

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF DUKE ENERGY)	
KENTUCKY, INC. FOR (1) AN ADJUSTMENT OF)	
ELECTRIC RATES; (2) APPROVAL OF NEW)	CASE NO.
TARIFFS; (3) APPROVAL OF ACCOUNTING)	2022-00372
PRACTICES TO ESTABLISH REGULATORY)	
ASSETS AND LIABILITIES; AND (4) ALL OTHER)	
REQUIRED APPROVALS AND RELIEF)	

ORDER

Duke Energy Kentucky, Inc. (Duke Kentucky) is a jurisdictional electric utility that generates, transmits, distributes, and sells electricity to approximately 146,515 consumers in Boone, Campbell, Grant, Kenton, and Pendleton counties.¹ Duke Kentucky's last adjustment of its electric rates was granted in Case No. 2019-00271.²

BACKGROUND

On November 1, 2022, Duke Kentucky filed a notice of its intent to file an application for approval of increases in its electric rates.³ According to the application the rate application would be supported by a fully forecasted test period consisting of the 12 months ending June 20, 2024.⁴ On December 1, 2022, Duke Kentucky filed an

¹ *Annual Report of Duke Kentucky to the Public Service Commission for the Year Ending December 31, 2021* (2021 Annual Report) at 4, 5.

² Case No. 2019-00271 *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* (Ky. PSC Apr. 27, 2020).

³ Duke Kentucky's Notice of Intent and Election (filed Nov. 1, 2022).

⁴ Application (filed Dec. 1, 2022) at 1.

application requesting authorization to increase its electric base rate revenue, including fuel, to a new total of \$453.5 million, which reflects an increase of approximately \$75.2 million from its current rates.⁵ The increase in base rates takes into account the offsetting impact of cost-effective energy efficiency in terms of adjustments to Duke Kentucky's load forecast.⁶ The average monthly residential electric bill increase based on the proposed electric base rates would be approximately 20.6 percent or approximately \$19 for a residential customer using 1,000 kWh of electricity, the typical monthly consumption of a Duke Kentucky residential customer.⁷

Duke Kentucky stated that the primary reason for the requested increase is that Duke Kentucky's earned rate of return on capital obtained from its current electric operations is 2.738 percent. Duke Kentucky stated this is inadequate to enable it to continue providing safe, reasonable, and reliable service to its customers and is insufficient to afford Duke Kentucky a reasonable opportunity to earn a fair return on its investment property that is used to provide such service while attracting necessary capital at reasonable rates.⁸ Duke Kentucky stated it is seeking to recover, through amortization, certain regulatory assets, including but not limited to: (1) incremental planned outage operation and maintenance (O&M) expense; (2) incremental purchased power expense for forced outages; and (3) rate case expenses resulting from this instant rate case.⁹

⁵ Application at 5.

⁶ Application at 5.

⁷ Application at 5.

⁸ Application at 6.

⁹ Application at 6.

Duke Kentucky's application also included a request to clarify language in several tariffs and service regulations, as well as new tariffs and surcharges related to: (1) recovery of undepreciated remaining net book value of generating assets at the time of retirement; (2) a surcharge for recovery of unplanned incremental distribution-related investments that are required pursuant to a municipal ordinance or franchise; (3) two new tariffs to support electric vehicle (EV) charging infrastructure; (4) a new, voluntary, community-based solar program named Clean Energy Connection (CEC); (5) a new hedging program for managing Duke Kentucky's participation in the PJM Interconnection LLC (PJM) markets to mitigate price volatility for customers; (6) a change to its Fuel Adjustment Clause to base the monthly charge upon a 12-month rolling average rate to mitigate volatility; and (7) a new Time of Use Rate.¹⁰ In addition, Duke Kentucky requested changes to accounting methods to establish and implement deferrals for regulatory assets and liabilities related to the EV tariffs and CEC and to continue all other existing deferrals.¹¹

A deficiency letter was issued to Duke Kentucky on December 6, 2022. On December 8, 2022, Duke Kentucky filed a response to the letter. In response to the deficiencies, Duke Kentucky stated that it had corrected the errors and omissions in the last week of publication in the Notice of the Change of Rates.¹² However, the correct notice would only be published for one week. Duke Kentucky requested a waiver from the requirements of 807 KAR 5:001, Section 17(2)(b)(3) for substantial compliance with

¹⁰ Application at 6.

¹¹ Application at 5-6.

¹² Duke Kentucky's Response to the Deficiency Letter (filed on Dec. 8, 2022) at 1-5.

the publication requirements.¹³ By Order issued on December 13, 2022, the Commission denied the request and required three consecutive weeks of publication of the corrected notice.¹⁴ On December 15, 2022,¹⁵ the application was deemed accepted as of December 14, 2022.

In an Order issued on December 19, 2022, the Commission suspended Duke Kentucky's proposed rates for six months, up to and including July 14, 2023. The December 19, 2022 Order also established a procedural schedule for the processing of this matter, which provided for a deadline for requesting intervention, two rounds of discovery upon Duke Kentucky's application,¹⁶ a deadline for the filing of intervenor testimony, one round of discovery upon any intervenor testimony, and an opportunity for Duke Kentucky to file rebuttal testimony.

The following parties were granted intervention in this proceeding: the Attorney General of the Commonwealth of Kentucky, by and through the Office of Rate Intervention (Attorney General);¹⁷ The Kroger Company (Kroger);¹⁸ Wal-Mart, Inc. (Walmart),¹⁹ Sierra Club,²⁰ and Kentucky Broadband and Cable Association (KBCA).²¹

¹³ Duke Kentucky's Response to the Deficiency Letter at 5-6.

¹⁴ Order (Ky. PSC Dec. 13, 2023).

¹⁵ PSC deficiency cured letter (filed Dec. 15, 2022).

¹⁶ Duke Kentucky responded to a total of five data requests from Commission Staff prior to the hearing.

¹⁷ Order (Ky. PSC Dec. 13, 2022).

¹⁸ Order (Ky. PSC Jan. 6, 2023).

¹⁹ Order (Ky. PSC Jan. 17, 2023).

²⁰ Order (Ky. PSC Jan. 17, 2023).

²¹ Order (Ky. PSC Jan. 17, 2023).

There were three public comments filed in this matter. On February 3, 2023, Lora Ledford filed a comment that Duke Kentucky's rates were too high and she asked the commission to vote no and deny any increase.²² On February 9, 2023, Kentucky Solar Industries Association, Inc. (KSIA) filed a public comment. KSIA objected to Duke Kentucky's approach to filing a subsequent net-metering case, arguing it was contrary to the intent of KRS 278.466 and encourages the Commission to engage in single-issue ratemaking.²³ According to KSIA, the Clean Energy Connection (CEC) is abstract and dependent upon a Certificate of Public Convenience and Necessity (CPCN).²⁴ According to KSIA, the value analysis was not provided, and the process was not transparent.²⁵ KSIA asked the Commission to deny approval for the CEC program.²⁶ On March 10, 2023, a public comment was filed by Chargepoint, Inc. (Chargepoint) generally supportive of two of Duke Kentucky's proposed tariffs, Electric Vehicle Site Make Ready Service (MRS) and Electric Vehicle Supply Equipment (EVSE) Program.²⁷ Chargepoint recommended that the chargers for the electric vehicles be networked and cited to the advantages of requiring that feature.²⁸

²² Lora Ledford's comment (email received on Feb. 3, 2023).

²³ KSIA's comments (filed on Feb. 9, 2023) at 2-4.

²⁴ KSIA's comment at 8.

²⁵ KSIA's comment at 9-10.

²⁶ KSIA's comment at 11.

²⁷ Chargepoint's comment (filed on Mar. 10, 2023) at 1.

²⁸ Chargepoint's comment at 3-4.

Duke Kentucky responded to five requests for information and periodically updated certain responses.²⁹ A formal hearing was held on May 9, 2023 through May 12, 2023. Duke Kentucky filed responses to post-hearing data requests on May 26, 2023. Each of the parties filed simultaneous post-hearing briefs on July 9, 2023. Duke Kentucky, Kroger, Walmart, Sierra Club and KBCA filed simultaneous response briefs on July 19, 2023.³⁰

TEST PERIOD

Duke Kentucky proposed the 12 months ending June 30, 2024, as its forecasted test period to determine the reasonableness of its proposed rates.³¹ Duke Kentucky's 2022 actual data and 2022 and 2023 budgets were the starting point for the preparation of both the base and forecasted periods.³² The testimony described the review and approval process to which its budgets are subjected, including the Duke Kentucky's executive management and Duke Energy Corporation's (Duke Energy) Board of Directors.³³

No intervenor objected to the proposed test period or suggested an alternative test period. The Commission otherwise finds Duke Kentucky's forecasted test period to be

²⁹ Duke Kentucky's Response to Commission Staff's First Request for Information (Staff's First Request) (filed Dec. 15, 2022); Duke Kentucky's Response to Commission Staff's Second Request for Information (Staff's Second Request) (filed Jan. 25, 2023); Duke Kentucky's Response to Commission Staff's Third Request for Information (Staff's Third Request) (filed Mar. 2, 2023); Duke Kentucky's Response to Commission Staff's Fourth Request for Information (Staff's Fourth Request) (filed Apr. 12, 2023); Duke Kentucky's Response to Commission Staff's Fifth Request for Information (Staff's Fifth Request) (filed Apr. 17, 2023).

³⁰ The Attorney General did not file a reply brief.

³¹ Direct Testimony of Grady "Tripp" Carpenter (Carpenter Direct Testimony) (filed Dec. 1, 2022) at 3.

³² Carpenter Direct Testimony at 3.

³³ Carpenter Direct Testimony at 3.

consistent with the provisions of KRS 278.192 and KAR 5:001, Sections 16(6), (7), and (8). Therefore, the Commission accepts the forecasted test period proposed by Duke Kentucky for use in this proceeding.

REVENUE REQUIREMENTS

The Attorney General was the only intervenor to recommend adjustments to Duke Kentucky's proposed revenue requirement. The Attorney General's revenue requirement witnesses, Lane Kollen and Randy Futral, proposed increasing Duke Kentucky's base revenues by no more than \$31.326 million, a reduction of at least \$43.851 million from Duke Kentucky's original requested base rate increase of \$75.177 million.³⁴ Duke Kentucky amended its requested base rate increase to \$68.821 million, after accepting four adjustments proposed by the Attorney General to correct errors in the test-year and accepting two adjustments with modifications.³⁵

Rate Base Adjustments

Accumulated Depreciation Reserve Balance – Duke Kentucky acknowledged a mistake in its plant reserve calculation.³⁶ Duke Kentucky initially had underestimated its plant reserve balance on its pro forma adjustments by \$120,622 (\$0.121 million).³⁷ The Attorney General recommended that the Commission reduce rate base by \$120,622

³⁴ Direct Testimony of Randy Futral (Futral Direct Testimony) (filed on Mar. 10, 2023) at 4.

³⁵ Revised Rebuttal Testimony of Lisa Steinkuhl (Steinkuhl Revised Rebuttal Testimony) (filed May 5, 2023), at 7.

³⁶ Futral Direct Testimony at 7 and Duke Kentucky's Response to Attorney General's First Request for Information (Attorney General's First Request) (filed Jan. 25, 2023), Item 112.

³⁷ Duke Kentucky's Response to Attorney General's Second Request for Information (Response to Attorney General's Second Request) (filed Mar. 2, 2023), Item 42.

(\$0.121 million) and the base revenue requirement and base rate increase by \$11,273 (\$0.011 million) to correct for the error.³⁸

The Commission finds that the Attorney General's adjustment should be accepted, which results in an \$11,273 (\$0.011 million) revenue requirement decrease.

Fuel and Lime Inventories Vendor Financing – Duke Kentucky included fuel and lime inventories in rate base. The Attorney General proposed reducing rate base for the portion of inventories that are financed by vendors due to zero cost accounts payable, similar to recommendations for Kentucky Power Company and Atmos Energy Corporation.³⁹ Duke Kentucky stated that it does not oppose this adjustment, the effect of which is to reduce rate base by \$6.459 million, for a revenue requirement reduction of \$603,632 (\$0.604 million).⁴⁰

The Commission finds that this adjustment proposed by the Attorney General should be accepted, which results in a rate base reduction of \$6.459 million and a \$603,632 (\$0.604 million) revenue requirement decrease.

Lead/Lag Study – Duke Kentucky included \$5.425 million of cash working capital (CWC) in rate base in its application based on the results of its lead/lag study. Duke Kentucky responded to a data request from the Attorney General by stating that the receivables balances had been stated on a combined electric and gas operations basis, while the revenue amounts had been stated on an electric-only basis.⁴¹ Duke Kentucky's

³⁸ Futral Direct Testimony at 8.

³⁹ Kollen Direct Testimony at 8–11.

⁴⁰ Steinkuhl Rebuttal Testimony at 5–6.

⁴¹ Duke Kentucky's Response to the Attorney General's First Request, Item 112.

re-calculated cash working capital amount is a positive \$506,078 (\$0.506 million), a reduction of \$4.919 million from the \$5.425 million included in the application.⁴² The Attorney General recommended an adjustment to reduce rate base by \$4.919 million and the revenue requirement by \$459,687 (0.460 million).⁴³

The Commission finds that this adjustment should be accepted and the adjustment will reduce rate base by \$4.919 million and the base revenue requirement and base rate increase by \$459,687 (\$0.460 million) to correct for the acknowledged error in the calculation of the collection lag days.

Sale of Receivables and Cash Working Capital – The Attorney General recommended adjusting revenue lag days to reflect the sales of receivables, resulting in a rate base reduction of \$17.945 million and a revenue requirement reduction of \$1.677 million.⁴⁴ Duke Kentucky used 27.02 revenue lag days to calculate its cash working capital and the Attorney General recommended 1.46 days to account for the sale of accounts receivable.⁴⁵ Duke Kentucky sells its receivables and collects payments from customers daily, but Duke Kentucky only remits or collects the net of those cash flows monthly.⁴⁶ Duke Kentucky argued that because it engages in securitization financing of accounts receivable and not factoring of accounts receivable, Duke Kentucky only receives cash after customers remit payments.⁴⁷ Duke Kentucky argued that the

⁴² Duke Kentucky's Response to Attorney General's First Request, Items 95 and 96.

⁴³ Futral Direct Testimony at 9–10.

⁴⁴ Kollen Direct Testimony at 16.

⁴⁵ Kollen Direct Testimony at 13.

⁴⁶ Kollen Direct Testimony at 12.

⁴⁷ Rebuttal Testimony of Paul M. Norman at 3.

financing arrangement benefits ratepayers because it provides diversification of long-term debt and should be removed from the capital structure if the revenue lag days are adjusted.⁴⁸

The Commission finds that Duke Kentucky's revised lead/lag study provides a reasonable measure of cash working capital because it reflects the actual cash flows of Duke Kentucky's electric operations, and the Attorney General's adjustment is not in the best interest of customers at this time. The revenue requirement impact of redistributing the accounts receivable financing to Duke Kentucky's other capital components is an increase of approximately \$2.094 million, which would make a net increase of approximately \$417,000 (\$0.417 million). The Commission also finds that Duke Kentucky should evaluate the benefit of securitization or factoring, and an adjustment may be made in the subsequent rate adjustment proceedings if the benefit of the arrangement does not outweigh the increase in cash working capital. Additionally, in absence of a lead/lag study, the Commission will assume that cash working capital is \$0 or negative. Duke Kentucky is a utility of sufficient size and sophistication that use of the 1/8th methodology to determine cash working capital should not be relied on in the future. Duke Kentucky should prepare a lead/lag study in subsequent proceedings to justify a positive cash working capital.

Rider Energy Surcharge Mechanism (Rider ESM) Roll-In – Duke Kentucky proposed to move recovery of the return on rate base and the related depreciation and property tax expenses from Rider ESM to base rates from four capital projects that are in service. The Attorney General opposed the roll-in and recommended that these costs

⁴⁸ Rebuttal Testimony of Thomas J. Heath, Jr. at 6.

continue to be recovered through Rider ESM, which according to Duke Kentucky's discovery responses would reduce the requested increase in revenue by \$12.076 million.⁴⁹ Duke Kentucky stated it does not oppose the adjustment and provided corrections to the calculations provided in discovery, which stated that the actual revenue requirement decrease is \$3.290 million.⁵⁰

The Commission finds that this adjustment as proposed by the Attorney General should be accepted and reduces the base revenue requirement and base rate increase by \$3.290 million.

Useful Lives for Generating Units – Duke Kentucky proposed depreciation rates that reflect new retirement dates for its generating facilities at East Bend, from 2041 to 2035, and Woodsdale, from 2032 to 2040.⁵¹ The revised depreciation rates are based on a new depreciation study and the retirement dates are based on Duke Kentucky's Integrated Resource Plan (IRP).⁵² The Attorney General recommended that the retirement date for East Bend remain 2041 and any remaining net book value be evaluated when Duke Kentucky files a certificate for public convenience and necessity (CPCN) for replacement generation.⁵³ The Attorney General also recommended: (1) removing the decommissioning costs from depreciation rates and recovering those costs in base rates as a discrete cost, to remove the escalation and impact of calculating

⁴⁹ Kollen Direct Testimony at 42–43 and Duke Kentucky's Response to Attorney General's Second Request, Item 40 and Duke Kentucky's Response to Staff's Third Request, Item 21.

⁵⁰ Steinkuhl Rebuttal Testimony at 4–5.

⁵¹ Direct Testimony of John Spanos (Spanos Direct Testimony) at 8.

⁵² Spanos Direct Testimony at 7–9 and Direct Testimony of William Luke (Luke Direct Testimony) at 11.

⁵³ Kollen Direct Testimony at 30–31.

depreciation rates based on the current plant amount but applying rates to increasing plant amounts;⁵⁴ (2) stopping escalation of decommissioning costs at the end of the test-year, which currently escalates to retirement date;⁵⁵ and (3) removing end of life materials and supplies inventories from decommissioning costs included in the depreciation rates because there is not a feasible way to estimate what amount will be salvaged.⁵⁶

Sierra Club recommended that East Bend be retired by 2030 and the remaining net book value either be treated a regulatory asset or securitized to mitigate the ratepayer impact of the earlier retirement.⁵⁷

Duke Kentucky argued that the purpose of a probable retirement date and the impact on depreciation rates is to estimate the life cycle of the asset and to recover the investment over the same time period that the asset will render service.⁵⁸ Duke Kentucky also stated that its analysis determined that 2035 will be the most likely economic retirement date for East Bend, taking into account the continued operations, maintenance expenses, and capital improvements necessary for continued operation.⁵⁹ Duke Kentucky argued that the Commission has previously approved its treatment of terminal net salvage as an appropriate way to avoid intergenerational inequality. . .”⁶⁰ Duke Kentucky further argued that materials and supplies inventories should be included in

⁵⁴ Kollen Direct Testimony at 32.

⁵⁵ Kollen Direct Testimony at 35.

⁵⁶ Kollen Direct Testimony at 37.

⁵⁷ Direct Testimony of Sarah Shenstone-Harris (Shenstone Direct Testimony) (filed Mar. 10, 2023) at 16.

⁵⁸ Rebuttal Testimony of John Spanos (Spanos Rebuttal Testimony) at 2.

⁵⁹ Spanos Rebuttal Testimony at 2–3.

⁶⁰ Spanos Rebuttal Testimony at 5–6.

decommissioning costs because it is industry standard appropriately accounts for the inventories necessary to operate the unit to retirement and the disposition of the remaining inventories at a loss and is consistent with Commission precedent.⁶¹

KRS 278.264 was enacted in the 2023 Regular Session and provides a methodology on how the Commission will review proposals to retire an electric generating unit.⁶² Duke Kentucky briefly discussed the impact of KRS 278.264⁶³ on its proposed depreciation rates. Duke Kentucky argued that denying its request to align depreciation rates with its revised estimated useful lives would expose ratepayers to net incremental costs. Duke Kentucky stated this satisfies the first prong of KRS 278.264, which created a rebuttal presumption against retirement.⁶⁴ Duke Kentucky also argued that the increased undepreciated balances at retirement would prevent Duke Kentucky from meeting the requirements of KRS 278.264 because, in its view, KRS 278.264 requires the Commission to consistently align depreciation rates with the probable remaining useful lives.”⁶⁵

The Commission finds that depreciation rates should reflect retirement dates of 2041 for East Bend and 2040 for Woodsdale, which results in a rate base increase of \$2.616 million and a revenue requirement increase of \$244,530 (\$0.244 million). The decrease in depreciation expense results in a revenue requirement decrease of

⁶¹ Rebuttal Testimony of Jeffrey Kopp at 3-4.

⁶² KRS 278.264.

⁶³ At the time of Duke Kentucky’s rebuttal testimony, KRS 278.264 was referred to as Senate Bill 4, which was passed on March 29, 2023, after the filing of intervenor testimony.

⁶⁴ Rebuttal Testimony of Sarah Lawler (Lawler Rebuttal Testimony) at 7–8.

⁶⁵ Lawler Rebuttal Testimony at 8.

\$5.226 million. Leaving the current depreciable rate for East Bend balances the risk of retirement before the unit is fully depreciated while encouraging Duke Kentucky to operate East Bend as long as it is economically viable. Duke Kentucky's 2021 IRP is not a reasonable planning document for the retirement date because Duke Kentucky's Generation Retirement Study did not adequately support the requested retirement date of 2035. Additionally, the Commission disagrees with Duke Kentucky's assertion that KRS 278.264 prevents the retirement of East Bend if there are stranded assets at the time of retirement. The law requires that Duke Kentucky receive Commission approval before the retirement of East Bend regardless of the incurrence of stranded assets; therefore, Duke Kentucky must rebut the presumption in KRS 278.264(2) to incur and recover these costs in subsequent proceedings. Amending the depreciable retirement date of East Bend at this time, based on incomplete analyses from the 2021 IRP, without the benefit of the legal standard in KRS 278.264 seems unreasonable in light of the rate increase to customers resulting from such a decision.

The Commission also finds that terminal net salvage should be removed from the depreciation rates due to the requirements of KRS 278.264(2) that the Commission "shall not . . . take any other action which authorizes or allows for the recovery of costs for the retirement of an electric generating unit...unless the presumption created by this section is rebutted." Duke Kentucky has the burden to overcome the presumption established in KRS 278.264 and without sufficient evidence for the rebuttal, the Commission cannot allow recovery of costs for the retirement of the electric generating units. Removing terminal net salvage increases rate base by \$1.446 million for a revenue requirement increase of \$135,109 (\$0.135 million). The reduction to depreciation expense results in

a revenue requirement decrease of \$5.775 million. The net effect of the adjustment of the East Bend retirement date and removal of decommissioning costs on Duke Kentucky's depreciation rates is \$15.848 million.

Operating Income Adjustments

Duke Energy Business Services (DEBS) Excess Deferred Income Taxes (EDIT) –

The Attorney General proposed an adjustment to amortize EDIT that were created by the Tax Cuts and Jobs Act, recorded as a reduction to DEBS's deferred tax expense in 2017, and not refunded or credited to Duke Kentucky or any other Duke Energy affiliate.⁶⁶ The Commission's Order in the last rate case stated that the \$214,000 (\$0.214 million) of DEBS EDIT previously allocated to Duke Kentucky's electric operations should be amortized over a five-year period and returned to customers through a revenue reduction.⁶⁷ The rates from that Order became effective on May 1, 2020, resulting in a remaining balance of \$82,173 (\$0.082 million) as of June 30, 2023 just prior to the start of the forecast test year.⁶⁸ Duke Kentucky acknowledged that it had inadvertently excluded the remaining DEBS EDIT and agreed with the Attorney General's adjustment.⁶⁹

The Commission finds that this adjustment should be accepted, which results in a revenue requirement reduction of \$16,435 (\$0.016 million).

⁶⁶ Futral Direct Testimony at 11–12.

⁶⁷ Case No. 2019-00271, *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* (Ky. PSC Apr. 27, 2020), Order at 23.

⁶⁸ Futral Direct Testimony at 11.

⁶⁹ Duke Kentucky's Response to the Attorney General's First Request, Item 140 and Steinkuhl Rebuttal Testimony at 4.

Property Tax Expense – Duke Kentucky included \$18.139 million in property taxes in its revenue requirement, excluding property taxes related to ESM projects.⁷⁰ The Attorney General proposed an adjustment to reduce property tax expense by \$2.514 million because the forecasted expense included an increase in gross plant instead of net plant and was escalated at a higher rate than 2022 actuals.⁷¹ Duke Kentucky argued that property tax expense is accrued based on estimates during a year and the expense also includes adjustments from prior years making book expense not an appropriate starting point for forecasting.⁷² Duke Kentucky also argued that the Attorney General's adjustment did not account for increases in operating income that affect property taxes.⁷³ Duke Kentucky proposed to use a corrected 2021 property tax expense as the starting point for escalation to estimate the test-year expense and proposed a reduction of \$1.605 million.⁷⁴ The Attorney General argued that Duke Kentucky did not provide any calculations for its proposed adjustment and overestimated property tax expenses by at least \$135,000 (\$0.135 million) due to updated property taxes provided in revised discovery responses.⁷⁵

The Commission finds that neither Duke Kentucky's nor the Attorney General's adjustments are reasonable due to errors and flawed assumptions. In the absence of a

⁷⁰ Duke Kentucky's Post-Hearing Brief at 47–48 and Application, Schedule C-2.1 at 13.

⁷¹ Futral Direct Testimony at 17-19.

⁷² Revised Rebuttal Testimony of John Panizza (Panizza Revised Rebuttal Testimony) (filed May 5, 2023) at 2-3.

⁷³ Panizza Revised Rebuttal Testimony at 5.

⁷⁴ Panizza Revised Rebuttal Testimony at 7 and Steinkuhl Rebuttal Testimony at 7.

⁷⁵ Attorney General's Brief at 29-30.

better estimate the Commission will average the adjustments. The result is a revenue requirement reduction of \$2.062 million.

Regulatory Asset Amortization – Duke Kentucky proposed a five-year amortization for regulatory assets established in Duke Kentucky’s 2017 rate case, one for forced outages not recovered through the fuel adjustment clause (FAC), and one for scheduled outages above the base rate level.⁷⁶ Duke Kentucky requested to begin amortization because the actual expenses going forward are expected to be approximately equal to the test-year amounts.⁷⁷ The Attorney General recommended not permitting recovery until the next rate case because the forced outages are being investigated in a separate Commission case, and the scheduled outages are projected to decrease resulting in lower regulatory asset balance.⁷⁸ The Attorney General argued that, if amortization is granted, the period should be ten years instead of the five-year period proposed by Duke Kentucky.⁷⁹ Duke Kentucky argued that both the forced and scheduled outage expenses were reasonable, and that if amortization is denied, then Duke Kentucky should be allowed to accrue carrying costs at the long-term debt rate approved in this case.⁸⁰ Duke Kentucky also argued that the forced outage expense amortization should not be dependent upon the investigation in the FAC case because the Commission has the ability to decide the issue in a rate case proceeding.⁸¹

⁷⁶ Steinkuhl Direct Testimony at 17.

⁷⁷ Steinkuhl Direct Testimony at 18.

⁷⁸ Kollen Direct Testimony at 20-21.

⁷⁹ Kollen Direct Testimony at 21.

⁸⁰ Steinkuhl Rebuttal Testimony at 12–13 and 15.

⁸¹ Steinkuhl Rebuttal Testimony at 16.

The Attorney General also recommended that the regulatory assets for East Bend O&M expenses and coal ash asset retirement obligations (ARO) be reamortized over the remaining useful life of East Bend, instead of the current ten-year amortization period and that the remaining 2019 rate case regulatory asset balance be reamortized over five years consistent with the current rate case expense.⁸² Duke Kentucky argued that the amortization period of the East Bend O&M and ARO regulatory assets should not be revised because the Commission previously found the ten-year amortization period reasonable.⁸³

The Commission finds that the regulatory assets for scheduled and forced outages should be amortized over five years, consistent with the period over which they were created. The Commission also finds that the deferral mechanisms for forced and scheduled outages are no longer necessary, given that Duke Kentucky expects the expenses to be in line with the base rate amounts. Additionally, the Commission also finds that the O&M and ARO regulatory assets should continue to be amortized over the currently approved amortization periods, because the costs have already been incurred and are not tied to the useful life of East Bend. Finally, the Commission finds that the remaining 2019 rate case expense regulatory asset be reamortized to run concurrently with the current rate case expense. The net revenue requirement impact of these adjustments is a decrease of \$2.072 million.

Rate Case Expense – Duke Kentucky estimated its rate case expense at \$1.136 million in the Application and the final expense update totaled \$1.002 million, including

⁸² Kollen Direct Testimony at 26 and 45-46 and Futral Direct Testimony at 14.

⁸³ Steinkuhl Rebuttal Testimony at 17–18.

pending and estimated expenses of \$251,022 (\$0.251 million).⁸⁴ Duke Kentucky also included \$98,867 (\$0.099 million), including \$37,911 (\$0.038 million) in pending and estimated expenses, for a “Generation Retirement Study” that did not result in a formal study other than the testimony and data responses from Lisa Quilici, billed at hourly rates between \$80 and \$735.⁸⁵ Duke Kentucky also expended a total of \$168,269 (\$0.168 million) for legal notice of its rate case application, which included approximately \$62,251 (\$0.062 million) in additional publication costs after the initial notice was found deficient.⁸⁶

The Attorney General recommended that rate case expense be reduced for estimated expenses and the cost of the revised notice.⁸⁷ Duke Kentucky argued that the revised notice publication was a reasonable expense incurred at the direction of the Commission, and Duke Kentucky cannot be held to a standard of perfection.⁸⁸ Duke Kentucky did not address the exclusion of estimated expenses.

Duke Kentucky bears the burden of proof that its rate case expense is reasonable. The evidence provided in the Generation Retirement Study was of little substance or usefulness, and the expense was gratuitous. The Commission finds that expenses for the Generation Retirement Study, the revised notice, and estimated expenses, totaling \$374,229 (\$0.374 million), should be removed from base rates, the 5-year amortization

⁸⁴ Application Schedule D-2.17 and F-6 and Duke Kentucky’s Fifth Supplemental Response to Staff’s First Request (filed June 2, 2023), Item 14, Attachment 1.

⁸⁵ Duke Kentucky’s Fifth Supplemental Response to Staff’s First Request, Item 14, Attachment 1.

⁸⁶ Duke Kentucky’s Fifth Supplemental Response to Staff’s First Request, Item 14, Attachment 1 and Duke Kentucky’s Reply Brief at 17.

⁸⁷ Attorney General’s Brief at 59–60.

⁸⁸ Duke Kentucky’s Reply Brief at 16–17.

of which results in a revenue requirement reduction of \$74,846 (\$0.074 million). The Commission also finds that the \$133,532 (\$0.134 million) difference in estimated and actual expenses should be reflected in the test-year amortization, for an additional \$26,751 (\$0.027 million) reduction.

In doing so, the Commission is not holding Duke Kentucky to a standard of perfection. Rather, the Commission is merely not forcing rate payers to bear the burden for mistakes Duke Kentucky made in creating the notice. There are explicit directions in the statutes and regulations for what is necessary in a notice of a general rate adjustment. Duke Kentucky is utility of sufficient resources to ensure notice is proper. The total impact of these adjustments is a revenue requirement reduction of \$101,722 (\$0.102 million). The Commission notes there are other expenses Duke Kentucky incurred that could be viewed as excessive and disallow recovery.⁸⁹ However, because Duke Kentucky bears the burden of proof in this proceeding, the Commission will be deferential in allowing recovery.

Non-Recurring Charges – In Case No. 2020-00141,⁹⁰ the Commission found that the calculation of non-recurring charges should be revised because only the marginal costs related to the service should be recovered through special non-recurring charges for service provided during normal working hours. In reaching that decision, the

⁸⁹ See Duke Kentucky's Fifth Supplemental Response to Staff's First Request, Item 14, Attachment 1. Duke Kentucky included \$45,156 in expenses for travel related to the hearing. Additionally, Duke Kentucky retained Concentric Energy Advisors to prepare testimony related to cost of capital for in the amount of \$65,547.50 for the case. Lastly, Duke Kentucky's witnesses and consultants were generally unable to explain Duke Kentucky's accounts receivable treatment and expenses were incurred to provide testimony on this topic. See Hearing Video Transcript (HVT) of the March 10, 2023 Hearing at 16:25:33–17:03:55.

⁹⁰ Case No. 2021-00141, *Electronic Application of Hyden-Leslie County Water District for an Alternative Rate Adjustment* (Ky. PSC Nov. 6, 2020).

Commission found that personnel are paid for work during normal business hours regardless of whether they are on a field visit or not, and therefore labor costs included in non-recurring charges that occur during regular business hours should be eliminated.⁹¹ By reflecting only the marginal cost of service in non-recurring charges, Duke Kentucky's rates will be more reflective of the principle of cost causation. Merely allocating a fixed expense of ordinary labor costs in special non-recurring charges like reconnect and collection charges creates a mismatch between how Duke Kentucky incurs expenses and how it recovers those expenses from customers. Instead of reflecting fixed costs in special non-recurring charges that a utility incurs regardless of the number or timing of those non-recurring services, including those fixed costs in rates for gas service more closely aligns those expenses with the actions that drive them.

This approach to ratemaking is entirely consistent with the Commission's history of ensuring that rates reflect, to a reasonable degree, the principle of cost causation while simultaneously taking into account the health of the utility and the ability of the utility to provide adequate, efficient and reasonable service.

a. Remote Reconnection Charge. Duke Kentucky proposed to reduce its remote reconnection charge from \$5.88 to \$5.60. Duke Kentucky relies on employee and contract labor to perform its remote reconnections.⁹² Duke Kentucky indicated that incoming calls can be routed to Duke Kentucky employees or contract labor employees. Duke Kentucky further explained that contract labor employees can process routine reconnection requests while more complicated reconnection requests are handled by

⁹¹ Case No. 2021-00141, Nov. 6, 2020 Order.

⁹² Sailers Direct Testimony, Confidential Attachment BLS-6.

Duke Kentucky employees.⁹³ In this proceeding, because Duke Kentucky relies on contract labor to perform the majority of remote reconnections and not Duke Kentucky employees, the Commission finds that labor costs should not be removed from the reconnection charge. The Commission further finds that Duke Kentucky’s proposal to reduce the reconnection charge to \$5.60 is reasonable, as supported by the evidence of record, and should be approved.

b. Non-Remote and Pole Reconnection Charges. Duke Kentucky did not propose to revise its non-remote and pole reconnection charges in this proceeding. However, as demonstrated by the evidence of record, all non-remote and pole reconnections are handled by Duke Kentucky employees.⁹⁴ Based on the information above and using the cost support provided in this proceeding,⁹⁵ the Commission finds that the following revisions should be made to Duke Kentucky’s regular hours, non-remote, and pole reconnection charges.

	<u>Current Charge</u>	<u>Revised Charge</u>
Non-Remote Reconnection	\$60.00	\$8.25
Pole Reconnection	\$125.00	\$18.00

As a result of the revision to the non-remote and pole reconnection fees, an adjustment will need to be made to miscellaneous service revenues. In forecasting its miscellaneous service revenues, Duke Kentucky allocated the total miscellaneous

⁹³ Duke Kentucky’s Response to Staff’s Second Request, Item 37(c).

⁹⁴ Duke Kentucky’s Response to Staff’s Second Request, Item 40(c).

⁹⁵ Duke Kentucky’s Response to Staff’s Second Request, Item 40.

service revenues using the actual revenue types in that account from year 2021. Since the amount of forecasted reconnection fees is not broken down by type of reconnection fee, the Commission used the percentage each type of reconnection fee represented in calendar year 2021 to determine the appropriate reduction to miscellaneous service revenues. This method results in a reduction of \$10,957 in miscellaneous service revenues.

	Revenue at Duke Kentucky's Proposed Rate ⁹⁶	Adjustment	Revenue at Final Approved Rate
Remote Reconnection	\$42,601 ⁹⁷	-	\$42,601
Non-Remote Reconnection	\$9,959 ⁹⁸	(\$8,589) ⁹⁹	\$1,370
Pole Reconnection	<u>\$2,766¹⁰⁰</u>	<u>(\$2,368)¹⁰¹</u>	<u>\$398</u>
Totals	\$55,326	(\$10,957)	\$44,369

c. Field Collection Charge. Duke Kentucky did not propose to increase its field collection charge in this proceeding. The fee is charged when a Duke Kentucky employee makes a field visit to the customer's premises for the purpose of disconnecting

⁹⁶ In 2021, Reconnection Fees were made up of 77% remote reconnections (\$36,615), 18 percent of non-remote reconnections (\$8,580), and 4% of pole reconnections (\$2,250). See Duke Kentucky's Response to Staff's Third Request, Item 11.

⁹⁷ $\$55,326 \times .77 = \$42,601$.

⁹⁸ $\$55,326 \times .18 = \$9,959$.

⁹⁹ $\$9,959 \times \text{percentage change to Non-Remote Reconnection Charge } (0.8625) = (\$8,589)$.

¹⁰⁰ $\$55,326 \times .05 = \$2,766$.

¹⁰¹ $\$2,766 \times \text{percent change to Pole Reconnection Charge } (0.856) = (\$2,368)$.

service and the Duke Kentucky employee provides the customer a means to avoid disconnection.¹⁰² Duke Kentucky indicated that it does not charge a disconnect fee when service is actually disconnected.¹⁰³ Given that a fee is not charged when service is actually disconnected, the Commission concludes there is no basis to charge a fee when the Duke Kentucky employee provides the customer a means to avoid disconnection. Therefore, the Commission finds that the field collection charge is unreasonable and should be removed from the tariff. As a result, the Commission reduces the test year miscellaneous service revenue by \$10,644.¹⁰⁴

Other Adjustments – The Commission will also adjust certain non-recurring charges and Duke Kentucky’s proposed pole-attachment charges. The revenue requirement impact of these adjustments are increases of \$22,000 (\$0.022 million) and \$38,000 (\$0.038 million), respectively.

Total Revenue Requirement

The effect of the Commission's adjustments on Duke Kentucky’s requested revenue increase of \$75.177 million is a decrease of \$27.679 million, for a total revenue requirement increase of \$47.498 million.¹⁰⁵

VALUATION

Rate Base – Duke Kentucky’s proposed rates included a return on rate base. The Commission finds that Duke Kentucky’s use of rate base to determine its return

¹⁰² Application, Schedule L-1 at 153 of 189.

¹⁰³ Duke Kentucky’s Response to Staff’s Second Request, Item 40(e).

¹⁰⁴ Duke Kentucky’s Response Staff’s Third Request, Item 28.

¹⁰⁵ See Appendix A to this Order for a summary of adjustments.

component is reasonable and should be approved. Duke Kentucky proposed a net investment rate base for its forecasted test period of \$1,176.675 million, based on the 13-month average for that period. In response to errors and adjustments identified in discovery, Duke Kentucky reduced this amount to \$1,165.177 million.

The Attorney General proposed to reduce Duke Kentucky's rate base to \$1,096.850 million.

As discussed above, the Commission has determined that Duke Kentucky's net investment rate based is \$1,115.444 million, as shown below:

	<u>Amount (millions)</u>
Rate Base per Duke Kentucky	1,176.675
Adjustments:	
Reverse Roll-in of Costs Currently Recovered Through ESM	(53.795)
Reduce Fuel and Lime Inventories For Amounts Financed By Vendors	(6.459)
Correct Error in the Accumulated Depreciation Reserve Balance	(0.121)
Reduce Cash Working Capital to Correct Revenue Lag Error in Lead/Lag Study	(4.919)
Reflect Changes Due to Lower Depr. Expense - 2041 East Bend Retirement	2.616
Reflect Changes Due to Lower Depr. Expense - No Terminal Net Salvage	<u>1.446</u>
Net Change in Rate Base	<u>(61.231)</u>
Adjusted Rate Base	<u>1,115.444</u>

Capitalization – Duke Kentucky is a wholly owned subsidiary of Duke Energy Ohio, Inc. (Duke Ohio), which is a wholly owned subsidiary of Cinergy Corp., which is wholly owned by Duke Energy. All equity funding is issued by Duke Energy and each subsidiary issues its own debt. Duke Kentucky proposes a total capitalization for the forecasted test period of \$1,842.376 million, which reflects financing activities through June 2024. The Commission accepts Duke Kentucky's proposed capitalization amount.

REVENUE ALLOCATION AND RATE DESIGN

Cost-of-Service Study (COSS) and Revenue Allocation

Duke Kentucky performed a COSS that considered varying methodologies to assess the allocation factors for each rate class. The three COSS methods evaluated by Duke Kentucky were the 12 Coincident Peaks (12-CP) method, the Average and Excess method, and the Production Stacking method.¹⁰⁶ Duke Kentucky recommended using the average 12-CP methodology stating that (1) the 12-CP method is the generally accepted method and was accepted in Case No. 2019-00271; (2) the 12-CP method recognizes that Duke Kentucky's current generating facilities are in place to meet the monthly maximum peak loads; and (3) Duke Kentucky believes the 12-CP method is an appropriate means to align capacity costs with the customer classes imposing such costs.¹⁰⁷ Kroger and the Attorney General did not object to the 12-CP methodology.¹⁰⁸ Wal-Mart did not object to the application of the 12-CP methodology but requested that the Commission not adopt the methodology.¹⁰⁹ Wal-Mart argued that the 12-CP methodology, although useful, may not be the best method because it only reflects demand at peak times.¹¹⁰ Walmart proposed using the Average and Excess approach.

The results of the COSS illustrate the amount of cross-subsidization between the rate classes. Duke Kentucky's proposed rate design addresses this subsidization and proposes reducing the residential class (RS) subsidies by five percent. The proposed

¹⁰⁶ Direct Testimony of James Ziolkowski (Ziolkowski Direct Testimony) (filed on Dec. 1, 2022) at 5, lines 3–8.

¹⁰⁷ Ziolkowski Direct Testimony at 6, lines 17–23 through 7, lines 1–5.

¹⁰⁸ Kroger's Post Hearing Brief at 2–3. The Attorney General's Post Hearing Brief does not discuss the allocation methodology.

¹⁰⁹ Walmart's Post-Hearing Brief at 8-9.

¹¹⁰ Walmart's Post-Hearing Brief at 8–9.

rate increase is allocated to each rate class based upon the percent of each class's proportion of rate base plus the five percent inter-class subsidization reduction. Duke Kentucky's proposed rate increases are as follows:

	Proposed Increase	Percent Increase		Current ROR	Proposed ROR
Rate RS	\$ 37,581,870	24.61%		0.11%	5.04%
Rate DS	\$ 19,203,468	17.14%		5.96%	10.59%
Rate GS-FL	\$ 88,238	11.86%		13.32%	17.58%
Rate EH	\$ 370,663	24.20%		1.41%	6.27%
Rate SP	\$ 3,024	12.11%		14.79%	19.00%
Rate DT - Secondary	\$ 8,749,084	17.10%		4.23%	8.95%
Rate DT – Primary	\$ 6,804,115	17.06%		3.57%	8.32%
Rate DP	\$ 172,221	14.31%		8.14%	12.66%
Rate TT	\$ 1,559,319	10.91%		7.68%	12.22%
Lighting	\$ 653,942	34.07%		0.02%	4.95%
Other – Water Pumping	\$ (44,319)	(4.79%)		2652.82%	2525.08%
Total	\$ 75,141,624	19.96%		2.73%	7.52%

For its COSS, Duke Kentucky applied the minimum size method for poles, conductors, and transformers.¹¹¹ As ordered by the Commission in Case No. 2019-00271,¹¹² Duke Kentucky did perform a zero-intercept study. Duke Kentucky stated the calculated zero-intercept cost of a transformer was calculated as \$1,604, which is lower than the minimum size study cost of \$2,231.¹¹³ The zero-intercept method results in a customer percentage of 69.55 percent versus the customer percentage of 22.69 percent in the minimum size study.¹¹⁴ According to Duke Kentucky, the difference in customer percentages occurs because the zero-intercept method does not account for the age of

¹¹¹ Ziolkowski Direct Testimony at 21, lines 6–11.

¹¹² Ziolkowski Direct Testimony at 21, lines 15–18.

¹¹³ Zioklowski Direct Testimony at 22, lines 8–9.

¹¹⁴ Ziolkowski Direct Testimony at 22, lines 10–11.

the transformers that exist on the current Duke Kentucky distribution system.¹¹⁵ The calculated zero-intercept cost of a pole was calculated at \$186.¹¹⁶ This is lower than the minimum size study cost of \$1,288 for primary poles and \$820 for secondary poles.¹¹⁷ According to Duke Kentucky, the analysis includes both primary and secondary poles because the accounting data does not specify the type of pole in each category.¹¹⁸ The zero intercept method resulted in a customer percentage of 8.66 percent for primary poles versus the customer percentage of 27.20 percent in the minimum size study.¹¹⁹

Duke Kentucky used the minimum size method in the COSS after the zero-intercept study based on several alleged deficiencies: linear relationship between equipment size and cost, the age of the equipment, and Duke Kentucky's accounting methods do not allow for a thorough and useful analysis under the zero-intercept method.¹²⁰

The Commission accepts Duke Kentucky's proposal to use the 12-CP method as a guide to determine revenue allocation. However, the Commission notes that Duke Kentucky should not automatically default to this method and should continue to consider and evaluate all available methodology in the future. The Commission notes that the 12-CP method is designed to allocate capacity related costs to the customer classes using the system during maximum system load. The allocation of capacity costs to each

¹¹⁵ Ziolkowski Direct Testimony at 22, lines 11–14.

¹¹⁶ Ziolkowski Direct Testimony at 22, lines 22–23.

¹¹⁷ Ziolkowski Direct Testimony at 23, lines 1–2.

¹¹⁸ Ziolkowski Direct Testimony at 23, lines 2–5.

¹¹⁹ Ziolkowski Direct Testimony at 23, lines 2–5.

¹²⁰ Ziolkowski Direct Testimony at 24–25.

customer class is based on the class load contribution to the maximum peak, at the time of peak, regardless of what their respective loads were at other times of the day, thus the 12-CP methodology fails to recognize any usage trade off and demand shifts.

The Commission finds that Duke Kentucky should consider using a method that takes into account energy utilization at times other than the 12-month peaks and should examine the utilization of expenses throughout the year beyond the 12 peaks. The Commission finds that Duke Kentucky in its next electric base rate case should perform additional analysis and evaluations on using other available methodology when proposing a COSS. Duke Kentucky should also provide additional testimony on the reasonableness of its proposed COSS methodology, the analysis Duke Kentucky conducted when considering other available methodology for its proposed COSS, and the advantages and disadvantages of the other available cost allocation methodologies. Allocating the Commission's revenue increase and reducing the inter-class subsidization by 5 percent results in a 15 percent increase for the residential class.

Rate Design

Duke Kentucky proposed to increase the current residential customer charge of \$12.60 to \$13.00, a 3.17 percent increase. The filed COSS supported a customer charge of \$13.86.¹²¹ The residential class is the only rate class Duke Kentucky proposed to have a change in its monthly customer charge. Duke did not propose to adjust any additional changes to the commercial or industrial rate classes' monthly customer charge, instead including the increase in the volumetric charges. The Commission finds that the proposed customer charges are reasonable and should be accepted.

¹²¹ Duke Kentucky's Response to Staff's First Request, Item 56, STAFF-DR-01-056_DEK_Electric_COSS_2022_Macros_Disabled.xlsx, Customer Charge tab.

RATE OF RETURN

Capital Structure – Duke Kentucky proposed a test-year-end capital structure consisting of 43.71 percent long-term debt at a cost rate of 4.38 percent; 3.78 percent short-term debt at a cost rate of 4.74 percent; and 52.51 percent common equity with a proposed rate of return of 10.35 percent.¹²²

The proposed short-term debt reflects assumed amounts for Assumed Amount Outstanding for Sale of Accounts Receivables. The amounts for the base and forecast periods reflects actual monthly balances during the trialing 12 months as of July 2022. The assumed interest rate for both periods was derived from Bloomberg’s Implied forward curve for one-month term Secured Overnight Financing Rate (SOFR) as of September 2022 plus an 85-basis point credit spread. The Amount Outstanding for the Notes Payable to Associated Companies in the forecasted short-term debt schedule is the 13-month average of Duke Kentucky’s money pool borrowing balance from current projections. The interest rate was derived from Bloomberg’s implied forward curve for one-month London Interbank Offered Rate (LIBOR) as of September 2022.¹²³

For the long-term debt, the interest rate on long term Commercial Paper for both base and forecast periods was derived from Bloomberg’s implied forward curve for one-month LIBOR as of September 2022 plus a 25-basis point credit spread. In addition, one long-term senior unsecured debt issuance totaling \$130 million is forecast for September 2023. The forecast interest rate is derived from a weighted average of Bloomberg’s forward curves for the 5-year, 10-year, and 30-year US Treasury yield as of September

¹²² Application, Volume 10, Schedule J-1 at 2.

¹²³ Direct Testimony of Christopher R. Bauer (Bauer Direct Testimony) (filed on Dec. 1, 2022) at 17–18 and Application, Volume 10, Schedule J-2.

2022 plus a credit spread of 220-basis points, 255-basis points, and 280-basis points respectively.¹²⁴

The following table showing Duke Kentucky's proposed capital structure.¹²⁵

	13-Month Average Balance	Percent of Total	Cost Rate	Weighted Cost
Common Equity	\$965,637,556	52.505%	10.350%	5.434%
Long-Term Debt	\$803,943,642	43.713%	4.377%	1.913%
Short-Term Debt	\$69,555,344	3.782%	4.739%	0.179%
Total Capital	\$1,839,136,542	100.00%		7.526%

The Attorney General's reviewed Duke Kentucky's Capital Structure and recommended that the Commission adopt the proposed cost rates for short-term debt and for long-term debt.¹²⁶ However, after examining Duke Kentucky's capital structure over the last three years, the Attorney General argued that the proposed weight for common equity is out of line with Duke Kentucky's recent history. Duke Kentucky's common equity ratio ranged from 46.44 percent in 2020 to 50.19 percent for the first eleven months of 2022. The Attorney General stated Duke Kentucky maintained its investment grade credit rating of Baa1 from Moody's and an S&P credit rating of A- in 2020 and BBB+ in 2021 and 2022.¹²⁷ The Attorney General argued the capital structure

¹²⁴ Bauer Direct Testimony at 18-19 and Application, Volume 10, Schedule J-3.

¹²⁵ Application, Volume 10, Schedule J-1 at 2 of 2.

¹²⁶ Direct Testimony of Richard A. Baudino (Baudino Direct Testimony) (filed on Mar. 10, 2023) at 31.

¹²⁷ Baudino Direct Testimony at 32.

maintained a strong investment grade rating and raising the common equity ratio to 52.505 percent would inflate the revenue requirement.¹²⁸ The Attorney General recommended that the Commission reject the proposed capital structure and adjust the capital structure to 50 percent common equity, 6.287 percent short-term debt and 43.713 percent long-term debt. The table below shows the Attorney General's recommend capital structure and cost rates.¹²⁹

	Percent of Total	Cost Rate	Weighted Cost
Common Equity	50.00%	9.550%	4.775%
Long-Term Debt	43.71%	4.377%	1.913%
Short-Term Debt	6.29%	4.739%	0.298%
Total Capital	100.00%		6.986%

Duke Kentucky maintained that its equity percentage has been adequate to maintain its credit quality.¹³⁰ However, Duke Kentucky's elevated capital requirement over the 2023-2025 period is projected to be approximately \$885 million consisting of approximately \$715 capital expenditures and \$170 million in debt debentures.¹³¹ Duke Kentucky stated that maintaining strong investment grade credit ratings is of paramount importance as it faced elevated capital expenditures, higher inflation and interest rates,

¹²⁸ Baudino Direct Testimony at 32.

¹²⁹ Baudino Direct Testimony at 33.

¹³⁰ Rebuttal Testimony of Christopher R. Bauer (Bauer Rebuttal Testimony) (filed on Apr. 14, 2023) at 6.

¹³¹ Bauer Rebuttal Testimony at 6.

and market volatility and uncertainty.¹³² Duke Kentucky acknowledged it has not paid a dividend to its corporate parent since 2016.¹³³ Duke Kentucky's current Funds From Operations to Debt ratio stands at 16.8 percent as of September 2022, which is below Moody's Investors Service (Moody's) downgrade threshold.¹³⁴

Duke Kentucky argued that the capital structure should be viewed as a part of an overall framework that considers the capital structure, allowed return on equity (ROE) and other cost recovery mechanisms.¹³⁵ Duke Kentucky provided an updated capital structure reflecting an average equity ratio over the 13-month forecast period ending June 30, 2024 of 52.145 percent.¹³⁶ Duke Kentucky stated this level of equity, and Duke Kentucky's proposed equity cost rate of 10.35 percent, will help maintain its credit quality.¹³⁷ The table below shows Duke Kentucky's updated proposed capital structure.¹³⁸

	13-Month Average Balance	Percent of Total	Cost Rate	Weighted Cost
Common Equity	\$951,750,195	52.145%	10.350%	5.397%
Long-Term Debt	\$804,442,968	44.075%	4.377%	1.929%
Short-Term Debt	\$68,990,481	3.780%	4.739%	0.179%

¹³² Bauer Rebuttal Testimony at 3-4 and 6.

¹³³ Bauer Rebuttal Testimony at 8.

¹³⁴ Bauer Rebuttal Testimony at 8 and CRB-Rebuttal 2, Moody's Opinion at 2.

¹³⁵ Bauer Rebuttal Testimony at 3.

¹³⁶ Bauer Rebuttal Testimony at 2.

¹³⁷ Bauer Rebuttal Testimony at 9.

¹³⁸ Bauer Rebuttal Testimony at 2 and Attachment-CRB-1 at 1.

Total Capital	\$1,825,183,644	100.00%	7.505%
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Duke Kentucky argued that the updated proposed capital structure is appropriate, considering it introduces the appropriate amount of risk due to leverage and minimizes the WACC to customers.¹³⁹ Additionally, Duke Kentucky explained that the capital structure is consistent with its target credit ratings and therefore seeks to maintain a level of equity in the capital structure that ensures high credit quality, while minimizing its overall cost of capital.¹⁴⁰

The Commission finds that the Attorney General did not provide sufficient evidence to adjust the capital structure and that Duke Kentucky's proposed updated capital structure should be approved. The Commission notes that in Duke Kentucky's recent natural gas rate case, a capital structure of 51.344 common equity, 46.039 percent long-term debt and 2.617 percent short-term debt was approved¹⁴¹ and the capital structure in this case, is very similar.

The Commission notes that Duke Kentucky has control over its capital spending and was able to improve its funds from operations to debt credit metric in part by adjusting its capital spending and debt levels in 2022.¹⁴² The Commission expects Duke Kentucky to continue to exercise prudent control over its capital spending going forward. The

¹³⁹ Duke Kentucky Brief at 56.

¹⁴⁰ Duke Kentucky Brief at 57.

¹⁴¹ See Case No. 2021-00190, *Electronic Application of Duke Kentucky, Inc. For: 1) an Adjustment of the Natural Gas Rates; 2) Approval of New Tariffs, and 3) All Other Required Approvals, Waivers, and Relief* (Ky. PSC Dec. 28, 2021), Order at 32.

¹⁴² Moody's Opinion, Exhibit 1 at 1.

Commission recognizes that an approved updated common equity ratio of 52.145 percent is substantially higher than the 46.44 percent from 2020.¹⁴³ The Commission expects Duke Kentucky to maintain a reasonably balanced capital structure so that it does not over burden its ratepayers to the benefit of shareholders.

The Commission notes concern regarding the reasonableness of Duke Kentucky's continued use and reliance on the private placement market for its debt financing. Every other regulated Duke Energy affiliate issues debt in the public market which affords greater access to capital, lower costs, and greater flexibility overall.¹⁴⁴ Duke Kentucky does not appear to have explored ways to lower its financing costs to the benefit of its ratepayers while its equity ratio has been steadily climbing since 2020.¹⁴⁵ Although the Commission accepts the current equity ratio, the Commission encourages Duke Kentucky to explore options so that in future proceedings so that the Commission can ensure that its ratepayers are not disadvantaged to the benefit of shareholders.

Return On Equity – Duke Kentucky developed its proposed return on equity (ROE) of 10.35 percent based upon the Discounted Cash Flow Model (DCF), the Capital Asset Pricing Model (CAPM), the Risk Premium Model (RPM). Duke Kentucky also conducted an Expected Earnings Analysis to evaluate alternative investments.¹⁴⁶ In its analysis, Duke Kentucky used a proxy utility group of 14 regulated vertically integrated electric utilities (Utility Proxy Group).¹⁴⁷ The proxy groups were selected on the basis of eight

¹⁴³ Baudino Direct Testimony at 32.

¹⁴⁴ Duke Kentucky's Response to Staff's Second Request for Information, Item 6.

¹⁴⁵ Baudino Direct Testimony at 32.

¹⁴⁶ Direct Testimony of Joshua C. Nowak (Nowak Direct Testimony) (filed on Dec. 1, 2022) at 3.

¹⁴⁷ Nowak Direct Testimony at 27.

criteria factors that reflect the broad set of risks investors consider when investing in a regulated vertically integrated electric utility.¹⁴⁸ The initial estimated ROE results from the analysis ranged from 9.27 percent to 11.53 percent.¹⁴⁹ Duke Kentucky maintained the ROE results obtained from the use of multiple models, in addition to consideration of Duke Kentucky’s business and regulatory risks, leads to the appropriate determination of the appropriate ROE and capital structure.¹⁵⁰ The initial estimated ROE results are shown below.¹⁵¹

	Average	Median
Primary Analysis		
DCF Result	9.27%	9.39%
CAPM Result	11.39%	11.32%
Risk Premium	10.32%	10.32%
Average	10.33%	10.34%
Benchmark		
Analysis		
Expected	11.53%	11.35%
Earnings		

The Attorney General used the DCF and the CAPM models with the same proxy group of 14 vertically integrated electric utilities used by Duke Kentucky. The Attorney

¹⁴⁸ Nowak Direct Testimony at 26–29.

¹⁴⁹ Nowak Direct Testimony, Figure 1 at 4. Mr. Nowak provided an update to his initial ROE estimates in his Rebuttal Testimony.

¹⁵⁰ Nowak Direct Testimony at 5.

¹⁵¹ Nowak Direct Testimony Figure 1 at 4.

General utilized the DCF model to obtain an estimated ROE range of 8.89 percent to 10.51 percent.¹⁵² Average and median DCF results were used obtain a DCF ROE of 9.58 percent. For the CAPM analysis, the Attorney General evaluated both historical and forecasted data to calculate market risk premiums (MRP). The results of the CAPM analyses range from 8.3 percent to 12.48 percent.¹⁵³ The Attorney General argued the forward looking CAPM result was based on an unsustainably high growth rate and should not be considered. The resulting CAPM ROE range is 8.30 percent to 10.02 percent. The Attorney General recommended an ROE of 9.55 percent.¹⁵⁴

The Attorney General argued that the CAPM model results are used to support his DCF ROE estimates because of concerns regarding the model's reliability for predicting ROE. In addition, analysts must exercise considerable judgement in selecting forecasted and historical data to determine an MRP. Consequently, analysts' judgment can influence CAPM ROE results significantly. Depending on how the market is measured, the beta values used in the CAPM calculations can vary.¹⁵⁵ The following table summarizes the Attorney General's results:¹⁵⁶

<u>DCF Model</u>	
Average Growth Rates	
High	10.51%
Low	8.89%
Average	9.48%

¹⁵² Baudino Direct Testimony at 15, 19, and 29.

¹⁵³ Baudino Direct Testimony at 29.

¹⁵⁴ Baudino Direct Testimony at 30.

¹⁵⁵ Baudino Direct Testimony at 21–23.

¹⁵⁶ Baudino Direct Testimony at 29, Exhibit RAB-3, and Exhibit RAB-4.

Median Growth Rates	
High	9.92%
Low	9.21%
Average	9.58%
CAPM Model	
Forward-looking Market Return	12.48%
Historical Risk Premium	
Arithmetic Mean	10.02%
Supply Side MRP	9.25%
Kroll MRP	9.06%
Damodaran MRP	8.30%

The Attorney General argued the recommended 9.55 percent ROE is reasonable given the relatively low risk regulated investment of Duke Kentucky, and that it is consistent with current economic and financial market conditions.¹⁵⁷ In addition, the CAPM ROE estimates support the reasonableness of the DCF estimates, which further supports the reasonableness of the recommended ROE.¹⁵⁸ The Attorney General stated Duke Kentucky’s proposed ROE of 10.35 percent is significantly overstated and inconsistent with current financial market evidence even after considering recent increases in long-term and short-term interest rates.¹⁵⁹ The Attorney General also stated that Duke Kentucky’s approach to calculating its proposed ROE was unreasonable and

¹⁵⁷ Baudino Direct Testimony at 3.

¹⁵⁸ Baudino Direct Testimony at 3.

¹⁵⁹ Baudino Direct Testimony at 4 and 33.

stemmed from the high ROE results from the risk premium and CAPM analyses.¹⁶⁰ The Attorney General also argued that Duke Kentucky’s results in the DCF, CAPM, and risk premium analyses were not accurate because incorrect data was used.¹⁶¹

Additionally, Walmart noted that other subsidiaries of Duke Energy, also regulated vertically integrated utilities, received ROEs ranging from 9.50 percent to 9.60 percent.¹⁶² Walmart also stated that the Commission has awarded ROEs to three vertically integrated electric utilities ranging from 9.30 percent to 9.75 percent.¹⁶³ Walmart evaluated awarded ROEs that have been reported by S&P Global Market Intelligence from 2019-2023 and found that awarded ROEs lower than what Duke Kentucky requested. Walmart argued that Duke Kentucky’s proposed ROE would be among the highest awarded since 2019.¹⁶⁴

Duke Kentucky subsequently updated the ROE analyses based on data as of March 31, 2023. The results of the updated analyses are provided in the table below.¹⁶⁵

Primary Analysis	Average	Median
DCF Result	9.92%	9.59%
CAPM Result	10.86%	10.79%
Risk Premium	10.29%	10.29%
Average	10.36%	10.22%

¹⁶⁰ Baudino Direct Testimony at 4.

¹⁶¹ Baudino Direct Testimony at 33–42.

¹⁶² Direct Testimony of Steve W. Chriss (Chriss Direct Testimony) (filed on Mar. 10, 2023) at 8.

¹⁶³ Chriss Direct Testimony at 8.

¹⁶⁴ Chriss Direct Testimony at 10–12.

¹⁶⁵ Nowak Rebuttal Testimony, Figure 2 at 9.

	Benchmark	
Analysis		

	Expected	
Earnings	11.61%	11.31%

Duke Kentucky reiterated the argument that a 10.35 percent ROE should be approved by the Commission. Duke Kentucky explained that a utility's ROE has a meaningful impact upon investment decisions and the ability of a utility to attract capital, which is necessary for the provision of cost-effective, safe, and reliable service to its customers.¹⁶⁶

In Case Nos. 2021-00183,¹⁶⁷ 2021-00185,¹⁶⁸ and 2021-00190,¹⁶⁹ the Commission explained why it is appropriate for utilities to present, and for the Commission to evaluate, multiple methodologies to estimate ROEs. Each approach has its own strengths and limiting assumptions. As demonstrated in the respective ROE testimonies in this proceeding, there is considerable variation in both data and application within each modeling approach, which can lead to differing results. The Commission's role is to

¹⁶⁶ Duke Kentucky Brief at 51.

¹⁶⁷ See generally Case No. 2021-00183, *Electronic Application of Columbia Gas of Kentucky, Inc. for an Adjustment of Rates; Approval of Depreciation Study; Approval of Tariff Revisions; Issuance of a Certificate of Public Convenience and Necessity; And Other Relief* (Ky. PSC Dec. 28, 2021).

¹⁶⁸ See generally Case No. 2021-00185, *Electronic Application of Delta Natural Gas Company, Inc. for an Adjustment of Its Rates and a Certificate of Public Convenience and Necessity* (Ky. PSC Jan. 3, 2022).

¹⁶⁹ See generally Case No. 2021-00190, *Electronic Application of Duke Energy Kentucky, Inc. for: 1) An Adjustment of the Natural Gas Rates; 2) Approval of New Tariffs, And 3) All Other Required Approvals, Waivers, and Relief* (Ky. PSC Jan. 28, 2021).

conduct a balanced analysis of all presented models, while giving weight to current economic conditions and trends.

Even though the Commission supports the use and presentation of multiple modeling approaches, the Commission finds that Duke Kentucky' use of the Predictive Risk Premium Model (PRPM) should be rejected. Though the PRPM model has been published and presented in multiple forums, it has been rejected by this Commission and only been addressed by three other regulatory commissions thus far and is not universally accepted.¹⁷⁰

The Commission reiterates that it continues to reject the use of flotation cost adjustments, financial risk adjustments and size adjustments in the ROE analyses. The Commission evaluates all models but will afford most weight to DCF and CAPM analyses based upon regulated company proxy groups. Both the DCF and CAPM are long standing, well accepted models that evaluate risk and returns both implicitly and explicitly.

Regarding the proposed models, the Commission agrees with Duke Kentucky that it is appropriate to present multiple methodologies to estimate ROEs, and it is the Commission's role to analyze various approaches presented by the parties. By balancing the needs of Duke Kentucky, and its customers, and reviewing the record in its entirety in this proceeding, the Commission finds that a ROE of 9.75 percent is fair, just and reasonable. The Commission continues to view capital riders, such as the ESM, as providing lower risk to the utility due to the automatic cost recovery and true-up components in the ESM and Duke Kentucky's gas pipeline replacement program. As

¹⁷⁰ See Case No. 2021-00183, Dec. 28, 2021 final Order at 14 and Atmos's Response to the Attorney General's First Request for Information (Attorney General's First Request) (filed Aug. 23, 2021), Item 66b.

such, the Commission finds that a 10-basis point reduction in the ROE component of the ESM from 9.75 percent to 9.65 percent is fair, just and reasonable.

PROPOSED TARIFF CHANGES

Customer Installations – Duke Kentucky proposed to utilize its Line Extension Policy to assess charges to customers resulting from material changes in the customer's installation.¹⁷¹ Duke defined a change in installation as any change or increase in installation that changes and/or requires upgrades to service drops, transformers, meters and other facilities to reliably serve the customer's new load.¹⁷² Duke Kentucky argued that a consistent policy for cost responsibility is needed due to the similarity of changes in installations for increases in load as compared to new customer locations.¹⁷³

Currently, if a change in installation does not impact the distribution primary main line system, Duke Kentucky does not require customer payment. However, if the distribution primary main line system is impacted, the customer would be responsible for the costs in excess of the 36-month revenue credit in accordance with the Line Extension Policy. Duke Kentucky indicated it has applied these policies consistently and thus, proposed to connect them directly through the proposed tariff changes.¹⁷⁴

The Commission finds that Duke Kentucky's proposed revision, with the modifications discussed below, is reasonable and should be approved. The Commission finds that the tariff should be revised to include language indicating that the policy would

¹⁷¹ Direct Testimony of Bruce L. Sailors (Sailors Direct Testimony) (filed dec. 1, 2022) at 24.

¹⁷² Duke Kentucky's Response to Staff's Second Request, Item 41.

¹⁷³ Duke Kentucky's Response Staff's Second Request, Item 47(a).

¹⁷⁴ Duke Kentucky's Response to Staff's Third Request, Item 23.

apply to changes to customer installations that impact the distribution primary main line system. Additionally, the Commission finds that the tariff should also include the different payment options available to the customer if a change in installation affects the primary main line system. As the tariff is currently written, it is unclear regarding what situations the tariff would apply to and what payment options are available to the customer.

Billing and Payment – Duke Kentucky proposed to remove language regarding the option of paying bills at its offices.¹⁷⁵ Duke Kentucky explained it transitioned away from walk-in pay locations on September 10, 2009, and that Duke Kentucky reported such to the Commission as part of its annual merger update in Case No. 2005-00228.¹⁷⁶ Duke Kentucky indicated that customers could pay their bill by mail, online, automatic bank draft, or at one of the over 50 locations that make up Duke Kentucky’s pay agent network.¹⁷⁷ Duke Kentucky stated that its website lists all agents and whether or not there is a fee at a particular payment location.¹⁷⁸ Duke Kentucky only offers one fee free in person payment location in Northern Kentucky for customers to remit payment.¹⁷⁹

Duke Kentucky indicated there has not been any negative feedback related to the lack of fee free in-person payment offerings.¹⁸⁰ Duke Kentucky also stated that it maintains an in-person facility in Erlanger where customers can review Duke Kentucky’s

¹⁷⁵ Sailer Direct Testimony at 24.

¹⁷⁶ Case No. 2005-00228, *Joint Application of Duke Energy Corporation, Duke Energy Holding Corp., Deer Acquisition Corp., Cougar Acquisition Corp., Cinergy Corp., The Cincinnati Gas & Electric Company, and the Union Light, Heat and Power Company for Approval of a Transfer and Acquisition of Control* (Ky. PSC Nov. 29, 2005) and Duke Kentucky’s Response to Staff’s Third Request, Item 3.

¹⁷⁷ Spiller Direct Testimony at 18.

¹⁷⁸ Duke Kentucky’s Response to the Attorney General’s First Request, Item 14(d).

¹⁷⁹ HVT of the May 11, 2023 Hearing at 15:00:05–15:00:56.

¹⁸⁰ HVT of the May 11, 2023 Hearing at 15:00:05–15:00:56.

current and proposed tariffs and that customer representatives at that location may also be able to assist customers looking for in-person customer service.¹⁸¹

The Attorney General stated that Duke Kentucky should work with its payment agents to determine if more would agree to be a fee free payment location.¹⁸²

The Commission finds that Duke Kentucky's proposal to remove language regarding customers' ability to pay their bills at Duke Kentucky's offices is unreasonable and that it should be denied. The Commission further finds that Duke Kentucky should maintain an office that is open five days a week for a total of 40 hours each week in which customers can make payments without having to pay a service fee. A utility the size of Duke Kentucky must maintain an office in the service territory where customers can make payments in person without having to scour Duke Kentucky's website to find a free location. An office location in Kentucky will also allow Duke Kentucky to ensure it meets the requirement in KRS 278.030(2) of providing adequate service to its customers in Kentucky. The Commission notes Duke Kentucky can satisfy the requirement of an office in Kentucky by making arrangements to accept customer payments at its Erlanger facility.

Late Payment Charge – Duke Kentucky proposed to decrease its late payment charge from 5 percent to 2.3 percent.¹⁸³ Duke Kentucky provided cost support for the reduction in the late payment fee that included the carrying costs of unpaid bills, outbound customer delinquency communications, and customer service costs.¹⁸⁴

¹⁸¹ Duke Kentucky's Post-Hearing Brief at 88.

¹⁸² The Attorney General's Post-Hearing Brief at 61.

¹⁸³ Direct Testimony of Jacob S. Colley (Colley Direct Testimony) (filed Dec. 1, 2022) at 14.

¹⁸⁴ Colley Direct Testimony, Attachment JSC-1.

Duke Kentucky stated that a late payment fee that varies with the size of the customer's bill would more closely reflect the incremental benefit to the customers that do not pay on time. A variable fee would also more fairly allocate late payment charges to customers with varying usage.¹⁸⁵ Duke Kentucky stated a fixed late payment charge allows customers with lower usage to subsidize late paying customers with higher usages.¹⁸⁶ Duke Kentucky also specified that 95 percent of the incremental costs relates to late paying customers relate to carrying charges and customer service costs, two components that can vary based on the size of the bill.¹⁸⁷

While the Commission has concerns about Duke Kentucky's calculation of its proposed late payment charge, the Commission finds that Duke Kentucky's proposed reduction to its late payment charge is reasonable and should be approved. Although, there was evidence presented¹⁸⁸ by Duke Kentucky that the customer service costs vary with the account and not the amount of the bill, it is reasonable for efficiency and simplicity to set the late payment fee at a percentage of the bill.

Late Payment Charge Waiver – During the pendency of this case, evidence was gathered to show that from April 2022 through June of 2022, Duke Kentucky waived all late payment fees as a result of its transition from its legacy billing systems to the new Customer Connect billing system.¹⁸⁹ Duke Kentucky did not request permission from the

¹⁸⁵ Duke Kentucky's Post-Hearing Brief at 86.

¹⁸⁶ Duke Kentucky's Post-Hearing Brief at 86–87.

¹⁸⁷ Duke Kentucky's Post-Hearing Brief at 87.

¹⁸⁸ HVT of the May 10, 2023 Hearing 07:38:00–07:54:00.

¹⁸⁹ Case No. 2021-00190, *Electronic Application of Duke Energy Kentucky, Inc. for: 1) An Adjustment of the Natural Gas Service Rates; 2) Approval of New Tariffs; and 3) All Other Required Approvals, Waivers, and Relief* (filed Apr. 21, 2023), Post Case Filing.

Commission to waive the late payment fees. KRS 278.160 requires a utility to file with the Commission schedules of all rates and conditions.¹⁹⁰ KRS 278.160 also requires every utility to charge and collect the rates on file.¹⁹¹

Duke Kentucky waived the late payment fees without seeking permission from the Commission. The Commission will open a separate proceeding to investigate Duke Kentucky's alleged violation of KRS 278.160(2).

Rate DT – Duke Kentucky proposed a change to its existing Time-of-Day Rate for Service at Distribution Voltage (Rate DT) tariff. Duke Kentucky proposed to create a separate demand charge for recovery of the cost-of-service study's distribution demand revenue component while reducing the on peak and off-peak demand charges commensurately. In proposing the revision, Duke Kentucky stated that it recognized the off-peak structure of Rate DT and the potential in future years for customers to adopt electric vehicle off-peak charging behavior.¹⁹²

The Sierra Club recommended that the Commission reject the non-coincident demand charge and require Duke Kentucky to maintain the use of time-varying volumetric rates for the recovery of distribution costs. The Sierra Club states that a non-coincident demand charge would poorly reflect cost causation, reduce incentives to charge during off-peak hours, and would undermine transportation electrification for DC Fast Charging (DCFC) customers and medium- and heavy-duty fleets.¹⁹³

¹⁹⁰ KRS 278.160(1).

¹⁹¹ KRS 278.160(2).

¹⁹² Sailers Direct Testimony at 10.

¹⁹³ Shenstone-Harris Direct Testimony at 65.

The Sierra Club stated that a non-coincident demand charge is not appropriate for recovering costs associated with equipment that is shared by multiple customers.¹⁹⁴ The Sierra Club argued that a class non-coincident peak demand is a reasonable cost allocator for most distribution costs, but a single customer's non-coincident demand is generally not reasonable as an element in rate design as it may occur at an entirely different time than the class non-coincident peak demand.¹⁹⁵

Wal-Mart recommended that the addition of the non-coincident demand charge be approved as it aligns the distribution rate with how distribution costs are incurred.¹⁹⁶ Wal-Mart argued that Rate DT is a general commercial rate, not an EV charging rate and that trying to incentivize off-peak charging of EVs is not appropriate to apply to a generally applicable tariff like Rate DT.¹⁹⁷

Duke Kentucky argued that non-coincident demand charges are commonly used across the utility industry and are an appropriate charge for non-residential customer rates.¹⁹⁸ Duke Kentucky acknowledged that for DCFC stations which are low load factor, demand charges can be a concern but also stated that the Commission has a pending proceeding reviewing such issues.¹⁹⁹

Duke Kentucky stated that customers willing to participate in hourly pricing can take service under Duke Kentucky's Experimental Real Time Pricing Program (Rate

¹⁹⁴ Sierra Club's Post-Hearing Brief at 44.

¹⁹⁵ Sierra Club's Post-Hearing Brief at 43.

¹⁹⁶ Chriss Direct Testimony at 20.

¹⁹⁷ Wal-Mart's Reply Brief at 8.

¹⁹⁸ Rebuttal Testimony of Bruce L. Sailers (Sailers Rebuttal Testimony) at 6.

¹⁹⁹ Sailers Rebuttal Testimony at 8.

RTP). Duke Kentucky stated that Rate RTP allows a customer to establish a customer baseline load and any incremental load would be priced as a function of PJM's LMP, with the primary focus being that there are no demand charges associated with the incremental load added above the customer's baseline load.²⁰⁰

The Commission finds that the addition of a non-coincident demand charge to Rate DT is reasonable and should be approved for the following reasons. As both Wal-Mart and Duke point out, Rate DT is a general commercial rate, not an EV charging rate. The Sierra Club's arguments center around how the proposed revision would affect EV charging. As Duke Kentucky points out, there are other rate schedule options a customer could choose to avoid demand charges associated with incremental load above a customer's baseline load.

Residential Service Time of Use with Critical Peak Pricing – Duke Kentucky proposed a new residential time-of-use tariff with the following primary features: (1) time-of-use structure which included daily super off-peak, off-peak, on-peak, and critical peak periods; (2) seasonal structure that consists of a summer season and a non-summer season; (3) recognize significant load periods through critical peak pricing and the declaration of critical peak days which would be limited to ten annually absent a system emergency; and (4) critical peak day notice that would be provided to customers through email and optionally through text message at the customer's discretion.²⁰¹ In order to limit potential lost revenue, Duke Kentucky proposed a maximum participation of 1,000

²⁰⁰ Duke Kentucky's Post-Hearing Brief at 68.

²⁰¹ Sailers Direct Testimony at 15.

customers.²⁰² Duke Kentucky requested a deferral for lost revenue for recovery in its next electric rate case and requested a waiver from 807 KAR 5:006, Section 7(1)(a)(3), which requires the present and last preceding meter readings to be shown on the bill.²⁰³

Sierra Club recommended that Duke Kentucky strengthen the on-peak to off-peak differential because the proposal results in customers paying more than their fair share of distribution costs during off-peak hours.²⁰⁴

Duke Kentucky argued that it had already strengthened the on-peak and critical peak charges as recommended by the Sierra Club.²⁰⁵

The Commission finds that the proposed rate is reasonable and provides participating customers the opportunity to reduce their bills while shifting load on Duke Kentucky's system.

Generation Asset True-Up Mechanism (Rider GTM) – Duke Kentucky proposed a new rider to recover from retail ratepayers any undepreciated plant balances following future retirements of its generating assets.²⁰⁶ Duke Kentucky argued that creating the rider now ensures that customers would pay no more, or no less, than the actual costs incurred by Duke Kentucky for those assets.²⁰⁷

The Attorney general recommended approving the Rider GTM with the following modifications: (1) credit for non-fuel, base rate recovery of generating unit, including O&M

²⁰² Sailers Direct Testimony at 17.

²⁰³ Sailers Direct Testimony at 17–18.

²⁰⁴ Shenstone-Harris Direct Testimony at 58.

²⁰⁵ Rebuttal Testimony of Bruce L. Sailers at 4.

²⁰⁶ Lawler Direct Testimony, at 17.

²⁰⁷ Lawler Direct Testimony, at 17.

expenses, through base/current method;²⁰⁸ (2) account for accumulated deferred income taxes (ADIT) from write-off of undepreciated value for tax purposes;²⁰⁹ (3) extend the amortization period from 10 years to 20 years;²¹⁰ (4) limit the rider to East Bend 2 and Woodsdale;²¹¹ (5) state the procedural aspects of the Rider;²¹² (6) define the test year for the Rider;²¹³ and (7) include a true-up for the revenue requirement and billing.²¹⁴

Duke Kentucky stated that, due to KRS 278.264, Rider GTM cannot be approved in this proceeding as the application did not, and could not, address the presumption created by KRS 278.264.²¹⁵ However, Duke Kentucky stated that if the Commission does not believe KRS 278.264 applies, it agreed that at the time Rider GTM is put into rates, to the extent there are any revenues included in base rates associated with the assets, the Rider would reflect a credit for those revenues.²¹⁶ Duke Kentucky stated the intention is to file a separate application to implement Rider GTM.²¹⁷

The Commission finds that KRS 278.264(2) precludes the approval of Rider GTM unless the presumption created by KRS 278.264(2) is rebutted and therefore Duke Kentucky's proposed Rider GTM is denied.

²⁰⁸ Kollen Direct Testimony at 48.

²⁰⁹ Kollen Direct Testimony at 51.

²¹⁰ Kollen Direct Testimony at 53.

²¹¹ Kollen Direct Testimony at 55.

²¹² Kollen Direct Testimony at 56.

²¹³ Kollen Direct Testimony at 56.

²¹⁴ Kollen Direct Testimony at 56.

²¹⁵ Lawler Rebuttal Testimony at 6.

²¹⁶ Lawler Rebuttal Testimony at 17.

²¹⁷ Lawler Rebuttal Testimony at 19.

Lighting Tariffs – Duke Kentucky proposed to revise its lighting tariffs as follows:

(1) add language indicating that when a lighting unit and/or pole reaches the end of its useful life or becomes obsolete and parts cannot be reasonably obtained, Duke Kentucky will replace the unit or pole with an available similar Light-emitting diode (LED) lighting unit and/or pole;²¹⁸ (2) add language to several lighting tariffs to clarify that vegetation obstructing light output from fixtures will not be managed by Duke Kentucky unless it falls under the current distribution reliability vegetation management practices;²¹⁹ (3) eliminate maintenance service under Rate TL;²²⁰ (4) revise the tariffs to state that Duke Kentucky will endeavor to replace burned out lamps within three business days after notification by the customer.²²¹

Duke Kentucky proposed to initiate a transition from older lighting technologies to LED technology under Rate LED as older lighting technologies begin to fail and become obsolete. Under the proposed revision, customers can continue taking service under the non-LED rate schedules until the unit reaches the end of its useful life or becomes obsolete and parts cannot be reasonably obtained.²²² Duke Kentucky stated that this provides for an easier transition to LED technology if the current pole can still be utilized when the light fixture fails.²²³

²¹⁸ Sailers Direct Testimony at 13.

²¹⁹ Sailers Direct Testimony at 13.

²²⁰ Sailers Direct Testimony at 14.

²²¹ Application, Schedule L-1 at 58, 81, 85, and 90 of 189.

²²² Sailers Direct Testimony at 13.

²²³ Sailers Direct Testimony at 13.

Duke Kentucky proposed to add clarifying language to its lighting tariffs regarding vegetation management related to lighting fixtures.²²⁴ Duke Kentucky stated that the proposed language does not change its current practice for vegetation management but clarifies that vegetation obstructing light output from the fixture is not managed by Duke Kentucky unless it falls under Duke Kentucky's current distribution reliability vegetation management practices.²²⁵ Similar language is already in several of Duke Kentucky's lighting rate schedules.²²⁶

Duke Kentucky stated that the maintenance services under Rate TL do not include any significant repair or replacement of traffic signals. Duke Kentucky also stated that diagnosing and addressing problems with a traffic signal issue can result in longer times to get the signal working.²²⁷ Duke Kentucky indicated that there have been no requests for bulb replacement since 2015, leading Duke Kentucky to believe that customers are not contacting Duke Kentucky for this service and removing the option will benefit customers as they will not be paying for a service they do not use.²²⁸

Duke Kentucky's current tariff states that it will endeavor to replace burned out lamps within 48 hours after notification by the customer. Due to certain labor challenges, Duke Kentucky indicated that it is experiencing challenges to accurately respond within

²²⁴ Sailers Direct Testimony at 13.

²²⁵ Sailers Direct Testimony at 13.

²²⁶ Application, Schedule L-2.2 at 54, 56, 66, and 67 of 152.

²²⁷ Sailers Direct Testimony at 7.

²²⁸ Duke Kentucky's Response to Staff's Second Request, Item 32(b).

the 48-hour window period to replace burned out lamps. Duke Kentucky stated that extending the time window will allow it to more accurately meet customer requests.²²⁹

The Commission finds that Duke Kentucky's revision to transition away from older lighting technologies to LED lighting is reasonable and should be approved. Most electric utilities have begun to transition to LED lighting as older lighting technologies are becoming obsolete. While several of Duke Kentucky's lighting tariffs have expiration dates, the revised language will allow Duke Kentucky to transition to LED lighting more quickly when it is not able to obtain parts for the older lighting technologies.

The Commission finds that Duke Kentucky's revision regarding the responsibility for vegetation management related to lighting fixtures is reasonable and should be approved. The proposed revision clarifies that Duke Kentucky does not manage vegetation obstructing light outputs unless it falls under Duke Kentucky's current distribution reliability vegetation management practices. Additionally, the language is already in several other lighting tariffs.

The Commission finds that Duke Kentucky's revision to remove maintenance services from Rate TL is reasonable and should be approved. Maintenance services provided under Rate TL do not include any significant repair/replacement of traffic signals. As customers do not appear to be using the maintenance services offered, they are paying for services that are not being used.

The Commission finds that Duke Kentucky's revision regarding the time to replace a burned-out lamp is reasonable and should be approved, with one modification. The Commission finds that the tariff as proposed should be modified to reflect that Duke

²²⁹ Duke Kentucky's Response to Staff's Second Request, Item 43.

Kentucky will, absent unusual circumstances, replace burned out lamps within 3 business days. Three business days, absent unusual circumstances, should be a reasonable amount of time for Duke Kentucky to replace burned out lamps.

Line Extension Policy – Duke Kentucky proposed to revise the line extension policy as follows: (1) include transmission line extensions to clarify that transmission line extension costs are subject to the PJM tariff; (2) utilize the line extension policy guidelines to assess customers charges for material changes in the customer’s installation as well as the traditional line extension for new customer locations; and (3) propose new line extension guidelines and an early termination paragraph that can apply to new customers who never start the proposed new operations or do not fulfill the full load additions anticipated.²³⁰

Currently, for line extension requests that are greater than three (3) times the estimated gross annual revenue, a customer can agree to a minimum bill amount or pay a contribution in aid of construction (CIAC) amount equal to the cost less the three-year estimated gross revenues.²³¹ The CIAC option is not in the tariff currently or in the proposed tariff. Duke Kentucky agreed during the pendency of these proceedings to revise the tariff to include the CIAC.²³²

Duke Kentucky proposed to change the line extension policy guidelines to apply to line extension and customer installation change where the estimated cost is greater

²³⁰ Sailors Direct Testimony at 25.

²³¹ Duke Kentucky’s Response to Staff’s Third Request, Item 10(c).

²³² Duke Kentucky’s Response to Staff’s Fourth Request, Item 12.

than \$1 million or greater than three times the estimated gross revenue.²³³ Duke Kentucky proposed to change the period which a customer must guarantee a monthly bill from five years to ten years.²³⁴ Duke Kentucky explained the revisions create additional commitments from customers that require a large investment in infrastructure. Duke Kentucky stated it does not plan on using the ten-year time period unless the investment in infrastructure is very large.²³⁵

The Commission finds that Duke Kentucky's revision regarding transmission line extensions is unreasonable and should not be approved. In requests to amend tariffs, Duke Kentucky bears the burden to show the amendment will result in fair, just and reasonable rates or adequate, efficient and reliable service. Duke Kentucky provided no information as to why compliance with PJM requirements for transmission lines is a necessary addition to the tariff. Duke Kentucky was unable to identify an example of when the distribution line extension policy would apply to transmission line extensions.²³⁶

The Commission finds that Duke Kentucky's proposal regarding changes to customer installations being subject to the line extension policy is reasonable and should be approved.

The Commission finds that Duke Kentucky's revisions to establish new line extension guidelines and an early termination clause are reasonable and should be approved, with two modifications. The Commission finds the proposed tariff should be

²³³ Application, Schedule L-2.2 at 82 of 152.

²³⁴ Application, Schedule L-2.2 at 82 of 152.

²³⁵ Duke Kentucky's Response to Staff's Second Request, Item 47(e).

²³⁶ Duke Kentucky's Response to Staff's Second Request, Item 47(d).

modified to include language indicating that the line extension policy would only apply to extensions or changes to customer installations that impact the distribution primary main line system. Finally, the Commission finds that the tariff should also include the different payment options available to the customer if a change in installation affects the primary main line system.

Load Management Rider (Rider LM) – Duke Kentucky proposed to add a provision to its Load Management Rider to limit avoiding demand charges for off-peak demand by changing the determination of billing demand from only the on-peak period to the higher of the on-peak period or 50 percent of the off-peak period demand.²³⁷

Sierra Club recommended the Commission reject the proposed revision and require Duke Kentucky to maintain the application of demand charges under the rider to on-peak hours only.²³⁸ Sierra Club stated that including off-peak hours would result in electric vehicle (EV) customers paying too much for charging during off-peak hours.²³⁹ Sierra Club also argued that a demand charge which only applies during off-peak hours would reduce the incentive for customers to shift as much load to off-peak hours as possible.²⁴⁰ Sierra Club argued that the proposed revision would result in less efficient use of the system because it reduces the incentive to shift load to off-peak hours.²⁴¹ Sierra Club stated that the terms and conditions of Rider LM protect Duke Kentucky from

²³⁷ Sailors Direct Testimony at 25.

²³⁸ Shenstone-Harris Direct Testimony at 67–68.

²³⁹ Shenstone-Harris Direct Testimony at 66.

²⁴⁰ Shenstone-Harris Direct Testimony at 66.

²⁴¹ Sierra Club's Post-Hearing Brief at 45.

customers imposing excessive demand during off-peak hours without paying for any necessary upgrades to serve that demand.²⁴²

Duke Kentucky argued that Sierra Club only singled out EV charging load independent of all other customer load.²⁴³ Duke Kentucky also stated that Rate DP Rider LM customers will experience no revenue impacts from this change, while Rate DS Rider LM customers will experience only immaterial revenue impacts.²⁴⁴ Duke Kentucky stated that Rider LM lowers the customer bill as compared to Rates DS and DP without Rider LM participation.²⁴⁵ Duke Kentucky argued that without the changes proposed, the interaction of Rider LM with Rates DS and DP allows customers to potentially add unlimited off-peak charging load with no impact to the customer's demand charges.²⁴⁶

The Commission finds that Duke Kentucky's proposed revision to Rider LM is unreasonable and that it should be denied. The Commission is concerned that the proposed revision will discourage customers from shifting as much load to off-peak hours as possible. Duke Kentucky needs to move load to off-peak hours to benefit the system.

Development Incentive Rider and Brownfield Redevelopment Rider – Duke Kentucky proposed to revise its Brownfield Redevelopment Rider (Rider BR) and Development Incentive Rider (Rider DIR) as follows: (1) move the Rider BR into Rider DIR; (2) require customers to maintain a minimum demand in accordance with its Special Contract and maintain a monthly average load factor of 35 percent; (3) require a customer

²⁴² Sierra Club's Post-Hearing Brief at 46.

²⁴³ Duke Kentucky's Post-Hearing Brief at 69–70.

²⁴⁴ Duke Kentucky's Post-Hearing Brief at 69.

²⁴⁵ Duke Kentucky's Post-Hearing Brief at 70.

²⁴⁶ Duke Kentucky's Post-Hearing Brief at 70.

to affirm that the availability of Rider DIR was a factor in the customer's decision to locate the new load in Duke Kentucky's territory; (4) require that a customer meet one of the following: employ an additional workforce in the service area of a minimum of ten full-time equivalent employees or a minimum capital investment of \$1 million at the customer's facility; (5) provide a bill discount of up to 30 percent for a period of sixty months, with no discount applied to excess facility charges, taxes, base fuel, and rider amounts; (6) add language that the expected incremental revenues derived from the discounted rates for serving the new load be less than Duke Kentucky's incremental cost of serving the customer over the length of the minimum term of the agreement; (7) add criteria that will be used to determine the percentage discount; and (8) add a provision requiring the customer to repay the incentives received if the customer ceases operations for which the discounts were approved, with repayment being based on when the customer ceases operations.²⁴⁷

Duke Kentucky stated that the changes are consistent with recent approvals or proposed changes in the Rider DIR provisions for Duke affiliates in Indiana and Ohio. Duke Kentucky stated the proposed changes will improve Duke Kentucky's competitiveness in the region.²⁴⁸ Duke Kentucky indicated that no potential customers had expressed reservations about locating in Duke Kentucky's territory due to the current terms of Rider DIR.²⁴⁹

²⁴⁷ Sailers Direct Testimony at 26–27.

²⁴⁸ Sailers Direct Testimony at 26.

²⁴⁹ Duke Kentucky's Response to Staff's Third Request, Item 4.

Duke Kentucky indicated that it was reducing the additional workforce criterion from a minimum of 25 new jobs to a minimum of ten new jobs because over the past several years, it has received multiple inquiries from crypto-currency mining companies, which have significant power requirements but do not have large employment requirements on site.²⁵⁰

The Commission finds that Duke Kentucky's proposed revisions to Rider BR and Rider DIR are unreasonable and should not be approved as there is no compelling reason for the revisions. The only reason given by Duke Kentucky for the proposed revisions was to make Duke Kentucky more competitive with Duke Indiana and Duke Ohio. It should be noted that, even without the proposed revisions, Duke Kentucky still has the opportunity to enter into special contracts for rates that differ from its rate schedules.

Make Ready Credit Program (MRC) – Duke Kentucky proposed the MRC program as a voluntary program available to residential and non-residential customers at their residence or place of business to prepare for installation of a Level 2 or higher EV charger. The EV charger could be customer-owned or third-party owned.²⁵¹ MRC program would provide funding to offset the cost of bringing electricity from existing infrastructure to the location of EV chargers.²⁵² Duke Kentucky stated the credit is designed to defray installation costs associated with EV chargers.²⁵³ Duke Kentucky would not own the make ready infrastructure.²⁵⁴ In order to qualify for the credit, a customer would be

²⁵⁰ Duke Kentucky's Response to Staff's Second Request, Item 50(b).

²⁵¹ Direct Testimony of Cormack Gordon (Gordon Direct Testimony) (filed Dec. 1, 2022) at 3.

²⁵² Duke Kentucky's Response to Staff's Second Request, Item 13a.

²⁵³ Gordon Direct Testimony at 3.

²⁵⁴ Gordon Direct Testimony at 3.

required to apply to participate in the program, fulfill certain obligations, and the credit²⁵⁵ would not exceed demonstrable costs.²⁵⁶

As designed, the make ready credit is spread out over three years. If there are multiple customers involved in one application, Duke Kentucky would determine a make ready infrastructure revenue credit amount based on the completed customer usage profile form and the expected increase in revenue to be achieved through such usage for the first three years of operation, with the revenue credits not to exceed the demonstrated costs.²⁵⁷

The Commission finds that Duke Kentucky's proposed MRC Program rider should be denied. Duke Kentucky has not provided sufficient load management options and this omission is a substantial oversight in light of the expected capacity constraints on Duke Kentucky's system. Load management is critical because it will take potentially flexible EV loads into grid benefits rather than grid costs. According to Duke Kentucky's 2021 IRP, Duke Kentucky plans to retire East Bend, which generates 600 MW of Duke Kentucky's 1,069 MW in total installed capacity.²⁵⁸ However, Duke Kentucky has not

²⁵⁵ Gordon Direct Testimony at 17.

²⁵⁶ Gordon Direct Testimony at 14–17.

²⁵⁷ Gordon Direct Testimony at 18. Duke Kentucky did carve out an exception in the testimony as follows “however, that for such a non-residential customer that is simultaneously participating in the Company's Line Extension Policy and eligible for revenue credits under such program that account for the anticipated EV charging load, the Company will develop a make ready infrastructure revenue credit amount based on the completed customer usage profile form and the expected increase in revenue to be achieved through such usage for the first two years following installation, with the Make Ready credits not to exceed the Demonstrated Costs.”

²⁵⁸ Case No. 2021-00145, June 21, 2021 IRP at 4, 36.

identified any concrete plans to replace or create generation.²⁵⁹ Meanwhile, Duke Kentucky has acknowledged that energy sales growth from vehicle electrification must be managed to assure a benefit to all customers.²⁶⁰ Duke Kentucky acknowledged net positive revenues for the utility and bill savings for all customers occur only if there is managed charging.²⁶¹ Duke Kentucky acknowledged the best time to implement managed charging is when customers use the MRC and Electric Vehicle Service Equipment (EVSE) programs to begin their electric vehicle transition.”²⁶²

The Commission finds that before any type of MRC program can be approved, Duke Kentucky should develop a comprehensive load management plan alongside its MRC program. The load management plan should be created so all customers can translate their unique needs and capabilities into grid benefits. At a minimum, a comprehensive load management plan should include the following elements:

- Time-of-Use (TOU) Rates: TOU options may include whole house and/or EV-specific TOU rates for residential customers designed to provide appropriate, granular price signals to encourage customer behavior that will contribute to reducing system peak demand.
- Critical Peak Pricing (CPP) Rates: CPP rates should be available for all customers such that participants pay higher prices during the few days or

²⁵⁹ Case No. 2021-00145, June 21, 2021 IRP at 4, Scott Park HVT of the May 9, 2023 Hearing between 11:51:00–12:00:00, Scott Park HVT of the May 9, 2023 Hearing 02:15:00–02:22:00

²⁶⁰ Gordon Direct at 6.

²⁶¹ Ex. CCG-1 at 15–7.

²⁶² Gordon Direct at 6.

hours when demand is the highest or when the power grid is severely stressed.

- Active Control: Customers unable or unwilling to respond to price signals should be able to enroll in programs in which Duke Kentucky can take direct control of the customers' EVSEs and adjust load based on system conditions.
- Increasingly Granular and Volumetric Pricing: Low load factor customers may be integrated into the system more cost-effectively through more granular price signals. For this purpose, dynamic rates could collect costs through the volumetric portion of the bill, rather than through demand charges.

In addition to these minimum elements, Duke Kentucky should consider optional, advanced tariff designs such as dynamic rates, off-peak credits, and rates for exporting energy to the grid. Duke Kentucky should also consider Automated Load Management (ALM), also referred to as EV Energy Management Systems (EMS), as a solution for avoiding or deferring infrastructure upgrades, particularly at apartment complexes, workplace, and public charging sites. As Duke Kentucky plans for accelerated EV adoption, and the associated load management programs, it should incorporate EV load forecasts into its IRP process and explain how load management efforts and integrated planning approaches will defer and avoid investment.

Notwithstanding the need for a comprehensive load management plan, Duke Kentucky's effort to model its make-ready incentives on Duke Kentucky's line extension program represents a step towards ensuring that incentives lead to benefits for all

customers while avoiding the risk of cost shifts. As noted above, Duke Kentucky needs to address issues in its line extension policy as well. A well-designed line extension policy can achieve this goal by factoring in anticipated revenues from new load. A three-year period reasonably achieves the balance of incentivizing connection to the grid while holding existing customers harmless, as new sources of load can contribute to downward rate pressure for all customers once the cost of the make-ready has been repaid by the customer. However, Duke Kentucky should implement the following modifications to its MRC proposal in future filings:

- Require that C&I customers purchase managed charging technology to qualify for an incentive, which may include networked chargers or EV telematics platforms capable of supporting managed charging.

- For projects in which a specific make-ready incentive is calculated for the individual project, Duke Kentucky should submit an annual update to the Commission to validate non-standardized load assumptions and compare load estimates with load actuals used to calculate incentives.

- Duke Kentucky should establish a timeline and process to migrate to Kentucky-specific load data and should refresh the data annually.

- Duke Kentucky should track and report all revenue and associated make-ready program costs in a transparent manner to allow for verification and validation that the program yields quantifiable net customer benefits.

Electric Vehicle Service Equipment Tariff (EVSE) – Duke Kentucky proposed the EVSE Program on a voluntary basis and to provide customers, both residential and non-residential, with the ability to choose a Level 2 or higher EVSE to have installed at their

home or business.²⁶³ Once installed, the customer would pay a flat rate each month for that charger for the five year life²⁶⁴ Included in the monthly rate amount is the charger, installation,²⁶⁵ and maintenance/warranty work for the charger during the duration of the contract. Duke Kentucky would own the charging equipment, but customers would operate it on a day-to-day basis.²⁶⁶

Duke Kentucky argued that electric vehicle adoption presents an opportunity for downward pressure on electric rates.²⁶⁷ The majority of EV charging occurs in residential settings and, when managed, can be made to occur during hours when the electric system is not constrained.²⁶⁸ As a result, system costs can be managed as well as spread over more kilowatt-hour sales.²⁶⁹ Duke Kentucky stated, that since the EVSE program is a separate tariffed offering, non-participating customers will not pay for this tariff.²⁷⁰ Duke Kentucky alleged that, as designed, the MRC and EVSE programs will encourage residential and non-residential customers to invest in working upgrades to existing structures while also delivering a benefit to all utility customers by lowering the per unit cost of electricity associated with new electric vehicle charging load.²⁷¹

²⁶³ Gordon Direct Testimony at 3.

²⁶⁴ Gordon Direct Testimony at 12.

²⁶⁵ Gordon Direct Testimony at 3.

²⁶⁶ Gordon Direct Testimony at 3.

²⁶⁷ Duke Kentucky's Response to Staff's Second Request, Item 14.

²⁶⁸ Duke Kentucky's Response to Staff's Second Request, Item 14.

²⁶⁹ Duke Kentucky's Response to Staff's Second Request, Item 14.

²⁷⁰ Gordon Direct Testimony at 11–12.

²⁷¹ Gordon Direct Testimony at 11–12.

The Commission finds that Duke Kentucky's Electric Vehicle Pilot Program should be denied. The proposal is premature given Duke Kentucky's lack of a comprehensive load management plan. Further, the proposal to own EVSE represents a dramatic expansion of the utility business model that risks negatively impacting consumers and competitive markets.

Specifically, Duke Kentucky's proposal is an unnecessary expansion of the utility business model which risks negatively impacting competitive markets and economic development in Kentucky. By definition, competitive markets for EVSE and related O&M services fall outside of the traditional utility (natural monopoly) model in which the lowest cost option is to have a single provider. Duke Kentucky's proposal to bring its market power and advantage as a monopoly to EVSE markets risks substantially disrupting an emerging market, including the risks that other suppliers may struggle to compete and delay or opt against competitive market entry, that customers are unable to benefit from innovation among suppliers or downward pressure on prices, and that the pace of EVSE adoption may decrease, thereby reducing private investment in EVSE and economic development in Kentucky.

Such risks would be introduced for only meager results, as Duke Kentucky anticipates only modest EVSE additions by the end of 2025 under the program.²⁷² Duke Kentucky offers no evidence of the market barrier for which it is solving; instead, it proposes to place the burden on the Commission to provide rigorous program oversight, including developing expertise in EVSE contract terms, to ensure that an uneven playing field is not created within existing markets.

²⁷² Confidential Attachment BLS-8.

Duke Kentucky's proposal risks increasing costs for customers and shifting costs to non-participants. Unless all costs are directly assigned, cost shifting is unavoidable. Duke Kentucky's proposal to enter a competitive market, however, introduces a unique cost shift risk. Anti-trust practitioners and economists warn against regulated monopoly entrance into competitive markets because such a practice introduces an incentive for utilities to shift costs from their competitive operations to their regulated products, for which captive customers have no alternative. This phenomenon, known as cross-subsidization, harms both the competitive market (by forcing out efficient rivals) as well as ratepayers, who face higher rates to recoup the utility's losses.²⁷³ The incentive to shift costs away from a company's competitive operations will exist even if Duke Kentucky creates a new rate schedule, as it proposes.

In addition, the calculations for the Company's proposed EVSE Tariff rely on an approach of allocating indirectly assigned costs, such as staff time, that appear speculative and unsupported, and which do not demonstrate that costs are allocated appropriately and do not result in cost shifts.²⁷⁴ Rather, the only way to ensure that cost shifts do not occur would be for an auditor to take on that burden of proof.

The proposed program also risks increasing costs for participants. Although Duke Kentucky claimed that Duke Kentucky-owned EVSE will not be placed into rate base,²⁷⁵ Duke Kentucky indicated that the EVSE would be subject to an annual return, indicating

²⁷³ See: Peter Fox-Penner, *Power After Carbon: Building a Clean, Resilient Grid*, Harvard University Press (2020) at 250.

²⁷⁴ Confidential Attachment BLS-8.

²⁷⁵ Gordon Direct Testimony at 23.

that the investment would in fact be part of Duke Kentucky's rate base.²⁷⁶ As such, under Duke Kentucky's proposal, customers would be contributing to the Company's return on rate base even though the same services could have been procured competitively, with no such expense. Other increased costs and risk for participating EV owners include the cost, borne by customers, of foregone innovation and downward price pressure in the competitive market. Also, because Duke Kentucky does not require evidence of compliance with its insurance policies until after a claim is filed,²⁷⁷ there is a risk that damages from a non-compliant customer will ultimately be rolled into the rate schedule. Additionally, the program introduces an incentive for Duke Kentucky to select more expensive EVSE in order to earn a higher return on rate base.

Duke Kentucky has not demonstrated that advancing EVSE in Kentucky can only be accomplished with a complex new regulatory mechanism that puts the burden on intervenors and the Commission to ensure that no cost shifts occur and that costs to consumers are minimized. Other jurisdictions have limited utility ownership of EVSE to specific circumstances and introduced alternative ways to address barriers to EVSE deployment. The most common and recent trend in other jurisdictions is to limit utility ownership of EVSE.²⁷⁸ Some states have cited concerns that permitting utilities to own EVSE would "eventually be a burden on the public;"²⁷⁹ other states have explicitly limited

²⁷⁶ See: Confidential Attachment BLS-8.

²⁷⁷ Attachment CCG-3 at 7 and Attachment CCG-4 at 7.

²⁷⁸ For example, Connecticut (Docket No. 17-12-03RE04), Georgia (SB146), Missouri (File No. ET-2016-0246), New Jersey (Docket No. QO20050357), New York (Case 18-E-0138), Pennsylvania (Docket Nos. R-2021-3024750, R-2021-3023618, R-2021-3024601), Texas (SB 1002), and Virginia (Case No. PUR-2019-00154).

²⁷⁹ Report and Order, *In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Approval of a Tariff Setting a Rate for Electric Vehicle Charging Stations*, File No. ET-2016-

utility ownership of EVSE to circumstances in which the private market was not satisfying customer demand²⁸⁰ while noting that the nascent state of the EV market and charging industry does not necessarily amount to market failure.²⁸¹ In Georgia and Texas, the legislature mandated limits to utility ownership of EVSE. Importantly, every one of the risks identified in this order could be addressed if Duke Kentucky followed the common approach that other jurisdictions have taken to stimulating an emerging market: targeted and demonstrably cost-effective rebates.²⁸²

Duke Kentucky's proposal lacks coordination with federal programs. Duke Kentucky's uncoordinated strategy, in which Duke Kentucky proposed to own EVSE despite substantial federal incentives for customer purchase²⁸³, planned to inefficiently use ratepayer dollars while failing to leverage existing resources to provide targeted support to customers facing financial barriers. By neglecting to leverage federal dollars while undermining competitive markets, Duke Kentucky's proposals mute the innovation that could otherwise be stimulated by federal funds.

0246, Tariff No. YE-2017-0052, Public Service Commission of the State of Missouri (April 19, 2017), available at psc.mo.gov/CMSInternetData/ON/Orders/2017/041917246.pdf.

²⁸⁰ Order *Establishing Electric Vehicle Infrastructure Make-Ready Program and Other Programs*, Case 18-E-0138, State of New York Public Service Commission (July 16, 2020), p. 29 and pp. 32-33, available at documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7B6238DD07-3974-4C4E-9201-3E339E311916%7D.

²⁸¹ Order *Establishing Electric Vehicle Infrastructure Make-Ready Program and Other Programs*, Case 18-E-0138, State of New York Public Service Commission (July 16, 2020), p. 29 and pp. 32-33, available at documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7B6238DD07-3974-4C4E-9201-3E339E311916%7D.

²⁸² For example, utilities have provided rebates for customers to purchase EVSE in the states of Arkansas, California, Connecticut, Louisiana, Massachusetts, Michigan, Mississippi, Missouri, New Jersey, Oregon, Pennsylvania, Texas, Utah, and Virginia.

²⁸³ "The Inflation Reduction Act—What it Is and What it Means for EV Adoption," Zero Emission Transportation Association. www.zeta2030.org/insights/the-inflation-reduction-act-what-it-is-and-what-it-means-for-ev-adoption.

Duke Kentucky's proposal focuses on EVSE deployment without developing the necessary rate design and load management programs to manage EV load and the associated increased costs. As previously described, Duke Kentucky's failure to provide comprehensive load management options could prove quite costly. As Duke Kentucky has previously acknowledged,²⁸⁴ load management options are needed at the time that a customer decides to install EVSE, as the options presented can inform a customer's decision regarding which technologies to purchase and thus, a customer's ability to participate in future programs. Duke Kentucky's failure to provide specificity regarding future managed charging options, combined with its proposal to own EVSE, strengthens Duke Kentucky's control over EV load – another service that could be provided by a third-party energy aggregator in the competitive market or through a programmatic incentive design.

Duke Kentucky's proposed pricing does not incent networked charging. Under the proposed tariffs, L2 networked chargers are higher for both residential and commercial customers, at times, significantly so.²⁸⁵ This approach conflicts with that of numerous jurisdictions.²⁸⁶ The substantially higher costs of networked chargers and absence of any load management programs to take advantage of networking capabilities will prove a strong disincentive for customers, especially residential customers, to rent networked

²⁸⁴ Gordon Direct Testimony at 6.

²⁸⁵ Confidential Attachment BLS-8.

²⁸⁶ For example, Connecticut (Docket No. 17-12-03RE04), Massachusetts (DPU 21-90, DPU 21-91), Minnesota (Docket No. E-002/M-18-643), and Virginia (www.dominionenergy.com/virginia/save-energy/electric-vehicles/powering-smart-transportation).

EVSE, a program flaw that may lock some customers out of participating in future advanced load management programs.

Future EVSE proposals should focus on stimulating competitive markets, rather than utility ownership. As stated, a common approach in other jurisdictions is for utilities to provide targeted rebates for customer EVSE purchase, though such rebates should require that customers leverage federal funds, be targeted towards low-income customers or public chargers, and satisfy industry standard cost-effectiveness testing and benefit cost analyses. Duke Kentucky should also require customer enrollment in a load management program or rate to receive an incentive. This will require developing a comprehensive load management plan, including rates that incentivize load management and direct (or automated) control of a customer's load. Providing a comprehensive suite of options ensures that all customers have the opportunity to translate their needs and capabilities into grid benefits.

Clean Energy Connection (CEC) – Duke Kentucky proposed a new tariff for a community solar program through which participating customers would be able to voluntarily subscribe to a share of new solar energy facility(s).²⁸⁷ Duke Kentucky stated that CEC provides a third option in addition to its GoGreen Kentucky (Rider GP) and Green Source Advantage (Rate GSA).²⁸⁸ Duke Kentucky stated that the program would enable different solar projects to be built; however, Duke Kentucky has not applied for a CPCN for any solar project.

²⁸⁷ Direct Testimony of Paul Halstead (Halstead Direct Testimony) (filed Dec. 1, 2022) at 2.

²⁸⁸ Halstead Direct Testimony at 3.

If the tariff is approved, Duke Kentucky would file for a CPCN for specific project approval²⁸⁹ and costs would be calculated at that time.²⁹⁰ The initial solar project is projected to be 49MW, with commercial customers allocated 37MW, residential customers allocated 10MW, and income qualified residential customers allocated 2MW.²⁹¹ Duke Kentucky will deem the program cost-effective if the value of the system benefits exceeds the value of the anticipated CEC customer bill credits.²⁹² The CEC bill credit is based on achieving forecasted participant program payback,²⁹³ rather than on value streams such as Energy, Capacity, O&M, and Ancillary Services.

The Attorney General recommended rejecting the tariff and requiring Duke Kentucky to refile when the CPCN is filed for the solar facility.²⁹⁴ Wal-Mart recommended the Commission approve the new tariff.²⁹⁵

The Commission finds that the CEC program should not be approved. Duke Kentucky provided only general descriptions of the bill credit and subscription fee formulas.²⁹⁶ Duke Kentucky did not identify a single, specific methodology for calculating program benefits, merely alluding to approaches used in its most recent IRP.²⁹⁷ The

²⁸⁹ Halstead Direct Testimony at 3.

²⁹⁰ Halstead Direct Testimony at 11.

²⁹¹ Halstead Direct Testimony at 7.

²⁹² Halstead Direct Testimony at 11.

²⁹³ Halstead Direct Testimony at 12.

²⁹⁴ Kollen Direct Testimony at 66.

²⁹⁵ Wal-Mart's Post Hearing Brief at 16.

²⁹⁶ Kollen Direct Testimony at 65.

²⁹⁷ Duke Kentucky's Response to Staff's Fourth Request, Item 22a.

significant uncertainty about costs and benefits fails to justify a rate-based program allowing mainly commercial customers to achieve an unsubstantiated level of program payback. Additionally, Duke Kentucky did not demonstrate that its existing renewable energy programs do not achieve the objectives of the CEC offering.

Net Metering Tariff – Duke Kentucky did not propose to revise its net metering tariff in this case and instead intends to file a successor net metering tariff 60 days after this case concludes.²⁹⁸ Duke Kentucky stated it is preparing for net metering revisions and intends to utilize the approved COSS from this proceeding and the Commission’s review, comments, and ultimate resolution of Duke Kentucky’s proposed CEC community solar program value stack and allocation of benefits to non-participants.²⁹⁹

Duke Kentucky may draw on the Commission’s review of the CEC program’s value stack to the extent that the reasons for the Commission’s rejection of that program are applicable to the NEM successor filing.

Fuel Adjustment Clause (Rider FAC) – Duke Kentucky proposed to revise its FAC by changing the rate calculation from a monthly basis to a rolling 12-month average.³⁰⁰ Duke Kentucky stated that the change to a rolling 12-month average will help to mitigate volatility in the FAC rate for its ratepayers. The Attorney General did not object to this modification in its testimony³⁰¹ and reiterated the request to allow the modification.³⁰²

²⁹⁸ Sailers Direct Testimony at 30.

²⁹⁹ Sailers Direct Testimony at 31.

³⁰⁰ Lawler Direct Testimony at 11.

³⁰¹ Kollen Direct Testimony at 40.

³⁰² Attorney General’s Post-Hearing Brief at 39–40.

Commission regulation 807 KAR 5:056, Section 1 states that the monthly FAC rate will be based upon the most recent actual monthly cost and sales and does not have a deviation clause. Therefore, the Commission denies Duke Kentucky's proposed revisions to the FAC rate calculation.

Green Source Advantage – Duke Kentucky proposed to revise the maximum amount of generation purchased metric under the Green Source Advantage Tariff from renewable generation capacity up to 125 percent of the customer's aggregate maximum annual demand to renewable generation capacity up to 100 percent of the customer's annual energy consumption. Duke Kentucky stated that this would allow customers to match their total annual consumption more closely with total annual generation from renewable resources.³⁰³ Duke Kentucky further explained that for customers with high load factors, the restriction of 125 percent of maximum demand would prevent them from covering all their annual energy consumption under the Green Source Advantage Rider.³⁰⁴

The Commission finds that Duke Kentucky's proposed revisions to the Green Source Advantage Tariff are reasonable and should be approved as the revisions allow companies to match their total annual consumption with total annual generation from renewable resources.

GoGreen Kentucky – Duke Kentucky proposed to add a new feature to its GoGreen Kentucky tariff to allow larger customers the ability to negotiate a price for quantity renewable energy credit (REC) purchases and the related terms and

³⁰³ Sailers Direct Testimony at 27.

³⁰⁴ Duke Kentucky's Response to Staff's Second Request, Item 35.

conditions.³⁰⁵ Duke Kentucky also proposed a revision to indicate that should the price of RECs decrease, no advance notice to the Commission would be required instead of the 60 day notice to the Commission in the current version of the tariff.³⁰⁶ Duke Kentucky clarified that it would provide notice to the Commission through a revised tariff sheet filing if the decrease occurred outside of their annual GoGreen Kentucky filing. Duke Kentucky anticipated a decrease would be implemented concurrent with its annual GoGreen Kentucky filing.³⁰⁷

The Commission finds that Duke Kentucky's proposed revisions to the GoGreen Kentucky Tariff, as modified below, are reasonable and should be approved. The proposed revision will allow larger customers to participate in the GoGreen Kentucky Tariff. KRS 278.180(2) allows the Commission, upon application, to prescribe a less time within which a reduction of rates may be made. The Commission considers the tariff revision an application pursuant to KRS 278.180(2) and finds the proposed no advance notice reasonable.

Local Government Fee and Incremental Local Investment Charge (ILIC) – Duke Kentucky proposed to add language to a current Local Government Fee tariff that would allow it to recover incremental costs imposed directly on the utility by local legislative authorities whether by ordinance, franchise, or other means.³⁰⁸ In conjunction with the amended language in the local government fee tariff, Duke Kentucky proposed a new

³⁰⁵ Sailers Direct Testimony at 27.

³⁰⁶ Application, Schedule L-1 at 141 of 189.

³⁰⁷ Duke Kentucky's Response to Staff's Second Request, Item 53(a).

³⁰⁸ Application, Schedule L-1 at 164 of 189.

tariff that would require public authorities to enter into agreements with Duke Kentucky for any incremental local investments that are outside Duke Kentucky's regular system-wide construction plans absent an ordinance, franchise or other directive.³⁰⁹ The agreements would be submitted to the Commission for determination of cost allocation to Duke Kentucky's customers in general or only the Duke Kentucky customers within the boundary of the Public Authority.³¹⁰

Duke Kentucky proposed that the monthly charge would be calculated by applying the current levelized fixed charge rate to the installed cost.³¹¹ If the charge is to be collected from all Duke Kentucky customers, the monthly total charge for the investment would be divided by the number of Duke Kentucky's customers.³¹² If it is to be collected from Duke Kentucky customers solely within the public authority, the same approach would be used except the number of customers would be only the customers within the boundary of the Public Authority.³¹³ Duke Kentucky asserted that only the customers benefitting from the required undergrounding or upgrades should bear the expense related to the improvements.³¹⁴

Duke Kentucky clarified that this tariff would be for recovery of franchise fees or any other fee or cost imposed directly on the utility.³¹⁵ The utility cited to KRS 96.050(9)

³⁰⁹ Application, Schedule L-1 at 185–186 of 189.

³¹⁰ Sailers Direct Testimony at 22. Sailers Direct Testimony at 22.

³¹¹ Sailers Direct Testimony at 22.

³¹² Sailers Direct Testimony at 22.

³¹³ Sailers Direct Testimony at 22.

³¹⁴ Duke Kentucky's Response to Staff's Second Request, Item 4.

³¹⁵ Duke Kentucky's Post-Hearing Brief at 14.

and *Benzinger v. Union Light, Heat & Power Co.*, 170 S.W.2d 38 (Ky. 1943) to support its assertion that municipalities can act *carte blanche* to force utilities to underground and relocate utility infrastructure.³¹⁶ Duke Kentucky argued that the Commission can establish a rate design for the proposed tariff.³¹⁷ Duke Kentucky did not address the issue of legal recourse versus a tariff.³¹⁸ Duke Kentucky also stated that the language in the Local Government Fee tariff is directly tied to the ILIC, but that the Commission could approve the amendment to the language in the local government fee tariff without approving the ILIC tariff.³¹⁹

The Attorney General argued that Duke Kentucky has the ability to not bid on a franchise agreement or it can seek legal redress against any franchise, ordinance, or permitting requirement in Kentucky.³²⁰ The Attorney General also argued that if the Commission approved Rider ILIC, Duke Kentucky would have no economic incentive to seek legal redress against the project as they could recover the costs through Rider ILIC. The Attorney General also noted that ILIC rider contains a requirement for an agreement between the local government entity and Duke as to costs and construction but there is no mechanism for the Commission to approve it.³²¹

The Attorney General argued that the tariff should be rejected as it is poorly conceived, provides an alternative form of regulation, and allows Duke Kentucky to

³¹⁶ Duke Kentucky's Post-Hearing Brief at 14.

³¹⁷ Duke Kentucky's Post-Hearing Brief at 15–16.

³¹⁸ Duke Kentucky's Post-Hearing Brief at 13–16.

³¹⁹ Duke Kentucky's Post-Hearing Brief at 16.

³²⁰ Attorney General's Post-Hearing Brief at 51.

³²¹ Attorney General's Post-Hearing Brief at 52.

establish rates not only within the boundaries of the local government authority, but potentially systemwide.³²² The Attorney General argued that Duke Kentucky has not proposed an objective process by which it or the Commission can ensure that the scope and/or cost of a project would be included in Duke Kentucky's regulatory system-wide construction plans.³²³ The Attorney General stated that the ratemaking recovery is based upon the installed costs of assets before such costs are incurred and construction is completed and that using a fixed charge provides a levelized form of ratemaking recovery where Duke Kentucky can incur costs on a declining cost basis.³²⁴

The Commission denies the proposed tariff as well as the proposed amended language to the Local Government Fee tariff. Duke Kentucky admitted that the ILIC rider would be a placeholder rider used to pass costs through to the customers.³²⁵ Duke Kentucky confirmed several times in the proceeding, including at the hearing³²⁶ that Duke Kentucky is not faced with investments as a result of ordinances such as described as the motivation behind the proposed tariff.³²⁷ In fact, Duke Kentucky stated that the rider is intended to assist the utility in negotiations with municipalities.³²⁸

The Commission will not allow its regulatory power to be used as a mechanism to further negotiations by utilities for the benefit utilities, and the detriment of Kentucky's

³²² Kollen Direct Testimony at 63.

³²³ Kollen Direct Testimony at 61.

³²⁴ Kollen Direct Testimony, page 63, lines 8–14.

³²⁵ Spiller HVT of the May 9, 2023 Hearing at 09:46:00–09:46:30.

³²⁶ Spiller HVT of the May 9, 2023 Hearing at 09:50:00–09:57:00.

³²⁷ Duke Kentucky's Response to Staff's Second Request, Item 5.

³²⁸ Spiller HVT of the May 9, 2023 Hearing at 09:52:00–09:55:02 and Spiller Direct Testimony at 34.

municipalities. The motivations behind Duke Kentucky's proposal are clear. Duke Kentucky's proposal is touted as a way to recover costs from burdensome and demanding requirements of municipality ordinances. Duke Kentucky has already had approximately 80 years to address the areas desired to underground utilities.³²⁹ Instead, in this case, Duke Kentucky proposed a rider for leverage in negotiations.

Should a municipality pass an ordinance affecting Duke Kentucky, Duke Kentucky has recourse. Although Duke Kentucky attempted to make the ILIC rider appear to give the Commission jurisdiction, the Commission has jurisdiction to regulate "rates" and "services"³³⁰ without this rider. As noted by the Attorney General, the ILIC contains a provision requiring an agreement between Duke Kentucky and the municipality governing costs and construction prior to the filing of any case.³³¹ In addition, there is nothing prohibiting Duke Kentucky of recovery of such costs.

As noted above, the amended language to the Local Government Fee rider is also denied. Although Duke Kentucky attempts to distinguish the two proposals, without the ILIC, Duke Kentucky would not have proposed the amended language to Local Government Fee rider. The Commission notes that there would have been no need for it.

³²⁹ See *Benzinger v. Union Light, Heat & Power Co.*, 170 S.W.2d 38 (Ky. 1943).

³³⁰ KRS 278.030.

³³¹ Attorney General's Post-Hearing Brief at 52.

Emergency Electric Procedures – Duke Kentucky proposed to update its Emergency Electric Procedures to recognize the close interaction with PJM during system emergency conditions.³³²

The Commission finds that the revisions to Duke Kentucky’s Emergency Electric Procedures, as modified below, are reasonable and should be approved. One of the revisions appears to take away Duke Kentucky’s authority to “. . . enter into power purchases to the extent that generation resources are reasonably available and transmission loading will allow”³³³ in the event of an emergency and appears to give PJM the sole authority to do so. The Commission finds that Duke Kentucky should also have the authority to enter into power purchase agreements in the event of emergencies.

Duke Kentucky also added a provision to the Emergency Electric Procedures regarding what would happen in the event of a long-term fuel shortage or severe weather. Under this provision, Duke Kentucky states that the Remedial Measures in the Event of Emergency and Curtailment Procedures would be utilized “. . . as permitted by contractual commitments or by order of the regulatory authority having jurisdiction such as PJM or NERC.”³³⁴ This provision is not necessary in Duke Kentucky’s retail tariff. If there is an insufficiency in wholesale generation, PJM can declare an emergency which would trigger Duke Kentucky’s Remedial Measures in the Event of Emergency and Curtailment Procedures. The Commission finds that the addition of the Long-Term Fuel Shortage or Severe Weather provision is unreasonable and should not be approved.

³³² Sailers Direct Testimony at 29–30.

³³³ Application, Schedule L-2.2 at 139 of 152.

³³⁴ Application, Schedule L-2.2 at 141 of 152.

Distribution Pole Attachments – Duke Kentucky proposed to revise its per foot rates for pole attachments in accordance with Administrative Case No. 251.³³⁵ Duke Kentucky proposed to increase the pole attachment rate to \$9.99 for a two-user attachment and \$8.61 for a three-user attachment.³³⁶

KBCA argued that there were two flaws in Duke Kentucky's calculation of its pole attachment rates: (1) Duke Kentucky failed to include the number of non-unitized poles it had identified but not yet incorporated into its pole count, which inflates the proposed rate as the costs of such poles are included in the gross pole investment figure used to calculate the pole rate; and (2) the distinction between two-user and three-user poles does not accurately reflect the actual distribution of attachments on Duke Kentucky's 35, 40, and 45-foot poles because the calculation does not take into account attachments on 50-foot poles, which are now in the same order of magnitude as attachments on 35-foot poles.³³⁷

KBCA argued that Duke Kentucky should include 2,464 unassigned, non-unitized poles to the 35, 40, and 45-foot categories in the same proportion Duke Kentucky used to assign 911 previously non-unitized poles in its pole attachment rate calculation.³³⁸ KBCA also argued that the number of attachments on 50-foot poles are now in the same order of magnitude as the number of attachments on 35-foot poles.³³⁹ KBCA argued that

³³⁵ Administrative Case No. 251, *The Adoption of a Standard Methodology for Establishing Rates for CATV Pole Attachments*.

³³⁶ Application, Volume 14, Attachment BLS-7.

³³⁷ Direct Testimony of Patricia D. Kravtin (Kravtin Direct Testimony) (filed Mar. 10, 2023) at 5–7.

³³⁸ Kravtin Direct Testimony at 11.

³³⁹ Kravtin Direct Testimony at 12–13.

the usable space factors prescribed in Administrative Case No. 251 for the pole attachment rate calculation are not accurate or reflective of Duke's actual pole characteristics.³⁴⁰ KBCA stated that Administrative Case No. 251 would permit a rate calculation based on deviations from the numbers prescribed by the Commission when there are major discrepancies with the average characteristics of the utility.³⁴¹ KBCA recommended either directing Duke Kentucky to charge the three-user rate on the basis of an average 42.5 foot pole height for all attachments or direct Duke Kentucky to recalculate its two-user and three-user rates to reflect Duke Kentucky's actual height distribution of poles used for attachments, including its use of 50 foot poles in the computation of the three-user rate.³⁴²

Duke Kentucky agreed the number of non-unitized poles is available and can be included in the calculation. However, Duke Kentucky disagreed with the amounts of poles KBCA used.³⁴³ Duke Kentucky stated that the number of poles of specific lengths that were unitized during 2022 but were not unitized as of December 31, 2021, are 22, 9, and 40 for 35-, 40-, and 45-foot poles, respectively.³⁴⁴ Duke Kentucky also argued that \$15,727.20, \$15,325.25, and \$74,647.88 should be added to the pole investment for 35-, 40-, and 45-foot poles, respectively, to add the corresponding investment associated with those poles.³⁴⁵ Duke Kentucky's revised calculation of its pole attachment rates

³⁴⁰ Kravtin Direct Testimony at 13.

³⁴¹ Kravtin Direct Testimony at 14.

³⁴² Kravtin Direct Testimony at 14–15.

³⁴³ Rebuttal Testimony of Bruce L. Sailers (Sailers Rebuttal Testimony) at 12.

³⁴⁴ Sailers Rebuttal Testimony at 14.

³⁴⁵ Sailers Rebuttal Testimony at 14.

resulted in charges of \$9.99 per foot for a two-user pole, which results in no change from the original proposal, and \$8.62 per foot for a three-user pole, and increase of \$0.01 over the original proposal of \$8.61 per foot. Due to the immaterial change, Duke Kentucky recommended that the Commission approve the original proposed charges.³⁴⁶ Duke Kentucky stated that there could be remaining non-unitized poles, but it does not have those counts available.³⁴⁷

Duke Kentucky did not agree that a major discrepancy exists regarding the types of poles used. Therefore, Duke Kentucky stated that it did not deviate from the Commission Order in Administrative Case No. 251. Duke Kentucky stated that the methodology could have been reviewed in Case No. 2022-00105,³⁴⁸ however it was not aware of any revisions from that case impacting the calculation specified in Administrative Case No. 251.³⁴⁹

The Commission finds that the revised pole attachment rates requested by Duke Kentucky are denied. The Commission does not adopt the arguments of KBCA but does not believe that Duke Kentucky met its burden of demonstrating that the proposed rates were fair, just and reasonable. KBCA attempts to demonstrate that Administrative Order 251 is outdated and should be revisited. However, Administrative Order 251 allows for the pole attachment rate to be configured to reflect a utility's pole usage.

³⁴⁶ Sailers Rebuttal Testimony at 13.

³⁴⁷ Sailers Rebuttal Testimony at 15.

³⁴⁸ Case No. 2022-00105, *Investigation of the Proposed Pole Attachment Tariffs of Investor Owned Electric Utilities*.

³⁴⁹ Sailers Rebuttal Testimony at 16.

Currently, Duke Kentucky does not have a document that accurately reflects the number of poles in use, the corresponding height of those poles, nor the number of attachers on each pole. In fact, Duke Kentucky changed its own pole count throughout this proceeding. In Administrative Order 251, the Commission stated that “the methodology shall be (1) the embedded cost of an average bare pole of the utility of the type and size which is or may be used for the provision of community antenna television (CATV) attachment (2) multiplied by an annual carrying charge, and (3) this product multiplied by the percentage of usable space used for CATV pole attachments.”³⁵⁰ The Commission went on to find that it would allow “deviations from the mathematical elements found reasonable herein only when a major discrepancy exists between the contested element and the average characteristics of the utility, and the burden of proof should be upon the party asserting the need for such deviation.”³⁵¹

In this case, the Commission notes that it does appear that taller poles are being used more frequently for attachment. However, once again, the Commission cannot make specific findings because Duke Kentucky failed to provide accurate information. The calculation should reflect the average of the pole height; an average represents a number reflective of all pole heights used in attachment not just the heights specifically set out in the Administrative Order 251. If the average height reflects use of 45 and 50-foot poles more often than 35 and 40-foot poles, then the utility may attempt to demonstrate that a major discrepancy exists.

³⁵⁰ Administrative Order 251, (Ky. PSC Sept. 17, 1982) at 8.

³⁵¹ Administrative Order 251, (Ky. PSC Sept. 17, 1982) at 19.

The problem herein is that no intervenor, the Commission, nor Duke Kentucky is able to properly attempt to calculate an average because Duke Kentucky failed to provide the information necessary to make an informed decision. As part of imposing fair, just and reasonable rates, the Commission must be able to evaluate the evidence, calculate the rate, and support its findings. The Commission cannot do that in this case. KBCA attempted to calculate rates based on the information in the record but did not provide substantial evidence that its position could be supported by the record that has been amassed in this case. KBCA's evidence merely called into question Duke Kentucky's calculations and rate request.

As pole attachments increase, in part due to a federal push for nationwide broadband services, the Commission finds that Duke Kentucky should undertake a serious attempt to obtain accurate information as to pole height, number of attachers, usable space, and number of poles used for attachment. If the analysis results in a major discrepancy from the formula in Administrative Order 251, then Duke Kentucky should file an application requesting a deviation from the Order, an updated calculation and requested rates.

Miscellaneous Tariff Revisions -- Duke Kentucky also proposed various minor text changes to its tariff. Unless otherwise stated in this Order, the Commission finds that the proposed changes are reasonable and that they should be approved.

Multi-Site Aggregated Demand Commercial Rate – Kroger recommended the Commission direct Duke Kentucky to study the feasibility of a multi-site aggregated demand commercial rate and propose a pilot program in the next rate case that would allow commercial customers to participate in a multi-site rate applicable to the portion of

the demand charge associated with fixed production and transmission costs.³⁵² Kroger argued that the proposed revisions to Rate DT would facilitate a multi-site rate because the revision separates the recovery of production and transmission costs, which would be subject to the aggregated billing demand, from the distribution costs which would not be billed based on aggregated demands.³⁵³ Kroger also argued that a well-designed demand aggregation program places a customer with multiple locations on equal footing with single-site customers by charging participating multi-site customers for the amount of generation and transmission services they actually use.³⁵⁴

Duke Kentucky opposed such a program because it (1) shifts costs to customers that have only one facility, (2) billing would be overly complicated, (3) Duke Kentucky's tariffed rates are based on individual accounts and not groups of accounts, and (4) keeping track of which accounts belong to which customer can be a time-consuming process and result in frequent re-billing issues.³⁵⁵ Duke Kentucky also argued that such a program may constitute discrimination as a group of customers under the same ownership would be treated differently than all others.³⁵⁶ Duke Kentucky also stated that Kroger's recommendation fails to consider existing energy efficiency programs available to commercial customer which would help them reduce their peak demands. Finally, Duke Kentucky argued that commercial customers can take advantage of the non-

³⁵² Direct Testimony of Justin D. Bieber (Bieber Direct Testimony) at 19.

³⁵³ Bieber Direct Testimony at 17.

³⁵⁴ Bieber Direct Testimony at 5.

³⁵⁵ Rebuttal Testimony of James E. Ziolkowski at 3–6.

³⁵⁶ Duke Kentucky's Post-Hearing Brief at 90.

residential time-of-use rate schedules, which would allow the customer to reduce their electric bill by shifting demand from on-peak to off-peak periods.³⁵⁷

The Commission finds that Kroger's proposal is unreasonable and should not be approved. Under Duke Kentucky's current rate schedules, which apply to single sites, it is advantageous for companies like Kroger to use energy efficiently at each site to avoid certain costs. Kroger's proposed Multi-Site Aggregated Demand Commercial Rate would lead to less efficient use of electricity as each individual site would not have to operate as efficiently to avoid certain costs. The Commission also agrees with Duke Kentucky's argument that such a rate would be discriminatory as a group of customers under the same ownership would be treated differently than all other customers with the rate class.

OTHER PROPOSALS

Duke Kentucky proposed to a program to use financial forward power markets to hedge against scheduled and forced outages/derates and periods where market prices are lower than generation costs.³⁵⁸ Duke Kentucky also proposed to include the gains and losses of the hedge program in the FAC.³⁵⁹ Duke Kentucky stated that the hedging program is not designed to result in net fuel cost savings but to reduce risk exposure.³⁶⁰ Duke Kentucky stated that ratepayers have similar exposure to market risk for scheduled and forced outages and economic purchases so Duke Kentucky believes it is in ratepayer's best interest to have a comprehensive hedging program.³⁶¹

³⁵⁷ Rebuttal Testimony of James E. Ziolkowski at 7–8.

³⁵⁸ Direct Testimony of James McClay at 17.

³⁵⁹ McClay Direct Testimony at 19.

³⁶⁰ McClay Direct Testimony at 20.

³⁶¹ McClay Direct Testimony at 19.

Duke Kentucky's previous hedging program for scheduled outages, termed a back-up power supply plan, was approved through May 31, 2022. In Case No. Case 2021-00086, the Commission ordered Duke Kentucky to evaluate whether there is a need for a back-up power supply plan and to provide a long-term cost-effectiveness analysis of its back-up power supply plans. Duke Kentucky did not provide a long-term cost-effectiveness analysis.

The Commission does not agree that ratepayers have similar risks in all situations. The FAC limits recovery of replacement generation for forced outages. While Duke Kentucky demonstrated the volatility and highest prices of the day ahead and real time energy market,³⁶² it did not explain why economic purchases should be hedged. The Commission finds that Duke Kentucky's proposal to hedge forced outages and economic purchases should be denied. The Commission also finds that Duke Kentucky's proposal to hedge scheduled outages should be approved. Duke Kentucky will have the burden of proof in FAC proceedings that the hedging of scheduled outages was reasonable.

IT IS THEREFORE ORDERED that:

1. The rates and charges proposed by Duke Kentucky are denied.
2. The rates and charges, as set forth in Appendix B to this Order, are approved as fair, just and reasonable rates for Duke Kentucky, and these rates and charges are approved for service rendered on and after the date of entry of this Order.
3. Duke Kentucky's proposed depreciation rates are denied and its depreciation rates shall be calculated as discussed in this Order.

³⁶² McClay Direct Testimony at 18.

4. Duke Kentucky's request to amortize the forced and scheduled outage regulatory assets over five years is approved.

5. Duke Kentucky's proposal to continue the deferrals for forced and scheduled outages expenses above and below base rates is denied.

6. Duke Kentucky's request to revise Rider FAC is denied.

7. Except for the tariffs that have been modified or denied, Duke Kentucky's proposed tariffs are approved as filed.

8. Within 20 days of the date of this Order, Duke Kentucky shall file with the Commission, using the Commission's electronic Tariff Filing System, new tariff sheets setting forth the rates, charges, and modifications approved or as required herein and reflecting their effective date and that they were authorized by this Order.

9. Duke Kentucky's proposed changes to its Customer Installations Tariff, as modified herein, is approved.

10. Duke Kentucky's proposal to remove language regarding the option of paying at its offices is denied.

11. Duke Kentucky shall maintain an office that is open five days a week for 40 hours per week in which customers can pay their bills in person without a service fee.

12. Duke Kentucky's proposed late payment charge is approved.

13. Duke Kentucky's proposal to add a non-coincident demand charge to Rate DT is approved.

14. Duke Kentucky's proposed Residential Service Time of Use with Critical Peak Pricing Tariff is approved.

15. Duke Kentucky's proposed Generation Asset True-up Mechanism Tariff is denied.

16. Duke Kentucky's revisions to its Lighting Tariffs, as modified herein, are approved.

17. Duke Kentucky's revisions to its Line Extension Policy Tariff, as modified herein, are approved.

18. Duke Kentucky's revision to its Load Management Rider Tariff is denied.

19. Duke Kentucky's revisions to Rider DIR and Rider BR are denied.

20. Duke Kentucky's revisions to its Green Source Advantage are approved.

21. Duke Kentucky's revisions to its GoGreen Kentucky Tariff, as modified herein, are approved.

22. Duke Kentucky's request to reduce its reconnection fee from \$5.88 to \$5.60 is approved.

23. Duke Kentucky's non-remote reconnection charge is reduced to \$8.25.

24. Duke Kentucky's non-remote reconnection charge is reduced to \$18.

25. Duke Kentucky's field collection charge shall be removed from the tariff.

26. Duke Kentucky's revisions to its Emergency Electric Procedures, as modified herein, are approved.

27. Duke Kentucky's request for a waiver from 807 KAR 5:006 Section 7(a)(3) is denied.

28. Duke Kentucky's request to approve the CEC is denied without prejudice.

29. Duke Kentucky's request to approve the EVSE is denied without prejudice.

30. Duke Kentucky's request to approve the MRC is denied without prejudice.

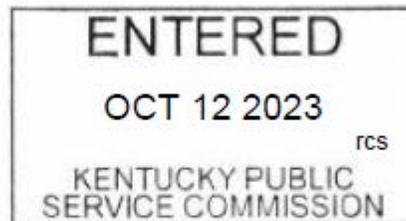
31. Duke Kentucky's proposal to hedge scheduled outages is approved.
32. Duke Kentucky's proposal to hedge forced outages and economic purchases is denied.
33. Duke Kentucky's request to revise pole attachment rates is denied without prejudice.
34. Duke Kentucky's amended Local Government Fee language is denied without prejudice.
35. Duke Kentucky's request to approve the ILIC is denied.
36. This case is closed and removed from the Commission's docket.

PUBLIC SERVICE COMMISSION

Art Cole
Chairman

Austin Hutton *lex KAC*
Vice Chairman *w/permission*

Mary Pat Regan
Commissioner



ATTEST:

Linda E. Brudwell
Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2022-00372 DATED OCT 12 2023

	<u>Amount (millions)</u>
Base Rate Increase Requested by Duke Kentucky	75.177
Reverse Roll-In of ESM Projects to Base Rates	(3.290)
Base Rate Increase Requested by Duke Kentucky Without Roll-In of ESM	<u>71.887</u>
Effects on Base Rate Increase of Rate Base Adjustments	
Reduce Fuel and Lime Inventories For Amounts Financed By Vendors	(0.604)
Correct Error in the Accumulated Depreciation Reserve Balance	(0.011)
Reduce Cash Working Capital to Correct Revenue Lag Error in Lead/Lag Study	(0.460)
Reflect Changes Due to Lower Depr. Expense - 2041 East Bend Retirement	0.245
Reflect Changes Due to Lower Depr. Expense - No Terminal Net Salvage	0.135
Effects on Base Rate Increase of Operating Income Adjustments	
Correct Error to Reflect Amortization of DEBS EDIT	(0.016)
Amortize Remaining Rate Case Expenses from Case No. 2019-00271 Over 5 Years	(0.043)
Reduce Property Tax Expense	(2.062)
Reduce Depreciation Expense to Reflect Revised Retirement Date for East Bend	(10.452)
Reduce Depreciation Expense to Remove Terminal Net Salvage	(5.775)
Reduce Rate Case Expense	(0.102)
Reduce Revenues from Non-recurring Charges	0.022
Reduce Revenues from Pole-Attachment Charges	0.038
Effects on Base Rate Increase of Rate of Return Adjustments	
Modify Capital Structure	(0.392)
Reduce Return on Equity from 10.35% to 9.55%	(4.912)
Total Adjustments to Request	<u>(27.679)</u>
Base Rate Increase After Adjustments	<u>47.498</u>

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2022-00372 DATED OCT 12 2023

The following rates and charges are prescribed for the customers in the area served by Duke Energy Kentucky, Inc. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under the authority of the Commission prior to the effective date of this Order.

RATE RS
RESIDENTIAL SERVICE

Customer Charge per month	\$ 13.00
Energy Charge per kWh:	
All kWh per month	\$ 0.099654
Late Payment Charge	2.3%

RATE RS-TOU-CPP
RESIDENTIAL SERVICE TIME OF USE WITH CRITICAL PEAK PRICING

Customer Charge per month	\$ 13.00
Energy Charge per kWh:	
Critical Peak per kWh per month	\$ 0.248559
On Peak per kWh per month	\$ 0.149126
Off Peak per kWh per month	\$ 0.099417
Discount per kWh per month	\$ 0.079534
Late Payment Charge	2.3%

RATE DS
SERVICE AT SECONDARY DISTRIBUTION VOLTAGE

Customer Charge per month:	
Single Phase Service	\$ 15.00
Three Phase Service	\$ 30.00
Demand Charge per kW:	
First 15 kW	\$ 0.00
Additional kW	\$ 10.21
Energy Charge per kWh:	
First 6,000 kWh	\$ 0.101188
Next 300 kWh/kW	\$ 0.062801
Additional kWh	\$ 0.051751

Non-Church Cap Rate per kWh	\$	0.293673
Church Cap Rate per kWh	\$	0.180289
Late Payment Charge		2.3%

RATE DT
TIME-OF-DAY RATE FOR SERVICE AT DISTRIBUTION VOLTAGE

Customer Charge per month:		
Single Phase	\$	63.50
Three Phase	\$	127.00
Primary Voltage Service	\$	138.00
Demand Charge per kW:		
Summer on-peak	\$	14.02
Winter on-peak	\$	13.26
Off-peak	\$	1.26
Distribution	\$	6.23
Energy Charge per kWh:		
Summer on-peak	\$	0.045679
Winter on-peak	\$	0.043669
Off-peak	\$	0.037671
Primary Service Discount:		
Metering of on-peak billing demand per kW:		
First 1,000 kW	\$	(0.71)
Additional kW	\$	(0.55)
Late Payment Charge		2.3%

RATE EH
OPTIONAL RATE FOR ELECTRIC SPACE HEATING

<u>Winter Period</u>		
Customer Charge per month:		
Single Phase Service	\$	15.00
Three Phase Service	\$	30.00
Primary Voltage Service	\$	117.00
Energy Charge per kWh:		
All kWh per month	\$	0.078414
Late Payment Charge		2.3%

RATE SP
SEASONAL SPORTS SERVICE

Customer Charge per month:	\$ 15.00
Energy Charge per kWh:	
All kWh per month	\$ 0.123760
Late Payment Charge	2.3%

RATE GS-FL
OPTIONAL UNMETERED GENERAL SERVICE RATE FOR SMALL FIXED LOADS

Base Rate per kWh:	
Load range of 540 to 720 hours per month	\$ 0.103034
Loads less than 540 hours per month	\$ 0.118449
Minimum per Fixed Load Location per month:	\$ 3.65
Late Payment Charge	2.3%

RATE DP
SERVICE AT PRIMARY DISTRIBUTION VOLTAGE

Customer Charge per month:	
Primary Voltage Service (12.5 or 34.5 kV)	\$ 117.00
Demand Charge per kW:	
All kW	\$ 9.37
Energy Charge per kWh:	
First 300 kWh/kW	\$ 0.062178
Additional kWh	\$ 0.052875
Late Payment Charge	2.3%

The maximum monthly rate, excluding the customer charge and all applicable riders shall not exceed \$0.285662 per kWh.

RATE TT
TIME-OF-DAY RATE FOR SERVICE AT TRANSMISSION VOLTAGE

Customer Charge per month:	\$ 500.00
Demand Charge per kW:	
Summer on-peak	\$ 9.08
Winter on-peak	\$ 7.45
Off-peak	\$ 1.38
Energy Charge per kWh:	
Summer on-peak	\$ 0.056864
Winter on-peak	\$ 0.054360
Off-peak	\$ 0.046869
Late Payment Charge	2.3%

RIDER GSS
GENERATION SUPPORT SERVICE

Administrative Charge:	\$ 50.00
Monthly Transmission and Distribution Reservation Charge (per kW):	
Rate DS – Secondary Distribution Service	\$ 7.8593
Rate DT – Distribution Service	\$ 10.3382
Rate DP – Primary Distribution Service	\$ 7.8987
Rate TT – Transmission Service	\$ 3.8408

RATE SL
STREET LIGHTING SERVICE

Base Rate per Unit per Month:

OVERHEAD DISTRIBUTION AREA

Standard Fixture (Cobra Head)

Mercury Vapor:

7,000 Lumen	\$ 10.54
7,000 Lumen (Open Refractor)	\$ 8.84
10,000 Lumen	\$ 12.22
21,000 Lumen	\$ 16.40

Metal Halide:

14,000 Lumen	\$ 10.54
20,500 Lumen	\$ 12.22
36,000 Lumen	\$ 16.40

Sodium Vapor:

9,500 Lumen	\$ 11.59
9,500 Lumen (Open Refractor)	\$ 8.73
16,000 Lumen	\$ 12.68
22,000 Lumen	\$ 16.45
27,500 Lumen	\$ 16.45
50,000 Lumen	\$ 22.24

Decorative Fixtures

Sodium Vapor:

9,500 Lumen (Rectilinear)	\$ 14.40
22,000 Lumen (Rectilinear)	\$ 17.88
50,000 Lumen (Rectilinear)	\$ 23.77
50,000 Lumen (Setback)	\$ 35.18

Spans of Secondary Wiring: For each increment of 50 feet of secondary wiring beyond the first 150 feet from the pole, the following price per month shall be added to the price per month per street lighting unit: \$ 0.76

UNDERGROUND DISTRIBUTION AREA

Standard Fixture (Cobra Head)

Mercury Vapor:

7,000 Lumen	\$	10.74
7,000 Lumen (Open Refractor)	\$	8.84
10,000 Lumen	\$	12.44
21,000 Lumen	\$	16.81

Metal Halide:

14,000 Lumen	\$	10.74
20,500 Lumen	\$	12.44
36,000 Lumen	\$	16.81

Sodium Vapor:

9,500 Lumen	\$	11.59
9,500 Lumen (Open Refractor)	\$	8.85
16,000 Lumen	\$	12.64
22,000 Lumen	\$	16.45
27,500 Lumen	\$	16.52
50,000 Lumen	\$	22.24

Decorative Fixture:

Mercury Vapor:

7,000 Lumen (Town & Country)	\$	11.10
7,000 Lumen (Holophane)	\$	13.91
7,000 Lumen (Gas Replica)	\$	31.61
7,000 Lumen (Granville)	\$	11.22
7,000 Lumen (Aspen)	\$	20.07

Metal Halide:

14,000 Lumen (Traditionaire)	\$	11.09
14,000 Lumen (Granville Acorn)	\$	20.07
14,000 Lumen (Gas Replica)	\$	31.72
14,500 Lumen (Gas Replica)	\$	31.72

Sodium Vapor:

9,500 Lumen (Town & Country)	\$	16.08
9,500 Lumen (Holophane)	\$	17.42
9,500 Lumen (Rectilinear)	\$	12.76
9,500 Lumen (Gas Replica)	\$	32.69
9,500 Lumen (Aspen)	\$	20.28
9,500 Lumen (Traditionaire)	\$	16.08
9,500 Lumen (Granville Acorn)	\$	20.28
22,000 Lumen (Rectilinear)	\$	17.97
50,000 Lumen (Rectilinear)	\$	23.85
50,000 Lumen (Setback)	\$	35.18

POLE CHARGES

Pole Description:

Wood:

17 Foot (Wood Laminated)	\$	6.44
30 Foot	\$	6.36
35 Foot	\$	6.44
40 Foot	\$	7.72

Aluminum:

12 Foot (Decorative)	\$	17.52
28 Foot	\$	10.16
28 Foot (Heavy Duty)	\$	10.26
30 Foot (Anchor Base)	\$	20.28

Fiberglass:

17 Foot	\$	6.44
12 Foot (Decorative)	\$	18.83
30 Foot (Bronze)	\$	12.26
35 Foot (Bronze)	\$	12.59

Steel:

27 Foot (11 gauge)	\$	16.56
27 Foot (3 gauge)	\$	24.44

Spans of Secondary Wiring: For each increment of 25 feet of secondary wiring beyond the first 25 feet from the pole, the following price per month shall be added to the price per month per street lighting unit: \$ 1.10

Late Payment Charge 2.3%

RATE TL
TRAFFIC LIGHTING SERVICE

Base Rate per kWh:
Energy only \$ 0.057815

Late Payment Charge 2.3%

RATE UOLS
UNMETERED OUTDOOR LIGHTING ELECTRIC SERVICE

Base Rate per kWh:
All kWh per month \$ 0.056957
Late Payment Charge 2.3%

RATE OL-E
OUTDOOR LIGHTING EQUIPMENT INSTALLATION

Late Payment Charge 2.3%

RATE LED
LED OUTDOOR LIGHTING ELECTRIC SERVICE

Base Rate per kWh:
All kWh per month \$ 0.056957

Monthly Maintenance and Fixture Charge Per Unit Per Month
Fixtures:

	<u>Fixture</u>	<u>Maintenance</u>
50W Neighborhood	\$ 4.25	\$ 2.90
50W Neighborhood with Lens	\$ 4.30	\$ 2.90
50W Standard LED	\$ 3.93	\$ 2.90
70W Standard LED	\$ 4.32	\$ 2.90
110W Standard LED	\$ 4.89	\$ 2.90
150W Standard LED	\$ 4.94	\$ 2.90
220W Standard LED	\$ 6.46	\$ 3.54
280W Standard LED	\$ 6.51	\$ 3.54
50W Acorn LED	\$ 11.98	\$ 2.90
50W Deluxe Acorn LED	\$ 13.36	\$ 2.90
70W LED Open Deluxe Acorn	\$ 13.75	\$ 2.90
50W Traditional LED	\$ 6.45	\$ 2.90
50W Open Traditional LED	\$ 6.72	\$ 2.90
50W Mini Bell LED	\$ 12.30	\$ 2.90
50W Enterprise LED	\$ 11.80	\$ 2.90
70W Sanibel LED	\$ 15.00	\$ 2.90
150W Sanibel LED	\$ 15.63	\$ 2.90
150W LED Teardrop	\$ 18.80	\$ 2.90
50W LED Teardrop Pedestrian	\$ 15.36	\$ 2.90
220W LED Shoebox	\$ 11.66	\$ 3.54
420W LED Shoebox	\$ 17.31	\$ 3.54
530W LED Shoebox	\$ 19.95	\$ 3.54
150W Clermont LED	\$ 20.51	\$ 2.90
130W Flood LED	\$ 7.37	\$ 2.90
260W Flood LED	\$ 11.50	\$ 3.54
50W Monticello LED	\$ 13.81	\$ 2.90
50W Mitchell Finial	\$ 13.15	\$ 2.90
50W Mitchell Ribs, Bands, and Medallions LED	\$ 14.37	\$ 2.90
50W Mitchell Top Hat LED	\$ 13.15	\$ 2.90
50W Mitchell Top Hat with Ribs, Bands, and Medallions LED	\$ 14.37	\$ 2.90

50W Open Monticello LED	\$ 13.75	\$ 2.90
150W LED Shoebox	\$ 10.73	\$ 2.90
50W Sanibel LED	\$ 14.23	\$ 2.90
40W Acorn No Finial LED	\$ 11.48	\$ 2.90
50W Ocala Acorn LED	\$ 6.87	\$ 2.90
50W Deluxe Traditional LED	\$ 13.12	\$ 2.90
30W Town & Country LED	\$ 5.47	\$ 2.90
30W Open Town & Country LED	\$ 5.21	\$ 2.90
150W Enterprise LED	\$ 11.72	\$ 2.90
220W Enterprise LED	\$ 12.06	\$ 3.54
50W Clermont LED	\$ 19.12	\$ 2.90
30W Gaslight Replica LED	\$ 21.81	\$ 2.90
50W Cobra LED	\$ 4.27	\$ 2.90
70W Cobra LED	\$ 4.43	\$ 2.90

Monthly Pole Charges Per Unit Per Month:

Style A 12 Ft Long Anchor Base Top Tenon Aluminum	\$ 9.67
Style A 15 Ft Long Direct Buried Top Tenon Aluminum	\$ 9.00
Style A 15 Ft Long Anchor Base Top Tenon Aluminum	\$ 11.22
Style A 18 Ft Long Direct Buried Top Tenon Aluminum	\$ 9.21
Style A 17 Ft Long Anchor Base Top Tenon Aluminum	\$ 11.96
Style A 25 Ft Long Direct Buried Top Tenon Aluminum	\$ 12.17
Style A 22 Ft Long Anchor Base Top Tenon Aluminum	\$ 15.09
Style A 30 Ft Long Direct Buried Top Tenon Aluminum	\$ 13.82
Style A 27 Ft Long Anchor Base Top Tenon Aluminum	\$ 20.18
Style A 35 Ft Long Direct Buried Top Tenon Aluminum	\$ 16.05
Style A 32 Ft Long Anchor Base Top Tenon Aluminum	\$ 20.71
Style A 41 Ft Long Direct Buried Top Tenon Aluminum	\$ 19.65
Style B 12 Ft Long Anchor Base Post Top Aluminum	\$ 10.99
Style C 12 Ft Long Anchor Base Post Top Aluminum	\$ 13.37
Style C 12 Ft Long Anchor Base Davit Steel	\$ 16.20
Style C 14 Ft Long Anchor Base Top Tenon Steel	\$ 15.28
Style C 21 Ft Long Anchor Base Davit Steel	\$ 34.13
Style C 23 Ft Long Anchor Base Boston Harbor Steel	\$ 39.64
Style D 12 Ft Long Anchor Base Breakaway Aluminum	\$ 12.76
Style E 12 Ft Long Anchor Base Post Top Aluminum	\$ 13.37
Style F 12 Ft Long Anchor Base Post Top Aluminum	\$ 16.30
Legacy Style 39 Ft Direct Buried Single or Twin Side Mount Aluminum Satin Finish	\$ 21.67
Legacy Style 27 Ft Long Anchor Base Side Mount Aluminum Pole Satin Finish Breakaway	\$ 21.18
Legacy Style 33 Ft Long Anchor Base Side Mount Aluminum Pole Satin Finish Breakaway	\$ 22.14
Legacy Style 37 Ft Long Anchor Base Side Mount Aluminum Pole Satin Finish	\$ 24.45
30' Class 7 Wood Pole	\$ 6.71

35' Class 5 Wood Pole	\$ 7.50
40' Class 4 Wood Pole	\$ 8.50
45' Class 4 Wood Pole	\$ 8.85
15' Style A - Fluted - for Shroud - Aluminum Direct Buried Pole	\$ 10.40
20' Style A - Fluted - for Shroud - Aluminum Direct Buried Pole	\$ 10.92
15' Style A - Smooth - for Shroud - Aluminum Direct Buried Pole	\$ 9.00
20' Style A - Smooth - for Shroud - Aluminum Direct Buried Pole	\$ 10.62
21' Style A - Fluted - Direct Buried	\$ 14.89
30' Style A - Transformer Base - Anchor Base	\$ 22.56
35' Style A - Transformer Base - Anchor Base	\$ 25.40
19' Style A - Breakaway - Direct Buried	\$ 20.25
24' Style A - Breakaway - Direct Buried	\$ 21.43
27' Style A - Breakaway - Direct Buried	\$ 20.49
32' Style A - Breakaway - Direct Buried	\$ 20.98
37' Style A - Breakaway - Direct Buried	\$ 22.33
42' Style A - Breakaway - Direct Buried	\$ 23.08
17' Style B - Anchor Base	\$ 15.57
17' Style C - Post Top - Anchor Base	\$ 16.80
17' Style C - Davit - Anchor Base	\$ 26.57
17' Style C - Boston Harbor - Anchor Base	\$ 25.91
25' Style D - Boston Harbor - Anchor Base	\$ 30.21
50' Wood - Direct Buried	\$ 11.02
55' Wood - Direct Buried	\$ 11.61
18' Style C - Breakaway - Direct Buried	\$ 22.97
17' Wood Laminated	\$ 6.85
12' Aluminum (decorative)	\$ 18.61
28' Aluminum	\$ 10.79
28' Aluminum (heavy duty)	\$ 10.91
30' Aluminum (anchor base)	\$ 21.56
17' Fiberglass	\$ 6.85
12' Fiberglass (decorative)	\$ 20.01
30' Fiberglass (bronze)	\$ 13.03
35' Fiberglass (bronze)	\$ 13.38
27' Steel (11 gauge)	\$ 17.60
27' Steel (3 gauge)	\$ 25.97
Shroud – Standard Style for anchor base poles	\$ 2.81
Shroud – Style B Pole for smooth and fluted poles	\$ 6.67
Shroud – Style C Pole for smooth and fluted poles	\$ 8.33
Shroud – Style D Pole for smooth and fluted poles	\$ 10.29
Shroud - Style B - Assembly	\$ 8.72
Shroud - Style C - Assembly	\$ 10.25
Shroud - Style D – Assembly	\$ 12.49

Shroud - Style Standard - Assembly 6"/15"	\$	4.87
Shroud - Style Standard - Assembly 6"/18"	\$	5.30

Pole Foundation Per Month Per Unit:

Flush – Pre-fabricated – Style A Pole	\$	13.78
Flush – Pre-fabricated – Style B Pole	\$	12.71
Flush – Pre-fabricated – Style C Pole	\$	13.64
Flush – Pre-fabricated – Style E Pole	\$	12.71
Flush – Pre-fabricated – Style F Pole	\$	12.71
Flush – Pre-fabricated – Style D Pole	\$	12.71
Reveal – Pre-fabricated – Style A Pole	\$	19.40
Reveal – Pre-fabricated – Style B Pole	\$	15.43
Reveal – Pre-fabricated – Style C Pole	\$	16.01
Reveal – Pre-fabricated – Style D Pole	\$	16.01
Reveal – Pre-fabricated – Style E Pole	\$	16.01
Reveal – Pre-fabricated – Style F Pole	\$	16.01
Screw-in Foundation	\$	8.25

Brackets Per Month Per Unit:

14 inch bracket – wood pole – side mount	\$	2.00
4 foot bracket – wood pole – side mount	\$	2.24
6 foot bracket – wood pole – side mount	\$	2.21
8 foot bracket – wood pole – side mount	\$	2.99
10 foot bracket – wood pole – side mount	\$	4.94
12 foot bracket – wood pole – side mount	\$	4.50
15 foot bracket – wood pole – side mount	\$	5.25
4 foot bracket – metal pole – side mount	\$	5.32
6 foot bracket – metal pole – side mount	\$	5.40
8 foot bracket – metal pole – side mount	\$	6.70
10 foot bracket – metal pole – side mount	\$	7.06
12 foot bracket – metal pole – side mount	\$	6.46
15 foot bracket – metal pole – side mount	\$	7.70
18 inch bracket – metal pole – double flood mount –top mount	\$	2.14
14 inch bracket – metal pole – single mount – top tenon	\$	2.27
14 inch bracket – metal pole – double mount – top tenon	\$	2.45
14 inch bracket – metal pole – triple mount – top tenon	\$	2.61
14 inch bracket – metal pole – quad mount – top tenon	\$	2.72
6 foot – metal pole – single – top tenon	\$	5.04
6 foot – metal pole – double – top tenon	\$	6.39
4 foot – Boston Harbor – top tenon	\$	7.31
6 foot – Boston Harbor – top tenon	\$	7.69

12 foot – Boston Harbor Style C pole double mount – top tenon	\$	13.16
4 foot – Davit arm – top tenon	\$	6.67
18 inch – Cobra head fixture for wood pole	\$	1.89
18 inch – Flood light for wood pole	\$	2.08
18" Metal - Flood - Bullhorn - Top Tenon	\$	2.56
4' Transmission - Top Tenon	\$	9.44
10' Transmission - Top Tenon	\$	10.88
15' Transmission - Top Tenon	\$	11.97
18" Transmission - Flood - Top Tenon	\$	5.03
3' Shepherds Crook - Single - Top Tenon	\$	4.77
3' Shepherds Crook w/ Scroll - Single - Top Tenon	\$	5.29
3' Shepherds Crook - Double - Top Tenon	\$	6.76
3' Shepherds Crook w/ Scroll - Double - Top Tenon	\$	7.59
3' Shepherds Crook w/ Scroll & Festoon - Single Top Tenon	\$	5.54
3' Shepherds Crook w/ Scroll - Wood - Top Tenon	\$	6.60
17" Masterpiece - Top Tenon - Double Post Mount - Top Tenon	\$	5.27
Wiring Equipment Per Month Per Unit:		
Secondary Pedestal (cost per unit)	\$	2.55
Handhole (cost per unit)	\$	3.67
Pullbox	\$	9.30
6AL DUPLEX and Trench (cost per foot)	\$	1.16
6AL DUPLEX and Trench and conduit (cost per foot)	\$	1.34
6AL DUPLEX with existing conduit (cost per foot)	\$	0.85
6AL DUPLEX and Bore with conduit (cost per foot)	\$	2.89
6AL DUPLEX OH wire (cost per foot)	\$	2.72
Late Payment Charge		2.3%
Additional Facilities Charge		0.8292%

RATE NSU
STREET LIGHTING SERVICE - NONSTANDARD UNITS

Rate per Unit per Month:

Company Owned

Boulevard Units Served Underground:

2,500 Lumen Incandescent - Series	\$	13.60
2,500 Lumen Incandescent - Multiple	\$	10.62

Holophane Decorative Served Underground:

10,000 Lumen Mercury Vapor on Fiberglass Pole	\$	24.80
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Spans of Secondary Wiring: For each increment of 25 feet of secondary wiring beyond the first 25 feet from the pole, the following price per month shall be added to the price per month per street lighting unit: \$ 1.10

Street Lighting Served Overhead:

2,500 Lumen Incandescent	\$ 10.53
2,500 Lumen Mercury Vapor	\$ 9.92
21,000 Lumen Mercury Vapor	\$ 15.93

Customer Owned

Steel Boulevard Units Served Underground:

2,500 Lumen Incandescent - Series	\$ 8.07
2,500 Lumens Incandescent - Multiple	\$ 10.26

Late Payment Charge 2.3%

RATE SC
STREET LIGHTING SERVICE – CUSTOMER OWNED

Base Rate per Unit per Month:

Standard Fixture (Cobra Head):

Mercury Vapor:

7,000 Lumen	\$ 6.27
10,000 Lumen	\$ 8.01
21,000 Lumen	\$ 11.14

Metal Halide:

14,000 Lumen	\$ 6.27
20,500 Lumen	\$ 8.01
36,000 Lumen	\$ 11.14

Sodium Vapor:

9,500 Lumen	\$ 7.45
16,000 Lumen	\$ 8.35
22,000 Lumen	\$ 9.20
27,500 Lumen	\$ 9.20
50,000 Lumen	\$ 12.58

Decorative Fixture:

Mercury Vapor:

7,000 Lumen (Holophane)	\$ 7.95
7,000 Lumen (Town & Country)	\$ 7.87
7,000 Lumen (Gas Replica)	\$ 7.95
7,000 Lumen (Aspen)	\$ 7.95

Metal Halide:		
14,000 Lumen (Traditionaire)	\$	7.87
14,000 Lumen (Granville Acorn)	\$	7.95
14,000 Lumen (Gas Replica)	\$	7.95
Sodium Vapor:		
9,500 Lumen (Town & Country)	\$	7.35
9,500 Lumen (Traditionaire)	\$	7.35
9,500 Lumen (Granville Acorn)	\$	7.67
9,500 Lumen (Rectilinear)	\$	7.35
9,500 Lumen (Aspen)	\$	7.67
9,500 Lumen (Holophane)	\$	7.67
9,500 Lumen (Gas Replica)	\$	7.67
22,000 Lumen (Rectilinear)	\$	9.74
50,000 Lumen (Rectilinear)	\$	13.00
<u>Pole Description:</u>		
Wood:		
30 Foot	\$	6.36
35 Foot	\$	6.44
40 Foot	\$	7.72
Customer Owned and Maintained Units per kWh	\$	0.056957
Late Payment Charge		2.3%

RATE SE
STREET LIGHTING SERVICE – OVERHEAD EQUIVALENT

Base Rate per Unit per Month:

Decorative Fixtures:

Mercury Vapor:

7,000 Lumen (Town & Country)	\$	10.82
7,000 Lumen (Holophane)	\$	10.86
7,000 Lumen (Gas Replica)	\$	10.86
7,000 Lumen (Aspen)	\$	10.86

Metal Halide:

14,000 Lumen (Traditionaire)	\$	10.82
14,000 Lumen (Granville Acorn)	\$	10.86
14,000 Lumen (Gas Replica)	\$	10.86

Sodium Vapor:

9,500 Lumen (Town & Country)	\$	11.71
9,500 Lumen (Holophane)	\$	11.89
9,500 Lumen (Rectilinear)	\$	11.71
9,500 Lumen (Gas Replica)	\$	11.87
9,500 Lumen (Aspen)	\$	11.87
9,500 Lumen (Traditionaire)	\$	11.71
9,500 Lumen (Granville Acorn)	\$	11.87
22,000 Lumen (Rectilinear)	\$	16.89
50,000 Lumen (Rectilinear)	\$	22.47
50,000 Lumen (Setback)	\$	22.47

Late Payment Charge 2.3%

RATE DPA
DISTRIBUTION POLE ATTACHMENTS

Annual rental per pole per foot:

Two-User pole	\$	8.59
Three-User pole	\$	7.26

RATE GSA
GREEN SOURCE ADVANTAGE

Late Payment Charge 2.3%

SCHEDULE RTP
REAL-TIME PRICING PROGRAM

Energy Delivery Charge (Credit) per kW per hour from CBL

Secondary Service	\$	0.024809
Primary Service	\$	0.020898
Transmission Service	\$	0.008139
Program Charge per billing period	\$	183.00

NON-RECURRING CHARGES

Remote Reconnection	\$	5.60
Reconnection – Non-remote	\$	8.25
Pole Reconnection	\$	18.00
Field Collection Charge	\$	0.00

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