 | 3/14/2023 | 18.12 | (20.24) | (2.12) | 0.1195% | -0.003 |
| ALLIANCE COAL LLC | 88,994.28 | 2/27/2023 | 4/3/2023 | 3/29/2023 | 18.12 | (5.24) | 12.88 | 0.1196% | 0.015 |
| ALLIANCE COAL LLC | 89,208.00 | 1/26/2023 | 2/8/2023 | 2/14/2023 | 7.17 | 5.66 | 12.83 | 0.1199% | 0.015 |
| ALLIANCE COAL LLC | 89,695.73 | 6/19/2023 | 7/6/2023 | 7/14/2023 | 9.18 | 7.64 | 16.82 | 0.1205% | 0.020 |
| ALLIANCE COAL LLC | 90,354.08 | 3/13/2023 | 4/6/2023 | 3/29/2023 | 12.67 | (8.35) | 4.33 | 0.1214% | 0.005 |
| ALLIANCE COAL LLC | 91,339.50 | 7/5/2023 | 7/22/2023 | 7/28/2023 | 9.25 | 5.50 | 14.75 | 0.1228% | 0.018 |
| ALLIANCE COAL LLC | 91,607.25 | 5/30/2023 | 6/7/2023 | 6/14/2023 | 4.62 | 6.77 | 11.38 | 0.1231% | 0.014 |
| ALLIANCE COAL LLC | 93,909.75 | 1/4/2023 | 2/9/2023 | 1/27/2023 | 18.66 | (13.32) | 5.34 | 0.1262% | 0.007 |
| ALLIANCE COAL LLC | 93,970.25 | 1/4/2023 | 2/20/2023 | 1/27/2023 | 24.15 | (24.30) | (0.15) | 0.1263% | 0.000 |
| IRON COAL SALES | 136,582.00 | 6/1/2023 | 6/15/2023 | 6/29/2023 | 7.64 | 13.73 | 21.36 | 0.1836% | 0.039 |
| IRON COAL SALES | 138,499.60 | 4/23/2023 | 5/19/2023 | 5/12/2023 | 13.62 | (7.24) | 6.38 | 0.1861% | 0.012 |
| IRON COAL SALES | 141,000.00 | 5/31/2023 | 6/27/2023 | 6/14/2023 | 14.22 | (13.44) | 0.78 | 0.1895% | 0.001 |
| IRON COAL SALES | 141,000.00 | 5/31/2023 | 6/27/2023 | 6/14/2023 | 14.22 | (13.44) | 0.78 | 0.1895% | 0.001 |
| IRON COAL SALES | 141,000.00 | 5/31/2023 | 6/16/2023 | 6/14/2023 | 8.64 | (2.27) | 6.36 | 0.1895% | 0.012 |
| IRON COAL SALES | 141,000.00 | 10/31/2023 | 11/18/2023 | 11/14/2023 | 9.70 | (4.40) | 5.30 | 0.1895% | 0.010 |
| IRON COAL SALES | 142,189.10 | 3/27/2023 | 4/14/2023 | 4/14/2023 | 9.64 | (0.27) | 9.36 | 0.1911% | 0.018 |
| IRON COAL SALES | 143,439.30 | 2/16/2023 | 4/12/2023 | 3/14/2023 | 28.17 | (29.33) | (1.17) | 0.1928% | -0.002 |
| IRON COAL SALES | 144,149.00 | 2/16/2023 | 3/8/2023 | 3/14/2023 | 10.64 | 5.72 | 16.36 | 0.1937% | 0.032 |
| IRON COAL SALES | 144,384.00 | 4/23/2023 | 5/10/2023 | 5/12/2023 | 9.11 | 1.77 | 10.89 | 0.1940% | 0.021 |
| IRON COAL SALES | 144,543.80 | 3/28/2023 | 4/9/2023 | 4/14/2023 | 6.67 | 4.67 | 11.33 | 0.1943% | 0.022 |
| IRON COAL SALES | 144,684.80 | 7/16/2023 | 8/3/2023 | 8/14/2023 | 9.71 | 10.57 | 20.29 | 0.1944% | 0.039 |
| IRON COAL SALES | 144,872.80 | 4/29/2023 | 5/9/2023 | 5/12/2023 | 5.61 | 2.78 | 8.39 | 0.1947% | 0.016 |
| IRON COAL SALES | 144,901.00 | 7/25/2023 | 8/25/2023 | 8/14/2023 | 16.15 | (11.30) | 4.85 | 0.1947% | 0.009 |
| IRON COAL SALES | 145,004.40 | 2/5/2023 | 2/27/2023 | 2/27/2023 | 11.70 | (0.41) | 11.30 | 0.1949% | 0.022 |
| IRON COAL SALES | 145,060.80 | 2/16/2023 | 3/9/2023 | 3/14/2023 | 11.14 | 4.71 | 15.86 | 0.1950% | 0.031 |
| IRON COAL SALES | 145,855.10 | 4/23/2023 | 5/13/2023 | 5/12/2023 | 10.63 | (1.25) | 9.38 | 0.1960% | 0.018 |
| IRON COAL SALES | 145,869.20 | 2/10/2023 | 3/8/2023 | 2/27/2023 | 13.64 | (9.28) | 4.36 | 0.1960% | 0.009 |
| IRON COAL SALES | 146,179.40 | 11/12/2023 | 12/4/2023 | 11/29/2023 | 11.72 | (5.44) | 6.28 | 0.1965% | 0.012 |
| IRON COAL SALES | 146,179.40 | 3/28/2023 | 4/13/2023 | 4/14/2023 | 8.64 | 0.73 | 9.36 | 0.1965% | 0.018 |
| IRON COAL SALES | 146,207.60 | 2/5/2023 | 2/26/2023 | 2/27/2023 | 11.19 | 0.62 | 11.81 | 0.1965% | 0.023 |
| IRON COAL SALES | 146,433.20 | 4/27/2023 | 5/12/2023 | 5/12/2023 | 8.12 | (0.23) | 7.88 | 0.1968% | 0.016 |
| IRON COAL SALES | 146,696.40 | 7/16/2023 | 7/30/2023 | 8/14/2023 | 7.70 | 14.61 | 22.30 | 0.1971% | 0.044 |
| IRON COAL SALES | 146,884.40 | 6/14/2023 | 6/26/2023 | 6/29/2023 | 6.74 | 2.53 | 9.26 | 0.1974% | 0.018 |
| IRON COAL SALES | 146,950.20 | 6/28/2023 | 7/12/2023 | 7/14/2023 | 7.65 | 1.71 | 9.35 | 0.1975% | 0.018 |
| IRON COAL SALES | 146,997.20 | 12/27/2023 | 1/12/2024 | 1/12/2024 | 8.70 | (0.39) | 8.30 | 0.1976% | 0.016 |

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|---|---|---|---|---|---|---|---|---|---|
| IRON COAL SALES | 147,044.20 | 6/14/2023 | 6/22/2023 | 6/29/2023 | 4.77 | 6.46 | 11.23 | 0.1976% | 0.022 |
| IRON COAL SALES | 147,100.60 | 6/1/2023 | 6/18/2023 | 6/29/2023 | 9.13 | 10.73 | 19.87 | 0.1977% | 0.039 |
| IRON COAL SALES | 147,138.20 | 11/28/2023 | 1/15/2024 | 12/14/2023 | 24.70 | (32.41) | (7.70) | 0.1977% | -0.015 |
| IRON COAL SALES | 147,204.00 | 7/10/2023 | 7/29/2023 | 7/28/2023 | 10.19 | (1.39) | 8.81 | 0.1978% | 0.017 |
| IRON COAL SALES | 147,213.40 | 6/28/2023 | 7/24/2023 | 7/14/2023 | 13.75 | (10.51) | 3.25 | 0.1978% | 0.006 |
| IRON COAL SALES | 147,222.80 | 7/16/2023 | 7/29/2023 | 8/14/2023 | 7.20 | 15.61 | 22.80 | 0.1979% | 0.045 |
| IRON COAL SALES | 147,269.80 | 10/31/2023 | 11/24/2023 | 11/14/2023 | 12.78 | (10.55) | 2.22 | 0.1979% | 0.004 |
| IRON COAL SALES | 147,316.80 | 7/16/2023 | 7/28/2023 | 8/14/2023 | 6.71 | 16.58 | 23.29 | 0.1980% | 0.046 |
| IRON COAL SALES | 147,424.90 | 6/29/2023 | 7/24/2023 | 7/14/2023 | 13.25 | (10.51) | 2.75 | 0.1981% | 0.005 |
| IRON COAL SALES | 147,439.00 | 8/22/2023 | 9/5/2023 | 9/14/2023 | 7.77 | 8.45 | 16.23 | 0.1981% | 0.032 |
| IRON COAL SALES | 147,471.90 | 6/22/2023 | 7/6/2023 | 7/14/2023 | 7.68 | 7.64 | 15.32 | 0.1982% | 0.030 |
| IRON COAL SALES | 147,500.10 | 3/27/2023 | 4/11/2023 | 4/14/2023 | 8.16 | 2.67 | 10.84 | 0.1982% | 0.021 |
| IRON COAL SALES | 147,580.00 | 4/23/2023 | 5/11/2023 | 5/12/2023 | 9.61 | 0.77 | 10.39 | 0.1983% | 0.021 |
| IRON COAL SALES | 147,730.40 | 8/13/2023 | 8/22/2023 | 8/29/2023 | 5.19 | 6.61 | 11.81 | 0.1985% | 0.023 |
| IRON COAL SALES | 147,815.00 | 6/8/2023 | 6/20/2023 | 6/29/2023 | 6.67 | 8.65 | 15.33 | 0.1987% | 0.030 |
| IRON COAL SALES | 147,974.80 | 2/5/2023 | 2/27/2023 | 2/27/2023 | 11.70 | (0.41) | 11.30 | 0.1989% | 0.022 |
| IRON COAL SALES | 148,012.40 | 12/18/2023 | 1/5/2024 | 1/12/2024 | 9.81 | 6.37 | 16.19 | 0.1989% | 0.032 |
| IRON COAL SALES | 148,059.40 | 5/13/2023 | 6/1/2023 | 5/26/2023 | 10.13 | (6.25) | 3.87 | 0.1990% | 0.008 |
| IRON COAL SALES | 148,111.10 | 6/7/2023 | 6/16/2023 | 6/29/2023 | 5.14 | 12.73 | 17.86 | 0.1990% | 0.036 |
| IRON COAL SALES | 148,125.20 | 5/13/2023 | 5/27/2023 | 5/26/2023 | 7.62 | (1.23) | 6.38 | 0.1991% | 0.013 |
| IRON COAL SALES | 148,162.80 | 7/16/2023 | 8/3/2023 | 8/14/2023 | 9.71 | 10.58 | 20.29 | 0.1991% | 0.040 |
| IRON COAL SALES | 148,191.00 | 5/5/2023 | 6/8/2023 | 5/26/2023 | 17.67 | (13.34) | 4.33 | 0.1992% | 0.009 |
| IRON COAL SALES | 148,238.00 | 5/13/2023 | 5/27/2023 | 5/26/2023 | 7.62 | (1.23) | 6.38 | 0.1992% | 0.013 |
| IRON COAL SALES | 148,238.00 | 7/16/2023 | 7/28/2023 | 8/14/2023 | 6.69 | 16.62 | 23.31 | 0.1992% | 0.046 |
| IRON COAL SALES | 148,275.60 | 2/7/2023 | 2/26/2023 | 2/27/2023 | 10.19 | 0.62 | 10.81 | 0.1993% | 0.022 |
| IRON COAL SALES | 148,294.40 | 2/7/2023 | 4/4/2023 | 2/27/2023 | 28.62 | (36.24) | (7.62) | 0.1993% | -0.015 |
| IRON COAL SALES | 148,369.60 | 3/27/2023 | 4/14/2023 | 4/14/2023 | 9.64 | (0.28) | 9.36 | 0.1994% | 0.019 |
| IRON COAL SALES | 148,426.00 | 6/14/2023 | 6/24/2023 | 6/29/2023 | 5.78 | 4.45 | 10.22 | 0.1995% | 0.020 |
| IRON COAL SALES | 148,482.40 | 7/16/2023 | 7/24/2023 | 8/14/2023 | 4.75 | 20.49 | 25.25 | 0.1995% | 0.050 |
| IRON COAL SALES | 148,632.80 | 8/22/2023 | 9/5/2023 | 9/14/2023 | 7.77 | 8.45 | 16.23 | 0.1998% | 0.032 |
| IRON COAL SALES | 148,910.10 | 8/13/2023 | 9/12/2023 | 8/29/2023 | 15.66 | (14.33) | 1.34 | 0.2001% | 0.003 |
| IRON COAL SALES | 148,910.10 | 6/22/2023 | 7/6/2023 | 7/14/2023 | 7.68 | 7.64 | 15.32 | 0.2001% | 0.031 |
| IRON COAL SALES | 149,093.40 | 2/22/2023 | 4/7/2023 | 3/14/2023 | 22.62 | (24.24) | (1.62) | 0.2004% | -0.003 |
| IRON COAL SALES | 149,102.80 | 11/16/2023 | 12/7/2023 | 12/14/2023 | 11.30 | 6.40 | 17.70 | 0.2004% | 0.035 |
| IRON COAL SALES | 149,149.80 | 3/31/2023 | 4/13/2023 | 4/14/2023 | 7.14 | 0.73 | 7.86 | 0.2004% | 0.016 |
| IRON COAL SALES | 149,225.00 | 6/13/2023 | 6/26/2023 | 6/29/2023 | 7.24 | 2.53 | 9.76 | 0.2005% | 0.020 |
| IRON COAL SALES | 149,229.70 | 2/17/2023 | 3/28/2023 | 3/14/2023 | 20.13 | (14.25) | 5.87 | 0.2006% | 0.012 |
| IRON COAL SALES | 149,309.60 | 6/13/2023 | 6/25/2023 | 6/29/2023 | 6.78 | 3.44 | 10.22 | 0.2007% | 0.021 |
| IRON COAL SALES | 149,328.40 | 2/7/2023 | 2/27/2023 | 2/27/2023 | 10.70 | (0.41) | 10.30 | 0.2007% | 0.021 |
| IRON COAL SALES | 149,521.10 | 2/16/2023 | 3/24/2023 | 3/14/2023 | 18.62 | (10.24) | 8.38 | 0.2009% | 0.017 |
| IRON COAL SALES | 149,610.40 | 7/23/2023 | 8/25/2023 | 8/14/2023 | 17.17 | (11.34) | 5.83 | 0.2011% | 0.012 |
| IRON COAL SALES | 149,629.20 | 7/26/2023 | 8/6/2023 | 8/14/2023 | 6.27 | 7.45 | 13.73 | 0.2011% | 0.028 |
| IRON COAL SALES | 149,638.60 | 8/4/2023 | 8/28/2023 | 8/29/2023 | 12.70 | 0.61 | 13.30 | 0.2011% | 0.027 |
| IRON COAL SALES | 149,685.60 | 4/29/2023 | 5/7/2023 | 5/12/2023 | 4.65 | 4.70 | 9.35 | 0.2012% | 0.019 |
| IRON COAL SALES | 149,695.00 | 7/23/2023 | 8/26/2023 | 8/14/2023 | 17.67 | (12.34) | 5.33 | 0.2012% | 0.011 |
| IRON COAL SALES | 149,742.00 | 5/25/2023 | 6/3/2023 | 6/14/2023 | 5.13 | 10.75 | 15.87 | 0.2012% | 0.032 |
| IRON COAL SALES | 149,854.80 | 4/23/2023 | 5/14/2023 | 5/12/2023 | 11.21 | (2.42) | 8.79 | 0.2014% | 0.018 |
| IRON COAL SALES | 149,911.20 | 11/18/2023 | 12/7/2023 | 12/14/2023 | 10.30 | 6.41 | 16.70 | 0.2015% | 0.034 |
| IRON COAL SALES | 149,948.80 | 8/6/2023 | 8/27/2023 | 8/29/2023 | 11.17 | 1.65 | 12.83 | 0.2015% | 0.026 |
| IRON COAL SALES | 149,981.70 | 2/17/2023 | 3/1/2023 | 3/14/2023 | 6.62 | 12.75 | 19.38 | 0.2016% | 0.039 |
| IRON COAL SALES | 150,061.60 | 5/26/2023 | 6/14/2023 | 6/14/2023 | 10.13 | (0.27) | 9.87 | 0.2017% | 0.020 |
| IRON COAL SALES | 150,183.80 | 6/8/2023 | 6/19/2023 | 6/29/2023 | 6.26 | 9.48 | 15.74 | 0.2018% | 0.032 |
| IRON COAL SALES | 150,268.40 | 10/31/2023 | 11/20/2023 | 11/14/2023 | 10.78 | (6.57) | 4.22 | 0.2019% | 0.009 |
| IRON COAL SALES | 150,296.60 | 4/27/2023 | 5/9/2023 | 5/12/2023 | 6.61 | 2.78 | 9.39 | 0.2020% | 0.019 |
| IRON COAL SALES | 150,475.20 | 6/28/2023 | 7/12/2023 | 7/14/2023 | 7.65 | 1.70 | 9.35 | 0.2022% | 0.019 |
| IRON COAL SALES | 150,541.00 | 7/10/2023 | 7/28/2023 | 7/28/2023 | 9.69 | (0.39) | 9.31 | 0.2023% | 0.019 |
| IRON COAL SALES | 150,550.40 | 2/18/2023 | 3/26/2023 | 3/14/2023 | 18.62 | (12.25) | 6.38 | 0.2023% | 0.013 |
| IRON COAL SALES | 150,578.60 | 4/29/2023 | 5/8/2023 | 5/12/2023 | 5.12 | 3.76 | 8.88 | 0.2024% | 0.018 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| IRON COAL SALES | 150,700.80 | 10/31/2023 | 11/30/2023 | 11/14/2023 | 15.66 | (16.32) | (0.66) | 0.2025% | -0.001 |
| IRON COAL SALES | 150,776.00 | 6/13/2023 | 6/25/2023 | 6/29/2023 | 6.78 | 3.44 | 10.22 | 0.2026% | 0.021 |
| IRON COAL SALES | 150,907.60 | 7/16/2023 | 7/29/2023 | 8/14/2023 | 7.19 | 15.61 | 22.81 | 0.2028% | 0.046 |
| IRON COAL SALES | 150,940.50 | 6/22/2023 | 7/5/2023 | 7/14/2023 | 7.18 | 8.65 | 15.82 | 0.2029% | 0.032 |
| IRON COAL SALES | 150,954.60 | 5/26/2023 | 6/17/2023 | 6/14/2023 | 11.63 | (3.26) | 8.37 | 0.2029% | 0.017 |
| IRON COAL SALES | 151,001.60 | 11/28/2023 | 1/14/2024 | 12/14/2023 | 24.20 | (31.40) | (7.20) | 0.2029% | -0.015 |
| IRON COAL SALES | 151,123.80 | 7/23/2023 | 8/9/2023 | 8/14/2023 | 9.18 | 4.63 | 13.82 | 0.2031% | 0.028 |
| IRON COAL SALES | 151,189.60 | 7/16/2023 | 7/31/2023 | 8/14/2023 | 8.21 | 13.58 | 21.79 | 0.2032% | 0.044 |
| IRON COAL SALES | 151,377.60 | 4/22/2023 | 5/14/2023 | 5/12/2023 | 11.71 | (2.42) | 9.29 | 0.2034% | 0.019 |
| IRON COAL SALES | 151,471.60 | 6/22/2023 | 7/2/2023 | 7/14/2023 | 5.69 | 11.61 | 17.31 | 0.2036% | 0.035 |
| IRON COAL SALES | 151,734.80 | 2/17/2023 | 3/26/2023 | 3/14/2023 | 19.12 | (12.25) | 6.88 | 0.2039% | 0.014 |
| IRON COAL SALES | 151,763.00 | 6/7/2023 | 7/2/2023 | 6/29/2023 | 13.19 | (3.39) | 9.81 | 0.2040% | 0.020 |
| IRON COAL SALES | 151,889.90 | 3/28/2023 | 4/11/2023 | 4/14/2023 | 7.66 | 2.67 | 10.34 | 0.2041% | 0.021 |
| IRON COAL SALES | 151,979.20 | 12/28/2023 | 1/6/2024 | 1/12/2024 | 5.19 | 5.63 | 10.81 | 0.2042% | 0.022 |
| IRON COAL SALES | 152,242.40 | 12/17/2023 | 1/4/2024 | 1/12/2024 | 9.71 | 7.59 | 17.29 | 0.2046% | 0.035 |
| IRON COAL SALES | 152,317.60 | 4/14/2023 | 4/28/2023 | 4/28/2023 | 7.63 | (0.27) | 7.37 | 0.2047% | 0.015 |
| IRON COAL SALES | 152,421.00 | 5/3/2023 | 5/23/2023 | 5/26/2023 | 10.62 | 2.77 | 13.38 | 0.2048% | 0.027 |
| IRON COAL SALES | 152,449.20 | 4/14/2023 | 5/6/2023 | 4/28/2023 | 11.65 | (8.30) | 3.35 | 0.2049% | 0.007 |
| IRON COAL SALES | 152,486.80 | 6/1/2023 | 6/15/2023 | 6/29/2023 | 7.64 | 13.73 | 21.36 | 0.2049% | 0.044 |
| IRON COAL SALES | 152,599.60 | 10/31/2023 | 11/16/2023 | 11/14/2023 | 8.67 | (2.34) | 6.33 | 0.2051% | 0.013 |
| IRON COAL SALES | 152,618.40 | 4/14/2023 | 5/6/2023 | 4/28/2023 | 11.65 | (8.30) | 3.35 | 0.2051% | 0.007 |
| IRON COAL SALES | 152,693.60 | 2/24/2023 | 4/3/2023 | 3/14/2023 | 19.62 | (20.23) | (0.62) | 0.2052% | -0.001 |
| IRON COAL SALES | 152,712.40 | 7/23/2023 | 8/14/2023 | 8/14/2023 | 11.78 | (0.55) | 11.22 | 0.2052% | 0.023 |
| IRON COAL SALES | 152,731.20 | 11/25/2023 | 12/16/2023 | 12/14/2023 | 11.23 | (2.46) | 8.77 | 0.2053% | 0.018 |
| IRON COAL SALES | 152,825.20 | 2/7/2023 | 2/27/2023 | 2/27/2023 | 10.70 | (0.41) | 10.30 | 0.2054% | 0.021 |
| IRON COAL SALES | 152,844.00 | 3/30/2023 | 5/5/2023 | 4/14/2023 | 18.65 | (21.30) | (2.65) | 0.2054% | -0.005 |
| IRON COAL SALES | 152,919.20 | 12/28/2023 | 1/7/2024 | 1/12/2024 | 5.69 | 4.62 | 10.31 | 0.2055% | 0.021 |
| IRON COAL SALES | 152,994.40 | 2/7/2023 | 2/25/2023 | 2/27/2023 | 9.69 | 1.62 | 11.31 | 0.2056% | 0.023 |
| IRON COAL SALES | 153,050.80 | 6/22/2023 | 7/3/2023 | 7/14/2023 | 6.19 | 10.61 | 16.81 | 0.2057% | 0.035 |
| IRON COAL SALES | 153,060.20 | 5/13/2023 | 5/28/2023 | 5/26/2023 | 8.15 | (2.30) | 5.85 | 0.2057% | 0.012 |
| IRON COAL SALES | 153,069.60 | 4/24/2023 | 5/12/2023 | 5/12/2023 | 9.62 | (0.23) | 9.38 | 0.2057% | 0.019 |
| IRON COAL SALES | 153,163.60 | 12/28/2023 | 1/6/2024 | 1/12/2024 | 5.19 | 5.63 | 10.81 | 0.2058% | 0.022 |
| IRON COAL SALES | 153,220.00 | 4/27/2023 | 5/12/2023 | 5/12/2023 | 8.12 | (0.23) | 7.88 | 0.2059% | 0.016 |
| IRON COAL SALES | 153,332.80 | 4/23/2023 | 5/13/2023 | 5/12/2023 | 10.63 | (1.25) | 9.37 | 0.2061% | 0.019 |
| IRON COAL SALES | 153,351.60 | 8/13/2023 | 8/22/2023 | 8/29/2023 | 5.19 | 6.61 | 11.81 | 0.2061% | 0.024 |
| IRON COAL SALES | 153,412.70 | 7/23/2023 | 8/14/2023 | 8/14/2023 | 11.77 | (0.55) | 11.23 | 0.2062% | 0.023 |
| IRON COAL SALES | 153,492.60 | 4/24/2023 | 5/12/2023 | 5/12/2023 | 9.62 | (0.23) | 9.38 | 0.2063% | 0.019 |
| IRON COAL SALES | 153,596.00 | 5/13/2023 | 5/26/2023 | 5/26/2023 | 7.12 | (0.23) | 6.88 | 0.2064% | 0.014 |
| IRON COAL SALES | 153,746.40 | 5/25/2023 | 6/2/2023 | 6/14/2023 | 4.63 | 11.75 | 16.37 | 0.2066% | 0.034 |
| IRON COAL SALES | 154,141.20 | 7/23/2023 | 8/24/2023 | 8/14/2023 | 16.67 | (10.34) | 6.33 | 0.2072% | 0.013 |
| IRON COAL SALES | 154,423.20 | 4/24/2023 | 5/13/2023 | 5/12/2023 | 10.13 | (1.25) | 8.87 | 0.2075% | 0.018 |
| IRON COAL SALES | 154,564.20 | 11/28/2023 | 12/16/2023 | 12/14/2023 | 9.73 | (2.46) | 7.27 | 0.2077% | 0.015 |
| IRON COAL SALES | 154,592.40 | 11/25/2023 | 12/17/2023 | 12/14/2023 | 11.73 | (3.46) | 8.27 | 0.2078% | 0.017 |
| IRON COAL SALES | 154,639.40 | 2/22/2023 | 4/12/2023 | 3/14/2023 | 25.17 | (29.33) | (4.17) | 0.2078% | -0.009 |
| IRON COAL SALES | 154,709.90 | 5/3/2023 | 5/22/2023 | 5/26/2023 | 10.13 | 3.74 | 13.87 | 0.2079% | 0.029 |
| IRON COAL SALES | 154,771.00 | 2/24/2023 | 3/27/2023 | 3/14/2023 | 16.16 | (13.33) | 2.84 | 0.2080% | 0.006 |
| IRON COAL SALES | 154,893.20 | 5/22/2023 | 6/28/2023 | 6/14/2023 | 19.19 | (14.37) | 4.81 | 0.2082% | 0.010 |
| IRON COAL SALES | 155,043.60 | 6/22/2023 | 7/3/2023 | 7/14/2023 | 6.14 | 10.72 | 16.86 | 0.2084% | 0.035 |
| IRON COAL SALES | 155,194.00 | 2/25/2023 | 3/23/2023 | 3/14/2023 | 13.62 | (9.24) | 4.38 | 0.2086% | 0.009 |
| IRON COAL SALES | 155,325.60 | 6/13/2023 | 6/25/2023 | 6/29/2023 | 6.78 | 3.44 | 10.22 | 0.2087% | 0.021 |
| IRON COAL SALES | 155,372.60 | 4/22/2023 | 5/14/2023 | 5/12/2023 | 11.71 | (2.42) | 9.29 | 0.2088% | 0.019 |
| IRON COAL SALES | 155,570.00 | 5/22/2023 | 7/1/2023 | 6/14/2023 | 20.69 | (17.38) | 3.31 | 0.2091% | 0.007 |
| IRON COAL SALES | 155,617.00 | 6/29/2023 | 7/23/2023 | 7/14/2023 | 12.75 | (9.50) | 3.25 | 0.2091% | 0.007 |
| IRON COAL SALES | 155,729.80 | 11/12/2023 | 12/5/2023 | 11/29/2023 | 12.20 | (6.41) | 5.80 | 0.2093% | 0.012 |
| IRON COAL SALES | 155,955.40 | 8/16/2023 | 8/27/2023 | 9/14/2023 | 6.17 | 17.65 | 23.83 | 0.2096% | 0.050 |
| IRON COAL SALES | 156,082.30 | 6/29/2023 | 7/23/2023 | 7/14/2023 | 12.75 | (9.50) | 3.25 | 0.2098% | 0.007 |
| IRON COAL SALES | 156,096.40 | 2/24/2023 | 4/5/2023 | 3/14/2023 | 20.62 | (22.24) | (1.62) | 0.2098% | -0.003 |
| IRON COAL SALES | 156,143.40 | 2/22/2023 | 4/12/2023 | 3/14/2023 | 25.17 | (29.33) | (4.17) | 0.2098% | -0.009 |

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|---|---|---|---|---|---|---|---|---|---|
| IRON COAL SALES | 156,369.00 | 5/3/2023 | 5/23/2023 | 5/26/2023 | 10.61 | 2.77 | 13.39 | 0.2101% | 0.028 |
| IRON COAL SALES | 156,387.80 | 8/16/2023 | 9/6/2023 | 9/14/2023 | 11.28 | 7.45 | 18.72 | 0.2102% | 0.039 |
| IRON COAL SALES | 156,528.80 | 7/23/2023 | 8/15/2023 | 8/14/2023 | 12.28 | (1.57) | 10.72 | 0.2104% | 0.023 |
| IRON COAL SALES | 156,862.50 | 2/7/2023 | 2/26/2023 | 2/27/2023 | 10.19 | 0.61 | 10.81 | 0.2108% | 0.023 |
| IRON COAL SALES | 156,867.20 | 5/22/2023 | 6/28/2023 | 6/14/2023 | 19.19 | (14.37) | 4.81 | 0.2108% | 0.010 |
| IRON COAL SALES | 157,017.60 | 4/22/2023 | 5/4/2023 | 5/12/2023 | 6.65 | 7.70 | 14.35 | 0.2110% | 0.030 |
| IRON COAL SALES | 157,092.80 | 7/23/2023 | 8/13/2023 | 8/14/2023 | 11.27 | 0.45 | 11.73 | 0.2111% | 0.025 |
| IRON COAL SALES | 157,365.40 | 5/25/2023 | 6/3/2023 | 6/14/2023 | 5.13 | 10.75 | 15.87 | 0.2115% | 0.034 |
| IRON COAL SALES | 157,741.40 | 6/23/2023 | 7/4/2023 | 7/14/2023 | 6.20 | 9.61 | 15.80 | 0.2120% | 0.034 |
| IRON COAL SALES | 157,746.10 | 3/30/2023 | 4/13/2023 | 4/14/2023 | 7.64 | 0.73 | 8.36 | 0.2120% | 0.018 |
| IRON COAL SALES | 158,418.20 | 11/12/2023 | 12/10/2023 | 11/29/2023 | 14.80 | (11.60) | 3.20 | 0.2129% | 0.007 |
| IRON COAL SALES | 159,442.80 | 7/23/2023 | 8/5/2023 | 8/14/2023 | 7.27 | 8.45 | 15.73 | 0.2143% | 0.034 |
| IRON COAL SALES | 159,461.60 | 6/23/2023 | 7/6/2023 | 7/14/2023 | 7.18 | 7.64 | 14.82 | 0.2143% | 0.032 |
| IRON COAL SALES | 159,912.80 | 5/22/2023 | 6/4/2023 | 6/14/2023 | 7.13 | 9.74 | 16.87 | 0.2149% | 0.036 |
| CASE COAL SALES, LLC | 183,065.20 | 11/1/2023 | 11/18/2023 | 11/29/2023 | 9.20 | 10.60 | 19.80 | 0.2460% | 0.049 |
| CASE COAL SALES, LLC | 183,407.40 | 6/9/2023 | 6/16/2023 | 6/29/2023 | 4.14 | 12.73 | 16.86 | 0.2465% | 0.042 |
| CASE COAL SALES, LLC | 183,596.20 | 7/12/2023 | 7/21/2023 | 7/28/2023 | 5.25 | 6.51 | 11.75 | 0.2467% | 0.029 |
| CASE COAL SALES, LLC | 185,926.70 | 1/5/2023 | 1/28/2023 | 1/27/2023 | 12.13 | (1.25) | 10.88 | 0.2499% | 0.027 |
| CASE COAL SALES, LLC | 186,654.76 | 12/1/2023 | 1/7/2024 | 12/29/2023 | 19.19 | (9.38) | 9.81 | 0.2508% | 0.025 |
| CASE COAL SALES, LLC | 186,853.00 | 12/14/2023 | 1/5/2024 | 12/29/2023 | 11.81 | (7.62) | 4.19 | 0.2511% | 0.011 |
| CASE COAL SALES, LLC | 189,083.20 | 8/2/2023 | 8/18/2023 | 8/29/2023 | 8.71 | 10.58 | 19.29 | 0.2541% | 0.049 |
| CASE COAL SALES, LLC | 190,101.54 | 12/20/2023 | 12/25/2023 | 1/12/2024 | 3.21 | 17.58 | 20.79 | 0.2555% | 0.053 |
| CASE COAL SALES, LLC | 190,286.80 | 5/2/2023 | 5/13/2023 | 5/26/2023 | 6.13 | 12.75 | 18.87 | 0.2557% | 0.048 |
| CASE COAL SALES, LLC | 190,888.60 | 1/17/2023 | 1/27/2023 | 2/14/2023 | 5.62 | 17.75 | 23.38 | 0.2565% | 0.060 |
| | $ 74,409,097.46 | | | | | | | | 13.28 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**PURCHASED POWER**

Weighted Lead Time: 12.48 days

| Supplier Name | Payment Date | Invoice Amount | Service Start Date | Service End Date | Service Lead Time | Payment Lead Time | Total Lead Time | Weighting Factor | Weighted Lead Time |
|---|---|---|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) |
| PJM Settlements, Inc | 2/2/2023 | $ 964,718.89 | 1/1/2023 | 1/31/2023 | 15.50 | 2.00 | 17.50 | 2.40% | 0.4201 |
| PJM Settlements, Inc | 2/23/2023 | 1,941,245.13 | 2/1/2023 | 2/28/2023 | 14.00 | (5.00) | 9.00 | 4.83% | 0.4347 |
| PJM Settlements, Inc | 3/2/2023 | 1,800,366.27 | 2/1/2023 | 2/28/2023 | 14.00 | 2.00 | 16.00 | 4.48% | 0.7167 |
| PJM Settlements, Inc | 3/9/2023 | 1,707,161.74 | 2/1/2023 | 2/28/2023 | 14.00 | 9.00 | 23.00 | 4.25% | 0.9770 |
| PJM Settlements, Inc | 3/23/2023 | 2,392,763.01 | 3/1/2023 | 3/31/2023 | 15.50 | (8.00) | 7.50 | 5.95% | 0.4465 |
| PJM Settlements, Inc | 3/16/2023 | 2,243,695.12 | 3/1/2023 | 3/31/2023 | 15.50 | (15.00) | 0.50 | 5.58% | 0.0279 |
| PJM Settlements, Inc | 3/30/2023 | 1,022,672.07 | 3/1/2023 | 3/31/2023 | 15.50 | (1.00) | 14.50 | 2.54% | 0.3690 |
| PJM Settlements, Inc | 5/4/2023 | 1,925,454.92 | 4/1/2023 | 4/30/2023 | 15.00 | 4.00 | 19.00 | 4.79% | 0.9103 |
| PJM Settlements, Inc | 4/20/2023 | 1,487,442.66 | 4/1/2023 | 4/30/2023 | 15.00 | (10.00) | 5.00 | 3.70% | 0.1851 |
| PJM Settlements, Inc | 5/11/2023 | 972,564.28 | 4/1/2023 | 4/30/2023 | 15.00 | 11.00 | 26.00 | 2.42% | 0.6292 |
| PJM Settlements, Inc | 6/1/2023 | 1,470,682.71 | 5/1/2023 | 5/31/2023 | 15.50 | 1.00 | 16.50 | 3.66% | 0.6038 |
| PJM Settlements, Inc | 5/18/2023 | 1,067,189.92 | 5/1/2023 | 5/31/2023 | 15.50 | (13.00) | 2.50 | 2.66% | 0.0664 |
| PJM Settlements, Inc | 5/11/2023 | 936,770.61 | 5/1/2023 | 5/31/2023 | 15.50 | (20.00) | (4.50) | 2.33% | (0.1049) |
| PJM Settlements, Inc | 5/25/2023 | 917,428.97 | 5/1/2023 | 5/31/2023 | 15.50 | (6.00) | 9.50 | 2.28% | 0.2169 |
| PJM Settlements, Inc | 9/7/2023 | 2,019,068.36 | 8/1/2023 | 8/31/2023 | 15.50 | 7.00 | 22.50 | 5.02% | 1.1304 |
| PJM Settlements, Inc | 10/5/2023 | 2,275,598.88 | 9/1/2023 | 9/30/2023 | 15.00 | 5.00 | 20.00 | 5.66% | 1.1324 |
| PJM Settlements, Inc | 9/28/2023 | 1,550,462.30 | 9/1/2023 | 9/30/2023 | 15.00 | (2.00) | 13.00 | 3.86% | 0.5015 |
| PJM Settlements, Inc | 10/12/2023 | 1,139,883.16 | 9/1/2023 | 9/30/2023 | 15.00 | 12.00 | 27.00 | 2.84% | 0.7658 |
| PJM Settlements, Inc | 10/19/2023 | 2,189,565.65 | 10/1/2023 | 10/31/2023 | 15.50 | (12.00) | 3.50 | 5.45% | 0.1907 |
| PJM Settlements, Inc | 10/26/2023 | 2,173,531.15 | 10/1/2023 | 10/31/2023 | 15.50 | (5.00) | 10.50 | 5.41% | 0.5679 |
| PJM Settlements, Inc | 10/12/2023 | 1,798,457.19 | 10/1/2023 | 10/31/2023 | 15.50 | (19.00) | (3.50) | 4.47% | (0.1566) |
| PJM Settlements, Inc | 11/9/2023 | 1,749,294.48 | 10/1/2023 | 10/31/2023 | 15.50 | 9.00 | 24.50 | 4.35% | 1.0664 |
| PJM Settlements, Inc | 11/2/2023 | 1,459,030.10 | 10/1/2023 | 10/31/2023 | 15.50 | 2.00 | 17.50 | 3.63% | 0.6353 |
| PJM Settlements, Inc | 11/16/2023 | 1,704,647.19 | 11/1/2023 | 11/30/2023 | 15.00 | (14.00) | 1.00 | 4.24% | 0.0424 |
| PJM Settlements, Inc | 12/7/2023 | 1,280,151.32 | 11/1/2023 | 11/30/2023 | 15.00 | 7.00 | 22.00 | 3.19% | 0.7008 |
| | | $ 40,189,846.08 | | | | | | | 12.48 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**LIME PURCHASES**

Weighted Lead Time: 20.53 days

| Vendor Name | Invoice Amount | Period Beginning | Period End | Payment Date | Service Lead Time | Payment Lead Time | Total Lead Time | Weighting Factor | Dollar-Weighted Days |
|---|---|---|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) |
| CROUNSE CORPORATION | $ 10,583.54 | 1/17/2023 | 1/20/2023 | 1/27/2023 | 2.13 | 6.74 | 8.87 | 0.061% | 0.01 |
| CROUNSE CORPORATION | 10,377.44 | 5/24/2023 | 6/3/2023 | 6/20/2023 | 5.65 | 16.70 | 22.35 | 0.060% | 0.01 |
| CARMEUSE LIME & STONE INC | 3,221.70 | 6/12/2023 | 6/12/2023 | 6/22/2023 | 0.50 | 9.60 | 10.10 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 674.90 | 7/25/2023 | 7/25/2023 | 8/9/2023 | 0.50 | 14.44 | 14.94 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 213,039.82 | 1/9/2023 | 1/13/2023 | 1/24/2023 | 2.68 | 10.63 | 13.32 | 1.226% | 0.16 |
| CARMEUSE LIME & STONE INC | 3,310.84 | 4/24/2023 | 4/24/2023 | 5/9/2023 | 0.50 | 14.44 | 14.94 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 733.41 | 1/10/2023 | 1/10/2023 | 1/24/2023 | 0.50 | 13.48 | 13.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 479,920.00 | 12/14/2023 | 12/19/2023 | 1/9/2024 | 3.25 | 20.50 | 23.75 | 2.761% | 0.66 |
| CARMEUSE LIME & STONE INC | 7,103.60 | 7/12/2023 | 7/12/2023 | 8/24/2023 | 0.50 | 42.43 | 42.93 | 0.041% | 0.02 |
| CARMEUSE LIME & STONE INC | 685.22 | 7/24/2023 | 7/24/2023 | 8/9/2023 | 0.50 | 15.44 | 15.94 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 43.26 | 7/25/2023 | 7/25/2023 | 8/9/2023 | 0.50 | 14.43 | 14.93 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 722.89 | 7/7/2023 | 7/7/2023 | 7/25/2023 | 0.50 | 17.63 | 18.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,234.44 | 1/16/2023 | 1/16/2023 | 2/9/2023 | 0.50 | 23.43 | 23.93 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 67.42 | 1/16/2023 | 1/16/2023 | 2/9/2023 | 0.50 | 23.43 | 23.93 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,675.20 | 12/4/2023 | 12/4/2023 | 12/21/2023 | 0.50 | 16.73 | 17.23 | 0.038% | 0.01 |
| CARMEUSE LIME & STONE INC | 6,874.84 | 11/28/2023 | 11/28/2023 | 12/7/2023 | 0.50 | 8.63 | 9.13 | 0.040% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.04 | 9/5/2023 | 9/5/2023 | 9/21/2023 | 0.50 | 15.81 | 16.31 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,120.40 | 9/12/2023 | 9/12/2023 | 9/21/2023 | 0.50 | 8.61 | 9.11 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 709.50 | 9/12/2023 | 9/12/2023 | 9/21/2023 | 0.50 | 8.61 | 9.11 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 67.60 | 1/5/2023 | 1/5/2023 | 1/24/2023 | 0.50 | 18.49 | 18.99 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 68.30 | 1/5/2023 | 1/5/2023 | 1/24/2023 | 0.50 | 18.49 | 18.99 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 725.16 | 1/9/2023 | 1/9/2023 | 1/24/2023 | 0.50 | 14.48 | 14.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 705.03 | 9/4/2023 | 9/4/2023 | 9/21/2023 | 0.50 | 16.47 | 16.97 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.51 | 9/6/2023 | 9/6/2023 | 9/21/2023 | 0.50 | 14.45 | 14.95 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 715.64 | 9/6/2023 | 9/6/2023 | 9/21/2023 | 0.50 | 14.45 | 14.95 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 730.57 | 3/23/2023 | 3/23/2023 | 4/7/2023 | 0.50 | 14.64 | 15.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,149.12 | 3/24/2023 | 3/24/2023 | 4/7/2023 | 0.50 | 13.64 | 14.14 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.87 | 3/24/2023 | 3/24/2023 | 4/7/2023 | 0.50 | 13.64 | 14.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,230.62 | 3/24/2023 | 3/24/2023 | 4/7/2023 | 0.50 | 13.64 | 14.14 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 677.92 | 3/21/2023 | 3/21/2023 | 4/7/2023 | 0.50 | 16.49 | 16.99 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 731.71 | 3/22/2023 | 3/22/2023 | 4/7/2023 | 0.50 | 15.48 | 15.99 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 710.89 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.50 | 8.20 | 8.70 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,197.51 | 1/2/2023 | 1/2/2023 | 1/24/2023 | 0.50 | 21.64 | 22.14 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 714.63 | 1/2/2023 | 1/2/2023 | 1/24/2023 | 0.50 | 21.64 | 22.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 742.24 | 1/4/2023 | 1/4/2023 | 1/24/2023 | 0.50 | 19.68 | 20.18 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 715.64 | 8/18/2023 | 8/18/2023 | 9/7/2023 | 0.50 | 19.97 | 20.47 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,215.60 | 8/21/2023 | 8/21/2023 | 9/7/2023 | 0.50 | 16.39 | 16.89 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 717.31 | 8/1/2023 | 8/1/2023 | 8/24/2023 | 0.50 | 22.56 | 23.06 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,120.40 | 8/3/2023 | 8/3/2023 | 8/24/2023 | 0.50 | 20.55 | 21.05 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,151.20 | 8/10/2023 | 8/10/2023 | 8/24/2023 | 0.50 | 13.63 | 14.13 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,114.80 | 7/28/2023 | 7/28/2023 | 8/9/2023 | 0.50 | 11.60 | 12.10 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.21 | 7/28/2023 | 7/28/2023 | 8/9/2023 | 0.50 | 11.60 | 12.10 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 720.04 | 3/28/2023 | 3/28/2023 | 4/7/2023 | 0.50 | 9.68 | 10.18 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 697.84 | 3/29/2023 | 3/29/2023 | 4/7/2023 | 0.50 | 8.67 | 9.17 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,160.58 | 4/18/2023 | 4/18/2023 | 5/9/2023 | 0.50 | 20.63 | 21.13 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 726.58 | 4/18/2023 | 4/18/2023 | 5/9/2023 | 0.50 | 20.62 | 21.12 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 2,997.58 | 4/19/2023 | 4/19/2023 | 5/9/2023 | 0.50 | 19.62 | 20.12 | 0.017% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,826.40 | 7/31/2023 | 7/31/2023 | 8/9/2023 | 0.50 | 8.60 | 9.10 | 0.039% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,212.80 | 7/9/2023 | 7/9/2023 | 7/25/2023 | 0.50 | 15.59 | 16.09 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 45.00 | 7/11/2023 | 7/11/2023 | 7/25/2023 | 0.50 | 13.58 | 14.08 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,210.24 | 3/13/2023 | 3/13/2023 | 3/23/2023 | 0.50 | 9.61 | 10.11 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,042.00 | 8/15/2023 | 8/15/2023 | 8/24/2023 | 0.50 | 8.47 | 8.97 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 48.78 | 6/13/2023 | 6/13/2023 | 6/22/2023 | 0.50 | 8.60 | 9.10 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 481,600.00 | 11/22/2023 | 12/3/2023 | 12/21/2023 | 6.26 | 17.48 | 23.74 | 2.771% | 0.66 |
| CARMEUSE LIME & STONE INC | 729.15 | 6/6/2023 | 6/6/2023 | 6/22/2023 | 0.50 | 15.65 | 16.15 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.79 | 6/7/2023 | 6/7/2023 | 6/22/2023 | 0.50 | 14.65 | 15.15 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.25 | 6/7/2023 | 6/7/2023 | 6/22/2023 | 0.50 | 14.65 | 15.15 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 710.93 | 6/7/2023 | 6/7/2023 | 6/22/2023 | 0.50 | 14.64 | 15.14 | 0.004% | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|
| CARMEUSE LIME & STONE INC | 674.79 | 3/24/2023 | 3/24/2023 | 4/7/2023 | 0.50 | 13.63 | 14.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.96 | 3/24/2023 | 3/24/2023 | 4/7/2023 | 0.50 | 13.63 | 14.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,242.08 | 3/28/2023 | 3/28/2023 | 4/7/2023 | 0.50 | 9.63 | 10.13 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 65.39 | 1/2/2023 | 1/2/2023 | 1/24/2023 | 0.50 | 21.64 | 22.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,596.80 | 7/21/2023 | 7/21/2023 | 8/9/2023 | 0.50 | 18.52 | 19.02 | 0.038% | 0.01 |
| CARMEUSE LIME & STONE INC | 41.39 | 7/24/2023 | 7/24/2023 | 8/9/2023 | 0.50 | 15.52 | 16.02 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 711.73 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.50 | 8.81 | 9.31 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,257.60 | 8/14/2023 | 8/14/2023 | 8/24/2023 | 0.50 | 9.45 | 9.95 | 0.042% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,350.32 | 5/29/2023 | 5/29/2023 | 6/8/2023 | 0.50 | 9.58 | 10.08 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 707.54 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.50 | 8.63 | 9.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 716.47 | 9/7/2023 | 9/7/2023 | 9/21/2023 | 0.50 | 13.81 | 14.31 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,124.92 | 3/22/2023 | 3/22/2023 | 4/7/2023 | 0.50 | 15.48 | 15.98 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.86 | 8/23/2023 | 8/23/2023 | 9/7/2023 | 0.50 | 14.99 | 15.49 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,053.20 | 8/21/2023 | 8/21/2023 | 9/7/2023 | 0.51 | 16.56 | 17.07 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 45.85 | 8/21/2023 | 8/21/2023 | 9/7/2023 | 0.51 | 16.56 | 17.07 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.07 | 8/22/2023 | 8/22/2023 | 9/7/2023 | 0.50 | 15.45 | 15.95 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 43.73 | 7/18/2023 | 7/18/2023 | 8/9/2023 | 0.50 | 21.70 | 22.20 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.66 | 6/23/2023 | 6/23/2023 | 7/7/2023 | 0.50 | 13.47 | 13.97 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,366.87 | 6/23/2023 | 6/23/2023 | 7/7/2023 | 0.50 | 13.47 | 13.97 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 748.78 | 4/19/2023 | 4/19/2023 | 5/9/2023 | 0.50 | 19.62 | 20.12 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,107.10 | 4/12/2023 | 4/12/2023 | 4/24/2023 | 0.50 | 11.59 | 12.09 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 52.46 | 4/12/2023 | 4/12/2023 | 4/24/2023 | 0.50 | 11.59 | 12.09 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,253.54 | 6/4/2023 | 6/4/2023 | 6/22/2023 | 0.50 | 17.48 | 17.98 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,016.68 | 3/30/2023 | 3/30/2023 | 4/7/2023 | 0.50 | 7.73 | 8.23 | 0.017% | 0.00 |
| CARMEUSE LIME & STONE INC | 674.22 | 3/30/2023 | 3/30/2023 | 4/7/2023 | 0.50 | 7.73 | 8.23 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 52.14 | 5/23/2023 | 5/23/2023 | 6/8/2023 | 0.50 | 15.58 | 16.09 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.57 | 8/11/2023 | 8/11/2023 | 8/24/2023 | 0.50 | 12.41 | 12.91 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,180.95 | 5/10/2023 | 5/10/2023 | 5/24/2023 | 0.50 | 13.48 | 13.98 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 705.59 | 7/5/2023 | 7/5/2023 | 7/25/2023 | 0.50 | 19.64 | 20.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 432,600.00 | 9/26/2023 | 9/30/2023 | 10/9/2023 | 2.65 | 8.69 | 11.35 | 2.489% | 0.28 |
| CARMEUSE LIME & STONE INC | 716.75 | 7/6/2023 | 7/6/2023 | 7/25/2023 | 0.50 | 18.64 | 19.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,246.40 | 7/7/2023 | 7/7/2023 | 7/25/2023 | 0.50 | 17.63 | 18.13 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 3,201.33 | 4/19/2023 | 4/19/2023 | 5/9/2023 | 0.50 | 19.45 | 19.95 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,058.80 | 7/14/2023 | 7/14/2023 | 7/25/2023 | 0.50 | 10.45 | 10.95 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 43.43 | 7/17/2023 | 7/17/2023 | 8/9/2023 | 0.50 | 22.45 | 22.95 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 696.38 | 7/17/2023 | 7/17/2023 | 8/9/2023 | 0.50 | 22.45 | 22.95 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 721.49 | 7/17/2023 | 7/17/2023 | 8/9/2023 | 0.50 | 22.45 | 22.95 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 717.31 | 7/3/2023 | 7/3/2023 | 7/25/2023 | 0.50 | 21.64 | 22.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.68 | 9/12/2023 | 9/12/2023 | 9/21/2023 | 0.50 | 8.71 | 9.21 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.57 | 8/31/2023 | 8/31/2023 | 9/7/2023 | 0.50 | 6.79 | 7.29 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 56.39 | 12/5/2023 | 12/5/2023 | 12/21/2023 | 0.50 | 15.56 | 16.06 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,773.20 | 12/5/2023 | 12/5/2023 | 12/21/2023 | 0.50 | 15.27 | 15.77 | 0.039% | 0.01 |
| CARMEUSE LIME & STONE INC | 6,748.00 | 11/27/2023 | 11/27/2023 | 12/7/2023 | 0.50 | 9.26 | 9.76 | 0.039% | 0.00 |
| CARMEUSE LIME & STONE INC | 61.33 | 11/21/2023 | 11/21/2023 | 12/7/2023 | 0.50 | 15.01 | 15.51 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 60.20 | 11/22/2023 | 11/22/2023 | 12/7/2023 | 0.50 | 14.65 | 15.15 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 727.15 | 1/3/2023 | 1/3/2023 | 1/24/2023 | 0.50 | 20.70 | 21.20 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,138.93 | 1/4/2023 | 1/4/2023 | 1/24/2023 | 0.50 | 19.68 | 20.18 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 712.29 | 11/17/2023 | 11/17/2023 | 12/7/2023 | 0.50 | 19.75 | 20.25 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,019.60 | 12/4/2023 | 12/4/2023 | 12/21/2023 | 0.50 | 16.59 | 17.09 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 707.54 | 8/22/2023 | 8/22/2023 | 9/7/2023 | 0.50 | 15.81 | 16.31 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 704.75 | 11/14/2023 | 11/14/2023 | 11/22/2023 | 0.50 | 7.74 | 8.24 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 62.34 | 11/21/2023 | 11/21/2023 | 12/7/2023 | 0.50 | 15.80 | 16.30 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,047.60 | 11/22/2023 | 11/22/2023 | 12/7/2023 | 0.50 | 14.81 | 15.31 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 53.84 | 4/3/2023 | 4/3/2023 | 4/24/2023 | 0.50 | 20.72 | 21.22 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,910.40 | 12/13/2023 | 12/13/2023 | 12/21/2023 | 0.50 | 7.98 | 8.48 | 0.040% | 0.00 |
| CARMEUSE LIME & STONE INC | 54.30 | 12/13/2023 | 12/13/2023 | 12/21/2023 | 0.50 | 7.98 | 8.48 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 726.24 | 12/14/2023 | 12/14/2023 | 12/21/2023 | 0.50 | 6.60 | 7.10 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 710.06 | 12/18/2023 | 12/18/2023 | 1/9/2024 | 0.50 | 21.78 | 22.28 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 56.03 | 12/19/2023 | 12/19/2023 | 1/9/2024 | 0.50 | 20.80 | 21.30 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 718.70 | 7/7/2023 | 7/7/2023 | 7/25/2023 | 0.50 | 17.58 | 18.08 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,222.98 | 4/12/2023 | 4/12/2023 | 4/24/2023 | 0.50 | 11.59 | 12.09 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 54.42 | 4/12/2023 | 4/12/2023 | 4/24/2023 | 0.50 | 11.59 | 12.09 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,244.62 | 4/17/2023 | 4/17/2023 | 5/9/2023 | 0.50 | 21.48 | 21.98 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 708.94 | 1/27/2023 | 1/27/2023 | 2/9/2023 | 0.50 | 12.48 | 12.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 66.51 | 1/27/2023 | 1/27/2023 | 2/9/2023 | 0.50 | 12.48 | 12.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 66.67 | 1/27/2023 | 1/27/2023 | 2/9/2023 | 0.50 | 12.72 | 13.22 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,287.92 | 1/30/2023 | 1/30/2023 | 2/9/2023 | 0.50 | 9.72 | 10.22 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,226.80 | 2/7/2023 | 2/7/2023 | 2/23/2023 | 0.50 | 15.41 | 15.91 | 0.019% | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|
| CARMEUSE LIME & STONE INC | 46.39 | 8/11/2023 | 8/11/2023 | 8/24/2023 | 0.50 | 12.45 | 12.95 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,215.60 | 8/14/2023 | 8/14/2023 | 8/24/2023 | 0.50 | 9.44 | 9.94 | 0.042% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.90 | 8/14/2023 | 8/14/2023 | 8/24/2023 | 0.50 | 9.44 | 9.94 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 61.99 | 11/15/2023 | 11/15/2023 | 11/22/2023 | 0.50 | 6.14 | 6.64 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 703.08 | 11/15/2023 | 11/15/2023 | 11/22/2023 | 0.50 | 6.14 | 6.64 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 42.60 | 7/13/2023 | 7/13/2023 | 7/25/2023 | 0.50 | 11.46 | 11.96 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,352.80 | 7/16/2023 | 7/16/2023 | 8/9/2023 | 0.50 | 23.45 | 23.95 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 46.01 | 6/8/2023 | 6/8/2023 | 6/22/2023 | 0.50 | 13.46 | 13.96 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,272.64 | 6/8/2023 | 6/8/2023 | 6/22/2023 | 0.50 | 13.45 | 13.96 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 64.61 | 1/20/2023 | 1/20/2023 | 2/9/2023 | 0.50 | 19.74 | 20.24 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.61 | 8/2/2023 | 8/2/2023 | 8/24/2023 | 0.50 | 21.55 | 22.05 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.77 | 6/16/2023 | 6/16/2023 | 7/7/2023 | 0.50 | 20.65 | 21.15 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.26 | 4/19/2023 | 4/19/2023 | 5/9/2023 | 0.50 | 19.58 | 20.09 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 719.47 | 5/24/2023 | 5/24/2023 | 6/8/2023 | 0.50 | 14.65 | 15.15 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 65.07 | 1/30/2023 | 1/30/2023 | 2/9/2023 | 0.50 | 9.72 | 10.22 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 711.73 | 12/11/2023 | 12/11/2023 | 12/21/2023 | 0.50 | 9.78 | 10.28 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 56.12 | 12/11/2023 | 12/11/2023 | 12/21/2023 | 0.50 | 9.78 | 10.28 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 56.91 | 12/12/2023 | 12/12/2023 | 12/21/2023 | 0.50 | 8.78 | 9.28 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 57.18 | 12/13/2023 | 12/13/2023 | 12/21/2023 | 0.50 | 7.79 | 8.29 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,862.80 | 12/15/2023 | 12/15/2023 | 12/21/2023 | 0.50 | 5.42 | 5.92 | 0.039% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.38 | 6/7/2023 | 6/7/2023 | 6/22/2023 | 0.50 | 14.46 | 14.96 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 714.52 | 7/20/2023 | 7/20/2023 | 8/9/2023 | 0.50 | 19.52 | 20.02 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 43.62 | 7/20/2023 | 7/20/2023 | 8/9/2023 | 0.50 | 19.52 | 20.02 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 449,680.00 | 7/10/2023 | 7/19/2023 | 8/9/2023 | 5.26 | 20.49 | 25.74 | 2.587% | 0.67 |
| CARMEUSE LIME & STONE INC | 452,200.00 | 7/25/2023 | 7/31/2023 | 8/9/2023 | 3.71 | 8.58 | 12.29 | 2.602% | 0.32 |
| CARMEUSE LIME & STONE INC | 55.90 | 12/25/2023 | 12/25/2023 | 1/9/2024 | 0.50 | 14.63 | 15.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 54.65 | 12/26/2023 | 12/26/2023 | 1/9/2024 | 0.50 | 13.02 | 13.52 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,091.82 | 6/28/2023 | 6/28/2023 | 7/7/2023 | 0.50 | 8.72 | 9.22 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 734.55 | 6/29/2023 | 6/29/2023 | 7/7/2023 | 0.50 | 7.72 | 8.22 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 731.71 | 5/25/2023 | 5/25/2023 | 6/8/2023 | 0.50 | 13.63 | 14.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,252.26 | 5/12/2023 | 5/12/2023 | 6/8/2023 | 0.50 | 26.47 | 26.97 | 0.019% | 0.01 |
| CARMEUSE LIME & STONE INC | 52.63 | 5/12/2023 | 5/12/2023 | 6/8/2023 | 0.50 | 26.46 | 26.96 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 68.11 | 1/23/2023 | 1/23/2023 | 2/9/2023 | 0.50 | 16.69 | 17.19 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,228.07 | 1/25/2023 | 1/25/2023 | 2/9/2023 | 0.50 | 14.57 | 15.07 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 733.98 | 1/25/2023 | 1/25/2023 | 2/9/2023 | 0.50 | 14.57 | 15.07 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,135.11 | 2/8/2023 | 2/8/2023 | 2/23/2023 | 0.50 | 14.40 | 14.91 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,966.40 | 8/11/2023 | 8/11/2023 | 8/24/2023 | 0.50 | 12.41 | 12.91 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 716.05 | 6/2/2023 | 6/2/2023 | 6/22/2023 | 0.50 | 19.52 | 20.02 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,205.15 | 2/8/2023 | 2/8/2023 | 2/23/2023 | 0.50 | 14.41 | 14.91 | 0.018% | 0.00 |
| CROUNSE CORPORATION | 9,891.59 | 2/2/2023 | 2/6/2023 | 2/17/2023 | 2.76 | 10.48 | 13.24 | 0.057% | 0.01 |
| CROUNSE CORPORATION | 9,657.37 | 7/5/2023 | 7/12/2023 | 7/27/2023 | 4.14 | 14.72 | 18.86 | 0.056% | 0.01 |
| CROUNSE CORPORATION | 10,093.04 | 4/11/2023 | 4/18/2023 | 4/27/2023 | 4.17 | 8.65 | 12.83 | 0.058% | 0.01 |
| CROUNSE CORPORATION | 10,876.72 | 6/8/2023 | 6/14/2023 | 6/29/2023 | 3.65 | 14.70 | 18.35 | 0.063% | 0.01 |
| CROUNSE CORPORATION | 10,932.81 | 2/9/2023 | 3/21/2023 | 4/7/2023 | 20.70 | 16.60 | 37.30 | 0.063% | 0.02 |
| CARMEUSE LIME & STONE INC | 47.79 | 6/23/2023 | 6/23/2023 | 7/7/2023 | 0.50 | 13.47 | 13.97 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,023.05 | 6/26/2023 | 6/26/2023 | 7/7/2023 | 0.50 | 10.46 | 10.96 | 0.017% | 0.00 |
| CARMEUSE LIME & STONE INC | 68.54 | 1/10/2023 | 1/10/2023 | 1/24/2023 | 0.50 | 13.48 | 13.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 717.03 | 12/29/2023 | 12/29/2023 | 1/9/2024 | 0.50 | 10.71 | 11.21 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.14 | 7/12/2023 | 7/12/2023 | 8/24/2023 | 0.50 | 42.43 | 42.93 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 707.82 | 7/12/2023 | 7/12/2023 | 8/24/2023 | 0.50 | 42.43 | 42.93 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,876.80 | 7/24/2023 | 7/24/2023 | 8/9/2023 | 0.50 | 15.44 | 15.94 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 6,960.80 | 7/25/2023 | 7/25/2023 | 8/9/2023 | 0.50 | 14.43 | 14.93 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 41.69 | 7/26/2023 | 7/26/2023 | 8/9/2023 | 0.50 | 13.43 | 13.93 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 668.48 | 7/26/2023 | 7/26/2023 | 8/9/2023 | 0.50 | 13.43 | 13.93 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,257.36 | 1/16/2023 | 1/16/2023 | 2/9/2023 | 0.50 | 23.43 | 23.93 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,279.01 | 6/26/2023 | 6/26/2023 | 7/7/2023 | 0.50 | 10.52 | 11.02 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.68 | 8/17/2023 | 8/17/2023 | 9/7/2023 | 0.50 | 20.68 | 21.18 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 722.61 | 8/4/2023 | 8/4/2023 | 8/24/2023 | 0.50 | 19.46 | 19.96 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 735.69 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.50 | 10.45 | 10.95 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 67.82 | 1/16/2023 | 1/16/2023 | 2/9/2023 | 0.50 | 23.43 | 23.93 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 712.07 | 1/6/2023 | 1/6/2023 | 1/24/2023 | 0.50 | 17.48 | 17.99 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 690.80 | 12/1/2023 | 12/1/2023 | 12/21/2023 | 0.50 | 19.79 | 20.29 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,022.40 | 12/1/2023 | 12/1/2023 | 12/21/2023 | 0.50 | 19.73 | 20.23 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,126.00 | 9/5/2023 | 9/5/2023 | 9/21/2023 | 0.50 | 15.81 | 16.31 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,078.40 | 9/13/2023 | 9/13/2023 | 9/21/2023 | 0.50 | 7.60 | 8.10 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,267.54 | 2/2/2023 | 2/2/2023 | 2/23/2023 | 0.50 | 20.60 | 21.10 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,224.25 | 1/5/2023 | 1/5/2023 | 1/24/2023 | 0.50 | 18.49 | 18.99 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,257.36 | 1/5/2023 | 1/5/2023 | 1/24/2023 | 0.50 | 18.49 | 18.99 | 0.019% | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|
| CARMEUSE LIME & STONE INC | 3,285.37 | 1/9/2023 | 1/9/2023 | 1/24/2023 | 0.50 | 14.48 | 14.98 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 727.44 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.50 | 10.45 | 10.95 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,218.40 | 8/22/2023 | 8/22/2023 | 9/7/2023 | 0.50 | 15.71 | 16.21 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 58.63 | 9/4/2023 | 9/4/2023 | 9/21/2023 | 0.50 | 16.47 | 16.97 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.57 | 3/26/2023 | 3/26/2023 | 4/7/2023 | 0.50 | 11.63 | 12.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,033.24 | 3/21/2023 | 3/21/2023 | 4/7/2023 | 0.50 | 16.49 | 16.99 | 0.017% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,036.40 | 7/12/2023 | 7/12/2023 | 7/25/2023 | 0.50 | 12.71 | 13.21 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 68.03 | 1/2/2023 | 1/2/2023 | 1/24/2023 | 0.50 | 21.64 | 22.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 69.63 | 1/4/2023 | 1/4/2023 | 1/24/2023 | 0.50 | 19.68 | 20.18 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 718.33 | 3/30/2023 | 3/30/2023 | 4/7/2023 | 0.50 | 7.74 | 8.24 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.57 | 3/30/2023 | 3/30/2023 | 4/7/2023 | 0.50 | 7.74 | 8.24 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.90 | 8/21/2023 | 8/21/2023 | 9/7/2023 | 0.50 | 16.39 | 16.89 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,198.80 | 8/1/2023 | 8/1/2023 | 8/24/2023 | 0.50 | 22.56 | 23.06 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 46.79 | 8/1/2023 | 8/1/2023 | 8/24/2023 | 0.50 | 22.56 | 23.06 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,064.40 | 8/10/2023 | 8/10/2023 | 8/24/2023 | 0.50 | 13.63 | 14.13 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 46.48 | 8/10/2023 | 8/10/2023 | 8/24/2023 | 0.50 | 13.63 | 14.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 700.85 | 7/31/2023 | 7/31/2023 | 8/9/2023 | 0.50 | 8.60 | 9.10 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,033.60 | 7/31/2023 | 7/31/2023 | 8/9/2023 | 0.50 | 8.60 | 9.10 | 0.040% | 0.00 |
| CARMEUSE LIME & STONE INC | 721.18 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.50 | 6.65 | 7.16 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 729.43 | 6/16/2023 | 6/16/2023 | 7/7/2023 | 0.50 | 20.65 | 21.15 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,033.60 | 7/9/2023 | 7/9/2023 | 7/25/2023 | 0.50 | 15.59 | 16.09 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 41.99 | 7/8/2023 | 7/8/2023 | 7/25/2023 | 0.50 | 16.59 | 17.09 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 53.36 | 4/18/2023 | 4/18/2023 | 5/9/2023 | 0.50 | 20.63 | 21.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,383.42 | 6/14/2023 | 6/14/2023 | 6/22/2023 | 0.50 | 7.68 | 8.18 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 718.70 | 7/9/2023 | 7/9/2023 | 7/25/2023 | 0.50 | 15.59 | 16.09 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 710.89 | 7/7/2023 | 7/7/2023 | 7/25/2023 | 0.50 | 17.58 | 18.08 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 45.07 | 7/7/2023 | 7/7/2023 | 7/25/2023 | 0.50 | 17.58 | 18.08 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 701.69 | 8/15/2023 | 8/15/2023 | 8/24/2023 | 0.50 | 8.47 | 8.97 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,357.96 | 6/13/2023 | 6/13/2023 | 6/22/2023 | 0.50 | 8.60 | 9.10 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 750.49 | 6/13/2023 | 6/13/2023 | 6/22/2023 | 0.50 | 8.60 | 9.10 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.71 | 6/13/2023 | 6/13/2023 | 6/22/2023 | 0.50 | 8.57 | 9.07 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,202.60 | 5/29/2023 | 5/29/2023 | 6/8/2023 | 0.50 | 9.76 | 10.26 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 721.46 | 5/31/2023 | 5/31/2023 | 6/8/2023 | 0.50 | 7.68 | 8.18 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,304.47 | 6/7/2023 | 6/7/2023 | 6/22/2023 | 0.50 | 14.64 | 15.14 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 738.54 | 6/7/2023 | 6/7/2023 | 6/22/2023 | 0.50 | 14.64 | 15.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 48.01 | 6/7/2023 | 6/7/2023 | 6/22/2023 | 0.50 | 14.64 | 15.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 693.85 | 6/3/2023 | 6/3/2023 | 6/22/2023 | 0.50 | 18.51 | 19.01 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 705.81 | 3/27/2023 | 3/27/2023 | 4/7/2023 | 0.50 | 10.63 | 11.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 724.59 | 3/28/2023 | 3/28/2023 | 4/7/2023 | 0.50 | 9.63 | 10.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 60.09 | 3/28/2023 | 3/28/2023 | 4/7/2023 | 0.50 | 9.63 | 10.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 715.20 | 1/2/2023 | 1/2/2023 | 1/24/2023 | 0.50 | 21.64 | 22.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,146.57 | 6/30/2023 | 6/30/2023 | 7/7/2023 | 0.50 | 6.76 | 7.26 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,210.00 | 7/29/2023 | 7/29/2023 | 8/24/2023 | 0.50 | 25.59 | 26.09 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 718.43 | 7/29/2023 | 7/29/2023 | 8/24/2023 | 0.50 | 25.59 | 26.09 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 694.43 | 11/14/2023 | 11/14/2023 | 11/22/2023 | 0.50 | 7.79 | 8.29 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,100.80 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.50 | 8.63 | 9.13 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 57.63 | 9/6/2023 | 9/6/2023 | 9/21/2023 | 0.50 | 14.92 | 15.42 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,025.60 | 3/21/2023 | 3/21/2023 | 4/7/2023 | 0.50 | 16.49 | 16.99 | 0.017% | 0.00 |
| CARMEUSE LIME & STONE INC | 698.41 | 3/22/2023 | 3/22/2023 | 4/7/2023 | 0.50 | 15.48 | 15.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 57.91 | 3/22/2023 | 3/22/2023 | 4/7/2023 | 0.50 | 15.48 | 15.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 701.13 | 7/18/2023 | 7/18/2023 | 8/9/2023 | 0.50 | 21.70 | 22.20 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,247.17 | 6/26/2023 | 6/26/2023 | 7/7/2023 | 0.50 | 10.47 | 10.97 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 717.76 | 6/28/2023 | 6/28/2023 | 7/7/2023 | 0.50 | 8.57 | 9.07 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.66 | 6/28/2023 | 6/28/2023 | 7/7/2023 | 0.50 | 8.57 | 9.07 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 56.57 | 4/19/2023 | 4/19/2023 | 5/9/2023 | 0.50 | 19.62 | 20.12 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 718.90 | 6/2/2023 | 6/2/2023 | 6/22/2023 | 0.50 | 19.52 | 20.02 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 57.47 | 3/31/2023 | 3/31/2023 | 4/7/2023 | 0.50 | 6.73 | 7.23 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.90 | 6/1/2023 | 6/1/2023 | 6/22/2023 | 0.50 | 20.54 | 21.04 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.43 | 6/2/2023 | 6/2/2023 | 6/22/2023 | 0.50 | 19.54 | 20.04 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.19 | 8/7/2023 | 8/7/2023 | 8/24/2023 | 0.50 | 16.62 | 17.12 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 705.87 | 8/7/2023 | 8/7/2023 | 8/24/2023 | 0.50 | 16.62 | 17.12 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,189.87 | 5/26/2023 | 5/26/2023 | 6/8/2023 | 0.50 | 12.51 | 13.01 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 50.96 | 5/10/2023 | 5/10/2023 | 5/24/2023 | 0.50 | 13.48 | 13.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.05 | 6/30/2023 | 6/30/2023 | 7/7/2023 | 0.50 | 6.72 | 7.22 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 712.29 | 7/4/2023 | 7/4/2023 | 7/25/2023 | 0.50 | 20.64 | 21.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.42 | 7/4/2023 | 7/4/2023 | 7/25/2023 | 0.50 | 20.64 | 21.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,857.20 | 7/27/2023 | 7/27/2023 | 8/9/2023 | 0.50 | 12.50 | 13.00 | 0.039% | 0.01 |
| CARMEUSE LIME & STONE INC | 3,151.67 | 5/11/2023 | 5/11/2023 | 6/8/2023 | 0.50 | 27.47 | 27.97 | 0.018% | 0.01 |

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|---|---|---|---|---|---|---|---|---|---|
| CARMEUSE LIME & STONE INC | 3,287.92 | 5/12/2023 | 5/12/2023 | 6/8/2023 | 0.50 | 26.46 | 26.96 | 0.019% | 0.01 |
| CARMEUSE LIME & STONE INC | 718.62 | 5/16/2023 | 5/16/2023 | 6/8/2023 | 0.50 | 22.46 | 22.96 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,290.47 | 5/16/2023 | 5/16/2023 | 6/8/2023 | 0.50 | 22.46 | 22.96 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 735.41 | 5/16/2023 | 5/16/2023 | 6/8/2023 | 0.50 | 22.46 | 22.96 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,281.55 | 5/30/2023 | 5/30/2023 | 6/8/2023 | 0.50 | 8.76 | 9.26 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 733.41 | 5/30/2023 | 5/30/2023 | 6/8/2023 | 0.50 | 8.76 | 9.26 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 724.01 | 7/5/2023 | 7/5/2023 | 7/25/2023 | 0.50 | 19.64 | 20.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,215.60 | 7/5/2023 | 7/5/2023 | 7/25/2023 | 0.50 | 19.64 | 20.14 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 51.02 | 4/21/2023 | 4/21/2023 | 5/9/2023 | 0.50 | 17.45 | 17.95 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,211.51 | 4/23/2023 | 4/23/2023 | 5/9/2023 | 0.50 | 15.44 | 15.94 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 43.78 | 7/13/2023 | 7/13/2023 | 7/25/2023 | 0.50 | 11.46 | 11.96 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 703.36 | 7/14/2023 | 7/14/2023 | 7/25/2023 | 0.50 | 10.45 | 10.95 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,988.80 | 7/17/2023 | 7/17/2023 | 8/9/2023 | 0.50 | 22.45 | 22.95 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,291.20 | 7/1/2023 | 7/1/2023 | 7/25/2023 | 0.50 | 23.64 | 24.14 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 45.48 | 7/3/2023 | 7/3/2023 | 7/25/2023 | 0.50 | 21.64 | 22.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,033.60 | 7/3/2023 | 7/3/2023 | 7/25/2023 | 0.50 | 21.64 | 22.14 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 715.64 | 9/12/2023 | 9/12/2023 | 9/21/2023 | 0.50 | 8.80 | 9.30 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 728.75 | 9/12/2023 | 9/12/2023 | 9/21/2023 | 0.50 | 8.17 | 8.67 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.32 | 9/13/2023 | 9/13/2023 | 9/21/2023 | 0.50 | 7.41 | 7.91 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.02 | 7/17/2023 | 7/17/2023 | 8/9/2023 | 0.50 | 22.43 | 22.93 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 694.43 | 12/4/2023 | 12/4/2023 | 12/21/2023 | 0.50 | 16.78 | 17.28 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 54.76 | 12/4/2023 | 12/4/2023 | 12/21/2023 | 0.50 | 16.78 | 17.28 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,921.60 | 11/30/2023 | 11/30/2023 | 12/7/2023 | 0.50 | 6.98 | 7.48 | 0.040% | 0.00 |
| CARMEUSE LIME & STONE INC | 690.80 | 12/5/2023 | 12/5/2023 | 12/21/2023 | 0.50 | 15.82 | 16.32 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,988.80 | 12/5/2023 | 12/5/2023 | 12/21/2023 | 0.50 | 15.75 | 16.25 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 696.38 | 11/27/2023 | 11/27/2023 | 12/7/2023 | 0.50 | 9.09 | 9.59 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 672.39 | 11/27/2023 | 11/27/2023 | 12/7/2023 | 0.50 | 9.26 | 9.76 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,265.00 | 1/3/2023 | 1/3/2023 | 1/24/2023 | 0.50 | 20.71 | 21.21 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 65.82 | 1/4/2023 | 1/4/2023 | 1/24/2023 | 0.50 | 19.68 | 20.18 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 62.80 | 11/17/2023 | 11/17/2023 | 12/7/2023 | 0.50 | 19.75 | 20.25 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.15 | 12/4/2023 | 12/4/2023 | 12/21/2023 | 0.50 | 16.59 | 17.09 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,086.80 | 8/23/2023 | 8/23/2023 | 9/7/2023 | 0.50 | 14.41 | 14.91 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 6,784.40 | 11/20/2023 | 11/20/2023 | 12/7/2023 | 0.50 | 16.37 | 16.87 | 0.039% | 0.01 |
| CARMEUSE LIME & STONE INC | 59.61 | 11/20/2023 | 11/20/2023 | 12/7/2023 | 0.50 | 16.37 | 16.87 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,072.80 | 11/14/2023 | 11/14/2023 | 11/22/2023 | 0.50 | 7.74 | 8.24 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 61.99 | 11/17/2023 | 11/17/2023 | 12/7/2023 | 0.50 | 20.00 | 20.50 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 58.35 | 11/20/2023 | 11/20/2023 | 12/7/2023 | 0.50 | 16.43 | 16.93 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 61.92 | 11/22/2023 | 11/22/2023 | 12/7/2023 | 0.50 | 14.81 | 15.31 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,232.40 | 11/7/2023 | 11/7/2023 | 11/22/2023 | 0.50 | 14.77 | 15.27 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 3,188.59 | 4/3/2023 | 4/3/2023 | 4/24/2023 | 0.50 | 20.72 | 21.22 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,022.40 | 12/12/2023 | 12/12/2023 | 12/21/2023 | 0.75 | 8.40 | 9.15 | 0.040% | 0.00 |
| CARMEUSE LIME & STONE INC | 699.73 | 12/12/2023 | 12/12/2023 | 12/21/2023 | 0.75 | 8.40 | 9.15 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 57.20 | 12/12/2023 | 12/12/2023 | 12/21/2023 | 0.50 | 8.31 | 8.81 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 715.48 | 2/1/2023 | 2/1/2023 | 2/23/2023 | 0.50 | 21.65 | 22.15 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.33 | 12/22/2023 | 12/22/2023 | 1/9/2024 | 0.50 | 17.53 | 18.03 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 57.00 | 12/25/2023 | 12/25/2023 | 1/9/2024 | 0.50 | 14.50 | 15.00 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 685.78 | 12/18/2023 | 12/18/2023 | 1/9/2024 | 0.50 | 21.81 | 22.31 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.99 | 12/18/2023 | 12/18/2023 | 1/9/2024 | 0.50 | 21.78 | 22.28 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 57.00 | 12/20/2023 | 12/20/2023 | 1/9/2024 | 0.50 | 19.77 | 20.27 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 722.89 | 12/20/2023 | 12/20/2023 | 1/9/2024 | 0.50 | 19.77 | 20.27 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,203.87 | 6/19/2023 | 6/19/2023 | 7/7/2023 | 0.50 | 17.56 | 18.06 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,212.80 | 7/7/2023 | 7/7/2023 | 7/25/2023 | 0.50 | 17.58 | 18.08 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 704.10 | 3/30/2023 | 3/30/2023 | 4/7/2023 | 0.50 | 7.74 | 8.24 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 58.39 | 3/30/2023 | 3/30/2023 | 4/7/2023 | 0.50 | 7.74 | 8.24 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,059.98 | 4/13/2023 | 4/13/2023 | 4/24/2023 | 0.50 | 10.48 | 10.98 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 51.66 | 4/13/2023 | 4/13/2023 | 4/24/2023 | 0.50 | 10.48 | 10.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 737.40 | 4/17/2023 | 4/17/2023 | 5/9/2023 | 0.50 | 21.48 | 21.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,201.33 | 1/26/2023 | 1/26/2023 | 2/9/2023 | 0.50 | 13.57 | 14.07 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 715.77 | 6/22/2023 | 6/22/2023 | 7/7/2023 | 0.50 | 14.65 | 15.15 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.53 | 6/22/2023 | 6/22/2023 | 7/7/2023 | 0.50 | 14.65 | 15.15 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 45.69 | 7/16/2023 | 7/16/2023 | 8/9/2023 | 0.50 | 23.45 | 23.95 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,166.95 | 6/8/2023 | 6/8/2023 | 6/22/2023 | 0.50 | 13.46 | 13.96 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 707.80 | 6/8/2023 | 6/8/2023 | 6/22/2023 | 0.50 | 13.46 | 13.96 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,051.07 | 3/20/2023 | 3/20/2023 | 4/7/2023 | 0.50 | 17.48 | 17.99 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,258.63 | 6/20/2023 | 6/20/2023 | 7/7/2023 | 0.50 | 16.66 | 17.16 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 53.90 | 4/4/2023 | 4/4/2023 | 4/24/2023 | 0.50 | 19.40 | 19.90 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 54.40 | 4/4/2023 | 4/4/2023 | 4/24/2023 | 0.50 | 19.40 | 19.90 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 699.26 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.50 | 6.65 | 7.15 | 0.004% | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|
| CARMEUSE LIME & STONE INC | 3,219.16 | 6/16/2023 | 6/16/2023 | 7/7/2023 | 0.50 | 20.65 | 21.15 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,226.80 | 9/8/2023 | 9/8/2023 | 9/21/2023 | 0.50 | 12.41 | 12.91 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,176.40 | 8/15/2023 | 8/15/2023 | 8/24/2023 | 0.50 | 8.47 | 8.97 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 699.83 | 3/20/2023 | 3/20/2023 | 4/7/2023 | 0.50 | 17.48 | 17.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 45.61 | 8/31/2023 | 8/31/2023 | 9/7/2023 | 0.50 | 6.63 | 7.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,272.64 | 4/19/2023 | 4/19/2023 | 5/9/2023 | 0.50 | 19.58 | 20.09 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 67.95 | 1/31/2023 | 1/31/2023 | 2/9/2023 | 0.50 | 8.71 | 9.21 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.31 | 12/8/2023 | 12/8/2023 | 12/21/2023 | 0.50 | 12.47 | 12.97 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,300.65 | 5/23/2023 | 5/23/2023 | 6/8/2023 | 0.50 | 15.59 | 16.09 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 730.00 | 5/26/2023 | 5/26/2023 | 6/8/2023 | 0.50 | 12.73 | 13.23 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 728.86 | 6/7/2023 | 6/7/2023 | 6/22/2023 | 0.50 | 14.46 | 14.96 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,170.80 | 7/20/2023 | 7/20/2023 | 8/9/2023 | 0.50 | 19.52 | 20.02 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 44.56 | 7/20/2023 | 7/20/2023 | 8/9/2023 | 0.50 | 19.52 | 20.02 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,019.60 | 7/20/2023 | 7/20/2023 | 8/9/2023 | 0.50 | 19.52 | 20.02 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 43.24 | 7/24/2023 | 7/24/2023 | 8/9/2023 | 0.50 | 15.52 | 16.02 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.72 | 8/7/2023 | 8/7/2023 | 8/24/2023 | 0.50 | 16.62 | 17.12 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 58.05 | 9/5/2023 | 9/5/2023 | 9/21/2023 | 0.50 | 15.79 | 16.29 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 701.25 | 3/13/2023 | 3/13/2023 | 3/23/2023 | 0.50 | 9.61 | 10.11 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 697.50 | 12/25/2023 | 12/25/2023 | 1/9/2024 | 0.50 | 14.15 | 14.65 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 709.50 | 12/26/2023 | 12/26/2023 | 1/9/2024 | 0.50 | 14.00 | 14.50 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 676.58 | 8/31/2023 | 8/31/2023 | 9/7/2023 | 0.60 | 6.72 | 7.32 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.14 | 8/31/2023 | 8/31/2023 | 9/7/2023 | 0.60 | 6.72 | 7.32 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 435,680.00 | 10/4/2023 | 10/6/2023 | 10/24/2023 | 1.74 | 17.51 | 19.26 | 2.507% | 0.48 |
| CARMEUSE LIME & STONE INC | 437,920.00 | 10/5/2023 | 10/13/2023 | 10/24/2023 | 4.66 | 10.68 | 15.34 | 2.519% | 0.39 |
| CARMEUSE LIME & STONE INC | 44.92 | 6/28/2023 | 6/28/2023 | 7/7/2023 | 0.50 | 8.72 | 9.22 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.47 | 6/30/2023 | 6/30/2023 | 7/7/2023 | 0.50 | 6.67 | 7.17 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,258.63 | 6/5/2023 | 6/5/2023 | 6/22/2023 | 0.50 | 16.50 | 17.00 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 728.29 | 6/5/2023 | 6/5/2023 | 6/22/2023 | 0.50 | 16.50 | 17.00 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 738.25 | 6/9/2023 | 6/9/2023 | 11/13/2023 | 0.50 | 157.00 | 157.50 | 0.004% | 0.01 |
| CARMEUSE LIME & STONE INC | 47.99 | 6/9/2023 | 6/9/2023 | 11/13/2023 | 0.50 | 157.00 | 157.50 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,285.37 | 5/12/2023 | 5/12/2023 | 6/8/2023 | 0.50 | 26.46 | 26.96 | 0.019% | 0.01 |
| CARMEUSE LIME & STONE INC | 733.98 | 1/20/2023 | 1/20/2023 | 2/9/2023 | 0.50 | 19.74 | 20.24 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,248.44 | 1/23/2023 | 1/23/2023 | 2/9/2023 | 0.50 | 16.69 | 17.19 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 65.27 | 2/7/2023 | 2/7/2023 | 3/7/2023 | 0.50 | 27.41 | 27.91 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 214,567.90 | 5/24/2023 | 6/1/2023 | 6/22/2023 | 4.65 | 20.70 | 25.35 | 1.234% | 0.31 |
| CARMEUSE LIME & STONE INC | 204,762.72 | 5/10/2023 | 5/14/2023 | 5/24/2023 | 2.76 | 9.49 | 12.24 | 1.178% | 0.14 |
| CARMEUSE LIME & STONE INC | 59.09 | 9/1/2023 | 9/1/2023 | 9/21/2023 | 0.50 | 19.14 | 19.64 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,005.60 | 9/4/2023 | 9/4/2023 | 9/21/2023 | 0.50 | 16.58 | 17.08 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 698.06 | 9/4/2023 | 9/4/2023 | 9/21/2023 | 0.50 | 16.58 | 17.08 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,187.60 | 9/5/2023 | 9/5/2023 | 9/21/2023 | 0.50 | 15.48 | 15.98 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 59.55 | 9/5/2023 | 9/5/2023 | 9/21/2023 | 0.50 | 15.48 | 15.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 698.12 | 6/4/2023 | 6/4/2023 | 6/22/2023 | 0.50 | 17.48 | 17.98 | 0.004% | 0.00 |
| CROUNSE CORPORATION | 10,359.48 | 1/16/2023 | 1/21/2023 | 2/9/2023 | 3.13 | 18.74 | 21.87 | 0.060% | 0.01 |
| CROUNSE CORPORATION | 10,097.78 | 10/18/2023 | 12/2/2023 | 12/19/2023 | 23.26 | 16.48 | 39.74 | 0.058% | 0.02 |
| CROUNSE CORPORATION | 9,748.42 | 7/10/2023 | 7/19/2023 | 7/27/2023 | 5.26 | 7.49 | 12.74 | 0.056% | 0.01 |
| CARMEUSE LIME & STONE INC | 720.04 | 6/12/2023 | 6/12/2023 | 6/22/2023 | 0.50 | 9.60 | 10.10 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,210.24 | 6/1/2023 | 6/1/2023 | 6/22/2023 | 0.50 | 20.54 | 21.04 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.64 | 6/1/2023 | 6/1/2023 | 6/22/2023 | 0.50 | 20.54 | 21.04 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,773.20 | 7/25/2023 | 7/25/2023 | 8/9/2023 | 0.50 | 14.44 | 14.94 | 0.039% | 0.01 |
| CARMEUSE LIME & STONE INC | 706.43 | 7/25/2023 | 7/25/2023 | 8/9/2023 | 0.50 | 14.43 | 14.93 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.06 | 7/25/2023 | 7/25/2023 | 8/9/2023 | 0.50 | 14.43 | 14.93 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 53.17 | 4/20/2023 | 4/20/2023 | 5/9/2023 | 0.50 | 18.45 | 18.95 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 739.96 | 4/24/2023 | 4/24/2023 | 5/9/2023 | 0.50 | 14.44 | 14.94 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,196.00 | 12/29/2023 | 12/29/2023 | 1/9/2024 | 0.50 | 10.71 | 11.21 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 42.73 | 7/24/2023 | 7/24/2023 | 8/9/2023 | 0.50 | 15.44 | 15.94 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,257.60 | 7/6/2023 | 7/6/2023 | 7/25/2023 | 0.50 | 18.63 | 19.14 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 45.10 | 7/6/2023 | 7/6/2023 | 7/25/2023 | 0.50 | 18.63 | 19.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,254.80 | 7/7/2023 | 7/7/2023 | 7/25/2023 | 0.50 | 17.63 | 18.13 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,201.60 | 8/16/2023 | 8/16/2023 | 9/7/2023 | 0.50 | 21.68 | 22.19 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 3,231.89 | 1/10/2023 | 1/10/2023 | 1/24/2023 | 0.50 | 13.48 | 13.98 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 722.31 | 1/10/2023 | 1/10/2023 | 1/24/2023 | 0.50 | 13.48 | 13.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 67.44 | 1/10/2023 | 1/10/2023 | 1/24/2023 | 0.50 | 13.48 | 13.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 718.90 | 1/10/2023 | 1/10/2023 | 1/24/2023 | 0.50 | 13.48 | 13.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,243.35 | 1/11/2023 | 1/11/2023 | 1/24/2023 | 0.50 | 12.47 | 12.98 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 68.09 | 1/11/2023 | 1/11/2023 | 1/24/2023 | 0.50 | 12.47 | 12.97 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 713.12 | 8/4/2023 | 8/4/2023 | 8/24/2023 | 0.50 | 19.46 | 19.96 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,152.94 | 1/5/2023 | 1/5/2023 | 1/24/2023 | 0.50 | 18.49 | 18.99 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 65.60 | 1/17/2023 | 1/17/2023 | 2/9/2023 | 0.50 | 22.45 | 22.95 | 0.000% | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|
| CARMEUSE LIME & STONE INC | 713.40 | 12/1/2023 | 12/1/2023 | 12/21/2023 | 0.50 | 19.82 | 20.32 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 699.73 | 12/1/2023 | 12/1/2023 | 12/21/2023 | 0.50 | 19.73 | 20.23 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 60.40 | 11/28/2023 | 11/28/2023 | 12/7/2023 | 0.50 | 8.63 | 9.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,008.40 | 9/11/2023 | 9/11/2023 | 9/21/2023 | 0.50 | 9.81 | 10.31 | 0.040% | 0.00 |
| CARMEUSE LIME & STONE INC | 57.79 | 9/11/2023 | 9/11/2023 | 9/21/2023 | 0.50 | 9.56 | 10.06 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,289.19 | 1/9/2023 | 1/9/2023 | 1/24/2023 | 0.50 | 14.48 | 14.98 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,212.79 | 1/9/2023 | 1/9/2023 | 1/24/2023 | 0.50 | 14.48 | 14.98 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,244.62 | 1/9/2023 | 1/9/2023 | 1/24/2023 | 0.50 | 14.48 | 14.98 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 68.25 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.50 | 10.45 | 10.95 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 719.26 | 8/22/2023 | 8/22/2023 | 9/7/2023 | 0.50 | 15.71 | 16.21 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,221.20 | 9/1/2023 | 9/1/2023 | 9/21/2023 | 0.50 | 19.41 | 19.91 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 719.54 | 9/1/2023 | 9/1/2023 | 9/21/2023 | 0.50 | 19.41 | 19.91 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,182.00 | 9/6/2023 | 9/6/2023 | 9/21/2023 | 0.50 | 14.45 | 14.95 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 703.53 | 3/24/2023 | 3/24/2023 | 4/7/2023 | 0.50 | 13.63 | 14.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 718.33 | 3/26/2023 | 3/26/2023 | 4/7/2023 | 0.50 | 11.63 | 12.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,137.20 | 9/8/2023 | 9/8/2023 | 9/21/2023 | 0.50 | 12.55 | 13.05 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 713.78 | 6/7/2023 | 6/7/2023 | 6/22/2023 | 0.50 | 14.64 | 15.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.40 | 6/7/2023 | 6/7/2023 | 6/22/2023 | 0.50 | 14.64 | 15.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 701.13 | 7/12/2023 | 7/12/2023 | 7/25/2023 | 0.50 | 12.71 | 13.21 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 62.68 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.50 | 8.20 | 8.70 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 732.85 | 1/3/2023 | 1/3/2023 | 1/24/2023 | 0.50 | 20.70 | 21.20 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.68 | 8/18/2023 | 8/18/2023 | 9/7/2023 | 0.50 | 19.97 | 20.47 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,282.83 | 1/24/2023 | 1/24/2023 | 2/9/2023 | 0.50 | 15.57 | 16.07 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 68.83 | 1/24/2023 | 1/24/2023 | 2/9/2023 | 0.50 | 15.57 | 16.07 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 735.41 | 1/27/2023 | 1/27/2023 | 2/9/2023 | 0.50 | 12.48 | 12.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 682.43 | 8/22/2023 | 8/22/2023 | 9/7/2023 | 0.50 | 15.91 | 16.41 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 708.94 | 7/28/2023 | 7/28/2023 | 8/9/2023 | 0.50 | 11.60 | 12.10 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.89 | 7/30/2023 | 7/30/2023 | 8/9/2023 | 0.50 | 9.60 | 10.10 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.82 | 6/22/2023 | 6/22/2023 | 7/7/2023 | 0.50 | 14.47 | 14.97 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 708.94 | 7/9/2023 | 7/9/2023 | 7/25/2023 | 0.51 | 15.59 | 16.10 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 42.54 | 7/10/2023 | 7/10/2023 | 7/25/2023 | 0.50 | 14.59 | 15.09 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.71 | 3/28/2023 | 3/28/2023 | 4/7/2023 | 0.50 | 9.68 | 10.18 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,122.38 | 3/29/2023 | 3/29/2023 | 4/7/2023 | 0.50 | 8.67 | 9.17 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 187,826.50 | 12/27/2022 | 1/4/2023 | 1/24/2023 | 4.68 | 19.64 | 24.32 | 1.081% | 0.26 |
| CARMEUSE LIME & STONE INC | 6,888.00 | 7/8/2023 | 7/8/2023 | 7/25/2023 | 0.50 | 16.59 | 17.09 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,134.40 | 7/7/2023 | 7/7/2023 | 7/25/2023 | 0.50 | 17.58 | 18.08 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 722.61 | 7/7/2023 | 7/7/2023 | 7/25/2023 | 0.50 | 17.58 | 18.08 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,193.20 | 7/10/2023 | 7/10/2023 | 7/25/2023 | 0.50 | 14.58 | 15.08 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 44.70 | 7/10/2023 | 7/10/2023 | 7/25/2023 | 0.50 | 14.58 | 15.08 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.50 | 3/13/2023 | 3/13/2023 | 3/23/2023 | 0.50 | 9.61 | 10.11 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,228.07 | 5/31/2023 | 5/31/2023 | 6/8/2023 | 0.50 | 7.68 | 8.18 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,165.67 | 5/31/2023 | 5/31/2023 | 6/8/2023 | 0.50 | 7.68 | 8.18 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 50.71 | 5/31/2023 | 5/31/2023 | 6/8/2023 | 0.50 | 7.68 | 8.18 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.21 | 6/7/2023 | 6/7/2023 | 6/22/2023 | 0.50 | 14.64 | 15.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,224.25 | 3/24/2023 | 3/24/2023 | 4/7/2023 | 0.50 | 13.64 | 14.14 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 58.53 | 3/27/2023 | 3/27/2023 | 4/7/2023 | 0.50 | 10.63 | 11.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 67.10 | 1/2/2023 | 1/2/2023 | 1/24/2023 | 0.50 | 21.64 | 22.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.07 | 7/20/2023 | 7/20/2023 | 8/9/2023 | 0.50 | 19.52 | 20.02 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,154.00 | 7/21/2023 | 7/21/2023 | 8/9/2023 | 0.50 | 18.52 | 19.02 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 703.25 | 6/30/2023 | 6/30/2023 | 7/7/2023 | 0.50 | 6.76 | 7.26 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 45.97 | 8/14/2023 | 8/14/2023 | 8/24/2023 | 0.50 | 9.44 | 9.94 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.77 | 8/14/2023 | 8/14/2023 | 8/24/2023 | 0.50 | 9.44 | 9.94 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 720.94 | 8/16/2023 | 8/16/2023 | 9/7/2023 | 0.50 | 21.65 | 22.15 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 714.24 | 8/8/2023 | 8/8/2023 | 8/24/2023 | 0.50 | 15.57 | 16.07 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 693.04 | 9/6/2023 | 9/6/2023 | 9/21/2023 | 0.50 | 14.92 | 15.42 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.00 | 9/7/2023 | 9/7/2023 | 9/21/2023 | 0.50 | 13.79 | 14.29 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 709.50 | 9/7/2023 | 9/7/2023 | 9/21/2023 | 0.50 | 13.79 | 14.29 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 56.07 | 3/21/2023 | 3/21/2023 | 4/7/2023 | 0.50 | 16.49 | 16.99 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.71 | 3/21/2023 | 3/21/2023 | 4/7/2023 | 0.50 | 16.49 | 16.99 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,268.82 | 5/10/2023 | 5/10/2023 | 5/24/2023 | 0.50 | 13.48 | 13.98 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 737.68 | 6/22/2023 | 6/22/2023 | 7/7/2023 | 0.50 | 14.47 | 14.97 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 48.91 | 6/23/2023 | 6/23/2023 | 7/7/2023 | 0.50 | 13.47 | 13.97 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 54.78 | 4/19/2023 | 4/19/2023 | 5/9/2023 | 0.50 | 19.62 | 20.12 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 737.68 | 6/6/2023 | 6/6/2023 | 6/22/2023 | 0.50 | 15.65 | 16.15 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,228.07 | 6/6/2023 | 6/6/2023 | 6/22/2023 | 0.50 | 15.65 | 16.15 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 721.46 | 6/6/2023 | 6/6/2023 | 6/22/2023 | 0.50 | 15.65 | 16.15 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.90 | 6/6/2023 | 6/6/2023 | 6/22/2023 | 0.50 | 15.65 | 16.15 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.77 | 6/6/2023 | 6/6/2023 | 6/22/2023 | 0.50 | 15.65 | 16.15 | 0.000% | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|
| CARMEUSE LIME & STONE INC | 486,640.00 | 10/18/2023 | 12/2/2023 | 12/21/2023 | 23.26 | 18.48 | 41.74 | 2.800% | 1.17 |
| CARMEUSE LIME & STONE INC | 3,081.63 | 6/3/2023 | 6/3/2023 | 6/22/2023 | 0.50 | 18.51 | 19.01 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.77 | 6/3/2023 | 6/3/2023 | 6/22/2023 | 0.50 | 18.51 | 19.01 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 43.40 | 6/4/2023 | 6/4/2023 | 6/22/2023 | 0.50 | 17.48 | 17.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 693.00 | 3/31/2023 | 3/31/2023 | 4/7/2023 | 0.50 | 6.73 | 7.23 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 707.54 | 8/7/2023 | 8/7/2023 | 8/24/2023 | 0.50 | 16.62 | 17.12 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 734.27 | 5/22/2023 | 5/22/2023 | 6/8/2023 | 0.50 | 16.69 | 17.19 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,254.81 | 5/23/2023 | 5/23/2023 | 6/8/2023 | 0.50 | 15.58 | 16.09 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,289.19 | 5/22/2023 | 5/22/2023 | 6/8/2023 | 0.50 | 16.58 | 17.08 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 748.50 | 5/10/2023 | 5/10/2023 | 5/24/2023 | 0.50 | 13.48 | 13.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.13 | 7/26/2023 | 7/26/2023 | 8/9/2023 | 0.50 | 13.50 | 14.00 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 42.61 | 7/27/2023 | 7/27/2023 | 8/9/2023 | 0.50 | 12.50 | 13.00 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 714.24 | 7/26/2023 | 7/26/2023 | 8/9/2023 | 0.50 | 13.50 | 14.00 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 52.71 | 5/16/2023 | 5/16/2023 | 6/8/2023 | 0.50 | 22.46 | 22.96 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,295.56 | 5/16/2023 | 5/16/2023 | 6/8/2023 | 0.50 | 22.46 | 22.96 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 724.31 | 5/31/2023 | 5/31/2023 | 6/8/2023 | 0.50 | 7.68 | 8.18 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 45.15 | 7/5/2023 | 7/5/2023 | 7/25/2023 | 0.50 | 19.64 | 20.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 722.05 | 7/7/2023 | 7/7/2023 | 7/25/2023 | 0.50 | 17.63 | 18.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 717.76 | 4/23/2023 | 4/23/2023 | 5/9/2023 | 0.50 | 15.44 | 15.94 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,044.80 | 7/13/2023 | 7/13/2023 | 7/25/2023 | 0.50 | 11.46 | 11.96 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.84 | 7/14/2023 | 7/14/2023 | 7/25/2023 | 0.50 | 10.46 | 10.96 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,240.80 | 7/17/2023 | 7/17/2023 | 8/9/2023 | 0.50 | 22.45 | 22.95 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 43.71 | 7/3/2023 | 7/3/2023 | 7/25/2023 | 0.50 | 21.64 | 22.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,117.60 | 9/11/2023 | 9/11/2023 | 9/21/2023 | 0.50 | 9.56 | 10.06 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.51 | 9/12/2023 | 9/12/2023 | 9/21/2023 | 0.50 | 8.80 | 9.30 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 669.60 | 9/12/2023 | 9/12/2023 | 9/21/2023 | 0.50 | 8.71 | 9.21 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,159.60 | 9/13/2023 | 9/13/2023 | 9/21/2023 | 0.50 | 7.41 | 7.91 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 701.54 | 1/4/2023 | 1/4/2023 | 1/24/2023 | 0.50 | 19.68 | 20.18 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 53.22 | 12/4/2023 | 12/4/2023 | 12/21/2023 | 0.50 | 16.02 | 16.52 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.16 | 8/22/2023 | 8/22/2023 | 9/7/2023 | 0.50 | 15.81 | 16.31 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 60.81 | 11/21/2023 | 11/21/2023 | 12/7/2023 | 0.50 | 15.78 | 16.28 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,123.20 | 11/21/2023 | 11/21/2023 | 12/7/2023 | 0.50 | 15.63 | 16.13 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 60.34 | 11/24/2023 | 11/24/2023 | 12/7/2023 | 0.50 | 12.81 | 13.31 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 706.99 | 11/21/2023 | 11/21/2023 | 12/7/2023 | 0.50 | 15.80 | 16.30 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 62.26 | 11/8/2023 | 11/8/2023 | 11/22/2023 | 0.50 | 13.79 | 14.29 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,036.40 | 12/6/2023 | 12/6/2023 | 12/21/2023 | 0.50 | 14.80 | 15.30 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 701.13 | 12/6/2023 | 12/6/2023 | 12/21/2023 | 0.50 | 14.80 | 15.30 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.18 | 12/12/2023 | 12/12/2023 | 12/21/2023 | 0.75 | 8.40 | 9.15 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 52.61 | 4/21/2023 | 4/21/2023 | 5/9/2023 | 0.50 | 17.45 | 17.95 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 51.28 | 4/24/2023 | 4/24/2023 | 5/9/2023 | 0.50 | 14.44 | 14.94 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,201.33 | 2/1/2023 | 2/1/2023 | 2/23/2023 | 0.50 | 21.65 | 22.15 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.29 | 12/7/2023 | 12/7/2023 | 12/21/2023 | 0.50 | 13.80 | 14.30 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 54.08 | 12/18/2023 | 12/18/2023 | 1/9/2024 | 0.50 | 21.81 | 22.31 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 56.01 | 12/18/2023 | 12/18/2023 | 1/9/2024 | 0.50 | 21.75 | 22.25 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 710.33 | 12/18/2023 | 12/18/2023 | 1/9/2024 | 0.50 | 21.75 | 22.25 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,180.95 | 6/19/2023 | 6/19/2023 | 7/7/2023 | 0.50 | 17.56 | 18.06 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,044.80 | 7/10/2023 | 7/10/2023 | 7/25/2023 | 0.50 | 14.58 | 15.08 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,212.80 | 7/11/2023 | 7/11/2023 | 7/25/2023 | 0.50 | 13.58 | 14.08 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 44.82 | 7/11/2023 | 7/11/2023 | 7/25/2023 | 0.50 | 13.58 | 14.08 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 43.59 | 7/12/2023 | 7/12/2023 | 7/25/2023 | 0.50 | 12.58 | 13.08 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,172.04 | 1/27/2023 | 1/27/2023 | 2/9/2023 | 0.50 | 12.48 | 12.98 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 710.65 | 1/27/2023 | 1/27/2023 | 2/9/2023 | 0.50 | 12.72 | 13.22 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 731.14 | 6/21/2023 | 6/21/2023 | 7/7/2023 | 0.50 | 15.65 | 16.15 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 63.68 | 2/7/2023 | 2/7/2023 | 3/7/2023 | 0.50 | 27.41 | 27.91 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 721.18 | 2/7/2023 | 2/7/2023 | 2/23/2023 | 0.50 | 15.41 | 15.91 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 732.65 | 7/16/2023 | 7/16/2023 | 8/9/2023 | 0.50 | 23.45 | 23.95 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 694.71 | 7/19/2023 | 7/19/2023 | 8/9/2023 | 0.50 | 20.70 | 21.20 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,053.61 | 6/8/2023 | 6/8/2023 | 6/22/2023 | 0.50 | 13.46 | 13.96 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.49 | 6/8/2023 | 6/8/2023 | 6/22/2023 | 0.50 | 13.45 | 13.95 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 713.49 | 4/4/2023 | 4/4/2023 | 4/24/2023 | 0.50 | 19.40 | 19.90 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,221.70 | 4/4/2023 | 4/4/2023 | 4/24/2023 | 0.50 | 19.40 | 19.90 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.37 | 8/1/2023 | 8/1/2023 | 8/24/2023 | 0.50 | 22.56 | 23.06 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,265.00 | 6/14/2023 | 6/14/2023 | 6/22/2023 | 0.50 | 7.68 | 8.18 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.43 | 6/14/2023 | 6/14/2023 | 6/22/2023 | 0.50 | 7.68 | 8.18 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 694.43 | 8/24/2023 | 8/24/2023 | 9/7/2023 | 0.50 | 13.79 | 14.29 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,210.00 | 8/15/2023 | 8/15/2023 | 8/24/2023 | 0.50 | 8.65 | 9.15 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 718.43 | 8/15/2023 | 8/15/2023 | 8/24/2023 | 0.50 | 8.65 | 9.15 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 58.03 | 3/20/2023 | 3/20/2023 | 4/7/2023 | 0.50 | 17.48 | 17.98 | 0.000% | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|
| CARMEUSE LIME & STONE INC | 699.17 | 8/31/2023 | 8/31/2023 | 9/7/2023 | 0.50 | 6.63 | 7.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 51.57 | 5/24/2023 | 5/24/2023 | 6/8/2023 | 0.50 | 14.65 | 15.15 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,240.80 | 1/31/2023 | 1/31/2023 | 2/9/2023 | 0.50 | 8.71 | 9.21 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,039.20 | 12/8/2023 | 12/8/2023 | 12/21/2023 | 0.50 | 12.28 | 12.78 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 56.25 | 12/11/2023 | 12/11/2023 | 12/21/2023 | 0.50 | 9.82 | 10.32 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 56.06 | 12/14/2023 | 12/14/2023 | 12/21/2023 | 0.50 | 6.80 | 7.30 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 683.83 | 12/15/2023 | 12/15/2023 | 12/21/2023 | 0.50 | 5.42 | 5.92 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 52.88 | 5/23/2023 | 5/23/2023 | 6/8/2023 | 0.50 | 15.59 | 16.09 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 51.39 | 5/22/2023 | 5/22/2023 | 6/8/2023 | 0.50 | 16.58 | 17.08 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 52.33 | 5/26/2023 | 5/26/2023 | 6/8/2023 | 0.50 | 12.73 | 13.23 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.10 | 6/8/2023 | 6/8/2023 | 6/22/2023 | 0.50 | 13.46 | 13.96 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 707.82 | 7/19/2023 | 7/19/2023 | 8/9/2023 | 0.50 | 20.52 | 21.02 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 58.15 | 3/13/2023 | 3/13/2023 | 3/23/2023 | 0.50 | 9.61 | 10.11 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,137.66 | 3/13/2023 | 3/13/2023 | 3/23/2023 | 0.50 | 9.61 | 10.11 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 728.86 | 1/20/2023 | 1/20/2023 | 2/9/2023 | 0.50 | 19.74 | 20.24 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,266.27 | 1/23/2023 | 1/23/2023 | 2/9/2023 | 0.50 | 16.69 | 17.19 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 730.00 | 1/23/2023 | 1/23/2023 | 2/9/2023 | 0.50 | 16.69 | 17.19 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 681.60 | 12/25/2023 | 12/25/2023 | 1/9/2024 | 0.50 | 14.56 | 15.06 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,000.00 | 12/25/2023 | 12/25/2023 | 1/9/2024 | 0.50 | 14.15 | 14.65 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 730.28 | 6/30/2023 | 6/30/2023 | 7/7/2023 | 0.50 | 6.67 | 7.17 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 728.29 | 5/25/2023 | 5/25/2023 | 6/8/2023 | 0.50 | 13.63 | 14.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 734.27 | 5/12/2023 | 5/12/2023 | 6/8/2023 | 0.50 | 26.46 | 26.96 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,284.10 | 1/20/2023 | 1/20/2023 | 2/9/2023 | 0.50 | 19.74 | 20.24 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 721.46 | 1/25/2023 | 1/25/2023 | 2/9/2023 | 0.50 | 14.57 | 15.07 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 68.86 | 1/25/2023 | 1/25/2023 | 2/9/2023 | 0.50 | 14.57 | 15.07 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,201.33 | 2/1/2023 | 2/1/2023 | 2/23/2023 | 0.50 | 21.65 | 22.15 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 715.48 | 2/1/2023 | 2/1/2023 | 2/23/2023 | 0.50 | 21.65 | 22.15 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 65.50 | 2/3/2023 | 2/3/2023 | 3/7/2023 | 0.50 | 31.58 | 32.08 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 203,361.98 | 4/11/2023 | 4/18/2023 | 5/9/2023 | 4.17 | 20.65 | 24.83 | 1.170% | 0.29 |
| CARMEUSE LIME & STONE INC | 221,316.92 | 6/8/2023 | 6/17/2023 | 7/7/2023 | 5.16 | 19.67 | 24.84 | 1.273% | 0.32 |
| CARMEUSE LIME & STONE INC | 7,131.60 | 9/1/2023 | 9/1/2023 | 9/21/2023 | 0.50 | 19.14 | 19.64 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 710.61 | 9/1/2023 | 9/1/2023 | 9/21/2023 | 0.50 | 19.14 | 19.64 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,170.80 | 9/6/2023 | 9/6/2023 | 9/21/2023 | 0.50 | 14.70 | 15.20 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 45.28 | 8/11/2023 | 8/11/2023 | 8/24/2023 | 0.50 | 12.41 | 12.91 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 45.38 | 6/4/2023 | 6/4/2023 | 6/22/2023 | 0.50 | 17.48 | 17.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 63.68 | 2/8/2023 | 2/8/2023 | 3/7/2023 | 0.50 | 26.41 | 26.91 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 65.40 | 2/8/2023 | 2/8/2023 | 3/7/2023 | 0.50 | 26.41 | 26.91 | 0.000% | 0.00 |
| CROUNSE CORPORATION | 10,471.51 | 1/26/2023 | 2/1/2023 | 2/17/2023 | 3.67 | 15.65 | 19.33 | 0.060% | 0.01 |
| CROUNSE CORPORATION | 9,847.95 | 12/18/2023 | 12/21/2023 | 1/9/2024 | 2.23 | 18.53 | 20.77 | 0.057% | 0.01 |
| CROUNSE CORPORATION | 9,958.34 | 12/14/2023 | 12/19/2023 | 12/28/2023 | 3.25 | 8.50 | 11.75 | 0.057% | 0.01 |
| CROUNSE CORPORATION | 9,993.20 | 11/22/2023 | 12/3/2023 | 12/19/2023 | 6.26 | 15.48 | 21.74 | 0.057% | 0.01 |
| CROUNSE CORPORATION | 9,857.68 | 8/22/2023 | 9/7/2023 | 9/19/2023 | 8.71 | 11.59 | 20.29 | 0.057% | 0.01 |
| CROUNSE CORPORATION | 9,378.15 | 9/26/2023 | 9/30/2023 | 10/9/2023 | 2.65 | 8.69 | 11.35 | 0.054% | 0.01 |
| CROUNSE CORPORATION | 10,173.32 | 7/17/2023 | 7/25/2023 | 8/9/2023 | 4.76 | 14.48 | 19.24 | 0.059% | 0.01 |
| CROUNSE CORPORATION | 9,086.84 | 10/5/2023 | 10/13/2023 | 10/27/2023 | 4.66 | 13.68 | 18.34 | 0.052% | 0.01 |
| CROUNSE CORPORATION | 9,758.08 | 6/26/2023 | 7/4/2023 | 7/26/2023 | 4.68 | 21.63 | 26.32 | 0.056% | 0.01 |
| CROUNSE CORPORATION | 10,583.54 | 2/24/2023 | 3/28/2023 | 4/7/2023 | 16.63 | 9.74 | 26.37 | 0.061% | 0.02 |
| CARMEUSE LIME & STONE INC | 43.92 | 6/26/2023 | 6/26/2023 | 7/7/2023 | 0.50 | 10.46 | 10.96 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 220,170.86 | 1/5/2023 | 1/10/2023 | 1/24/2023 | 3.17 | 13.66 | 16.83 | 1.267% | 0.21 |
| CARMEUSE LIME & STONE INC | 3,149.12 | 4/20/2023 | 4/20/2023 | 5/9/2023 | 0.50 | 18.45 | 18.95 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 703.82 | 4/20/2023 | 4/20/2023 | 5/9/2023 | 0.50 | 18.45 | 18.95 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 727.72 | 1/11/2023 | 1/11/2023 | 1/24/2023 | 0.50 | 12.47 | 12.97 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 732.85 | 6/26/2023 | 6/26/2023 | 7/7/2023 | 0.50 | 10.52 | 11.02 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.64 | 6/26/2023 | 6/26/2023 | 7/7/2023 | 0.50 | 10.52 | 11.02 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 717.59 | 8/16/2023 | 8/16/2023 | 9/7/2023 | 0.50 | 21.68 | 22.19 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,247.17 | 1/11/2023 | 1/11/2023 | 1/24/2023 | 0.50 | 12.47 | 12.97 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 725.73 | 1/11/2023 | 1/11/2023 | 1/24/2023 | 0.50 | 12.47 | 12.97 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,291.74 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.50 | 10.45 | 10.95 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,215.34 | 1/16/2023 | 1/16/2023 | 2/9/2023 | 0.50 | 23.43 | 23.93 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,280.28 | 1/18/2023 | 1/18/2023 | 2/9/2023 | 0.50 | 21.45 | 21.95 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 52.45 | 12/4/2023 | 12/4/2023 | 12/21/2023 | 0.50 | 16.73 | 17.23 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 720.66 | 9/13/2023 | 9/13/2023 | 9/21/2023 | 0.50 | 7.79 | 8.29 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 720.61 | 1/5/2023 | 1/5/2023 | 1/24/2023 | 0.50 | 18.49 | 18.99 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 734.27 | 1/9/2023 | 1/9/2023 | 1/24/2023 | 0.50 | 14.48 | 14.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 68.81 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.50 | 11.45 | 11.96 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 733.41 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.50 | 11.45 | 11.96 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 732.85 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.50 | 11.45 | 11.95 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,075.60 | 9/4/2023 | 9/4/2023 | 9/21/2023 | 0.50 | 16.47 | 16.97 | 0.041% | 0.01 |

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|---|---|---|---|---|---|---|---|---|---|
| CARMEUSE LIME & STONE INC | 735.41 | 1/17/2023 | 1/17/2023 | 2/9/2023 | 0.50 | 22.45 | 22.95 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,268.82 | 3/23/2023 | 3/23/2023 | 4/7/2023 | 0.50 | 14.64 | 15.14 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 704.39 | 3/23/2023 | 3/23/2023 | 4/7/2023 | 0.50 | 14.64 | 15.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,147.84 | 3/24/2023 | 3/24/2023 | 4/7/2023 | 0.50 | 13.63 | 14.13 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.14 | 3/24/2023 | 3/24/2023 | 4/7/2023 | 0.50 | 13.63 | 14.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,158.03 | 3/27/2023 | 3/27/2023 | 4/7/2023 | 0.50 | 10.63 | 11.13 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,273.91 | 3/22/2023 | 3/22/2023 | 4/7/2023 | 0.50 | 15.48 | 15.99 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 708.65 | 3/22/2023 | 3/22/2023 | 4/7/2023 | 0.50 | 15.48 | 15.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 43.73 | 7/12/2023 | 7/12/2023 | 7/25/2023 | 0.50 | 12.71 | 13.21 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,182.00 | 8/18/2023 | 8/18/2023 | 9/7/2023 | 0.50 | 19.97 | 20.47 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 46.61 | 8/3/2023 | 8/3/2023 | 8/24/2023 | 0.50 | 20.55 | 21.05 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 712.57 | 8/10/2023 | 8/10/2023 | 8/24/2023 | 0.50 | 13.63 | 14.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 698.62 | 9/1/2023 | 9/6/2023 | 9/21/2023 | 3.00 | 14.23 | 17.23 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.88 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.50 | 6.65 | 7.16 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.42 | 6/16/2023 | 6/16/2023 | 7/7/2023 | 0.50 | 20.65 | 21.15 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 730.28 | 6/20/2023 | 6/20/2023 | 7/7/2023 | 0.50 | 16.66 | 17.16 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 731.42 | 2/1/2023 | 2/1/2023 | 2/23/2023 | 0.50 | 21.65 | 22.15 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 700.85 | 7/9/2023 | 7/9/2023 | 7/25/2023 | 0.50 | 15.59 | 16.09 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 57.14 | 3/28/2023 | 3/28/2023 | 4/7/2023 | 0.50 | 9.68 | 10.18 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 57.87 | 3/29/2023 | 3/29/2023 | 4/7/2023 | 0.50 | 8.67 | 9.17 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,296.83 | 4/18/2023 | 4/18/2023 | 5/9/2023 | 0.50 | 20.63 | 21.13 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 42.42 | 7/31/2023 | 7/31/2023 | 8/9/2023 | 0.50 | 8.60 | 9.10 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 730.85 | 6/20/2023 | 6/20/2023 | 7/7/2023 | 0.50 | 16.66 | 17.16 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,277.73 | 6/21/2023 | 6/21/2023 | 7/7/2023 | 0.50 | 15.66 | 16.16 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 686.34 | 7/8/2023 | 7/8/2023 | 7/25/2023 | 0.50 | 16.59 | 17.09 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 733.98 | 6/13/2023 | 6/13/2023 | 6/22/2023 | 0.50 | 8.57 | 9.07 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 715.77 | 5/29/2023 | 5/29/2023 | 6/8/2023 | 0.50 | 9.76 | 10.26 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,180.95 | 6/7/2023 | 6/7/2023 | 6/22/2023 | 0.50 | 14.64 | 15.14 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,280.28 | 3/26/2023 | 3/26/2023 | 4/7/2023 | 0.50 | 11.63 | 12.13 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.46 | 7/21/2023 | 7/21/2023 | 8/9/2023 | 0.50 | 18.52 | 19.02 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 657.32 | 7/21/2023 | 7/21/2023 | 8/9/2023 | 0.50 | 18.52 | 19.02 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 62.75 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.50 | 8.81 | 9.31 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,168.00 | 8/8/2023 | 8/8/2023 | 8/24/2023 | 0.50 | 15.57 | 16.07 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 63.42 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.50 | 8.78 | 9.28 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,226.80 | 1/31/2023 | 1/31/2023 | 2/9/2023 | 0.50 | 8.71 | 9.21 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 702.80 | 8/21/2023 | 8/21/2023 | 9/7/2023 | 0.51 | 16.56 | 17.07 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,240.80 | 8/22/2023 | 8/22/2023 | 9/7/2023 | 0.50 | 15.45 | 15.95 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 47.95 | 6/22/2023 | 6/22/2023 | 7/7/2023 | 0.50 | 14.47 | 14.97 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,244.62 | 4/19/2023 | 4/19/2023 | 5/9/2023 | 0.50 | 19.62 | 20.12 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,219.16 | 6/6/2023 | 6/6/2023 | 6/22/2023 | 0.50 | 15.65 | 16.15 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 719.47 | 6/6/2023 | 6/6/2023 | 6/22/2023 | 0.50 | 15.65 | 16.15 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 738.82 | 6/6/2023 | 6/6/2023 | 6/22/2023 | 0.50 | 15.65 | 16.15 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 484,120.00 | 12/5/2023 | 12/11/2023 | 12/21/2023 | 3.80 | 9.41 | 13.20 | 2.785% | 0.37 |
| CARMEUSE LIME & STONE INC | 694.42 | 4/12/2023 | 4/12/2023 | 4/24/2023 | 0.50 | 11.59 | 12.09 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,208.97 | 4/12/2023 | 4/12/2023 | 4/24/2023 | 0.50 | 11.59 | 12.09 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.73 | 6/2/2023 | 6/2/2023 | 6/22/2023 | 0.50 | 19.52 | 20.02 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 688.73 | 6/3/2023 | 6/3/2023 | 6/22/2023 | 0.50 | 18.51 | 19.01 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 728.01 | 3/31/2023 | 3/31/2023 | 4/7/2023 | 0.50 | 6.72 | 7.22 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.16 | 8/7/2023 | 8/7/2023 | 8/24/2023 | 0.50 | 16.62 | 17.12 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.05 | 8/7/2023 | 8/7/2023 | 8/24/2023 | 0.50 | 16.62 | 17.12 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 715.08 | 8/8/2023 | 8/8/2023 | 8/24/2023 | 0.50 | 15.62 | 16.12 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 727.44 | 5/23/2023 | 5/23/2023 | 6/8/2023 | 0.50 | 15.58 | 16.09 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 735.12 | 5/22/2023 | 5/22/2023 | 6/8/2023 | 0.50 | 16.58 | 17.08 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 713.96 | 8/11/2023 | 8/11/2023 | 8/24/2023 | 0.50 | 12.41 | 12.91 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 708.37 | 6/30/2023 | 6/30/2023 | 7/7/2023 | 0.50 | 6.72 | 7.22 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,890.80 | 7/20/2023 | 7/20/2023 | 8/9/2023 | 0.50 | 19.49 | 19.99 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 736.54 | 5/16/2023 | 5/16/2023 | 6/8/2023 | 0.50 | 22.46 | 22.96 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 52.57 | 5/30/2023 | 5/30/2023 | 6/8/2023 | 0.50 | 8.76 | 9.26 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 729.43 | 5/30/2023 | 5/30/2023 | 6/8/2023 | 0.50 | 8.75 | 9.26 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 51.92 | 5/31/2023 | 5/31/2023 | 6/8/2023 | 0.50 | 7.68 | 8.18 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.84 | 7/5/2023 | 7/5/2023 | 7/25/2023 | 0.50 | 19.64 | 20.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,215.60 | 7/14/2023 | 7/14/2023 | 7/25/2023 | 0.50 | 10.46 | 10.96 | 0.042% | 0.00 |
| CARMEUSE LIME & STONE INC | 45.31 | 7/1/2023 | 7/1/2023 | 7/25/2023 | 0.50 | 23.64 | 24.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,980.40 | 7/2/2023 | 7/2/2023 | 7/25/2023 | 0.50 | 22.64 | 23.14 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 6,720.00 | 9/12/2023 | 9/12/2023 | 9/21/2023 | 0.50 | 8.71 | 9.21 | 0.039% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,313.60 | 9/12/2023 | 9/12/2023 | 9/21/2023 | 0.50 | 8.17 | 8.67 | 0.042% | 0.00 |
| CARMEUSE LIME & STONE INC | 705.87 | 7/17/2023 | 7/17/2023 | 8/9/2023 | 0.50 | 22.43 | 22.93 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,857.20 | 8/31/2023 | 8/31/2023 | 9/7/2023 | 0.50 | 6.79 | 7.29 | 0.039% | 0.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CARMEUSE LIME & STONE INC | 683.27 | 8/31/2023 | 8/31/2023 | 9/7/2023 | 0.50 | 6.79 | 7.29 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,932.80 | 12/5/2023 | 12/5/2023 | 12/21/2023 | 0.50 | 15.82 | 16.32 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 674.90 | 12/5/2023 | 12/5/2023 | 12/21/2023 | 0.50 | 15.27 | 15.77 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,988.80 | 11/27/2023 | 11/27/2023 | 12/7/2023 | 0.50 | 9.09 | 9.59 | 0.040% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.29 | 11/27/2023 | 11/27/2023 | 12/7/2023 | 0.50 | 9.26 | 9.76 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 699.73 | 11/22/2023 | 11/22/2023 | 12/7/2023 | 0.50 | 14.50 | 15.00 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,980.40 | 11/21/2023 | 11/21/2023 | 12/7/2023 | 0.50 | 15.01 | 15.51 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 6,851.60 | 11/22/2023 | 11/22/2023 | 12/7/2023 | 0.50 | 14.65 | 15.15 | 0.039% | 0.01 |
| CARMEUSE LIME & STONE INC | 68.46 | 1/3/2023 | 1/3/2023 | 1/24/2023 | 0.50 | 20.71 | 21.21 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 729.71 | 1/3/2023 | 1/3/2023 | 1/24/2023 | 0.50 | 20.71 | 21.21 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 68.22 | 1/3/2023 | 1/3/2023 | 1/24/2023 | 0.50 | 20.70 | 21.20 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 452,480.00 | 9/26/2023 | 10/2/2023 | 10/24/2023 | 3.66 | 21.68 | 25.34 | 2.603% | 0.66 |
| CARMEUSE LIME & STONE INC | 699.45 | 12/4/2023 | 12/4/2023 | 12/21/2023 | 0.50 | 16.59 | 17.09 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,204.40 | 12/29/2023 | 12/29/2023 | 1/9/2024 | 0.50 | 10.63 | 11.13 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.06 | 8/23/2023 | 8/23/2023 | 9/7/2023 | 0.50 | 14.41 | 14.91 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,100.80 | 8/22/2023 | 8/22/2023 | 9/7/2023 | 0.50 | 15.81 | 16.31 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 62.14 | 11/14/2023 | 11/14/2023 | 11/22/2023 | 0.50 | 7.74 | 8.24 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 703.08 | 11/17/2023 | 11/17/2023 | 12/7/2023 | 0.50 | 20.00 | 20.50 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,921.60 | 11/21/2023 | 11/21/2023 | 12/7/2023 | 0.50 | 15.78 | 16.28 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 709.78 | 11/21/2023 | 11/21/2023 | 12/7/2023 | 0.50 | 15.63 | 16.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 684.39 | 11/24/2023 | 11/24/2023 | 12/7/2023 | 0.50 | 12.81 | 13.31 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 699.73 | 11/27/2023 | 11/27/2023 | 12/7/2023 | 0.50 | 9.77 | 10.27 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 686.34 | 11/6/2023 | 11/6/2023 | 11/22/2023 | 0.50 | 15.63 | 16.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,277.73 | 4/3/2023 | 4/3/2023 | 4/24/2023 | 0.50 | 20.72 | 21.22 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,226.80 | 4/4/2023 | 4/4/2023 | 4/24/2023 | 0.50 | 19.40 | 19.90 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 692.76 | 12/8/2023 | 12/8/2023 | 12/21/2023 | 0.50 | 12.93 | 13.43 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 54.63 | 12/8/2023 | 12/8/2023 | 12/21/2023 | 0.50 | 12.93 | 13.43 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,280.00 | 12/12/2023 | 12/12/2023 | 12/21/2023 | 0.50 | 8.31 | 8.81 | 0.042% | 0.00 |
| CARMEUSE LIME & STONE INC | 735.41 | 4/21/2023 | 4/21/2023 | 5/9/2023 | 0.50 | 17.45 | 17.95 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,036.40 | 12/7/2023 | 12/7/2023 | 12/21/2023 | 0.50 | 13.80 | 14.30 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,042.00 | 12/22/2023 | 12/22/2023 | 1/9/2024 | 0.50 | 17.53 | 18.03 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,103.60 | 12/13/2023 | 12/13/2023 | 1/8/2024 | 0.50 | 25.89 | 26.39 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 707.82 | 12/13/2023 | 12/13/2023 | 1/8/2024 | 0.50 | 25.89 | 26.39 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.55 | 6/19/2023 | 6/19/2023 | 7/7/2023 | 0.50 | 17.56 | 18.06 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.21 | 6/19/2023 | 6/19/2023 | 7/7/2023 | 0.50 | 17.56 | 18.06 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 701.96 | 7/10/2023 | 7/10/2023 | 7/25/2023 | 0.50 | 14.58 | 15.08 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,014.00 | 7/12/2023 | 7/12/2023 | 7/25/2023 | 0.50 | 12.58 | 13.08 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 698.90 | 7/12/2023 | 7/12/2023 | 7/25/2023 | 0.50 | 12.58 | 13.08 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,159.31 | 4/17/2023 | 4/17/2023 | 5/9/2023 | 0.50 | 21.48 | 21.98 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.29 | 6/21/2023 | 6/21/2023 | 7/7/2023 | 0.50 | 15.65 | 16.15 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 63.50 | 2/6/2023 | 2/6/2023 | 3/7/2023 | 0.50 | 28.56 | 29.06 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 64.11 | 2/7/2023 | 2/7/2023 | 3/7/2023 | 0.50 | 27.41 | 27.91 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.99 | 6/9/2023 | 6/9/2023 | 6/22/2023 | 0.50 | 12.45 | 12.95 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,081.63 | 1/20/2023 | 1/20/2023 | 2/9/2023 | 0.50 | 19.74 | 20.24 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,231.89 | 1/23/2023 | 1/23/2023 | 2/9/2023 | 0.50 | 16.69 | 17.19 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 722.31 | 1/23/2023 | 1/23/2023 | 2/9/2023 | 0.50 | 16.69 | 17.19 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,194.96 | 6/19/2023 | 6/19/2023 | 7/7/2023 | 0.50 | 17.55 | 18.05 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.42 | 6/19/2023 | 6/19/2023 | 7/7/2023 | 0.50 | 17.55 | 18.05 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,170.80 | 8/2/2023 | 8/2/2023 | 8/24/2023 | 0.50 | 21.55 | 22.05 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 46.06 | 8/3/2023 | 8/3/2023 | 8/24/2023 | 0.50 | 20.55 | 21.05 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 726.58 | 6/26/2023 | 6/26/2023 | 7/7/2023 | 0.50 | 10.52 | 11.02 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 45.88 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.50 | 6.65 | 7.15 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.88 | 9/8/2023 | 9/8/2023 | 9/21/2023 | 0.50 | 12.41 | 12.91 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 720.10 | 9/8/2023 | 9/8/2023 | 9/21/2023 | 0.50 | 12.41 | 12.91 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.87 | 8/15/2023 | 8/15/2023 | 8/24/2023 | 0.50 | 8.65 | 9.15 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 715.08 | 8/15/2023 | 8/15/2023 | 8/24/2023 | 0.50 | 8.47 | 8.97 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,119.83 | 3/18/2023 | 3/18/2023 | 4/7/2023 | 0.50 | 19.49 | 19.99 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 57.82 | 3/18/2023 | 3/18/2023 | 4/7/2023 | 0.50 | 19.49 | 19.99 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 731.42 | 4/19/2023 | 4/19/2023 | 5/9/2023 | 0.50 | 19.58 | 20.09 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,178.41 | 1/28/2023 | 1/28/2023 | 2/9/2023 | 0.50 | 11.72 | 12.22 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 710.36 | 1/28/2023 | 1/28/2023 | 2/9/2023 | 0.50 | 11.72 | 12.22 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,039.20 | 12/8/2023 | 12/8/2023 | 12/21/2023 | 0.50 | 12.47 | 12.97 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 701.41 | 12/8/2023 | 12/8/2023 | 12/21/2023 | 0.50 | 12.28 | 12.78 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.31 | 12/8/2023 | 12/8/2023 | 12/21/2023 | 0.50 | 12.28 | 12.78 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,142.80 | 12/11/2023 | 12/11/2023 | 12/21/2023 | 0.50 | 9.78 | 10.28 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 706.15 | 12/11/2023 | 12/11/2023 | 12/21/2023 | 0.50 | 9.09 | 9.59 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 725.12 | 12/13/2023 | 12/13/2023 | 12/21/2023 | 0.50 | 7.79 | 8.29 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,279.01 | 6/27/2023 | 6/27/2023 | 7/7/2023 | 0.50 | 9.48 | 9.98 | 0.019% | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|
| CARMEUSE LIME & STONE INC | 3,239.53 | 5/23/2023 | 5/23/2023 | 6/8/2023 | 0.50 | 15.59 | 16.09 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 737.68 | 5/23/2023 | 5/23/2023 | 6/8/2023 | 0.50 | 15.59 | 16.09 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,187.60 | 8/7/2023 | 8/7/2023 | 8/24/2023 | 0.50 | 16.62 | 17.12 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 46.16 | 8/9/2023 | 8/9/2023 | 8/24/2023 | 0.50 | 14.43 | 14.93 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 68.38 | 1/20/2023 | 1/20/2023 | 2/9/2023 | 0.50 | 19.74 | 20.24 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 68,996.70 | 12/22/2023 | 12/22/2023 | 1/9/2024 | 0.50 | 17.62 | 18.12 | 0.397% | 0.07 |
| CARMEUSE LIME & STONE INC | 7,114.80 | 12/25/2023 | 12/25/2023 | 1/9/2024 | 0.50 | 14.63 | 15.13 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 6,840.40 | 12/25/2023 | 12/25/2023 | 1/9/2024 | 0.50 | 14.56 | 15.06 | 0.039% | 0.01 |
| CARMEUSE LIME & STONE INC | 55.00 | 12/25/2023 | 12/25/2023 | 1/9/2024 | 0.50 | 14.15 | 14.65 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,955.20 | 12/26/2023 | 12/26/2023 | 1/9/2024 | 0.50 | 13.02 | 13.52 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 6,790.00 | 8/31/2023 | 8/31/2023 | 9/7/2023 | 0.60 | 6.72 | 7.32 | 0.039% | 0.00 |
| CARMEUSE LIME & STONE INC | 65.20 | 2/2/2023 | 2/2/2023 | 3/7/2023 | 0.50 | 32.60 | 33.10 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 691.01 | 6/28/2023 | 6/28/2023 | 7/7/2023 | 0.50 | 8.72 | 9.22 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,286.65 | 6/29/2023 | 6/29/2023 | 7/7/2023 | 0.50 | 7.72 | 8.22 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.75 | 6/29/2023 | 6/29/2023 | 7/7/2023 | 0.50 | 7.72 | 8.22 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,267.54 | 5/11/2023 | 5/11/2023 | 6/8/2023 | 0.50 | 27.47 | 27.97 | 0.019% | 0.01 |
| CARMEUSE LIME & STONE INC | 726.87 | 5/12/2023 | 5/12/2023 | 6/8/2023 | 0.50 | 26.47 | 26.97 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 68.86 | 1/20/2023 | 1/20/2023 | 2/9/2023 | 0.50 | 19.74 | 20.24 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 66.54 | 1/26/2023 | 1/26/2023 | 2/9/2023 | 0.50 | 13.57 | 14.07 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 735.12 | 2/6/2023 | 2/6/2023 | 2/23/2023 | 0.50 | 16.56 | 17.06 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 213,421.84 | 6/19/2023 | 6/27/2023 | 7/7/2023 | 4.76 | 9.49 | 14.24 | 1.228% | 0.17 |
| CARMEUSE LIME & STONE INC | 722.89 | 9/4/2023 | 9/4/2023 | 9/21/2023 | 0.50 | 16.80 | 17.30 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.55 | 6/2/2023 | 6/2/2023 | 6/22/2023 | 0.50 | 19.52 | 20.02 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,123.65 | 6/4/2023 | 6/4/2023 | 6/22/2023 | 0.50 | 17.48 | 17.98 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 211,257.06 | 2/9/2023 | 3/21/2023 | 4/7/2023 | 20.70 | 16.60 | 37.30 | 1.215% | 0.45 |
| CARMEUSE LIME & STONE INC | 716.34 | 2/8/2023 | 2/8/2023 | 2/23/2023 | 0.50 | 14.41 | 14.91 | 0.004% | 0.00 |
| CROUNSE CORPORATION | 9,857.68 | 8/4/2023 | 8/8/2023 | 8/17/2023 | 2.68 | 8.64 | 11.32 | 0.057% | 0.01 |
| CROUNSE CORPORATION | 9,803.05 | 7/25/2023 | 7/31/2023 | 8/9/2023 | 3.71 | 8.58 | 12.29 | 0.056% | 0.01 |
| CROUNSE CORPORATION | 9,645.23 | 7/31/2023 | 8/4/2023 | 8/17/2023 | 2.79 | 12.43 | 15.21 | 0.055% | 0.01 |
| CROUNSE CORPORATION | 9,993.20 | 12/7/2023 | 12/12/2023 | 12/28/2023 | 3.27 | 15.47 | 18.73 | 0.057% | 0.01 |
| CROUNSE CORPORATION | 10,649.20 | 5/24/2023 | 6/1/2023 | 6/20/2023 | 4.65 | 18.70 | 23.35 | 0.061% | 0.01 |
| CROUNSE CORPORATION | 10,592.32 | 6/19/2023 | 6/27/2023 | 7/7/2023 | 4.76 | 9.49 | 14.24 | 0.061% | 0.01 |
| CARMEUSE LIME & STONE INC | 3,228.07 | 6/12/2023 | 6/12/2023 | 6/22/2023 | 0.50 | 9.61 | 10.11 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 721.46 | 6/12/2023 | 6/12/2023 | 6/22/2023 | 0.50 | 9.61 | 10.11 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,289.19 | 6/23/2023 | 6/23/2023 | 7/7/2023 | 0.50 | 13.47 | 13.97 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,281.55 | 1/10/2023 | 1/10/2023 | 1/24/2023 | 0.50 | 13.48 | 13.98 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,268.82 | 1/10/2023 | 1/10/2023 | 1/24/2023 | 0.50 | 13.48 | 13.98 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,256.08 | 1/11/2023 | 1/11/2023 | 1/24/2023 | 0.50 | 12.47 | 12.97 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.42 | 12/29/2023 | 12/29/2023 | 1/9/2024 | 0.50 | 10.78 | 11.28 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,708.80 | 7/26/2023 | 7/26/2023 | 8/9/2023 | 0.50 | 13.43 | 13.93 | 0.039% | 0.01 |
| CARMEUSE LIME & STONE INC | 705.59 | 7/26/2023 | 7/26/2023 | 8/9/2023 | 0.50 | 13.43 | 13.93 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,182.00 | 9/6/2023 | 9/6/2023 | 9/21/2023 | 0.50 | 14.37 | 14.87 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 68.30 | 1/16/2023 | 1/16/2023 | 2/9/2023 | 0.50 | 23.43 | 23.93 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 69.21 | 1/16/2023 | 1/16/2023 | 2/9/2023 | 0.50 | 23.43 | 23.93 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 723.17 | 7/6/2023 | 7/6/2023 | 7/25/2023 | 0.50 | 18.63 | 19.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 45.08 | 7/7/2023 | 7/7/2023 | 7/25/2023 | 0.50 | 17.63 | 18.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.81 | 8/16/2023 | 8/16/2023 | 9/7/2023 | 0.50 | 21.68 | 22.19 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 67.76 | 1/10/2023 | 1/10/2023 | 1/24/2023 | 0.50 | 13.48 | 13.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,252.00 | 8/4/2023 | 8/4/2023 | 8/24/2023 | 0.50 | 19.46 | 19.96 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 66.80 | 1/6/2023 | 1/6/2023 | 1/24/2023 | 0.50 | 17.48 | 17.99 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 68.78 | 1/18/2023 | 1/18/2023 | 2/9/2023 | 0.50 | 21.45 | 21.95 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 56.25 | 12/1/2023 | 12/1/2023 | 12/21/2023 | 0.50 | 19.82 | 20.32 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 54.47 | 12/1/2023 | 12/1/2023 | 12/21/2023 | 0.50 | 19.79 | 20.29 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.18 | 12/1/2023 | 12/1/2023 | 12/21/2023 | 0.50 | 19.73 | 20.23 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 665.14 | 12/4/2023 | 12/4/2023 | 12/21/2023 | 0.50 | 16.73 | 17.23 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 710.06 | 9/5/2023 | 9/5/2023 | 9/21/2023 | 0.50 | 15.81 | 16.31 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 64.92 | 2/2/2023 | 2/2/2023 | 3/7/2023 | 0.50 | 32.60 | 33.10 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,290.47 | 1/17/2023 | 1/17/2023 | 2/9/2023 | 0.50 | 22.45 | 22.95 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 58.41 | 3/23/2023 | 3/23/2023 | 4/7/2023 | 0.50 | 14.64 | 15.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 58.36 | 3/24/2023 | 3/24/2023 | 4/7/2023 | 0.50 | 13.64 | 14.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 58.34 | 3/24/2023 | 3/24/2023 | 4/7/2023 | 0.50 | 13.63 | 14.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 713.21 | 3/24/2023 | 3/24/2023 | 4/7/2023 | 0.50 | 13.63 | 14.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,214.06 | 3/26/2023 | 3/26/2023 | 4/7/2023 | 0.50 | 11.63 | 12.13 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.14 | 9/8/2023 | 9/8/2023 | 9/21/2023 | 0.50 | 12.55 | 13.05 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 62.95 | 11/14/2023 | 11/14/2023 | 11/22/2023 | 0.50 | 7.12 | 7.62 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 713.96 | 11/14/2023 | 11/14/2023 | 11/22/2023 | 0.50 | 7.12 | 7.62 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 725.16 | 1/2/2023 | 1/2/2023 | 1/24/2023 | 0.50 | 21.64 | 22.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,279.01 | 1/3/2023 | 1/3/2023 | 1/24/2023 | 0.50 | 20.70 | 21.20 | 0.019% | 0.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CARMEUSE LIME & STONE INC | 3,214.06 | 3/30/2023 | 3/30/2023 | 4/7/2023 | 0.50 | 7.74 | 8.24 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 54.05 | 4/14/2023 | 4/14/2023 | 4/24/2023 | 0.50 | 9.48 | 9.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 693.59 | 8/1/2023 | 8/1/2023 | 8/24/2023 | 0.50 | 22.56 | 23.06 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.64 | 8/2/2023 | 8/2/2023 | 8/24/2023 | 0.50 | 21.55 | 22.05 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 733.70 | 1/24/2023 | 1/24/2023 | 2/9/2023 | 0.50 | 15.57 | 16.07 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,011.20 | 9/1/2023 | 9/6/2023 | 9/21/2023 | 3.00 | 14.23 | 17.23 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 58.09 | 9/1/2023 | 9/6/2023 | 9/21/2023 | 3.00 | 14.23 | 17.23 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,267.54 | 6/20/2023 | 6/20/2023 | 7/7/2023 | 0.50 | 16.66 | 17.16 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.47 | 6/20/2023 | 6/20/2023 | 7/7/2023 | 0.50 | 16.66 | 17.16 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 65.02 | 2/1/2023 | 2/1/2023 | 3/7/2023 | 0.50 | 33.65 | 34.15 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 43.71 | 7/9/2023 | 7/9/2023 | 7/25/2023 | 0.50 | 15.59 | 16.09 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,114.80 | 7/9/2023 | 7/9/2023 | 7/25/2023 | 0.51 | 15.59 | 16.10 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 6,846.00 | 7/10/2023 | 7/10/2023 | 7/25/2023 | 0.50 | 14.59 | 15.09 | 0.039% | 0.01 |
| CARMEUSE LIME & STONE INC | 6,756.40 | 7/8/2023 | 7/8/2023 | 7/25/2023 | 0.50 | 16.59 | 17.09 | 0.039% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,044.80 | 7/8/2023 | 7/8/2023 | 7/25/2023 | 0.50 | 16.58 | 17.09 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 706.38 | 4/18/2023 | 4/18/2023 | 5/9/2023 | 0.50 | 20.63 | 21.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.66 | 4/18/2023 | 4/18/2023 | 5/9/2023 | 0.50 | 20.63 | 21.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.81 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.50 | 6.65 | 7.15 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,221.70 | 3/16/2023 | 3/16/2023 | 4/7/2023 | 0.50 | 21.49 | 21.99 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,191.14 | 6/27/2023 | 6/27/2023 | 7/7/2023 | 0.50 | 9.48 | 9.98 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.51 | 6/20/2023 | 6/20/2023 | 7/7/2023 | 0.50 | 16.66 | 17.16 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 703.08 | 7/8/2023 | 7/8/2023 | 7/25/2023 | 0.50 | 16.59 | 17.09 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 42.80 | 7/8/2023 | 7/8/2023 | 7/25/2023 | 0.50 | 16.59 | 17.09 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.34 | 7/7/2023 | 7/7/2023 | 7/25/2023 | 0.50 | 17.58 | 18.08 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 716.75 | 7/10/2023 | 7/10/2023 | 7/25/2023 | 0.50 | 14.58 | 15.08 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 53.02 | 5/30/2023 | 5/30/2023 | 6/8/2023 | 0.50 | 8.76 | 9.26 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.40 | 6/6/2023 | 6/6/2023 | 6/22/2023 | 0.50 | 15.65 | 16.15 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,252.26 | 6/7/2023 | 6/7/2023 | 6/22/2023 | 0.50 | 14.65 | 15.15 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 726.87 | 6/7/2023 | 6/7/2023 | 6/22/2023 | 0.50 | 14.65 | 15.15 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,104.55 | 6/3/2023 | 6/3/2023 | 6/22/2023 | 0.50 | 18.51 | 19.01 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 720.61 | 3/24/2023 | 3/24/2023 | 4/7/2023 | 0.50 | 13.64 | 14.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,200.05 | 1/2/2023 | 1/2/2023 | 1/24/2023 | 0.50 | 21.64 | 22.14 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 706.71 | 7/20/2023 | 7/20/2023 | 8/9/2023 | 0.50 | 19.52 | 20.02 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,661.20 | 7/24/2023 | 7/24/2023 | 8/9/2023 | 0.50 | 15.52 | 16.02 | 0.038% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,142.80 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.50 | 8.81 | 9.31 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,282.83 | 6/5/2023 | 6/5/2023 | 6/22/2023 | 0.50 | 16.50 | 17.00 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,235.20 | 8/16/2023 | 8/16/2023 | 9/7/2023 | 0.50 | 21.65 | 22.15 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 47.03 | 8/16/2023 | 8/16/2023 | 9/7/2023 | 0.50 | 21.65 | 22.15 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 52.90 | 5/29/2023 | 5/29/2023 | 6/8/2023 | 0.50 | 9.58 | 10.08 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 53.67 | 5/29/2023 | 5/29/2023 | 6/8/2023 | 0.50 | 9.58 | 10.08 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.81 | 7/29/2023 | 7/29/2023 | 8/24/2023 | 0.50 | 25.59 | 26.09 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,190.40 | 9/7/2023 | 9/7/2023 | 9/21/2023 | 0.50 | 13.81 | 14.31 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,235.20 | 9/8/2023 | 9/8/2023 | 9/21/2023 | 0.50 | 12.78 | 13.28 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 720.04 | 3/21/2023 | 3/21/2023 | 4/7/2023 | 0.50 | 16.49 | 16.99 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,197.51 | 1/31/2023 | 1/31/2023 | 2/9/2023 | 0.50 | 8.71 | 9.21 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 710.06 | 8/18/2023 | 8/18/2023 | 9/7/2023 | 0.50 | 19.13 | 19.63 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 725.73 | 6/26/2023 | 6/26/2023 | 7/7/2023 | 0.50 | 10.47 | 10.97 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 445,480.00 | 7/5/2023 | 7/12/2023 | 7/25/2023 | 4.14 | 12.72 | 16.86 | 2.563% | 0.43 |
| CARMEUSE LIME & STONE INC | 725.16 | 4/19/2023 | 4/19/2023 | 5/9/2023 | 0.50 | 19.62 | 20.12 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 48.03 | 6/6/2023 | 6/6/2023 | 6/22/2023 | 0.50 | 15.65 | 16.15 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 706.66 | 3/29/2023 | 3/29/2023 | 4/7/2023 | 0.50 | 8.64 | 9.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 707.52 | 6/2/2023 | 6/2/2023 | 6/22/2023 | 0.50 | 19.52 | 20.02 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 727.15 | 6/4/2023 | 6/4/2023 | 6/22/2023 | 0.50 | 17.48 | 17.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.27 | 6/4/2023 | 6/4/2023 | 6/22/2023 | 0.50 | 17.48 | 17.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,257.36 | 3/31/2023 | 3/31/2023 | 4/7/2023 | 0.50 | 6.72 | 7.22 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 729.71 | 6/2/2023 | 6/2/2023 | 6/22/2023 | 0.50 | 19.54 | 20.04 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,100.80 | 8/7/2023 | 8/7/2023 | 8/24/2023 | 0.50 | 16.62 | 17.12 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 46.65 | 8/8/2023 | 8/8/2023 | 8/24/2023 | 0.50 | 15.62 | 16.12 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 51.96 | 5/23/2023 | 5/23/2023 | 6/8/2023 | 0.50 | 15.59 | 16.09 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,148.40 | 7/4/2023 | 7/4/2023 | 7/25/2023 | 0.50 | 20.64 | 21.14 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 44.54 | 7/26/2023 | 7/26/2023 | 8/9/2023 | 0.50 | 13.50 | 14.00 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 734.84 | 5/12/2023 | 5/12/2023 | 6/8/2023 | 0.50 | 26.46 | 26.96 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 51.51 | 5/16/2023 | 5/16/2023 | 6/8/2023 | 0.50 | 22.46 | 22.96 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 52.80 | 5/16/2023 | 5/16/2023 | 6/8/2023 | 0.50 | 22.46 | 22.96 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 731.99 | 5/16/2023 | 5/16/2023 | 6/8/2023 | 0.50 | 22.46 | 22.96 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,263.72 | 5/30/2023 | 5/30/2023 | 6/8/2023 | 0.50 | 8.75 | 9.26 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 701.96 | 7/13/2023 | 7/13/2023 | 7/25/2023 | 0.50 | 11.46 | 11.96 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 718.98 | 7/14/2023 | 7/14/2023 | 7/25/2023 | 0.50 | 10.46 | 10.96 | 0.004% | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|
| CARMEUSE LIME & STONE INC | 41.57 | 7/14/2023 | 7/14/2023 | 7/25/2023 | 0.50 | 10.45 | 10.96 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 43.24 | 7/16/2023 | 7/16/2023 | 8/9/2023 | 0.50 | 23.45 | 23.95 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,958.00 | 7/16/2023 | 7/16/2023 | 8/9/2023 | 0.50 | 23.45 | 23.95 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 726.52 | 7/1/2023 | 7/1/2023 | 7/25/2023 | 0.50 | 23.64 | 24.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.74 | 7/2/2023 | 7/2/2023 | 7/25/2023 | 0.50 | 22.64 | 23.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,319.20 | 7/3/2023 | 7/3/2023 | 7/25/2023 | 0.50 | 21.64 | 22.14 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 60.60 | 9/12/2023 | 9/12/2023 | 9/21/2023 | 0.50 | 8.17 | 8.67 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,084.00 | 7/17/2023 | 7/17/2023 | 8/9/2023 | 0.50 | 22.43 | 22.93 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 6,969.20 | 12/4/2023 | 12/4/2023 | 12/21/2023 | 0.50 | 16.78 | 17.28 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 60.81 | 11/30/2023 | 11/30/2023 | 12/7/2023 | 0.50 | 6.98 | 7.48 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 54.91 | 12/5/2023 | 12/5/2023 | 12/21/2023 | 0.50 | 15.75 | 16.25 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 715.08 | 12/5/2023 | 12/5/2023 | 12/21/2023 | 0.50 | 15.56 | 16.06 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 61.40 | 11/27/2023 | 11/27/2023 | 12/7/2023 | 0.50 | 9.09 | 9.59 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 682.43 | 11/27/2023 | 11/27/2023 | 12/7/2023 | 0.50 | 9.53 | 10.03 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 61.70 | 11/22/2023 | 11/22/2023 | 12/7/2023 | 0.50 | 14.50 | 15.00 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 695.55 | 11/21/2023 | 11/21/2023 | 12/7/2023 | 0.50 | 15.01 | 15.51 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 60.12 | 11/17/2023 | 11/17/2023 | 12/7/2023 | 0.50 | 19.32 | 19.82 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 674.90 | 12/4/2023 | 12/4/2023 | 12/21/2023 | 0.50 | 16.02 | 16.52 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 56.61 | 12/29/2023 | 12/29/2023 | 1/9/2024 | 0.50 | 10.63 | 11.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 717.87 | 12/29/2023 | 12/29/2023 | 1/9/2024 | 0.50 | 10.63 | 11.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,809.60 | 11/25/2023 | 11/25/2023 | 12/7/2023 | 0.50 | 11.89 | 12.39 | 0.039% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.83 | 11/25/2023 | 11/25/2023 | 12/7/2023 | 0.50 | 11.89 | 12.39 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 62.58 | 11/21/2023 | 11/21/2023 | 12/7/2023 | 0.50 | 15.63 | 16.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,014.00 | 11/22/2023 | 11/22/2023 | 12/7/2023 | 0.50 | 15.00 | 15.50 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 702.24 | 11/22/2023 | 11/22/2023 | 12/7/2023 | 0.50 | 14.81 | 15.31 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,217.88 | 4/3/2023 | 4/3/2023 | 4/24/2023 | 0.50 | 20.71 | 21.21 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 54.33 | 4/3/2023 | 4/3/2023 | 4/24/2023 | 0.50 | 20.71 | 21.21 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,820.80 | 12/6/2023 | 12/6/2023 | 12/21/2023 | 0.50 | 14.53 | 15.03 | 0.039% | 0.01 |
| CARMEUSE LIME & STONE INC | 6,952.40 | 12/8/2023 | 12/8/2023 | 12/21/2023 | 0.50 | 12.93 | 13.43 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 701.69 | 12/22/2023 | 12/22/2023 | 1/9/2024 | 0.50 | 17.53 | 18.03 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,254.80 | 12/25/2023 | 12/25/2023 | 1/9/2024 | 0.50 | 14.50 | 15.00 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 718.90 | 6/19/2023 | 6/19/2023 | 7/7/2023 | 0.50 | 17.60 | 18.10 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 710.93 | 6/19/2023 | 6/19/2023 | 7/7/2023 | 0.50 | 17.56 | 18.06 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 718.70 | 7/11/2023 | 7/11/2023 | 7/25/2023 | 0.50 | 13.58 | 14.08 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 706.09 | 4/17/2023 | 4/17/2023 | 5/9/2023 | 0.50 | 21.48 | 21.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,299.38 | 4/17/2023 | 4/17/2023 | 5/9/2023 | 0.50 | 21.48 | 21.98 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.71 | 4/17/2023 | 4/17/2023 | 5/9/2023 | 0.50 | 21.48 | 21.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,200.05 | 1/24/2023 | 1/24/2023 | 2/9/2023 | 0.50 | 15.57 | 16.07 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 734.84 | 1/30/2023 | 1/30/2023 | 2/9/2023 | 0.50 | 9.72 | 10.22 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,202.60 | 6/22/2023 | 6/22/2023 | 7/7/2023 | 0.50 | 14.65 | 15.15 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 718.98 | 8/14/2023 | 8/14/2023 | 8/24/2023 | 0.50 | 9.44 | 9.94 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 682.99 | 7/13/2023 | 7/13/2023 | 7/25/2023 | 0.50 | 11.46 | 11.96 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,972.00 | 7/19/2023 | 7/19/2023 | 8/9/2023 | 0.50 | 20.70 | 21.20 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 3,312.11 | 5/26/2023 | 5/26/2023 | 6/8/2023 | 0.50 | 12.73 | 13.23 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.55 | 6/8/2023 | 6/8/2023 | 6/22/2023 | 0.50 | 13.45 | 13.96 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 706.95 | 4/5/2023 | 4/5/2023 | 4/24/2023 | 0.50 | 18.40 | 18.90 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,086.80 | 8/3/2023 | 8/3/2023 | 8/24/2023 | 0.50 | 20.55 | 21.05 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 469,280.00 | 7/17/2023 | 7/25/2023 | 8/9/2023 | 4.76 | 14.48 | 19.24 | 2.700% | 0.52 |
| CARMEUSE LIME & STONE INC | 729.71 | 6/14/2023 | 6/14/2023 | 6/22/2023 | 0.50 | 7.68 | 8.18 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,158.03 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.50 | 6.65 | 7.15 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 705.81 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.50 | 6.65 | 7.15 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 719.47 | 6/16/2023 | 6/16/2023 | 7/7/2023 | 0.50 | 20.65 | 21.15 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,103.28 | 1/30/2023 | 1/30/2023 | 2/9/2023 | 0.50 | 9.72 | 10.22 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.81 | 12/11/2023 | 12/11/2023 | 12/21/2023 | 0.50 | 9.59 | 10.09 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.68 | 12/11/2023 | 12/11/2023 | 12/21/2023 | 0.50 | 9.09 | 9.59 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 710.89 | 12/14/2023 | 12/14/2023 | 12/21/2023 | 0.50 | 6.80 | 7.30 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 732.85 | 6/27/2023 | 6/27/2023 | 7/7/2023 | 0.50 | 9.48 | 9.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,207.69 | 5/22/2023 | 5/22/2023 | 6/8/2023 | 0.50 | 16.58 | 17.08 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 714.35 | 5/29/2023 | 5/29/2023 | 6/8/2023 | 0.50 | 9.58 | 10.08 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,261.18 | 6/7/2023 | 6/7/2023 | 6/22/2023 | 0.50 | 14.46 | 14.96 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.14 | 7/19/2023 | 7/19/2023 | 8/9/2023 | 0.50 | 20.52 | 21.02 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,100.80 | 8/9/2023 | 8/9/2023 | 8/24/2023 | 0.50 | 14.43 | 14.93 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 46.07 | 6/28/2023 | 6/28/2023 | 7/7/2023 | 0.50 | 8.68 | 9.18 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 692,440.00 | 12/22/2023 | 12/22/2023 | 1/9/2024 | 0.50 | 17.62 | 18.12 | 3.984% | 0.72 |
| CARMEUSE LIME & STONE INC | 3,281.55 | 2/2/2023 | 2/2/2023 | 2/23/2023 | 0.50 | 20.60 | 21.10 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 52.20 | 5/25/2023 | 5/25/2023 | 6/8/2023 | 0.50 | 13.63 | 14.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.34 | 6/5/2023 | 6/5/2023 | 6/22/2023 | 0.50 | 16.50 | 17.00 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,303.20 | 6/9/2023 | 6/9/2023 | 11/13/2023 | 0.50 | 157.00 | 157.50 | 0.019% | 0.03 |

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|---|---|---|---|---|---|---|---|---|---|
| CARMEUSE LIME & STONE INC | 730.28 | 5/11/2023 | 5/11/2023 | 6/8/2023 | 0.50 | 27.47 | 27.97 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,173.31 | 1/26/2023 | 1/26/2023 | 2/9/2023 | 0.50 | 13.57 | 14.07 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 736.83 | 2/3/2023 | 2/3/2023 | 2/23/2023 | 0.50 | 19.58 | 20.08 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 65.35 | 2/6/2023 | 2/6/2023 | 3/7/2023 | 0.50 | 28.56 | 29.06 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 700.69 | 2/8/2023 | 2/8/2023 | 2/23/2023 | 0.50 | 14.40 | 14.91 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 209,092.28 | 5/24/2023 | 6/3/2023 | 6/22/2023 | 5.65 | 18.70 | 24.35 | 1.203% | 0.29 |
| CARMEUSE LIME & STONE INC | 7,254.80 | 9/4/2023 | 9/4/2023 | 9/21/2023 | 0.50 | 16.80 | 17.30 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 714.52 | 9/6/2023 | 9/6/2023 | 9/21/2023 | 0.50 | 14.70 | 15.20 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,291.74 | 2/8/2023 | 2/8/2023 | 2/23/2023 | 0.50 | 14.41 | 14.91 | 0.019% | 0.00 |
| CROUNSE CORPORATION | 11,025.07 | 1/9/2023 | 1/13/2023 | 1/27/2023 | 2.68 | 13.63 | 16.32 | 0.063% | 0.01 |
| CROUNSE CORPORATION | 9,809.12 | 9/26/2023 | 10/2/2023 | 10/27/2023 | 3.66 | 24.68 | 28.34 | 0.056% | 0.02 |
| CROUNSE CORPORATION | 9,040.36 | 10/4/2023 | 10/6/2023 | 10/19/2023 | 1.74 | 12.51 | 14.26 | 0.052% | 0.01 |
| CROUNSE CORPORATION | 10,984.16 | 6/8/2023 | 6/17/2023 | 6/29/2023 | 5.16 | 11.67 | 16.84 | 0.063% | 0.01 |
| CARMEUSE LIME & STONE INC | 46.81 | 6/12/2023 | 6/12/2023 | 6/22/2023 | 0.50 | 9.60 | 10.10 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 717.48 | 6/1/2023 | 6/1/2023 | 6/22/2023 | 0.50 | 20.54 | 21.04 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 191,137.34 | 2/2/2023 | 2/6/2023 | 2/23/2023 | 2.76 | 16.48 | 19.24 | 1.100% | 0.21 |
| CARMEUSE LIME & STONE INC | 55.90 | 4/24/2023 | 4/24/2023 | 5/9/2023 | 0.50 | 14.44 | 14.94 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,053.20 | 12/29/2023 | 12/29/2023 | 1/9/2024 | 0.50 | 10.78 | 11.28 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.00 | 7/26/2023 | 7/26/2023 | 8/9/2023 | 0.50 | 13.43 | 13.93 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 715.64 | 9/6/2023 | 9/6/2023 | 9/21/2023 | 0.50 | 14.37 | 14.87 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,182.00 | 8/17/2023 | 8/17/2023 | 9/7/2023 | 0.50 | 20.68 | 21.18 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 715.64 | 8/17/2023 | 8/17/2023 | 9/7/2023 | 0.50 | 20.68 | 21.18 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.52 | 8/4/2023 | 8/4/2023 | 8/24/2023 | 0.50 | 19.46 | 19.96 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 722.88 | 1/16/2023 | 1/16/2023 | 2/9/2023 | 0.50 | 23.43 | 23.93 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 66.11 | 1/5/2023 | 1/5/2023 | 1/24/2023 | 0.50 | 18.49 | 18.99 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 704.67 | 1/5/2023 | 1/5/2023 | 1/24/2023 | 0.50 | 18.49 | 18.99 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,186.05 | 1/6/2023 | 1/6/2023 | 1/24/2023 | 0.50 | 17.48 | 17.99 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,128.74 | 1/17/2023 | 1/17/2023 | 2/9/2023 | 0.50 | 22.45 | 22.95 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 699.26 | 1/17/2023 | 1/17/2023 | 2/9/2023 | 0.50 | 22.45 | 22.95 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 733.13 | 1/18/2023 | 1/18/2023 | 2/9/2023 | 0.50 | 21.45 | 21.95 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,159.60 | 12/1/2023 | 12/1/2023 | 12/21/2023 | 0.50 | 19.82 | 20.32 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,232.40 | 9/13/2023 | 9/13/2023 | 9/21/2023 | 0.50 | 7.79 | 8.29 | 0.042% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.93 | 9/13/2023 | 9/13/2023 | 9/21/2023 | 0.50 | 7.79 | 8.29 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 735.12 | 1/9/2023 | 1/9/2023 | 1/24/2023 | 0.50 | 14.48 | 14.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 68.89 | 1/9/2023 | 1/9/2023 | 1/24/2023 | 0.50 | 14.48 | 14.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 68.03 | 1/9/2023 | 1/9/2023 | 1/24/2023 | 0.50 | 14.48 | 14.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,279.01 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.50 | 11.45 | 11.95 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,899.20 | 9/4/2023 | 9/4/2023 | 9/21/2023 | 0.50 | 16.78 | 17.28 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 60.58 | 3/23/2023 | 3/23/2023 | 4/7/2023 | 0.50 | 14.64 | 15.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 722.03 | 3/24/2023 | 3/24/2023 | 4/7/2023 | 0.50 | 13.64 | 14.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 711.17 | 9/8/2023 | 9/8/2023 | 9/21/2023 | 0.50 | 12.55 | 13.05 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 56.22 | 3/21/2023 | 3/21/2023 | 4/7/2023 | 0.50 | 16.49 | 16.99 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,170.77 | 3/22/2023 | 3/22/2023 | 4/7/2023 | 0.50 | 15.48 | 15.98 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,193.69 | 6/7/2023 | 6/7/2023 | 6/22/2023 | 0.50 | 14.64 | 15.14 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,165.20 | 11/14/2023 | 11/14/2023 | 11/22/2023 | 0.50 | 7.12 | 7.62 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,244.62 | 1/2/2023 | 1/2/2023 | 1/24/2023 | 0.50 | 21.64 | 22.14 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,321.03 | 1/4/2023 | 1/4/2023 | 1/24/2023 | 0.50 | 19.68 | 20.18 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,201.33 | 4/14/2023 | 4/14/2023 | 4/24/2023 | 0.50 | 9.48 | 9.98 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 45.25 | 8/1/2023 | 8/1/2023 | 8/24/2023 | 0.50 | 22.56 | 23.06 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.28 | 8/3/2023 | 8/3/2023 | 8/24/2023 | 0.50 | 20.55 | 21.05 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 703.92 | 8/10/2023 | 8/10/2023 | 8/24/2023 | 0.50 | 13.63 | 14.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 45.92 | 8/10/2023 | 8/10/2023 | 8/24/2023 | 0.50 | 13.63 | 14.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.52 | 8/22/2023 | 8/22/2023 | 9/7/2023 | 0.50 | 15.91 | 16.41 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 43.71 | 7/31/2023 | 7/31/2023 | 8/9/2023 | 0.50 | 8.60 | 9.10 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,226.80 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.50 | 6.65 | 7.16 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,263.72 | 6/16/2023 | 6/16/2023 | 7/7/2023 | 0.50 | 20.65 | 21.15 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,272.64 | 2/1/2023 | 2/1/2023 | 2/23/2023 | 0.50 | 21.65 | 22.15 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.21 | 7/9/2023 | 7/9/2023 | 7/25/2023 | 0.51 | 15.59 | 16.10 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 682.16 | 7/10/2023 | 7/10/2023 | 7/25/2023 | 0.50 | 14.59 | 15.09 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 673.23 | 7/8/2023 | 7/8/2023 | 7/25/2023 | 0.50 | 16.59 | 17.09 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 689.02 | 3/28/2023 | 3/28/2023 | 4/7/2023 | 0.50 | 9.68 | 10.18 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 50.61 | 4/19/2023 | 4/19/2023 | 5/9/2023 | 0.50 | 19.62 | 20.12 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 210,111.00 | 12/9/2022 | 1/1/2023 | 1/24/2023 | 12.18 | 22.64 | 34.82 | 1.209% | 0.42 |
| CARMEUSE LIME & STONE INC | 756.18 | 6/14/2023 | 6/14/2023 | 6/22/2023 | 0.50 | 7.68 | 8.18 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 720.04 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.50 | 6.65 | 7.15 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 720.04 | 3/16/2023 | 3/16/2023 | 4/7/2023 | 0.50 | 21.49 | 21.99 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.62 | 6/21/2023 | 6/21/2023 | 7/7/2023 | 0.50 | 15.66 | 16.16 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 717.03 | 7/11/2023 | 7/11/2023 | 7/25/2023 | 0.50 | 13.58 | 14.08 | 0.004% | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|
| CARMEUSE LIME & STONE INC | 45.77 | 8/15/2023 | 8/15/2023 | 8/24/2023 | 0.50 | 8.47 | 8.97 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,284.10 | 6/13/2023 | 6/13/2023 | 6/22/2023 | 0.50 | 8.57 | 9.07 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 51.71 | 5/31/2023 | 5/31/2023 | 6/8/2023 | 0.50 | 7.68 | 8.18 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 707.52 | 5/31/2023 | 5/31/2023 | 6/8/2023 | 0.50 | 7.68 | 8.18 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,220.43 | 6/7/2023 | 6/7/2023 | 6/22/2023 | 0.50 | 14.65 | 15.15 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 45.10 | 6/3/2023 | 6/3/2023 | 6/22/2023 | 0.50 | 18.51 | 19.01 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 733.13 | 3/26/2023 | 3/26/2023 | 4/7/2023 | 0.50 | 11.63 | 12.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 696.99 | 1/2/2023 | 1/2/2023 | 1/24/2023 | 0.50 | 21.64 | 22.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 45.71 | 6/30/2023 | 6/30/2023 | 7/7/2023 | 0.50 | 6.76 | 7.26 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.17 | 8/14/2023 | 8/14/2023 | 8/24/2023 | 0.50 | 9.45 | 9.95 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,072.80 | 8/14/2023 | 8/14/2023 | 8/24/2023 | 0.50 | 9.44 | 9.94 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 704.75 | 8/14/2023 | 8/14/2023 | 8/24/2023 | 0.50 | 9.44 | 9.94 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 737.97 | 5/29/2023 | 5/29/2023 | 6/8/2023 | 0.50 | 9.58 | 10.08 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 748.78 | 5/29/2023 | 5/29/2023 | 6/8/2023 | 0.50 | 9.58 | 10.08 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,969.20 | 11/14/2023 | 11/14/2023 | 11/22/2023 | 0.50 | 7.79 | 8.29 | 0.040% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,218.40 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.50 | 8.78 | 9.28 | 0.042% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,955.20 | 9/6/2023 | 9/6/2023 | 9/21/2023 | 0.50 | 14.92 | 15.42 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 59.95 | 9/8/2023 | 9/8/2023 | 9/21/2023 | 0.50 | 12.78 | 13.28 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 720.94 | 9/8/2023 | 9/8/2023 | 9/21/2023 | 0.50 | 12.78 | 13.28 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,221.70 | 3/21/2023 | 3/21/2023 | 4/7/2023 | 0.50 | 16.49 | 16.99 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 714.63 | 1/31/2023 | 1/31/2023 | 2/9/2023 | 0.50 | 8.71 | 9.21 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,902.00 | 8/23/2023 | 8/23/2023 | 9/7/2023 | 0.50 | 14.99 | 15.49 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 687.74 | 8/23/2023 | 8/23/2023 | 9/7/2023 | 0.50 | 14.99 | 15.49 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 52.37 | 5/10/2023 | 5/10/2023 | 5/24/2023 | 0.50 | 13.48 | 13.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 730.57 | 5/10/2023 | 5/10/2023 | 5/24/2023 | 0.50 | 13.48 | 13.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 752.48 | 6/23/2023 | 6/23/2023 | 7/7/2023 | 0.50 | 13.47 | 13.97 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,350.32 | 4/19/2023 | 4/19/2023 | 5/9/2023 | 0.50 | 19.62 | 20.12 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 58.60 | 3/29/2023 | 3/29/2023 | 4/7/2023 | 0.50 | 8.64 | 9.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 717.19 | 4/12/2023 | 4/12/2023 | 4/24/2023 | 0.50 | 11.59 | 12.09 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,216.61 | 6/2/2023 | 6/2/2023 | 6/22/2023 | 0.50 | 19.52 | 20.02 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,183.50 | 6/3/2023 | 6/3/2023 | 6/22/2023 | 0.50 | 18.51 | 19.01 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 711.50 | 6/3/2023 | 6/3/2023 | 6/22/2023 | 0.50 | 18.51 | 19.01 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.25 | 6/3/2023 | 6/3/2023 | 6/22/2023 | 0.50 | 18.51 | 19.01 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,228.07 | 6/1/2023 | 6/1/2023 | 6/22/2023 | 0.50 | 20.54 | 21.04 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,106.40 | 8/7/2023 | 8/7/2023 | 8/24/2023 | 0.50 | 16.62 | 17.12 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 3,285.37 | 5/22/2023 | 5/22/2023 | 6/8/2023 | 0.50 | 16.69 | 17.19 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 724.88 | 5/23/2023 | 5/23/2023 | 6/8/2023 | 0.50 | 15.59 | 16.09 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 52.69 | 5/22/2023 | 5/22/2023 | 6/8/2023 | 0.50 | 16.58 | 17.08 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 51.10 | 5/26/2023 | 5/26/2023 | 6/8/2023 | 0.50 | 12.51 | 13.01 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,169.49 | 6/30/2023 | 6/30/2023 | 7/7/2023 | 0.50 | 6.72 | 7.22 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,008.40 | 7/6/2023 | 7/6/2023 | 7/25/2023 | 0.50 | 18.63 | 19.13 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 698.34 | 7/6/2023 | 7/6/2023 | 7/25/2023 | 0.50 | 18.63 | 19.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 686.62 | 7/20/2023 | 7/20/2023 | 8/9/2023 | 0.50 | 19.49 | 19.99 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 707.54 | 7/26/2023 | 7/26/2023 | 8/9/2023 | 0.50 | 13.50 | 14.00 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 683.27 | 7/27/2023 | 7/27/2023 | 8/9/2023 | 0.50 | 12.50 | 13.00 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 454,720.00 | 8/22/2023 | 9/7/2023 | 9/21/2023 | 8.71 | 13.59 | 22.29 | 2.616% | 0.58 |
| CARMEUSE LIME & STONE INC | 50.49 | 5/11/2023 | 5/11/2023 | 6/8/2023 | 0.50 | 27.47 | 27.97 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,215.34 | 5/16/2023 | 5/16/2023 | 6/8/2023 | 0.50 | 22.46 | 22.96 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,240.80 | 5/31/2023 | 5/31/2023 | 6/8/2023 | 0.50 | 7.68 | 8.18 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 718.98 | 7/5/2023 | 7/5/2023 | 7/25/2023 | 0.50 | 19.64 | 20.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 45.03 | 7/7/2023 | 7/7/2023 | 7/25/2023 | 0.50 | 17.63 | 18.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 715.48 | 4/19/2023 | 4/19/2023 | 5/9/2023 | 0.50 | 19.45 | 19.95 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 675.36 | 4/21/2023 | 4/21/2023 | 5/9/2023 | 0.50 | 17.45 | 17.95 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 54.22 | 4/23/2023 | 4/23/2023 | 5/9/2023 | 0.50 | 15.44 | 15.94 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 43.38 | 7/2/2023 | 7/2/2023 | 7/25/2023 | 0.50 | 22.64 | 23.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 58.97 | 9/11/2023 | 9/11/2023 | 9/21/2023 | 0.50 | 9.56 | 10.06 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 713.40 | 9/13/2023 | 9/13/2023 | 9/21/2023 | 0.50 | 7.41 | 7.91 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 689.69 | 11/30/2023 | 11/30/2023 | 12/7/2023 | 0.50 | 6.98 | 7.48 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 54.47 | 12/5/2023 | 12/5/2023 | 12/21/2023 | 0.50 | 15.82 | 16.32 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 53.22 | 12/5/2023 | 12/5/2023 | 12/21/2023 | 0.50 | 15.27 | 15.77 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 682.71 | 11/22/2023 | 11/22/2023 | 12/7/2023 | 0.50 | 14.65 | 15.15 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 690.53 | 11/23/2023 | 11/23/2023 | 12/7/2023 | 0.50 | 13.78 | 14.28 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,148.40 | 11/17/2023 | 11/17/2023 | 12/7/2023 | 0.50 | 19.75 | 20.25 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 62.02 | 11/19/2023 | 11/19/2023 | 12/7/2023 | 0.50 | 17.22 | 17.72 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 706.15 | 8/23/2023 | 8/23/2023 | 9/7/2023 | 0.50 | 14.41 | 14.91 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 676.02 | 11/20/2023 | 11/20/2023 | 12/7/2023 | 0.50 | 16.37 | 16.87 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 678.53 | 11/25/2023 | 11/25/2023 | 12/7/2023 | 0.50 | 11.89 | 12.39 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,641.60 | 11/20/2023 | 11/20/2023 | 12/7/2023 | 0.50 | 16.43 | 16.93 | 0.038% | 0.01 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CARMEUSE LIME & STONE INC | 689.69 | 11/21/2023 | 11/21/2023 | 12/7/2023 | 0.50 | 15.78 | 16.28 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 698.90 | 11/22/2023 | 11/22/2023 | 12/7/2023 | 0.50 | 15.00 | 15.50 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 61.70 | 11/27/2023 | 11/27/2023 | 12/7/2023 | 0.50 | 9.77 | 10.27 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,095.20 | 11/21/2023 | 11/21/2023 | 12/7/2023 | 0.50 | 15.80 | 16.30 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 6,888.00 | 11/6/2023 | 11/6/2023 | 11/22/2023 | 0.50 | 15.63 | 16.13 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 60.52 | 11/6/2023 | 11/6/2023 | 11/22/2023 | 0.50 | 15.63 | 16.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 63.54 | 11/7/2023 | 11/7/2023 | 11/22/2023 | 0.50 | 14.77 | 15.27 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,086.80 | 11/8/2023 | 11/8/2023 | 11/22/2023 | 0.50 | 13.79 | 14.29 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 732.56 | 4/3/2023 | 4/3/2023 | 4/24/2023 | 0.50 | 20.72 | 21.22 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 719.18 | 4/3/2023 | 4/3/2023 | 4/24/2023 | 0.50 | 20.71 | 21.21 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 721.18 | 4/4/2023 | 4/4/2023 | 4/24/2023 | 0.50 | 19.40 | 19.90 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.29 | 12/6/2023 | 12/6/2023 | 12/21/2023 | 0.50 | 14.80 | 15.30 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 679.64 | 12/6/2023 | 12/6/2023 | 12/21/2023 | 0.50 | 14.53 | 15.03 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 53.59 | 12/6/2023 | 12/6/2023 | 12/21/2023 | 0.50 | 14.53 | 15.03 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 725.40 | 12/12/2023 | 12/12/2023 | 12/21/2023 | 0.50 | 8.31 | 8.81 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 688.57 | 12/13/2023 | 12/13/2023 | 12/21/2023 | 0.50 | 7.98 | 8.48 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,116.01 | 4/21/2023 | 4/21/2023 | 5/9/2023 | 0.50 | 17.45 | 17.95 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,037.06 | 4/24/2023 | 4/24/2023 | 5/9/2023 | 0.50 | 14.44 | 14.94 | 0.017% | 0.00 |
| CARMEUSE LIME & STONE INC | 678.77 | 4/24/2023 | 4/24/2023 | 5/9/2023 | 0.50 | 14.44 | 14.94 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,882.40 | 12/18/2023 | 12/18/2023 | 1/9/2024 | 0.50 | 21.81 | 22.31 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,254.80 | 12/20/2023 | 12/20/2023 | 1/9/2024 | 0.50 | 19.77 | 20.27 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 43.78 | 7/10/2023 | 7/10/2023 | 7/25/2023 | 0.50 | 14.58 | 15.08 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 53.34 | 4/17/2023 | 4/17/2023 | 5/9/2023 | 0.50 | 21.48 | 21.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 67.10 | 1/24/2023 | 1/24/2023 | 2/9/2023 | 0.50 | 15.57 | 16.07 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 715.48 | 1/26/2023 | 1/26/2023 | 2/9/2023 | 0.50 | 13.57 | 14.07 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,179.68 | 1/27/2023 | 1/27/2023 | 2/9/2023 | 0.50 | 12.72 | 13.22 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,254.81 | 6/21/2023 | 6/21/2023 | 7/7/2023 | 0.50 | 15.65 | 16.15 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.53 | 6/21/2023 | 6/21/2023 | 7/7/2023 | 0.50 | 15.65 | 16.15 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,196.23 | 2/6/2023 | 2/6/2023 | 2/23/2023 | 0.50 | 16.56 | 17.06 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,205.15 | 2/7/2023 | 2/7/2023 | 2/23/2023 | 0.50 | 15.41 | 15.91 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 711.17 | 8/11/2023 | 8/11/2023 | 8/24/2023 | 0.50 | 12.45 | 12.95 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,854.40 | 7/13/2023 | 7/13/2023 | 7/25/2023 | 0.50 | 11.46 | 11.96 | 0.039% | 0.00 |
| CARMEUSE LIME & STONE INC | 740.24 | 5/26/2023 | 5/26/2023 | 6/8/2023 | 0.50 | 12.73 | 13.23 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.36 | 6/8/2023 | 6/8/2023 | 6/22/2023 | 0.50 | 13.46 | 13.96 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 688.73 | 1/20/2023 | 1/20/2023 | 2/9/2023 | 0.50 | 19.74 | 20.24 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 67.76 | 1/23/2023 | 1/23/2023 | 2/9/2023 | 0.50 | 16.69 | 17.19 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 53.41 | 4/5/2023 | 4/5/2023 | 4/24/2023 | 0.50 | 18.40 | 18.90 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 714.06 | 6/19/2023 | 6/19/2023 | 7/7/2023 | 0.50 | 17.55 | 18.05 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 726.24 | 8/1/2023 | 8/1/2023 | 8/24/2023 | 0.50 | 22.56 | 23.06 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 706.15 | 8/3/2023 | 8/3/2023 | 8/24/2023 | 0.50 | 20.55 | 21.05 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 697.27 | 3/18/2023 | 3/18/2023 | 4/7/2023 | 0.50 | 19.49 | 19.99 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,131.29 | 3/20/2023 | 3/20/2023 | 4/7/2023 | 0.50 | 17.48 | 17.98 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 707.82 | 12/11/2023 | 12/11/2023 | 12/21/2023 | 0.50 | 9.59 | 10.09 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 51.20 | 5/29/2023 | 5/29/2023 | 6/8/2023 | 0.50 | 9.58 | 10.08 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,103.60 | 7/19/2023 | 7/19/2023 | 8/9/2023 | 0.50 | 20.52 | 21.02 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 693.32 | 7/24/2023 | 7/24/2023 | 8/9/2023 | 0.50 | 15.52 | 16.02 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,170.77 | 6/28/2023 | 6/28/2023 | 7/7/2023 | 0.50 | 8.68 | 9.18 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,916.00 | 8/4/2023 | 8/4/2023 | 8/24/2023 | 0.50 | 19.46 | 19.96 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 689.13 | 8/4/2023 | 8/4/2023 | 8/24/2023 | 0.50 | 19.46 | 19.96 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 708.94 | 12/25/2023 | 12/25/2023 | 1/9/2024 | 0.50 | 14.63 | 15.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.95 | 12/26/2023 | 12/26/2023 | 1/9/2024 | 0.50 | 14.00 | 14.50 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,267.54 | 6/30/2023 | 6/30/2023 | 7/7/2023 | 0.50 | 6.67 | 7.17 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,258.63 | 5/25/2023 | 5/25/2023 | 6/8/2023 | 0.50 | 13.63 | 14.13 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,273.91 | 5/25/2023 | 5/25/2023 | 6/8/2023 | 0.50 | 13.63 | 14.13 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 52.10 | 5/12/2023 | 5/12/2023 | 6/8/2023 | 0.50 | 26.47 | 26.97 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 726.01 | 1/23/2023 | 1/23/2023 | 2/9/2023 | 0.50 | 16.69 | 17.19 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,289.19 | 2/6/2023 | 2/6/2023 | 2/23/2023 | 0.50 | 16.56 | 17.06 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 734.27 | 2/7/2023 | 2/7/2023 | 2/23/2023 | 0.50 | 15.41 | 15.91 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 62.29 | 2/8/2023 | 2/8/2023 | 3/7/2023 | 0.50 | 26.40 | 26.91 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.42 | 9/6/2023 | 9/6/2023 | 9/21/2023 | 0.50 | 14.70 | 15.20 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 716.19 | 9/5/2023 | 9/5/2023 | 9/21/2023 | 0.50 | 15.48 | 15.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 208,073.56 | 2/6/2023 | 2/14/2023 | 2/23/2023 | 4.65 | 8.70 | 13.35 | 1.197% | 0.16 |
| CARMEUSE LIME & STONE INC | 65.30 | 2/6/2023 | 2/6/2023 | 3/7/2023 | 0.50 | 28.56 | 29.06 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 735.69 | 2/8/2023 | 2/8/2023 | 2/23/2023 | 0.50 | 14.41 | 14.91 | 0.004% | 0.00 |
| CROUNSE CORPORATION | 11,269.50 | 12/9/2022 | 1/1/2023 | 1/19/2023 | 12.18 | 17.64 | 29.82 | 0.065% | 0.02 |
| CROUNSE CORPORATION | 10,045.49 | 12/5/2023 | 12/11/2023 | 12/28/2023 | 3.80 | 16.41 | 20.20 | 0.058% | 0.01 |
| CROUNSE CORPORATION | 10,707.48 | 8/8/2023 | 8/16/2023 | 8/30/2023 | 4.64 | 13.73 | 18.36 | 0.062% | 0.01 |
| CARMEUSE LIME & STONE INC | 42.09 | 7/25/2023 | 7/25/2023 | 8/9/2023 | 0.50 | 14.44 | 14.94 | 0.000% | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|
| CARMEUSE LIME & STONE INC | 675.64 | 6/26/2023 | 6/26/2023 | 7/7/2023 | 0.50 | 10.46 | 10.96 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,285.37 | 6/27/2023 | 6/27/2023 | 7/7/2023 | 0.50 | 9.57 | 10.07 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 734.27 | 6/27/2023 | 6/27/2023 | 7/7/2023 | 0.50 | 9.57 | 10.07 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.73 | 6/27/2023 | 6/27/2023 | 7/7/2023 | 0.50 | 9.57 | 10.07 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 200,178.48 | 1/16/2023 | 1/21/2023 | 2/9/2023 | 3.13 | 18.74 | 21.87 | 1.152% | 0.25 |
| CARMEUSE LIME & STONE INC | 202,343.26 | 1/26/2023 | 2/1/2023 | 2/23/2023 | 3.67 | 21.65 | 25.33 | 1.164% | 0.29 |
| CARMEUSE LIME & STONE INC | 68.81 | 1/10/2023 | 1/10/2023 | 1/24/2023 | 0.50 | 13.48 | 13.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 730.57 | 1/10/2023 | 1/10/2023 | 1/24/2023 | 0.50 | 13.48 | 13.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.51 | 9/6/2023 | 9/6/2023 | 9/21/2023 | 0.50 | 14.37 | 14.87 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 728.01 | 1/16/2023 | 1/16/2023 | 2/9/2023 | 0.50 | 23.43 | 23.93 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 737.68 | 1/16/2023 | 1/16/2023 | 2/9/2023 | 0.50 | 23.43 | 23.93 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 68.00 | 1/11/2023 | 1/11/2023 | 1/24/2023 | 0.50 | 12.47 | 12.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,156.80 | 8/4/2023 | 8/4/2023 | 8/24/2023 | 0.50 | 19.46 | 19.96 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 718.62 | 1/16/2023 | 1/16/2023 | 2/9/2023 | 0.50 | 23.43 | 23.93 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,932.80 | 12/1/2023 | 12/1/2023 | 12/21/2023 | 0.50 | 19.79 | 20.29 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 685.03 | 11/28/2023 | 11/28/2023 | 12/7/2023 | 0.50 | 8.63 | 9.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.00 | 9/12/2023 | 9/12/2023 | 9/21/2023 | 0.50 | 8.61 | 9.11 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 58.65 | 9/13/2023 | 9/13/2023 | 9/21/2023 | 0.50 | 7.60 | 8.10 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 705.31 | 9/13/2023 | 9/13/2023 | 9/21/2023 | 0.50 | 7.60 | 8.10 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 728.01 | 1/5/2023 | 1/5/2023 | 1/24/2023 | 0.50 | 18.49 | 18.99 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 67.36 | 1/9/2023 | 1/9/2023 | 1/24/2023 | 0.50 | 14.48 | 14.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 68.75 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.50 | 11.45 | 11.95 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.92 | 8/22/2023 | 8/22/2023 | 9/7/2023 | 0.50 | 15.71 | 16.21 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 57.16 | 9/4/2023 | 9/4/2023 | 9/21/2023 | 0.50 | 16.78 | 17.28 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 687.46 | 9/4/2023 | 9/4/2023 | 9/21/2023 | 0.50 | 16.78 | 17.28 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 68.99 | 1/17/2023 | 1/17/2023 | 2/9/2023 | 0.50 | 22.45 | 22.95 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,151.67 | 3/23/2023 | 3/23/2023 | 4/7/2023 | 0.50 | 14.64 | 15.14 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,191.14 | 3/24/2023 | 3/24/2023 | 4/7/2023 | 0.50 | 13.63 | 14.13 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 60.68 | 3/22/2023 | 3/22/2023 | 4/7/2023 | 0.50 | 15.48 | 15.99 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 58.76 | 3/22/2023 | 3/22/2023 | 4/7/2023 | 0.50 | 15.48 | 15.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,134.40 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.50 | 8.20 | 8.70 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 67.04 | 1/2/2023 | 1/2/2023 | 1/24/2023 | 0.50 | 21.64 | 22.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 715.48 | 4/14/2023 | 4/14/2023 | 4/24/2023 | 0.50 | 9.48 | 9.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,960.80 | 8/1/2023 | 8/1/2023 | 8/24/2023 | 0.50 | 22.56 | 23.06 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 684.39 | 8/2/2023 | 8/2/2023 | 8/24/2023 | 0.50 | 21.55 | 22.05 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 709.50 | 8/3/2023 | 8/3/2023 | 8/24/2023 | 0.50 | 20.55 | 21.05 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,290.47 | 1/27/2023 | 1/27/2023 | 2/9/2023 | 0.50 | 12.48 | 12.98 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 68.99 | 1/27/2023 | 1/27/2023 | 2/9/2023 | 0.50 | 12.48 | 12.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,848.80 | 8/22/2023 | 8/22/2023 | 9/7/2023 | 0.50 | 15.91 | 16.41 | 0.039% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,224.00 | 7/30/2023 | 7/30/2023 | 8/9/2023 | 0.50 | 9.60 | 10.10 | 0.042% | 0.00 |
| CARMEUSE LIME & STONE INC | 43.78 | 7/8/2023 | 7/8/2023 | 7/25/2023 | 0.50 | 16.58 | 17.09 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,221.70 | 3/28/2023 | 3/28/2023 | 4/7/2023 | 0.50 | 9.68 | 10.18 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,082.90 | 3/28/2023 | 3/28/2023 | 4/7/2023 | 0.50 | 9.68 | 10.18 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 736.83 | 4/18/2023 | 4/18/2023 | 5/9/2023 | 0.50 | 20.63 | 21.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,250.99 | 4/18/2023 | 4/18/2023 | 5/9/2023 | 0.50 | 20.62 | 21.12 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 669.95 | 4/19/2023 | 4/19/2023 | 5/9/2023 | 0.50 | 19.62 | 20.12 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 680.20 | 7/31/2023 | 7/31/2023 | 8/9/2023 | 0.50 | 8.60 | 9.10 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.71 | 3/16/2023 | 3/16/2023 | 4/7/2023 | 0.50 | 21.49 | 21.99 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.36 | 6/27/2023 | 6/27/2023 | 7/7/2023 | 0.50 | 9.48 | 9.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,270.09 | 6/20/2023 | 6/20/2023 | 7/7/2023 | 0.50 | 16.66 | 17.16 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.82 | 7/9/2023 | 7/9/2023 | 7/25/2023 | 0.50 | 15.59 | 16.09 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 43.85 | 7/8/2023 | 7/8/2023 | 7/25/2023 | 0.50 | 16.59 | 17.09 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,309.57 | 5/30/2023 | 5/30/2023 | 6/8/2023 | 0.50 | 8.76 | 9.26 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 739.68 | 5/30/2023 | 5/30/2023 | 6/8/2023 | 0.50 | 8.76 | 9.26 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,262.45 | 6/6/2023 | 6/6/2023 | 6/22/2023 | 0.50 | 15.65 | 16.15 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 719.75 | 6/7/2023 | 6/7/2023 | 6/22/2023 | 0.50 | 14.65 | 15.15 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 60.79 | 3/26/2023 | 3/26/2023 | 4/7/2023 | 0.50 | 11.63 | 12.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,118.56 | 1/2/2023 | 1/2/2023 | 1/24/2023 | 0.50 | 21.64 | 22.14 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 712.85 | 7/21/2023 | 7/21/2023 | 8/9/2023 | 0.50 | 18.52 | 19.02 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 40.99 | 7/21/2023 | 7/21/2023 | 8/9/2023 | 0.50 | 18.52 | 19.02 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 663.74 | 7/24/2023 | 7/24/2023 | 8/9/2023 | 0.50 | 15.52 | 16.02 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 733.70 | 6/5/2023 | 6/5/2023 | 6/22/2023 | 0.50 | 16.50 | 17.00 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 723.17 | 8/14/2023 | 8/14/2023 | 8/24/2023 | 0.50 | 9.45 | 9.95 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,196.00 | 8/14/2023 | 8/14/2023 | 8/24/2023 | 0.50 | 9.44 | 9.94 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,301.93 | 5/29/2023 | 5/29/2023 | 6/8/2023 | 0.50 | 9.58 | 10.08 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 62.39 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.50 | 8.63 | 9.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,120.40 | 9/7/2023 | 9/7/2023 | 9/21/2023 | 0.50 | 13.79 | 14.29 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 67.66 | 1/31/2023 | 1/31/2023 | 2/9/2023 | 0.50 | 8.71 | 9.21 | 0.000% | 0.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CARMEUSE LIME & STONE INC | 46.32 | 8/18/2023 | 8/18/2023 | 9/7/2023 | 0.50 | 19.13 | 19.63 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,036.40 | 7/18/2023 | 7/18/2023 | 8/9/2023 | 0.50 | 21.70 | 22.20 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 3,280.28 | 6/23/2023 | 6/23/2023 | 7/7/2023 | 0.50 | 13.47 | 13.97 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.18 | 6/26/2023 | 6/26/2023 | 7/7/2023 | 0.50 | 10.47 | 10.97 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,211.51 | 6/28/2023 | 6/28/2023 | 7/7/2023 | 0.50 | 8.57 | 9.07 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,305.75 | 6/6/2023 | 6/6/2023 | 6/22/2023 | 0.50 | 15.65 | 16.15 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,161.85 | 3/29/2023 | 3/29/2023 | 4/7/2023 | 0.50 | 8.64 | 9.14 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 2,987.40 | 6/4/2023 | 6/4/2023 | 6/22/2023 | 0.50 | 17.48 | 17.98 | 0.017% | 0.00 |
| CARMEUSE LIME & STONE INC | 667.67 | 6/4/2023 | 6/4/2023 | 6/22/2023 | 0.50 | 17.48 | 17.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.91 | 3/30/2023 | 3/30/2023 | 4/7/2023 | 0.50 | 7.73 | 8.23 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 60.37 | 3/31/2023 | 3/31/2023 | 4/7/2023 | 0.50 | 6.72 | 7.22 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 708.10 | 8/7/2023 | 8/7/2023 | 8/24/2023 | 0.50 | 16.62 | 17.12 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 52.63 | 5/22/2023 | 5/22/2023 | 6/8/2023 | 0.50 | 16.69 | 17.19 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,349.04 | 5/10/2023 | 5/10/2023 | 5/24/2023 | 0.50 | 13.48 | 13.98 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 53.65 | 5/10/2023 | 5/10/2023 | 5/24/2023 | 0.50 | 13.48 | 13.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 43.55 | 7/6/2023 | 7/6/2023 | 7/25/2023 | 0.50 | 18.63 | 19.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 462,280.00 | 8/15/2023 | 9/5/2023 | 9/21/2023 | 11.21 | 15.59 | 26.79 | 2.660% | 0.71 |
| CARMEUSE LIME & STONE INC | 493,920.00 | 8/8/2023 | 8/16/2023 | 9/7/2023 | 4.64 | 21.73 | 26.36 | 2.842% | 0.75 |
| CARMEUSE LIME & STONE INC | 454,720.00 | 8/4/2023 | 8/8/2023 | 8/24/2023 | 2.68 | 15.64 | 18.32 | 2.616% | 0.48 |
| CARMEUSE LIME & STONE INC | 52.67 | 5/12/2023 | 5/12/2023 | 6/8/2023 | 0.50 | 26.46 | 26.96 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,275.18 | 5/16/2023 | 5/16/2023 | 6/8/2023 | 0.50 | 22.46 | 22.96 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 52.47 | 5/16/2023 | 5/16/2023 | 6/8/2023 | 0.50 | 22.46 | 22.96 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,266.00 | 7/5/2023 | 7/5/2023 | 7/25/2023 | 0.50 | 19.64 | 20.14 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,193.20 | 7/6/2023 | 7/6/2023 | 7/25/2023 | 0.50 | 18.64 | 19.14 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 3,021.78 | 4/21/2023 | 4/21/2023 | 5/9/2023 | 0.50 | 17.45 | 17.95 | 0.017% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,689.20 | 7/14/2023 | 7/14/2023 | 7/25/2023 | 0.50 | 10.45 | 10.96 | 0.038% | 0.00 |
| CARMEUSE LIME & STONE INC | 43.87 | 7/14/2023 | 7/14/2023 | 7/25/2023 | 0.50 | 10.45 | 10.95 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,198.80 | 7/2/2023 | 7/2/2023 | 7/25/2023 | 0.50 | 22.64 | 23.14 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 717.31 | 7/2/2023 | 7/2/2023 | 7/25/2023 | 0.50 | 22.64 | 23.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,198.80 | 7/3/2023 | 7/3/2023 | 7/25/2023 | 0.50 | 21.64 | 22.14 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 44.74 | 7/3/2023 | 7/3/2023 | 7/25/2023 | 0.50 | 21.64 | 22.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,176.40 | 12/5/2023 | 12/5/2023 | 12/21/2023 | 0.50 | 15.56 | 16.06 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 60.17 | 11/27/2023 | 11/27/2023 | 12/7/2023 | 0.50 | 9.53 | 10.03 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,848.80 | 11/27/2023 | 11/27/2023 | 12/7/2023 | 0.50 | 9.53 | 10.03 | 0.039% | 0.00 |
| CARMEUSE LIME & STONE INC | 60.89 | 11/23/2023 | 11/23/2023 | 12/7/2023 | 0.50 | 13.78 | 14.28 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,930.00 | 11/23/2023 | 11/23/2023 | 12/7/2023 | 0.50 | 13.78 | 14.28 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 3,222.98 | 1/4/2023 | 1/4/2023 | 1/24/2023 | 0.50 | 19.68 | 20.18 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 720.32 | 1/4/2023 | 1/4/2023 | 1/24/2023 | 0.50 | 19.68 | 20.18 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,058.80 | 11/19/2023 | 11/19/2023 | 12/7/2023 | 0.50 | 17.22 | 17.72 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 703.36 | 11/19/2023 | 11/19/2023 | 12/7/2023 | 0.50 | 17.22 | 17.72 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,773.20 | 12/4/2023 | 12/4/2023 | 12/21/2023 | 0.50 | 16.02 | 16.52 | 0.039% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,056.00 | 11/17/2023 | 11/17/2023 | 12/7/2023 | 0.50 | 20.00 | 20.50 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 661.79 | 11/20/2023 | 11/20/2023 | 12/7/2023 | 0.50 | 16.43 | 16.93 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,022.40 | 11/27/2023 | 11/27/2023 | 12/7/2023 | 0.50 | 9.77 | 10.27 | 0.040% | 0.00 |
| CARMEUSE LIME & STONE INC | 734.55 | 4/3/2023 | 4/3/2023 | 4/24/2023 | 0.50 | 20.71 | 21.21 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 57.27 | 12/14/2023 | 12/14/2023 | 12/21/2023 | 0.50 | 6.60 | 7.10 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,290.47 | 4/21/2023 | 4/21/2023 | 5/9/2023 | 0.50 | 17.45 | 17.95 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.56 | 4/21/2023 | 4/21/2023 | 5/9/2023 | 0.50 | 17.45 | 17.95 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 733.98 | 4/24/2023 | 4/24/2023 | 5/9/2023 | 0.50 | 14.44 | 14.94 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 701.13 | 12/7/2023 | 12/7/2023 | 12/21/2023 | 0.50 | 13.80 | 14.30 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,126.00 | 12/18/2023 | 12/18/2023 | 1/9/2024 | 0.50 | 21.78 | 22.28 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,128.80 | 12/18/2023 | 12/18/2023 | 1/9/2024 | 0.50 | 21.75 | 22.25 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,131.60 | 12/19/2023 | 12/19/2023 | 1/9/2024 | 0.50 | 20.80 | 21.30 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 3,216.61 | 6/19/2023 | 6/19/2023 | 7/7/2023 | 0.50 | 17.60 | 18.10 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.73 | 6/19/2023 | 6/19/2023 | 7/7/2023 | 0.50 | 17.60 | 18.10 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 720.32 | 4/12/2023 | 4/12/2023 | 4/24/2023 | 0.50 | 11.59 | 12.09 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 683.89 | 4/13/2023 | 4/13/2023 | 4/24/2023 | 0.50 | 10.48 | 10.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 725.16 | 4/17/2023 | 4/17/2023 | 5/9/2023 | 0.50 | 21.48 | 21.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 68.94 | 1/30/2023 | 1/30/2023 | 2/9/2023 | 0.50 | 9.72 | 10.22 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 714.35 | 2/6/2023 | 2/6/2023 | 2/23/2023 | 0.50 | 16.56 | 17.06 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 716.34 | 2/7/2023 | 2/7/2023 | 2/23/2023 | 0.50 | 15.41 | 15.91 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,137.20 | 8/11/2023 | 8/11/2023 | 8/24/2023 | 0.50 | 12.45 | 12.95 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 53.06 | 5/26/2023 | 5/26/2023 | 6/8/2023 | 0.50 | 12.73 | 13.23 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 682.47 | 6/8/2023 | 6/8/2023 | 6/22/2023 | 0.50 | 13.46 | 13.96 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 715.20 | 6/8/2023 | 6/8/2023 | 6/22/2023 | 0.50 | 13.45 | 13.95 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,303.20 | 6/9/2023 | 6/9/2023 | 6/22/2023 | 0.50 | 12.45 | 12.95 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 738.25 | 6/9/2023 | 6/9/2023 | 6/22/2023 | 0.50 | 12.45 | 12.95 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 56.55 | 3/20/2023 | 3/20/2023 | 4/7/2023 | 0.50 | 17.48 | 17.99 | 0.000% | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|
| CARMEUSE LIME & STONE INC | 3,287.92 | 1/23/2023 | 1/23/2023 | 2/9/2023 | 0.50 | 16.67 | 17.17 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 734.84 | 1/23/2023 | 1/23/2023 | 2/9/2023 | 0.50 | 16.67 | 17.17 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 68.94 | 1/23/2023 | 1/23/2023 | 2/9/2023 | 0.50 | 16.67 | 17.17 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 720.04 | 4/4/2023 | 4/4/2023 | 4/24/2023 | 0.50 | 19.40 | 19.90 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,170.80 | 8/2/2023 | 8/2/2023 | 8/24/2023 | 0.50 | 21.55 | 22.05 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 714.52 | 8/2/2023 | 8/2/2023 | 8/24/2023 | 0.50 | 21.55 | 22.05 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 714.52 | 8/2/2023 | 8/2/2023 | 8/24/2023 | 0.50 | 21.55 | 22.05 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,250.99 | 6/26/2023 | 6/26/2023 | 7/7/2023 | 0.50 | 10.52 | 11.02 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.23 | 6/26/2023 | 6/26/2023 | 7/7/2023 | 0.50 | 10.52 | 11.02 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,128.74 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.50 | 6.65 | 7.15 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 724.31 | 1/31/2023 | 1/31/2023 | 2/9/2023 | 0.50 | 8.71 | 9.21 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,103.60 | 12/11/2023 | 12/11/2023 | 12/21/2023 | 0.50 | 9.59 | 10.09 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,159.60 | 12/11/2023 | 12/11/2023 | 12/21/2023 | 0.50 | 9.82 | 10.32 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,243.60 | 12/12/2023 | 12/12/2023 | 12/21/2023 | 0.50 | 8.78 | 9.28 | 0.042% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,277.20 | 12/13/2023 | 12/13/2023 | 12/21/2023 | 0.50 | 7.79 | 8.29 | 0.042% | 0.00 |
| CARMEUSE LIME & STONE INC | 53.92 | 12/15/2023 | 12/15/2023 | 12/21/2023 | 0.50 | 5.42 | 5.92 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 51.90 | 5/23/2023 | 5/23/2023 | 6/8/2023 | 0.50 | 15.59 | 16.09 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,196.23 | 5/29/2023 | 5/29/2023 | 6/8/2023 | 0.50 | 9.58 | 10.08 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,242.08 | 6/8/2023 | 6/8/2023 | 6/22/2023 | 0.50 | 13.46 | 13.96 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 724.59 | 6/8/2023 | 6/8/2023 | 6/22/2023 | 0.50 | 13.46 | 13.96 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,958.00 | 7/24/2023 | 7/24/2023 | 8/9/2023 | 0.50 | 15.52 | 16.02 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 716.19 | 8/7/2023 | 8/7/2023 | 8/24/2023 | 0.50 | 16.62 | 17.12 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 698.06 | 9/5/2023 | 9/5/2023 | 9/21/2023 | 0.50 | 15.79 | 16.29 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 444,920.00 | 7/31/2023 | 8/4/2023 | 8/24/2023 | 2.79 | 19.43 | 22.21 | 2.560% | 0.57 |
| CARMEUSE LIME & STONE INC | 3,261.18 | 1/20/2023 | 1/20/2023 | 2/9/2023 | 0.50 | 19.74 | 20.24 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.95 | 8/4/2023 | 8/4/2023 | 8/24/2023 | 0.50 | 19.46 | 19.96 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 5,440.60 | 12/22/2023 | 12/22/2023 | 1/9/2024 | 0.50 | 17.62 | 18.12 | 0.031% | 0.01 |
| CARMEUSE LIME & STONE INC | 53.75 | 12/25/2023 | 12/25/2023 | 1/9/2024 | 0.50 | 14.56 | 15.06 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 481,600.00 | 12/7/2023 | 12/12/2023 | 12/21/2023 | 3.27 | 8.47 | 11.73 | 2.771% | 0.33 |
| CARMEUSE LIME & STONE INC | 733.41 | 2/2/2023 | 2/2/2023 | 2/23/2023 | 0.50 | 20.60 | 21.10 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 65.05 | 2/3/2023 | 2/3/2023 | 3/7/2023 | 0.50 | 31.58 | 32.08 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 52.45 | 5/25/2023 | 5/25/2023 | 6/8/2023 | 0.50 | 13.63 | 14.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,231.89 | 6/5/2023 | 6/5/2023 | 6/22/2023 | 0.50 | 16.50 | 17.00 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.95 | 6/5/2023 | 6/5/2023 | 6/22/2023 | 0.50 | 16.50 | 17.00 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 52.35 | 5/11/2023 | 5/11/2023 | 6/8/2023 | 0.50 | 27.47 | 27.97 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 753.62 | 5/11/2023 | 5/11/2023 | 6/8/2023 | 0.50 | 27.47 | 27.97 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,285.37 | 2/7/2023 | 2/7/2023 | 2/23/2023 | 0.50 | 15.41 | 15.91 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 196,612.96 | 6/26/2023 | 7/4/2023 | 7/25/2023 | 4.68 | 20.63 | 25.32 | 1.131% | 0.29 |
| CARMEUSE LIME & STONE INC | 58.05 | 9/4/2023 | 9/4/2023 | 9/21/2023 | 0.50 | 16.58 | 17.08 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 60.11 | 9/4/2023 | 9/4/2023 | 9/21/2023 | 0.50 | 16.80 | 17.30 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,286.65 | 2/6/2023 | 2/6/2023 | 2/23/2023 | 0.50 | 16.56 | 17.06 | 0.019% | 0.00 |
| CROUNSE CORPORATION | 11,394.11 | 1/5/2023 | 1/10/2023 | 1/19/2023 | 3.17 | 8.66 | 11.83 | 0.066% | 0.01 |
| CROUNSE CORPORATION | 10,074.25 | 12/27/2022 | 1/4/2023 | 1/19/2023 | 4.68 | 14.64 | 19.32 | 0.058% | 0.01 |
| CROUNSE CORPORATION | 10,021.57 | 8/15/2023 | 9/5/2023 | 9/19/2023 | 11.21 | 13.59 | 24.79 | 0.058% | 0.01 |
| CROUNSE CORPORATION | 10,162.56 | 5/10/2023 | 5/14/2023 | 5/26/2023 | 2.76 | 11.49 | 14.24 | 0.058% | 0.01 |
| CROUNSE CORPORATION | 10,768.06 | 2/6/2023 | 2/14/2023 | 2/27/2023 | 4.65 | 12.70 | 17.35 | 0.062% | 0.01 |
| CARMEUSE LIME & STONE INC | 46.90 | 6/12/2023 | 6/12/2023 | 6/22/2023 | 0.50 | 9.61 | 10.11 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,089.60 | 7/25/2023 | 7/25/2023 | 8/9/2023 | 0.50 | 14.43 | 14.93 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 735.12 | 6/23/2023 | 6/23/2023 | 7/7/2023 | 0.50 | 13.47 | 13.97 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 204,508.04 | 1/17/2023 | 1/20/2023 | 2/9/2023 | 2.13 | 19.74 | 21.87 | 1.177% | 0.26 |
| CARMEUSE LIME & STONE INC | 474,600.00 | 12/18/2023 | 12/21/2023 | 1/9/2024 | 2.23 | 18.53 | 20.77 | 2.730% | 0.57 |
| CARMEUSE LIME & STONE INC | 68.27 | 1/11/2023 | 1/11/2023 | 1/24/2023 | 0.50 | 12.47 | 12.97 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 56.54 | 12/29/2023 | 12/29/2023 | 1/9/2024 | 0.50 | 10.71 | 11.21 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 702.80 | 12/29/2023 | 12/29/2023 | 1/9/2024 | 0.50 | 10.78 | 11.28 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 693.59 | 7/25/2023 | 7/25/2023 | 8/9/2023 | 0.50 | 14.43 | 14.93 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,081.20 | 7/26/2023 | 7/26/2023 | 8/9/2023 | 0.50 | 13.43 | 13.93 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 3,300.65 | 1/16/2023 | 1/16/2023 | 2/9/2023 | 0.50 | 23.43 | 23.93 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,216.61 | 1/10/2023 | 1/10/2023 | 1/24/2023 | 0.50 | 13.48 | 13.98 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 724.88 | 1/11/2023 | 1/11/2023 | 1/24/2023 | 0.50 | 12.47 | 12.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.14 | 8/4/2023 | 8/4/2023 | 8/24/2023 | 0.50 | 19.46 | 19.96 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 69.02 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.50 | 10.45 | 10.95 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 58.07 | 9/11/2023 | 9/11/2023 | 9/21/2023 | 0.50 | 9.81 | 10.31 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 698.34 | 9/11/2023 | 9/11/2023 | 9/21/2023 | 0.50 | 9.81 | 10.31 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,974.80 | 9/11/2023 | 9/11/2023 | 9/21/2023 | 0.50 | 9.56 | 10.06 | 0.040% | 0.00 |
| CARMEUSE LIME & STONE INC | 694.99 | 9/11/2023 | 9/11/2023 | 9/21/2023 | 0.50 | 9.56 | 10.06 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 730.28 | 2/2/2023 | 2/2/2023 | 2/23/2023 | 0.50 | 20.60 | 21.10 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 68.97 | 1/9/2023 | 1/9/2023 | 1/24/2023 | 0.50 | 14.48 | 14.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 718.05 | 1/9/2023 | 1/9/2023 | 1/24/2023 | 0.50 | 14.48 | 14.98 | 0.004% | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|
| CARMEUSE LIME & STONE INC | 3,281.55 | 1/12/2023 | 1/12/2023 | 1/24/2023 | 0.50 | 11.45 | 11.96 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,254.81 | 1/13/2023 | 1/13/2023 | 1/24/2023 | 0.50 | 10.45 | 10.95 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.83 | 9/1/2023 | 9/1/2023 | 9/21/2023 | 0.50 | 19.41 | 19.91 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 703.82 | 3/24/2023 | 3/24/2023 | 4/7/2023 | 0.50 | 13.64 | 14.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 705.81 | 3/27/2023 | 3/27/2023 | 4/7/2023 | 0.50 | 10.63 | 11.13 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 58.53 | 3/27/2023 | 3/27/2023 | 4/7/2023 | 0.50 | 10.63 | 11.13 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 68.75 | 1/3/2023 | 1/3/2023 | 1/24/2023 | 0.50 | 20.70 | 21.20 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 718.98 | 8/21/2023 | 8/21/2023 | 9/7/2023 | 0.50 | 16.39 | 16.89 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,868.40 | 8/2/2023 | 8/2/2023 | 8/24/2023 | 0.50 | 21.55 | 22.05 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,170.80 | 8/3/2023 | 8/3/2023 | 8/24/2023 | 0.50 | 20.55 | 21.05 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 714.52 | 8/3/2023 | 8/3/2023 | 8/24/2023 | 0.50 | 20.55 | 21.05 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 719.82 | 7/30/2023 | 7/30/2023 | 8/9/2023 | 0.50 | 9.60 | 10.10 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 735.69 | 6/22/2023 | 6/22/2023 | 7/7/2023 | 0.50 | 14.47 | 14.97 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,291.74 | 6/22/2023 | 6/22/2023 | 7/7/2023 | 0.50 | 14.47 | 14.97 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 701.96 | 7/8/2023 | 7/8/2023 | 7/25/2023 | 0.50 | 16.58 | 17.09 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 54.89 | 4/18/2023 | 4/18/2023 | 5/9/2023 | 0.50 | 20.62 | 21.12 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 49.15 | 6/14/2023 | 6/14/2023 | 6/22/2023 | 0.50 | 7.68 | 8.18 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,221.70 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.50 | 6.65 | 7.15 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 713.21 | 6/27/2023 | 6/27/2023 | 7/7/2023 | 0.50 | 9.48 | 9.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 732.56 | 6/21/2023 | 6/21/2023 | 7/7/2023 | 0.50 | 15.66 | 16.16 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,056.00 | 7/8/2023 | 7/8/2023 | 7/25/2023 | 0.50 | 16.59 | 17.09 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,252.00 | 7/7/2023 | 7/7/2023 | 7/25/2023 | 0.50 | 17.58 | 18.08 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,240.80 | 7/11/2023 | 7/11/2023 | 7/25/2023 | 0.50 | 13.58 | 14.08 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 721.49 | 7/11/2023 | 7/11/2023 | 7/25/2023 | 0.50 | 13.58 | 14.08 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,196.00 | 7/11/2023 | 7/11/2023 | 7/25/2023 | 0.50 | 13.58 | 14.08 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 44.72 | 7/11/2023 | 7/11/2023 | 7/25/2023 | 0.50 | 13.58 | 14.08 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 717.48 | 3/13/2023 | 3/13/2023 | 3/23/2023 | 0.50 | 9.61 | 10.11 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 51.31 | 5/29/2023 | 5/29/2023 | 6/8/2023 | 0.50 | 9.76 | 10.26 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.76 | 3/24/2023 | 3/24/2023 | 4/7/2023 | 0.50 | 13.64 | 14.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,019.23 | 3/24/2023 | 3/24/2023 | 4/7/2023 | 0.50 | 13.63 | 14.13 | 0.017% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,158.03 | 3/27/2023 | 3/27/2023 | 4/7/2023 | 0.50 | 10.63 | 11.13 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,092.40 | 7/20/2023 | 7/20/2023 | 8/9/2023 | 0.50 | 19.52 | 20.02 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 47.69 | 6/5/2023 | 6/5/2023 | 6/22/2023 | 0.50 | 16.50 | 17.00 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 717.03 | 8/14/2023 | 8/14/2023 | 8/24/2023 | 0.50 | 9.44 | 9.94 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.59 | 8/8/2023 | 8/8/2023 | 8/24/2023 | 0.50 | 15.57 | 16.07 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 61.23 | 11/14/2023 | 11/14/2023 | 11/22/2023 | 0.50 | 7.79 | 8.29 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 719.26 | 11/13/2023 | 11/13/2023 | 11/22/2023 | 0.50 | 8.78 | 9.28 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 59.58 | 9/7/2023 | 9/7/2023 | 9/21/2023 | 0.50 | 13.81 | 14.31 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 676.21 | 3/21/2023 | 3/21/2023 | 4/7/2023 | 0.50 | 16.49 | 16.99 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 721.18 | 1/31/2023 | 1/31/2023 | 2/9/2023 | 0.50 | 8.71 | 9.21 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 67.04 | 1/31/2023 | 1/31/2023 | 2/9/2023 | 0.50 | 8.71 | 9.21 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,126.00 | 8/18/2023 | 8/18/2023 | 9/7/2023 | 0.50 | 19.13 | 19.63 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 721.49 | 8/22/2023 | 8/22/2023 | 9/7/2023 | 0.50 | 15.45 | 15.95 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,300.65 | 6/22/2023 | 6/22/2023 | 7/7/2023 | 0.50 | 14.47 | 14.97 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 733.13 | 6/23/2023 | 6/23/2023 | 7/7/2023 | 0.50 | 13.47 | 13.97 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,236.98 | 6/28/2023 | 6/28/2023 | 7/7/2023 | 0.50 | 8.57 | 9.07 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 723.45 | 6/28/2023 | 6/28/2023 | 7/7/2023 | 0.50 | 8.57 | 9.07 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.03 | 6/28/2023 | 6/28/2023 | 7/7/2023 | 0.50 | 8.57 | 9.07 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,300.65 | 6/6/2023 | 6/6/2023 | 6/22/2023 | 0.50 | 15.65 | 16.15 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.95 | 6/6/2023 | 6/6/2023 | 6/22/2023 | 0.50 | 15.65 | 16.15 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 54.18 | 4/12/2023 | 4/12/2023 | 4/24/2023 | 0.50 | 11.59 | 12.09 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,165.67 | 6/2/2023 | 6/2/2023 | 6/22/2023 | 0.50 | 19.52 | 20.02 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 45.99 | 6/2/2023 | 6/2/2023 | 6/22/2023 | 0.50 | 19.52 | 20.02 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,100.73 | 3/31/2023 | 3/31/2023 | 4/7/2023 | 0.50 | 6.73 | 7.23 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 721.46 | 6/1/2023 | 6/1/2023 | 6/22/2023 | 0.50 | 20.54 | 21.04 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,265.00 | 6/2/2023 | 6/2/2023 | 6/22/2023 | 0.50 | 19.54 | 20.04 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,084.00 | 8/7/2023 | 8/7/2023 | 8/24/2023 | 0.50 | 16.62 | 17.12 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,117.60 | 8/8/2023 | 8/8/2023 | 8/24/2023 | 0.50 | 15.62 | 16.12 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 709.22 | 8/8/2023 | 8/8/2023 | 8/24/2023 | 0.50 | 15.62 | 16.12 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.26 | 8/8/2023 | 8/8/2023 | 8/24/2023 | 0.50 | 15.62 | 16.12 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,176.40 | 8/8/2023 | 8/8/2023 | 8/24/2023 | 0.50 | 15.62 | 16.12 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 3,243.35 | 5/23/2023 | 5/23/2023 | 6/8/2023 | 0.50 | 15.59 | 16.09 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 712.92 | 5/26/2023 | 5/26/2023 | 6/8/2023 | 0.50 | 12.51 | 13.01 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,165.20 | 8/11/2023 | 8/11/2023 | 8/24/2023 | 0.50 | 12.41 | 12.91 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 710.93 | 5/10/2023 | 5/10/2023 | 5/24/2023 | 0.50 | 13.48 | 13.98 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,081.20 | 7/5/2023 | 7/5/2023 | 7/25/2023 | 0.50 | 19.64 | 20.14 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 44.00 | 7/5/2023 | 7/5/2023 | 7/25/2023 | 0.50 | 19.64 | 20.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 42.82 | 7/20/2023 | 7/20/2023 | 8/9/2023 | 0.50 | 19.49 | 19.99 | 0.000% | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|
| CARMEUSE LIME & STONE INC | 7,100.80 | 7/26/2023 | 7/26/2023 | 8/9/2023 | 0.50 | 13.50 | 14.00 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 7,168.00 | 7/26/2023 | 7/26/2023 | 8/9/2023 | 0.50 | 13.50 | 14.00 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 704.39 | 5/11/2023 | 5/11/2023 | 6/8/2023 | 0.50 | 27.47 | 27.97 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 52.29 | 5/30/2023 | 5/30/2023 | 6/8/2023 | 0.50 | 8.75 | 9.26 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.70 | 7/6/2023 | 7/6/2023 | 7/25/2023 | 0.50 | 18.64 | 19.14 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 54.05 | 4/19/2023 | 4/19/2023 | 5/9/2023 | 0.50 | 19.45 | 19.95 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 666.53 | 7/14/2023 | 7/14/2023 | 7/25/2023 | 0.50 | 10.45 | 10.96 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 693.32 | 7/16/2023 | 7/16/2023 | 8/9/2023 | 0.50 | 23.45 | 23.95 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 45.00 | 7/17/2023 | 7/17/2023 | 8/9/2023 | 0.50 | 22.45 | 22.95 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 695.55 | 7/2/2023 | 7/2/2023 | 7/25/2023 | 0.50 | 22.64 | 23.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 729.31 | 7/3/2023 | 7/3/2023 | 7/25/2023 | 0.50 | 21.64 | 22.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 700.85 | 7/3/2023 | 7/3/2023 | 7/25/2023 | 0.50 | 21.64 | 22.14 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 709.22 | 9/11/2023 | 9/11/2023 | 9/21/2023 | 0.50 | 9.56 | 10.06 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,182.00 | 9/12/2023 | 9/12/2023 | 9/21/2023 | 0.50 | 8.80 | 9.30 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 696.38 | 12/5/2023 | 12/5/2023 | 12/21/2023 | 0.50 | 15.75 | 16.25 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,022.40 | 11/22/2023 | 11/22/2023 | 12/7/2023 | 0.50 | 14.50 | 15.00 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 3,253.54 | 1/3/2023 | 1/3/2023 | 1/24/2023 | 0.50 | 20.70 | 21.20 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 67.58 | 1/4/2023 | 1/4/2023 | 1/24/2023 | 0.50 | 19.68 | 20.18 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,843.20 | 11/17/2023 | 11/17/2023 | 12/7/2023 | 0.50 | 19.32 | 19.82 | 0.039% | 0.01 |
| CARMEUSE LIME & STONE INC | 681.88 | 11/17/2023 | 11/17/2023 | 12/7/2023 | 0.50 | 19.32 | 19.82 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 61.62 | 11/22/2023 | 11/22/2023 | 12/7/2023 | 0.50 | 15.00 | 15.50 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,868.40 | 11/24/2023 | 11/24/2023 | 12/7/2023 | 0.50 | 12.81 | 13.31 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 720.66 | 11/7/2023 | 11/7/2023 | 11/22/2023 | 0.50 | 14.77 | 15.27 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 706.15 | 11/8/2023 | 11/8/2023 | 11/22/2023 | 0.50 | 13.79 | 14.29 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 712.64 | 4/3/2023 | 4/3/2023 | 4/24/2023 | 0.50 | 20.72 | 21.22 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.34 | 4/3/2023 | 4/3/2023 | 4/24/2023 | 0.50 | 20.72 | 21.22 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,286.65 | 4/3/2023 | 4/3/2023 | 4/24/2023 | 0.50 | 20.71 | 21.21 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.49 | 4/3/2023 | 4/3/2023 | 4/24/2023 | 0.50 | 20.71 | 21.21 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 54.48 | 4/4/2023 | 4/4/2023 | 4/24/2023 | 0.50 | 19.40 | 19.90 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,288.40 | 12/14/2023 | 12/14/2023 | 12/21/2023 | 0.50 | 6.60 | 7.10 | 0.042% | 0.00 |
| CARMEUSE LIME & STONE INC | 696.42 | 4/21/2023 | 4/21/2023 | 5/9/2023 | 0.50 | 17.45 | 17.95 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,284.10 | 4/24/2023 | 4/24/2023 | 5/9/2023 | 0.50 | 14.44 | 14.94 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.45 | 4/24/2023 | 4/24/2023 | 5/9/2023 | 0.50 | 14.44 | 14.94 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 63.60 | 2/1/2023 | 2/1/2023 | 3/7/2023 | 0.50 | 33.65 | 34.15 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 722.89 | 12/25/2023 | 12/25/2023 | 1/9/2024 | 0.50 | 14.50 | 15.00 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 55.81 | 12/13/2023 | 12/13/2023 | 1/8/2024 | 0.50 | 25.89 | 26.39 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 710.61 | 12/19/2023 | 12/19/2023 | 1/9/2024 | 0.50 | 20.80 | 21.30 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 716.05 | 6/19/2023 | 6/19/2023 | 7/7/2023 | 0.50 | 17.56 | 18.06 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 44.82 | 7/7/2023 | 7/7/2023 | 7/25/2023 | 0.50 | 17.58 | 18.08 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,150.39 | 3/30/2023 | 3/30/2023 | 4/7/2023 | 0.50 | 7.74 | 8.24 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 54.78 | 4/17/2023 | 4/17/2023 | 5/9/2023 | 0.50 | 21.48 | 21.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 715.20 | 1/24/2023 | 1/24/2023 | 2/9/2023 | 0.50 | 15.57 | 16.07 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 67.12 | 1/26/2023 | 1/26/2023 | 2/9/2023 | 0.50 | 13.57 | 14.07 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 727.44 | 6/21/2023 | 6/21/2023 | 7/7/2023 | 0.50 | 15.65 | 16.15 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,271.36 | 6/21/2023 | 6/21/2023 | 7/7/2023 | 0.50 | 15.65 | 16.15 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,056.00 | 11/15/2023 | 11/15/2023 | 11/22/2023 | 0.50 | 6.14 | 6.64 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 43.33 | 7/19/2023 | 7/19/2023 | 8/9/2023 | 0.50 | 20.70 | 21.20 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 731.42 | 6/8/2023 | 6/8/2023 | 6/22/2023 | 0.50 | 13.45 | 13.96 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,200.05 | 6/8/2023 | 6/8/2023 | 6/22/2023 | 0.50 | 13.45 | 13.95 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 681.90 | 3/20/2023 | 3/20/2023 | 4/7/2023 | 0.50 | 17.48 | 17.99 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 728.29 | 6/20/2023 | 6/20/2023 | 7/7/2023 | 0.50 | 16.66 | 17.16 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.34 | 6/20/2023 | 6/20/2023 | 7/7/2023 | 0.50 | 16.66 | 17.16 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,192.41 | 4/4/2023 | 4/4/2023 | 4/24/2023 | 0.50 | 19.40 | 19.90 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,163.13 | 4/5/2023 | 4/5/2023 | 4/24/2023 | 0.50 | 18.40 | 18.90 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,288.40 | 8/1/2023 | 8/1/2023 | 8/24/2023 | 0.50 | 22.56 | 23.06 | 0.042% | 0.01 |
| CARMEUSE LIME & STONE INC | 46.61 | 8/2/2023 | 8/2/2023 | 8/24/2023 | 0.50 | 21.55 | 22.05 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 45.45 | 6/15/2023 | 6/15/2023 | 6/22/2023 | 0.50 | 6.65 | 7.15 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 6,969.20 | 8/24/2023 | 8/24/2023 | 9/7/2023 | 0.50 | 13.79 | 14.29 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 45.30 | 8/24/2023 | 8/24/2023 | 9/7/2023 | 0.50 | 13.79 | 14.29 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 46.65 | 8/15/2023 | 8/15/2023 | 8/24/2023 | 0.50 | 8.47 | 8.97 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,016.80 | 8/31/2023 | 8/31/2023 | 9/7/2023 | 0.50 | 6.63 | 7.13 | 0.040% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,219.16 | 5/24/2023 | 5/24/2023 | 6/8/2023 | 0.50 | 14.65 | 15.15 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 66.64 | 1/28/2023 | 1/28/2023 | 2/9/2023 | 0.50 | 11.72 | 12.22 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 693.57 | 1/30/2023 | 1/30/2023 | 2/9/2023 | 0.50 | 9.72 | 10.22 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 701.41 | 12/8/2023 | 12/8/2023 | 12/21/2023 | 0.50 | 12.47 | 12.97 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 713.40 | 12/11/2023 | 12/11/2023 | 12/21/2023 | 0.50 | 9.82 | 10.32 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,086.80 | 12/11/2023 | 12/11/2023 | 12/21/2023 | 0.50 | 9.09 | 9.59 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 721.77 | 12/12/2023 | 12/12/2023 | 12/21/2023 | 0.50 | 8.78 | 9.28 | 0.004% | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|
| CARMEUSE LIME & STONE INC | 7,134.40 | 12/14/2023 | 12/14/2023 | 12/21/2023 | 0.50 | 6.80 | 7.30 | 0.041% | 0.00 |
| CARMEUSE LIME & STONE INC | 47.64 | 6/27/2023 | 6/27/2023 | 7/7/2023 | 0.50 | 9.48 | 9.98 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 724.02 | 5/23/2023 | 5/23/2023 | 6/8/2023 | 0.50 | 15.59 | 16.09 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 716.91 | 5/22/2023 | 5/22/2023 | 6/8/2023 | 0.50 | 16.58 | 17.08 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,266.27 | 5/26/2023 | 5/26/2023 | 6/8/2023 | 0.50 | 12.73 | 13.23 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 699.45 | 7/20/2023 | 7/20/2023 | 8/9/2023 | 0.50 | 19.52 | 20.02 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 707.54 | 8/9/2023 | 8/9/2023 | 8/24/2023 | 0.50 | 14.43 | 14.93 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,005.60 | 9/5/2023 | 9/5/2023 | 9/21/2023 | 0.50 | 15.79 | 16.29 | 0.040% | 0.01 |
| CARMEUSE LIME & STONE INC | 708.65 | 6/28/2023 | 6/28/2023 | 7/7/2023 | 0.50 | 8.68 | 9.18 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 68.49 | 1/23/2023 | 1/23/2023 | 2/9/2023 | 0.50 | 16.69 | 17.19 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 693.04 | 12/26/2023 | 12/26/2023 | 1/9/2024 | 0.50 | 13.02 | 13.52 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 7,120.40 | 12/26/2023 | 12/26/2023 | 1/9/2024 | 0.50 | 14.00 | 14.50 | 0.041% | 0.01 |
| CARMEUSE LIME & STONE INC | 3,273.91 | 2/3/2023 | 2/3/2023 | 2/23/2023 | 0.50 | 19.58 | 20.08 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 731.71 | 2/3/2023 | 2/3/2023 | 2/23/2023 | 0.50 | 19.58 | 20.08 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 722.31 | 6/5/2023 | 6/5/2023 | 6/22/2023 | 0.50 | 16.50 | 17.00 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 54.02 | 5/11/2023 | 5/11/2023 | 6/8/2023 | 0.50 | 27.47 | 27.97 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,371.96 | 5/11/2023 | 5/11/2023 | 6/8/2023 | 0.50 | 27.47 | 27.97 | 0.019% | 0.01 |
| CARMEUSE LIME & STONE INC | 67.68 | 1/25/2023 | 1/25/2023 | 2/9/2023 | 0.50 | 14.57 | 15.07 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,284.10 | 1/25/2023 | 1/25/2023 | 2/9/2023 | 0.50 | 14.57 | 15.07 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 709.22 | 1/26/2023 | 1/26/2023 | 2/9/2023 | 0.50 | 13.57 | 14.07 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 63.60 | 2/1/2023 | 2/1/2023 | 3/7/2023 | 0.50 | 33.65 | 34.15 | 0.000% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,296.83 | 2/3/2023 | 2/3/2023 | 2/23/2023 | 0.50 | 19.58 | 20.08 | 0.019% | 0.00 |
| CARMEUSE LIME & STONE INC | 219,152.14 | 6/8/2023 | 6/14/2023 | 6/22/2023 | 3.65 | 7.70 | 11.35 | 1.261% | 0.14 |
| CARMEUSE LIME & STONE INC | 694.15 | 8/11/2023 | 8/11/2023 | 8/24/2023 | 0.50 | 12.41 | 12.91 | 0.004% | 0.00 |
| CARMEUSE LIME & STONE INC | 3,203.87 | 6/2/2023 | 6/2/2023 | 6/22/2023 | 0.50 | 19.52 | 20.02 | 0.018% | 0.00 |
| CARMEUSE LIME & STONE INC | 204,508.04 | 2/24/2023 | 3/28/2023 | 4/7/2023 | 16.63 | 9.74 | 26.37 | 1.177% | 0.31 |
| CARMEUSE LIME & STONE INC | 734.55 | 2/6/2023 | 2/6/2023 | 2/23/2023 | 0.50 | 16.56 | 17.06 | 0.004% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,803.85 | 6/27/2023 | 6/27/2023 | 7/13/2023 | 0.50 | 15.57 | 16.07 | 0.022% | 0.00 |
| MISSISSIPPI LIME COMPANY | 576.30 | 12/28/2023 | 12/28/2023 | 1/11/2024 | 0.50 | 13.64 | 14.14 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,343.84 | 12/27/2023 | 12/27/2023 | 1/11/2024 | 0.50 | 14.89 | 15.39 | 0.031% | 0.00 |
| MISSISSIPPI LIME COMPANY | 576.54 | 7/26/2023 | 7/26/2023 | 8/14/2023 | 0.50 | 18.51 | 19.01 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 525.03 | 1/10/2023 | 1/10/2023 | 2/14/2023 | 0.50 | 34.49 | 34.99 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 518.58 | 1/9/2023 | 1/9/2023 | 2/14/2023 | 0.50 | 35.50 | 36.00 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 566.16 | 9/12/2023 | 9/12/2023 | 10/12/2023 | 0.50 | 29.03 | 29.53 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,242.32 | 8/22/2023 | 8/22/2023 | 9/14/2023 | 0.50 | 22.62 | 23.12 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 5,121.36 | 9/5/2023 | 9/5/2023 | 10/12/2023 | 0.50 | 36.55 | 37.05 | 0.029% | 0.01 |
| MISSISSIPPI LIME COMPANY | 536.21 | 3/28/2023 | 3/28/2023 | 4/13/2023 | 0.50 | 15.69 | 16.19 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,835.95 | 3/21/2023 | 3/21/2023 | 4/13/2023 | 0.50 | 22.50 | 23.00 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3,815.09 | 1/16/2023 | 1/16/2023 | 2/14/2023 | 0.50 | 28.46 | 28.96 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 511.06 | 1/16/2023 | 1/16/2023 | 2/14/2023 | 0.50 | 28.46 | 28.96 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,285.52 | 8/7/2023 | 8/7/2023 | 9/14/2023 | 0.50 | 37.69 | 38.19 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 5,151.60 | 7/28/2023 | 7/28/2023 | 8/14/2023 | 0.50 | 16.60 | 17.10 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3,901.76 | 3/30/2023 | 3/30/2023 | 4/13/2023 | 0.50 | 13.69 | 14.19 | 0.022% | 0.00 |
| MISSISSIPPI LIME COMPANY | 12.74 | 4/19/2023 | 4/19/2023 | 5/11/2023 | 0.50 | 21.65 | 22.15 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 520.95 | 6/6/2023 | 6/6/2023 | 7/13/2023 | 0.50 | 36.68 | 37.18 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 9.65 | 6/23/2023 | 6/23/2023 | 7/13/2023 | 0.50 | 19.75 | 20.25 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 488.27 | 6/23/2023 | 6/23/2023 | 7/13/2023 | 0.50 | 19.75 | 20.25 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,147.28 | 8/4/2023 | 8/4/2023 | 9/14/2023 | 0.50 | 40.46 | 40.96 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 4,054.23 | 6/7/2023 | 6/7/2023 | 7/13/2023 | 0.50 | 35.68 | 36.18 | 0.023% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3,843.98 | 6/12/2023 | 6/12/2023 | 7/13/2023 | 0.50 | 30.64 | 31.14 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 539.50 | 7/12/2023 | 7/12/2023 | 8/14/2023 | 0.50 | 32.47 | 32.97 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,324.40 | 9/11/2023 | 9/11/2023 | 10/12/2023 | 0.50 | 30.49 | 30.99 | 0.031% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3.56 | 11/27/2023 | 11/27/2023 | 12/14/2023 | 0.50 | 16.82 | 17.32 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,091.12 | 11/9/2023 | 11/9/2023 | 12/14/2023 | 0.50 | 34.38 | 34.88 | 0.029% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3,768.54 | 6/2/2023 | 6/2/2023 | 7/13/2023 | 0.50 | 40.69 | 41.19 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 5,233.68 | 12/20/2023 | 12/20/2023 | 1/11/2024 | 0.50 | 21.57 | 22.07 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 540.73 | 4/4/2023 | 4/4/2023 | 5/11/2023 | 0.50 | 36.42 | 36.92 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 584.56 | 7/10/2023 | 7/10/2023 | 8/14/2023 | 0.50 | 34.47 | 34.97 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 525.68 | 6/9/2023 | 6/9/2023 | 7/13/2023 | 0.50 | 33.46 | 33.96 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,188.32 | 11/6/2023 | 11/6/2023 | 12/14/2023 | 0.50 | 37.81 | 38.31 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 511.70 | 6/19/2023 | 6/19/2023 | 7/13/2023 | 0.50 | 23.68 | 24.18 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 524.39 | 6/22/2023 | 6/22/2023 | 7/13/2023 | 0.50 | 20.53 | 21.03 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 10.12 | 6/19/2023 | 6/19/2023 | 7/13/2023 | 0.50 | 23.55 | 24.05 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,287.68 | 7/24/2023 | 7/24/2023 | 8/14/2023 | 0.50 | 20.49 | 20.99 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 577.48 | 7/24/2023 | 7/24/2023 | 8/14/2023 | 0.50 | 20.49 | 20.99 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 530.62 | 3/19/2023 | 3/19/2023 | 4/13/2023 | 0.50 | 24.49 | 24.99 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 507.62 | 1/31/2023 | 1/31/2023 | 2/14/2023 | 0.50 | 13.74 | 14.24 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 579.61 | 9/8/2023 | 9/8/2023 | 10/12/2023 | 0.50 | 33.65 | 34.15 | 0.003% | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|
| MISSISSIPPI LIME COMPANY | 3,734.84 | 3/12/2023 | 3/12/2023 | 4/13/2023 | 0.51 | 31.63 | 32.13 | 0.021% | 0.01 |
| MISSISSIPPI LIME COMPANY | 528.47 | 1/23/2023 | 1/23/2023 | 2/14/2023 | 0.50 | 21.74 | 22.24 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 1.96 | 12/18/2023 | 12/18/2023 | 1/11/2024 | 0.50 | 23.98 | 24.48 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 512.35 | 6/29/2023 | 6/29/2023 | 7/13/2023 | 0.50 | 13.72 | 14.22 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 15.60 | 1/19/2023 | 1/19/2023 | 2/14/2023 | 0.50 | 25.75 | 26.25 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,138.64 | 8/3/2023 | 8/3/2023 | 9/14/2023 | 0.50 | 41.55 | 42.05 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3,869.66 | 2/7/2023 | 2/7/2023 | 3/14/2023 | 0.50 | 34.43 | 34.93 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3,794.22 | 2/7/2023 | 2/7/2023 | 3/14/2023 | 0.50 | 34.43 | 34.93 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 11.47 | 5/31/2023 | 5/31/2023 | 6/14/2023 | 0.50 | 13.69 | 14.19 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 583.62 | 12/27/2023 | 12/27/2023 | 1/11/2024 | 0.50 | 14.89 | 15.39 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,365.44 | 7/13/2023 | 7/13/2023 | 8/14/2023 | 0.50 | 31.43 | 31.93 | 0.031% | 0.01 |
| MISSISSIPPI LIME COMPANY | 16.34 | 1/11/2023 | 1/11/2023 | 2/14/2023 | 0.50 | 33.49 | 33.99 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 15.79 | 1/18/2023 | 1/18/2023 | 2/14/2023 | 0.50 | 26.46 | 26.96 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 10.10 | 6/15/2023 | 6/15/2023 | 7/13/2023 | 0.50 | 27.72 | 28.22 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,909.78 | 6/15/2023 | 6/15/2023 | 7/13/2023 | 0.50 | 27.72 | 28.22 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 10.35 | 6/15/2023 | 6/15/2023 | 7/13/2023 | 0.50 | 27.72 | 28.22 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 523.74 | 6/15/2023 | 6/15/2023 | 7/13/2023 | 0.50 | 27.72 | 28.22 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,184.00 | 9/12/2023 | 9/12/2023 | 10/12/2023 | 0.50 | 29.03 | 29.53 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 15.54 | 2/2/2023 | 2/2/2023 | 3/14/2023 | 0.50 | 39.65 | 40.15 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 538.79 | 2/2/2023 | 2/2/2023 | 3/14/2023 | 0.50 | 39.65 | 40.15 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 4,002.87 | 3/28/2023 | 3/28/2023 | 4/13/2023 | 0.50 | 15.69 | 16.19 | 0.023% | 0.00 |
| MISSISSIPPI LIME COMPANY | 568.75 | 9/8/2023 | 9/8/2023 | 10/12/2023 | 0.50 | 33.54 | 34.04 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 14.40 | 3/15/2023 | 3/15/2023 | 4/13/2023 | 0.50 | 28.49 | 28.99 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,283.36 | 7/7/2023 | 7/7/2023 | 8/14/2023 | 0.50 | 37.61 | 38.11 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 5,317.92 | 7/6/2023 | 7/6/2023 | 8/14/2023 | 0.50 | 38.66 | 39.16 | 0.031% | 0.01 |
| MISSISSIPPI LIME COMPANY | 15.68 | 1/2/2023 | 1/2/2023 | 2/14/2023 | 0.50 | 42.72 | 43.22 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 510.63 | 1/2/2023 | 1/2/2023 | 2/14/2023 | 0.50 | 42.72 | 43.22 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,736.44 | 6/30/2023 | 6/30/2023 | 7/13/2023 | 0.50 | 12.74 | 13.24 | 0.021% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,203.44 | 9/7/2023 | 9/7/2023 | 10/12/2023 | 0.50 | 34.87 | 35.37 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 562.15 | 8/4/2023 | 8/4/2023 | 9/14/2023 | 0.50 | 40.46 | 40.96 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 529.76 | 3/29/2023 | 3/29/2023 | 4/13/2023 | 0.50 | 14.69 | 15.19 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 14.04 | 3/29/2023 | 3/29/2023 | 4/13/2023 | 0.50 | 14.69 | 15.19 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 4,006.08 | 4/3/2023 | 4/3/2023 | 5/11/2023 | 0.50 | 37.73 | 38.23 | 0.023% | 0.01 |
| MISSISSIPPI LIME COMPANY | 12.73 | 4/3/2023 | 4/3/2023 | 5/11/2023 | 0.50 | 37.73 | 38.23 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 14.44 | 2/2/2023 | 2/2/2023 | 3/14/2023 | 0.50 | 39.65 | 40.15 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,868.05 | 5/10/2023 | 5/10/2023 | 6/14/2023 | 0.50 | 34.52 | 35.02 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 561.68 | 7/5/2023 | 7/5/2023 | 8/14/2023 | 0.50 | 39.63 | 40.13 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,880.89 | 5/11/2023 | 5/11/2023 | 6/14/2023 | 0.50 | 33.55 | 34.05 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 519.87 | 5/11/2023 | 5/11/2023 | 6/14/2023 | 0.50 | 33.55 | 34.05 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 4,939.92 | 7/12/2023 | 7/12/2023 | 8/14/2023 | 0.50 | 32.47 | 32.97 | 0.028% | 0.01 |
| MISSISSIPPI LIME COMPANY | 569.23 | 7/3/2023 | 7/3/2023 | 8/14/2023 | 0.50 | 41.62 | 42.12 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 581.49 | 9/11/2023 | 9/11/2023 | 10/12/2023 | 0.50 | 30.49 | 30.99 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 560.50 | 11/27/2023 | 11/27/2023 | 12/14/2023 | 0.50 | 16.82 | 17.32 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,770.15 | 1/4/2023 | 1/4/2023 | 2/14/2023 | 0.50 | 40.68 | 41.18 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 505.04 | 1/4/2023 | 1/4/2023 | 2/14/2023 | 0.50 | 40.68 | 41.18 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3.54 | 11/17/2023 | 11/17/2023 | 12/14/2023 | 0.50 | 26.39 | 26.89 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3.84 | 11/20/2023 | 11/20/2023 | 12/14/2023 | 0.50 | 23.39 | 23.89 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 510.41 | 6/2/2023 | 6/2/2023 | 7/13/2023 | 0.50 | 40.70 | 41.20 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 1.94 | 12/20/2023 | 12/20/2023 | 1/11/2024 | 0.50 | 21.57 | 22.07 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 4,020.53 | 4/17/2023 | 4/17/2023 | 5/11/2023 | 0.50 | 23.49 | 23.99 | 0.023% | 0.01 |
| MISSISSIPPI LIME COMPANY | 524.17 | 1/25/2023 | 1/25/2023 | 2/14/2023 | 0.50 | 19.58 | 20.08 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 590.46 | 11/12/2023 | 11/12/2023 | 12/14/2023 | 0.50 | 31.47 | 31.97 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 551.53 | 11/14/2023 | 11/23/2023 | 12/14/2023 | 5.00 | 20.37 | 25.37 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,819.90 | 6/19/2023 | 6/19/2023 | 7/13/2023 | 0.50 | 23.68 | 24.18 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 14.07 | 3/19/2023 | 3/19/2023 | 4/13/2023 | 0.50 | 24.49 | 24.99 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 1.94 | 12/11/2023 | 12/11/2023 | 1/11/2024 | 0.50 | 30.53 | 31.03 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 543.52 | 5/25/2023 | 5/25/2023 | 6/14/2023 | 0.50 | 19.61 | 20.11 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,648.17 | 6/8/2023 | 6/8/2023 | 7/13/2023 | 0.50 | 34.47 | 34.97 | 0.021% | 0.01 |
| MISSISSIPPI LIME COMPANY | 2.70 | 9/8/2023 | 9/8/2023 | 10/12/2023 | 0.50 | 33.65 | 34.15 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 16.22 | 1/23/2023 | 1/23/2023 | 2/14/2023 | 0.50 | 21.74 | 22.24 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,304.96 | 12/18/2023 | 12/18/2023 | 1/11/2024 | 0.50 | 23.98 | 24.48 | 0.031% | 0.01 |
| MISSISSIPPI LIME COMPANY | 10.67 | 6/5/2023 | 6/5/2023 | 7/13/2023 | 0.50 | 37.70 | 38.20 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 494.93 | 1/20/2023 | 1/20/2023 | 2/14/2023 | 0.50 | 24.75 | 25.25 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 15.53 | 1/24/2023 | 1/24/2023 | 2/14/2023 | 0.50 | 20.59 | 21.09 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,932.25 | 2/8/2023 | 2/8/2023 | 3/14/2023 | 0.50 | 33.46 | 33.96 | 0.023% | 0.01 |
| MISSISSIPPI LIME COMPANY | 14.90 | 2/1/2023 | 2/1/2023 | 3/14/2023 | 0.50 | 40.66 | 41.16 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,069.52 | 12/8/2023 | 12/8/2023 | 1/11/2024 | 0.50 | 33.42 | 33.92 | 0.029% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3,919.41 | 1/10/2023 | 1/10/2023 | 2/14/2023 | 0.50 | 34.49 | 34.99 | 0.023% | 0.01 |

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|---|---|---|---|---|---|---|---|---|---|
| MISSISSIPPI LIME COMPANY | 15.93 | 1/4/2023 | 1/4/2023 | 2/14/2023 | 0.50 | 40.50 | 41.00 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,839.16 | 1/18/2023 | 1/18/2023 | 2/14/2023 | 0.50 | 26.46 | 26.96 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 572.53 | 8/22/2023 | 8/22/2023 | 9/14/2023 | 0.50 | 22.62 | 23.12 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 515.79 | 1/16/2023 | 1/16/2023 | 2/14/2023 | 0.50 | 28.46 | 28.96 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 567.10 | 8/8/2023 | 8/8/2023 | 9/14/2023 | 0.50 | 36.69 | 37.19 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 562.62 | 7/28/2023 | 7/28/2023 | 8/14/2023 | 0.50 | 16.60 | 17.10 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 568.28 | 8/31/2023 | 8/31/2023 | 9/14/2023 | 0.50 | 13.57 | 14.07 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,363.28 | 12/26/2023 | 12/26/2023 | 1/11/2024 | 0.50 | 15.58 | 16.08 | 0.031% | 0.00 |
| MISSISSIPPI LIME COMPANY | 1.94 | 12/18/2023 | 12/18/2023 | 1/11/2024 | 0.50 | 23.75 | 24.25 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 522.67 | 3/30/2023 | 3/30/2023 | 4/13/2023 | 0.50 | 13.69 | 14.19 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,811.88 | 1/2/2023 | 1/2/2023 | 2/14/2023 | 0.50 | 42.72 | 43.22 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 508.69 | 4/17/2023 | 4/17/2023 | 5/11/2023 | 0.50 | 23.69 | 24.19 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,346.00 | 8/14/2023 | 8/14/2023 | 9/14/2023 | 0.50 | 30.46 | 30.96 | 0.031% | 0.01 |
| MISSISSIPPI LIME COMPANY | 587.86 | 8/23/2023 | 8/23/2023 | 9/14/2023 | 0.50 | 21.93 | 22.43 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 538.15 | 3/21/2023 | 3/21/2023 | 4/13/2023 | 0.50 | 22.50 | 23.00 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 514.93 | 6/12/2023 | 6/12/2023 | 7/13/2023 | 0.50 | 30.64 | 31.14 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 541.80 | 5/23/2023 | 5/23/2023 | 6/14/2023 | 0.50 | 21.61 | 22.11 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,738.05 | 2/2/2023 | 2/2/2023 | 3/14/2023 | 0.50 | 39.65 | 40.15 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 500.74 | 2/2/2023 | 2/2/2023 | 3/14/2023 | 0.50 | 39.65 | 40.15 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 4,015.71 | 2/6/2023 | 2/6/2023 | 3/14/2023 | 0.50 | 35.63 | 36.13 | 0.023% | 0.01 |
| MISSISSIPPI LIME COMPANY | 5,212.08 | 7/3/2023 | 7/3/2023 | 8/14/2023 | 0.50 | 41.62 | 42.12 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 1.96 | 12/4/2023 | 12/4/2023 | 1/11/2024 | 0.50 | 37.72 | 38.22 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3.59 | 11/22/2023 | 11/22/2023 | 12/14/2023 | 0.50 | 21.60 | 22.10 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 12.05 | 4/13/2023 | 4/13/2023 | 5/11/2023 | 0.50 | 27.49 | 27.99 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 16.09 | 1/25/2023 | 1/25/2023 | 2/14/2023 | 0.50 | 19.58 | 20.08 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,050.08 | 11/14/2023 | 11/23/2023 | 12/14/2023 | 5.00 | 20.37 | 25.37 | 0.029% | 0.01 |
| MISSISSIPPI LIME COMPANY | 10.12 | 6/19/2023 | 6/19/2023 | 7/13/2023 | 0.50 | 23.68 | 24.18 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 2.68 | 9/6/2023 | 9/6/2023 | 10/12/2023 | 0.50 | 36.00 | 36.50 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,789.41 | 1/31/2023 | 1/31/2023 | 2/14/2023 | 0.50 | 13.74 | 14.24 | 0.022% | 0.00 |
| MISSISSIPPI LIME COMPANY | 500.31 | 3/12/2023 | 3/12/2023 | 4/13/2023 | 0.51 | 31.63 | 32.13 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,792.62 | 1/19/2023 | 1/19/2023 | 2/14/2023 | 0.50 | 25.75 | 26.25 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 505.90 | 1/24/2023 | 1/24/2023 | 2/14/2023 | 0.50 | 20.59 | 21.09 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 503.10 | 1/24/2023 | 1/24/2023 | 2/14/2023 | 0.50 | 20.58 | 21.08 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 526.75 | 2/8/2023 | 2/8/2023 | 3/14/2023 | 0.50 | 33.46 | 33.96 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 516.86 | 2/1/2023 | 2/1/2023 | 3/14/2023 | 0.50 | 40.66 | 41.16 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 509.55 | 6/27/2023 | 6/27/2023 | 7/13/2023 | 0.50 | 15.57 | 16.07 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 1.98 | 12/27/2023 | 12/27/2023 | 1/11/2024 | 0.50 | 14.89 | 15.39 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 579.84 | 7/24/2023 | 7/24/2023 | 8/14/2023 | 0.50 | 20.44 | 20.94 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 1.99 | 12/1/2023 | 12/1/2023 | 1/11/2024 | 0.50 | 40.43 | 40.93 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 15.69 | 1/16/2023 | 1/16/2023 | 2/14/2023 | 0.50 | 28.46 | 28.96 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 12.74 | 4/14/2023 | 4/14/2023 | 5/11/2023 | 0.50 | 26.49 | 26.99 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,136.48 | 7/11/2023 | 7/11/2023 | 8/14/2023 | 0.50 | 33.61 | 34.11 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 10.30 | 6/6/2023 | 6/6/2023 | 7/13/2023 | 0.50 | 36.68 | 37.18 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 580.79 | 7/6/2023 | 7/6/2023 | 8/14/2023 | 0.50 | 38.66 | 39.16 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 12.07 | 4/17/2023 | 4/17/2023 | 5/11/2023 | 0.50 | 23.69 | 24.19 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 14.06 | 3/22/2023 | 3/22/2023 | 4/13/2023 | 0.50 | 21.69 | 22.19 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 516.22 | 3/27/2023 | 3/27/2023 | 4/13/2023 | 0.50 | 16.69 | 17.19 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,184.00 | 8/1/2023 | 8/1/2023 | 9/14/2023 | 0.50 | 43.57 | 44.07 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 514.71 | 6/21/2023 | 6/21/2023 | 7/13/2023 | 0.50 | 21.48 | 21.98 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 10.74 | 6/7/2023 | 6/7/2023 | 7/13/2023 | 0.50 | 35.68 | 36.18 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,954.72 | 3/29/2023 | 3/29/2023 | 4/13/2023 | 0.50 | 14.69 | 15.19 | 0.023% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,961.14 | 5/24/2023 | 5/24/2023 | 6/14/2023 | 0.50 | 20.61 | 21.11 | 0.023% | 0.00 |
| MISSISSIPPI LIME COMPANY | 11.85 | 5/24/2023 | 5/24/2023 | 6/14/2023 | 0.50 | 20.61 | 21.11 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,454.00 | 7/31/2023 | 7/31/2023 | 8/14/2023 | 0.50 | 13.57 | 14.07 | 0.031% | 0.00 |
| MISSISSIPPI LIME COMPANY | 15.51 | 2/6/2023 | 2/6/2023 | 3/14/2023 | 0.50 | 35.63 | 36.13 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 510.63 | 5/9/2023 | 5/9/2023 | 6/14/2023 | 0.50 | 35.53 | 36.03 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 518.15 | 5/10/2023 | 5/10/2023 | 6/14/2023 | 0.50 | 34.52 | 35.02 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 590.93 | 7/27/2023 | 7/27/2023 | 8/14/2023 | 0.50 | 17.51 | 18.01 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,281.20 | 12/4/2023 | 12/4/2023 | 1/11/2024 | 0.50 | 37.72 | 38.22 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 564.04 | 11/22/2023 | 11/22/2023 | 12/14/2023 | 0.50 | 21.60 | 22.10 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 2.00 | 12/5/2023 | 12/5/2023 | 1/11/2024 | 0.50 | 36.60 | 37.10 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 590.22 | 12/5/2023 | 12/5/2023 | 1/11/2024 | 0.50 | 36.60 | 37.10 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,164.56 | 11/3/2023 | 11/3/2023 | 12/14/2023 | 0.50 | 40.44 | 40.94 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3.71 | 11/8/2023 | 11/8/2023 | 12/14/2023 | 0.50 | 35.42 | 35.92 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 15.39 | 1/3/2023 | 1/3/2023 | 2/14/2023 | 0.50 | 41.68 | 42.18 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 15.50 | 1/4/2023 | 1/4/2023 | 2/14/2023 | 0.50 | 40.68 | 41.18 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 604.61 | 11/20/2023 | 11/20/2023 | 12/14/2023 | 0.50 | 23.39 | 23.89 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 586.92 | 12/13/2023 | 12/13/2023 | 1/11/2024 | 0.50 | 28.59 | 29.09 | 0.003% | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|
| MISSISSIPPI LIME COMPANY | 5,374.08 | 12/13/2023 | 12/13/2023 | 1/11/2024 | 0.50 | 28.59 | 29.09 | 0.031% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3,792.62 | 4/13/2023 | 4/13/2023 | 5/11/2023 | 0.50 | 27.49 | 27.99 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 4,036.58 | 4/4/2023 | 4/4/2023 | 5/11/2023 | 0.50 | 36.42 | 36.92 | 0.023% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3.75 | 11/12/2023 | 11/12/2023 | 12/14/2023 | 0.50 | 31.47 | 31.97 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,924.23 | 6/9/2023 | 6/9/2023 | 7/13/2023 | 0.50 | 33.46 | 33.96 | 0.023% | 0.01 |
| MISSISSIPPI LIME COMPANY | 566.63 | 11/6/2023 | 11/6/2023 | 12/14/2023 | 0.50 | 37.81 | 38.31 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,961.14 | 3/19/2023 | 3/19/2023 | 4/13/2023 | 0.50 | 24.49 | 24.99 | 0.023% | 0.01 |
| MISSISSIPPI LIME COMPANY | 5,238.00 | 12/11/2023 | 12/11/2023 | 1/11/2024 | 0.50 | 30.53 | 31.03 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 10.65 | 6/13/2023 | 6/13/2023 | 7/13/2023 | 0.50 | 29.61 | 30.11 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 13.26 | 3/12/2023 | 3/12/2023 | 4/13/2023 | 0.51 | 31.63 | 32.13 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,802.25 | 6/28/2023 | 6/28/2023 | 7/13/2023 | 0.51 | 14.66 | 15.17 | 0.022% | 0.00 |
| MISSISSIPPI LIME COMPANY | 2.00 | 12/24/2023 | 12/24/2023 | 1/11/2024 | 0.50 | 17.08 | 17.58 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 508.05 | 1/19/2023 | 1/19/2023 | 2/14/2023 | 0.50 | 25.75 | 26.25 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 15.44 | 1/24/2023 | 1/24/2023 | 2/14/2023 | 0.50 | 20.58 | 21.08 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,744.47 | 2/7/2023 | 2/7/2023 | 3/14/2023 | 0.50 | 34.43 | 34.93 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 14.95 | 2/7/2023 | 2/7/2023 | 3/14/2023 | 0.50 | 34.43 | 34.93 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 590.69 | 12/22/2023 | 12/22/2023 | 1/11/2024 | 0.50 | 19.87 | 20.37 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 513.64 | 5/31/2023 | 5/31/2023 | 6/14/2023 | 0.50 | 13.69 | 14.19 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,279.04 | 7/26/2023 | 7/26/2023 | 8/14/2023 | 0.50 | 18.51 | 19.01 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 16.12 | 1/10/2023 | 1/10/2023 | 2/14/2023 | 0.50 | 34.49 | 34.99 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 15.92 | 1/9/2023 | 1/9/2023 | 2/14/2023 | 0.50 | 35.50 | 36.00 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,374.08 | 12/1/2023 | 12/1/2023 | 1/11/2024 | 0.50 | 40.43 | 40.93 | 0.031% | 0.01 |
| MISSISSIPPI LIME COMPANY | 511.06 | 6/15/2023 | 6/15/2023 | 7/13/2023 | 0.50 | 27.72 | 28.22 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 2.61 | 9/5/2023 | 9/5/2023 | 10/12/2023 | 0.50 | 36.55 | 37.05 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 559.32 | 9/5/2023 | 9/5/2023 | 10/12/2023 | 0.50 | 36.55 | 37.05 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 14.22 | 3/28/2023 | 3/28/2023 | 4/13/2023 | 0.50 | 15.69 | 16.19 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,207.76 | 9/8/2023 | 9/8/2023 | 10/12/2023 | 0.50 | 33.54 | 34.04 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 15.83 | 1/16/2023 | 1/16/2023 | 2/14/2023 | 0.50 | 28.46 | 28.96 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 4,009.29 | 4/14/2023 | 4/14/2023 | 5/11/2023 | 0.50 | 26.49 | 26.99 | 0.023% | 0.01 |
| MISSISSIPPI LIME COMPANY | 537.07 | 4/19/2023 | 4/19/2023 | 5/11/2023 | 0.50 | 21.65 | 22.15 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 577.01 | 7/7/2023 | 7/7/2023 | 8/14/2023 | 0.50 | 37.61 | 38.11 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,365.44 | 7/19/2023 | 7/19/2023 | 8/14/2023 | 0.50 | 25.50 | 26.00 | 0.031% | 0.01 |
| MISSISSIPPI LIME COMPANY | 5,093.28 | 7/20/2023 | 7/20/2023 | 8/14/2023 | 0.50 | 24.49 | 24.99 | 0.029% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3,644.96 | 6/23/2023 | 6/23/2023 | 7/13/2023 | 0.50 | 19.75 | 20.25 | 0.021% | 0.00 |
| MISSISSIPPI LIME COMPANY | 500.52 | 6/30/2023 | 6/30/2023 | 7/13/2023 | 0.50 | 12.74 | 13.24 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,797.43 | 4/17/2023 | 4/17/2023 | 5/11/2023 | 0.50 | 23.69 | 24.19 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 4,980.96 | 8/18/2023 | 8/18/2023 | 9/14/2023 | 0.50 | 26.68 | 27.18 | 0.029% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3,999.66 | 6/26/2023 | 6/26/2023 | 7/13/2023 | 0.50 | 16.48 | 16.98 | 0.023% | 0.00 |
| MISSISSIPPI LIME COMPANY | 543.09 | 6/7/2023 | 6/7/2023 | 7/13/2023 | 0.50 | 35.68 | 36.18 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 530.62 | 5/24/2023 | 5/24/2023 | 6/14/2023 | 0.50 | 20.61 | 21.11 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 595.65 | 7/31/2023 | 7/31/2023 | 8/14/2023 | 0.50 | 13.57 | 14.07 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 11.61 | 5/11/2023 | 5/11/2023 | 6/14/2023 | 0.50 | 33.55 | 34.05 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 576.78 | 12/4/2023 | 12/4/2023 | 1/11/2024 | 0.50 | 37.72 | 38.22 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,164.56 | 11/22/2023 | 11/22/2023 | 12/14/2023 | 0.50 | 21.60 | 22.10 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 5,389.20 | 11/21/2023 | 11/21/2023 | 12/14/2023 | 0.50 | 22.38 | 22.88 | 0.031% | 0.01 |
| MISSISSIPPI LIME COMPANY | 5,335.20 | 11/8/2023 | 11/8/2023 | 12/14/2023 | 0.50 | 35.42 | 35.92 | 0.031% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3,742.86 | 1/3/2023 | 1/3/2023 | 2/14/2023 | 0.50 | 41.68 | 42.18 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 5,536.08 | 11/20/2023 | 11/20/2023 | 12/14/2023 | 0.50 | 23.39 | 23.89 | 0.032% | 0.01 |
| MISSISSIPPI LIME COMPANY | 508.05 | 4/13/2023 | 4/13/2023 | 5/11/2023 | 0.50 | 27.49 | 27.99 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 10.09 | 6/2/2023 | 6/2/2023 | 7/13/2023 | 0.50 | 40.70 | 41.20 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 12.83 | 4/4/2023 | 4/4/2023 | 5/11/2023 | 0.50 | 36.42 | 36.92 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,352.48 | 7/10/2023 | 7/10/2023 | 8/14/2023 | 0.50 | 34.47 | 34.97 | 0.031% | 0.01 |
| MISSISSIPPI LIME COMPANY | 558.38 | 7/18/2023 | 7/18/2023 | 8/14/2023 | 0.50 | 26.70 | 27.20 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 10.37 | 6/22/2023 | 6/22/2023 | 7/13/2023 | 0.50 | 20.53 | 21.03 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,819.90 | 6/19/2023 | 6/19/2023 | 7/13/2023 | 0.50 | 23.55 | 24.05 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3,789.41 | 1/27/2023 | 1/27/2023 | 2/14/2023 | 0.50 | 17.74 | 18.24 | 0.022% | 0.00 |
| MISSISSIPPI LIME COMPANY | 15.58 | 1/31/2023 | 1/31/2023 | 2/14/2023 | 0.50 | 13.74 | 14.24 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 9.66 | 6/8/2023 | 6/8/2023 | 7/13/2023 | 0.50 | 34.47 | 34.97 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 578.43 | 7/2/2023 | 7/2/2023 | 8/14/2023 | 0.50 | 42.62 | 43.12 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 558.14 | 8/2/2023 | 8/2/2023 | 9/14/2023 | 0.50 | 42.57 | 43.07 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 539.87 | 6/5/2023 | 6/5/2023 | 7/13/2023 | 0.50 | 37.70 | 38.20 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,776.57 | 1/24/2023 | 1/24/2023 | 2/14/2023 | 0.50 | 20.59 | 21.09 | 0.022% | 0.00 |
| MISSISSIPPI LIME COMPANY | 2.00 | 12/22/2023 | 12/22/2023 | 1/11/2024 | 0.50 | 19.87 | 20.37 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 10.07 | 6/27/2023 | 6/27/2023 | 7/13/2023 | 0.50 | 15.57 | 16.07 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 585.98 | 7/13/2023 | 7/13/2023 | 8/14/2023 | 0.50 | 31.43 | 31.93 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,309.28 | 7/24/2023 | 7/24/2023 | 8/14/2023 | 0.50 | 20.44 | 20.94 | 0.031% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3,973.98 | 1/11/2023 | 1/11/2023 | 2/14/2023 | 0.50 | 33.49 | 33.99 | 0.023% | 0.01 |
| MISSISSIPPI LIME COMPANY | 509.55 | 1/13/2023 | 1/13/2023 | 2/14/2023 | 0.50 | 31.46 | 31.96 | 0.003% | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|
| MISSISSIPPI LIME COMPANY | 3,871.26 | 1/9/2023 | 1/9/2023 | 2/14/2023 | 0.50 | 35.50 | 36.00 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3,977.19 | 6/14/2023 | 6/14/2023 | 7/13/2023 | 0.50 | 28.72 | 29.22 | 0.023% | 0.01 |
| MISSISSIPPI LIME COMPANY | 532.77 | 6/14/2023 | 6/14/2023 | 7/13/2023 | 0.50 | 28.72 | 29.22 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 4,022.13 | 2/2/2023 | 2/2/2023 | 3/14/2023 | 0.50 | 39.65 | 40.15 | 0.023% | 0.01 |
| MISSISSIPPI LIME COMPANY | 13.62 | 3/21/2023 | 3/21/2023 | 4/13/2023 | 0.50 | 22.50 | 23.00 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,203.44 | 8/31/2023 | 8/31/2023 | 9/14/2023 | 0.50 | 13.57 | 14.07 | 0.030% | 0.00 |
| MISSISSIPPI LIME COMPANY | 13.86 | 3/30/2023 | 3/30/2023 | 4/13/2023 | 0.50 | 13.69 | 14.19 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 4,009.29 | 4/19/2023 | 4/19/2023 | 5/11/2023 | 0.50 | 21.65 | 22.15 | 0.023% | 0.01 |
| MISSISSIPPI LIME COMPANY | 4,055.84 | 3/15/2023 | 3/15/2023 | 4/13/2023 | 0.50 | 28.49 | 28.99 | 0.023% | 0.01 |
| MISSISSIPPI LIME COMPANY | 5,207.76 | 8/15/2023 | 8/15/2023 | 9/14/2023 | 0.50 | 29.72 | 30.23 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3,888.92 | 6/6/2023 | 6/6/2023 | 7/13/2023 | 0.50 | 36.68 | 37.18 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 585.98 | 7/19/2023 | 7/19/2023 | 8/14/2023 | 0.50 | 25.50 | 26.00 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 566.16 | 8/1/2023 | 8/1/2023 | 9/14/2023 | 0.50 | 43.57 | 44.07 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 513.64 | 1/31/2023 | 1/31/2023 | 2/14/2023 | 0.50 | 13.74 | 14.24 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 4,754.16 | 8/24/2023 | 8/24/2023 | 9/14/2023 | 0.50 | 20.89 | 21.39 | 0.027% | 0.01 |
| MISSISSIPPI LIME COMPANY | 5,207.76 | 8/16/2023 | 8/17/2023 | 9/14/2023 | 1.00 | 27.69 | 28.69 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 5,296.32 | 8/21/2023 | 8/21/2023 | 9/14/2023 | 0.50 | 23.58 | 24.08 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 4,017.32 | 3/21/2023 | 3/21/2023 | 4/13/2023 | 0.50 | 22.50 | 23.00 | 0.023% | 0.01 |
| MISSISSIPPI LIME COMPANY | 11.57 | 5/10/2023 | 5/10/2023 | 6/14/2023 | 0.50 | 34.52 | 35.02 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,410.80 | 7/27/2023 | 7/27/2023 | 8/14/2023 | 0.50 | 17.51 | 18.01 | 0.031% | 0.01 |
| MISSISSIPPI LIME COMPANY | 5,125.68 | 7/14/2023 | 7/14/2023 | 8/14/2023 | 0.50 | 30.47 | 30.97 | 0.029% | 0.01 |
| MISSISSIPPI LIME COMPANY | 559.79 | 7/14/2023 | 7/14/2023 | 8/14/2023 | 0.50 | 30.47 | 30.97 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,404.32 | 12/5/2023 | 12/5/2023 | 1/11/2024 | 0.50 | 36.60 | 37.10 | 0.031% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3.74 | 11/21/2023 | 11/21/2023 | 12/14/2023 | 0.50 | 22.38 | 22.88 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3.54 | 11/9/2023 | 11/9/2023 | 12/14/2023 | 0.50 | 34.38 | 34.88 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 501.38 | 1/3/2023 | 1/3/2023 | 2/14/2023 | 0.50 | 41.68 | 42.18 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 556.02 | 11/17/2023 | 11/17/2023 | 12/14/2023 | 0.50 | 26.39 | 26.89 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 12.28 | 4/5/2023 | 4/5/2023 | 5/11/2023 | 0.50 | 35.42 | 35.92 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,864.84 | 4/5/2023 | 4/5/2023 | 5/11/2023 | 0.50 | 35.42 | 35.92 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 1.99 | 12/13/2023 | 12/13/2023 | 1/11/2024 | 0.50 | 28.59 | 29.09 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 10.73 | 6/2/2023 | 6/2/2023 | 7/13/2023 | 0.50 | 40.69 | 41.19 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 542.88 | 6/2/2023 | 6/2/2023 | 7/13/2023 | 0.50 | 40.69 | 41.19 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,912.99 | 1/25/2023 | 1/25/2023 | 2/14/2023 | 0.50 | 19.58 | 20.08 | 0.023% | 0.00 |
| MISSISSIPPI LIME COMPANY | 10.39 | 6/9/2023 | 6/9/2023 | 7/13/2023 | 0.50 | 33.46 | 33.96 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,914.60 | 6/22/2023 | 6/22/2023 | 7/13/2023 | 0.50 | 20.53 | 21.03 | 0.023% | 0.00 |
| MISSISSIPPI LIME COMPANY | 574.89 | 9/6/2023 | 9/6/2023 | 10/12/2023 | 0.50 | 36.00 | 36.50 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,307.12 | 9/8/2023 | 9/8/2023 | 10/12/2023 | 0.50 | 33.65 | 34.15 | 0.031% | 0.01 |
| MISSISSIPPI LIME COMPANY | 10.07 | 6/28/2023 | 6/28/2023 | 7/13/2023 | 0.51 | 14.66 | 15.17 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,945.09 | 1/23/2023 | 1/23/2023 | 2/14/2023 | 0.50 | 21.74 | 22.24 | 0.023% | 0.01 |
| MISSISSIPPI LIME COMPANY | 589.75 | 12/24/2023 | 12/24/2023 | 1/11/2024 | 0.50 | 17.08 | 17.58 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 15.19 | 1/20/2023 | 1/20/2023 | 2/14/2023 | 0.50 | 24.75 | 25.25 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,858.42 | 2/1/2023 | 2/1/2023 | 3/14/2023 | 0.50 | 40.66 | 41.16 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 518.37 | 2/7/2023 | 2/7/2023 | 3/14/2023 | 0.50 | 34.43 | 34.93 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,408.64 | 12/22/2023 | 12/22/2023 | 1/11/2024 | 0.50 | 19.87 | 20.37 | 0.031% | 0.01 |
| MISSISSIPPI LIME COMPANY | 5,276.88 | 12/28/2023 | 12/28/2023 | 1/11/2024 | 0.50 | 13.64 | 14.14 | 0.030% | 0.00 |
| MISSISSIPPI LIME COMPANY | 1.95 | 12/28/2023 | 12/28/2023 | 1/11/2024 | 0.50 | 13.64 | 14.14 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 589.51 | 7/17/2023 | 7/17/2023 | 8/14/2023 | 0.50 | 27.43 | 27.93 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,803.85 | 1/13/2023 | 1/13/2023 | 2/14/2023 | 0.50 | 31.46 | 31.96 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 15.64 | 1/13/2023 | 1/13/2023 | 2/14/2023 | 0.50 | 31.46 | 31.96 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,874.47 | 1/4/2023 | 1/4/2023 | 2/14/2023 | 0.50 | 40.50 | 41.00 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 519.01 | 1/4/2023 | 1/4/2023 | 2/14/2023 | 0.50 | 40.50 | 41.00 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 586.92 | 12/1/2023 | 12/1/2023 | 1/11/2024 | 0.50 | 40.43 | 40.93 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,815.09 | 6/15/2023 | 6/15/2023 | 7/13/2023 | 0.50 | 27.72 | 28.22 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 2.64 | 9/12/2023 | 9/12/2023 | 10/12/2023 | 0.50 | 29.03 | 29.53 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,850.40 | 1/16/2023 | 1/16/2023 | 2/14/2023 | 0.50 | 28.46 | 28.96 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 577.25 | 8/7/2023 | 8/7/2023 | 9/14/2023 | 0.50 | 37.69 | 38.19 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,192.64 | 8/8/2023 | 8/8/2023 | 9/14/2023 | 0.50 | 36.69 | 37.19 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 576.78 | 8/16/2023 | 8/16/2023 | 9/14/2023 | 0.50 | 28.68 | 29.19 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 560.97 | 7/11/2023 | 7/11/2023 | 8/14/2023 | 0.50 | 33.61 | 34.11 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 585.74 | 12/26/2023 | 12/26/2023 | 1/11/2024 | 0.50 | 15.58 | 16.08 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,283.36 | 7/20/2023 | 7/20/2023 | 8/14/2023 | 0.50 | 24.50 | 25.00 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3,959.54 | 3/22/2023 | 3/22/2023 | 4/13/2023 | 0.50 | 21.69 | 22.19 | 0.023% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3,853.61 | 3/27/2023 | 3/27/2023 | 4/13/2023 | 0.50 | 16.69 | 17.19 | 0.022% | 0.00 |
| MISSISSIPPI LIME COMPANY | 13.69 | 3/27/2023 | 3/27/2023 | 4/13/2023 | 0.50 | 16.69 | 17.19 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 583.85 | 8/14/2023 | 8/14/2023 | 9/14/2023 | 0.50 | 30.46 | 30.96 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 15.77 | 1/31/2023 | 1/31/2023 | 2/14/2023 | 0.50 | 13.74 | 14.24 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 519.22 | 8/24/2023 | 8/24/2023 | 9/14/2023 | 0.50 | 20.89 | 21.39 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 568.75 | 8/16/2023 | 8/17/2023 | 9/14/2023 | 1.00 | 27.69 | 28.69 | 0.003% | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|
| MISSISSIPPI LIME COMPANY | 578.43 | 8/21/2023 | 8/21/2023 | 9/14/2023 | 0.50 | 23.58 | 24.08 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 14.27 | 3/21/2023 | 3/21/2023 | 4/13/2023 | 0.50 | 22.50 | 23.00 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,842.37 | 6/21/2023 | 6/21/2023 | 7/13/2023 | 0.50 | 21.48 | 21.98 | 0.022% | 0.00 |
| MISSISSIPPI LIME COMPANY | 10.17 | 6/21/2023 | 6/21/2023 | 7/13/2023 | 0.50 | 21.48 | 21.98 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 10.59 | 6/26/2023 | 6/26/2023 | 7/13/2023 | 0.50 | 16.48 | 16.98 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 536.64 | 4/3/2023 | 4/3/2023 | 5/11/2023 | 0.50 | 37.73 | 38.23 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 10.18 | 6/12/2023 | 6/12/2023 | 7/13/2023 | 0.50 | 30.64 | 31.14 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 4,044.60 | 5/23/2023 | 5/23/2023 | 6/14/2023 | 0.50 | 21.61 | 22.11 | 0.023% | 0.01 |
| MISSISSIPPI LIME COMPANY | 12.10 | 5/23/2023 | 5/23/2023 | 6/14/2023 | 0.50 | 21.61 | 22.11 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 11.40 | 5/9/2023 | 5/9/2023 | 6/14/2023 | 0.50 | 35.53 | 36.03 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 588.57 | 11/21/2023 | 11/21/2023 | 12/14/2023 | 0.50 | 22.38 | 22.88 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 582.67 | 11/8/2023 | 11/8/2023 | 12/14/2023 | 0.50 | 35.42 | 35.92 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,091.12 | 11/17/2023 | 11/17/2023 | 12/14/2023 | 0.50 | 26.39 | 26.89 | 0.029% | 0.01 |
| MISSISSIPPI LIME COMPANY | 4,052.63 | 6/2/2023 | 6/2/2023 | 7/13/2023 | 0.50 | 40.69 | 41.19 | 0.023% | 0.01 |
| MISSISSIPPI LIME COMPANY | 571.59 | 12/20/2023 | 12/20/2023 | 1/11/2024 | 0.50 | 21.57 | 22.07 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 538.58 | 4/17/2023 | 4/17/2023 | 5/11/2023 | 0.50 | 23.49 | 23.99 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,112.72 | 7/18/2023 | 7/18/2023 | 8/14/2023 | 0.50 | 26.70 | 27.20 | 0.029% | 0.01 |
| MISSISSIPPI LIME COMPANY | 511.70 | 6/19/2023 | 6/19/2023 | 7/13/2023 | 0.50 | 23.55 | 24.05 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,263.92 | 9/6/2023 | 9/6/2023 | 10/12/2023 | 0.50 | 36.00 | 36.50 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 507.62 | 1/27/2023 | 1/27/2023 | 2/14/2023 | 0.50 | 17.74 | 18.24 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 4,057.44 | 5/25/2023 | 5/25/2023 | 6/14/2023 | 0.50 | 19.61 | 20.11 | 0.023% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,110.56 | 8/2/2023 | 8/2/2023 | 9/14/2023 | 0.50 | 42.57 | 43.07 | 0.029% | 0.01 |
| MISSISSIPPI LIME COMPANY | 509.34 | 6/28/2023 | 6/28/2023 | 7/13/2023 | 0.51 | 14.66 | 15.17 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,824.72 | 6/29/2023 | 6/29/2023 | 7/13/2023 | 0.50 | 13.72 | 14.22 | 0.022% | 0.00 |
| MISSISSIPPI LIME COMPANY | 10.13 | 6/29/2023 | 6/29/2023 | 7/13/2023 | 0.50 | 13.72 | 14.22 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,755.70 | 1/24/2023 | 1/24/2023 | 2/14/2023 | 0.50 | 20.58 | 21.08 | 0.022% | 0.00 |
| MISSISSIPPI LIME COMPANY | 14.46 | 2/7/2023 | 2/7/2023 | 3/14/2023 | 0.50 | 34.43 | 34.93 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 501.60 | 2/7/2023 | 2/7/2023 | 3/14/2023 | 0.50 | 34.43 | 34.93 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 15.19 | 2/8/2023 | 2/8/2023 | 3/14/2023 | 0.50 | 33.46 | 33.96 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 561.21 | 8/3/2023 | 8/3/2023 | 9/14/2023 | 0.50 | 41.55 | 42.05 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 553.66 | 12/8/2023 | 12/8/2023 | 1/11/2024 | 0.50 | 33.42 | 33.92 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,834.35 | 5/31/2023 | 5/31/2023 | 6/14/2023 | 0.50 | 13.69 | 14.19 | 0.022% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,397.84 | 7/17/2023 | 7/17/2023 | 8/14/2023 | 0.50 | 27.43 | 27.93 | 0.031% | 0.01 |
| MISSISSIPPI LIME COMPANY | 532.34 | 1/11/2023 | 1/11/2023 | 2/14/2023 | 0.50 | 33.49 | 33.99 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 514.28 | 1/18/2023 | 1/18/2023 | 2/14/2023 | 0.50 | 26.46 | 26.96 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 10.53 | 6/14/2023 | 6/14/2023 | 7/13/2023 | 0.50 | 28.72 | 29.22 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 2.65 | 9/8/2023 | 9/8/2023 | 10/12/2023 | 0.50 | 33.54 | 34.04 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 513.85 | 3/21/2023 | 3/21/2023 | 4/13/2023 | 0.50 | 22.50 | 23.00 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,054.40 | 8/9/2023 | 8/9/2023 | 9/14/2023 | 0.50 | 35.64 | 36.14 | 0.029% | 0.01 |
| MISSISSIPPI LIME COMPANY | 552.01 | 8/9/2023 | 8/9/2023 | 9/14/2023 | 0.50 | 35.64 | 36.14 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 537.07 | 4/14/2023 | 4/14/2023 | 5/11/2023 | 0.50 | 26.49 | 26.99 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,281.20 | 8/16/2023 | 8/16/2023 | 9/14/2023 | 0.50 | 28.68 | 29.19 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 1.99 | 12/26/2023 | 12/26/2023 | 1/11/2024 | 0.50 | 15.58 | 16.08 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,231.52 | 12/18/2023 | 12/18/2023 | 1/11/2024 | 0.50 | 23.75 | 24.25 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 571.35 | 12/18/2023 | 12/18/2023 | 1/11/2024 | 0.50 | 23.75 | 24.25 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 543.31 | 3/15/2023 | 3/15/2023 | 4/13/2023 | 0.50 | 28.49 | 28.99 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 568.75 | 8/15/2023 | 8/15/2023 | 9/14/2023 | 0.50 | 29.72 | 30.23 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 577.01 | 7/20/2023 | 7/20/2023 | 8/14/2023 | 0.50 | 24.50 | 25.00 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 556.25 | 7/20/2023 | 7/20/2023 | 8/14/2023 | 0.50 | 24.49 | 24.99 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 9.89 | 6/30/2023 | 6/30/2023 | 7/13/2023 | 0.50 | 12.74 | 13.24 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 530.41 | 3/22/2023 | 3/22/2023 | 4/13/2023 | 0.50 | 21.69 | 22.19 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 2.65 | 9/7/2023 | 9/7/2023 | 10/12/2023 | 0.50 | 34.87 | 35.37 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 568.28 | 9/7/2023 | 9/7/2023 | 10/12/2023 | 0.50 | 34.87 | 35.37 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,834.35 | 1/31/2023 | 1/31/2023 | 2/14/2023 | 0.50 | 13.74 | 14.24 | 0.022% | 0.00 |
| MISSISSIPPI LIME COMPANY | 543.99 | 8/18/2023 | 8/18/2023 | 9/14/2023 | 0.50 | 26.68 | 27.18 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,382.72 | 8/23/2023 | 8/23/2023 | 9/14/2023 | 0.50 | 21.93 | 22.43 | 0.031% | 0.01 |
| MISSISSIPPI LIME COMPANY | 535.78 | 6/26/2023 | 6/26/2023 | 7/13/2023 | 0.50 | 16.48 | 16.98 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 537.93 | 2/6/2023 | 2/6/2023 | 3/14/2023 | 0.50 | 35.63 | 36.13 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,811.88 | 5/9/2023 | 5/9/2023 | 6/14/2023 | 0.50 | 35.53 | 36.03 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 5,142.96 | 7/5/2023 | 7/5/2023 | 8/14/2023 | 0.50 | 39.63 | 40.13 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 2.71 | 9/11/2023 | 9/11/2023 | 10/12/2023 | 0.50 | 30.49 | 30.99 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,132.16 | 11/27/2023 | 11/27/2023 | 12/14/2023 | 0.50 | 16.82 | 17.32 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3.59 | 11/3/2023 | 11/3/2023 | 12/14/2023 | 0.50 | 40.44 | 40.94 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 564.04 | 11/3/2023 | 11/3/2023 | 12/14/2023 | 0.50 | 40.44 | 40.94 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 556.02 | 11/9/2023 | 11/9/2023 | 12/14/2023 | 0.50 | 34.38 | 34.88 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 517.72 | 4/5/2023 | 4/5/2023 | 5/11/2023 | 0.50 | 35.42 | 35.92 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3,810.27 | 6/2/2023 | 6/2/2023 | 7/13/2023 | 0.50 | 40.70 | 41.20 | 0.022% | 0.01 |
| MISSISSIPPI LIME COMPANY | 9.98 | 6/2/2023 | 6/2/2023 | 7/13/2023 | 0.50 | 40.69 | 41.19 | 0.000% | 0.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MISSISSIPPI LIME COMPANY | 504.82 | 6/2/2023 | 6/2/2023 | 7/13/2023 | 0.50 | 40.69 | 41.19 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 12.78 | 4/17/2023 | 4/17/2023 | 5/11/2023 | 0.50 | 23.49 | 23.99 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,406.48 | 11/12/2023 | 11/12/2023 | 12/14/2023 | 0.50 | 31.47 | 31.97 | 0.031% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3.51 | 11/14/2023 | 11/23/2023 | 12/14/2023 | 5.00 | 20.37 | 25.37 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 3.60 | 11/6/2023 | 11/6/2023 | 12/14/2023 | 0.50 | 37.81 | 38.31 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 15.58 | 1/27/2023 | 1/27/2023 | 2/14/2023 | 0.50 | 17.74 | 18.24 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 572.06 | 12/11/2023 | 12/11/2023 | 1/11/2024 | 0.50 | 30.53 | 31.03 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 12.13 | 5/25/2023 | 5/25/2023 | 6/14/2023 | 0.50 | 19.61 | 20.11 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 488.70 | 6/8/2023 | 6/8/2023 | 7/13/2023 | 0.50 | 34.47 | 34.97 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 4,023.74 | 6/13/2023 | 6/13/2023 | 7/13/2023 | 0.50 | 29.61 | 30.11 | 0.023% | 0.01 |
| MISSISSIPPI LIME COMPANY | 539.01 | 6/13/2023 | 6/13/2023 | 7/13/2023 | 0.50 | 29.61 | 30.11 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,296.32 | 7/2/2023 | 7/2/2023 | 8/14/2023 | 0.50 | 42.62 | 43.12 | 0.030% | 0.01 |
| MISSISSIPPI LIME COMPANY | 579.37 | 12/18/2023 | 12/18/2023 | 1/11/2024 | 0.50 | 23.98 | 24.48 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 5,400.00 | 12/24/2023 | 12/24/2023 | 1/11/2024 | 0.50 | 17.08 | 17.58 | 0.031% | 0.01 |
| MISSISSIPPI LIME COMPANY | 4,030.16 | 6/5/2023 | 6/5/2023 | 7/13/2023 | 0.50 | 37.70 | 38.20 | 0.023% | 0.01 |
| MISSISSIPPI LIME COMPANY | 3,694.71 | 1/20/2023 | 1/20/2023 | 2/14/2023 | 0.50 | 24.75 | 25.25 | 0.021% | 0.01 |
| MISSISSIPPI LIME COMPANY | 14.66 | 2/7/2023 | 2/7/2023 | 3/14/2023 | 0.50 | 34.43 | 34.93 | 0.000% | 0.00 |
| MISSISSIPPI LIME COMPANY | 508.26 | 2/7/2023 | 2/7/2023 | 3/14/2023 | 0.50 | 34.43 | 34.93 | 0.003% | 0.00 |
| MISSISSIPPI LIME COMPANY | 1.88 | 12/8/2023 | 12/8/2023 | 1/11/2024 | 0.50 | 33.42 | 33.92 | 0.000% | 0.00 |
| | $ 17,381,773.13 | | | | | | | | 20.53 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**EMISSIONS FEES**

Weighted Lead Time: 577.50 days

| Vendor Name | Invoice Amount | Period Beginning | Period End | Payment Date | Service Lead Time | Payment Lead Time | Total Lead Time | Weighting Factor | Dollar-Weighted Days |
|---|---|---|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) |
| State of Kentucky Treasurer | $ 450,656.00 | 1/1/2021 | 12/31/2021 | 1/30/2023 | 182.50 | 395.00 | 577.50 | 100.00% | 577.50 |
| | $450,656.00 | | | | | | | | 577.50 |

**Duke Kentucky**
**Calculation of Payroll Lag Days**
**12 Months Ended Dec 31, 2023**
**Payroll Lead Lag Summary**

| Line No | Gross Payroll Items Duke Kentucky | Amount | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|
| 1 | (A) | (B) | (C) | (D) |
| 2 | Bi-Weekly Net Payroll | $9,666,149 | 11.50 | $111,160,717 |
| 3 | Incentive Bi_Weekly Net Payroll | 354,221 | 251.00 | 88,909,427 |
| 4 | Semi-Monthly Net Payroll | 398,434 | 6.64 | 2,645,246 |
| 5 | Incentive Semi-Monthly Net Payroll | 39,849 | 256.00 | 10,201,250 |
| 6 | Bi-Weekly Deductions | 4,510,351 | 11.97 | 53,985,682 |
| 7 | Incentive Bi-Weekly Deductions | 148,360 | 250.50 | 37,164,127 |
| 8 | Semi-Monthly Deductions | 194,036 | 6.83 | 1,325,239 |
| 9 | Incentive Semi-Monthly Deductions | 12,464 | 255.50 | 3,184,580 |
| 10 | Bi-Weekly Taxes | 4,921,774 | 15.04 | 73,999,307 |
| 11 | Incentive Bi-Weekly Taxes | 213,705 | 253.03 | 54,073,724 |
| 12 | Semi-Monthly Taxes | 210,821 | 11.57 | 2,439,062 |
| 13 | Incentive Semi-Monthly Taxes | 27,548 | 262.48 | 7,230,846 |
| 14 | Total Payroll | $20,697,712 | | $446,319,208 |
| 15 | | | | |
| 16 | Total Payroll Excluding Incentive | $19,901,565 | 12.34 | $245,555,253 |
| 17 | Total Incentive Payroll | $796,146 | 252.17 | $200,763,955 |
| 18 | Payroll Taxes | $5,373,848 | 25.63 | $137,742,940 |
| 19 | | | | |
| 20 | Gross Payroll Items Duke Energy Business Services | | | |
| 21 | | | | |
| 22 | Bi-Weekly Net Payroll | $88,791,443 | 11.58 | $1,028,207,111 |
| 23 | Incentive Bi_Weekly Net Payroll | 4,080,208 | 251.00 | 1,024,132,211 |
| 24 | Semi-Monthly Net Payroll | 427,152,473 | 6.65 | 2,840,783,525 |
| 25 | Incentive Semi-Monthly Net Payroll | 69,480,021 | 256.00 | 17,786,885,368 |
| 26 | Bi-Weekly Deductions | 37,727,875 | 12.12 | 457,426,983 |
| 27 | Incentive Bi-Weekly Deductions | 922,274 | 250.50 | 231,029,569 |
| 28 | Semi-Monthly Deductions | 175,076,168 | 6.99 | 1,223,497,757 |
| 29 | Incentive Semi-Monthly Deductions | 17,344,510 | 255.50 | 4,431,522,336 |
| 30 | Bi-Weekly Taxes | 39,392,544 | 13.52 | 532,760,326 |
| 31 | Incentive Bi-Weekly Taxes | 2,095,542 | 251.82 | 527,699,418 |
| 32 | Semi-Monthly Taxes | 202,887,789 | 7.79 | 1,580,903,222 |
| 33 | Incentive Semi-Monthly Taxes | 42,993,531 | 256.56 | 11,030,420,217 |
| 34 | Total Payroll | $1,107,944,377 | | $42,695,268,043 |
| 35 | | | | |
| 36 | Total Payroll Excluding Incentive | $971,028,292 | 7.89 | $7,663,578,923 |
| 37 | Total Incentive Payroll | $136,916,086 | 255.86 | $35,031,689,119 |
| 38 | | | | |
| 39 | | | | |
| 40 | | | | |

Duke Kentucky Electric
Calculation of Payroll Lag Days
12 Months Ended Dec 31, 2023
Incentive Pay LTIP

| Payroll Description | Amount | Period Beginning | Period End | Total Days | Midpoint Service Period | Paid | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) |
| LTIP | | 1/1/2020 | 1/1/2023 | 1,097.00 | 7/2/2021 | 2/22/2023 | 600.0 | $0 |

**Duke Kentucky**
**Calculation of Payroll Lag Days**
**12 Months Ended Dec 31, 2023**
**Lag Days O&M Expenses**

| Line No | O&M Expense | Amount | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|
| 1 | (A) | (B) | (C) | (D) |
| 2 | Duke Energy Kentucky | | | |
| 3 | Labor Expense | $8,911,463 | 12.34 | $109,953,995 |
| 4 | Incentive Labor Expense | $356,496 | 252.17 | $89,897,482 |
| 5 | Total Duke Energy Kentucky & Other O&M Labor | $9,267,959 | 21.56 | $199,851,477 |
| 6 | | | | |
| 7 | | | | |
| 8 | Duke Energy Business Services | | | |
| 9 | Labor Expense | $5,963,786 | 7.89 | $47,067,570 |
| 10 | Incentive Labor Expense | $840,901 | 255.86 | $215,154,889 |
| 11 | Total Duke Energy Kentucky O&M Labor | $6,804,686 | 38.54 | $262,222,458 |
| 12 | | | | |
| 13 | | | | |
| 14 | Total O&M Expense with Incentive | $16,072,645 | 28.75 | $462,073,935 |
| 15 | | | | |
| 16 | Total Labor without Incentive | $14,875,249 | 10.56 | $157,021,565 |
| 17 | | | | |
| 18 | Total Incentive | $1,197,397 | 254.76 | $305,052,370 |
| 19 | | | | |
| 20 | | | | |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**PENSION AND BENEFITS**

| Description | Payment Amount | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|
| (A) | (B) | (C) | (D) |
| Qualified Pension | $ 459,543.92 | 0 | - |
| Employee Savings Active | 930,998.42 | 13.42 | 12,495,741.16 |
| OPEB Active | 26,480.13 | 0 | - |
| Medical Active | 1,179,650.79 | 4.82 | 5,682,414.86 |
| Dental Active | 48,122.14 | 8.1 | 389,907.30 |
| Long Term Disability | 42,480.35 | 21.47 | 912,209.73 |
| FAS112 Offset | (172,503.66) | 0 | - |
| Service/Safety Awards | 12,750.77 | 4.67 | 59,556.16 |
| Other Work/Family Benefits | - | 0 | - |
| Tuition Refund | 5,346.40 | 3.31 | 17,675.03 |
| Basic Life | 14,836.74 | 10.55 | 156,530.52 |
| Accidental Death & Dismember. | 1,350.13 | 10.53 | 14,210.40 |
| Exec Supplemental Insurance | 417.98 | -211 | (88,193.78) |
| Executive Savings Plan | 127,885.29 | 0 | - |
| Executive Cash Balance | 684.00 | 17.08 | 11,685.00 |
| Financial Planning | 1,394.42 | 17.14 | 23,900.52 |
| Executive Physicals | 57.00 | 16.5 | 940.50 |
| Other Executive Benefits | 39.57 | -122.5 | (4,847.33) |
| Restricted Stock Units | 250.16 | 0 | - |
| Exec Short Term Incent | 2.38 | 430 | 1,023.40 |
| Pension Non Service Costs | (1,057,702.77) | 0 | - |
| OPEB Non Service Costs | (261,494.91) | 0 | - |
| NQ Non Service Costs | 81,382.43 | 0 | - |
| Total Pensions & Benefits | $ 1,441,972 | 13.64 | 19,672,753 |

**Retirement Cash Balance Plan**

| Amount | Period Beginning | Period Ending | Midpoint of Service Period | Payment Date | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| $ 38,333.00 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | | |
| 38,317.00 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | | |
| 38,325.00 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | | |
| 38,325.00 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | | |
| 38,325.00 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | | |
| 38,325.00 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | | |
| 38,325.00 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | | |
| 38,325.00 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | | |
| 38,325.00 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | | |
| 38,325.00 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | | |
| 38,325.00 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | | |
| 37,967.00 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | | |
| $ 459,542 | | | | | | - |

**Retirement Savings Plan**

| Amount | Period Beginning | Period Ending | Midpoint of Service Period | Payment Date | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| $ 74,905.14 | 1/1/2023 | 2/1/2023 | 1/16/2023 | 1/30/2023 | 13.50 | 1,011,219.39 |
| 70,618.63 | 2/1/2023 | 3/1/2023 | 2/15/2023 | 2/27/2023 | 12.00 | 847,423.56 |
| 49,869.59 | 3/1/2023 | 4/1/2023 | 3/16/2023 | 3/31/2023 | 14.50 | 723,109.06 |
| 75,055.89 | 4/1/2023 | 5/1/2023 | 4/16/2023 | 4/27/2023 | 11.00 | 825,614.79 |
| 76,791.53 | 5/1/2023 | 6/1/2023 | 5/16/2023 | 5/30/2023 | 13.50 | 1,036,685.66 |
| 105,794.35 | 6/1/2023 | 7/1/2023 | 6/16/2023 | 6/29/2023 | 13.00 | 1,375,326.55 |
| 71,928.84 | 7/1/2023 | 8/1/2023 | 7/16/2023 | 7/31/2023 | 14.50 | 1,042,968.18 |
| 73,601.05 | 8/1/2023 | 9/1/2023 | 8/16/2023 | 8/31/2023 | 14.50 | 1,067,215.23 |
| 78,597.96 | 9/1/2023 | 10/1/2023 | 9/16/2023 | 10/1/2023 | 15.00 | 1,178,969.40 |
| 72,618.37 | 10/1/2023 | 11/1/2023 | 10/16/2023 | 10/30/2023 | 13.50 | 980,348.00 |
| 79,138.17 | 11/1/2023 | 12/1/2023 | 11/16/2023 | 11/29/2023 | 13.00 | 1,028,796.21 |
| 102,078.90 | 12/1/2023 | 1/1/2024 | 12/16/2023 | 12/30/2023 | 13.50 | 1,378,065.15 |
| $ 930,998.42 | | | | | | 12,495,741.16 |

**FAS 106 - OPEB**

| Amount | Period Beginning | Period Ending | Midpoint of Service Period | Payment Date | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| $ 2,323.01 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | - | - |
| 2,213.72 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | - | - |
| 2,268.36 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | - | - |
| 2,268.36 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | - | - |
| 2,268.36 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | - | - |
| 2,268.36 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | - | - |
| 2,268.36 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | - | - |
| 2,268.36 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | - | - |
| 2,268.36 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | - | - |
| 2,268.36 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | - | - |
| 2,268.36 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | - | - |
| 1,528.16 | 1/1/2023 | 1/1/2024 | 7/2/2023 | | - | - |
| $26,480 | | | | | | - |

**Active Medical**

| Amount | Period Beginning | Period Ending | Midpoint of Service Period | Payment Date | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|

| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
|---|---|---|---|---|---|---|
| $ 198,422.77 | 1/1/2023 | 2/1/2023 | 1/16/2023 | 1/12/2023 | (4.50) | (892,902.47) |
| 65,538.81 | 2/1/2023 | 3/1/2023 | 2/15/2023 | 2/28/2023 | 13.00 | 852,004.53 |
| 55,604.84 | 3/1/2023 | 4/1/2023 | 3/16/2023 | 3/31/2023 | 14.50 | 806,270.18 |
| 137,101.23 | 4/1/2023 | 5/1/2023 | 4/16/2023 | 4/27/2023 | 11.00 | 1,508,113.53 |
| 199,834.74 | 5/1/2023 | 6/1/2023 | 5/16/2023 | 5/24/2023 | 7.50 | 1,498,760.55 |
| 125,343.90 | 6/1/2023 | 7/1/2023 | 6/16/2023 | 6/22/2023 | 6.00 | 752,063.40 |
| 58,864.59 | 7/1/2023 | 8/1/2023 | 7/16/2023 | 7/20/2023 | 3.50 | 206,026.07 |
| 67,543.27 | 8/1/2023 | 9/1/2023 | 8/16/2023 | 8/16/2023 | (0.50) | (33,771.64) |
| 82,724.64 | 9/1/2023 | 10/1/2023 | 9/16/2023 | 9/20/2023 | 4.00 | 330,898.56 |
| 73,657.59 | 10/1/2023 | 11/1/2023 | 10/16/2023 | 10/17/2023 | 0.50 | 36,828.80 |
| 67,039.00 | 11/1/2023 | 12/1/2023 | 11/16/2023 | 11/22/2023 | 6.00 | 402,234.00 |
| 47,975.41 | 12/1/2023 | 1/1/2024 | 12/16/2023 | 12/21/2023 | 4.50 | 215,889.35 |
| $ 1,179,650.79 | | | | | | 5,682,414.86 |

**Active Dental**

| Amount | Period Beginning | Period Ending | Midpoint of Service Period | Payment Date | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| $ 6,122.00 | 1/1/2023 | 2/1/2023 | 1/16/2023 | 1/25/2023 | 8.50 | 52,037.00 |
| 6,123.00 | 2/1/2023 | 3/1/2023 | 2/15/2023 | 2/23/2023 | 8.00 | 48,984.00 |
| 6,130.00 | 3/1/2023 | 4/1/2023 | 3/16/2023 | 3/23/2023 | 6.50 | 39,845.00 |
| 8,433.00 | 5/1/2023 | 6/1/2023 | 5/16/2023 | 5/24/2023 | 7.50 | 63,247.50 |
| (437.00) | 6/1/2023 | 7/1/2023 | 6/16/2023 | 6/15/2023 | (1.00) | 437.00 |
| 2,422.00 | 7/1/2023 | 8/1/2023 | 7/16/2023 | 7/28/2023 | 11.50 | 27,853.00 |
| 5,505.00 | 8/1/2023 | 9/1/2023 | 8/16/2023 | 8/28/2023 | 11.50 | 63,307.50 |
| 6,315.00 | 9/1/2023 | 10/1/2023 | 9/16/2023 | 9/25/2023 | 9.00 | 56,835.00 |
| 3,765.00 | 10/1/2023 | 11/1/2023 | 10/16/2023 | 10/16/2023 | (0.50) | (1,882.50) |
| 3,146.00 | 11/1/2023 | 12/1/2023 | 11/16/2023 | 11/28/2023 | 12.00 | 37,752.00 |
| 598.00 | 12/1/2023 | 1/1/2024 | 12/16/2023 | 12/19/2023 | 2.50 | 1,495.00 |
| $ 48,122.00 | | | | | | 389,910.50 |

**Misc. Other Fees**

| Amount | Period Beginning | Period Ending | Midpoint of Service Period | Payment Date | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| $ 22.00 | 12/1/2023 | 1/1/2024 | 12/16/2023 | 12/29/2023 | 12.50 | 275.00 |
| $ 22.00 | | | | | | 275.00 |

**Long Term Disability**

| Amount | Period Beginning | Period Ending | Midpoint of Service Period | Payment Date | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| $ 3,469.90 | 12/1/2022 | 1/1/2023 | 12/16/2022 | 1/9/2023 | 23.50 | 81,542.65 |
| 3,672.28 | 1/1/2023 | 2/1/2023 | 1/16/2023 | 2/22/2023 | 36.50 | 134,038.22 |
| 3,698.98 | 2/1/2023 | 3/1/2023 | 2/15/2023 | 3/14/2023 | 27.00 | 99,872.46 |
| 3,682.19 | 3/1/2023 | 4/1/2023 | 3/16/2023 | 4/6/2023 | 20.50 | 75,484.90 |
| 3,556.36 | 4/1/2023 | 5/1/2023 | 4/16/2023 | 5/11/2023 | 25.00 | 88,909.00 |
| 3,525.40 | 5/1/2023 | 6/1/2023 | 5/16/2023 | 6/14/2023 | 28.50 | 100,473.90 |
| 3,507.10 | 6/1/2023 | 7/1/2023 | 6/16/2023 | 7/19/2023 | 33.00 | 115,734.30 |
| 3,512.96 | 7/1/2023 | 8/1/2023 | 7/16/2023 | 8/14/2023 | 28.50 | 100,119.36 |
| 3,495.64 | 8/1/2023 | 10/1/2023 | 8/31/2023 | 9/20/2023 | 19.50 | 68,164.98 |
| 3,533.15 | 10/1/2023 | 11/1/2023 | 10/16/2023 | 10/16/2023 | (0.50) | (1,766.58) |
| 3,428.48 | 11/1/2023 | 12/1/2023 | 11/16/2023 | 11/28/2023 | 12.00 | 41,141.76 |
| 3,397.91 | 12/1/2023 | 1/1/2024 | 12/16/2023 | 12/19/2023 | 2.50 | 8,494.77 |
| $ 42,480.35 | | | | | | 912,209.73 |

**FAS 112 Offset**

| Amount | Period Beginning | Period Ending | Midpoint of Service Period | Payment Date | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| $ 108,544.80 | 3/1/2023 | 4/1/2023 | 3/16/2023 | | | |
| (281,048.46) | 6/1/2023 | 7/1/2023 | 6/16/2023 | | | |
| $ (172,503.66) | | | | | | - |

**Service/Safety Awards**

| Amount | Period Beginning | Period Ending | Midpoint of Service Period | Payment Date | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| $ 7,816.49 | 3/1/2023 | 4/1/2023 | 3/16/2023 | 3/4/2023 | (12.50) | (97,706.13) |
| (5,210.89) | 4/1/2023 | 5/1/2023 | 4/16/2023 | 4/3/2023 | (13.00) | 67,741.57 |
| 1,919.46 | 5/1/2023 | 6/1/2023 | 5/16/2023 | 5/24/2023 | 7.50 | 14,395.95 |
| 2,045.96 | 6/1/2023 | 7/1/2023 | 6/16/2023 | 6/8/2023 | (8.00) | (16,367.68) |
| (575.95) | 7/1/2023 | 8/1/2023 | 7/16/2023 | 7/5/2023 | (11.50) | 6,623.43 |
| 5,381.59 | 9/1/2023 | 10/1/2023 | 9/16/2023 | 9/20/2023 | 4.00 | 21,526.36 |
| (4,036.09) | 10/1/2023 | 11/1/2023 | 10/16/2023 | 10/3/2023 | (13.50) | 54,487.22 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 2,578.27 | 11/1/2023 | 12/1/2023 | 11/16/2023 | 11/9/2023 | (7.00) | (18,047.89) |
| 2,831.93 | 12/1/2023 | 1/1/2024 | 12/16/2023 | 12/26/2023 | 9.50 | 26,903.34 |
| $ 12,750.77 | | | | | | 59,556.16 |

**Tuition Refund**

| Amount | Period Beginning | Period Ending | Midpoint of Service Period | Payment Date | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| $ 1,667.06 | 3/1/2023 | 4/1/2023 | 3/16/2023 | 3/27/2023 | 10.50 | 17,504.13 |
| 784.17 | 4/1/2023 | 5/1/2023 | 4/16/2023 | 4/18/2023 | 2.00 | 1,568.34 |
| 702.96 | 7/1/2023 | 8/1/2023 | 7/16/2023 | 7/11/2023 | (5.50) | (3,866.28) |
| 702.96 | 8/1/2023 | 9/1/2023 | 8/16/2023 | 8/31/2023 | 14.50 | 10,192.92 |
| 723.63 | 10/1/2023 | 11/1/2023 | 10/16/2023 | 10/9/2023 | (7.50) | (5,427.23) |
| 765.62 | 11/1/2023 | 12/1/2023 | 11/16/2023 | 11/13/2023 | (3.00) | (2,296.86) |
| $ 5,346.40 | | | | | | 17,675.03 |

**Basic Life**

| Amount | Period Beginning | Period Ending | Midpoint of Service Period | Payment Date | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| $ 1,211.00 | 1/1/2023 | 2/1/2023 | 1/16/2023 | 1/18/2023 | 1.50 | 1,816.50 |
| 1,244.00 | 2/1/2023 | 3/1/2023 | 2/15/2023 | 2/27/2023 | 12.00 | 14,928.00 |
| 1,247.00 | 3/1/2023 | 4/1/2023 | 3/16/2023 | 3/30/2023 | 13.50 | 16,834.50 |
| 1,259.00 | 4/1/2023 | 5/1/2023 | 4/16/2023 | 4/27/2023 | 11.00 | 13,849.00 |
| 1,252.00 | 5/1/2023 | 6/1/2023 | 5/16/2023 | 5/25/2023 | 8.50 | 10,642.00 |
| 1,275.00 | 6/1/2023 | 7/1/2023 | 6/16/2023 | 6/27/2023 | 11.00 | 14,025.00 |
| 1,232.00 | 7/1/2023 | 8/1/2023 | 7/16/2023 | 7/25/2023 | 8.50 | 10,472.00 |
| 1,246.00 | 8/1/2023 | 9/1/2023 | 8/16/2023 | 8/28/2023 | 11.50 | 14,329.00 |
| 1,246.00 | 9/1/2023 | 10/1/2023 | 9/16/2023 | 9/26/2023 | 10.00 | 12,460.00 |
| 1,246.00 | 10/1/2023 | 11/1/2023 | 10/16/2023 | 10/30/2023 | 13.50 | 16,821.00 |
| 1,198.00 | 11/1/2023 | 12/1/2023 | 11/16/2023 | 11/30/2023 | 14.00 | 16,772.00 |
| 1,181.00 | 12/1/2023 | 1/1/2024 | 12/16/2023 | 12/28/2023 | 11.50 | 13,581.50 |
| $ 14,837.00 | | | | | | 156,530.50 |

**Accidental Death and Dismemberment**

| Amount | Period Beginning | Period Ending | Midpoint of Service Period | Payment Date | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| $ 114.41 | 1/1/2023 | 2/1/2023 | 1/16/2023 | 1/18/2023 | 1.50 | 171.62 |
| 117.02 | 2/1/2023 | 3/1/2023 | 2/15/2023 | 2/27/2023 | 12.00 | 1,404.24 |
| 116.88 | 3/1/2023 | 4/1/2023 | 3/16/2023 | 3/30/2023 | 13.50 | 1,577.88 |
| 121.57 | 4/1/2023 | 5/1/2023 | 4/16/2023 | 4/27/2023 | 11.00 | 1,337.27 |
| 110.51 | 5/1/2023 | 6/1/2023 | 5/16/2023 | 5/25/2023 | 8.50 | 939.34 |
| 113.98 | 6/1/2023 | 7/1/2023 | 6/16/2023 | 6/27/2023 | 11.00 | 1,253.78 |
| 110.26 | 7/1/2023 | 8/1/2023 | 7/16/2023 | 7/25/2023 | 8.50 | 937.21 |
| 111.99 | 8/1/2023 | 9/1/2023 | 8/16/2023 | 8/28/2023 | 11.50 | 1,287.89 |
| 112.21 | 9/1/2023 | 10/1/2023 | 9/16/2023 | 9/26/2023 | 10.00 | 1,122.10 |
| 111.93 | 10/1/2023 | 11/1/2023 | 10/16/2023 | 10/30/2023 | 13.50 | 1,511.06 |
| 104.11 | 11/1/2023 | 12/1/2023 | 11/16/2023 | 11/30/2023 | 14.00 | 1,457.54 |
| 105.26 | 12/1/2023 | 1/1/2024 | 12/16/2023 | 12/28/2023 | 11.50 | 1,210.49 |
| $ 1,350.13 | | | | | | 14,210.40 |

**Supplemental Insurance**

| Amount | Period Beginning | Period Ending | Midpoint of Service Period | Payment Date | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| $ 418.00 | 1/1/2024 | 1/1/2025 | 7/2/2024 | 12/4/2023 | (211.00) | (88,198.00) |
| $ 418.00 | | | | | | (88,198.00) |

**Executive Savings Plan**

| Amount | Period Beginning | Period Ending | Midpoint of Service Period | Payment Date | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| $ 47,034.18 | 1/1/2023 | 2/1/2023 | | | | |
| (16,250.03) | 2/1/2023 | 3/1/2023 | | | | |

| | | | |
|---|---|---|---|
| 20,996.66 | 3/1/2023 | 4/1/2023 | |
| 7,033.42 | 4/1/2023 | 5/1/2023 | |
| (7,866.97) | 5/1/2023 | 6/1/2023 | |
| 26,884.59 | 6/1/2023 | 7/1/2023 | |
| 17,128.17 | 7/1/2023 | 8/1/2023 | |
| (11,276.30) | 8/1/2023 | 9/1/2023 | |
| (20,272.19) | 9/1/2023 | 10/1/2023 | |
| (11,694.88) | 10/1/2023 | 11/1/2023 | |
| 43,432.71 | 11/1/2023 | 12/1/2023 | |
| 32,735.93 | 12/1/2023 | 1/1/2024 | |
| $ 127,885.29 | | | - |

**Executive Cash Balance Plan**

| Amount | Period Beginning | Period Ending | Midpoint of Service Period | Payment Date | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| $ 114.00 | 2/1/2023 | 3/1/2023 | 2/15/2023 | 3/2/2023 | 15.00 | 1,710.00 |
| 57.00 | 3/1/2023 | 4/1/2023 | 3/16/2023 | 4/4/2023 | 18.50 | 1,054.50 |
| 57.00 | 4/1/2023 | 5/1/2023 | 4/16/2023 | 5/2/2023 | 16.00 | 912.00 |
| 57.00 | 5/1/2023 | 6/1/2023 | 5/16/2023 | 6/2/2023 | 16.50 | 940.50 |
| 57.00 | 6/1/2023 | 7/1/2023 | 6/16/2023 | 7/5/2023 | 19.00 | 1,083.00 |
| 57.00 | 7/1/2023 | 8/1/2023 | 7/16/2023 | 8/2/2023 | 16.50 | 940.50 |
| 57.00 | 8/1/2023 | 9/1/2023 | 8/16/2023 | 9/5/2023 | 19.50 | 1,111.50 |
| 57.00 | 9/1/2023 | 10/1/2023 | 9/16/2023 | 10/3/2023 | 17.00 | 969.00 |
| 57.00 | 10/1/2023 | 11/1/2023 | 10/16/2023 | 11/2/2023 | 16.50 | 940.50 |
| 57.00 | 11/1/2023 | 12/1/2023 | 11/16/2023 | 12/4/2023 | 18.00 | 1,026.00 |
| 57.00 | 12/1/2023 | 1/1/2024 | 12/16/2023 | 1/3/2024 | 17.50 | 997.50 |
| $ 684.00 | | | | | | 11,685.00 |

**Financial Planning**

| Amount | Period Beginning | Period Ending | Midpoint of Service Period | Payment Date | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| $ 148.60 | 1/1/2023 | 2/1/2023 | 1/16/2023 | 2/2/2023 | 16.50 | 2,451.90 |
| 55.58 | 3/1/2023 | 4/1/2023 | 3/16/2023 | 4/4/2023 | 18.50 | 1,028.23 |
| 89.12 | 4/1/2023 | 5/1/2023 | 4/16/2023 | 5/2/2023 | 16.00 | 1,425.92 |
| 427.11 | 5/1/2023 | 6/1/2023 | 5/16/2023 | 6/2/2023 | 16.50 | 7,047.32 |
| 64.14 | 6/1/2023 | 7/1/2023 | 6/16/2023 | 7/5/2023 | 19.00 | 1,218.66 |
| 65.40 | 7/1/2023 | 8/1/2023 | 7/16/2023 | 8/2/2023 | 16.50 | 1,079.10 |
| 11.40 | 8/1/2023 | 9/1/2023 | 8/16/2023 | 9/5/2023 | 19.50 | 222.30 |
| 18.34 | 9/1/2023 | 10/1/2023 | 9/16/2023 | 10/3/2023 | 17.00 | 311.78 |
| 41.70 | 10/1/2023 | 11/1/2023 | 10/16/2023 | 11/2/2023 | 16.50 | 688.05 |
| 298.48 | 11/1/2023 | 12/1/2023 | 11/16/2023 | 12/4/2023 | 18.00 | 5,372.64 |
| 174.55 | 12/1/2023 | 1/1/2024 | 12/16/2023 | 1/3/2024 | 17.50 | 3,054.63 |
| $ 1,394.42 | | | | | | 23,900.52 |

**Executive Physicals**

| Amount | Period Beginning | Period Ending | Midpoint of Service Period | Payment Date | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| $ 28.50 | 7/1/2023 | 8/1/2023 | 7/16/2023 | 8/2/2023 | 16.50 | 470.25 |
| 28.50 | 10/1/2023 | 11/1/2023 | 10/16/2023 | 11/2/2023 | 16.50 | 470.25 |
| $ 57.00 | | | | | | 940.50 |

**Other Executive Benefits**

| Amount | Period Beginning | Period Ending | Midpoint of Service Period | Payment Date | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| $ 39.57 | 1/1/2023 | 1/1/2024 | 7/2/2023 | 3/2/2023 | (122.50) | (4,847.33) |
| $ 39.57 | | | | | | (4,847.33) |

**Restricted Stock Units**

| Amount | Period Beginning | Period Ending | Midpoint of Service Period | Payment Date | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| $ 125.55 | 1/1/2023 | 1/1/2024 | | | | |
| 124.61 | 1/1/2023 | 1/1/2024 | | | | |
| $ 250.16 | | | | | | - |

**Executive Short Term Incentive**

| Amount | Period Beginning | Period Ending | Midpoint of Service Period | Payment Date | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| $ 2.38 | 1/1/2022 | 12/31/2022 | 7/2/2022 | 9/5/2023 | 430.00 | 1,023.40 |
| $ 2.38 | | | | | | 1,023.40 |

**Pension Non Service Costs**

| Amount | Period Beginning | Period Ending | Midpoint of Service Period | Payment Date | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| $ (75,984.56) | 1/1/2023 | 1/1/2024 | | | | |
| (100,383.79) | 1/1/2023 | 1/1/2024 | | | | |
| (88,184.18) | 1/1/2023 | 1/1/2024 | | | | |
| (88,184.18) | 1/1/2023 | 1/1/2024 | | | | |
| (88,184.18) | 1/1/2023 | 1/1/2024 | | | | |
| (88,184.18) | 1/1/2023 | 1/1/2024 | | | | |
| (88,184.18) | 1/1/2023 | 1/1/2024 | | | | |
| (88,184.18) | 1/1/2023 | 1/1/2024 | | | | |
| (88,184.18) | 1/1/2023 | 1/1/2024 | | | | |
| (88,184.18) | 1/1/2023 | 1/1/2024 | | | | |
| (88,184.18) | 1/1/2023 | 1/1/2024 | | | | |
| (87,676.80) | 1/1/2023 | 1/1/2024 | | | | |
| $(1,057,702.77) | | | | | | - |

**OPEB Non Service Costs**

| Amount | Period Beginning | Period Ending | Midpoint of Service Period | Payment Date | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| $ (2,933.76) | 1/1/2023 | 1/1/2024 | | | | |
| (32,575.29) | 1/1/2023 | 1/1/2024 | | | | |
| (17,754.52) | 1/1/2023 | 1/1/2024 | | | | |
| (17,754.52) | 1/1/2023 | 1/1/2024 | | | | |
| (17,754.52) | 1/1/2023 | 1/1/2024 | | | | |
| (17,754.52) | 1/1/2023 | 1/1/2024 | | | | |
| (17,754.52) | 1/1/2023 | 1/1/2024 | | | | |
| (17,754.52) | 1/1/2023 | 1/1/2024 | | | | |
| (70,426.01) | 1/1/2023 | 1/1/2024 | | | | |
| (17,754.52) | 1/1/2023 | 1/1/2024 | | | | |
| (17,754.52) | 1/1/2023 | 1/1/2024 | | | | |
| (13,523.69) | 1/1/2023 | 1/1/2024 | | | | |
| $ (261,494.91) | | | | | | - |

**NQ Non Service Costs**

| Amount | Period Beginning | Period Ending | Midpoint of Service Period | Payment Date | (Lead) Lag Days | Weighted Dollar Days |
|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| $ 6,598.45 | 1/1/2023 | 1/1/2024 | | | | |
| 6,965.28 | 1/1/2023 | 1/1/2024 | | | | |
| 6,781.87 | 1/1/2023 | 1/1/2024 | | | | |
| 6,781.87 | 1/1/2023 | 1/1/2024 | | | | |
| 6,781.87 | 1/1/2023 | 1/1/2024 | | | | |
| 6,781.87 | 1/1/2023 | 1/1/2024 | | | | |
| 6,781.87 | 1/1/2023 | 1/1/2024 | | | | |
| 6,781.87 | 1/1/2023 | 1/1/2024 | | | | |
| 6,781.87 | 1/1/2023 | 1/1/2024 | | | | |
| 6,781.87 | 1/1/2023 | 1/1/2024 | | | | |
| 6,781.87 | 1/1/2023 | 1/1/2024 | | | | |
| 6,781.87 | 1/1/2023 | 1/1/2024 | | | | |
| $ 81,382.43 | | | | | | - |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**INSURANCE EXPENSE**

Weighted Lead Time: (128.90) days

| Activity | Payment Date | Invoice Amount | Service Start Date | Service End Date | Service Lead Time | Payment Lead Time | Total Lead Time | Weighting Factor | Weighted Lead Time |
|---|---|---|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) |
| Property Insurance Premium | 2/27/2023 | $ 1,331,715.00 | 1/1/2023 | 1/1/2024 | 183.00 | (308.00) | (125.00) | 68.32% | (85.4030) |
| Liability/Auto Insurance Premium | 2/27/2023 | 313,492.00 | 1/1/2023 | 1/1/2024 | 183.00 | (308.00) | (125.00) | 16.08% | (20.1043) |
| WC Insurance Premium | 2/22/2023 | 100,376.00 | 1/1/2023 | 1/1/2024 | 183.00 | (313.00) | (130.00) | 5.15% | (6.6946) |
| Bison Corp Governance | 1/18/2023 | 169,255.00 | 1/1/2023 | 1/1/2024 | 183.00 | (348.00) | (165.00) | 8.68% | (14.3277) |
| Bison WC Corp Governance | 2/22/2023 | 9,859.00 | 1/1/2023 | 1/1/2024 | 183.00 | (313.00) | (130.00) | 0.51% | (0.6575) |
| DEBS Bison Property, Auto, Liability Premiums | 2/27/2023 | 6,793.00 | 1/1/2023 | 1/1/2024 | 183.00 | (308.00) | (125.00) | 0.35% | (0.4356) |
| DEBS WC and DEBS Corp. Govn WC | 2/22/2023 | 13,386.00 | 1/1/2023 | 1/1/2024 | 183.00 | (313.00) | (130.00) | 0.69% | (0.8928) |
| Marsh USA UAS Liability Premium | 1/30/2023 | 18.00 | 7/1/2023 | 7/1/2024 | 183.50 | (518.00) | (334.50) | 0.00% | (0.0031) |
| Marsh USA UAS Liability Premium | 7/11/2023 | 342.00 | 7/1/2023 | 7/1/2024 | 183.50 | (356.00) | (172.50) | 0.02% | (0.0303) |
| Marsh USA Aircraft Hull Liability | 1/30/2023 | 141.00 | 7/1/2023 | 7/1/2024 | 183.50 | (518.00) | (334.50) | 0.01% | (0.0242) |
| Marsh USA Aircraft Hull Liability | 7/11/2023 | 3,568.00 | 7/1/2023 | 7/1/2024 | 183.50 | (356.00) | (172.50) | 0.18% | (0.3158) |
| Marsh USA Aircraft Hull Liability | 8/15/2023 | 167.00 | 7/1/2023 | 7/1/2024 | 183.50 | (321.00) | (137.50) | 0.01% | (0.0118) |
| Marsh USA Aircraft Hull Liability | 10/17/2023 | 52.00 | 7/1/2023 | 7/1/2024 | 183.50 | (258.00) | (74.50) | 0.00% | (0.0020) |
| | | $ 1,949,164.00 | | | | | | | (128.90) |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**INTERCOMPANY TRANSACTIONS**

Weighted Lead Time: 41.31 days

| Service Start Date | Service End Date | Payment Date | Payment Amount | Service Lead Time | Processing Lead Time | Total Unweighted Lead Time | Weighting Factor | Weighted Lead Time |
|---|---|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) |
| 11/1/2022 | 12/1/2022 | 12/21/2022 | $ 378,591.00 | 15.50 | 20.00 | 35.50 | 6.40% | 2.27 |
| 12/1/2022 | 1/1/2023 | 1/30/2023 | 550,266.00 | 16.00 | 29.00 | 45.00 | 9.31% | 4.19 |
| 1/1/2023 | 2/1/2023 | 2/23/2023 | 528,124.00 | 16.00 | 22.00 | 38.00 | 8.93% | 3.39 |
| 2/1/2023 | 3/1/2023 | 3/28/2023 | 583,241.00 | 14.50 | 27.00 | 41.50 | 9.87% | 4.09 |
| 3/1/2023 | 4/1/2023 | 4/27/2023 | 531,512.00 | 16.00 | 26.00 | 42.00 | 8.99% | 3.78 |
| 4/1/2023 | 5/1/2023 | 5/26/2023 | 569,237.00 | 15.50 | 25.00 | 40.50 | 9.63% | 3.90 |
| 5/1/2023 | 6/1/2023 | 6/27/2023 | 399,871.00 | 16.00 | 26.00 | 42.00 | 6.76% | 2.84 |
| 6/1/2023 | 7/1/2023 | 7/27/2023 | 516,335.00 | 15.50 | 26.00 | 41.50 | 8.73% | 3.62 |
| 7/1/2023 | 8/1/2023 | 8/29/2023 | 525,490.00 | 16.00 | 28.00 | 44.00 | 8.89% | 3.91 |
| 8/1/2023 | 9/1/2023 | 9/26/2023 | 351,589.00 | 16.00 | 25.00 | 41.00 | 5.95% | 2.44 |
| 9/1/2023 | 10/1/2023 | 10/26/2023 | 563,420.00 | 15.50 | 25.00 | 40.50 | 9.53% | 3.86 |
| 10/1/2023 | 11/1/2023 | 11/28/2023 | 414,494.00 | 16.00 | 27.00 | 43.00 | 7.01% | 3.01 |
| | | | $ 5,912,170.00 | | | | | 41.31 |

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**OTHER O&M**

Weighted Lead Time: 80.94 days

| Supplier Name | Invoice Date | Payment Date | Invoice Amount | Service Start Date | Service End Date | Service Lead Time | Payment Lead Time | Total Lead Time | Weighting Factor | Weighted Lead Time |
|---|---|---|---|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) | (K) |
| | 6/26/2023 | 6/26/2023 | $ 117.67 | 5/11/2023 | 5/23/2023 | 6.50 | 34.00 | 40.50 | 0.01% | 0.0037 |
| NORTH CAROLINA ADVANCED ENERGY CORP | 10/31/2023 | 2/8/2024 | 105.84 | 10/1/2023 | 10/31/2023 | 15.50 | 100.00 | 115.50 | 0.01% | 0.0095 |
| SLONE PLUMBING INC | 12/30/2022 | 1/9/2023 | 939.66 | 6/23/2022 | 12/23/2022 | 92.00 | 17.00 | 109.00 | 0.07% | 0.0799 |
| BOWLIN GROUP LLC | 1/9/2023 | 2/23/2023 | 106.45 | 11/23/2022 | 11/23/2022 | 0.50 | 92.00 | 92.50 | 0.01% | 0.0077 |
| BOWLIN GROUP LLC | 1/9/2023 | 2/23/2023 | 658.32 | 11/9/2022 | 11/15/2022 | 3.50 | 100.00 | 103.50 | 0.05% | 0.0531 |
| BURFORDS CONSTRUCTION LLC | 1/4/2023 | 3/3/2023 | 750.00 | 12/11/2022 | 12/17/2022 | 3.50 | 76.00 | 79.50 | 0.06% | 0.0465 |
| ASPLUNDH TREE EXPERT CO | 1/11/2023 | 3/10/2023 | 289.80 | 1/7/2023 | 1/7/2023 | 0.50 | 62.00 | 62.50 | 0.02% | 0.0141 |
| ASPLUNDH TREE EXPERT CO | 1/11/2023 | 3/10/2023 | 451.80 | 1/7/2023 | 1/7/2023 | 0.50 | 62.00 | 62.50 | 0.04% | 0.0220 |
| ASPLUNDH TREE EXPERT CO | 1/3/2023 | 3/3/2023 | 374.24 | 12/31/2022 | 12/31/2022 | 0.50 | 62.00 | 62.50 | 0.03% | 0.0182 |
| ASPLUNDH TREE EXPERT CO | 1/3/2023 | 3/3/2023 | 310.50 | 12/31/2022 | 12/31/2022 | 0.50 | 62.00 | 62.50 | 0.02% | 0.0151 |
| CINTAS CORPORATION | 10/26/2022 | 3/2/2023 | 544.78 | 10/26/2022 | 10/26/2022 | 0.50 | 127.00 | 127.50 | 0.04% | 0.0542 |
| WELLS TECHNOLOGY INC | 1/20/2023 | 3/10/2023 | 269.42 | 12/1/2022 | 12/31/2022 | 15.50 | 69.00 | 84.50 | 0.02% | 0.0178 |
| ASPLUNDH TREE EXPERT CO | 1/23/2023 | 3/24/2023 | 677.76 | 1/21/2023 | 1/21/2023 | 0.50 | 62.00 | 62.50 | 0.05% | 0.0330 |
| ASPLUNDH TREE EXPERT LLC | 1/31/2023 | 3/31/2023 | 813.24 | 1/28/2023 | 1/28/2023 | 0.50 | 62.00 | 62.50 | 0.06% | 0.0396 |
| NORTHERN KENTUCKY EMER | 8/4/2023 | 8/7/2023 | 389.00 | 7/18/2023 | 7/18/2023 | 0.50 | 20.00 | 20.50 | 0.03% | 0.0062 |
| | 12/11/2023 | 12/11/2023 | 100.00 | 11/1/2023 | 12/31/2023 | 30.50 | (20.00) | 10.50 | 0.01% | 0.0008 |
| ORR PROTECTION SYSTEMS INC | 2/1/2023 | 5/2/2023 | 560.00 | 12/22/2022 | 12/22/2022 | 0.50 | 131.00 | 131.50 | 0.04% | 0.0574 |
| ASPLUNDH TREE EXPERT LLC | 2/6/2023 | 4/6/2023 | 293.64 | 1/30/2023 | 2/4/2023 | 3.00 | 61.00 | 64.00 | 0.02% | 0.0147 |
| LAKESIDE ENVIRONMENTAL CONSULTANTS LLC | 2/6/2023 | 4/6/2023 | 101.76 | 2/4/2023 | 2/4/2023 | 0.50 | 61.00 | 61.50 | 0.01% | 0.0049 |
| BOWLIN GROUP LLC | 2/9/2023 | 3/24/2023 | 121.68 | 12/27/2022 | 2/2/2023 | 19.00 | 50.00 | 69.00 | 0.01% | 0.0065 |
| FUSION SAFETY AND BUSINESS SOLUTIONS | 2/8/2023 | 5/10/2023 | 275.60 | 1/31/2023 | 2/4/2023 | 2.50 | 95.00 | 97.50 | 0.02% | 0.0210 |
| ASPLUNDH TREE EXPERT LLC | 2/20/2023 | 4/21/2023 | 268.62 | 2/18/2023 | 2/18/2023 | 0.50 | 62.00 | 62.50 | 0.02% | 0.0131 |
| GLENWOOD ELECTRIC INC | 2/22/2023 | 5/23/2023 | 161.37 | 2/22/2023 | 2/22/2023 | 0.50 | 90.00 | 90.50 | 0.01% | 0.0114 |
| ASPLUNDH TREE EXPERT LLC | 2/27/2023 | 4/28/2023 | 180.72 | 2/25/2023 | 2/25/2023 | 0.50 | 62.00 | 62.50 | 0.01% | 0.0088 |
| ASPLUNDH TREE EXPERT LLC | 2/27/2023 | 4/28/2023 | 404.10 | 2/25/2023 | 2/25/2023 | 0.50 | 62.00 | 62.50 | 0.03% | 0.0197 |
| CA ADVANCED INC | 3/13/2023 | 4/27/2023 | 220.57 | 9/3/2022 | 12/29/2022 | 59.00 | 119.00 | 178.00 | 0.02% | 0.0306 |
| ASPLUNDH TREE EXPERT LLC | 3/20/2023 | 5/19/2023 | 519.66 | 3/13/2023 | 3/18/2023 | 3.00 | 62.00 | 65.00 | 0.04% | 0.0263 |
| ACTION AUTOMATION INC | 10/28/2022 | 3/23/2023 | 901.00 | 10/28/2022 | 10/28/2022 | 0.50 | 146.00 | 146.50 | 0.07% | 0.1029 |
| | 2/22/2023 | 3/1/2023 | 132.90 | 2/22/2023 | 2/22/2023 | 0.50 | 7.00 | 7.50 | 0.01% | 0.0008 |
| BRIMAR INDUSTRIES | 12/5/2023 | 12/27/2023 | 438.42 | 12/5/2023 | 12/5/2023 | 0.50 | 22.00 | 22.50 | 0.03% | 0.0077 |
| BOWLIN GROUP LLC | 2/7/2023 | 3/28/2023 | 226.88 | 12/19/2022 | 1/5/2023 | 9.00 | 82.00 | 91.00 | 0.02% | 0.0161 |
| LAKESIDE ENVIRONMENTAL CONSULTANTS LLC | 3/20/2023 | 5/19/2023 | 203.52 | 3/18/2023 | 3/18/2023 | 0.50 | 62.00 | 62.50 | 0.02% | 0.0099 |
| | 12/8/2023 | 12/8/2023 | 169.50 | 10/17/2023 | 12/2/2023 | 23.50 | 6.00 | 29.50 | 0.01% | 0.0039 |
| LAKESIDE ENVIRONMENTAL CONSULTANTS LLC | 3/20/2023 | 5/19/2023 | 714.56 | 3/18/2023 | 3/18/2023 | 0.50 | 62.00 | 62.50 | 0.06% | 0.0348 |
| INDUSTRIAL SCIENTIFIC CORP | 3/1/2723 | 6/23/2023 | 681.75 | 1/24/2023 | 1/24/2023 | 0.50 | 150.00 | 150.50 | 0.05% | 0.0800 |
| INDUSTRIAL SCIENTIFIC CORP | 3/19/2023 | 6/23/2023 | 680.56 | 3/3/2023 | 3/3/2023 | 0.50 | 112.00 | 112.50 | 0.05% | 0.0597 |
| | 5/2/2023 | 5/2/2023 | 664.50 | 2/28/2023 | 4/3/2023 | 17.50 | 29.00 | 46.50 | 0.05% | 0.0241 |
| INDIANA OXYGEN CO | 4/4/2023 | 5/19/2023 | 360.23 | 3/1/2023 | 3/31/2023 | 15.50 | 49.00 | 64.50 | 0.03% | 0.0181 |
| POWELL ELECTRICAL SYSTEMS INC | 4/5/2023 | 5/19/2023 | 266.06 | 4/4/2023 | 4/4/2023 | 0.50 | 45.00 | 45.50 | 0.02% | 0.0094 |
| APPLIED INDUSTRIAL TECHNOLOGIES INC | 4/7/2023 | 6/6/2023 | 603.44 | 4/7/2023 | 4/7/2023 | 0.50 | 60.00 | 60.50 | 0.05% | 0.0285 |
| ASPLUNDH TREE EXPERT LLC | 4/10/2023 | 6/9/2023 | 146.82 | 4/3/2023 | 4/8/2023 | 3.00 | 62.00 | 65.00 | 0.01% | 0.0074 |
| FERGUSON ENTERPRISES LLC | 4/10/2023 | 5/25/2023 | 394.36 | 4/10/2023 | 4/10/2023 | 0.50 | 45.00 | 45.50 | 0.03% | 0.0140 |
| SLONE PLUMBING INC | 4/11/2023 | 4/14/2023 | 269.00 | 2/28/2023 | 2/28/2023 | 0.50 | 45.00 | 45.50 | 0.02% | 0.0095 |
| ASPLUNDH TREE EXPERT LLC | 4/10/2023 | 6/9/2023 | 179.60 | 4/8/2023 | 4/8/2023 | 0.50 | 62.00 | 62.50 | 0.01% | 0.0088 |
| ASPLUNDH TREE EXPERT LLC | 4/10/2023 | 6/9/2023 | 255.84 | 4/8/2023 | 4/8/2023 | 0.50 | 62.00 | 62.50 | 0.02% | 0.0125 |
| INDIANA FLUID SYSTEM TECHNOLOGIES | 4/5/2023 | 5/19/2023 | 590.05 | 4/5/2023 | 4/5/2023 | 0.50 | 44.00 | 44.50 | 0.05% | 0.0205 |
| ASPLUNDH TREE EXPERT LLC | 4/17/2023 | 6/16/2023 | 993.96 | 4/15/2023 | 4/15/2023 | 0.50 | 62.00 | 62.50 | 0.08% | 0.0484 |
| BOWLIN GROUP LLC | 3/16/2023 | 4/28/2023 | 486.72 | 2/27/2023 | 2/27/2023 | 0.50 | 60.00 | 60.50 | 0.04% | 0.0230 |
| WELLS TECHNOLOGY INC | 4/24/2023 | 6/9/2023 | 230.76 | 4/24/2023 | 4/24/2023 | 0.50 | 46.00 | 46.50 | 0.02% | 0.0084 |
| AMZN Mktp US T62HE6WJ2 | 8/7/2023 | 8/8/2023 | 147.60 | 7/27/2023 | 7/27/2023 | 0.50 | 12.00 | 12.50 | 0.01% | 0.0014 |
| | 12/13/2023 | 12/13/2023 | 530.35 | 12/7/2023 | 12/7/2023 | 0.50 | 6.00 | 6.50 | 0.04% | 0.0027 |
| ASPLUNDH TREE EXPERT LLC | 5/15/2023 | 7/14/2023 | 383.76 | 5/13/2023 | 5/13/2023 | 0.50 | 62.00 | 62.50 | 0.03% | 0.0187 |
| ASPLUNDH TREE EXPERT LLC | 5/8/2023 | 7/7/2023 | 228.27 | 5/6/2023 | 5/6/2023 | 0.50 | 62.00 | 62.50 | 0.02% | 0.0111 |
| ASPLUNDH TREE EXPERT LLC | 5/30/2023 | 7/28/2023 | 260.88 | 5/22/2023 | 5/26/2023 | 2.50 | 63.00 | 65.50 | 0.02% | 0.0133 |
| | 1/31/2023 | 2/5/2023 | 189.37 | 1/5/2023 | 1/19/2023 | 7.50 | 17.00 | 24.50 | 0.01% | 0.0036 |
| AMERICAN ELEVATORS INC | 11/1/2022 | 7/17/2023 | 858.00 | 10/1/2022 | 10/31/2022 | 15.50 | 259.00 | 274.50 | 0.07% | 0.1837 |

| Supplier Name | Invoice Date | Payment Date | Invoice Amount | Service Start Date | Service End Date | Service Lead Time | Payment Lead Time | Total Lead Time | Weighting Factor | Weighted Lead Time |
|---|---|---|---|---|---|---|---|---|---|---|
| ASPLUNDH TREE EXPERT LLC | 6/5/2023 | 8/4/2023 | 307.10 | 5/29/2023 | 6/2/2023 | 2.50 | 63.00 | 65.50 | 0.02% | 0.0157 |
| FERGUSON ENTERPRISES LLC | 6/7/2023 | 7/21/2023 | 903.96 | 5/26/2023 | 5/26/2023 | 0.50 | 56.00 | 56.50 | 0.07% | 0.0398 |
| SLONE PLUMBING INC | 6/6/2023 | 6/12/2023 | 830.25 | 2/23/2023 | 2/23/2023 | 0.50 | 109.00 | 109.50 | 0.06% | 0.0709 |
| INCORP INDUSTRIES LLC | 5/31/2023 | 9/1/2023 | 341.46 | 5/31/2023 | 5/31/2023 | 0.50 | 93.00 | 93.50 | 0.03% | 0.0249 |
| ASPLUNDH TREE EXPERT LLC | 6/12/2023 | 8/11/2023 | 307.10 | 6/10/2023 | 6/10/2023 | 0.50 | 62.00 | 62.50 | 0.02% | 0.0150 |
| ASPLUNDH TREE EXPERT LLC | 6/12/2023 | 8/11/2023 | 688.68 | 6/10/2023 | 6/10/2023 | 0.50 | 62.00 | 62.50 | 0.05% | 0.0336 |
| FLORENCE WINNELSON CO | 4/3/2023 | 4/20/2023 | 194.52 | 3/28/2023 | 3/28/2023 | 0.50 | 23.00 | 23.50 | 0.02% | 0.0036 |
| ASPLUNDH TREE EXPERT LLC | 6/19/2023 | 8/18/2023 | 677.64 | 6/17/2023 | 6/17/2023 | 0.50 | 62.00 | 62.50 | 0.05% | 0.0330 |
| TRC ENGINEERS INC | 5/31/2023 | 7/28/2023 | 126.00 | 2/6/2023 | 2/17/2023 | 6.00 | 161.00 | 167.00 | 0.01% | 0.0164 |
| ASPLUNDH TREE EXPERT LLC | 7/3/2023 | 9/1/2023 | 211.80 | 7/1/2023 | 7/1/2023 | 0.50 | 62.00 | 62.50 | 0.02% | 0.0103 |
| ASPLUNDH TREE EXPERT LLC | 7/10/2023 | 9/8/2023 | 108.70 | 7/8/2023 | 7/8/2023 | 0.50 | 62.00 | 62.50 | 0.01% | 0.0053 |
| ASPLUNDH TREE EXPERT LLC | 7/10/2023 | 9/8/2023 | 319.80 | 7/8/2023 | 7/8/2023 | 0.50 | 62.00 | 62.50 | 0.02% | 0.0156 |
| | 5/25/2023 | 6/13/2023 | 475.66 | 4/5/2023 | 4/18/2023 | 7.00 | 56.00 | 63.00 | 0.04% | 0.0234 |
| GLENWOOD ELECTRIC INC | 5/3/2023 | 8/1/2023 | 745.32 | 4/18/2023 | 4/18/2023 | 0.50 | 105.00 | 105.50 | 0.06% | 0.0613 |
| JOHN CONTI COFFEE FIVE | 3/13/2023 | 4/6/2023 | 765.75 | 3/13/2023 | 3/13/2023 | 0.50 | 24.00 | 24.50 | 0.06% | 0.0146 |
| ASPLUNDH TREE EXPERT LLC | 7/19/2023 | 9/15/2023 | 237.24 | 7/15/2023 | 7/15/2023 | 0.50 | 62.00 | 62.50 | 0.02% | 0.0116 |
| ASPLUNDH TREE EXPERT LLC | 7/19/2023 | 9/15/2023 | 838.66 | 7/10/2023 | 7/15/2023 | 3.00 | 62.00 | 65.00 | 0.07% | 0.0425 |
| BURFORDS CONSTRUCTION LLC | 7/17/2023 | 9/15/2023 | 468.75 | 7/2/2023 | 7/8/2023 | 3.50 | 69.00 | 72.50 | 0.04% | 0.0265 |
| OROURKE WRECKING COMPANY | 6/25/2023 | 9/22/2023 | 150.00 | 6/5/2023 | 6/21/2023 | 8.50 | 93.00 | 101.50 | 0.01% | 0.0119 |
| EWT HOLDINGS III CORP | 7/28/2023 | 9/11/2023 | 798.59 | 7/26/2023 | 7/26/2023 | 0.50 | 47.00 | 47.50 | 0.06% | 0.0296 |
| ASPLUNDH TREE EXPERT LLC | 7/31/2023 | 9/29/2023 | 264.88 | 7/24/2023 | 7/29/2023 | 3.00 | 62.00 | 65.00 | 0.02% | 0.0134 |
| LAKESIDE ENVIRONMENTAL CONSULTANTS LLC | 8/8/2023 | 10/6/2023 | 230.52 | 8/1/2023 | 8/4/2023 | 2.00 | 63.00 | 65.00 | 0.02% | 0.0117 |
| BURFORDS CONSTRUCTION LLC | 7/25/2023 | 9/22/2023 | 950.22 | 6/25/2023 | 7/1/2023 | 3.50 | 83.00 | 86.50 | 0.07% | 0.0641 |
| EQUIPMENT DEPOT OHIO INC | 7/19/2023 | 9/1/2023 | 146.36 | 7/19/2023 | 7/19/2023 | 0.50 | 44.00 | 44.50 | 0.01% | 0.0051 |
| ASPLUNDH TREE EXPERT LLC | 8/9/2023 | 10/6/2023 | 643.20 | 7/31/2023 | 8/4/2023 | 2.50 | 63.00 | 65.50 | 0.05% | 0.0329 |
| EN ENGINEERING LLC | 8/10/2023 | 11/8/2023 | 120.00 | 12/22/2022 | 1/30/2023 | 20.00 | 282.00 | 302.00 | 0.01% | 0.0283 |
| ASPLUNDH TREE EXPERT LLC | 8/22/2023 | 10/20/2023 | 153.55 | 8/14/2023 | 8/18/2023 | 2.50 | 63.00 | 65.50 | 0.01% | 0.0078 |
| ASPLUNDH TREE EXPERT LLC | 8/22/2023 | 10/20/2023 | 225.90 | 8/14/2023 | 8/18/2023 | 2.50 | 63.00 | 65.50 | 0.02% | 0.0115 |
| BOWLIN GROUP LLC | 7/6/2023 | 8/23/2023 | 881.94 | 6/27/2023 | 6/28/2023 | 1.00 | 56.00 | 57.00 | 0.07% | 0.0392 |
| ASPLUNDH TREE EXPERT LLC | 8/29/2023 | 10/27/2023 | 381.65 | 8/21/2023 | 8/26/2023 | 3.00 | 62.00 | 65.00 | 0.03% | 0.0193 |
| ASPLUNDH TREE EXPERT LLC | 2/13/2023 | 9/1/2023 | 319.80 | 2/9/2023 | 2/10/2023 | 1.00 | 203.00 | 204.00 | 0.02% | 0.0509 |
| ASPLUNDH TREE EXPERT LLC | 2/13/2023 | 9/1/2023 | 258.06 | 2/9/2023 | 2/10/2023 | 1.00 | 203.00 | 204.00 | 0.02% | 0.0411 |
| HOFFMAN ANALYTIC SERVICES | 8/31/2023 | 9/20/2023 | 166.42 | 7/12/2023 | 7/12/2023 | 0.50 | 70.00 | 70.50 | 0.01% | 0.0091 |
| BOWLIN GROUP LLC | 7/18/2023 | 9/7/2023 | 365.04 | 7/13/2023 | 7/13/2023 | 0.50 | 56.00 | 56.50 | 0.03% | 0.0161 |
| EN ENGINEERING LLC | 8/31/2023 | 11/29/2023 | 120.00 | 12/2/2021 | 12/16/2022 | 190.00 | 348.00 | 538.00 | 0.01% | 0.0503 |
| ASPLUNDH TREE EXPERT LLC | 9/5/2023 | 11/3/2023 | 395.00 | 8/29/2023 | 8/29/2023 | 0.50 | 66.00 | 66.50 | 0.03% | 0.0205 |
| LAKESIDE ENVIRONMENTAL CONSULTANTS LLC | 9/12/2023 | 11/10/2023 | 139.92 | 9/5/2023 | 9/7/2023 | 1.50 | 64.00 | 65.50 | 0.01% | 0.0071 |
| AMS CONSTRUCTION INC | 9/13/2023 | 10/27/2023 | 112.00 | 8/31/2023 | 8/31/2023 | 0.50 | 57.00 | 57.50 | 0.01% | 0.0050 |
| WELLS TECHNOLOGY INC | 9/20/2023 | 11/6/2023 | 119.88 | 9/20/2023 | 9/20/2023 | 0.50 | 47.00 | 47.50 | 0.01% | 0.0044 |
| BOWLIN GROUP LLC | 7/31/2023 | 9/26/2023 | 224.93 | 7/10/2023 | 7/11/2023 | 1.00 | 77.00 | 78.00 | 0.02% | 0.0137 |
| EQUIPMENT DEPOT OHIO INC | 8/31/2023 | 10/6/2023 | 435.90 | 8/31/2023 | 8/31/2023 | 0.50 | 36.00 | 36.50 | 0.03% | 0.0124 |
| ASPLUNDH TREE EXPERT LLC | 10/9/2023 | 12/8/2023 | 317.07 | 10/2/2023 | 10/5/2023 | 2.00 | 64.00 | 66.00 | 0.02% | 0.0163 |
| US LAWNS OF CINCINNATI EAST | 9/21/2023 | 12/20/2023 | 920.00 | 9/10/2023 | 9/16/2023 | 3.50 | 95.00 | 98.50 | 0.07% | 0.0707 |
| DANIEL L KUCHLE | 10/10/2023 | 1/9/2024 | 660.00 | 10/4/2023 | 10/4/2023 | 0.50 | 97.00 | 97.50 | 0.05% | 0.0502 |
| ASPLUNDH TREE EXPERT LLC | 10/16/2023 | 12/15/2023 | 880.92 | 10/9/2023 | 10/14/2023 | 3.00 | 62.00 | 65.00 | 0.07% | 0.0447 |
| ASPLUNDH TREE EXPERT LLC | 3/13/2023 | 10/20/2023 | 418.20 | 3/5/2023 | 3/5/2023 | 0.50 | 229.00 | 229.50 | 0.03% | 0.0748 |
| AMZN MKTP US RW2MJ1IL3 | 12/29/2023 | 12/29/2023 | 148.93 | 12/11/2023 | 12/11/2023 | 0.50 | 18.00 | 18.50 | 0.01% | 0.0021 |
| BOWLIN GROUP LLC | 10/27/2023 | 11/7/2023 | 137.93 | 8/22/2023 | 8/27/2023 | 3.00 | 72.00 | 75.00 | 0.01% | 0.0081 |
| THE HYDAKER WHEATLAKE COMPANY | 10/16/2023 | 12/1/2023 | 911.00 | 8/4/2023 | 8/4/2023 | 0.50 | 119.00 | 119.50 | 0.07% | 0.0849 |
| SPX FLOW US LLC | 10/3/2023 | 12/15/2023 | 130.48 | 10/3/2023 | 10/3/2023 | 0.50 | 73.00 | 73.50 | 0.01% | 0.0075 |
| AMS CONSTRUCTION INC | 9/25/2023 | 11/9/2023 | 620.16 | 8/29/2023 | 8/30/2023 | 1.00 | 71.00 | 72.00 | 0.05% | 0.0348 |
| IN SPIRACLE MEDIA, LL | 3/27/2023 | 3/28/2023 | 137.50 | 3/14/2023 | 3/14/2023 | 0.50 | 14.00 | 14.50 | 0.01% | 0.0016 |
| | 5/10/2023 | 5/15/2023 | 124.56 | 2/20/2023 | 2/21/2023 | 1.00 | 83.00 | 84.00 | 0.01% | 0.0082 |
| | 6/1/2023 | 6/1/2023 | 108.48 | 5/11/2023 | 5/24/2023 | 7.00 | 8.00 | 15.00 | 0.01% | 0.0013 |
| WESCO DISTRIBUTION INC | 11/2/2023 | 12/1/2023 | 462.96 | 11/2/2023 | 11/2/2023 | 0.50 | 29.00 | 29.50 | 0.04% | 0.0107 |
| LAKESIDE ENVIRONMENTAL CONSULTANTS LLC | 11/7/2023 | 1/5/2024 | 182.70 | 10/31/2023 | 10/31/2023 | 0.50 | 66.00 | 66.50 | 0.01% | 0.0095 |
| BOWLIN GROUP LLC | 10/4/2023 | 11/17/2023 | 453.94 | 9/20/2023 | 9/21/2023 | 1.00 | 57.00 | 58.00 | 0.04% | 0.0205 |
| EQUIPMENT DEPOT OHIO INC | 10/24/2023 | 12/1/2023 | 644.83 | 10/18/2023 | 10/18/2023 | 0.50 | 44.00 | 44.50 | 0.05% | 0.0224 |
| AMS CONSTRUCTION INC | 10/19/2023 | 12/1/2023 | 487.90 | 7/21/2023 | 8/25/2023 | 18.00 | 98.00 | 116.00 | 0.04% | 0.0441 |
| BOWLIN GROUP LLC | 10/27/2023 | 12/11/2023 | 725.13 | 10/2/2023 | 10/17/2023 | 8.00 | 55.00 | 63.00 | 0.06% | 0.0356 |
| SUPERIOR ENVIRONMENTAL SOLUTIONS LLC | 11/7/2023 | 3/4/2024 | 810.90 | 11/7/2023 | 11/7/2023 | 0.50 | 118.00 | 118.50 | 0.06% | 0.0749 |
| | 7/10/2023 | 7/10/2023 | 100.00 | 6/1/2023 | 7/31/2023 | 30.50 | (21.00) | 9.50 | 0.01% | 0.0007 |
| | 7/10/2023 | 7/10/2023 | 150.00 | 3/1/2023 | 5/31/2023 | 46.00 | 40.00 | 86.00 | 0.01% | 0.0101 |

| Supplier Name | Invoice Date | Payment Date | Invoice Amount | Service Start Date | Service End Date | Service Lead Time | Payment Lead Time | Total Lead Time | Weighting Factor | Weighted Lead Time |
|---|---|---|---|---|---|---|---|---|---|---|
| | 7/25/2023 | 7/25/2023 | 323.61 | 6/15/2023 | 7/3/2023 | 9.50 | 22.00 | 31.50 | 0.03% | 0.0079 |
| ASPLUNDH TREE EXPERT LLC | 12/11/2023 | 2/9/2024 | 224.50 | 12/4/2023 | 12/5/2023 | 1.00 | 66.00 | 67.00 | 0.02% | 0.0117 |
| BOWLIN GROUP LLC | 11/13/2023 | 12/28/2023 | 389.47 | 10/18/2023 | 10/19/2023 | 1.00 | 70.00 | 71.00 | 0.03% | 0.0216 |
| ADVANCED MECHANICAL OF NORTHERN KENTUCKY | 12/19/2023 | 3/18/2024 | 933.23 | 12/4/2023 | 12/4/2023 | 0.50 | 105.00 | 105.50 | 0.07% | 0.0768 |
| BOWLIN GROUP LLC | 11/13/2023 | 12/28/2023 | 132.48 | 10/20/2023 | 10/27/2023 | 4.00 | 62.00 | 66.00 | 0.01% | 0.0068 |
| BOWLIN GROUP LLC | 11/13/2023 | 12/28/2023 | 603.69 | 10/20/2023 | 10/27/2023 | 4.00 | 62.00 | 66.00 | 0.05% | 0.0311 |
| AMS CONSTRUCTION INC | 11/17/2022 | 2/17/2023 | 298.64 | 10/31/2022 | 11/10/2022 | 5.50 | 99.00 | 104.50 | 0.02% | 0.0243 |
| AMS CONSTRUCTION INC | 11/17/2022 | 2/17/2023 | 814.06 | 10/31/2022 | 11/10/2022 | 5.50 | 99.00 | 104.50 | 0.06% | 0.0663 |
| W D WRIGHT CONTRACTING INC | 12/23/2022 | 3/23/2023 | 388.44 | 12/15/2022 | 12/15/2022 | 0.50 | 98.00 | 98.50 | 0.03% | 0.0298 |
| BADGER DAYLIGHTING CORP | 1/27/2023 | 2/10/2023 | 863.84 | 1/18/2023 | 1/19/2023 | 1.00 | 22.00 | 23.00 | 0.07% | 0.0155 |
| SP AUTH TOOL OUTLET | 3/10/2023 | 3/30/2023 | 348.74 | 3/6/2023 | 3/6/2023 | 0.50 | 24.00 | 24.50 | 0.03% | 0.0067 |
| AMS CONSTRUCTION INC | 1/18/2023 | 4/18/2023 | 125.61 | 12/19/2022 | 1/5/2023 | 9.00 | 103.00 | 112.00 | 0.01% | 0.0110 |
| | 8/30/2023 | 9/5/2023 | 223.83 | 7/26/2023 | 8/12/2023 | 9.00 | 24.00 | 33.00 | 0.02% | 0.0058 |
| AMS CONSTRUCTION INC | 2/3/2023 | 5/4/2023 | 195.37 | 1/9/2023 | 1/19/2023 | 5.50 | 105.00 | 110.50 | 0.02% | 0.0168 |
| ASPLUNDH TREE EXPERT LLC | 2/28/2023 | 4/28/2023 | 549.70 | 2/20/2023 | 2/24/2023 | 2.50 | 63.00 | 65.50 | 0.04% | 0.0281 |
| ASPLUNDH TREE EXPERT LLC | 2/21/2023 | 4/21/2023 | 358.00 | 2/13/2023 | 2/18/2023 | 3.00 | 62.00 | 65.00 | 0.03% | 0.0181 |
| W D WRIGHT CONTRACTING INC | 2/24/2023 | 5/25/2023 | 328.86 | 2/13/2023 | 2/17/2023 | 2.50 | 97.00 | 99.50 | 0.03% | 0.0255 |
| OROURKE WRECKING COMPANY | 2/2/2023 | 4/17/2023 | 200.00 | 1/27/2023 | 1/27/2023 | 0.50 | 80.00 | 80.50 | 0.02% | 0.0126 |
| TOMS PAPA DINOS | 10/28/2023 | 10/28/2023 | 316.34 | 10/1/2023 | 10/1/2023 | 0.50 | 27.00 | 27.50 | 0.02% | 0.0068 |
| AMS CONSTRUCTION INC | 2/27/2023 | 5/26/2023 | 407.16 | 1/23/2023 | 2/11/2023 | 10.00 | 104.00 | 114.00 | 0.03% | 0.0362 |
| ASPLUNDH TREE EXPERT LLC | 4/18/2023 | 6/16/2023 | 533.00 | 4/11/2023 | 4/15/2023 | 2.50 | 62.00 | 64.50 | 0.04% | 0.0268 |
| BADGER DAYLIGHTING CORP | 3/22/2023 | 4/28/2023 | 130.34 | 3/2/2023 | 3/2/2023 | 0.50 | 57.00 | 57.50 | 0.01% | 0.0058 |
| WRIGHT BROTHERS INC | 5/17/2023 | 6/5/2023 | 295.43 | 5/17/2023 | 5/17/2023 | 0.50 | 19.00 | 19.50 | 0.02% | 0.0045 |
| ASPLUNDH TREE EXPERT LLC | 6/7/2023 | 8/4/2023 | 746.20 | 5/30/2023 | 6/3/2023 | 2.50 | 62.00 | 64.50 | 0.06% | 0.0375 |
| OROURKE WRECKING COMPANY | 3/15/2023 | 6/15/2023 | 292.50 | 3/13/2023 | 3/13/2023 | 0.50 | 94.00 | 94.50 | 0.02% | 0.0216 |
| SANITATION DISTRICT NO 1 | 4/10/2023 | 6/23/2023 | 181.15 | 1/1/2023 | 3/31/2023 | 45.00 | 84.00 | 129.00 | 0.01% | 0.0182 |
| BADGER DAYLIGHTING CORP | 6/6/2023 | 8/8/2023 | 302.65 | 5/25/2023 | 5/25/2023 | 0.50 | 75.00 | 75.50 | 0.02% | 0.0178 |
| AMS CONSTRUCTION INC | 8/1/2023 | 9/27/2023 | 195.37 | 7/5/2023 | 7/6/2023 | 1.00 | 83.00 | 84.00 | 0.02% | 0.0128 |
| AMS CONSTRUCTION INC | 8/1/2023 | 10/2/2023 | 446.56 | 7/10/2023 | 7/13/2023 | 2.00 | 81.00 | 83.00 | 0.03% | 0.0289 |
| AMS CONSTRUCTION INC | 9/18/2023 | 11/3/2023 | 451.16 | 9/4/2023 | 9/14/2023 | 5.50 | 50.00 | 55.50 | 0.04% | 0.0195 |
| OROURKE WRECKING COMPANY | 9/15/2023 | 11/10/2023 | 138.00 | 8/7/2023 | 8/25/2023 | 9.50 | 77.00 | 86.50 | 0.01% | 0.0093 |
| ERA - A Waters Company | 7/18/2023 | 7/25/2023 | 169.71 | 7/11/2023 | 7/11/2023 | 0.50 | 14.00 | 14.50 | 0.01% | 0.0019 |
| OROURKE WRECKING COMPANY | 9/18/2024 | 11/10/2023 | 866.25 | 9/7/2023 | 9/15/2023 | 4.50 | 56.00 | 60.50 | 0.07% | 0.0409 |
| PRINTING SERVICES | 7/20/2023 | 7/24/2023 | 123.05 | 6/10/2023 | 6/10/2023 | 0.50 | 44.00 | 44.50 | 0.01% | 0.0043 |
| AWP INC | 11/7/2023 | 2/5/2024 | 132.00 | 11/7/2023 | 11/7/2023 | 0.50 | 90.00 | 90.50 | 0.01% | 0.0093 |
| AMS CONSTRUCTION INC | 10/6/2023 | 11/20/2023 | 307.01 | 9/18/2023 | 9/28/2023 | 5.50 | 53.00 | 58.50 | 0.02% | 0.0140 |
| AMS CONSTRUCTION INC | 10/19/2023 | 12/4/2023 | 251.19 | 10/9/2023 | 10/12/2023 | 2.00 | 53.00 | 55.00 | 0.02% | 0.0108 |
| ASPLUNDH TREE EXPERT LLC | 11/21/2023 | 1/19/2024 | 967.00 | 11/13/2023 | 11/18/2023 | 3.00 | 62.00 | 65.00 | 0.08% | 0.0490 |
| CA ADVANCED INC | 11/6/2023 | 12/21/2023 | 140.00 | 7/24/2023 | 10/3/2023 | 36.00 | 79.00 | 115.00 | 0.01% | 0.0126 |
| AMS CONSTRUCTION INC | 11/10/2023 | 12/22/2023 | 138.44 | 11/6/2023 | 11/9/2023 | 2.00 | 43.00 | 45.00 | 0.01% | 0.0049 |
| ASPLUNDH TREE EXPERT LLC | 12/13/2023 | 2/9/2024 | 449.10 | 12/4/2023 | 12/9/2023 | 3.00 | 62.00 | 65.00 | 0.04% | 0.0228 |
| GUIDANT GROUP INC | 1/9/2023 | 1/23/2023 | 176.72 | 12/31/2022 | 1/6/2023 | 3.50 | 17.00 | 20.50 | 0.01% | 0.0028 |
| | 4/27/2023 | 4/28/2023 | 125.42 | 4/14/2023 | 4/14/2023 | 0.50 | 14.00 | 14.50 | 0.01% | 0.0014 |
| GUIDANT GROUP INC | 1/31/2023 | 2/14/2023 | 115.50 | 1/21/2023 | 1/27/2023 | 3.50 | 18.00 | 21.50 | 0.01% | 0.0019 |
| GUIDANT GROUP INC | 2/21/2023 | 3/7/2023 | 795.00 | 2/11/2023 | 2/17/2023 | 3.50 | 18.00 | 21.50 | 0.06% | 0.0133 |
| BLACKHAWK ENGAGEMENT SOLUTIONS INC | 2/10/2023 | 3/27/2023 | 129.80 | 1/1/2023 | 1/31/2023 | 15.50 | 55.00 | 70.50 | 0.01% | 0.0071 |
| Texas Oil Tech Lab | 5/5/2023 | 5/1/2023 | 530.00 | 4/3/2023 | 4/3/2023 | 0.50 | 28.00 | 28.50 | 0.04% | 0.0118 |
| GUIDANT GROUP INC | 2/28/2023 | 3/14/2023 | 103.90 | 2/18/2023 | 2/24/2023 | 3.50 | 18.00 | 21.50 | 0.01% | 0.0017 |
| ACCENTURE INTERNATIONAL LIMITED | 3/1/2023 | 4/3/2023 | 295.26 | 1/1/2023 | 1/31/2023 | 15.50 | 62.00 | 77.50 | 0.02% | 0.0178 |
| GUIDANT GROUP INC | 3/14/2023 | 3/28/2023 | 212.85 | 3/3/2023 | 3/9/2023 | 3.50 | 19.00 | 22.50 | 0.02% | 0.0037 |
| GUIDANT GROUP INC | 3/20/2023 | 4/3/2023 | 715.50 | 3/10/2023 | 3/16/2023 | 3.50 | 18.00 | 21.50 | 0.06% | 0.0120 |
| BLACKHAWK ENGAGEMENT SOLUTIONS INC | 4/19/2023 | 4/26/2023 | 715.00 | 4/11/2023 | 4/17/2023 | 3.50 | 9.00 | 12.50 | 0.06% | 0.0070 |
| | 6/12/2023 | 6/12/2023 | 785.85 | 5/16/2023 | 6/6/2023 | 11.00 | 6.00 | 17.00 | 0.06% | 0.0104 |
| CHARLES TOMBRAS ADVERTISING INC | 5/1/2023 | 6/12/2023 | 177.24 | 1/1/2023 | 3/31/2023 | 45.00 | 73.00 | 118.00 | 0.01% | 0.0163 |
| Randy's Rugged Wear | 3/1/2023 | 3/1/2023 | 172.14 | 2/28/2023 | 2/28/2023 | 0.50 | 1.00 | 1.50 | 0.01% | 0.0002 |
| CHARLES TOMBRAS ADVERTISING INC | 5/1/2023 | 6/16/2023 | 197.86 | 5/1/2023 | 5/31/2023 | 15.50 | 16.00 | 31.50 | 0.02% | 0.0049 |
| | 11/13/2023 | 11/14/2023 | 212.44 | 10/3/2023 | 10/3/2023 | 0.50 | 42.00 | 42.50 | 0.02% | 0.0070 |
| GUIDANT GROUP INC | 6/27/2023 | 7/11/2023 | 103.92 | 6/16/2023 | 6/22/2023 | 3.50 | 19.00 | 22.50 | 0.01% | 0.0018 |
| IMAGINE PARENT LLC | 6/27/2023 | 6/30/2023 | 163.97 | 6/27/2023 | 6/27/2023 | 0.50 | 3.00 | 3.50 | 0.01% | 0.0004 |
| NEI GLOBAL RELOCATION CO | 6/12/2023 | 7/3/2023 | 578.50 | 5/1/2023 | 5/31/2023 | 15.50 | 33.00 | 48.50 | 0.05% | 0.0219 |
| GUIDANT GROUP INC | 7/5/2023 | 7/19/2023 | 222.85 | 6/23/2023 | 6/29/2023 | 3.50 | 20.00 | 23.50 | 0.02% | 0.0041 |
| CHARLES TOMBRAS ADVERTISING INC | 7/10/2023 | 8/22/2023 | 197.85 | 7/1/2023 | 7/31/2023 | 15.50 | 22.00 | 37.50 | 0.02% | 0.0058 |
| GUIDANT GROUP INC | 9/19/2023 | 10/3/2023 | 221.00 | 9/8/2023 | 9/14/2023 | 3.50 | 19.00 | 22.50 | 0.02% | 0.0039 |

| Supplier Name | Invoice Date | Payment Date | Invoice Amount | Service Start Date | Service End Date | Service Lead Time | Payment Lead Time | Total Lead Time | Weighting Factor | Weighted Lead Time |
|---|---|---|---|---|---|---|---|---|---|---|
| GUIDANT GROUP INC | 10/2/2023 | 10/16/2023 | 198.81 | 9/22/2023 | 9/28/2023 | 3.50 | 18.00 | 21.50 | 0.02% | 0.0033 |
| KUBRA DATA TRANSFER LTD | 9/30/2023 | 11/17/2023 | 224.00 | 9/1/2023 | 9/30/2023 | 15.00 | 48.00 | 63.00 | 0.02% | 0.0110 |
| GUIDANT GROUP INC | 10/17/2023 | 10/31/2023 | 221.00 | 10/6/2023 | 10/12/2023 | 3.50 | 19.00 | 22.50 | 0.02% | 0.0039 |
| CHARLES TOMBRAS ADVERTISING INC | 9/10/2023 | 10/25/2023 | 501.71 | 8/1/2023 | 9/30/2023 | 30.50 | 25.00 | 55.50 | 0.04% | 0.0217 |
| | 11/14/2023 | 11/14/2023 | 691.61 | 10/16/2023 | 10/19/2023 | 2.00 | 26.00 | 28.00 | 0.05% | 0.0151 |
| SOLO PRINTING LLC | 10/20/2023 | 12/7/2023 | 363.97 | 10/20/2023 | 10/20/2023 | 0.50 | 48.00 | 48.50 | 0.03% | 0.0138 |
| GUIDANT GROUP INC | 10/31/2023 | 11/14/2023 | 102.85 | 10/22/2023 | 10/28/2023 | 3.50 | 17.00 | 20.50 | 0.01% | 0.0016 |
| OPEN TEXT INC | 10/10/2023 | 12/21/2023 | 543.84 | 10/1/2023 | 10/31/2023 | 15.50 | 51.00 | 66.50 | 0.04% | 0.0282 |
| CHARLES TOMBRAS ADVERTISING INC | 10/10/2023 | 11/22/2023 | 311.54 | 10/1/2023 | 10/31/2023 | 15.50 | 22.00 | 37.50 | 0.02% | 0.0091 |
| GUIDANT GROUP INC | 11/28/2023 | 12/12/2023 | 129.99 | 11/19/2023 | 11/25/2023 | 3.50 | 17.00 | 20.50 | 0.01% | 0.0021 |
| GUIDANT GROUP INC | 12/12/2023 | 12/22/2023 | 162.00 | 12/3/2023 | 12/9/2023 | 3.50 | 13.00 | 16.50 | 0.01% | 0.0021 |
| NATIONAL UTILITIES DIVERSITY COUNCIL | 11/27/2023 | 12/14/2023 | 467.00 | 1/1/2024 | 12/21/2024 | 178.00 | (373.00) | (195.00) | 0.04% | (0.0710) |
| JONES LANG LASALLE AMERICAS INC | 12/14/2023 | 12/19/2023 | 166.88 | 11/1/2023 | 11/30/2023 | 15.00 | 19.00 | 34.00 | 0.01% | 0.0044 |
| | 8/1/2023 | 8/7/2023 | 150.00 | 5/1/2023 | 7/31/2023 | 46.00 | 7.00 | 53.00 | 0.01% | 0.0062 |
| GRAINGER | 5/25/2023 | 5/31/2023 | 263.50 | 4/7/2023 | 4/12/2023 | 3.00 | 49.00 | 52.00 | 0.02% | 0.0107 |
| | 7/7/2023 | 8/1/2023 | 115.26 | 6/23/2023 | 6/23/2023 | 0.50 | 39.00 | 39.50 | 0.01% | 0.0036 |
| AMZN MKTP US H74UZ8691 | 4/11/2023 | 4/12/2023 | 174.53 | 3/25/2023 | 3/25/2023 | 0.50 | 18.00 | 18.50 | 0.01% | 0.0025 |
| BLACKHAWK ENGAGEMENT SOLUTIONS INC | 12/8/2023 | 1/22/2024 | 387.16 | 11/1/2023 | 11/30/2023 | 15.00 | 53.00 | 68.00 | 0.03% | 0.0205 |
| IMAGINE PARENT LLC | 12/14/2023 | 12/22/2023 | 403.53 | 12/20/2023 | 12/20/2023 | 0.50 | 2.00 | 2.50 | 0.03% | 0.0008 |
| IMAGINE PARENT LLC | 12/19/2023 | 12/22/2023 | 270.04 | 12/19/2023 | 12/19/2023 | 0.50 | 3.00 | 3.50 | 0.02% | 0.0007 |
| KENTUCKY STATE TREASURER | 1/4/2023 | 1/6/2023 | 500.00 | 1/1/2023 | 12/31/2023 | 182.50 | (359.00) | (176.50) | 0.04% | (0.0688) |
| LAKESIDE ENVIRONMENTAL CONSULTANTS LLC | 1/5/2023 | 2/17/2023 | 127.08 | 12/18/2022 | 12/24/2022 | 3.50 | 55.00 | 58.50 | 0.01% | 0.0058 |
| | 8/7/2023 | 8/7/2023 | 142.55 | 7/18/2023 | 7/19/2023 | 1.00 | 19.00 | 20.00 | 0.01% | 0.0022 |
| DSI SOLUTIONS LLC | 4/5/2023 | 7/5/2023 | 641.65 | 3/5/2023 | 4/7/2023 | 17.00 | 89.00 | 106.00 | 0.05% | 0.0530 |
| C3 INC | 12/15/2023 | 1/29/2024 | 271.72 | 11/30/2023 | 11/29/2024 | 183.00 | (305.00) | (122.00) | 0.02% | (0.0259) |
| | 6/30/2023 | 7/7/2023 | 100.00 | 5/1/2023 | 6/30/2023 | 30.50 | 7.00 | 37.50 | 0.01% | 0.0029 |
| A-1 JANITORIAL CLEANING SERVICE INC | 2/1/2023 | 4/6/2023 | 1,558.10 | 2/1/2023 | 2/28/2023 | 14.00 | 37.00 | 51.00 | 0.12% | 0.0620 |
| ACUREN INSPECTION INC | 10/24/2023 | 12/8/2023 | 7,750.00 | 10/16/2023 | 10/22/2023 | 3.50 | 47.00 | 50.50 | 0.60% | 0.3052 |
| ADVANCED TREE CARE SERVICE INC | 10/5/2023 | 1/3/2024 | 4,803.00 | 8/29/2023 | 8/30/2023 | 1.00 | 126.00 | 127.00 | 0.37% | 0.4757 |
| WRIGHT BROTHERS INC | 6/21/2023 | 7/7/2023 | 1,404.11 | 6/21/2023 | 6/21/2023 | 0.50 | 16.00 | 16.50 | 0.11% | 0.0181 |
| AIR RELIEF HOLDING COMPANY LLC | 6/2/2023 | 8/31/2023 | 5,597.00 | 5/29/2023 | 5/31/2023 | 1.50 | 92.00 | 93.50 | 0.44% | 0.4081 |
| AIRGAS INC | 1/23/2023 | 8/23/2023 | 1,997.62 | 1/20/2023 | 1/20/2023 | 0.50 | 215.00 | 215.50 | 0.16% | 0.3357 |
| AIRGAS INC | 1/11/2023 | 6/16/2023 | 1,779.60 | 1/6/2023 | 1/6/2023 | 0.50 | 161.00 | 161.50 | 0.14% | 0.2241 |
| BURFORDS CONSTRUCTION LLC | 7/25/2023 | 9/22/2023 | 1,365.00 | 7/9/2023 | 7/15/2023 | 3.50 | 69.00 | 72.50 | 0.11% | 0.0772 |
| TRC ENGINEERS INC | 4/14/2023 | 6/13/2023 | 1,249.50 | 2/20/2023 | 3/31/2023 | 20.00 | 74.00 | 94.00 | 0.10% | 0.0916 |
| CA ADVANCED INC | 2/21/2023 | 4/6/2023 | 1,090.48 | 1/19/2023 | 1/20/2023 | 1.00 | 76.00 | 77.00 | 0.09% | 0.0655 |
| INCORP INDUSTRIES LLC | 3/22/2023 | 6/20/2023 | 1,749.93 | 2/1/2023 | 2/28/2023 | 14.00 | 112.00 | 126.00 | 0.14% | 0.1719 |
| INCORP INDUSTRIES LLC | 12/20/2023 | 3/21/2024 | 1,690.58 | 11/27/2023 | 12/3/2023 | 3.50 | 109.00 | 112.50 | 0.13% | 0.1483 |
| ALPHA-LIBERTY COMPANY INC | 5/24/2023 | 7/7/2023 | 1,145.00 | 5/11/2023 | 5/11/2023 | 0.50 | 57.00 | 57.50 | 0.09% | 0.0513 |
| ASPLUNDH TREE EXPERT LLC | 6/19/2023 | 8/18/2023 | 4,914.63 | 6/11/2023 | 6/17/2023 | 3.50 | 62.00 | 65.50 | 0.38% | 0.2510 |
| ALTERNATIVE ENERGY SYSTEMS CONSULTING | 4/6/2023 | 5/19/2023 | 1,672.89 | 3/1/2023 | 3/31/2023 | 15.50 | 49.00 | 64.50 | 0.13% | 0.0841 |
| GLENWOOD ELECTRIC INC | 11/11/2022 | 2/15/2023 | 1,126.92 | 10/7/2022 | 10/31/2022 | 12.50 | 107.00 | 119.50 | 0.09% | 0.1050 |
| AMERICAN LIGHTING AND SIGNALIZATION LLC | 7/12/2023 | 9/12/2023 | 5,265.20 | 6/1/2023 | 6/30/2023 | 15.00 | 74.00 | 89.00 | 0.41% | 0.3654 |
| AMERICAN LIGHTING AND SIGNALIZATION LLC | 5/11/2023 | 7/10/2023 | 1,280.07 | 4/1/2023 | 4/30/2023 | 15.00 | 71.00 | 86.00 | 0.10% | 0.0858 |
| ADVANCED MECHANICAL OF NORTHERN KENTUCKY | 10/19/2023 | 1/17/2024 | 3,505.23 | 9/6/2023 | 9/14/2023 | 4.50 | 125.00 | 129.50 | 0.27% | 0.3540 |
| AMS CONSTRUCTION INC | 10/10/2023 | 11/22/2023 | 1,171.26 | 8/9/2023 | 8/10/2023 | 1.00 | 104.00 | 105.00 | 0.09% | 0.0959 |
| APPLIED INDUSTRIAL TECHNOLOGIES INC | 9/12/2023 | 11/10/2023 | 1,174.19 | 9/12/2023 | 9/12/2023 | 0.50 | 59.00 | 59.50 | 0.09% | 0.0545 |
| APPLIED INDUSTRIAL TECHNOLOGIES INC | 2/23/2023 | 10/6/2023 | 9,373.79 | 2/23/2023 | 2/23/2023 | 0.50 | 225.00 | 225.50 | 0.73% | 1.6484 |
| BAINBRIDGE CHEMICAL CORP | 5/2/2023 | 6/16/2023 | 16,873.61 | 5/2/2023 | 5/2/2023 | 0.50 | 45.00 | 45.50 | 1.32% | 0.5987 |
| BAINBRIDGE CHEMICAL CORP | 3/20/2023 | 5/4/2023 | 16,403.08 | 3/19/2023 | 3/19/2023 | 0.50 | 46.00 | 46.50 | 1.28% | 0.5948 |
| ASPLUNDH TREE EXPERT LLC | 11/6/2023 | 1/5/2024 | 5,870.62 | 10/29/2023 | 11/4/2023 | 3.50 | 62.00 | 65.50 | 0.46% | 0.2999 |
| WESCO DISTRIBUTION INC | 3/2/2023 | 3/31/2023 | 2,119.42 | 2/1/2023 | 2/28/2023 | 14.00 | 31.00 | 45.00 | 0.17% | 0.0744 |
| BETHESDA HEALTHCARE INC | 5/31/2023 | 12/13/2023 | 1,120.00 | 5/1/2023 | 5/31/2023 | 15.50 | 196.00 | 211.50 | 0.09% | 0.1847 |
| BRAKEFIRE INC | 8/17/2023 | 9/1/2023 | 2,345.75 | 7/1/2023 | 7/31/2023 | 15.50 | 32.00 | 47.50 | 0.18% | 0.0869 |
| BUTLER COUNTY | 7/10/2023 | 7/20/2023 | 6,517.51 | 6/1/2023 | 7/5/2023 | 17.50 | 15.00 | 32.50 | 0.51% | 0.1652 |
| KUBRA DATA TRANSFER LTD | 6/30/2023 | 8/18/2023 | 2,792.09 | 6/1/2023 | 6/30/2023 | 15.00 | 49.00 | 64.00 | 0.22% | 0.1394 |
| ASPLUNDH TREE EXPERT LLC | 9/20/2023 | 11/17/2023 | 1,796.40 | 8/14/2023 | 8/18/2023 | 2.50 | 91.00 | 93.50 | 0.14% | 0.1310 |
| AMS CONSTRUCTION INC | 7/24/2023 | 9/13/2023 | 1,503.85 | 7/3/2023 | 7/6/2023 | 2.00 | 69.00 | 71.00 | 0.12% | 0.0833 |
| C&K INDUSTRIAL SERVICES INC | 6/9/2023 | 9/11/2023 | 24,419.92 | 5/22/2023 | 5/28/2023 | 3.50 | 106.00 | 109.50 | 1.90% | 2.0853 |
| C&K INDUSTRIAL SERVICES INC | 6/9/2023 | 9/11/2023 | 17,955.07 | 5/29/2023 | 6/2/2023 | 2.50 | 101.00 | 103.50 | 1.40% | 1.4492 |
| CHARLES TOMBRAS ADVERTISING INC | 12/1/2022 | 2/17/2023 | 1,057.35 | 9/1/2022 | 12/31/2022 | 61.00 | 48.00 | 109.00 | 0.08% | 0.0899 |
| CAROLINA PRECISION SWITCHGEAR LLC | 1/26/2023 | 3/10/2023 | 3,018.75 | 1/2/2023 | 1/8/2023 | 3.50 | 61.00 | 64.50 | 0.24% | 0.1518 |
| INCORP INDUSTRIES LLC | 11/21/2023 | 2/23/2024 | 2,823.03 | 11/6/2023 | 11/12/2023 | 3.50 | 103.00 | 106.50 | 0.22% | 0.2345 |

| Supplier Name | Invoice Date | Payment Date | Invoice Amount | Service Start Date | Service End Date | Service Lead Time | Payment Lead Time | Total Lead Time | Weighting Factor | Weighted Lead Time |
|---|---|---|---|---|---|---|---|---|---|---|
| INCORP INDUSTRIES LLC | 5/18/2023 | 9/1/2023 | 1,655.40 | 4/24/2023 | 4/30/2023 | 3.50 | 124.00 | 127.50 | 0.13% | 0.1646 |
| CINTAS CORPORATION | 10/24/2023 | 12/8/2023 | 1,565.52 | 10/24/2023 | 10/24/2023 | 0.50 | 45.00 | 45.50 | 0.12% | 0.0555 |
| CITY OF TRENTON | 2/6/2023 | 3/3/2023 | 1,851.27 | 1/6/2023 | 2/6/2023 | 16.00 | 25.00 | 41.00 | 0.14% | 0.0592 |
| SOLO PRINTING LLC | 1/20/2023 | 3/9/2023 | 1,572.52 | 1/19/2023 | 1/19/2023 | 0.50 | 49.00 | 49.50 | 0.12% | 0.0607 |
| INCORP INDUSTRIES LLC | 6/27/2023 | 9/25/2023 | 9,592.54 | 6/12/2023 | 6/18/2023 | 3.50 | 99.00 | 102.50 | 0.75% | 0.7668 |
| ADVANCED MECHANICAL OF NORTHERN KENTUCKY | 7/3/2023 | 10/3/2023 | 4,673.34 | 9/24/2023 | 9/30/2023 | 3.50 | 3.00 | 6.50 | 0.36% | 0.0237 |
| CORNERSTONE CONTROLS INC | 10/6/2023 | 11/22/2023 | 5,098.58 | 10/13/2023 | 10/13/2023 | 0.50 | 40.00 | 40.50 | 0.40% | 0.1610 |
| DEBRA-KUEMPEL | 10/11/2023 | 1/9/2024 | 4,251.90 | 10/11/2023 | 10/11/2023 | 0.50 | 90.00 | 90.50 | 0.33% | 0.3001 |
| DEBRA-KUEMPEL | 10/13/2023 | 1/11/2024 | 3,188.90 | 10/13/2023 | 10/13/2023 | 0.50 | 90.00 | 90.50 | 0.25% | 0.2251 |
| INCORP INDUSTRIES LLC | 10/18/2023 | 2/8/2024 | 1,650.90 | 10/2/2023 | 10/8/2023 | 3.50 | 123.00 | 126.50 | 0.13% | 0.1629 |
| US LAWNS OF CINCINNATI EAST | 10/6/2023 | 1/4/2024 | 1,431.20 | 9/24/2023 | 9/30/2023 | 3.50 | 96.00 | 99.50 | 0.11% | 0.1111 |
| INCORP INDUSTRIES LLC | 3/2/2023 | 5/31/2023 | 1,838.49 | 2/6/2023 | 2/12/2023 | 3.50 | 108.00 | 111.50 | 0.14% | 0.1599 |
| INCORP INDUSTRIES LLC | 6/30/2023 | 10/6/2023 | 1,997.58 | 6/1/2023 | 6/30/2023 | 15.00 | 98.00 | 113.00 | 0.16% | 0.1760 |
| CA ADVANCED INC | 8/10/2023 | 9/26/2023 | 1,388.61 | 4/27/2023 | 6/13/2023 | 24.00 | 105.00 | 129.00 | 0.11% | 0.1397 |
| BOWLIN GROUP LLC | 2/13/2023 | 3/30/2023 | 1,111.29 | 8/29/2022 | 11/3/2022 | 33.50 | 147.00 | 180.50 | 0.09% | 0.1564 |
| ELECTRIC POWER RESEARCH INSTITUTE EPRI | 7/25/2023 | 8/31/2023 | 1,638.31 | 8/1/2023 | 10/31/2023 | 46.00 | (61.00) | (15.00) | 0.13% | (0.0192) |
| ERNST & YOUNG LLP | 10/10/2023 | 11/22/2023 | 14,283.43 | 4/3/2023 | 5/25/2023 | 26.50 | 181.00 | 207.50 | 1.11% | 2.3113 |
| FAITH MILLWRIGHT & RIGGING INC | 7/5/2023 | 7/14/2023 | 3,702.50 | 7/1/2023 | 7/1/2023 | 0.50 | 13.00 | 13.50 | 0.29% | 0.0390 |
| OROURKE WRECKING COMPANY | 12/12/2022 | 2/3/2023 | 4,869.98 | 12/3/2022 | 12/3/2022 | 0.50 | 62.00 | 62.50 | 0.38% | 0.2374 |
| JONES LANG LASALLE AMERICAS INC | 12/4/2023 | 12/8/2023 | 6,082.03 | 11/1/2023 | 11/30/2023 | 15.00 | 8.00 | 23.00 | 0.47% | 0.1091 |
| FENTON RIGGING CORP | 7/26/2023 | 11/14/2023 | 3,025.93 | 7/20/2023 | 7/20/2023 | 0.50 | 117.00 | 117.50 | 0.24% | 0.2773 |
| US LAWNS OF CINCINNATI EAST | 5/17/2023 | 8/15/2023 | 2,909.60 | 4/23/2023 | 4/29/2023 | 3.50 | 108.00 | 111.50 | 0.23% | 0.2530 |
| ASPLUNDH TREE EXPERT LLC | 10/4/2023 | 12/1/2023 | 1,279.20 | 9/25/2023 | 9/30/2023 | 3.00 | 62.00 | 65.00 | 0.10% | 0.0648 |
| FUSION SAFETY AND BUSINESS SOLUTIONS | 8/15/2023 | 11/14/2023 | 1,028.40 | 8/7/2023 | 8/11/2023 | 2.50 | 95.00 | 97.50 | 0.08% | 0.0782 |
| INCORP INDUSTRIES LLC | 10/31/2023 | 2/8/2024 | 4,702.99 | 10/1/2023 | 10/31/2023 | 15.50 | 100.00 | 115.50 | 0.37% | 0.4236 |
| FUSION SAFETY AND BUSINESS SOLUTIONS | 9/22/2023 | 12/21/2023 | 1,422.22 | 9/11/2023 | 9/14/2023 | 2.00 | 98.00 | 100.00 | 0.11% | 0.1109 |
| FUSION SAFETY AND BUSINESS SOLUTIONS | 3/8/2023 | 6/7/2023 | 10,663.60 | 2/20/2023 | 3/5/2023 | 7.00 | 94.00 | 101.00 | 0.83% | 0.8399 |
| GENERAL KINEMATICS CORP | 3/23/2023 | 4/6/2023 | 1,133.35 | 3/23/2023 | 3/23/2023 | 0.50 | 14.00 | 14.50 | 0.09% | 0.0128 |
| GIW INDUSTRIES INC | 7/17/2023 | 9/1/2023 | 8,515.40 | 7/17/2023 | 7/17/2023 | 0.50 | 46.00 | 46.50 | 0.66% | 0.3088 |
| INCORP INDUSTRIES LLC | 10/26/2023 | 2/8/2024 | 2,871.00 | 10/16/2023 | 10/22/2023 | 3.50 | 109.00 | 112.50 | 0.22% | 0.2519 |
| ASPLUNDH TREE EXPERT LLC | 4/3/2023 | 6/2/2023 | 2,148.96 | 3/30/2023 | 3/31/2023 | 1.00 | 63.00 | 64.00 | 0.17% | 0.1073 |
| GOT-A-GO RENTALS & SEPTIC SERVICE INC | 5/26/2023 | 8/30/2023 | 2,931.20 | 5/19/2023 | 6/16/2023 | 14.50 | 75.00 | 89.50 | 0.23% | 0.2046 |
| HOIST & CRANE SERVICE GROUP | 6/30/2023 | 7/28/2023 | 2,053.70 | 6/2/2023 | 6/6/2023 | 2.50 | 52.00 | 54.50 | 0.16% | 0.0873 |
| HONAKER LAW OFFICE PLLC | 3/7/2023 | 4/6/2023 | 1,007.00 | 2/1/2023 | 2/28/2023 | 14.00 | 37.00 | 51.00 | 0.08% | 0.0401 |
| INDUSTRIAL FIELD MAINTENANCE LLC | 5/1/2023 | 5/31/2023 | 15,802.14 | 3/30/2023 | 4/30/2023 | 16.00 | 31.00 | 47.00 | 1.23% | 0.5792 |
| ASPLUNDH TREE EXPERT LLC | 12/4/2023 | 2/4/2024 | 2,782.14 | 11/27/2023 | 12/2/2023 | 3.00 | 64.00 | 67.00 | 0.22% | 0.1454 |
| ASPLUNDH TREE EXPERT LLC | 9/5/2023 | 11/3/2023 | 1,391.07 | 9/2/2023 | 9/2/2023 | 0.50 | 62.00 | 62.50 | 0.11% | 0.0678 |
| INCORP INDUSTRIES LLC | 3/2/2023 | 5/31/2023 | 2,742.35 | 2/13/2023 | 2/19/2023 | 3.50 | 101.00 | 104.50 | 0.21% | 0.2235 |
| TRC ENGINEERS INC | 9/13/2022 | 1/9/2023 | 2,306.04 | 8/1/2022 | 8/31/2022 | 15.50 | 131.00 | 146.50 | 0.18% | 0.2635 |
| INCORP INDUSTRIES LLC | 10/26/2023 | 1/24/2024 | 4,684.99 | 10/9/2023 | 10/15/2023 | 3.50 | 101.00 | 104.50 | 0.37% | 0.3818 |
| ASPLUNDH TREE EXPERT LLC | 6/27/2023 | 8/25/2023 | 9,737.49 | 6/19/2023 | 6/24/2023 | 3.00 | 62.00 | 65.00 | 0.76% | 0.4936 |
| INVAIR SYSTEMS LLC | 6/26/2023 | 6/28/2023 | 25,255.05 | 6/26/2023 | 6/26/2023 | 0.50 | 2.00 | 2.50 | 1.97% | 0.0492 |
| JOHN CONTI COFFEE COMPANY | 3/13/2023 | 4/6/2023 | 1,214.39 | 3/13/2023 | 3/13/2023 | 0.50 | 24.00 | 24.50 | 0.09% | 0.0232 |
| JOHN M GRATSCH | 7/14/2023 | 10/12/2023 | 1,659.68 | 7/13/2023 | 7/13/2023 | 0.50 | 91.00 | 91.50 | 0.13% | 0.1184 |
| JONES LANG LASALLE AMERICAS INC | 12/4/2023 | 12/8/2023 | 1,403.67 | 11/1/2023 | 11/30/2023 | 15.00 | 8.00 | 23.00 | 0.11% | 0.0252 |
| JOHN M GRATSCH | 4/17/2023 | 7/26/2023 | 2,286.26 | 4/25/2023 | 4/25/2023 | 0.50 | 92.00 | 92.50 | 0.18% | 0.1649 |
| JOHN M GRATSCH | 9/24/2023 | 12/21/2023 | 5,140.74 | 9/20/2023 | 9/20/2023 | 0.50 | 92.00 | 92.50 | 0.40% | 0.3708 |
| | 11/28/2023 | 12/4/2023 | 1,029.81 | 11/11/2023 | 11/16/2023 | 3.00 | 18.00 | 21.00 | 0.08% | 0.0169 |
| ASPLUNDH TREE EXPERT LLC | 10/4/2023 | 12/1/2023 | 2,901.00 | 9/25/2023 | 9/30/2023 | 3.00 | 62.00 | 65.00 | 0.23% | 0.1471 |
| ASPLUNDH TREE EXPERT LLC | 9/5/2023 | 11/3/2023 | 1,033.02 | 8/28/2023 | 9/2/2023 | 3.00 | 62.00 | 65.00 | 0.08% | 0.0524 |
| ASPLUNDH TREE EXPERT LLC | 5/30/2023 | 7/28/2023 | 1,445.76 | 5/27/2023 | 5/27/2023 | 0.50 | 62.00 | 62.50 | 0.11% | 0.0705 |
| GRAINGER | 8/16/2023 | 8/29/2023 | 3,175.51 | 8/2/2023 | 8/2/2023 | 0.50 | 27.00 | 27.50 | 0.25% | 0.0681 |
| JOHN M GRATSCH | 7/2/2023 | 9/29/2023 | 2,201.49 | 6/29/2023 | 6/29/2023 | 0.50 | 92.00 | 92.50 | 0.17% | 0.1588 |
| JOHN M GRATSCH | 5/10/2023 | 8/9/2023 | 1,703.23 | 5/10/2023 | 5/10/2023 | 0.50 | 91.00 | 91.50 | 0.13% | 0.1215 |
| JOHN M GRATSCH | 10/29/2023 | 1/26/2024 | 2,043.85 | 10/25/2023 | 10/25/2023 | 0.50 | 93.00 | 93.50 | 0.16% | 0.1490 |
| JOHN M GRATSCH | 12/1/2023 | 2/29/2024 | 8,492.88 | 10/29/2023 | 11/29/2023 | 16.00 | 92.00 | 108.00 | 0.66% | 0.7153 |
| JOHNSON ELECTRIC SUPPLY COMPANY | 12/4/2023 | 12/7/2023 | 1,811.54 | 11/28/2023 | 11/29/2023 | 1.00 | 8.00 | 9.00 | 0.14% | 0.0127 |
| AMS CONSTRUCTION INC | 12/16/2022 | 1/30/2023 | 1,913.20 | 11/14/2022 | 11/23/2022 | 5.00 | 68.00 | 73.00 | 0.15% | 0.1089 |
| ASPLUNDH TREE EXPERT LLC | 2/13/2023 | 4/14/2023 | 4,520.72 | 2/5/2023 | 2/11/2023 | 3.50 | 62.00 | 65.50 | 0.35% | 0.2309 |
| JOHNSON ELECTRIC SUPPLY COMPANY | 7/4/2023 | 7/31/2023 | 11,360.00 | 6/27/2023 | 6/27/2023 | 0.50 | 34.00 | 34.50 | 0.89% | 0.3056 |
| ASPLUNDH TREE EXPERT LLC | 5/15/2023 | 7/14/2023 | 1,391.07 | 5/8/2023 | 5/13/2023 | 3.00 | 62.00 | 65.00 | 0.11% | 0.0705 |
| ADVANCED MECHANICAL OF NORTHERN KENTUCKY | 10/19/2023 | 1/17/2024 | 2,564.22 | 8/2/2023 | 8/9/2023 | 4.00 | 161.00 | 165.00 | 0.20% | 0.3299 |
| INCORP INDUSTRIES LLC | 11/17/2023 | 2/15/2024 | 1,168.48 | 10/30/2023 | 11/5/2023 | 3.50 | 102.00 | 105.50 | 0.09% | 0.0961 |

| Supplier Name | Invoice Date | Payment Date | Invoice Amount | Service Start Date | Service End Date | Service Lead Time | Payment Lead Time | Total Lead Time | Weighting Factor | Weighted Lead Time |
|---|---|---|---|---|---|---|---|---|---|---|
| ASPLUNDH TREE EXPERT LLC | 6/12/2023 | 8/11/2023 | 3,354.64 | 6/5/2023 | 6/10/2023 | 3.00 | 62.00 | 65.00 | 0.26% | 0.1700 |
| WRIGHT BROTHERS INC | 8/21/2023 | 8/29/2023 | 1,562.32 | 8/21/2023 | 8/21/2023 | 0.50 | 8.00 | 8.50 | 0.12% | 0.0104 |
| AMS CONSTRUCTION INC | 9/11/2023 | 10/26/2023 | 3,766.50 | 8/21/2023 | 8/29/2023 | 4.50 | 58.00 | 62.50 | 0.29% | 0.1836 |
| US LAWNS OF CINCINNATI EAST | 6/12/2023 | 9/8/2023 | 1,597.60 | 6/4/2023 | 6/10/2023 | 3.50 | 90.00 | 93.50 | 0.12% | 0.1165 |
| KENTUCKY UNDERGROUND PROTECTION INC | 11/30/2023 | 1/10/2024 | 3,276.00 | 11/1/2023 | 11/30/2023 | 15.00 | 41.00 | 56.00 | 0.26% | 0.1431 |
| M & E PUMP & EQUIPMENT CO | 1/18/2023 | 4/18/2023 | 6,541.08 | 1/17/2023 | 1/17/2023 | 0.50 | 91.00 | 91.50 | 0.51% | 0.4667 |
| MCGILL POWER S&E INC | 8/15/2023 | 9/18/2023 | 19,650.00 | 8/15/2023 | 8/15/2023 | 0.50 | 34.00 | 34.50 | 1.53% | 0.5287 |
| INCORP INDUSTRIES LLC | 4/30/2003 | 8/11/2023 | 1,270.54 | 4/17/2023 | 4/23/2023 | 3.50 | 110.00 | 113.50 | 0.10% | 0.1125 |
| INCORP INDUSTRIES LLC | 6/27/2023 | 9/25/2023 | 3,147.04 | 6/12/2023 | 6/18/2023 | 3.50 | 99.00 | 102.50 | 0.25% | 0.2516 |
| ASPLUNDH TREE EXPERT LLC | 5/22/2023 | 7/21/2023 | 8,386.60 | 5/15/2023 | 5/20/2023 | 3.00 | 62.00 | 65.00 | 0.65% | 0.4251 |
| MIDWEST SWITCHGEAR SERVICES | 8/18/2023 | 12/21/2023 | 8,130.00 | 8/18/2023 | 8/18/2023 | 0.50 | 125.00 | 125.50 | 0.63% | 0.7957 |
| MIDWEST SWITCHGEAR SERVICES | 12/19/2022 | 4/6/2023 | 7,460.00 | 12/13/2022 | 12/19/2022 | 3.50 | 108.00 | 111.50 | 0.58% | 0.6487 |
| BLACKHAWK ENGAGEMENT SOLUTIONS INC | 7/11/2023 | 8/25/2023 | 1,500.00 | 7/1/2023 | 7/31/2023 | 15.50 | 25.00 | 40.50 | 0.12% | 0.0474 |
| GLENWOOD ELECTRIC INC | 2/17/2023 | 5/18/2023 | 2,018.40 | 2/8/2023 | 2/9/2023 | 1.00 | 98.00 | 99.00 | 0.16% | 0.1558 |
| | 9/15/2023 | 9/18/2023 | 1,840.49 | 8/1/2023 | 9/12/2023 | 21.50 | 6.00 | 27.50 | 0.14% | 0.0395 |
| ASPLUNDH TREE EXPERT LLC | 7/24/2023 | 9/22/2023 | 2,845.50 | 7/17/2023 | 7/22/2023 | 3.00 | 62.00 | 65.00 | 0.22% | 0.1442 |
| NV5 GEOSPATIAL INC | 8/25/2023 | 10/24/2023 | 2,499.72 | 7/29/2023 | 8/25/2023 | 14.00 | 60.00 | 74.00 | 0.19% | 0.1443 |
| INCORP INDUSTRIES LLC | 4/30/2023 | 8/1/2023 | 1,412.50 | 4/3/2023 | 4/9/2023 | 3.50 | 114.00 | 117.50 | 0.11% | 0.1294 |
| ASPLUNDH TREE EXPERT LLC | 5/16/2023 | 7/14/2023 | 1,257.20 | 5/8/2023 | 5/12/2023 | 2.50 | 63.00 | 65.50 | 0.10% | 0.0642 |
| WRIGHT BROTHERS INC | 10/2/2023 | 10/13/2023 | 1,546.21 | 10/2/2023 | 10/2/2023 | 0.50 | 11.00 | 11.50 | 0.12% | 0.0139 |
| PATRICK ENGINEERING INC | 1/11/2023 | 3/22/2023 | 1,476.13 | 12/1/2022 | 1/3/2023 | 17.00 | 78.00 | 95.00 | 0.12% | 0.1094 |
| PERFORMANCE CONTRACTORS INC | 11/30/2022 | 1/24/2023 | 26,767.92 | 10/31/2022 | 11/20/2022 | 10.50 | 65.00 | 75.50 | 2.09% | 1.5760 |
| AMS CONSTRUCTION INC | 6/21/2023 | 8/4/2023 | 1,040.13 | 6/15/2023 | 6/15/2023 | 0.50 | 50.00 | 50.50 | 0.08% | 0.0410 |
| INCORP INDUSTRIES LLC | 11/16/2023 | 3/8/2024 | 3,797.03 | 10/23/2023 | 10/29/2023 | 3.50 | 131.00 | 134.50 | 0.30% | 0.3983 |
| PERFORMANCE CONTRACTORS INC | 3/20/2023 | 5/4/2023 | 19,790.81 | 2/27/2023 | 3/12/2023 | 7.00 | 53.00 | 60.00 | 1.54% | 0.9260 |
| PERFORMANCE CONTRACTORS INC | 10/13/2023 | 11/30/2023 | 14,580.75 | 9/11/2023 | 9/24/2023 | 7.00 | 67.00 | 74.00 | 1.14% | 0.8414 |
| INCORP INDUSTRIES LLC | 5/25/2023 | 8/23/2023 | 3,393.38 | 5/1/2023 | 5/7/2023 | 3.50 | 108.00 | 111.50 | 0.26% | 0.2951 |
| PERFORMANCE CONTRACTORS INC | 1/10/2023 | 2/24/2023 | 10,813.94 | 12/19/2022 | 12/25/2022 | 3.50 | 61.00 | 64.50 | 0.84% | 0.5439 |
| GLENWOOD ELECTRIC INC | 2/22/2023 | 5/23/2023 | 2,202.91 | 2/16/2023 | 3/4/2023 | 8.50 | 80.00 | 88.50 | 0.17% | 0.1520 |
| R B JERGENS CONTRACTORS INC | 1/31/2023 | 6/12/2023 | 2,594.14 | 12/1/2022 | 12/31/2022 | 15.50 | 163.00 | 178.50 | 0.20% | 0.3611 |
| R B JERGENS CONTRACTORS INC | 2/5/2023 | 5/4/2023 | 28,408.60 | 1/30/2023 | 2/5/2023 | 3.50 | 88.00 | 91.50 | 2.22% | 2.0271 |
| RENOLD INC | 8/23/2023 | 9/26/2023 | 10,108.16 | 8/23/2023 | 8/23/2023 | 0.50 | 34.00 | 34.50 | 0.79% | 0.2720 |
| ASPLUNDH TREE EXPERT LLC | 2/13/2023 | 4/14/2023 | 13,910.70 | 2/6/2023 | 2/11/2023 | 3.00 | 62.00 | 65.00 | 1.08% | 0.7051 |
| ASPLUNDH TREE EXPERT CO | 1/16/2023 | 3/17/2023 | 21,805.16 | 1/9/2023 | 1/14/2023 | 3.00 | 62.00 | 65.00 | 1.70% | 1.1053 |
| ROSS MARKETING SOLUTIONS | 3/10/2023 | 3/21/2023 | 1,922.86 | 3/10/2023 | 3/10/2023 | 0.50 | 11.00 | 11.50 | 0.15% | 0.0172 |
| KUBRA DATA TRANSFER LTD | 1/31/2023 | 3/20/2023 | 13,800.22 | 1/1/2023 | 1/31/2023 | 15.50 | 48.00 | 63.50 | 1.08% | 0.6834 |
| SALESFORCECOM INC | 6/30/2023 | 8/17/2023 | 1,766.26 | 7/30/2023 | 7/29/2024 | 183.00 | (347.00) | (164.00) | 0.14% | (0.2259) |
| SCHNEIDER ELECTRIC GRID AUTOMATION INC | 4/3/2023 | 5/18/2023 | 5,303.64 | 4/1/2023 | 6/30/2023 | 45.50 | (43.00) | 2.50 | 0.41% | 0.0103 |
| SCHNEIDER ELECTRIC GRID AUTOMATION INC | 10/2/2024 | 11/16/2023 | 2,121.46 | 10/1/2023 | 12/31/2023 | 46.00 | (45.00) | 1.00 | 0.17% | 0.0017 |
| SCHNEIDER ELECTRIC GRID AUTOMATION INC | 7/5/2023 | 8/18/2023 | 5,303.64 | 7/1/2023 | 9/30/2023 | 46.00 | (43.00) | 3.00 | 0.41% | 0.0124 |
| ASPLUNDH TREE EXPERT LLC | 11/14/2023 | 1/12/2024 | 12,559.61 | 11/6/2023 | 11/11/2023 | 3.00 | 62.00 | 65.00 | 0.98% | 0.6366 |
| SUPERIOR FORESTRY SERVICES INC | 8/9/2023 | 9/22/2023 | 2,716.16 | 8/12/2023 | 8/12/2023 | 0.50 | 41.00 | 41.50 | 0.21% | 0.0879 |
| INCORP INDUSTRIES LLC | 8/7/2023 | 11/21/2023 | 18,534.97 | 7/24/2023 | 7/30/2023 | 3.50 | 114.00 | 117.50 | 1.45% | 1.6984 |
| TELEDYNE INSTRUMENTS INC | 11/13/2023 | 12/28/2023 | 5,050.90 | 11/6/2023 | 11/10/2023 | 2.50 | 48.00 | 50.50 | 0.39% | 0.1989 |
| THE BABCOCK & WILCOX COMPANY | 8/18/2023 | 10/2/2023 | 32,075.60 | 8/18/2023 | 8/18/2023 | 0.50 | 45.00 | 45.50 | 2.50% | 1.1381 |
| UPLIGHT INC | 7/17/2023 | 8/1/2023 | 1,457.50 | 5/28/2023 | 6/25/2023 | 14.50 | 37.00 | 51.50 | 0.11% | 0.0585 |
| UPLIGHT INC | 1/30/2023 | 2/14/2023 | 6,186.50 | 12/1/2022 | 1/18/2023 | 24.50 | 27.00 | 51.50 | 0.48% | 0.2485 |
| VENTURESUM CORPORATION | 8/31/2023 | 10/20/2023 | 4,458.30 | 8/24/2023 | 8/29/2023 | 3.00 | 52.00 | 55.00 | 0.35% | 0.1912 |
| VENTURESUM CORPORATION | 8/29/2023 | 10/13/2023 | 6,963.00 | 8/18/2023 | 8/30/2023 | 6.50 | 44.00 | 50.50 | 0.54% | 0.2742 |
| INCORP INDUSTRIES LLC | 11/28/2023 | 2/28/2024 | 11,968.16 | 11/13/2023 | 11/19/2023 | 3.50 | 101.00 | 104.50 | 0.93% | 0.9753 |
| VIKING AUTOMATIC SPRINKLER COMPANY | 6/20/2023 | 9/21/2023 | 1,860.00 | 5/10/2023 | 5/10/2023 | 0.50 | 134.00 | 134.50 | 0.15% | 0.1951 |
| KUBRA DATA TRANSFER LTD | 9/30/2023 | 11/17/2023 | 13,965.26 | 9/1/2023 | 9/30/2023 | 15.00 | 48.00 | 63.00 | 1.09% | 0.6861 |
| ASPLUNDH TREE EXPERT LLC | 4/17/2023 | 6/16/2023 | 22,934.94 | 4/10/2023 | 4/15/2023 | 3.00 | 62.00 | 65.00 | 1.79% | 1.1626 |
| KUBRA DATA TRANSFER LTD | 10/31/2023 | 12/18/2023 | 12,963.68 | 10/1/2023 | 10/31/2023 | 15.50 | 48.00 | 63.50 | 1.01% | 0.6420 |
| ASPLUNDH TREE EXPERT LLC | 10/29/2023 | 12/29/2023 | 19,112.45 | 10/23/2023 | 10/28/2023 | 3.00 | 62.00 | 65.00 | 1.49% | 0.9688 |
| ASPLUNDH TREE EXPERT LLC | 10/23/2023 | 12/22/2023 | 21,842.80 | 10/16/2023 | 10/21/2023 | 3.00 | 62.00 | 65.00 | 1.70% | 1.1072 |
| ASPLUNDH TREE EXPERT LLC | 7/19/2023 | 9/15/2023 | 16,382.10 | 7/10/2023 | 7/15/2023 | 3.00 | 62.00 | 65.00 | 1.28% | 0.8304 |
| ASPLUNDH TREE EXPERT LLC | 4/24/2023 | 6/23/2023 | 25,039.26 | 4/17/2023 | 4/22/2023 | 3.00 | 62.00 | 65.00 | 1.95% | 1.2692 |
| SUPERIOR ENVIRONMENTAL SOLUTIONS LLC | 10/21/2023 | 2/1/2024 | 90,500.28 | 10/16/2023 | 10/21/2023 | 3.00 | 103.00 | 106.00 | 7.06% | 7.4811 |
| SUPERIOR ENVIRONMENTAL SOLUTIONS LLC | 11/1/2023 | 3/13/2024 | 89,148.02 | 10/23/2023 | 11/1/2023 | 5.00 | 133.00 | 138.00 | 6.95% | 9.5940 |
| HONEYWELL INTERNATIONAL INC | 3/31/2023 | 5/15/2023 | 101,294.94 | 2/1/2023 | 2/28/2023 | 14.00 | 76.00 | 90.00 | 7.90% | 7.1095 |
| | | | $ 1,282,306.86 | | | | | | | 80.94 |

| Supplier Name | Invoice Date | Payment Date | Invoice Amount | Service Start Date | Service End Date | Service Lead Time | Payment Lead Time | Total Lead Time | Weighting Factor | Weighted Lead Time |
|---|---|---|---|---|---|---|---|---|---|---|

**DUKE ENERGY KENTUCKY**
**LEAD LAG STUDY**
**TAXES OTHER THAN INCOME TAXES**

| Category | Weighted Expense Lead |
|---|---|
| Regulatory Fees | (172.00) |
| Kentucky Sales and Use Tax | 35.09 |
| Utility Gross Receipts License Tax (UGRLT) | 35.08 |
| Local Franchise Fee | 35.54 |
| Property /Real Estate Tax | 265.35 |
| Federal Unemployment Taxes | 105.65 |
| State Unemployment Taxes - Kentucky | 105.58 |

**Regulatory Fees**

| Payee | | Amount | Period Beginning | Period Ending | Payment Date | Weighting Factor | Service Lead | Payment Lead | Total Lead | Weighted Lead |
|---|---|---|---|---|---|---|---|---|---|---|
| (A) | | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) |
| State of Kentucky Treasurer | $ | 597,823.00 | 7/1/2023 | 6/30/2024 | 7/11/2023 | 100.00% | 183.00 | (355.00) | (172.00) | (172.00) |
| | $ | 597,823.00 | | | | | | | | (172.00) |

**Kentucky Sales and Use Tax**

| Payee | | Amount | Period Beginning | Period Ending | Payment Date | Weighting Factor | Service Lead | Payment Lead | Total Lead | Weighted Lead |
|---|---|---|---|---|---|---|---|---|---|---|
| (A) | | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) |
| Kentucky Department of Revenue | $ | 1,974,391.06 | 1/1/2023 | 2/1/2023 | 2/20/2023 | 12.67% | 16.00 | 19.00 | 35.00 | 4.44 |
| Kentucky Department of Revenue | | 1,056,672.81 | 2/1/2023 | 3/1/2023 | 3/20/2023 | 6.78% | 14.50 | 19.00 | 33.50 | 2.27 |
| Kentucky Department of Revenue | | 1,111,375.32 | 3/1/2023 | 4/1/2023 | 4/20/2023 | 7.13% | 16.00 | 19.00 | 35.00 | 2.50 |
| Kentucky Department of Revenue | | 322,076.64 | 4/1/2023 | 5/1/2023 | 5/22/2023 | 2.07% | 15.50 | 21.00 | 36.50 | 0.75 |
| Kentucky Department of Revenue | | 1,873,813.39 | 5/1/2023 | 6/1/2023 | 6/20/2023 | 12.03% | 16.00 | 19.00 | 35.00 | 4.21 |
| Kentucky Department of Revenue | | 1,159,215.21 | 6/1/2023 | 7/1/2023 | 7/20/2023 | 7.44% | 15.50 | 19.00 | 34.50 | 2.57 |
| Kentucky Department of Revenue | | 1,085,161.59 | 7/1/2023 | 8/1/2023 | 8/21/2023 | 6.97% | 16.00 | 20.00 | 36.00 | 2.51 |
| Kentucky Department of Revenue | | 1,457,994.69 | 8/1/2023 | 9/1/2023 | 9/20/2023 | 9.36% | 16.00 | 19.00 | 35.00 | 3.28 |
| Kentucky Department of Revenue | | 1,457,775.66 | 9/1/2023 | 10/1/2023 | 10/20/2023 | 9.36% | 15.50 | 19.00 | 34.50 | 3.23 |
| Kentucky Department of Revenue | | 1,085,861.01 | 10/1/2023 | 11/1/2023 | 11/20/2023 | 6.97% | 16.00 | 19.00 | 35.00 | 2.44 |
| Kentucky Department of Revenue | | 1,324,457.81 | 11/1/2023 | 12/1/2023 | 12/20/2023 | 8.50% | 15.50 | 19.00 | 34.50 | 2.93 |
| Kentucky Department of Revenue | | 1,668,697.11 | 12/1/2023 | 1/1/2024 | 1/22/2024 | 10.71% | 16.00 | 21.00 | 37.00 | 3.96 |
| | $ | 15,577,492.30 | | | | | | | | 35.09 |

**Utility Gross Receipts License Tax (UGRLT)**

| Payee | | Amount | Period Beginning | Period Ending | Payment Date | Weighting Factor | Service Lead | Payment Lead | Total Lead | Weighted Lead |
|---|---|---|---|---|---|---|---|---|---|---|
| (A) | | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) |
| Kentucky Department of Revenue | $ | 1,790,186.27 | 1/1/2023 | 2/1/2023 | 2/20/2023 | 13.04% | 16.00 | 19.00 | 35.00 | 4.56 |
| Kentucky Department of Revenue | | 1,366,059.57 | 2/1/2023 | 3/1/2023 | 3/20/2023 | 9.95% | 14.50 | 19.00 | 33.50 | 3.33 |
| Kentucky Department of Revenue | | 1,117,096.84 | 3/1/2023 | 4/1/2023 | 4/20/2023 | 8.14% | 16.00 | 19.00 | 35.00 | 2.85 |
| Kentucky Department of Revenue | | 665,271.82 | 4/1/2023 | 5/1/2023 | 5/22/2023 | 4.85% | 15.50 | 21.00 | 36.50 | 1.77 |
| Kentucky Department of Revenue | | 1,090,687.71 | 5/1/2023 | 6/1/2023 | 6/20/2023 | 7.94% | 16.00 | 19.00 | 35.00 | 2.78 |
| Kentucky Department of Revenue | | 1,029,322.51 | 6/1/2023 | 7/1/2023 | 7/20/2023 | 7.50% | 15.50 | 19.00 | 34.50 | 2.59 |
| Kentucky Department of Revenue | | 964,267.40 | 7/1/2023 | 8/1/2023 | 8/21/2023 | 7.02% | 16.00 | 20.00 | 36.00 | 2.53 |
| Kentucky Department of Revenue | | 1,108,874.71 | 8/1/2023 | 9/1/2023 | 9/20/2023 | 8.08% | 16.00 | 19.00 | 35.00 | 2.83 |
| Kentucky Department of Revenue | | 1,144,764.63 | 9/1/2023 | 10/1/2023 | 10/20/2023 | 8.34% | 15.50 | 19.00 | 34.50 | 2.88 |
| Kentucky Department of Revenue | | 959,879.51 | 10/1/2023 | 11/1/2023 | 11/20/2023 | 6.99% | 16.00 | 19.00 | 35.00 | 2.45 |
| Kentucky Department of Revenue | | 1,089,627.51 | 11/1/2023 | 12/1/2023 | 12/20/2023 | 7.94% | 15.50 | 19.00 | 34.50 | 2.74 |
| Kentucky Department of Revenue | | 1,401,992.52 | 12/1/2023 | 1/1/2024 | 1/22/2024 | 10.21% | 16.00 | 21.00 | 37.00 | 3.78 |
| | $ | 13,728,031.00 | | | | | | | | 35.08 |

**Local Franchise Fee**

| Payee | Amount | Period Beginning | Period Ending | Payment Date | Weighting Factor | Service Lead | Payment Lead | Total Lead | Weighted Lead |
|---|---|---|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) |
| City of Ft. Thomas | $ 574.15 | 3/1/2023 | 3/31/2023 | 4/20/2023 | 11.53% | 15.50 | 20.00 | 35.50 | 4.09 |
| City of Ft. Thomas | 199.67 | 4/1/2023 | 4/30/2023 | 5/22/2023 | 4.01% | 15.00 | 22.00 | 37.00 | 1.48 |
| City of Ft. Thomas | 639.50 | 5/1/2023 | 5/31/2023 | 6/20/2023 | 12.84% | 15.50 | 20.00 | 35.50 | 4.56 |
| City of Ft. Thomas | 655.09 | 6/1/2023 | 6/30/2023 | 7/20/2023 | 13.16% | 15.00 | 20.00 | 35.00 | 4.61 |
| City of Ft. Thomas | 656.54 | 7/1/2023 | 7/31/2023 | 8/21/2023 | 13.19% | 15.50 | 21.00 | 36.50 | 4.81 |
| City of Ft. Thomas | 668.68 | 8/1/2023 | 8/31/2023 | 9/20/2023 | 13.43% | 15.50 | 20.00 | 35.50 | 4.77 |
| City of Ft. Thomas | 727.84 | 10/1/2023 | 10/31/2023 | 11/20/2023 | 14.62% | 15.50 | 20.00 | 35.50 | 5.19 |
| City of Ft. Thomas | 857.39 | 11/1/2023 | 11/30/2023 | 12/20/2023 | 17.22% | 15.00 | 20.00 | 35.00 | 6.03 |
| | $ 4,978.86 | | | | | | | | 35.54 |

**Property /Real Estate Tax**

| Payee | Amount | Period Beginning | Period Ending | Payment Date | Weighting Factor | Service Lead | Payment Lead | Total Lead | Weighted Lead |
|---|---|---|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) |
| COUNTY OF HAMILTON | 52,898.59 | 1/1/2022 | 1/1/2023 | 1/25/2023 | 0.57% | 183.00 | 24.00 | 207.00 | 1.19 |
| CITY OF FLORENCE | 67,337.25 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 0.73% | 183.00 | 57.00 | 240.00 | 1.76 |
| CITY OF WALTON | 8,364.95 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 0.09% | 183.00 | 57.00 | 240.00 | 0.22 |
| CITY OF BELLEVUE | 12,059.37 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 0.13% | 183.00 | 57.00 | 240.00 | 0.31 |
| CITY OF COLD SPRING | 14,068.25 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 0.15% | 183.00 | 57.00 | 240.00 | 0.37 |
| CITY OF DAYTON | 15,068.78 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 0.16% | 183.00 | 57.00 | 240.00 | 0.39 |
| CITY OF FORT THOMAS | 76,896.74 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 0.84% | 183.00 | 57.00 | 240.00 | 2.01 |
| CITY OF HIGHLAND HEIGHTS | 6,353.41 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 0.07% | 183.00 | 57.00 | 240.00 | 0.17 |
| CITY OF SILVER GROVE | 479.11 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 0.01% | 183.00 | 57.00 | 240.00 | 0.01 |
| CITY OF SOUTHGATE | 15,292.81 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 0.17% | 183.00 | 57.00 | 240.00 | 0.40 |
| CAMPBELL COUNTY | 1,071,973.73 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 11.65% | 183.00 | 57.00 | 240.00 | 27.96 |
| KENTON COUNTY | 1,841,385.09 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 20.01% | 183.00 | 57.00 | 240.00 | 48.03 |
| CITY OF CRESCENT SPRINGS | 3,268.98 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 0.04% | 183.00 | 57.00 | 240.00 | 0.09 |
| CITY OF COVINGTON | 91,669.79 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 1.00% | 183.00 | 57.00 | 240.00 | 2.39 |
| CITY OF EDGEWOOD | 14,758.95 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 0.16% | 183.00 | 57.00 | 240.00 | 0.38 |
| CITY OF ELSMERE | 6,138.87 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 0.07% | 183.00 | 57.00 | 240.00 | 0.16 |
| CITY OF FORT MITCHELL KY | 28,373.02 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 0.31% | 183.00 | 57.00 | 240.00 | 0.74 |
| CITY OF FORT WRIGHT | 21,698.79 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 0.24% | 183.00 | 57.00 | 240.00 | 0.57 |
| CITY OF INDEPENDENCE | 31,903.04 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 0.35% | 183.00 | 57.00 | 240.00 | 0.83 |
| CITY OF LAKESIDE PARK | 11,072.51 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 0.12% | 183.00 | 57.00 | 240.00 | 0.29 |
| CITY OF LUDLOW | 21,448.24 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 0.23% | 183.00 | 57.00 | 240.00 | 0.56 |
| CITY OF PARK HILLS | 8,224.03 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 0.09% | 183.00 | 57.00 | 240.00 | 0.21 |
| CITY OF RYLAND HEIGHTS | 4,312.87 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 0.05% | 183.00 | 57.00 | 240.00 | 0.11 |
| CITY OF TAYLOR MILL | 50,468.58 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 0.55% | 183.00 | 57.00 | 240.00 | 1.32 |
| CITY OF BUTLER | 825.42 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 0.01% | 183.00 | 57.00 | 240.00 | 0.02 |
| CITY OF FALMOUTH | 2,042.64 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 0.02% | 183.00 | 57.00 | 240.00 | 0.05 |
| ERLANGER-ELSMERE BOARD OF EDUCATION | 175,209.94 | 1/1/2022 | 1/1/2023 | 2/27/2023 | 1.90% | 183.00 | 57.00 | 240.00 | 4.57 |
| BUTLER COUNTY | 1,401,731.91 | 1/1/2022 | 1/1/2023 | 3/3/2023 | 15.23% | 183.00 | 61.00 | 244.00 | 37.17 |
| BOONE COUNTY SHERIFFS DEPARTMENT | 2,046,625.42 | 1/1/2022 | 1/1/2023 | 3/8/2023 | 22.24% | 183.00 | 66.00 | 249.00 | 55.38 |
| CITY OF ALEXANDRIA | 12,836.78 | 1/1/2022 | 1/1/2023 | 3/8/2023 | 0.14% | 183.00 | 66.00 | 249.00 | 0.35 |
| CITY OF MELBOURNE | 3,271.56 | 1/1/2022 | 1/1/2023 | 3/8/2023 | 0.04% | 183.00 | 66.00 | 249.00 | 0.09 |
| CITY OF WILDER | 91,999.66 | 1/1/2022 | 1/1/2023 | 3/8/2023 | 1.00% | 183.00 | 66.00 | 249.00 | 2.49 |
| CITY OF ERLANGER | 35,423.91 | 1/1/2022 | 1/1/2023 | 3/8/2023 | 0.38% | 183.00 | 66.00 | 249.00 | 0.96 |
| CITY OF UNION | 1,231.44 | 1/1/2022 | 1/1/2023 | 3/8/2023 | 0.01% | 183.00 | 66.00 | 249.00 | 0.03 |
| BOONE COUNTY SHERIFFS DEPARTMENT | 253.20 | 1/1/2022 | 1/1/2023 | 3/30/2023 | 0.00% | 183.00 | 88.00 | 271.00 | 0.01 |
| CITY OF WOODLAWN | 1,701.15 | 1/1/2022 | 1/1/2023 | 3/8/2023 | 0.02% | 183.00 | 66.00 | 249.00 | 0.05 |
| CITY OF CRITTENDEN | 8,183.06 | 1/1/2022 | 1/1/2023 | 3/20/2023 | 0.09% | 183.00 | 78.00 | 261.00 | 0.23 |
| CITY OF DRY RIDGE | 11,324.40 | 1/1/2022 | 1/1/2023 | 3/20/2023 | 0.12% | 183.00 | 78.00 | 261.00 | 0.32 |
| CITY OF WILLIAMSTOWN | 10,273.22 | 1/1/2022 | 1/1/2023 | 3/20/2023 | 0.11% | 183.00 | 78.00 | 261.00 | 0.29 |
| CITY OF FAIRVIEW | 14,374.47 | 1/1/2022 | 1/1/2023 | 3/20/2023 | 0.16% | 183.00 | 78.00 | 261.00 | 0.41 |
| PENDLETON COUNTY SHERIFFS OFFICE | 12,268.38 | 1/1/2022 | 1/1/2023 | 3/20/2023 | 0.13% | 183.00 | 78.00 | 261.00 | 0.35 |
| CITY OF NEWPORT | 120,247.06 | 1/1/2022 | 1/1/2023 | 3/30/2023 | 1.31% | 183.00 | 88.00 | 271.00 | 3.54 |
| CITY OF WARSAW | 56.59 | 1/1/2022 | 1/1/2023 | 3/30/2023 | 0.00% | 183.00 | 88.00 | 271.00 | 0.00 |
| GRANT COUNTY | 325,924.89 | 1/1/2022 | 1/1/2023 | 3/30/2023 | 3.54% | 183.00 | 88.00 | 271.00 | 9.60 |
| GALLATIN COUNTY | 2,660.99 | 1/1/2022 | 1/1/2023 | 4/7/2023 | 0.03% | 183.00 | 96.00 | 279.00 | 0.08 |
| CITY OF GLENCOE | 54.13 | 1/1/2022 | 1/1/2023 | 5/22/2023 | 0.00% | 183.00 | 141.00 | 324.00 | 0.00 |
| CITY OF ERLANGER | 165.38 | 1/1/2022 | 1/1/2023 | 7/18/2023 | 0.00% | 183.00 | 198.00 | 381.00 | 0.01 |
| CITY OF DRY RIDGE | 1,845.23 | 1/1/2022 | 1/1/2023 | 7/18/2023 | 0.02% | 183.00 | 198.00 | 381.00 | 0.08 |
| CITY OF EDGEWOOD | 3,616.12 | 1/1/2022 | 1/1/2023 | 7/18/2023 | 0.04% | 183.00 | 198.00 | 381.00 | 0.15 |
| CITY OF ALEXANDRIA | 6,220.58 | 1/1/2022 | 1/1/2023 | 7/18/2023 | 0.07% | 183.00 | 198.00 | 381.00 | 0.26 |
| CITY OF CRITTENDEN | 1,926.64 | 1/1/2022 | 1/1/2023 | 7/18/2023 | 0.02% | 183.00 | 198.00 | 381.00 | 0.08 |
| CITY OF WILLIAMSTOWN | 2,531.25 | 1/1/2022 | 1/1/2023 | 7/18/2023 | 0.03% | 183.00 | 198.00 | 381.00 | 0.10 |
| BUTLER COUNTY | 1,267,045.61 | 1/1/2022 | 1/1/2023 | 7/17/2023 | 13.77% | 183.00 | 197.00 | 380.00 | 52.32 |
| CITY OF CRESCENT SPRINGS | 458.51 | 1/1/2022 | 1/1/2023 | 7/18/2023 | 0.00% | 183.00 | 198.00 | 381.00 | 0.02 |
| CITY OF UNION | 144.52 | 1/1/2022 | 1/1/2023 | 8/2/2023 | 0.00% | 183.00 | 213.00 | 396.00 | 0.01 |
| GRANT COUNTY | 76,814.89 | 1/1/2022 | 1/1/2023 | 8/2/2023 | 0.83% | 183.00 | 213.00 | 396.00 | 3.31 |
| CITY OF COLD SPRING | 1,714.14 | 1/1/2022 | 1/1/2023 | 8/2/2023 | 0.02% | 183.00 | 213.00 | 396.00 | 0.07 |
| CITY OF FORT MITCHELL KY | 745.65 | 1/1/2022 | 1/1/2023 | 8/2/2023 | 0.01% | 183.00 | 213.00 | 396.00 | 0.03 |
| CITY OF TAYLOR MILL | 2,540.53 | 1/1/2022 | 1/1/2023 | 8/2/2023 | 0.03% | 183.00 | 213.00 | 396.00 | 0.11 |
| CITY OF WALTON | 716.47 | 1/1/2022 | 1/1/2023 | 8/2/2023 | 0.01% | 183.00 | 213.00 | 396.00 | 0.03 |
| CITY OF VILLA HILLS | 7,517.42 | 1/1/2022 | 1/1/2023 | 11/16/2023 | 0.08% | 183.00 | 319.00 | 502.00 | 0.41 |
| CITY OF CRESTVIEW HILLS | 17,867.11 | 1/1/2022 | 1/1/2023 | 11/16/2023 | 0.19% | 183.00 | 319.00 | 502.00 | 0.97 |
| CITY OF NEWPORT | 571.38 | 1/1/2023 | 1/1/2024 | 11/16/2023 | 0.01% | 183.00 | (46.00) | 137.00 | 0.01 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CITY OF WILDER | 203.63 | 1/1/2023 | 1/1/2024 | 11/16/2023 | 0.00% | 183.00 | (46.00) | 137.00 | 0.00 |
| CITY OF CRESTVIEW HILLS | 900.77 | 1/1/2023 | 1/1/2024 | 11/16/2023 | 0.01% | 183.00 | (46.00) | 137.00 | 0.01 |
| KENTON COUNTY | 10,541.04 | 1/1/2023 | 1/1/2024 | 11/16/2023 | 0.11% | 183.00 | (46.00) | 137.00 | 0.16 |
| CAMPBELL COUNTY | 1,011.69 | 1/1/2023 | 1/1/2024 | 11/16/2023 | 0.01% | 183.00 | (46.00) | 137.00 | 0.02 |
| BOONE COUNTY SHERIFFS DEPARTMENT | 39,004.55 | 1/1/2023 | 1/1/2024 | 12/7/2023 | 0.42% | 183.00 | (25.00) | 158.00 | 0.67 |
| MECKLENBURG COUNTY | 3,763.43 | 1/1/2023 | 1/1/2024 | 12/29/2023 | 0.04% | 183.00 | (3.00) | 180.00 | 0.07 |
| | $ 9,201,902.51 | | | | | | | | 265.35 |

**Federal Unemployment Taxes**

| Payee | Amount | Period Beginning | Period Ending | Payment Date | Weighting Factor | Service Lead | Payment Lead | Total Lead | Weighted Lead |
|---|---|---|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) |
| Department of Revenue | $ 3,896.26 | 12/26/2022 | 1/8/2023 | 4/28/2023 | 49.56% | 7.00 | 110.00 | 117.00 | 57.99 |
| Department of Revenue | 2,056.38 | 1/9/2023 | 1/22/2023 | 4/28/2023 | 26.16% | 7.00 | 96.00 | 103.00 | 26.94 |
| Department of Revenue | 278.03 | 1/23/2023 | 2/5/2023 | 4/28/2023 | 3.54% | 7.00 | 82.00 | 89.00 | 3.15 |
| Department of Revenue | 119.50 | 2/6/2023 | 2/19/2023 | 4/28/2023 | 1.52% | 7.00 | 68.00 | 75.00 | 1.14 |
| Department of Revenue | 138.73 | 2/20/2023 | 3/5/2023 | 4/28/2023 | 1.76% | 7.00 | 54.00 | 61.00 | 1.08 |
| Department of Revenue | 260.92 | 3/20/2023 | 4/2/2023 | 7/28/2023 | 3.32% | 7.00 | 117.00 | 124.00 | 4.12 |
| Department of Revenue | 69.48 | 4/3/2023 | 4/16/2023 | 7/28/2023 | 0.88% | 7.00 | 103.00 | 110.00 | 0.97 |
| Department of Revenue | 5.60 | 4/17/2023 | 4/30/2023 | 7/28/2023 | 0.07% | 7.00 | 89.00 | 96.00 | 0.07 |
| Department of Revenue | 62.72 | 5/1/2023 | 5/14/2023 | 7/28/2023 | 0.80% | 7.00 | 75.00 | 82.00 | 0.65 |
| Department of Revenue | 56.21 | 5/15/2023 | 5/28/2023 | 7/28/2023 | 0.71% | 7.00 | 61.00 | 68.00 | 0.49 |
| Department of Revenue | 59.76 | 5/29/2023 | 6/11/2023 | 7/28/2023 | 0.76% | 7.00 | 47.00 | 54.00 | 0.41 |
| Department of Revenue | 31.31 | 6/12/2023 | 6/25/2023 | 7/28/2023 | 0.40% | 7.00 | 33.00 | 40.00 | 0.16 |
| Department of Revenue | 22.08 | 6/26/2023 | 7/9/2023 | 10/30/2023 | 0.28% | 7.00 | 113.00 | 120.00 | 0.34 |
| Department of Revenue | 25.90 | 7/10/2023 | 7/23/2023 | 10/30/2023 | 0.33% | 7.00 | 99.00 | 106.00 | 0.35 |
| Department of Revenue | 45.34 | 7/24/2023 | 8/6/2023 | 10/30/2023 | 0.58% | 7.00 | 85.00 | 92.00 | 0.53 |
| Department of Revenue | 27.25 | 8/7/2023 | 8/20/2023 | 10/30/2023 | 0.35% | 7.00 | 71.00 | 78.00 | 0.27 |
| Department of Revenue | 54.87 | 8/21/2023 | 9/3/2023 | 10/30/2023 | 0.70% | 7.00 | 57.00 | 64.00 | 0.45 |
| Department of Revenue | 59.51 | 9/4/2023 | 9/17/2023 | 10/30/2023 | 0.76% | 7.00 | 43.00 | 50.00 | 0.38 |
| Department of Revenue | 17.05 | 9/18/2023 | 10/1/2023 | 1/30/2024 | 0.22% | 7.00 | 121.00 | 128.00 | 0.28 |
| Department of Revenue | 42.98 | 10/30/2023 | 11/12/2023 | 1/30/2024 | 0.55% | 7.00 | 79.00 | 86.00 | 0.47 |
| Department of Revenue | 27.66 | 11/13/2023 | 11/26/2023 | 1/30/2024 | 0.35% | 7.00 | 65.00 | 72.00 | 0.25 |
| Department of Revenue | 32.79 | 11/27/2023 | 12/10/2023 | 1/30/2024 | 0.42% | 7.00 | 51.00 | 58.00 | 0.24 |
| Department of Revenue | 38.62 | 12/11/2023 | 12/24/2023 | 1/30/2024 | 0.49% | 7.00 | 37.00 | 44.00 | 0.22 |
| Department of Revenue | 138.73 | 2/20/2023 | 3/5/2023 | 4/28/2023 | 1.76% | 7.00 | 54.00 | 61.00 | 1.08 |
| Department of Revenue | 153.12 | 1/8/2023 | 1/13/2023 | 4/28/2023 | 1.95% | 3.00 | 105.00 | 108.00 | 2.10 |
| Department of Revenue | 92.55 | 1/23/2023 | 1/31/2023 | 4/28/2023 | 1.18% | 4.25 | 87.00 | 91.25 | 1.07 |
| Department of Revenue | 6.33 | 2/8/2023 | 2/15/2023 | 4/28/2023 | 0.08% | 4.00 | 72.00 | 76.00 | 0.06 |
| Department of Revenue | 33.71 | 8/8/2023 | 8/15/2023 | 10/30/2023 | 0.43% | 4.00 | 76.00 | 80.00 | 0.34 |
| Department of Revenue | 8.29 | 8/23/2023 | 8/31/2023 | 10/30/2023 | 0.11% | 4.25 | 60.00 | 64.25 | 0.07 |
| | $ 7,861.68 | | | | | | | | 105.65 |

**State Unemployment Taxes - Kentucky**

| Payee | Amount | Period Beginning | Period Ending | Payment Date | Weighting Factor | Service Lead | Payment Lead | Total Lead | Weighted Lead |
|---|---|---|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) | (J) |
| Department of Revenue | $ 1,701.45 | 12/26/2022 | 1/8/2023 | 4/28/2023 | 26.64% | 7.00 | 110.00 | 117.00 | 31.17 |
| Department of Revenue | 871.31 | 12/26/2022 | 1/8/2023 | 4/28/2023 | 13.64% | 7.00 | 110.00 | 117.00 | 15.96 |
| Department of Revenue | 1,481.29 | 1/9/2023 | 1/22/2023 | 4/28/2023 | 23.19% | 7.00 | 96.00 | 103.00 | 23.89 |
| Department of Revenue | 434.11 | 1/9/2023 | 1/22/2023 | 4/28/2023 | 6.80% | 7.00 | 96.00 | 103.00 | 7.00 |
| Department of Revenue | 846.73 | 1/23/2023 | 2/5/2023 | 4/28/2023 | 13.26% | 7.00 | 82.00 | 89.00 | 11.80 |
| Department of Revenue | 151.47 | 1/23/2023 | 2/5/2023 | 4/28/2023 | 2.37% | 7.00 | 82.00 | 89.00 | 2.11 |
| Department of Revenue | 164.74 | 2/6/2023 | 2/19/2023 | 4/28/2023 | 2.58% | 7.00 | 68.00 | 75.00 | 1.93 |
| Department of Revenue | 42.45 | 2/6/2023 | 2/19/2023 | 4/28/2023 | 0.66% | 7.00 | 68.00 | 75.00 | 0.50 |
| Department of Revenue | (495.46) | 2/20/2023 | 3/5/2023 | 4/28/2023 | -7.76% | 7.00 | 54.00 | 61.00 | (4.73) |
| Department of Revenue | 20.75 | 2/20/2023 | 3/5/2023 | 4/28/2023 | 0.32% | 7.00 | 54.00 | 61.00 | 0.20 |
| Department of Revenue | 10.71 | 3/6/2023 | 3/19/2023 | 4/28/2023 | 0.17% | 7.00 | 40.00 | 47.00 | 0.08 |
| Department of Revenue | 110.47 | 3/20/2023 | 4/2/2023 | 7/28/2023 | 1.73% | 7.00 | 117.00 | 124.00 | 2.14 |
| Department of Revenue | 76.64 | 4/3/2023 | 4/16/2023 | 7/28/2023 | 1.20% | 7.00 | 103.00 | 110.00 | 1.32 |
| Department of Revenue | 81.67 | 4/17/2023 | 4/30/2023 | 7/28/2023 | 1.28% | 7.00 | 89.00 | 96.00 | 1.23 |
| Department of Revenue | 24.52 | 5/1/2023 | 5/14/2023 | 7/28/2023 | 0.38% | 7.00 | 75.00 | 82.00 | 0.31 |
| Department of Revenue | 30.08 | 5/1/2023 | 5/14/2023 | 7/28/2023 | 0.47% | 7.00 | 75.00 | 82.00 | 0.39 |
| Department of Revenue | 17.62 | 5/15/2023 | 5/28/2023 | 7/28/2023 | 0.28% | 7.00 | 61.00 | 68.00 | 0.19 |
| Department of Revenue | 31.13 | 5/15/2023 | 5/28/2023 | 7/28/2023 | 0.49% | 7.00 | 61.00 | 68.00 | 0.33 |
| Department of Revenue | 24.68 | 5/29/2023 | 6/11/2023 | 7/28/2023 | 0.39% | 7.00 | 47.00 | 54.00 | 0.21 |
| Department of Revenue | 65.05 | 5/29/2023 | 6/11/2023 | 7/28/2023 | 1.02% | 7.00 | 47.00 | 54.00 | 0.55 |
| Department of Revenue | 9.33 | 6/12/2023 | 6/25/2023 | 7/28/2023 | 0.15% | 7.00 | 33.00 | 40.00 | 0.06 |
| Department of Revenue | 63.85 | 6/12/2023 | 6/25/2023 | 7/28/2023 | 1.00% | 7.00 | 33.00 | 40.00 | 0.40 |
| Department of Revenue | 11.23 | 6/26/2023 | 7/9/2023 | 10/30/2023 | 0.18% | 7.00 | 113.00 | 120.00 | 0.21 |
| Department of Revenue | 25.89 | 6/26/2023 | 7/9/2023 | 10/30/2023 | 0.41% | 7.00 | 113.00 | 120.00 | 0.49 |
| Department of Revenue | 13.15 | 7/10/2023 | 7/23/2023 | 10/30/2023 | 0.21% | 7.00 | 99.00 | 106.00 | 0.22 |
| Department of Revenue | 22.99 | 7/24/2023 | 8/6/2023 | 10/30/2023 | 0.36% | 7.00 | 85.00 | 92.00 | 0.33 |
| Department of Revenue | 26.64 | 8/7/2023 | 8/20/2023 | 10/30/2023 | 0.42% | 7.00 | 71.00 | 78.00 | 0.33 |
| Department of Revenue | 41.99 | 8/21/2023 | 9/3/2023 | 10/30/2023 | 0.66% | 7.00 | 57.00 | 64.00 | 0.42 |
| Department of Revenue | 43.44 | 9/4/2023 | 9/17/2023 | 10/30/2023 | 0.68% | 7.00 | 43.00 | 50.00 | 0.34 |
| Department of Revenue | 33.36 | 9/18/2023 | 10/1/2023 | 1/30/2024 | 0.52% | 7.00 | 121.00 | 128.00 | 0.67 |
| Department of Revenue | 7.00 | 10/2/2023 | 10/15/2023 | 1/30/2024 | 0.11% | 7.00 | 107.00 | 114.00 | 0.12 |
| Department of Revenue | 28.32 | 10/30/2023 | 11/12/2023 | 1/30/2024 | 0.44% | 7.00 | 79.00 | 86.00 | 0.38 |
| Department of Revenue | 17.92 | 11/13/2023 | 11/26/2023 | 1/30/2024 | 0.28% | 7.00 | 65.00 | 72.00 | 0.20 |
| Department of Revenue | 24.69 | 11/27/2023 | 12/10/2023 | 1/30/2024 | 0.39% | 7.00 | 51.00 | 58.00 | 0.22 |
| Department of Revenue | 26.68 | 12/11/2023 | 12/24/2023 | 1/30/2024 | 0.42% | 7.00 | 37.00 | 44.00 | 0.18 |
| Department of Revenue | 70.04 | 1/1/2023 | 1/15/2023 | 4/28/2023 | 1.10% | 7.50 | 103.00 | 110.50 | 1.21 |
| Department of Revenue | 23.78 | 1/1/2023 | 1/15/2023 | 4/28/2023 | 0.37% | 7.50 | 103.00 | 110.50 | 0.41 |
| Department of Revenue | 68.30 | 1/16/2023 | 1/31/2023 | 4/28/2023 | 1.07% | 8.00 | 87.00 | 95.00 | 1.02 |
| Department of Revenue | 23.77 | 1/16/2023 | 1/31/2023 | 4/28/2023 | 0.37% | 8.00 | 87.00 | 95.00 | 0.35 |
| Department of Revenue | 28.16 | 2/1/2023 | 2/15/2023 | 4/28/2023 | 0.44% | 7.50 | 72.00 | 79.50 | 0.35 |
| Department of Revenue | 23.78 | 2/1/2023 | 2/15/2023 | 4/28/2023 | 0.37% | 7.50 | 72.00 | 79.50 | 0.30 |
| Department of Revenue | 0.67 | 2/16/2023 | 2/28/2023 | 4/28/2023 | 0.01% | 6.50 | 59.00 | 65.50 | 0.01 |
| Department of Revenue | (10.82) | 3/1/2023 | 3/15/2023 | 4/28/2023 | -0.17% | 7.50 | 44.00 | 51.50 | (0.09) |
| Department of Revenue | 44.95 | 8/1/2023 | 8/15/2023 | 10/30/2023 | 0.70% | 7.50 | 76.00 | 83.50 | 0.59 |
| Department of Revenue | 27.05 | 8/16/2023 | 8/31/2023 | 10/30/2023 | 0.42% | 8.00 | 60.00 | 68.00 | 0.29 |
| | $ 6,387.57 | | | | | | | | 105.58 |

**Federal Income Tax**

| Payment | Period Beginning | Period Ending | Payment Date | Service Lead Time | Payment Lead Time | Total | Weighting Factor | Weighted Lead |
|---|---|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) |
| First Payment | 1/1/2023 | 12/31/2023 | 4/17/2023 | 182.50 | (258.00) | (75.50) | 25% | (18.88) |
| Second Payment | 1/1/2023 | 12/31/2023 | 6/15/2023 | 182.50 | (199.00) | (16.50) | 25% | (4.13) |
| Third Payment | 1/1/2023 | 12/31/2023 | 9/15/2023 | 182.50 | (107.00) | 75.50 | 25% | 18.88 |
| Fourth Payment | 1/1/2023 | 12/31/2023 | 12/15/2023 | 182.50 | (16.00) | 166.50 | 25% | 41.63 |
| | | | | | | | | 37.50 |

**State Income Tax**

| Payment | Period Beginning | Period Ending | Payment Date | Service Lead Time | Payment Lead Time | Total | Weighting Factor | Weighted Lead |
|---|---|---|---|---|---|---|---|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) | (H) | (I) |
| First Payment | 1/1/2023 | 12/31/2023 | 4/17/2023 | 182.50 | (258.00) | (75.50) | 25% | (18.88) |
| Second Payment | 1/1/2023 | 12/31/2023 | 6/15/2023 | 182.50 | (199.00) | (16.50) | 25% | (4.13) |
| Third Payment | 1/1/2023 | 12/31/2023 | 9/15/2023 | 182.50 | (107.00) | 75.50 | 25% | 18.88 |
| Fourth Payment | 1/1/2023 | 12/31/2023 | 12/15/2023 | 182.50 | (16.00) | 166.50 | 25% | 41.63 |
| | | | | | | | | 37.50 |

**COMMONWEALTH OF KENTUCKY**

**BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

| | | |
|---|---|---|
| THE ELECTRONIC APPLICATION OF DUKE ENERGY KENTUCKY, INC., FOR: 1) AN ADJUSTMENT OF THE ELECTRIC RATES; 2) APPROVAL OF NEW TARIFFS; 3) APPROVAL OF ACCOUNTING PRACTICES TO ESTABLISH REGULATORY ASSETS AND LIABILITIES; AND 4) ALL OTHER REQUIRED APPROVALS AND RELIEF. | ) | CASE NO. 2024-00354 |

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**DIRECT TESTIMONY OF**

**MARC W. ARNOLD**

**ON BEHALF OF**

**DUKE ENERGY KENTUCKY, INC**

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December 2, 2024

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ATTACHMENTS:

Attachment MWA-1 Reliability Programs

## I. INTRODUCTION AND PURPOSE

**Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

A. My name is Marc W. Arnold, and my business address is 1262 Cox Ave, Erlanger, Kentucky 41018.

**Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

A. I am employed by Duke Energy Business Services (DEBS), as Vice President of Zone Operations. DEBS provides various administrative and other services to Duke Energy Kentucky, Inc. (Duke Energy Kentucky or the Company) and other affiliated companies of Duke Energy Corporation (Duke Energy).

**Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.**

A. I received a Bachelor of Science in Business from St. Leo University and a master's degree in business from Indiana Wesleyan University. I began my career at Cinergy Corp., as a Distribution Designer in 2001, and have held a variety of positions of increasing responsibility across Duke Energy in the areas of electric system distribution engineering and operations.

**Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES AS VICE PRESIDENT ZONE OPERATIONS.**

A. In my current role, I am responsible for the engineering, operations, and maintenance of the electric distribution systems in the Duke Energy Ohio South Zone footprint, which includes Duke Energy Kentucky.

**Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION (COMMISSION)?**

A. No.

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

A. The purpose of my testimony is: (1) to describe Duke Energy Kentucky's electric delivery system; (2) to explain Duke Energy Kentucky's overall policies relating to the design, construction, operation, and maintenance of the Company's electric delivery facilities; and (3) to explain the need for continued investment in the electric delivery system in order to maintain system reliability. I also sponsor part of the information in the capital budget relating to the Company's local transmission and distribution facilities contained in Filing Requirements (FR) 16(7)(b), FR 16(7)(f) and FR 16(7)(g), which I provided to Duke Energy Kentucky witness Mr. Grady "Tripp" S. Carpenter for the forecasted financial data.

## II. DUKE ENERGY KENTUCKY'S ELECTRIC DISTRIBUTION SYSTEM FACILITIES AND POLICIES RELATING TO DESIGN, CONSTRUCTION, OPERATION AND MAINTENANCE OF ITS TRANSMISSION AND DISTRIBUTION SYSTEM

**Q. PLEASE GENERALLY DESCRIBE THE DUKE ENERGY KENTUCKY ELECTRIC DELIVERY SYSTEM.**

A. Duke Energy Kentucky's electric delivery system is used, among other things, to deliver retail electric service to approximately 155,000 customers located throughout our service area in the Commonwealth of Kentucky and is spread throughout five counties in the northern part of the Commonwealth. Duke Energy

Kentucky owns and operates all its electric distribution and local transmission facilities.

Its parent, Duke Energy Ohio, Inc. (Duke Energy Ohio) owns and operates, subject to the functional control of PJM Interconnection, LLC, (PJM) the bulk transmission facilities located in Duke Energy Kentucky's service territory. Duke Energy Kentucky owns, operates, and maintains approximately 126 miles of transmission lines operating at 69 kilovolts (kV) and approximately 2,248 miles of primary distribution lines operating at 34.5 kV or lower and approximately 755 miles of secondary distribution circuits operating at 480 volts or below. The electric delivery system also includes approximately 39 combined transmission and distribution substations with a combined capacity of approximately 3,844,000 kVA and various other equipment and facilities.

The Duke Energy Kentucky electric system is interconnected with East Kentucky Power Cooperative via a 69 kV tie line at the Kenton Substation. It is primarily served by transmission facilities within Duke Energy Midwest which, in turn, is directly interconnected with a total of 10 transmission owning utilities, the majority of whom are in PJM or Midcontinent Independent System Operator (MISO).

Duke Energy Kentucky's electric delivery system includes various other equipment and facilities such as control rooms, computers, capacitors, streetlights, meters, and protective, relay and telecommunications equipment and facilities.

Duke Energy Kentucky's electric delivery system provides considerable flexibility for Duke Energy Kentucky to operate in a manner that provides reliable and economic power to our customers.

**Q. PLEASE GENERALLY DESCRIBE HOW DUKE ENERGY KENTUCKY'S ELECTRIC DISTRIBUTION SYSTEM HAS GROWN SINCE JUNE 30, 2024, (THE END OF THE TEST PERIOD FROM DUKE ENERGY KENTUCKY'S LAST RETAIL ELECTRIC RATE CASE).**

A. Duke Energy Kentucky's electric distribution system has grown considerably. In the Company's last electric base rate case, Case No. 2022-00372, Duke Energy Kentucky's forecasted cost of electric distribution system plant in service was $692,963,750 (13-month average forecasted balance ending June 30, 2024), As of June 30, 2024, Duke Energy Kentucky's actual cost of electric distribution system plant in service was $707, 234,216. The Company's forecasted test year (13-month average balance ending June 30, 2026) in this case is projecting the balance to be $799,139,727.

As a further example, by June 30, 2026, Duke Energy Kentucky plans to increase the distribution substation transformer capacity by approximately 90 MVA. Investments like these have been necessary to maintain safe and reliable electric distribution service for our existing customers.

**Q. PLEASE GENERALLY DESCRIBE HOW DUKE ENERGY KENTUCKY'S ELECTRIC TRANSMISSION SYSTEM HAS GROWN SINCE JUNE 30, 2024 (THE END OF THE TEST PERIOD FROM DUKE ENERGY KENTUCKY'S LAST RETAIL ELECTRIC RATE CASE).**

A. Duke Energy Kentucky's electric transmission system has grown considerably. In the Company's last electric base rate case, Duke Energy Kentucky's forecasted cost of electric transmission system plant in service was $134,522,697 (13-month average forecasted balance ending June 30, 2024), As of June 30, 2024, Duke Energy Kentucky's actual cost of electric transmission system plant in service was $139,279,748. The Company's forecasted test year (13-month average balance ending June 30, 2026) in this case is projecting the balance to be $160,703,839.

**Q. PLEASE EXPLAIN WHAT HAS DRIVEN THIS INVESTMENT IN DISTRIBUTION AND TRANSMISSION PLANT.**

A. A primary driver for this additional investment has been, and will be, localized load growth. Duke Energy Kentucky is experiencing significant development in specific areas of its service territory in Northern Kentucky where additional capacity and facilities are necessary to provide safe and reliable service. This growth includes new and increased loads from commercial, retail, industrial, and residential customers.

While the Company's total load growth across its entire system may not appear to be changing significantly, this localized growth on specific circuits

necessitates investment where the current facilities are not able to support the development. Examples of this localized load growth include the following:

- In Covington, Kentucky, the former Internal Revenue Services (IRS) complex is being redeveloped. The Covington Central Riverfront development has a projected demand of approximately 7 MVA and a substation expansion at Duke Energy Kentucky's current Covington Substation is required to meet this need.
- In Newport, Kentucky, a new commercial development known as Ovation is currently being built with a projected future demand of 5 MVA. A substation expansion at Duke Energy Kentucky's current York Substation is required to meet this new demand.
- In Kenton County a new transformer is being installed at Duke Energy Kentucky's Buffington Substation to support load growth at a new industrial development. Multiple large customers have committed to the industrial site which projected to have 12 MVA of peak demand.
- In Boone and Kenton counties, multiple large customer projects and expansion are occurring which requires expanding capacity capabilities at Oakbrook and Litton substations. These projects will increase demand in this area to 34 MVA by 2030.

Additionally, the Company continues to make investments focused on maintaining and improving reliability in its electric delivery system. Such reliability investments include, but are not limited to, a measured deployment of self-optimizing grid technologies designed to minimize outage durations and

enable faster restorations, as well as the replacement of aging infrastructure. Furthermore, investments are also now necessary to meet our customers' evolving and increased expectations, all of which I describe later in my testimony. These investments are necessary to continue to provide our customers with the safe, reliable, and efficient service they desire and deserve.

**Q. IN YOUR OPINION, ARE DUKE ENERGY KENTUCKY'S TRANSMISSION AND DISTRIBUTION SYSTEM FACILITIES USED AND USEFUL IN PROVIDING SERVICE TO DUKE ENERGY KENTUCKY'S RETAIL ELECTRIC CUSTOMERS?**

A. Yes, they are used daily to provide safe and reliable electric delivery service to our customers.

**Q. PLEASE GENERALLY DESCRIBE HOW THE TRANSMISSION AND DISTRIBUTION SYSTEMS ARE DESIGNED, CONSTRUCTED, AND OPERATED.**

A. The electric transmission system is designed to deliver bulk electric power from local generating plants and other resources to regional substations, or to interconnect with other systems in order to enhance system reliability. The transmission voltages used by Duke Energy Kentucky are 69 kV and 138 kV. As I previously mentioned, Duke Energy Ohio owns the bulk transmission system in northern Kentucky, consisting of 138 kV and above. There are also two 69 kV circuits in Kentucky owned by Duke Energy Kentucky. The system generally consists of steel towers or wood poles, transmission lines, and substations with power transformers, switches, circuit breakers, and associated equipment. The

physical design of the system is generally governed by the National Electrical Safety Code (NESC), which I understand is adopted in Kentucky through KRS § 278.042. The bulk transmission system is under the control authority of PJM, a regional transmission organization approved by the Federal Energy Regulatory Commission (FERC). Under PJM's authority, the bulk transmission system is operated in accordance with the reliability standards developed by the North American Electric Reliability Corporation (NERC) and any regional standards developed by ReliabilityFirst Corporation. NERC is the Electric Reliability Organization designated by the FERC under the Federal Power Act of 2005 to develop mandatory and enforceable reliability standards.

The electric distribution system is designed to receive bulk power at transmission voltages, reduce the voltage to 12.5 kV, and deliver power to customers' premises. The distribution system generally consists of substation power transformers, switches, circuit breakers, wood poles, underground cables, distribution transformers, and associated equipment. The physical design of the distribution system is also generally governed by the NESC.

Duke Energy Kentucky operates the transmission and distribution facilities it owns in accordance with good utility practice. Duke Energy Kentucky continuously runs the system with a workforce that provides customer service 24 hours per day, seven days per week, 365 days per year, including trouble response crews. Duke Energy Kentucky regulates equipment loading in accordance with good utility practice. The Company monitors outages with various systems, such

as Supervisory Control and Data Acquisition (SCADA), Distribution Outage Management System (DOMS), and the Distribution Management System (DMS).

**Q. HOW DOES DUKE ENERGY KENTUCKY IDENTIFY AND ADDRESS CUSTOMER OUTAGES?**

A. Customers typically report outages using either the Company's automated telephone system, text message, mobile app, or the website, Duke-Energy.com. These outage reports that are received then interface with DOMS, the outage management software application, to monitor and respond to outages. Additionally, some outages are reported automatically through the SCADA system remotely and modeled in DOMS.

DOMS analyzes the calls and identifies for Duke Energy Kentucky's dispatchers the piece of equipment (*e.g.,* circuit breaker, recloser, fuse, and transformer) that is the probable location of the outage. The dispatcher contacts the field trouble response person through the radio system to direct them to the probable equipment location to make repairs and restore electric service. Generally, the field trouble response person inspects the circuit or segment of line in question to identify and report the cause of the outage. The dispatcher records the date, time, duration, and cause of the outage in DOMS.

Dispatchers continuously monitor weather conditions, both in anticipation of and during weather events. When lightning, wind, or ice storms hit Duke Energy Kentucky's service territory, line crews are paged, called, or held over to respond. Duke Energy Kentucky will call in several hundred employees, as necessary, to respond to severe storms, including Duke Energy's utility

employees stationed in Ohio, Indiana, North Carolina, South Carolina, and Florida. If necessary, Duke Energy Kentucky will contact other utilities for additional line crews, through a mutual assistance program.

**Q. HOW HAS DUKE ENERGY KENTUCKY'S DEPLOYMENT OF AMI METERS IMPACTED OUTAGE RESTORATION?**

A. Duke Energy Kentucky completed installation of new AMI meters throughout its service territory in fourth quarter of 2018. The AMI devices are integrated into the DOMs to enable better outage response. Duke Energy Kentucky can "ping" groups of meters or individual meters to better and more efficiently locate outages and determine whether service has been restored for customers. Mass meter pinging can be performed to assess where power is out on the system and, after restoration work is performed, whether all the affected customers have been restored. When the Company is clearing single-outage tickets toward the end of a storm outage event, individual meters can be pinged to confirm whether service has been restored, rather than visiting or calling customers for confirmation.

**Q. PLEASE GENERALLY DESCRIBE HOW DUKE ENERGY KENTUCKY'S ELECTRIC DELIVERY SYSTEM IS MAINTAINED.**

A. Duke Energy Kentucky maintains its electric delivery infrastructure in accordance with good utility practice by adhering to inspections, monitoring, testing, and periodic maintenance programs. Examples of these existing programs include, but are not limited to, the following: (1) substation inspection program; (2) line inspection program; (3) ground-line inspection and treatment program; (4) vegetation management program; (5) underground cable replacement program;

(6) capacitor maintenance program; and (7) dissolved gas analysis in substations. Additionally, Duke Energy Kentucky makes capital investments to maintain reliability. Attachment MWA-1 is a list and description of Duke Energy Kentucky's current Distribution Reliability Programs. Duke Energy Kentucky also uses various reliability indices to measure the effectiveness of its maintenance programs and system reliability.

**Q. WHAT ARE THE COMPANY'S OBJECTIVES IN DESIGNING, CONSTRUCTING, OPERATING, AND MAINTAINING ITS ELECTRIC DELIVERY FACILITIES?**

A. In designing, constructing, operating, and maintaining its facilities, the Company strives to provide safe, cost-effective, and reliable electric service.

**Q. PLEASE DESCRIBE SOME OF THE FACTORS THAT THE COMPANY MUST CONSIDER IN ATTEMPTING TO ACHIEVE THESE OBJECTIVES.**

A. In providing electric service to its customers, the Company must provide safe and reliable service while at the same time prudently and responsibly managing the costs of providing such service. The Company weighs various factors in selecting the electric delivery system projects in which to invest, including the Company's planning criteria, any requirements mandated either by regulatory authorities, and project costs versus benefits.

**Q. HOW DOES THE COMPANY BALANCE ALL OF THESE FACTORS?**

A. Annually, electric system studies are performed to determine where and when system modifications are needed to ensure load is adequately served. When these

needs are identified, solutions are developed, addressing not only the capacity need, but also providing opportunities to maintain or improve reliability and operating flexibility. Recommendations are made and discussed with the operations staff to ensure a balanced, workable plan has been developed. To support and improve this effort, Duke Energy Kentucky uses a distribution system planning software tool that allows for quicker, more detailed analysis of the system.

In the course of maintaining and operating the electric system, equipment and hardware is identified that requires repair or replacement. Specific projects are developed to address areas requiring upgrades and investment resulting from operating issues, new load growth, or as a result of the various inspection, monitoring, and testing programs I described above.

**Q. PLEASE DESCRIBE THE INVESTMENTS THAT DUKE ENERGY KENTUCKY HAS MADE TO ITS DELIVERY SYSTEM TO ENHANCE OR IMPROVE HOW IT PROVIDES SERVICE TO ITS CUSTOMERS.**

A. Duke Energy Kentucky strives to provide safe, reliable and affordable utility service. As customers expect more from the Company, it must invest in the electric delivery system grid to provide increasingly reliable service. Duke Energy Kentucky will use technology that supports faster restoration, effectively decreasing inconveniences to its customers. The Company is continuing to transition from a static grid that may employ limited and pre-determined solutions through manual switching to a self-optimizing grid that responds quickly and automatically to failures and mitigates them by finding the most efficient real-

time solution to restore customers. The difference between static and dynamic operation is the use of the real-time data to determine the best solution to restore service. The new grid uses automation and intelligence to manage itself and maximize the reliability customers experience in real time.

Today, the Company's system is constructed for one-way power flow in a radial design with limited ability to integrate renewable energy. As time progresses, this system will eventually evolve into a self-optimizing system.

**Q. PLEASE BRIEFLY EXPLAIN THE TERM "SELF-OPTIMIZING GRID."**

A. The term "self-optimizing grid" refers to a series of interconnected and sectionalized distribution circuits that allow for smaller amounts of customers to be affected by faults on the system and shorter duration of outages when those faults occur. These self-optimizing grid investments seek to: (1) increase system "connectivity" by building more circuit ties that allow for more flexibility in restoration options (by tying more circuits together the system will shift from a radial design to more of a "spider web" design); (2) increase "capacity" by installing larger wires and additional system transformers banks to be able to handle dynamic switching and increased two-way power flow from adjacent circuits and renewable generation; and (3) increase "control" through additional system automation and intelligence. Increased automation and intelligence are becoming necessary requirements to manage an increasingly dynamic system.

With increased connectivity, capacity, and control, the Company will have an increasingly more resilient system with greater flexibility in restoration

options. Instead of having circuit pairs that can back each other up, the network allows for multiple options to re-energize circuit segments.

Presently, the Company is slowly and prudently making these investments over time and in the ordinary course of business, as its distribution circuits need upgrading due to age, capacity needs, or changes in performance that dictate such an upgrade is desired. The Company plans to upgrade approximately fifteen circuits per year as part of normal maintenance and investment. Self-optimizing grid implementation is about 40 percent complete, and at the present deployment rate will be substantially complete by 2030.

## III. MEASURING THE RELIABILITY OF DUKE ENERGY KENTUCKY'S ELECTRIC DELIVERY SYSTEM

**Q. YOU STATED THAT DUKE ENERGY KENTUCKY USES VARIOUS INDICES TO MEASURE THE EFFECTIVENESS OF ITS MAINTENANCE PROGRAMS AND SYSTEM RELIABILITY. PLEASE EXPLAIN THESE RELIABILITY INDICES.**

A. These reliability indices are generally recognized standards for measuring the number, scope, and duration of outages. These indices are defined as follows:

1) System Average Interruption Duration Index (SAIDI) is the average duration of time each customer is interrupted, and is expressed by the sum of customer interruption durations divided by the total number of customers served; and

2) System Average Interruption Frequency Index (SAIFI) is the system average interruption frequency index and represents the average number of

interruptions per customer. SAIFI is expressed by the total number of customer interruptions divided by the total number of customers served.

**Q. DOES DUKE ENERGY KENTUCKY REGULARLY REPORT ITS SYSTEM PERFORMANCE TO THE COMMISSION?**

A. Yes. The Company files annual reliability reports in accordance with the Commission's Order in Administrative Case No. 2011-00450 that directed utilities to file annual reliability reports of SAIDI and SAIFI on a system-wide basis showing total circuits and five-year averages, both including and excluding major event days. The Company also submits circuit reporting identifying which, if any circuits have a SAIDI or SAIFI score that exceeds the five-year average, along with an explanation of any corrective actions taken. Additionally, the Company files an annual report of its vegetation management activities.

**Q. HOW HAS DUKE ENERGY KENTUCKY'S SYSTEM PERFORMED AS MEASURED BY THESE RELIABILITY INDICES?**

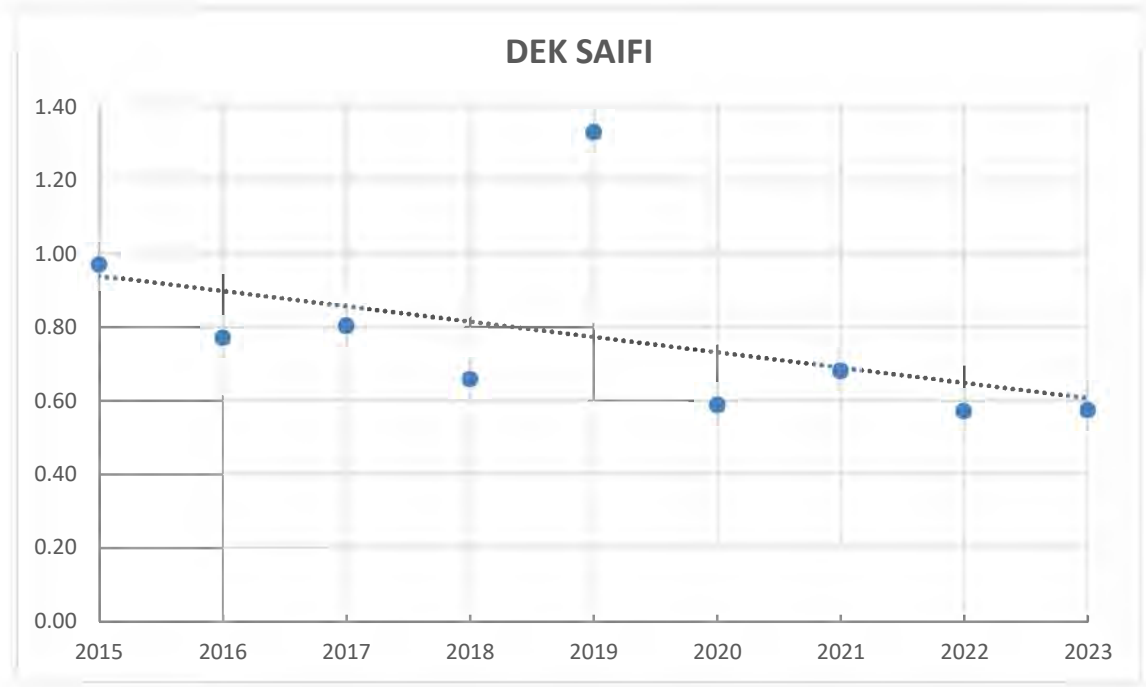
A. Duke Energy Kentucky's system has performed well. Duke Energy Kentucky's reliability scores have exceeded industry average reliability scores and are among the best performing throughout Duke Energy's six state electric service areas. The latest reliability index scores available are for calendar year 2023 and are reported below.

**Table 1 – 2023 Reliability Indexes**

| Reliability Index | Duke Energy KY Actual excl. MED[1] | Duke Energy KY Actual incl. MED |
|---|---|---|
| SAIFI | 0.58 | 0.74 |
| SAIDI | 72 | 140 |

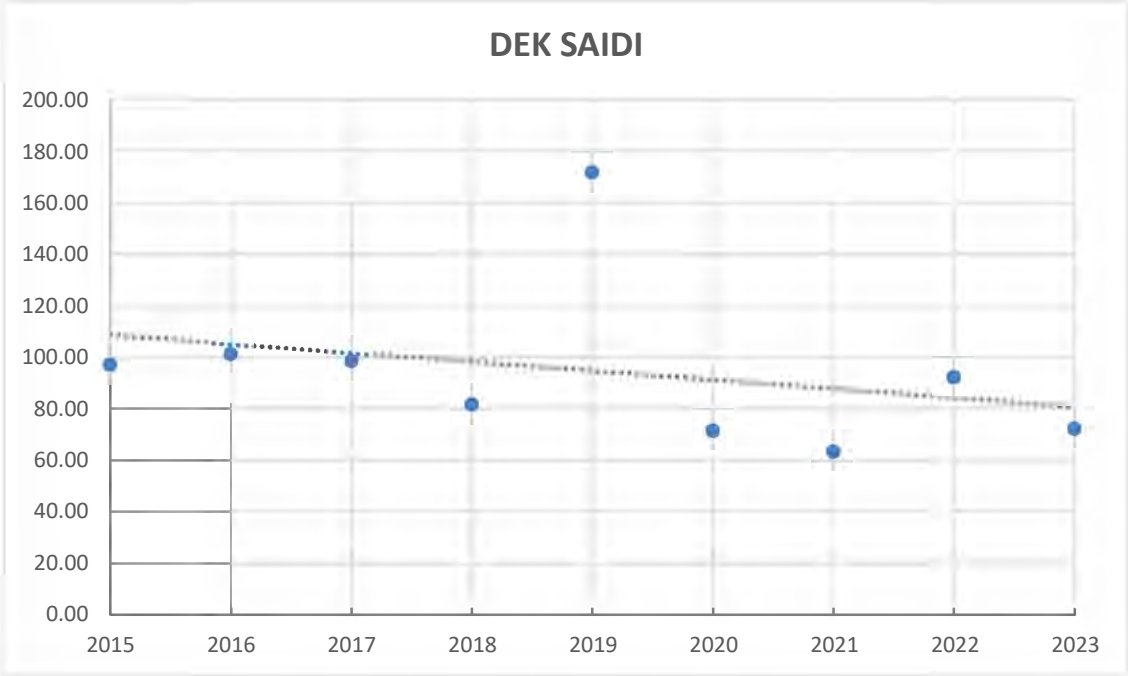
Furthermore, Figures 1 and 2 show a steady trend of improving reliability in Duke Energy Kentucky as measured by SAIFI and SAIDI.

**Figure 1 – Duke Energy Kentucky SAIFI**




[1] An MED is a major event day.

**Figure 2 – Duke Energy Kentucky SAIDI**




## IV. DUKE ENERGY KENTUCKY'S INVESTMENT IN ITS TRANSMISSION AND DISTRIBUTION FACILITIES

**Q. PLEASE DESCRIBE DUKE ENERGY KENTUCKY'S INVESTMENTS RELATING TO ITS TRANSMISSION AND DISTRIBUTION FACILITIES DURING THE PAST FEW YEARS AND ITS PROJECTED FUTURE INVESTMENTS.**

A. The table below summarizes Duke Energy Kentucky's capital expenditures for its transmission and distribution facilities for the period from 2017 through June 30, 2026.

**Table 2 – Capital Expenditures 2017-2026**

| $ millions) | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | Projected 2024 | Projected 2025 | Projected Jan-Jun 2026 |
|---|---|---|---|---|---|---|---|---|---|---|
| Transmission | 3.4 | 3.1 | 12.3 | 32.9 | 16.4 | 14.0 | 16.4 | 15.8 | 24.6 | 5.9 |
| Distribution | 43.6 | 50.4 | 66.3 | 48.3 | 38.7 | 38.3 | 36.4 | 61.2 | 74.1 | 34.0 |
| Total | **47.0** | **53.5** | **78.6** | **81.2** | **55.1** | **52.3** | **52.8** | **77.1** | **98.7** | **39.9** |

## V. MAJOR CHALLENGES FACING DUKE ENERGY KENTUCKY'S ELECTRIC DELIVERY SYSTEM

**Q. WHAT ARE THE MAJOR CHALLENGES FACING DUKE ENERGY KENTUCKY'S TRANSMISSION AND DISTRIBUTION SYSTEM?**

A. The aging of the electric delivery system is a major challenge. Much of the existing equipment is over 40 years old. This equipment typically will last from 30–50 years. The charts below show the age distribution for Duke Energy Kentucky's distribution poles and transmission and distribution transformers. Given the age of our assets, we expect to incur substantial expenditures to replace this equipment during the next several years.

**Figure 3 –Duke Energy Kentucky Distribution Poles Age Distribution Fall 2024**

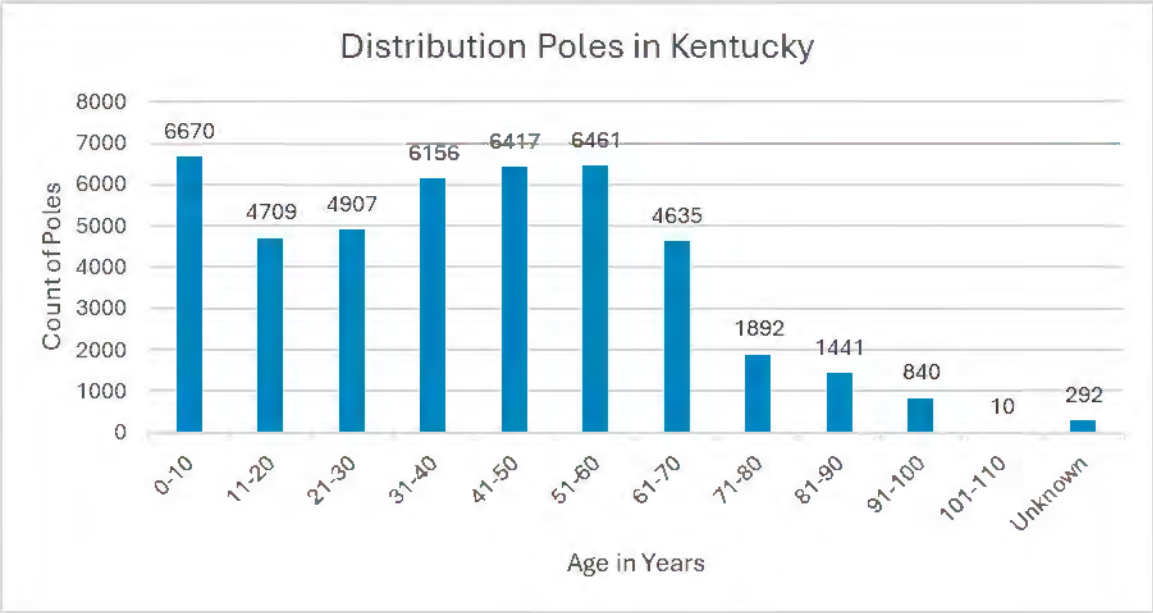
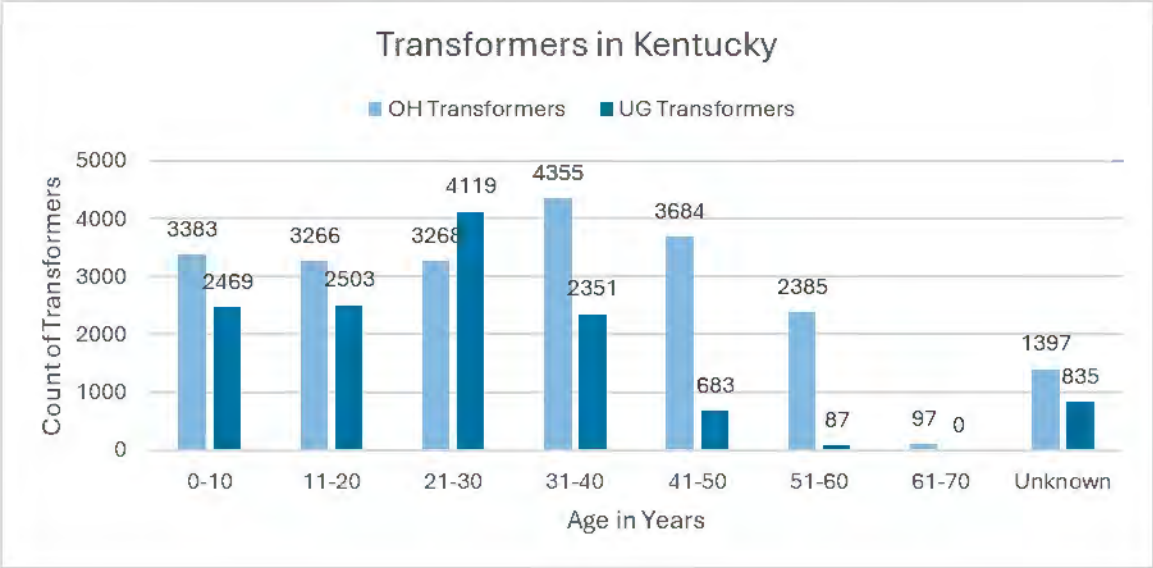



**Figure 4 – Duke Energy Kentucky Distribution Transformer Age Distribution as of Fall 2024**




Another challenge is increased costs to complete the same amount of work. Factors contributing to this include low unemployment, supply chain constraints, and competition for infrastructure related skilled labor.

Duke Energy Kentucky is also experiencing localized load growth with significant residential and commercial expansion projects as previously discussed.

**Q. DO CUSTOMERS' RELIABILITY EXPECTATIONS PRESENT A CHALLENGE?**

A. Yes. Customers are increasingly using equipment that is highly sensitive to voltage fluctuations; therefore, customers are demanding highly reliable service that minimizes the number of voltage fluctuations. In addition, since the pandemic began, a higher share of residential customers are working from home with the need for uninterrupted service cited more frequently in customer verbatims. This presents a challenge for Duke Energy Kentucky to strike the correct balance between reliable and cost-effective service.

**Q. ARE THE PRACTICES AND PROGRAMS YOU DESCRIBED ABOVE, COUPLED WITH THE CURRENT LEVEL OF SPENDING, SUFFICIENT FOR THE COMPANY TO MAINTAIN ITS PRESENT LEVEL OF SERVICE RELIABILITY AND MEET CUSTOMER EXPECTATIONS?**

A. Maintaining prior levels of investment and not adapting to incorporate new technology and data will not serve to maintain, let alone enhance reliability or customer satisfaction. Duke Energy Kentucky will need to increase its investments to continue to meet customers' increased expectations. Customer expectations are evolving as technology changes. Customers are requiring a higher degree of reliability, performance, and response. Customers are expecting service restorations to be made more quickly, as so much of their daily life depends upon the availability of electricity. This includes, for example, the ability

to power and charge cellular phones, computers, and other mobile devices, in order to maintain communication access, beyond just heating and cooling homes.

Although Duke Energy Kentucky's current practices have served it well in the past, the Company must continue to evolve to meet these growing customer expectations. Duke Energy Kentucky cannot be stagnant and simply rely upon the premise that past practices will continue to be sufficient to maintain future performance. Rather, the Company must adapt its practices and implement new programs to respond to industry demands, changes in technology, and continually evolving customer needs and expectations.

**Q. DOES THE COMPANY MEASURE OR ATTEMPT TO QUANTIFY CUSTOMER EXPECTATIONS?**

A. Yes. Testimony provided by Witness Spiller and Witness Colley explain the Company's initiatives to measure customer satisfaction and its performance through both its internal Customer Experience Monitor (CX Monitor) and Fastrack post-transaction surveys, as well as national benchmark surveys such as J.D. Power. Ms. Spiller further supports the most recent customer survey data available.

**Q. IN GENERAL, WHAT DO THE CUSTOMER SATISFACTION SURVEYS INDICATE IN TERMS OF DUKE ENERGY KENTUCKY'S STRATEGY TO MEET CUSTOMER RELIABILITY EXPECTATIONS?**

A. Feedback trends from Duke Energy Kentucky's customers show that they are satisfied with the Company's overall performance; however, we know that customers have low tolerance for long duration outages and untimely outage

notifications or updates. Additionally, the Company's reliability satisfaction metrics demonstrate strong performance, but there is always room for improvement.

**Q. HOW IS THE COMPANY ADAPTING TO ADDRESS CUSTOMERS' HIGH EXPECTATIONS?**

A. Each month the Company collects new customer feedback and analyzes this data to identify, measure and diagnose customer issues. This process allows us to continually look for opportunities to enhance and improve service to customers. We believe that continuing to make strategic electric delivery system investments will enable the Company to improve the health and performance of the electric delivery system which is vital to improving Duke Energy's core mission of powering the lives of our customers and the vitality of our communities.

**Q. PLEASE EXPLAIN HOW THE DELIVERY SYSTEM INVESTMENTS AND RELIABILITY PROGRAMS YOU PREVIOUSLY DESCRIBED ARE INTENDED TO ADDRESS THESE CHALLENGES.**

A. Duke Energy Kentucky must adapt its practices and implement new programs to respond to industry demands, changes in technology, and continually evolving customer needs and expectations. Customers' increasing expectations regarding reliability and outage-related communications require increased investment. The delivery system investments and reliability programs described will position the Company to address the challenges of aging infrastructure, localized load growth, and customers' low tolerance for outages and lack of outage-related information by keeping pace with the changes in technology and customer demands.

## VI. SCHEDULES AND FILING REQUIREMENTS (FR) SPONSORED BY WITNESS

**Q. PLEASE DESCRIBE FR 16(7)(b).**

A. FR 16(7)(b) consists of the most recent capital construction budget containing the forecasted construction expenditures for a minimum of three years. I provided the forecasted capital construction budget for the local transmission and distribution facilities contained in FR 16(7)(b) and for Mr. Carpenter's use for the forecasted financial data.

**Q. PLEASE DESCRIBE FR 16(7)(f).**

A. FR 16(7)(f) includes the following information for major projects constituting five percent or more of the annual construction budget during the three-year capital expenditure forecast: the starting date and completion date for each project and construction cost per year. I provided this information for the local transmission and distribution facilities contained in FR 16(7)(f).

**Q. PLEASE DESCRIBE FR 16(7)(g).**

A. FR 16(7)(g) includes the following information for projects constituting less than five percent of the annual construction budget during the three-year capital expenditure forecast: the starting date and completion date for each project and construction cost per year. I provided this information for the local transmission and distribution facilities contained in FR 16(7)(g).

## VII. CONCLUSION

1 **Q. WERE THE INFORMATION YOU PROVIDED FOR FR 16(7)(b), FR**
2 **16(7)(f), AND FR 16(7)(g) AND ATTACHMENT MWA-1 PREPARED BY**
3 **YOU OR UNDER YOUR SUPERVISION?**
4 A. Yes.
5 **Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**
6 A. Yes.

**VERIFICATION**

| | | |
|---|---|---|
| **STATE OF OHIO** | ) | |
| | ) | **SS:** |
| **COUNTY OF HAMILTON** | ) | |

The undersigned, Marc W. Arnold, Vice President, Zone Operations being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing testimony and that it is true and correct to the best of his knowledge, information and belief.

Marc W. Arnold Affiant

Subscribed and sworn to before me by Marc W. Arnold on this 2ND day of DECEMBER, 2024.

NOTARY PUBLIC

My Commission Expires: 1/5/2029

# Distribution Reliability Programs and Brief Description

| Programs | Description |
|---|---|
| Underground Small Cable Primary-only Replace | Replacement of Underground Cable as a program due to failure rates or testing results. This is for the replacement of primary cable only. Small cable (size 1/0 or smaller). |
| Underground Large Cable Primary-only Replace | Replacement of Underground Cable as a program due to failure rates or testing results. This is for the replacement of primary cable only. Large cable (size larger than 1/0). |
| Pole Replace Insp Follow Up | Distribution Poles replaced as part of the Pole Inspection Program only. |
| Pole Inspection Other Units of Property FUP | Replacements of other units of property (UOP) outside a complete pole change out. Part of the Pole Inspection Program only. (E.g. arrestor, cutout) |
| Pole Reinforcement | Distribution Poles reinforced as part of the Pole Inspection Program only. |
| Recloser Electronic Replace | Replacement of electronic recloser unit or controller and all capital components |
| Recloser Hydraulic Replace | Replacement of hydraulic recloser unit and all capital components, including sectionalizers |
| Cutout Oil to Vacuum Switch Replace | Change out of Oil to Vacuum switches, cutouts, arresters on capacitor banks. Capacitor reactive/corrective work should be charged to the "Capacitor Replace" program. |
| Over Head Line Switch Replace | Replacement of Over Head line switches, including gang and solid blade disconnects. |
| Switch Gear Replace | Underground Switchgear Replacement. Includes inspection capital follow up, and corrective replacements (PME-style, switching module, etc.). |
| Live Front Transformer Replace | Upgrade Live Front Transformers to dead front. |
| Capacitor Auto | Upgrade of capacitors by adding controls and modem. |
| Circuit Sectionalization | Installation of sectionalizing devices that are not on the mainline circuit (reclosers, sectionalizers, fuses). Reactive only. Mainline sectionalization devices should be charged to the Circuit Segmentation Program |
| Over Head Deteriorated Conductor Replace | Replacement of primary conductors that are likely to fail, due to poor performance, condition, or construction method, with a more reliable heavier gauge industry standard wire. |
| Transformer Retrofit | Retrofitting transformers, replacing Cutouts failed to interrupt and execution of the AB Chance cutout replacement program for efficiency purposes. |
| Modem Replace | Proactive program to replace smart device modems (Line Sensor, Reclosers, Regulators, & Capacitors) that are reaching end of useful life |
| Removal Non-Utilized Infrastructure-Over Head | Removal of Non-Utilized Infrastructure – Over Head |

| | |
|---|---|
| Corrective Emergency Replace | Includes emergency Downtown Underground (DTUG), Overhead, and Underground Corrective Replacements - Imminent/ Emergency work requiring immediate response. "An emergency is a situation in which a field performer cannot leave the site until the identified hazard is mitigated and resolved. An emergency would be a situation identified to be a danger to the public, to utility personnel, imminent outage, or to prevent an impact on the environment. An emergency can be applied to any asset at any location. Emergency repairs can be mitigated or 'made safe' until a more comprehensive repair or replace is performed. |
| Underground Cable Secondary Service Replace | Underground Cable Replace Secondary / Service |
| Manhole Lid Retrofit | Manhole Lid Retrofits/Replace for Explosion Mitigation across the system. |
| Line Patrol Replace | Replacement of capital items identified through the regulatory required line patrol inspection. |
| SMEI Insp Replace | Replacement of other units of property identified through the Surface Mounted Equipment Inspection (SMEI). |
| Limited Access Cross Upgrade | Bringing interstate crossings up to NESC grade B construction. |
| Line Sensor Replace | Replacement of stand-alone line sensors (IE:toll grade or Cooper) only. Includes the controller if it is separate than the line sensor. |
| NAN Device Replace | Replacement of neighborhood area network (NAN) devices. These devices were originally used as a part of AMI but are not limited to communicating metering traffic. Does not include modems and line sensors for reclosers, capacitors, or regulators as they should go to the modem replace or line sensor replace programs |
| Over Head Replace (Other - Planned) | Overhead Corrective Replacements - Work found in the field that is not part of inspections, outages, or power quality, that can be prioritized or scheduled. Over Head Wire Primary Replacements will be charged to "Over Head Wire Primary Replace" program |
| Over Head Stolen Conductor Replace | Replacement of stolen overhead conductor, including neutrals that are in service. |
| Over Head Wire Primary Replace | Replacement of at least one span of Over Head Wire Primary, including neutral |
| Over Head Wire Secondary Service Replace | Replacement of at least one span of Over Head Wire Secondary, including neutral |
| Underground Replace (Other - Planned) | Underground Corrective Replacements - Work found in the field that is not part of inspections, outages, or power quality, that can be prioritized or scheduled. |
| Pole Stub Removal | Stub Pole Removal (Planned). This is a removal project only. It is only to be used for pulling of poles that are a part of the Pulled Pole backlog or the project that the pole removal has already been closed. |
| Pole Replacement (Non- Insp Based) | Replacement Distribution Poles typically "found in field" by operations or engineering and not associated with an outage, public damage, or pole inspection. |
| Over Head Transf Replace | Overhead corrective transformer replacements found in the field that is not part of inspections, outages, or power quality, that can be prioritized or scheduled. |
| Pad Transformer 1PH Non-Leak Replace | PadmountTransformer single phase non-leak replacement, includes inspection follow up and corrective. |

| | |
|---|---|
| Pad Transformer 1PH Oil Leak Replace | Padmount Transformer single-phase replacement resulting from oil leak, includes inspection follow up and corrective. |
| Pad Transformer 3PH Non-Leak Replace | Padmount Transformer three-phase non- leak replacement, includes inspection follow up and corrective. |
| Pad Transf 3PH Oil Leak Replace | Padmount Transformer three-phase replacement resulting from oil leak, includes inspection follow up and corrective. |
| Capacitor Replace | Change out of entire capacitor bank or individual components including controller, cutouts, arrestors or switches not identified as part of the Oil-to-Vacuum switch replacement program. |
| Regulator Replace | Change out of entire regulator bank or individual components including controller, cutouts, arrestors or switches not identified as part of the Oil-to-Vacuum switch replacement program. |
| Declared Protection Zone | Proactive solution to a chronic problem, by identifying and improving a section of a feeder. Done when all other reliability efforts are not successful. Driven by internal analysis of performance. |
| Over Head Outage Investigation Improve Replace | Over Head outage investigation and replacements identified by Reliability Engineering. May also include issue reported by Customers, Commission, or daily outage reports. Corrective action should be identified and corrected within a pre-determined amount of time. |
| Underground Outage Investigation Improve Replace | Underground Outage Investigation and replacements identified by Reliability Engineering. May also include issue reported by Customers, Commission, or daily outage reports. Corrective action should be identified and corrected within a pre-determined amount of time. |
| Proactive Pad Transf 1PH Non- Leak Replace | Proactive single phase dry Transformer replacement, within 100 feet of active waterway (not a retention pond; active flowing waterway), and greater than 210 gallons of oil. |
| Proactive Pad Transf 1PH Oil Leak Replace | Proactive Padmount Transformer single-phase replacement resulting from oil leak, within 100 feet of active waterway (not a retention pond; active flowing waterway), and greater than 210 gallons of oil. |
| Proactive Pad Transf 3PH Non- Leak Replace | Proactive Padmount Transformer three-phase non-leak replacement, within 100 feet of active waterway (not a retention pond; active flowing waterway), and greater than 210 gallons of oil. |
| Proactive Pad Transf 3PH Oil Leak Replace | Proactive Padmount Transformer three-phase replacement resulting from oil leak, within 100 feet of active waterway (not a retention pond; active flowing waterway), and greater than 210 gallons of oil. |
| Circuit Connectivity | Projects Driven by Distribution Capacity needs outside the substation and not associated with a substation upgrade. |
| Segmentation & Automation | Smart Grid Self-Healing |
| Live Front Switchgear | Upgrade Live Front to Dead Front |
| Substation Capacity | Load Growth, Load Transfers and Tie Lines for Distribution |
| Targeted Over Head Under Ground- | Replace Existing Over Head Distribution System with Under Ground Facilities on a targeted basis. |
| Circuit Capacity | Upgrade distribution lines or addition of new circuit driven by the addition of a new retail substation to serve load growth. |