COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

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

CASE NO. 2018-00261

FILING REQUIREMENTS

VOLUME 13

Duke Energy Kentucky, Inc.
Case No. 2018-00261
Forecasted Test Period Filing Requirements
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Vol. #	Tab #	Filing Requirement	Description	Sponsoring Witness
1	1	KRS 278.180	30 days' notice of rates to PSC.	Amy B. Spiller
1	2	807 KAR 5:001 Section 7(1)	The original and 10 copies of application plus copy for anyone named as interested party.	Amy B. Spiller
1	3	807 KAR 5:001 Section 12(2)	(a) Amount and kinds of stock authorized. (b) Amount and kinds of stock issued and outstanding. (c) Terms of preference of preferred stock whether cumulative or participating, or on dividends or assets or otherwise. (d) Brief description of each mortgage on property of applicant, giving date of execution, name of mortgagor, name of mortgagee, or trustee, amount of indebtedness authorized to be secured thereby, and the amount of indebtedness actually secured, together with any sinking fund provisions. (e) Amount of bonds authorized, and amount issued, giving the name of the public utility which issued the same, describing each class separately, and giving date of issue, face value, rate of interest, date of maturity and how secured, together with amount of interest paid thereon during the last fiscal year. (f) Each note outstanding, giving date of issue, amount, date of maturity, rate of interest, in whose favor, together with amount of interest paid thereon during the last fiscal year. (g) Other indebtedness, giving same by classes and describing security, if any, with a brief statement of the devolution or assumption of any portion of such indebtedness upon or by person or corporation if the original liability has been transferred, together with amount of interest paid thereon during the last fiscal year. (h) Rate and amount of dividends paid during the five (5) previous fiscal years, and the amount of capital stock on which dividends were paid each year. (i) Detailed income statement and balance sheet.	Robert H. "Beau" Pratt Michael Covington
1	4	807 KAR 5:001 Section 14(1)	Full name, mailing address, and electronic mail address of applicant and reference to the particular provision of law requiring PSC approval.	Amy B. Spiller
1	5	807 KAR 5:001 Section 14(2)	If a corporation, the applicant shall identify in the application the state in which it is incorporated and the date of its incorporation, attest that it is currently in good standing in the state in which it is incorporated, and, if it is not a Kentucky corporation, state if it is authorized to transact business in Kentucky.	Amy B. Spiller

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

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

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

11	39	807 KAR 5:001 Section 16(7)(s)	Summary of latest depreciation study with schedules itemized by major plant accounts, except that telecommunications utilities adopting PSC's average depreciation rates shall identify current and base period depreciation rates used by major plant accounts. If information has been filed in another PSC case, refer to that case's number and style.	John J. Spanos
11	40	807 KAR 5:001 Section 16(7)(t)	List all commercial or in-house computer software, programs, and models used to develop schedules and work papers associated with application. Include each software, program, or model; its use; identify the supplier of each; briefly describe software, program, or model; specifications for computer hardware and operating system required to run program	Sarah E. Lawler
11	41	807 KAR 5:001 Section 16(7)(u)	If utility had any amounts charged or allocated to it by affiliate or general or home office or paid any monies to affiliate or general or home office during the base period or during previous 3 calendar years, file: 1. Detailed description of method of calculation and amounts allocated or charged to utility by affiliate or general or home office for each allocation or payment; 2. method and amounts allocated during base period and method and estimated amounts to be allocated during forecasted test period; 3. Explain how allocator for both base and forecasted test period was determined; and 4. All facts relied upon, including other regulatory approval, to demonstrate that each amount charged, allocated or paid during base period is reasonable.	Jeffrey R. Setser
11	42	807 KAR 5:001 Section 16(7)(v)	If gas, electric or water utility with annual gross revenues greater than $5,000,000, cost of service study based on methodology generally accepted in industry and based on current and reliable data from single time period.	James E. Ziolkowski
11	43	807 KAR 5:001 Section 16(7)(w)	Local exchange carriers with fewer than 50,000 access lines need not file cost of service studies, except as specifically directed by PSC. Local exchange carriers with more than 50,000 access lines shall file: 1. Jurisdictional separations study consistent with Part 36 of the FCC's rules and regulations; and 2. Service specific cost studies supporting pricing of services generating annual revenue greater than $1,000,000 except local exchange access: a. Based on current and reliable data from single time period; and b. Using generally recognized fully allocated, embedded, or incremental cost principles.	N/A
11	44	807 KAR 5:001 Section 16(8)(a)	Jurisdictional financial summary for both base and forecasted periods detailing how utility derived amount of requested revenue increase.	Sarah E. Lawler

11	45	807 KAR 5:001 Section 16(8)(b)	Jurisdictional rate base summary for both base and forecasted periods with supporting schedules which include detailed analyses of each component of the rate base.	Sarah E. Lawler Cynthia S. Lee Robert H. "Beau" Pratt John R. Panizza James E. Ziolkowski Michael Covington
11	46	807 KAR 5:001 Section 16(8)(c)	Jurisdictional operating income summary for both base and forecasted periods with supporting schedules which provide breakdowns by major account group and by individual account.	Sarah E. Lawler
11	47	807 KAR 5:001 Section 16(8)(d)	Summary of jurisdictional adjustments to operating income by major account with supporting schedules for individual adjustments and jurisdictional factors.	Sarah E. Lawler Cynthia S. Lee Robert H. "Beau" Pratt James E. Ziolkowski
11	48	807 KAR 5:001 Section 16(8)(e)	Jurisdictional federal and state income tax summary for both base and forecasted periods with all supporting schedules of the various components of jurisdictional income taxes.	John R. Panizza
11	49	807 KAR 5:001 Section 16(8)(f)	Summary schedules for both base and forecasted periods (utility may also provide summary segregating items it proposes to recover in rates) of organization membership dues; initiation fees; expenditures for country club; charitable contributions; marketing, sales, and advertising; professional services; civic and political activities; employee parties and outings; employee gifts; and rate cases.	Sarah E. Lawler
11	50	807 KAR 5:001 Section 16(8)(g)	Analyses of payroll costs including schedules for wages and salaries, employee benefits, payroll taxes, straight time and overtime hours, and executive compensation by title.	Sarah E. Lawler Renee H. Metzler
11	51	807 KAR 5:001 Section 16(8)(h)	Computation of gross revenue conversion factor for forecasted period.	Sarah E. Lawler
11	52	807 KAR 5:001 Section 16(8)(i)	Comparative income statements (exclusive of dividends per share or earnings per share), revenue statistics and sales statistics for 5 calendar years prior to application filing date, base period, forecasted period, and 2 calendar years beyond forecast period.	Michael Covington Robert H. "Beau" Pratt
11	53	807 KAR 5:001 Section 16(8)(j)	Cost of capital summary for both base and forecasted periods with supporting schedules providing details on each component of the capital structure.	Robert H. "Beau" Pratt
11	54	807 KAR 5:001 Section 16(8)(k)	Comparative financial data and earnings measures for the 10 most recent calendar years, base period, and forecast period.	Cynthia S. Lee Robert H. "Beau" Pratt Michael Covington
11	55	807 KAR 5:001 Section 16(8)(l)	Narrative description and explanation of all proposed tariff changes.	Bruce L. Sailers
11	56	807 KAR 5:001 Section 16(8)(m)	Revenue summary for both base and forecasted periods with supporting schedules which provide detailed billing analyses for all customer classes.	Bruce L. Sailers
11	57	807 KAR 5:001 Section 16(8)(n)	Typical bill comparison under present and proposed rates for all customer classes.	Bruce L. Sailers
11	58	807 KAR 5:001 Section 16(9)	The commission shall notify the applicant of any deficiencies in the application within thirty (30) days of the application's submission. An application shall not be accepted for filing until the utility has cured all noted deficiencies.	William Don Wathen, Jr.

11	59	807 KAR 5:001 Section (17)(1)	(1) Public postings. (a) A utility shall post at its place of business a copy of the notice no later than the date the application is submitted to the commission. (b) A utility that maintains a Web site shall, within five (5) business days of the date the application is submitted to the commission, post on its Web sites: 1. A copy of the public notice; and 2. A hyperlink to the location on the commission's Web site where the case documents are available. (c) The information required in paragraphs (a) and (b) of this subsection shall not be removed until the commission issues a final decision on the application.	Amy B. Spiller
11	60	807 KAR 5:001 Section 17(2)	(2) Customer Notice. (a) If a utility has twenty (20) or fewer customers, the utility shall mail a written notice to each customer no later than the date on which the application is submitted to the commission. (b) If a utility has more than twenty (20) customers, it shall provide notice by: 1. Including notice with customer bills mailed no later than the date the application is submitted to the commission; 2. Mailing a written notice to each customer no later than the date the application is submitted to the commission; 3. Publishing notice once a week for three (3) consecutive weeks in a prominent manner in a newspaper of general circulation in the utility's service area, the first publication to be made no later than the date the application is submitted to the commission; or 4. Publishing notice in a trade publication or newsletter delivered to all customers no later than the date the application is submitted to the commission. (c) A utility that provides service in more than one (1) county may use a combination of the notice methods listed in paragraph (b) of this subsection.	Amy B. Spiller

11	61	807 KAR 5:001 Section 17(3)	(3) Proof of Notice. A utility shall file with the commission no later than forty-five (45) days from the date the application was initially submitted to the commission: (a) If notice is mailed to its customers, an affidavit from an authorized representative of the utility verifying the contents of the notice, that notice was mailed to all customers, and the date of the mailing; (b) If notice is published in a newspaper of general circulation in the utility's service area, an affidavit from the publisher verifying the contents of the notice, that the notice was published, and the dates of the notice's publication; or (c) If notice is published in a trade publication or newsletter delivered to all customers, an affidavit from an authorized representative of the utility verifying the contents of the notice, the mailing of the trade publication or newsletter, that notice was included in the publication or newsletter, and the date of mailing.	Amy B. Spiller

11	62	807 KAR 5:001 Section 17(4)	(4) Notice Content. Each notice issued in accordance with this section shall contain: (a) The proposed effective date and the date the proposed rates are expected to be filed with the commission; (b) The present rates and proposed rates for each customer classification to which the proposed rates will apply; (c) The amount of the change requested in both dollar amounts and percentage change for each customer classification to which the proposed rates will apply; (d) The amount of the average usage and the effect upon the average bill for each customer classification to which the proposed rates will apply, except for local exchange companies, which shall include the effect upon the average bill for each customer classification for the proposed rate change in basic local service; (e) A statement that a person may examine this application at the offices of (utility name) located at (utility address); (f) A statement that a person may examine this application at the commission's offices located at 211 Sower Boulevard, Frankfort, Kentucky, Monday through Friday, 8:00 a.m. to 4:30 p.m., or through the commission's Web site at http://psc.ky.gov; (g) A statement that comments regarding the application may be submitted to the Public Service Commission through its Web site or by mail to Public Service Commission, Post Office Box 615, Frankfort, Kentucky 40602; (h) A statement that the rates contained in this notice are the rates proposed by (utility name) but that the Public Service Commission may order rates to be charged that differ from the proposed rates contained in this notice; (i) A statement that a person may submit a timely written request for intervention to the Public Service Commission, Post Office Box 615, Frankfort, Kentucky 40602, establishing the grounds for the request including the status and interest of the party; and (j) A statement that if the commission does not receive a written request for intervention within thirty (30) days of initial publication or mailing of the notice, the commission may take final action on the application.	Bruce L. Sailers
11	63	807 KAR 5:001 Section 17(5)	(5) Abbreviated form of notice. Upon written request, the commission may grant a utility permission to use an abbreviated form of published notice of the proposed rates, provided the notice includes a coupon that may be used to obtain all the required information.	N/A

12	-	807 KAR 5:001 Section 16(8)(a) through (n)	Schedule Book, including Work Papers (Schedules A-N)	Various
13	-	807 KAR 5:001 Section 16(7)(a)	Testimony (Volume 1 of 3)	Various
14	-	807 KAR 5:001 Section 16(7)(a)	Testimony (Volume 2 of 3)	Various
15	-	807 KAR 5:001 Section 16(7)(a)	Testimony (Volume 3 of 3)	Various
16-17	-	KRS 278.2205(6)	Cost Allocation Manual	Legal

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

The Electronic Application of Duke Energy Kentucky, Inc., for: 1) An Adjustment of the Natural Gas Rates; 2) Approval of a Decoupling Mechanism; 3) Approval of New Tariffs; and 4) All Other Required Approvals, Waivers, and Relief.	))))))	Case No. 2018-00261

DIRECT TESTIMONY OF

AMY B. SPILLER

ON BEHALF OF

DUKE ENERGY KENTUCKY, INC.

August 31, 2018

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ABS-2 - Q-1 Duke Energy Midwest Fastrack Quarterly Report

ABS-3 - Duke Energy Midwest Fastrack June 2017 Update

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

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

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

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

Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.

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

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

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

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

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

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

A. No.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THESE PROCEEDINGS?

A. My testimony provides an overview of Duke Energy Kentucky's natural gas business operations and community involvement in our northern Kentucky service territory. I discuss Duke Energy Kentucky's levels of customer satisfaction and how the constructive regulatory treatment sought in these proceedings will enable the Company to meet our customers' expectations of safe, reliable, adequate, reasonable, and affordable natural gas service. I then discuss the major developments since the Company's last natural gas base rate case, Case No. 2009-00202 (2009 Rate Case), including, but not limited to, the implementation and success of our accelerated service replacement program (ASRP), and the Company's deployment of advanced metering infrastructure (AMI) and automated meter reading (AMR) devices for natural gas service.

I next provide an overview of Duke Energy Kentucky's need for an increase in natural gas rates and the reasonableness of this request. In this regard, I also address the Company's proposals to implement a new cost recovery mechanism for weather normalization adjustments (WNA) to the Company's rates. I also introduce the other witnesses who testify on the Company's behalf and, in doing so; provide an overview of their testimony.

I sponsor several Filing Requirements (FR), including those required under 807 KAR 5:001: FR 14(1) through FR 14(4), FR 16(1)(b)(1), FR 16(1)(b)(2), FR 16(1)(b)(5), FR 16(2), and FR 16(3). I discuss the existing programs to achieve improvements in efficiency and productivity and the purpose

of each program, as required by FR 16(7)(a). I provide the management statement of attestation, required by FR 16(7)(e), concerning the forecasted financial data. Finally, I sponsor the affidavit in support of the notice requirements under FR 17(1) through (3).

II. OVERVIEW OF KENTUCKY OPERATIONS

A. COMPANY OVERVIEW

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

A. Duke Energy Kentucky provides natural gas service to approximately 99,500 customers in Bracken, Boone, Campbell, Gallatin, Grant, Kenton, and Pendleton counties in northern Kentucky.[1] The Company owns, operates, and maintains approximately 1,453 miles of gas mains on our natural gas distribution system.

Duke Energy Kentucky's natural gas customer classes include approximately 92,000 residential customers, 6,500 commercial customers, and just over 200 industrial customers. Additionally, the Company provides service to numerous public authorities, as well as firm and interruptible transportation customers. Although not heavily industrialized, our relatively densely populated territory consists of a diverse mix of commercial and industrial customers that includes automotive suppliers, food production, transportation, colleges and universities, manufacturing and retail, and health care providers.

The Company's local operations as it relates to natural gas utility service are as follows:

[1] Duke Energy Kentucky also provides electric service to approximately 146,000 customers in Boone, Campbell, Gallatin, Grant, Kenton, and Pendleton counties.

- Cincinnati, Ohio – the headquarters for Duke Energy Kentucky, the Queens Gate meter testing facility, and Kellogg Avenue Resource Center
- Monroe, Ohio - Todhunter Resource Center
- Monford Heights, Ohio - Resource Center
- Erlanger, Kentucky – Duke Energy Kentucky's construction and maintenance facility
- Covington, Kentucky – Duke Energy Kentucky's meter reading operations

From these locations, Duke Energy Kentucky directs the planning, construction, operation, and maintenance of our natural gas transmission and distribution systems.

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

A. Duke Energy is one of the largest utility companies in the United States. Through a series of mergers and acquisitions, including the 2006 merger with Cinergy, the 2012 merger with Progress Energy, and the more recent merger with Piedmont Natural Gas Company (Piedmont), Duke Energy now serves approximately 7.4 million electric customers and over 1.5 million natural gas customers, representing a population of over 24 million in seven states, comprising Kentucky, Ohio, Indiana, Florida, North Carolina, South Carolina, and Tennessee.

Q. PLEASE DESCRIBE HOW BEING A PART OF THE DUKE ENERGY FAMILY OF COMPANIES ASSISTS DUKE ENERGY KENTUCKY IN PROVIDING SAFE, RELIABLE, ADEQUATE, REASONABLE, AND AFFORDABLE NATURAL GAS SERVICE TO ITS KENTUCKY CUSTOMERS.

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

The recent merger with Piedmont brought additional operational experience from the natural gas industry. The Duke Energy Gas Operations team now consists of many legacy Piedmont leaders who have industry-leading experience in safely managing natural gas systems. In addition to the Kentucky and Ohio natural gas operations, the Duke Energy natural gas system now consists of 22,000 miles of distribution line and nearly 3,000 miles of transmission lines in North Carolina, South Carolina, and Tennessee.

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

Consequently, Duke Energy Kentucky's customers have access to resources, including a highly trained and dedicated workforce from multiple jurisdictions that are familiar with the Company's systems and are experienced in the safe operation of the Company's utility infrastructure, thereby enabling the continued and efficient operation of Duke Energy Kentucky's natural gas utility system. Pursuant to Commission-approved service agreements, Duke Energy Kentucky is allocated only a portion of these costs. Although this structure affords significant benefit to our customers, it is not a structure with which they have reason to take notice. Indeed, the legal entity structure and relationships discussed above are essentially invisible to and seamless for our Kentucky customers, who receive all of their utility services from Duke Energy Kentucky. This corporate structure is designed such that our Kentucky customers will continue to receive safe, reliable, adequate, reasonable and affordable natural gas service without regard to corporate structure or organization.

B. COMMUNITY ENGAGEMENT

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

A. Duke Energy Kentucky embraces its responsibility to promote economic development in the communities in which we do business. We appreciate that access to affordable, reliable utility service is a critical factor in a company's decision about where to locate or expand its facilities and Duke Energy Kentucky is well positioned to meet our customers' energy needs and attract job-creating industry and capital investment to our service territory. However, business clients

need more than reliable utility service. They also need readily available building sites, access to state and local incentives, flexible workforce training programs, and proximity to a community of customers and business partners. Duke Energy Kentucky assists in meeting these needs through our partnerships with our local communities and the Commonwealth of Kentucky.

In 2017, Site Selection magazine named Duke Energy to its Top 10 Utilities in Site Selection for North America for the nineteenth consecutive year. Additionally, Site Selection recognized Duke Energy's "Site Readiness" program as a best practice. This program is designed to improve large tracts of industrial land in the service territory, moving them closer to being "fully marketable." In collaboration with local economic development organizations, Duke Energy offers funding to local communities that have taken advantage of the program and spent dollars improving participant sites. In addition to this successful program, our economic development team collaborates with local, regional, and state economic development professionals in attracting new business and jobs to our communities, whether in the field of manufacturing, logistics, distribution, or professional services.

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

We estimate that our cooperative efforts, along with those of state and local economic development officials, have contributed to the creation of nearly 21,000 northern Kentucky jobs and more than $3 billion of capital investment in northern Kentucky since 2006.

Duke Energy Kentucky's employees have actively served on several boards and committees of organizations in the community that promote economic development in the region. Some of these organizations include:

- Catalytic Funding Corp. of Northern Kentucky
- GROW NKY
- Northern Kentucky Tri-ED
- Northern Kentucky Chamber of Commerce
- Kentucky Chamber of Commerce
- Kentucky Association of Economic Development
- NKY Regional Alliance
- Horizon Community Funds of Northern Kentucky
- REDI
- Cintrifuse
- Cincinnati USA Regional Chamber of Commerce
- Cincinnati Business Committee, Economic Development
- Cincinnati Center City Development Corporation
- Greater Cincinnati Chinese Chamber of Commerce

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

A. Duke Energy Kentucky has made good corporate citizenship a priority by giving back to the communities we serve. Since 2009, Duke Energy Kentucky and the Duke Energy Foundation have contributed approximately $4 million in shareholder dollars to Kentucky charitable organizations. But our contributions are not only financial in nature. Rather, consistent with the culture of Duke Energy, our employees and retirees and their families regularly give back to our communities by volunteering their time. Indeed, during 2017 alone, we had fifteen volunteer events in Kentucky where employees and retirees and their families volunteered over 700 hours of their time.

Q. DESCRIBE THE METHODS EMPLOYED BY DUKE ENERGY KENTUCKY TO ENGAGE WITH CUSTOMERS.

A. Our customers depend on the services we provide to power their lives. Moreover, in this very diverse and dynamic environment, it is important that our customers are able to engage with Duke Energy Kentucky via a variety of platforms. Consequently, customers have opportunities to interact with the Company through various customer service channels both directly and remotely. These programs include:

- Focus Groups for small/medium businesses
- Contact Centers
- Business Service Center
- Pay Agents
- Automated Phone Service
- Enhanced Web Functionality for Online Services

Q. DO CUSTOMERS HAVE OPTIONS FOR BOTH MANAGING AND PAYING THEIR BILLS?

A. Yes. Duke Energy Kentucky has a number of programs designed to allow customers to conveniently manage their bills:

- Budget Billing
- Adjusted Due Date
- Extended Payment Agreements
- Home Energy Assistance

Although customers are able to pay their bills using the United States Postal Service, they also have other options. The Company offers a number of convenient bill payment options, which include:

- Speedpay
- e-bill
- Payment Advantage

C. CUSTOMER SATISFACTION

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

A. Duke Energy Kentucky strives to consistently provide high quality customer service. We currently measure customer satisfaction performance through two primary tools: the annual J.D. Power Natural Gas Utility Residential Customer Satisfaction Study (J.D. Power Study) and Duke Energy's proprietary transaction survey – Fastrack.

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

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

The J.D. Power Study calculates overall customer satisfaction based on six performance areas: (1) safety and reliability; (2) billing and payment; (3) price and value; (4) corporate citizenship; (5) communications; and (6) customer service. J.D. Power published the results for Waves 1-3 of its 2018 Customer Satisfaction Study on June 5, 2018.[3] Attachment ABS-1 is an excerpt from this recent publication that provides a relevant summary of residential customer satisfaction for the country's 84 midsize and large natural gas utilities.

Although the results indicate that our overall satisfaction is below the industry average in the Midwest Region, Duke Energy Midwest is a top quartile performer in Field Customer Service and is above the industry average in other categories. These other categories are efforts to help customers reduce their bills and involvement in local charities and civic organizations. The results indicate that Duke Energy has a number of strengths compared to our peers nationally and

[3] The 2018 J.D. Power Gas Utility Residential Customer Satisfaction Study is comprised of four waves of interviews: 1) September/October 2017; 2) December 2017/January 2018; 3) March/April 2018; and 4) June/July 2018. The June/July 2018 wave of results will be released on or about September 11, 2018.

will prompt us to continue focusing on areas where we are not above the industry average.

Q. PLEASE DESCRIBE FAST TRACK AND THE COMPANY'S FASTRACK PERFORMANCE.

A. In addition to the independent J.D. Power Study, our internal customer satisfaction measurements continue to reflect strong performance in meeting the needs of our customers. Through Fastrack, Duke Energy's proprietary transaction study, we regularly survey residential customers who have had a recent service interaction with Duke Energy Kentucky.

Fastrack is administered to a random sample of customers roughly 24-48 hours after these customers have a service interaction/experience with the Company. Customers respond to this live phone interview and provide ratings on their overall satisfaction, as well as ratings on each part of their end-to-end experience. Two key processes are measured by these surveys, reflecting the majority of natural gas interactions customers have with Duke Energy Kentucky: (1) service initiation requests (requests to turn on or transfer service); and (2) billing issues (billing inquiries/requests/complaints). The results of these surveys enable Duke Energy Kentucky to identify what aspects of the customer journey are working well and what aspects could be enhanced to better the customer experience. These surveys are conducted daily (except Sundays and major holidays) throughout the year by an independent research firm – Bellomy Research. Since 2014, we have accumulated over 3,000 Duke Energy Kentucky survey responses, which represent the "voice" of our Kentucky customers.

The results are expressed on the basis of the percentage of respondents who are highly satisfied and the percentage who are least satisfied. Using a ranking system of zero to ten, customers who rated the Company an eight or higher are considered to be highly satisfied and those who rated the Company at a four or below are considered to be least satisfied. Attachments ABS-2 and ABS-3 are copies of the Q-1 Duke Energy Midwest Fastrack Quarterly Report and the Duke Energy Midwest Fastrack June 2018 Update, respectively.

Duke Energy Kentucky's customer satisfaction scores indicate that overall customer satisfaction is relatively high and either steady or improving. Through the first six months of 2018, customers provided the following ratings:

- **Service Initiation (Natural gas):** 91 percent of Duke Energy Kentucky residential customers were highly satisfied with their overall Service Initiation experience; and
- **Billing Questions/Requests/Complaints:** 84 percent of Duke Energy Kentucky residential customers were highly satisfied with their overall Billing experience.

These surveys also indicate that our customers want timely gas service initiation and better communication to keep them informed. While 91 percent of our Kentucky customers are highly satisfied with service initiation, according to customer comments, we have room for improvement on timely appointment windows and better communication to prevent multiple call backs.

D. DEVELOPMENTS SINCE THE COMPANY'S LAST NATURAL GAS RATE CASE

Q. PLEASE SUMMARIZE THE SIGNIFICANT OPERATIONAL DEVELOPMENTS THAT HAVE OCCURRED SINCE THE 2009 RATE CASE.

A. With the 2009 Rate Case, Duke Energy Kentucky completed our Accelerated Main Replacement Program, the first in the state to begin such a program and the first to complete the program. In 2016, the Company implemented our ASRP to methodically replace pre-1971, steel and other metallic unprotected services (main-to-curb and curb-to-meter) that remained on the Company's natural gas delivery system. With the Application in these proceedings, the Company is concluding our ASRP initiative, having completed the program both ahead of schedule and under initial cost projections.

In July of 2012, Duke Energy completed its merger with Progress Energy. This combination has expanded Duke Energy Kentucky's access to, and the availability of, resources and expertise and resulted in the implementation of best practices. The positive attributes of this merger are reflected in annual reports filed with the Commission.

In October 2016, Duke Energy completed its merger with Piedmont, further expanding its resource base and expertise in the area of natural gas delivery. Duke Energy Kentucky now benefits from a larger pool of natural gas expertise, which enhances our ability to provide safe, reliable, adequate, reasonable, and affordable natural gas service.

Q. PLEASE SUMMARIZE THE SIGNIFICANT NATURAL GAS INVESTMENTS THE COMPANY HAS MADE SINCE THE 2009 RATE CASE.

A. Duke Energy Kentucky continues to make prudent operational decisions and investments in our natural gas delivery system. In 2016, Duke Energy Kentucky commenced construction of our Big Bone natural gas pipeline-a new, twelve-inch natural gas pipeline. This pipeline spans approximately ten miles, from Walton to Big Bone, Kentucky, and was needed in response to load growth and from a system reliability standpoint. The Company has recently completed construction of and placed this pipeline into service.

More recently, the Company received approval and commenced deployment of an AMI/AMR metering system. This deployment will provide the platform for the Company to provide better communication with our customers regarding their usage. Duke Energy Kentucky witness Gary Hebbeler discusses these investments in greater detail in his direct testimony.

Q. PLEASE BRIEFLY DISCUSS THE NEED FOR CONTINUING INVESTMENTS IN THE DISTRIBUTION SYSTEM.

A. Duke Energy Kentucky has regularly made prudent investments in our natural gas delivery system, as needed for its continued safe, reliable, and efficient operation. And, over the years, the system has evolved, consistent with applicable standards, changes in technology, and, importantly, changes in our customers' expectations. Our investments and the manner in which they are made have thus also evolved. The Company continues to explore strategies and opportunities to make prudent

investments to improve not only the performance of our natural gas delivery system, but also how we interact directly with our customers. These strategies include examination of new operational technologies including but not limited to in-line inspections, metering infrastructure, and additional communication platforms.

Q. DO ANY SUCH FUTURE INVESTMENTS COME TO MIND?

A. Yes. Looking forward, Duke Energy Kentucky will be updating our existing Customer Information System (CIS) to a new, state of the art system. This software investment will occur over time and will be fully in service by 2022 as part of a consolidated Duke Energy effort to modernize the customer experience in all jurisdictions and provide greater flexibility and efficiency in meeting ever-evolving customer expectations. Duke Energy Kentucky's current CIS' primary function, as designed, was to use the aggregated usage data for simple billing purposes for each individual meter. The utility industry, however, is not now limited to such simplistic transactions as customers desire more information to better understand and control their energy consumption.

Advanced meters and associated components, for example, have the capability of recording more frequent and detailed usage data. This data, in turn, can create personalized opportunities for customers according to their preferences, whether in the form of rate options or other usage-related services. Duke Energy Kentucky intends to continue transforming our natural gas utility service in order to position our customers to have more control, convenience, and information as well as flexible billing options. A more robust and capable CIS is necessary to

enable the Company to meet customer expectations for greater convenience, control, transparency, and access to information.

Q. HAVE THERE BEEN ANY LEGAL OR REGULATORY CHANGES SINCE THE 2009 RATE CASE THAT HAVE IMPACTED THE COST OF PROVIDING UTILITY SERVICE?

A. Yes. There have been at least two significant developments since 2009 that impact the Company's cost of providing natural gas distribution service. First, as a result of the Tax Act and Jobs Creation Act of 2017 (TCJA), the corporate income tax rate for companies such as Duke Energy Kentucky was reduced from 35 percent to 21 percent. The TCJA also resulted in other changes that will be discussed more fully in the direct testimony of Company witnesses, Mr. John Panizza and Mr. William Don Wathen Jr. Generally, the impact of the TCJA will be to reduce the Company's revenue requirement, at least for the foreseeable future.

The second major legal or regulatory action involves new rules promulgated by the Pipeline and Hazardous Materials Safety Administration (PHMSA). As discussed in the direct testimony of Company witness Hebbeler, since the 2009 Rate Case, the Company has implemented both distribution and transmission integrity management programs in compliance with these PHMSA regulations.

Q. ARE THERE ANY TRENDS THAT HAVE IMPACTED THE COMPANY'S ABILITY TO RECOVER ITS COST OF SERVICE?

A. Yes. Customer behavior and technology advances have served to reduce the average consumption of most customers. Although industrial load has been steady to higher, typical residential and commercial customers have reduced their average consumption since our last natural gas base rate case. As further explained by Mr. Wathen, a decline in volumetric sales has contributed to the Company's inability to recover its costs of service.

Q. NOTWITSHTANDING THE CHANGES YOU PREVIOUSLY MENTIONED, DO YOU BELIEVE DUKE ENERGY KENTUCKY SUCCESSFULLY MANAGED ITS COSTS OF PROVIDING SERVICE TO CUSTOMERS SINCE ITS 2009 RATE CASE?

A. Yes. Duke Energy Kentucky has proven itself successful and capable of implementing initiatives to manage its costs to serve. Since the 2009 Rate Case, Duke Energy Kentucky has been part of two significant utility mergers that have enabled the Company to implement best practices and to find opportunities to operate more efficiently.

Despite these best efforts, the Company can no longer continue to operate at the current level without seeking an increase in base natural gas rates. The Company is entering into a period where, due to our aging system, changes in customer consumption levels, and changes in laws, we must make additional investments in our natural gas delivery system to continue to provide reasonable and adequate service and to have the opportunity to earn a fair and reasonable return.

III. OVERVIEW OF DUKE ENERGY KENTUCKY'S RATE CASE

Q. PLEASE EXPLAIN WHY DUKE ENERGY KENTUCKY PROPOSES TO INCREASE RETAIL NATURAL GAS RATES.

A. Duke Energy Kentucky's natural gas base rates were last updated almost a decade ago and, today, those rates are not sufficient to cover our costs of service and do not provide an opportunity to earn a fair rate of return on investments. Duke Energy Kentucky also needs to reflect the changes in costs of service related to capital investments and the operations and maintenance of our natural gas infrastructure. Although the Company has added customers over time, our customers are using significantly less gas today than just a few years ago. Consequently, the growth in the numbers of customers, albeit positive, has not offset the loss due to volumetric sales or increases in costs. These factors have prompted the Company to propose new rates, as reflected in these proceedings.

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

A. Duke Energy Kentucky proposes to increase our natural gas base rates in order to increase annual base natural gas rate revenues by approximately $10.5 million. This increase is primarily driven by investments in plant in service that have occurred since the 2009 Rate Case and that are forecasted to be completed during the proposed test period. The Company is also seeking to recover, through amortization, a regulatory asset related to pipeline integrity work previously authorized for deferral by this Commission and is also proposing to establish the return component of our overall cost of service using the more common rate base

approach rather than using allocated capitalization. Additionally, the Company is also proposing to implement a WNA mechanism to enable the Company to mitigate the impact of weather on customers' natural gas rates.

This rate increase is necessary in order to allow Duke Energy Kentucky to recover its costs for providing reliable natural gas service and have the opportunity to earn a fair return on its capital investments.

Q. WHAT TEST PERIOD IS THE COMPANY USING IN THESE PROCEEDINGS?

A. Duke Energy Kentucky is using a forecasted test period that spans the twelve months beginning April 1, 2019, and ending March 31, 2020. Duke Energy Kentucky witness Robert "Beau" Pratt explains how the Company determined the basis for the forecasted test period.

Q. PLEASE BRIEFLY DESCRIBE THE COMPANY'S PROPOSAL TO USE THE RATE BASE METHOD TO ESTABLISH RATES.

A. Through his direct testimony, Company witness Wathen discusses this proposal in greater detail and, as such, I only briefly mention it here. Historically, the Company's natural gas base rates have been determined with reference to a return on capitalization. Although this methodology may have been appropriate in the past, another methodology is more common today. Specifically, and as evident in other Duke Energy jurisdictions, a return-on-rate base approach provides a transparent and effective way to establish base rates.

Q. PLEASE FURTHER DESCRIBE THE COMPANY'S PROPOSAL TO IMPLEMENT A WNA MECHANISM.

A. Our customers' bills include a volumetric component that fluctuates with usage. Changes in weather influence usage and, therefore, monthly volumetric charges. These weather changes, which cannot be controlled or fully predicted, necessarily impose volatility on our customers' bills, month over month. A WNA mechanism will mitigate the impact of weather volatility on customer bills, as well as the corresponding impact on the Company's earnings, in a fair and equitable manner. Duke Energy Kentucky's proposed WNA mechanism will be applicable to customers served under Rate Schedules Residential Service (RS) and General Service (GS).

IV. INTRODUCTION OF WITNESSES

Q. PLEASE INTRODUCE THE OTHER WITNESSES IN THESE PROCEEDINGS.

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

- Tyler Barbare, Director, Gas Technical Field Operations, discusses the Company's proposal to align its natural gas meter testing process to the depreciable life of the AMI/AMR modules connected to the natural gas meters.
- Michael Covington, Director, Natural Gas Utilities and Infrastructure, offers testimony regarding the Company's accounting policies and the accounting treatment requested in these proceedings.

- Gary Hebbeler, Vice President, Natural Gas Operations; provides an overview of the natural gas operations for both Duke Energy and Duke Energy Kentucky. Mr. Hebbeler also discusses the Company's safety and integrity initiatives and the major investments since the 2009 Rate Case.
- Sarah E. Lawler, Director Rates, and Regulatory Planning, provides testimony supporting Duke Energy Kentucky's overall revenue requirement for the test period and certain adjustments to the test period financial data.
- Cynthia S. Lee, Director, Asset Accounting, offers testimony on Duke Energy Kentucky's capital accounting processes and sponsors certain accounting information used for the test period financial data.
- Renee Metzler, Managing Director Retirement, supports the Company's compensation and benefits programs.
- Roger A. Morin, PhD, Principal, Utility Research International, offers testimony on Duke Energy Kentucky's requested rate of return.
- John Panizza, Director, Tax Operations, addresses the Company's tax expense in the test period revenue requirement.
- Benjamin Walter Bohdan Passty, Ph.D., Lead Load Forecasting Analyst, performed and supports the Company's natural gas load forecast.
- Robert ("Beau") H. Pratt, Director, Regional Financial Forecasting, presents testimony regarding Duke Energy Kentucky's credit ratings,

financial objectives, cash requirements, and capital structure, as well as Duke Energy Kentucky's budgeting and forecasting processes.

- Bruce L. Sailers, Pricing and Regulatory Solutions Manager, offers testimony as to rate design and tariff language.
- Jeffrey R. Setser, Director of Allocations and Reporting, supports the Company's various service agreements and associated allocations.
- John J. Spanos, Gannet Fleming Valuation and Rate Consultants, LLC, provides testimony on Duke Energy Kentucky's latest depreciation study.
- William Don Wathen Jr., Director, Rates and Regulatory Strategy, Ohio and Kentucky, provides a more detailed overview of the filing including support for the Company's proposed WNA.
- James E. Ziolkowski, Director, Rates and Regulatory Planning, provides testimony regarding Duke Energy Kentucky's cost of service study.

V. ATTACHMENTS SPONSORED BY WITNESS

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

A. These filing requirements provide for the Company to seek proposed new rates through a written Application addressing various matters, including the full name, address, and electronic mail address of the Company and set forth the facts upon which the Application is based, with a request for the order, authorization, permission, or certificate desired and a reference to the particular law requiring or providing the same. FR 14(2) applies to Duke Energy Kentucky because it is a

corporation, registered to do business, and is in good standing in the Commonwealth of Kentucky. The Application submitted in these proceedings includes this information and was prepared at my direction. FR 14(3) and FR 14(4) are not applicable to Duke Energy Kentucky because it is neither a limited liability company nor a limited partnership.

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

A. FR 16(1)(b)(1) is a statement for the reason for the adjustment. As I explained above and as further explained by Mr. Wathen, the Company is proposing new natural gas base rates because the present rates reflect the cost of service from the 2009 Rate Case, which is no longer sufficient to enable the Company to furnish safe, reliable, adequate, reasonable, and affordable service. Duke Energy Kentucky also needs to reflect the costs of service related to capital investments and the operation and maintenance of our natural gas delivery system that have occurred since 2010. The load growth on Duke Energy Kentucky's system has been relatively slow and has not significantly offset these increased costs.

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

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

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

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

Q. PLEASE DESCRIBE FR 16(2).

A. FR 16(2) is the notice of intent submitted to the Commission at least thirty, but no more than sixty, days prior to filing the Application. The notice was filed on August 2, 2017, at my direction.

Q. PLEASE DESCRIBE FR 16(3).

A. FR 16(3) states that notice given in accordance with 807 KAR 5:001 Section 7 will satisfy notice requirements of 807 KAR 5:051, Section 2. The Company provided notice to customers in accordance with 807 KAR 5:001 Section 7.

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

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

- Duke/Progress merger: In July 2012, Duke Energy and Progress Energy closed their merger. Duke Energy Kentucky has benefitted from the implementation of best practices and through the access to

additional resources and expertise from its sister electric utilities in five other jurisdictions. The Company has benefitted from the economies of scale that naturally arise from being a part of a combined corporation with a market capitalization of more than $52.1 billion.

- The ASRP, which I discussed previously and for which Mr. Hebbeler provides further detail. The various mergers that have occurred over the last several years which have resulted in numerous efficiencies and implementation of best practices. Duke Energy Kentucky regularly reports on these to the Commission through regular filings.
- The Gas Transmission and Distribution Integrity Management Programs, which are designed to enhance the safety and reliability of Duke Energy Kentucky's gas distribution service by establishing a systematic plan to perform periodic safety assessments and maintenance activities in response to new federal pipeline safety legislation, as discussed in more detail by Mr. Hebbeler.
- The sewer line inspection program, which is a program designed to check potential high-risk gas main installations along sewer lines as a result of local sewer districts not maintaining accurate records of the location and depths of their systems. The Company inspects gas main installations that are likely to have experienced a breach based upon premises structure elevation and main line sewer location and depth in relation to the street.

- Duke Energy Kentucky has historically offered Demand Side Management (DSM) programs that provide energy efficiency services to gas and electric customers. Currently there are four programs that provide benefits for gas customers. These programs include: (1) Residential Conservation and Energy Education (RCEE) (Low-Income Weatherization) program; (2) the Residential Home Energy House Call (HEHC) program; (3) Energy Efficient Web Site program; and (4) the Residential Comprehensive Energy Education program (NEED). These programs offer direct benefits to customers through energy efficiency education, energy use audits, and even home weatherization. Although some of these programs are currently suspended by order of the Commission, Duke Energy Kentucky is hopeful that we can continue to provide these important services to customers going forward.
- AMI/AMR technology: Duke Energy Kentucky began deploying AMI technology, as I discussed earlier in my testimony. We expect this to ultimately improve customer service and reduce our costs related to meter reading, customer service calls, and call center operations.

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

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

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

Q. PLEASE DESCRIBE FR 17(1)

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

Q. PLEASE DESCRIBE FR 17(2).

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

Q. PLEASE DESCRIBE FR 17(3).

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

VI. CONCLUSION

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

A. Yes.

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

A. Yes.

VERIFICATION

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

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

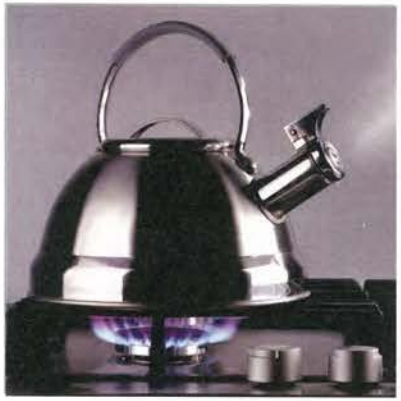
Amy B. Spiller, Affiant

Subscribed and sworn to before me by Amy B. Spiller, on this 30th day of AUGUST, 2018.

ADELE M. FRISCH
Notary Public, State of Ohio
My Commission Expires 01-05-2019

NOTARY PUBLIC

My Commission Expires: 1/5/2019



J.D. POWER

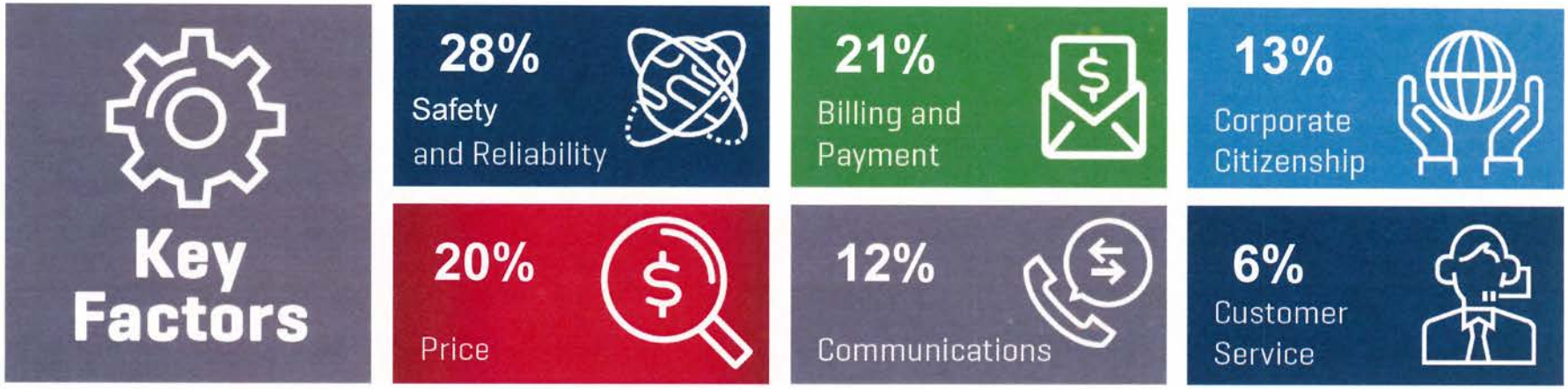
2017
Gas Utility Residential Customer Satisfaction Study℠
waves 1-3

Duke Energy (OH/KY)

Jeff Conklin, Vice President, Service Industries

June 2018

J.D. Power 2018 Gas Utility Residential Customer Satisfaction Study



~57,500+
Total Responses Nationally

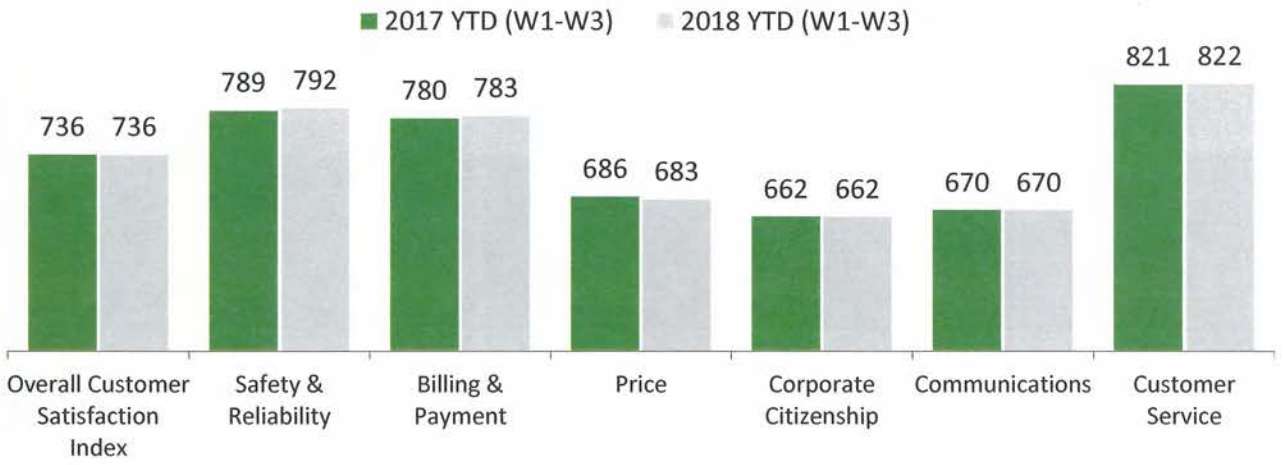
17th Year of the Study

84 Brands
each with 125,000+ Residential Customers

Customer Service 29% when have interaction

Duke Energy sample size:
~ 600 total completes annually

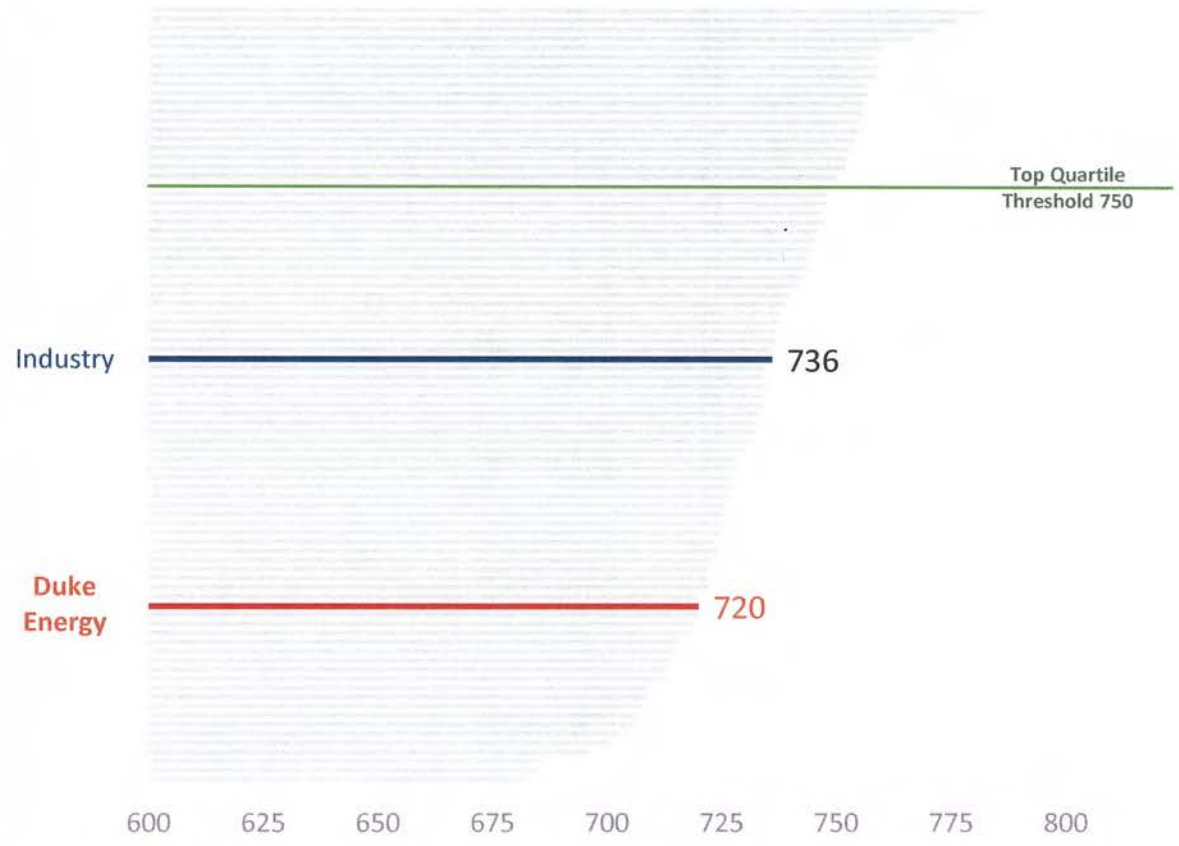
Industry satisfaction has remained level



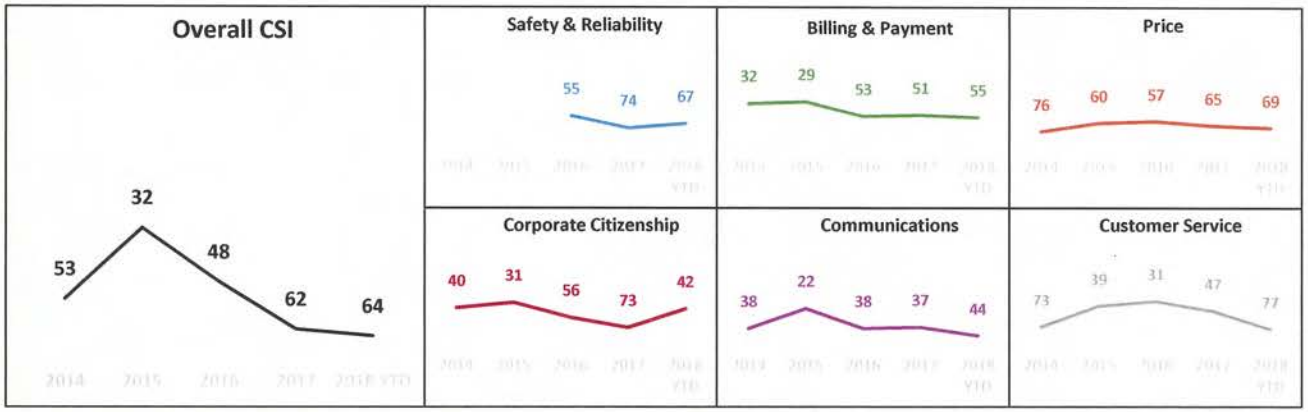
Compared to the same time last year,

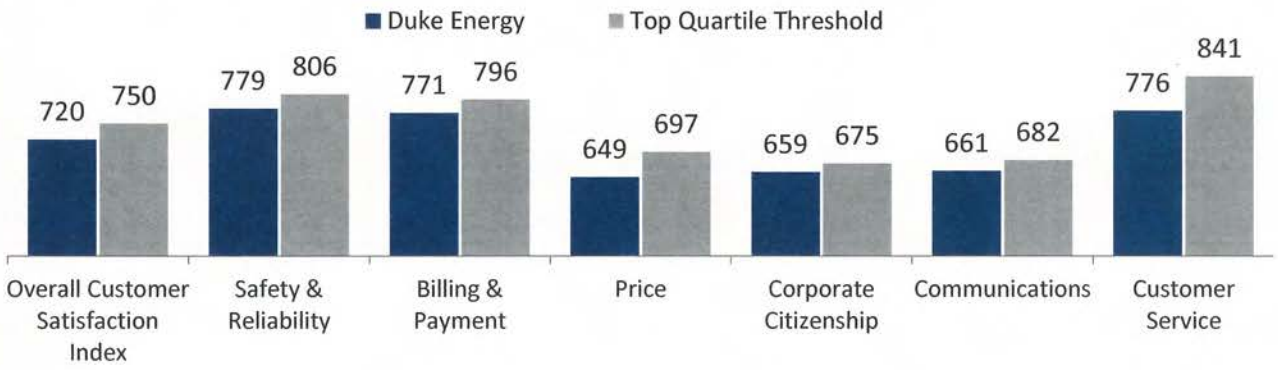
Duke Energy has declined two positions in industry rankings

Overall Industry Ranking



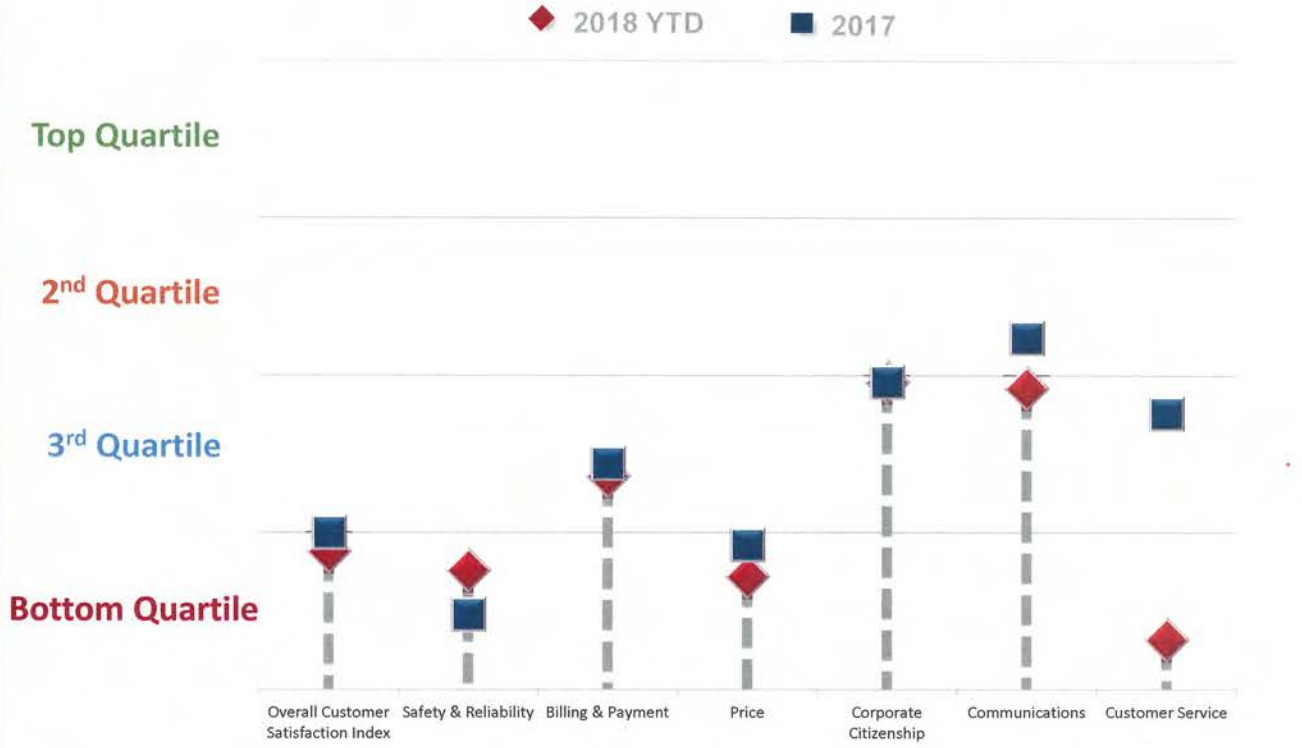
Duke Energy Ranking by Factor



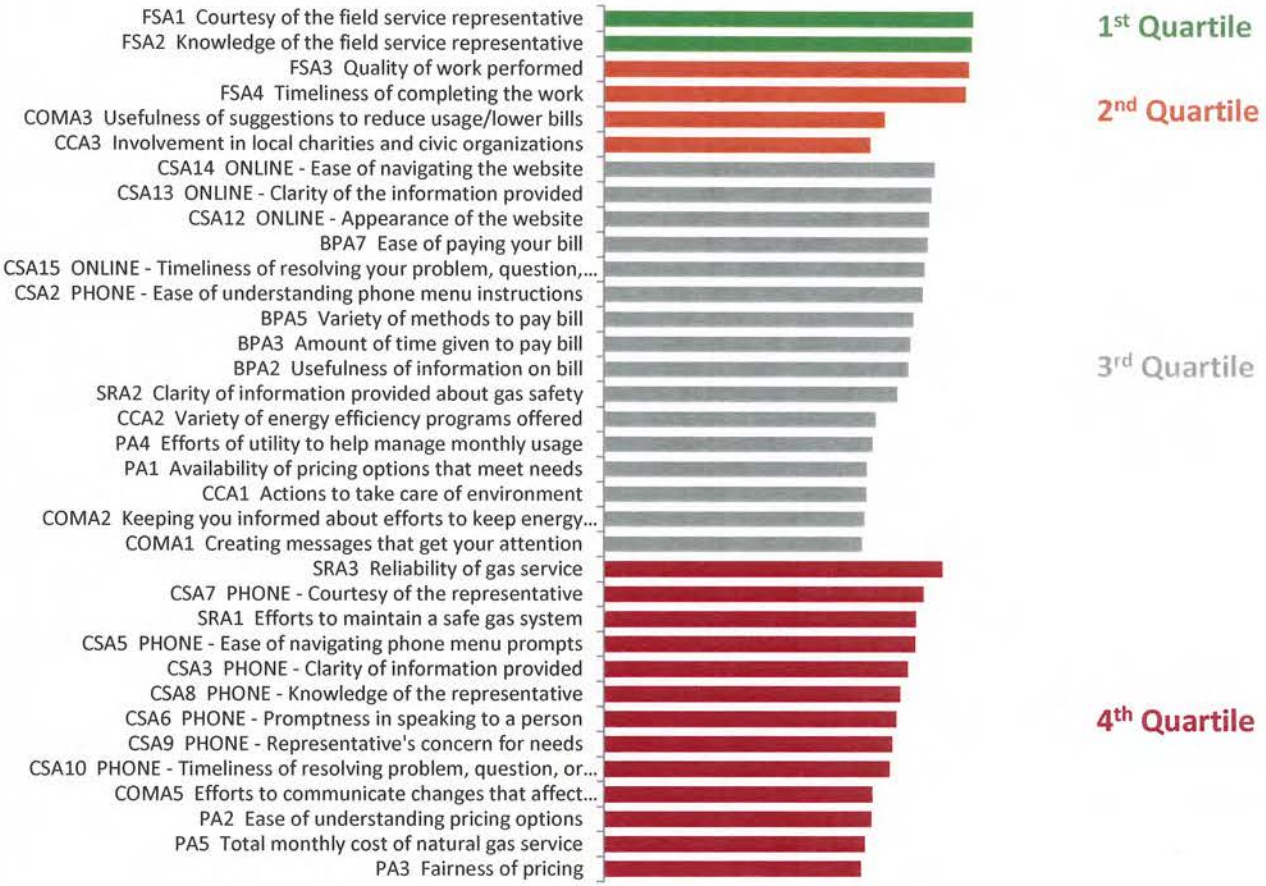


Duke Energy Ranking this year compared to last for overall satisfaction and the factors driving satisfaction

Quartile Comparison to the Industry

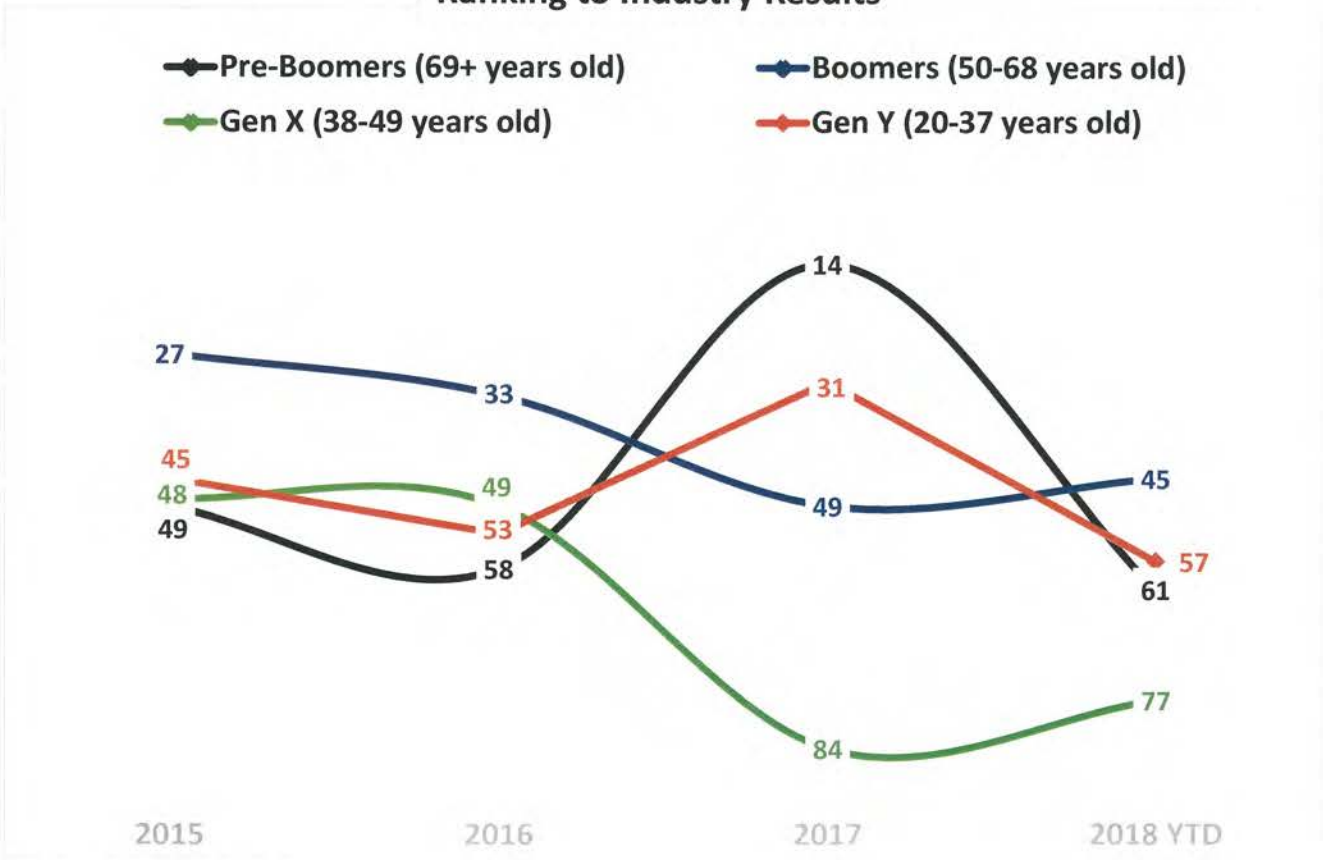


Duke Energy Attributes by quartile ranking



Generational Historical Rank Performance

Duke Energy



Top 2018 Brands

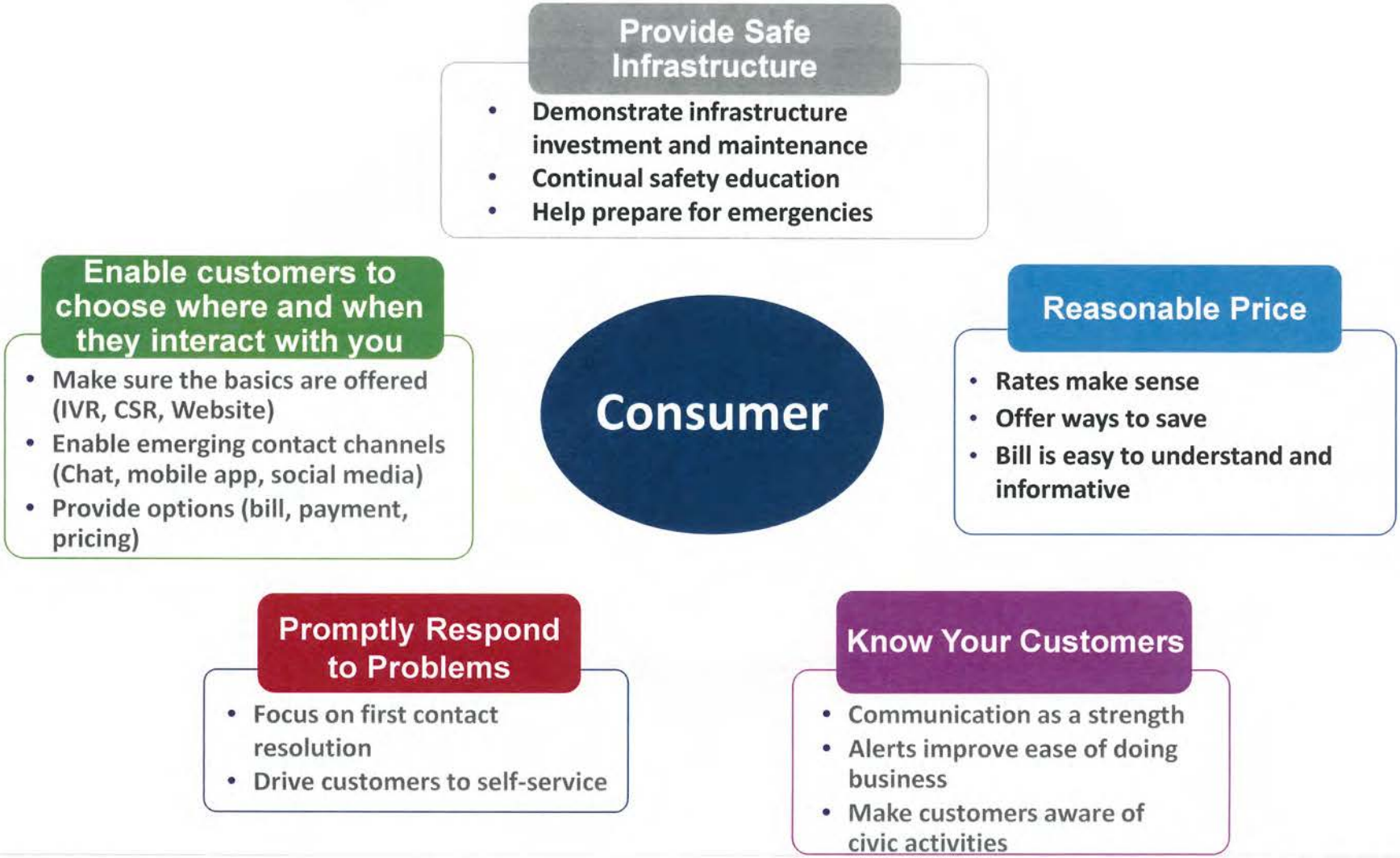
Pre-Boomers
CPS Energy

Boomers
Cascade Natural Gas

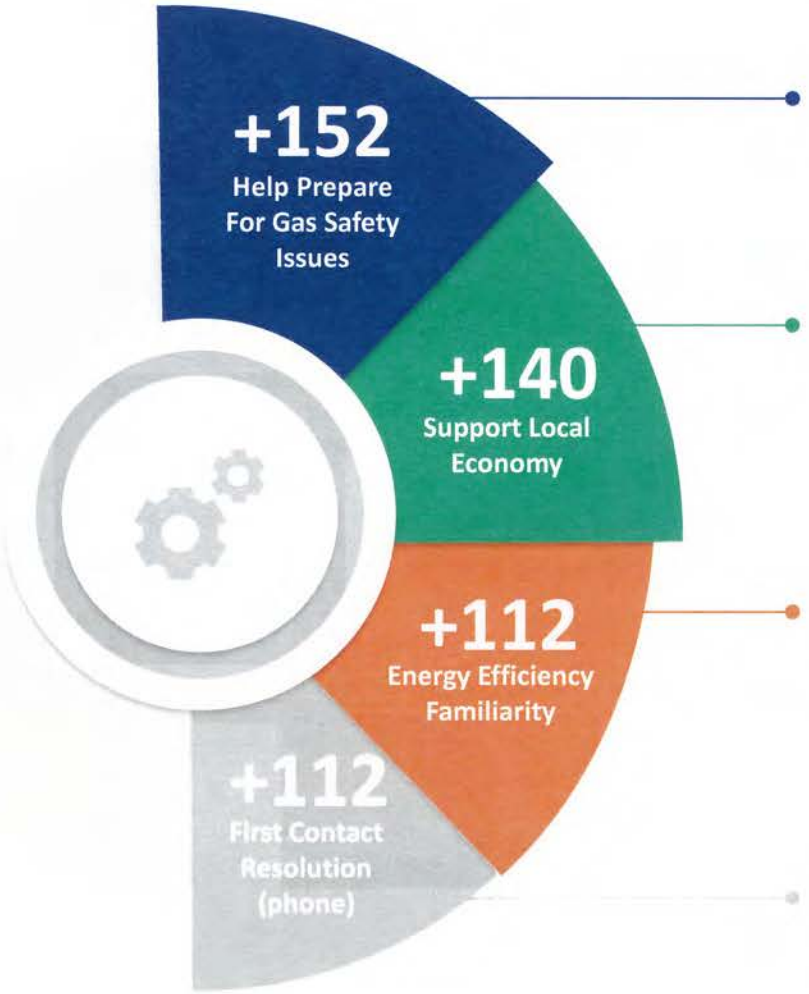
Gen X
Southwest Gas

Gen Y
TECO Peoples Gas

Consumer Expectations of Natural Gas Utilities



What Moves the Dial the Most in Overall Satisfaction



With the inclusion of Safety & Reliability factor, this diagnostic has surfaced as a key to high satisfaction.

This corporate citizenship diagnostic has a big impact on overall customer satisfaction. Customers that are aware of their utility helping the local economy is the best way to increase satisfaction.

Everyone wants the ability to lower their bills. Awareness of EE programs and offers is a great way to counter rate increases.

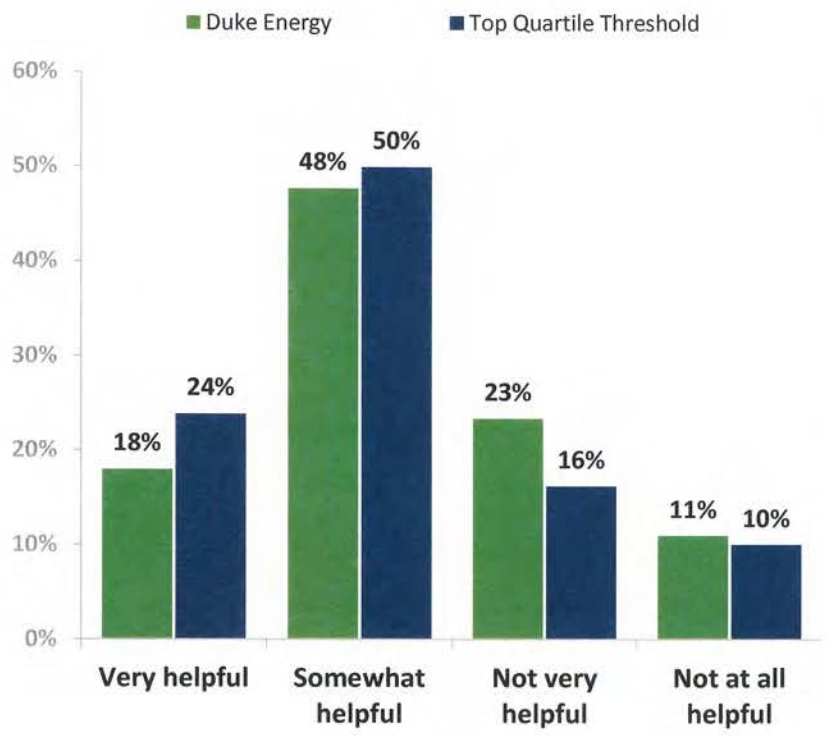
When a customer contacts their utility they expect their question or problem to be resolved the first time.

Provide Safe Infrastructure

- Demonstrate infrastructure investment and maintenance
- Continual safety education
- Help prepare for emergencies

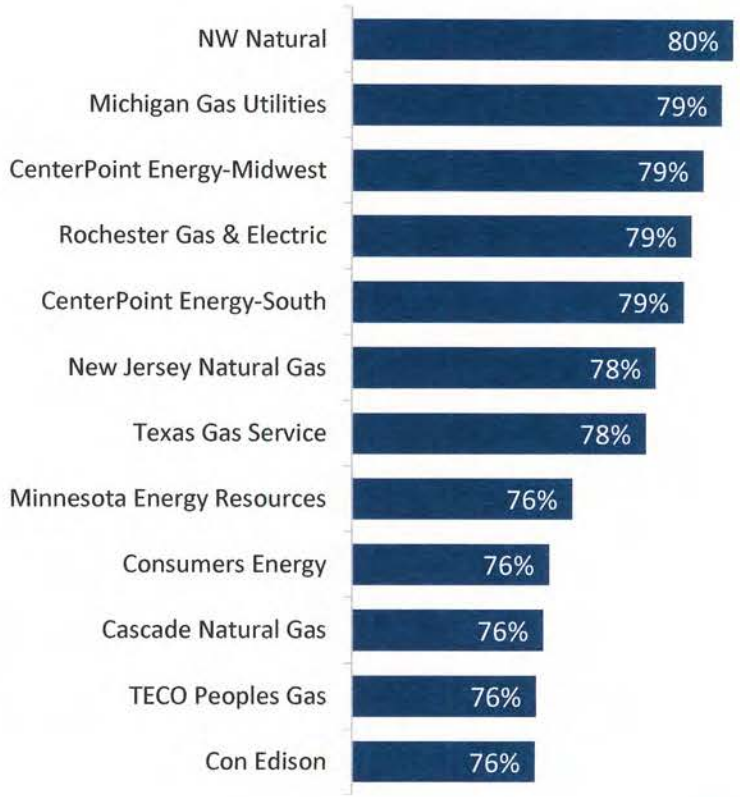
Helpfulness of Gas Utility to Prepare for Safety Issue

How helpful has your gas utility been in preparing you to handle a gas safety issue?



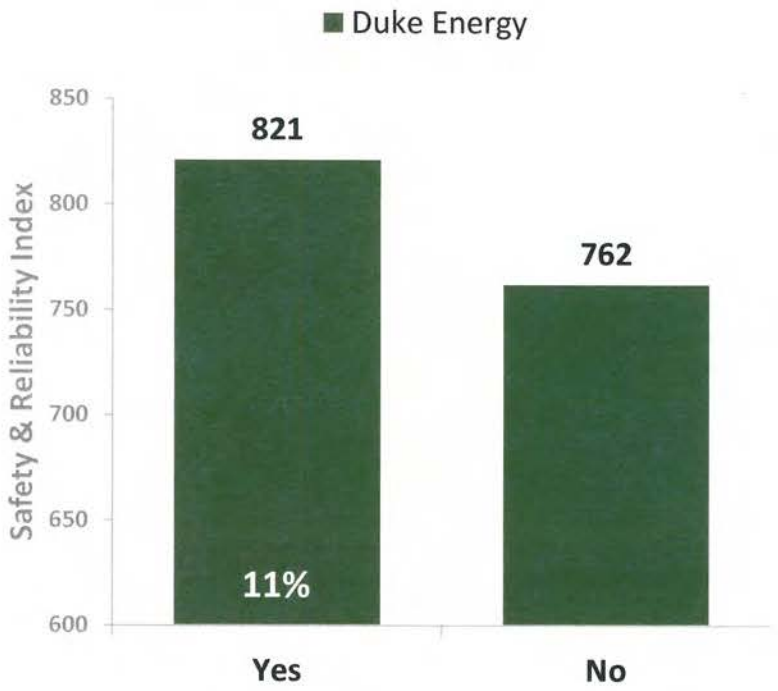
Top Brands

(Very/somewhat helpful)

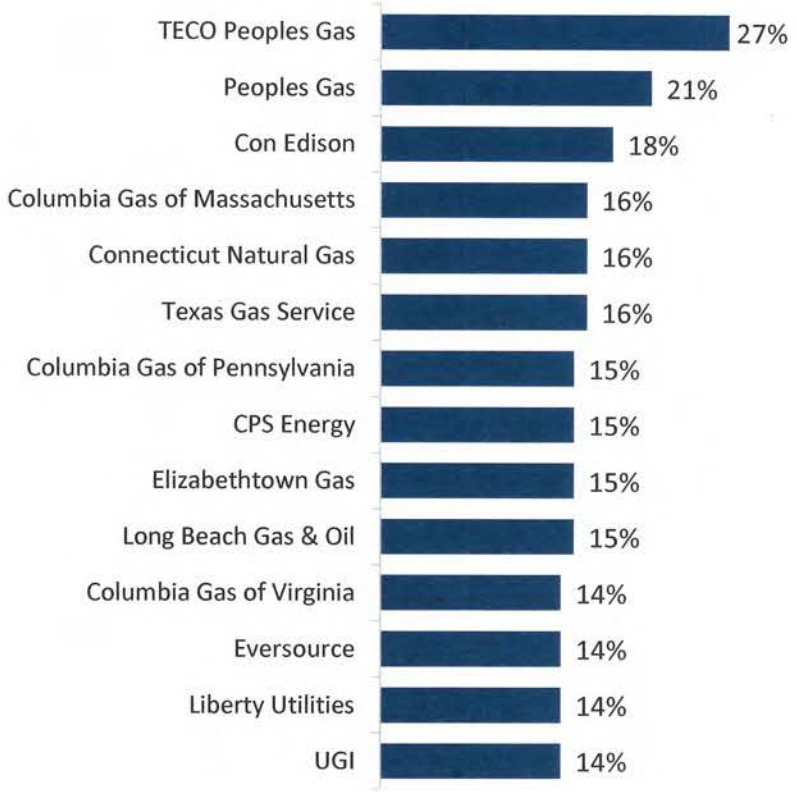


Impact of Safety Inspections

Had Safety Inspection Done



Top Brands (%Yes)

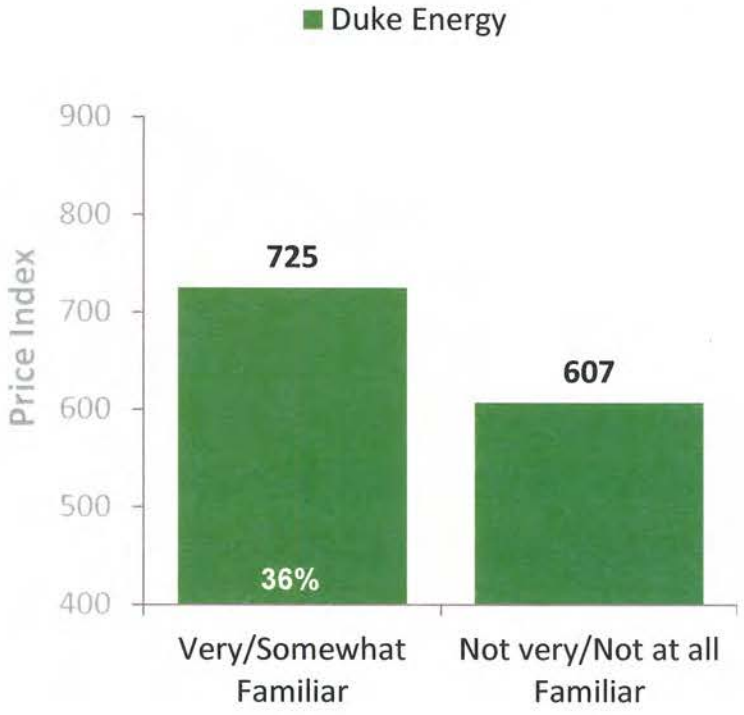


Reasonable Price

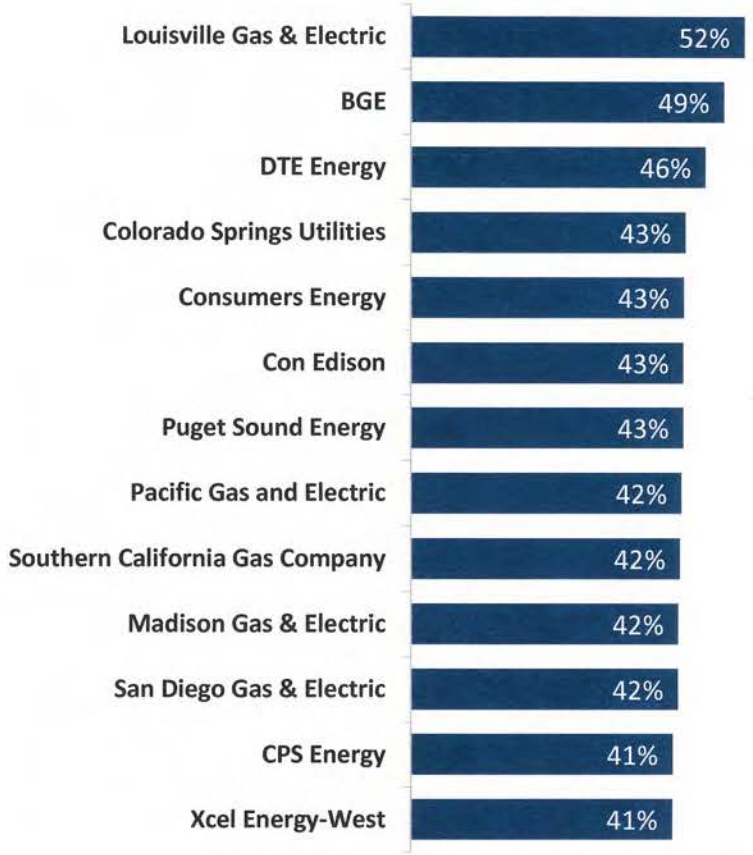
- Rates make sense
- Offer ways to save
- Bill is easy to understand and informative

Familiarity with Conservation Programs

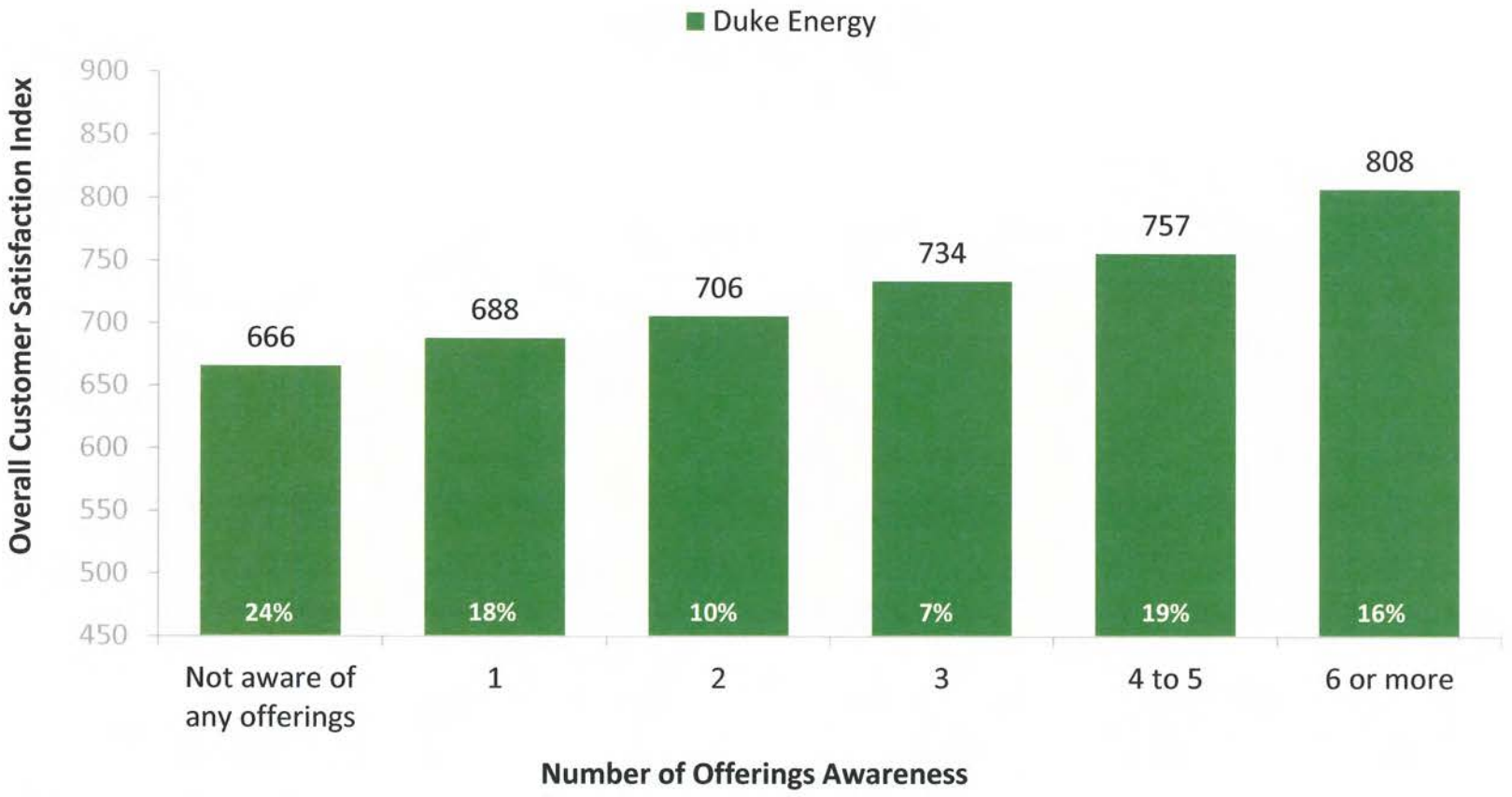
Price Index by Familiarity with Energy Efficiency Programs



Top Utilities - Familiar with Energy Efficiency or Conservation Programs



Overall Satisfaction Index by Program Offerings



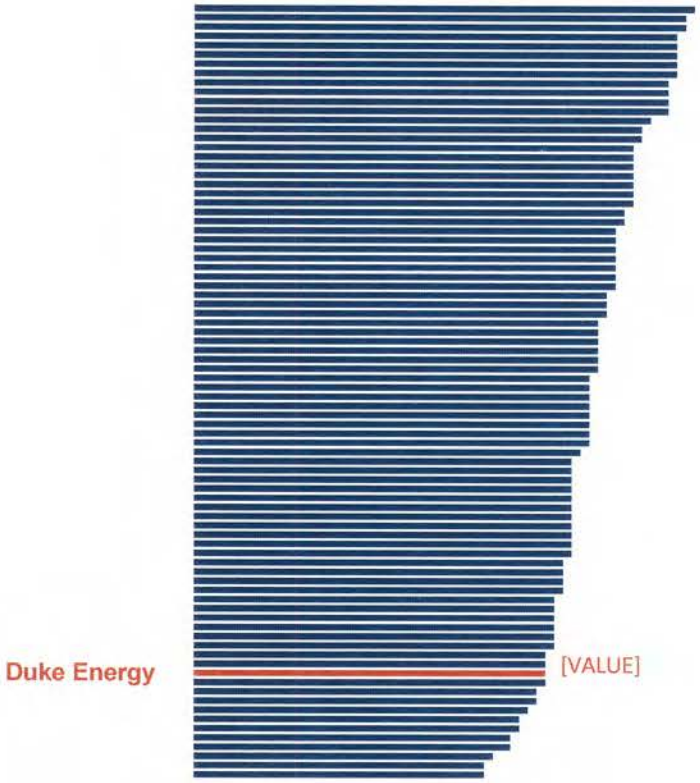
Note: Out of 19 potential offerings

Know Your Customers

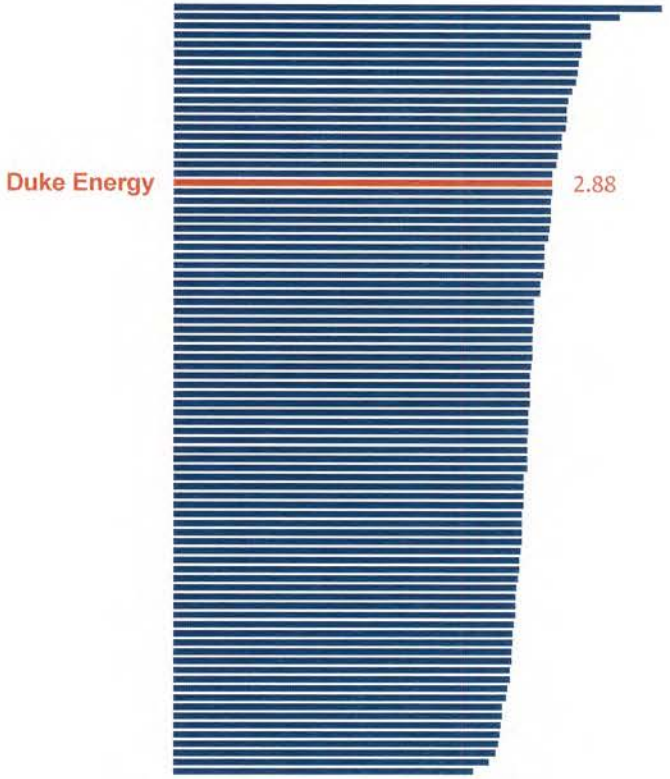
- Communication as a strength
- Alerts improve ease of doing business
- Make customers aware of civic activities

Communications Recall & Reach

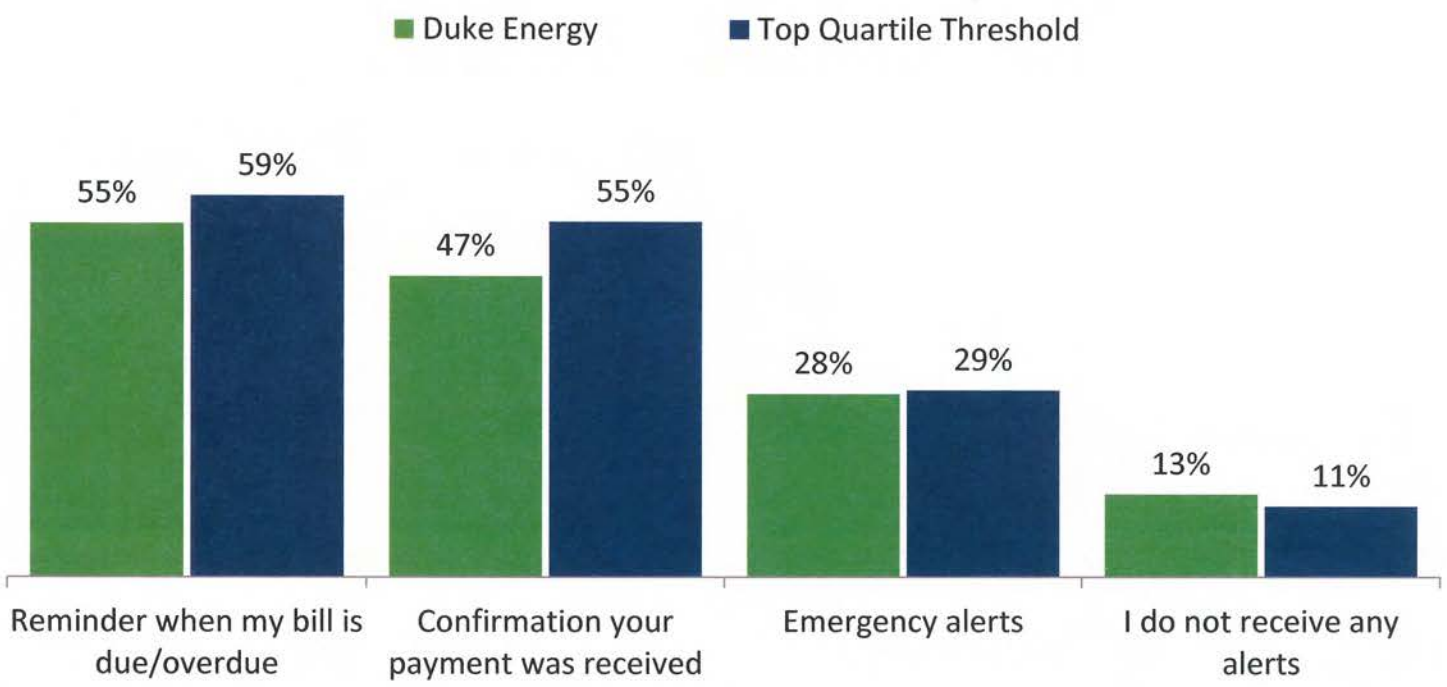
Recall Communications



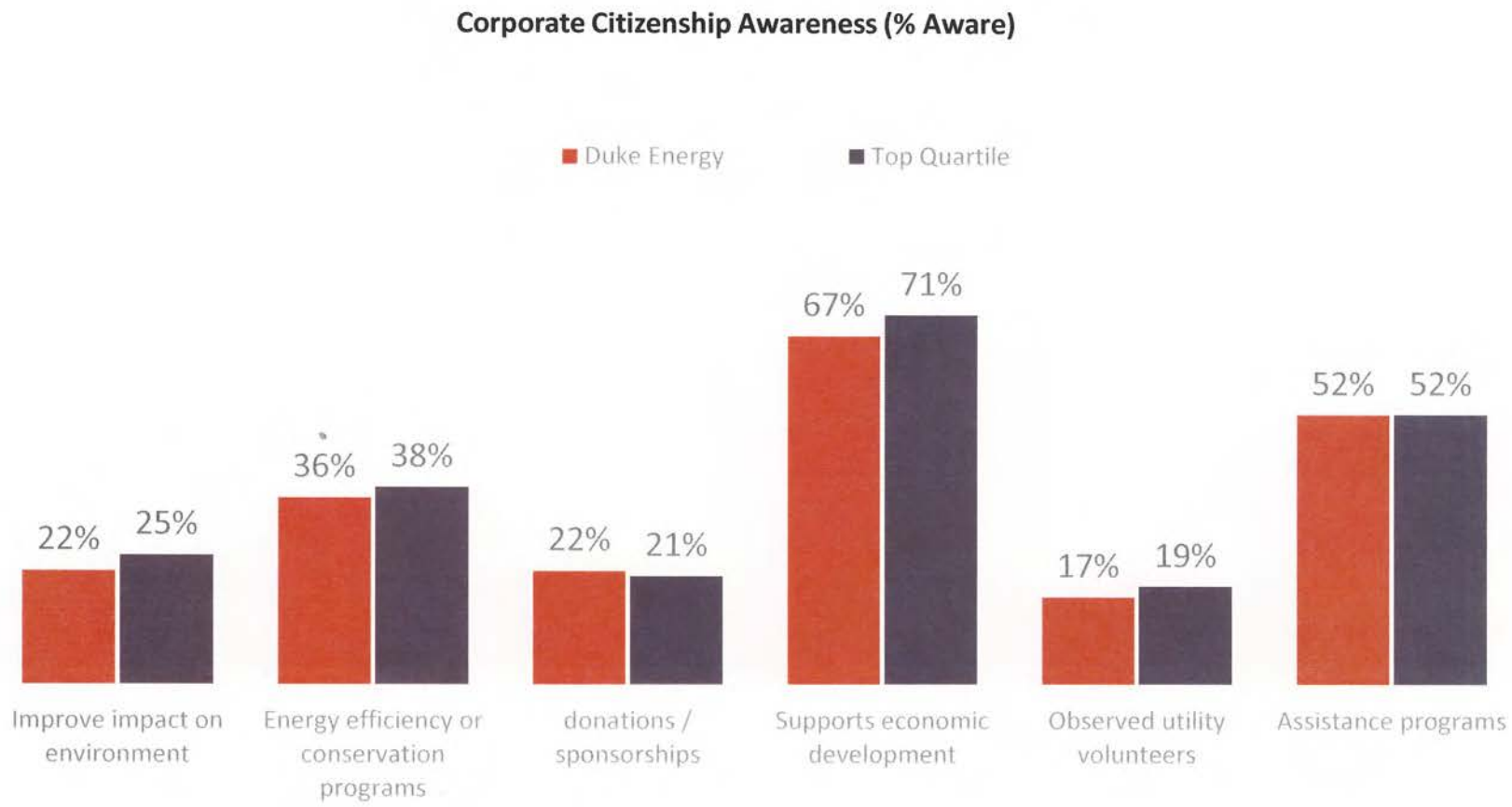
Communications Frequency



Billing & Other Alerts Received



Aware of Utility Efforts On...



J.D. POWER

Promptly Respond to Customer Problems

- Focus on first contact resolution
- Drive customers to self-service

First Contact Resolution and Impact on Satisfaction

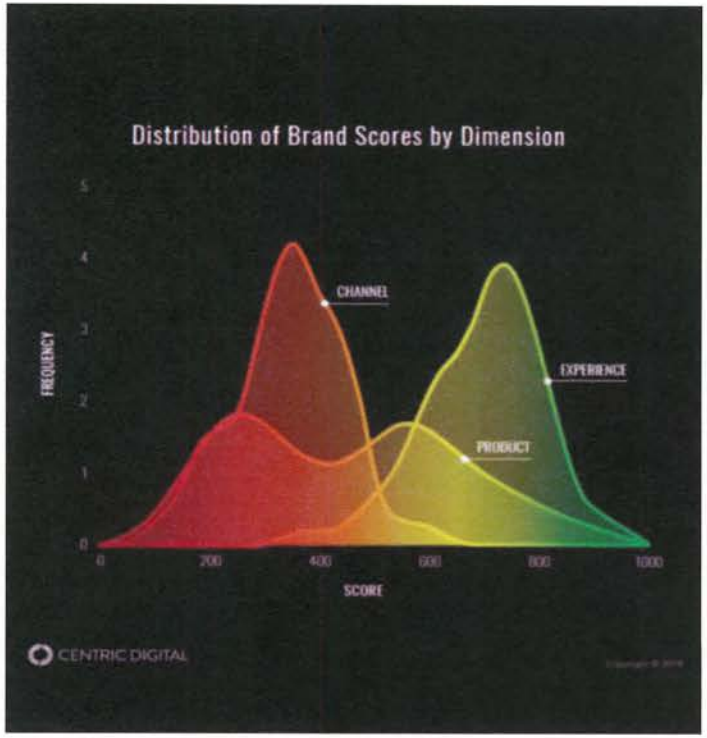
		Duke Energy		Top Quartile Threshold
Phone	1st CONTACT	63%	809	79%
	2+ CONTACTS	33%	655	21%
Online	1st CONTACT	72%	820	78%
	2+ CONTACTS	19%	739	18%

Enable customers to choose where and when they interact with you

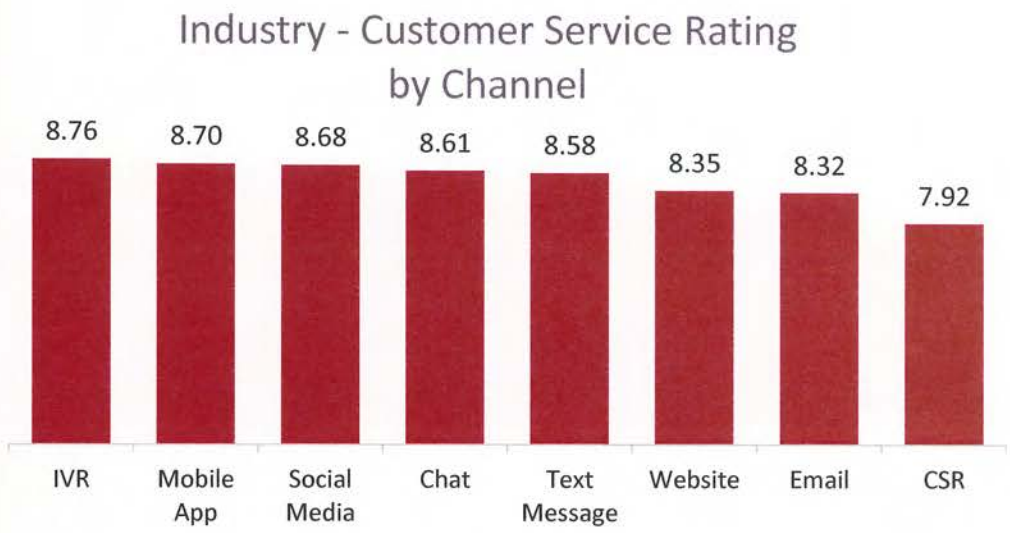
- Make sure the basics are covered (IVR, CSR, Website)
- Allow for Omni-channel contacts
- Give options (bill, payment, pricing)

Digital Transformation

Moving away from traditional methods of customer service



Source: 2018 Utility Digital Evaluation Study



Online Accounts Drive Engagement

Duke Energy has 60% online accounts (3rd quartile)

Impact of having customers with an online account

	Duke Energy	
	Online account	No online account
B&P Index	788	745
Receive e-bill	74%	11%
Recall utility communications	46%	30%
# Corp. Citizenship actions aware of	2.4	2.0
Product/service participation	36%	31%
Energy efficiency awareness	39%	30%
# Positive Word of Mouth mentions	1.1	0.3
NPS	4	-5

Summary

Summary of Findings

Strengths

+ Donations, Assistance programs (Citz)
+ Offerings / EE

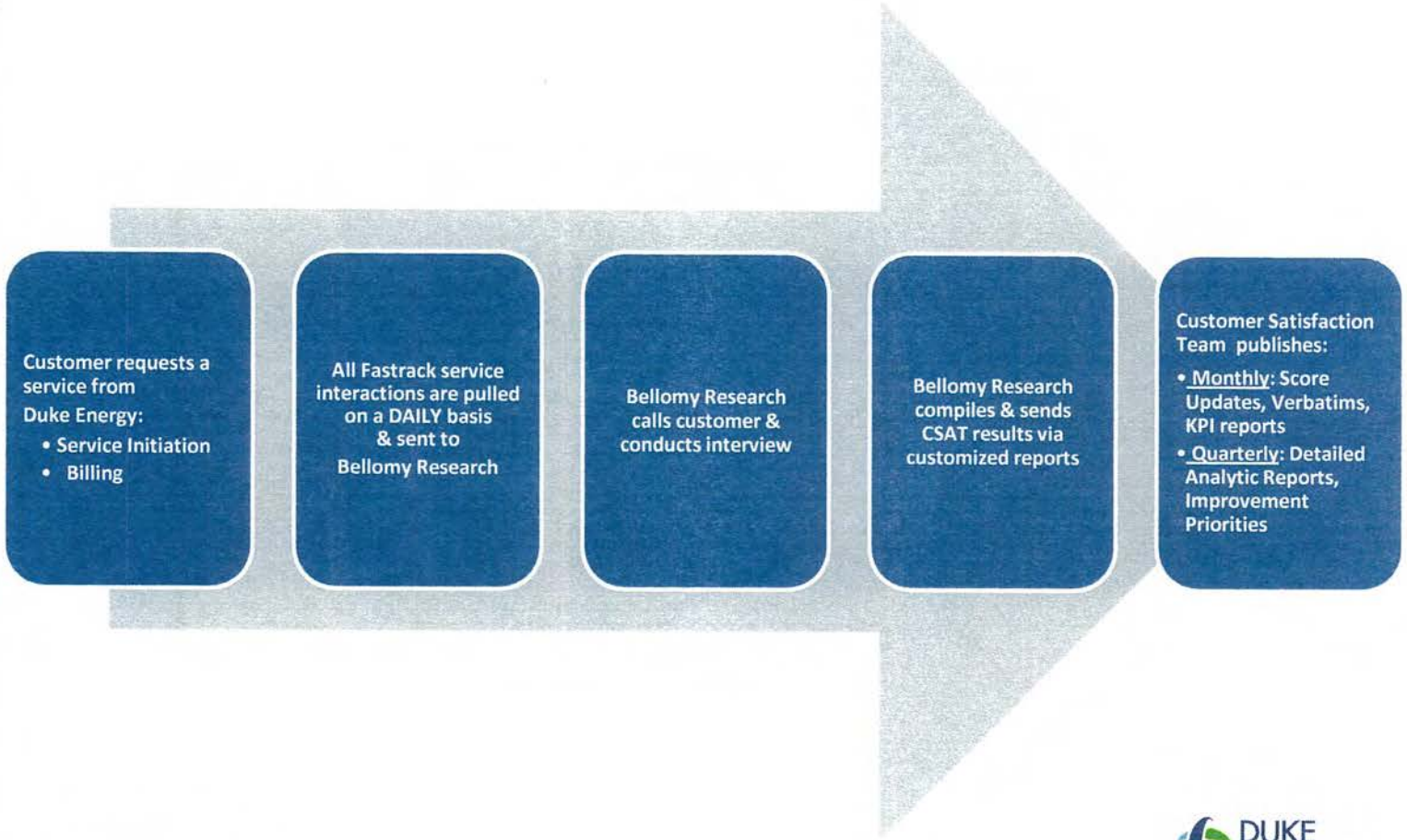
Opportunities

- Helpful prep for safety
- Value of natural gas service
- E-Bill
- Customer Service (phone FCR)

1DF – Midwest
Fastrack

March 2018 Update

Fastrack Description
The Process



DUKE ENERGY.

Fastrack Description
The Score Question

*"**All things considered**, how satisfied were you with Duke Energy handling your recent service request, where 10 is completely satisfied and 0 is not at all satisfied?"*

0 1 2 3 4 5 6 7 **8 9 10**

Highly Dissatisfied= % '0-4'

Highly Satisfied= % '8,9,10'

$$\textbf{Fastrack Score} = \frac{\text{\# of customers rating the score question '8, 9, 10'}}{\text{TOTAL customers interviewed}}$$

Example

If there are 10 total interviews:

- 1 rated the score question '5'
- 3 rated the score question '8'
- 2 rated the score question '9'
- 4 rated the score question '10'

$$\textbf{The Fastrack Score would} = \frac{(3+2+4)}{10} = 90$$

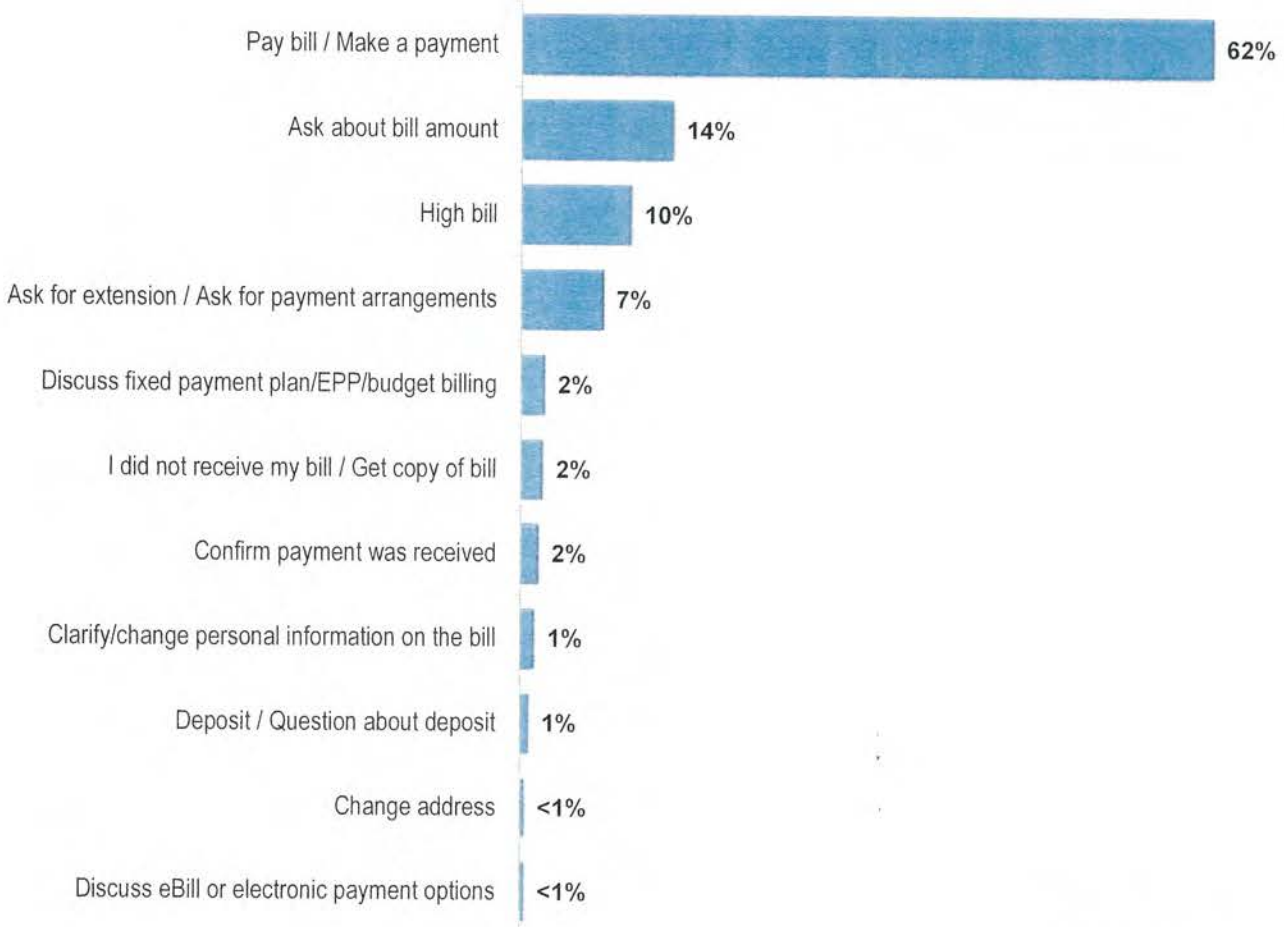
DUKE ENERGY.

Duke Midwest Fastrack

Billing (Internal) Module

Q1-18

Billing (Internal)
Reason for Call* — Q1-18



*Numbers may add up to more than 100% due to multiple responses.

DUKE ENERGY.

Billing (Internal)
Impact on Overall Satisfaction

	YTD-17	Q1-18	Q2-18	Q3-18	Q4-18	YTD-18
Overall Satisfaction with Duke Energy's overall performance as your electric supplier	87	79				79
	3	3				3
Would you say that this recent service experience has had a positive, negative, or no effect on this overall satisfaction with Duke Energy?						
Net Effect[1]	46	43				43
A positive effect	52	48				48
A negative effect	6	5				5
No effect	43	48				48

[1] *Net Effect = A positive effect – A negative effect*

DUKE ENERGY.

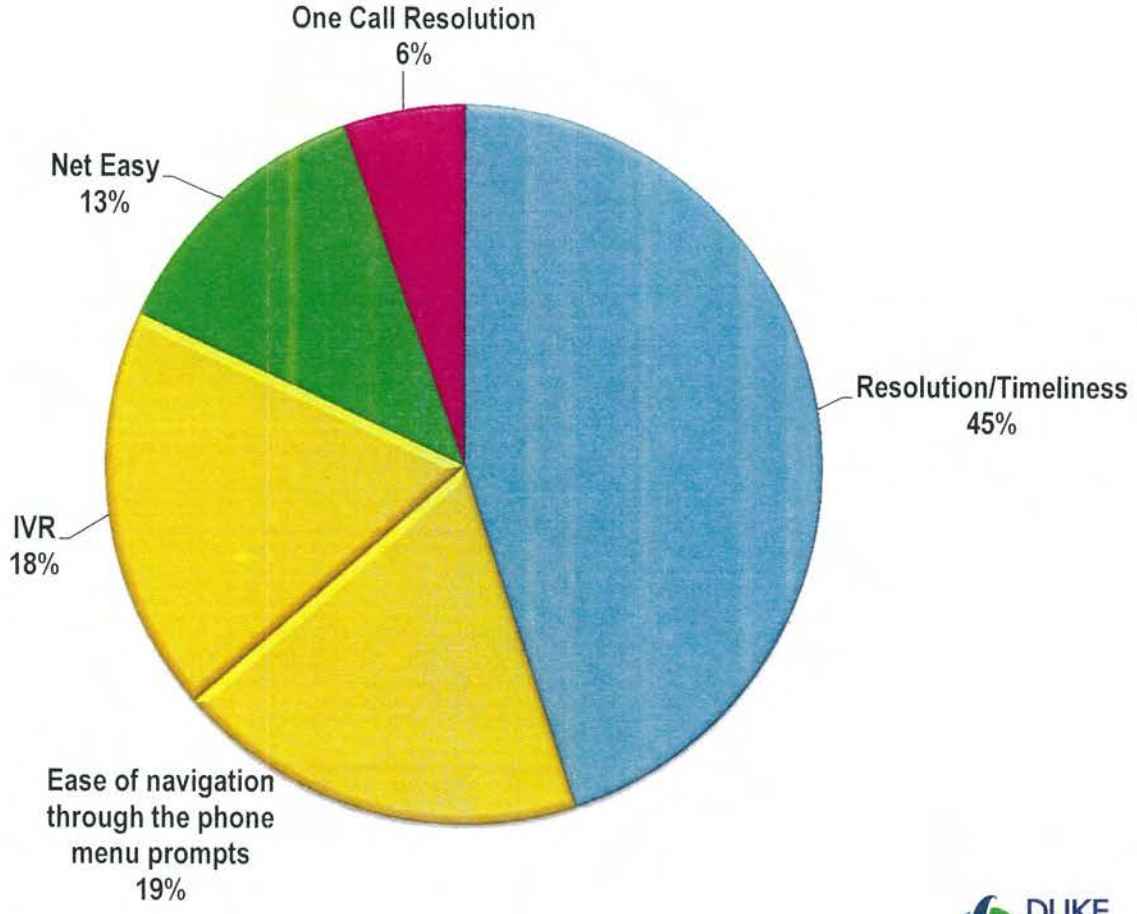
Impact on Overall Satisfaction
DE-MW Fastrack Modules

	YTD-17	Q1-18	Q2-18	Q3-18	Q4-18	YTD-18
Would you say that this recent service experience has had a positive, negative, or no effect on your overall satisfaction with Duke Energy?						
Net Effect[1]						
Service Initiation	65	64				64
Service Initiation (Gas)	58	62				62
Outdoor Lighting	43	45				45
Billing (Internal)	46	43				43
Billing (Outsource)	41	38				38
Outage	34	37				37

[1] *Net Effect = A positive effect – A negative effect*

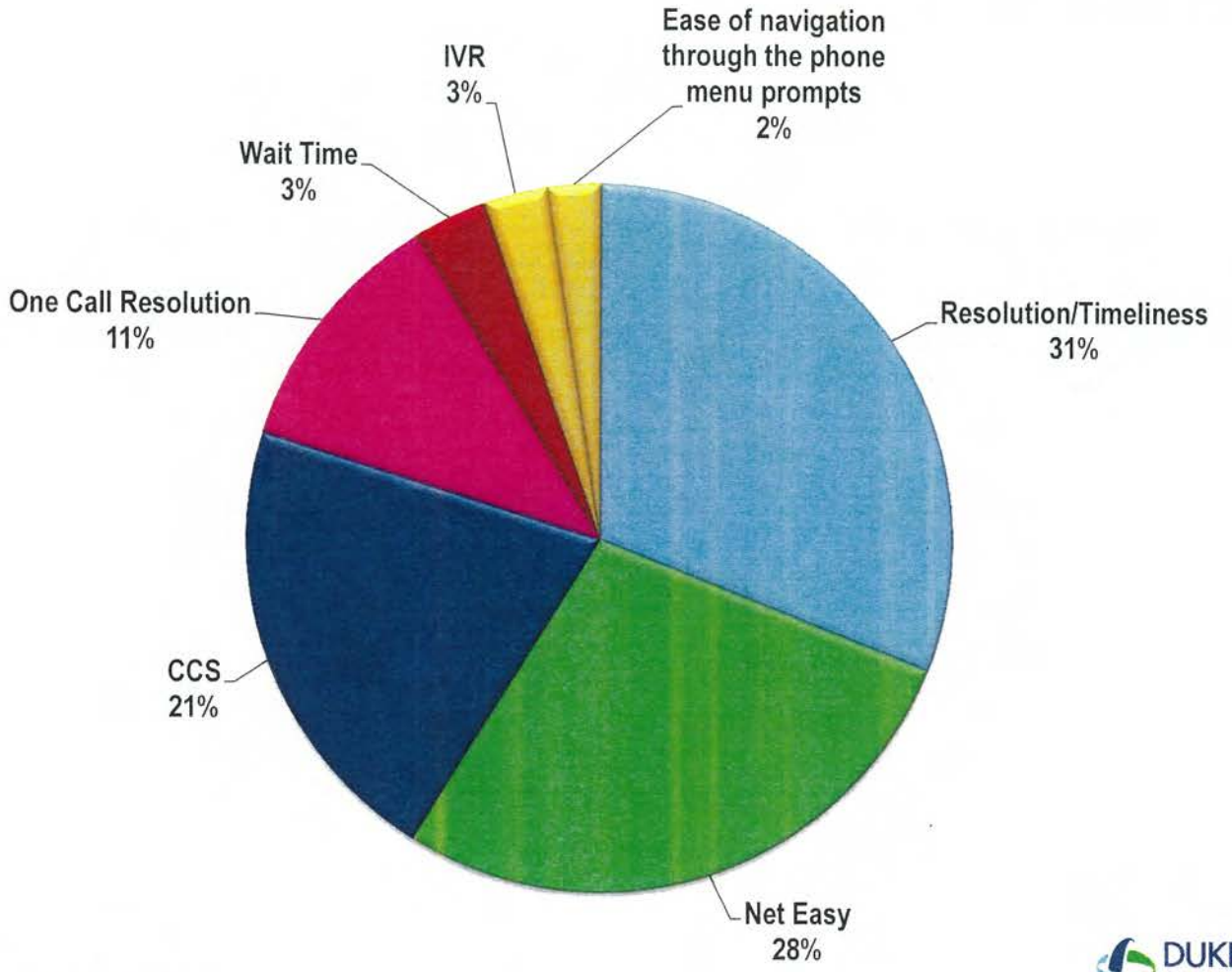
DUKE ENERGY.

Billing (Internal) - IVR Only
DEMW Q1-18 Opportunity Score



DUKE ENERGY.

Billing (Internal) - IVR & CCS
DEMW Q1-18 Opportunity Score



DUKE ENERGY.


IVR Only


IVR & CCS

Billing (Internal)
IVR Ratings

	YTD-17	Q1-18	Q2-18	Q3-18	Q4-18	YTD-18
Overall Satisfaction with IVR	76	76				76
	7	7				7
Ease of navigation through the phone menu prompts	83	81				81
	4	4				4
Amount of time you waited to be transferred to CCS	86	82				82
	1	4				4
Overall Satisfaction with Customer Care Specialist	91	87				87
	5	6				6

Rating Scale (0 - 10): % (8-10) / % (0-4)

DUKE ENERGY.

Billing (Internal)
Request Resolution

	YTD-17	Q1-18	Q2-18	Q3-18	Q4-18	YTD-18
Request Resolution						
Have requests or questions been resolved? (% Yes)	*89*	*90*				*90*
One call resolution (% Yes)	*92*	*90*				*90*
Timeliness of resolving request	95	91				91
	1	2				2

DUKE ENERGY.

Billing (Internal)
Net Easy

	YTD-17	Q1-18	Q2-18	Q3-18	Q4-18	YTD-18
Net Easy*	84	77				77
Easy	91	87				87
Neither easy nor difficult	2	4				4
Difficult	7	10				10
% Indicating Request Resolved	89	90				90
Easy	96	92				92
Neither easy nor difficult	2	4				4
Difficult	3	4				4
% Indicating Request NOT Resolved	4	4				4
Easy	50	43				43
Neither easy nor difficult	6	4				4
Difficult	44	52				52

*Net Easy = Easy – Difficult.

DUKE ENERGY.

Net Easy
DE-MW Fastrack Modules

	YTD-17	Q1-18	Q2-18	Q3-18	Q4-18	YTD-18
All things considered, would you say it was easy - or difficult - for you to get your request resolved?						
Net Easy*						
Service Initiation	93	94				94
Service Initiation (Gas)	88	93				93
Outage	76	79				79
Billing (Internal)	84	77				77
Billing (Outsource)	69	76				76
Outdoor Lighting	51	61				61

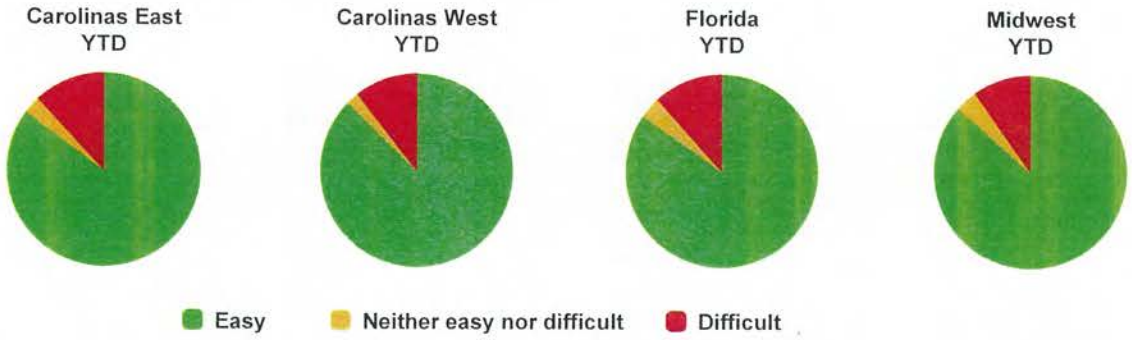
*Net Easy = Easy – Difficult.

DUKE ENERGY.

Net Easy
Billing (Internal) – 2018

	Carolinas East					Carolinas West					Florida					Midwest				
	Q1	Q2	Q3	Q4	YTD	Q1	Q2	Q3	Q4	YTD	Q1	Q2	Q3	Q4	YTD	Q1	Q2	Q3	Q4	YTD
Net Easy*	73				**73**	77				**77**	73				**73**	77				**77**
Easy	85				85	87				87	85				85	87				87
Neither easy nor difficult	3				3	2				2	4				4	4				4
Difficult	12				12	11				11	12				12	10				10

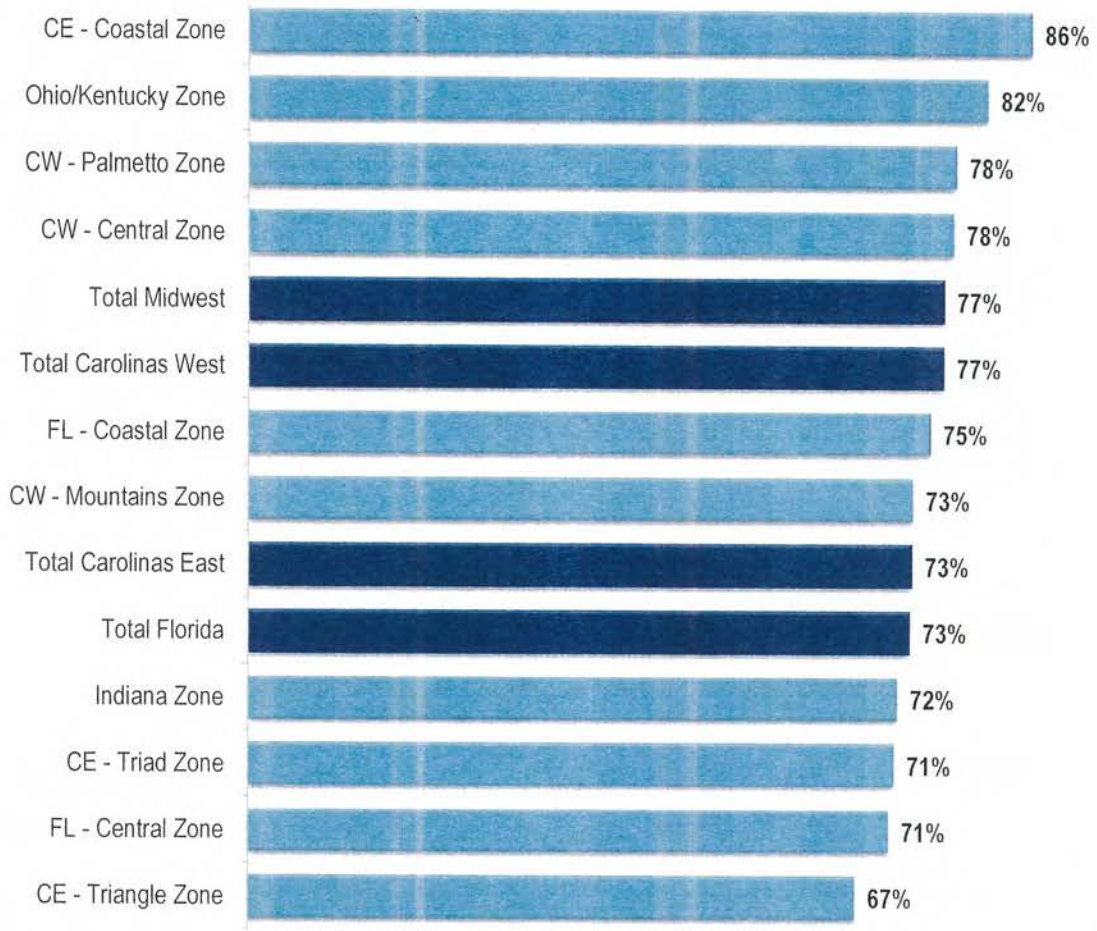
**Net Easy score = Easy - Difficult*



All things considered, would you say it was easy – or difficult – for you to get your request resolved?

DUKE ENERGY.

Net Easy
Billing (Internal) By Zone – Q1-18



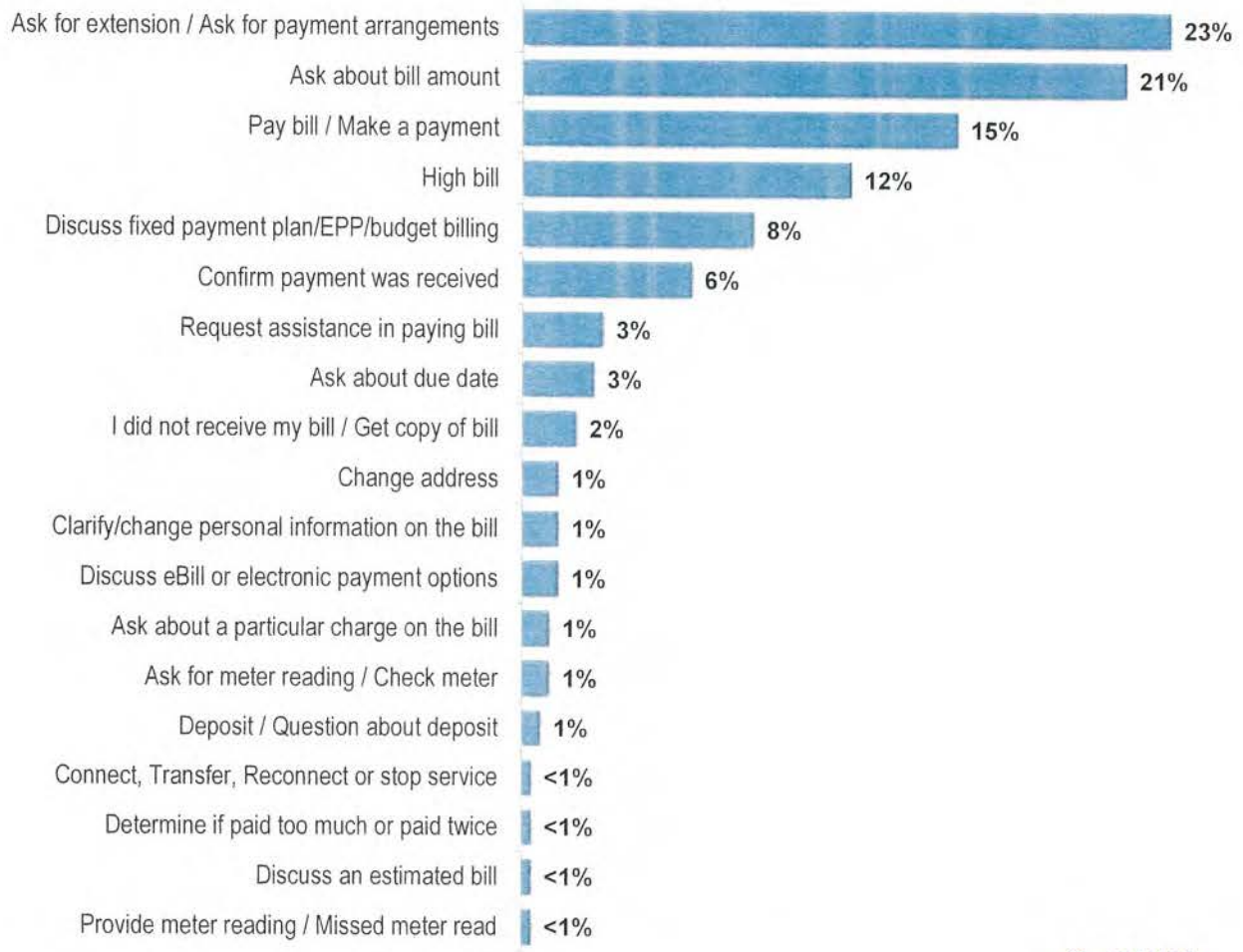
DUKE ENERGY.

Midwest Fastrack

Billing (Outsource) Module

Q1-18

Billing (Outsource)
Reason for Call* — Q1-18



*Numbers may add up to more than 100% due to multiple responses.

DUKE ENERGY.

Billing (Outsource)
Impact on Overall Satisfaction

	YTD-17	Q1-18	Q2-18	Q3-18	Q4-18	YTD-18
Overall Satisfaction with Duke Energy's overall performance as your electric supplier	81	78				78
	6	7				7
Would you say that this recent service experience has had a positive, negative, or no effect on this overall satisfaction with Duke Energy?						
Net Effect[1]	41	38				38
A positive effect	54	49				49
A negative effect	12	11				11
No effect	34	39				39

[1] *Net Effect = A positive effect – A negative effect*

DUKE ENERGY.

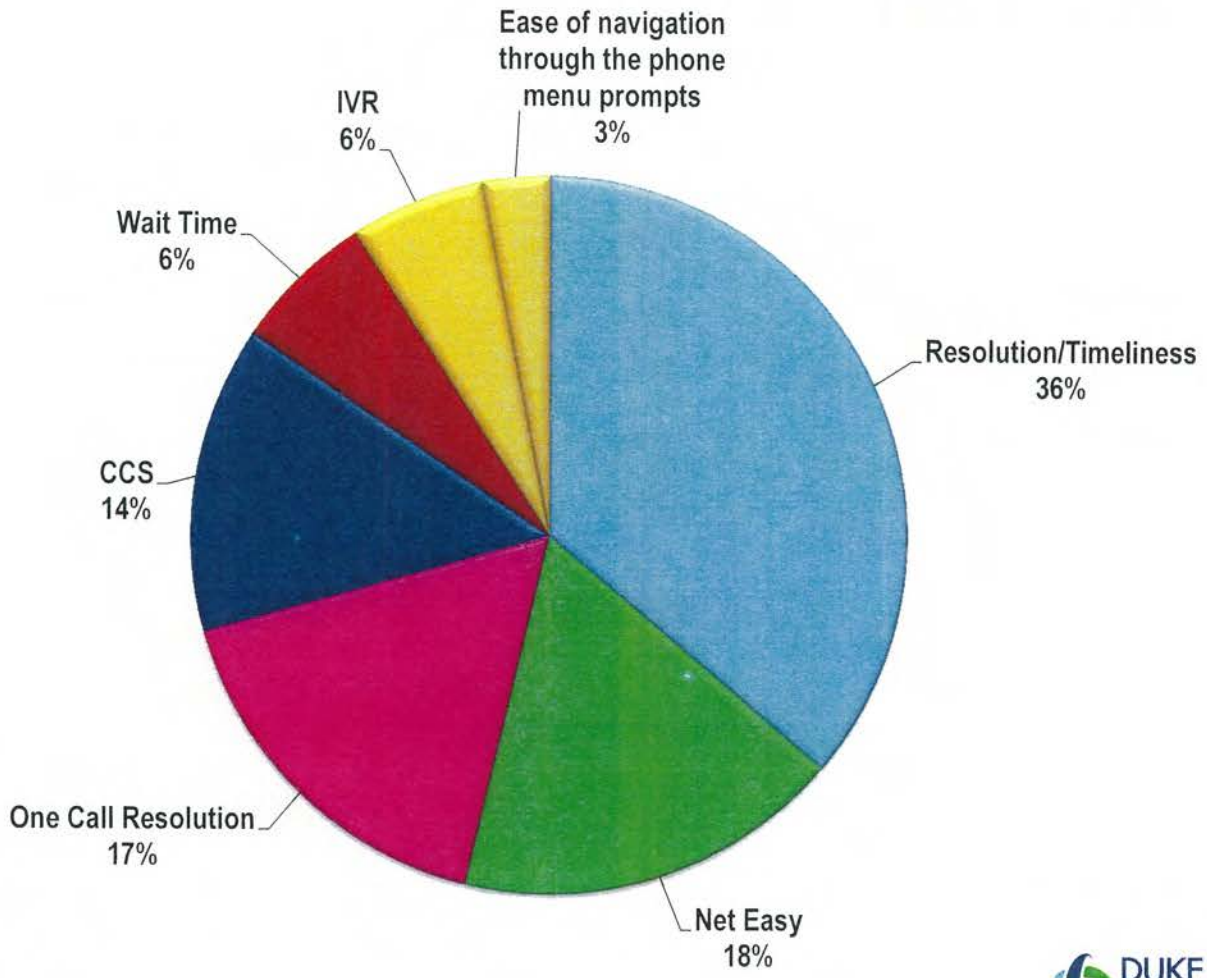
Impact on Overall Satisfaction
DE-MW Fastrack Modules

	YTD-17	Q1-18	Q2-18	Q3-18	Q4-18	YTD-18
Would you say that this recent service experience has had a positive, negative, or no effect on your overall satisfaction with Duke Energy?						
Net Effect[1]						
Service Initiation	65	64				64
Service Initiation (Gas)	58	62				62
Outdoor Lighting	43	45				45
Billing (Internal)	46	43				43
Billing (Outsource)	41	38				38
Outage	34	37				37

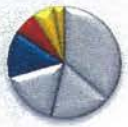
[1] *Net Effect = A positive effect – A negative effect.*

DUKE ENERGY.

Billing (Outsource)
DEMW Q1-18 Opportunity Score



DUKE ENERGY.



Billing (Outsource)
IVR Ratings

	YTD-17	Q1-18	Q2-18	Q3-18	Q4-18	YTD-18
Overall Satisfaction with IVR	64	61				61
	13	14				14
Ease of navigation through the phone menu prompts	72	70				70
	10	10				10
Amount of time you waited to be transferred to CCS	85	85				85
	3	6				6
Overall Satisfaction with Customer Care Specialist	87	91				91
	7	4				4

Rating Scale (0 - 10):	
	% (8-10)
	% (0-4)

DUKE ENERGY.

Billing (Outsource)
Request Resolution

	YTD-17	Q1-18	Q2-18	Q3-18	Q4-18	YTD-18
Request Resolution						
Have requests or questions been resolved? (% Yes)	*78*	*79*				*79*
One call resolution (% Yes)	*83*	*84*				*84*
Timeliness of resolving request	93	91				91
	3	1				1

DUKE ENERGY.

Billing (Outsource)
Net Easy

	YTD-17	Q1-18	Q2-18	Q3-18	Q4-18	YTD-18
Net Easy*	69	76				76
Easy	83	87				87
Neither easy nor difficult	3	2				2
Difficult	14	11				11
% Indicating Request Resolved	78	79				79
Easy	94	98				98
Neither easy nor difficult	2	1				1
Difficult	4	2				2
% Indicating Request NOT Resolved	7	5				5
Easy	44	44				44
Neither easy nor difficult	9	8				8
Difficult	47	48				48

*Net Easy = Easy – Difficult.

DUKE ENERGY.

Net Easy
DE-MW Fastrack Modules

	YTD-17	Q1-18	Q2-18	Q3-18	Q4-18	YTD-18
All things considered, would you say it was easy - or difficult - for you to get your request resolved?						
Net Easy*						
Service Initiation	93	94				94
Service Initiation (Gas)	88	93				93
Outage	76	79				79
Billing (Internal)	84	77				77
Billing (Outsource)	69	76				76
Outdoor Lighting	51	61				61

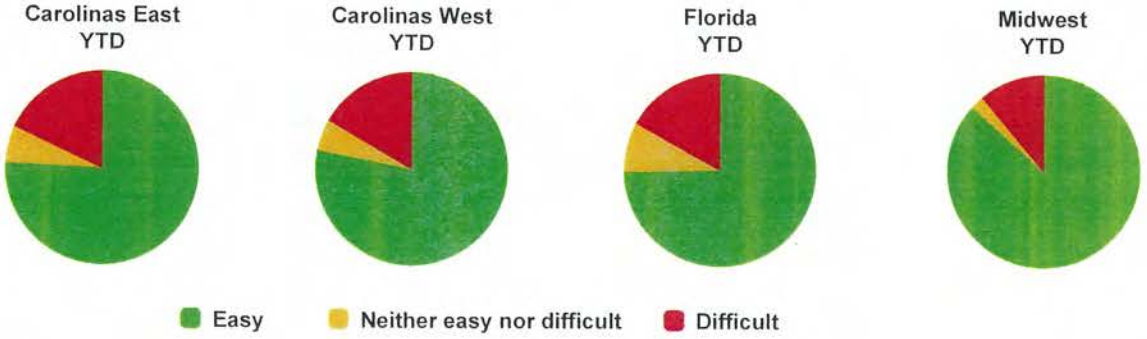
*Net Easy = Easy – Difficult.

DUKE ENERGY.

Net Easy
Billing (Outsource) – 2018

	Carolinas East					Carolinas West					Florida					Midwest				
	Q1	Q2	Q3	Q4	YTD	Q1	Q2	Q3	Q4	YTD	Q1	Q2	Q3	Q4	YTD	Q1	Q2	Q3	Q4	YTD
Net Easy*	58				**58**	61				**61**	58				**58**	76				**76**
Easy	76				76	78				78	75				75	87				87
Neither easy nor difficult	6				6	5				5	8				8	2				2
Difficult	18				18	17				17	17				17	11				11

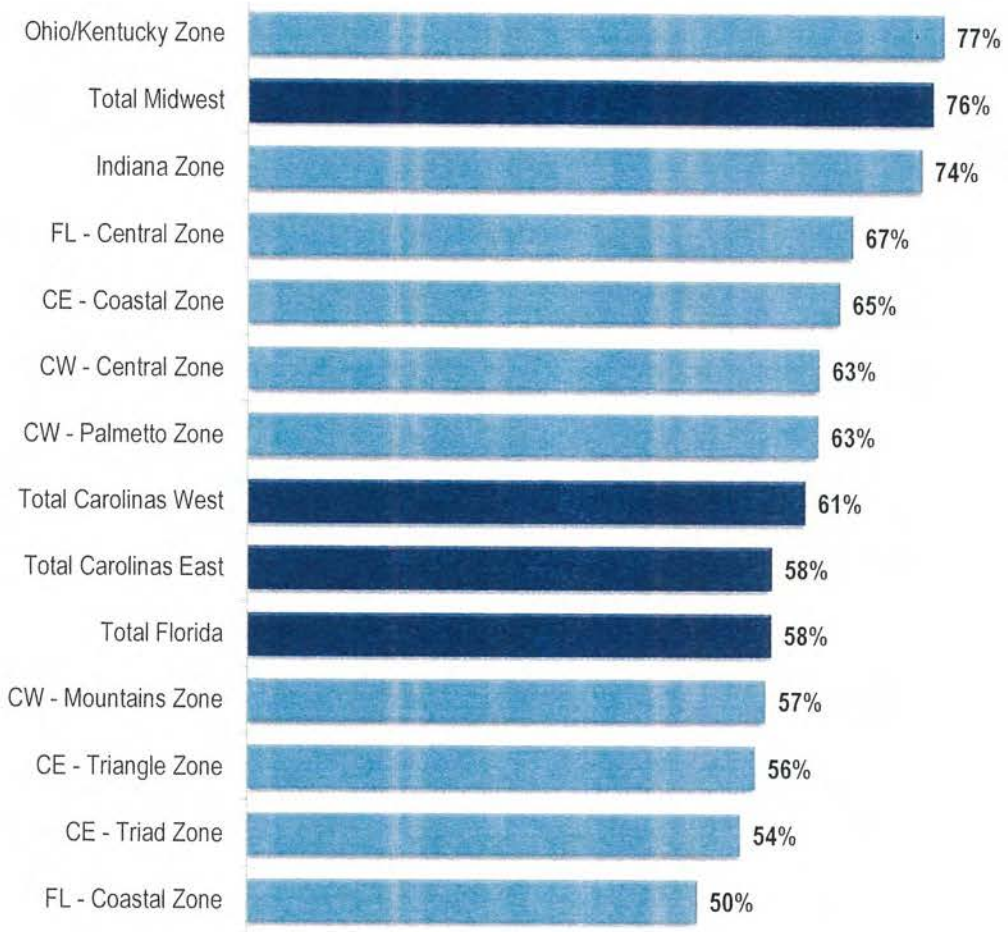
*Net Easy score = Easy - Difficult



All things considered, would you say it was easy – or difficult – for you to get your request resolved?

DUKE ENERGY.

Net Easy
Billing (Outsource) By Zone – Q1-18



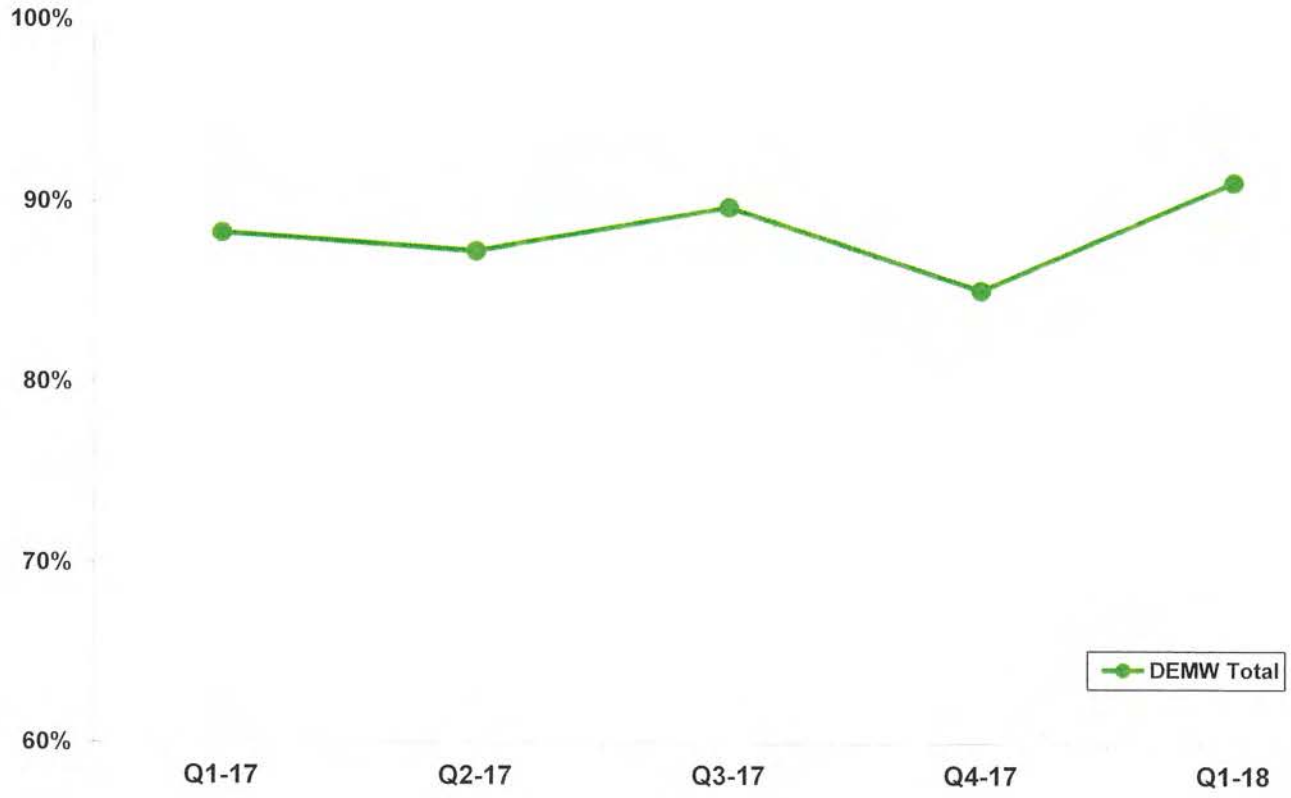
DUKE ENERGY.

Duke OHKY
Fastrack

Service Initiation (Gas) Module

Q1-18

Service Initiation (Gas)
DE-OHKY Score Trends



DUKE ENERGY.

Service Initiation (Gas)
Impact on Overall Satisfaction

	YTD-17	Q1-18	Q2-18	Q3-18	Q4-18	YTD-18
Overall Satisfaction with Duke Energy's overall performance as your electric supplier	90	92				92
	2	2				2
Would you say that your recent service experience has had a positive, negative, or no effect on your overall satisfaction with Duke Energy?						
Net Effect[1]	58	62				62
A positive effect	63	65				65
A negative effect	5	3				3
No effect	32	32				32

[1] *Net Effect = A positive effect – A negative effect*

DUKE ENERGY.

Impact on Overall Satisfaction
DE-MW Fastrack Modules

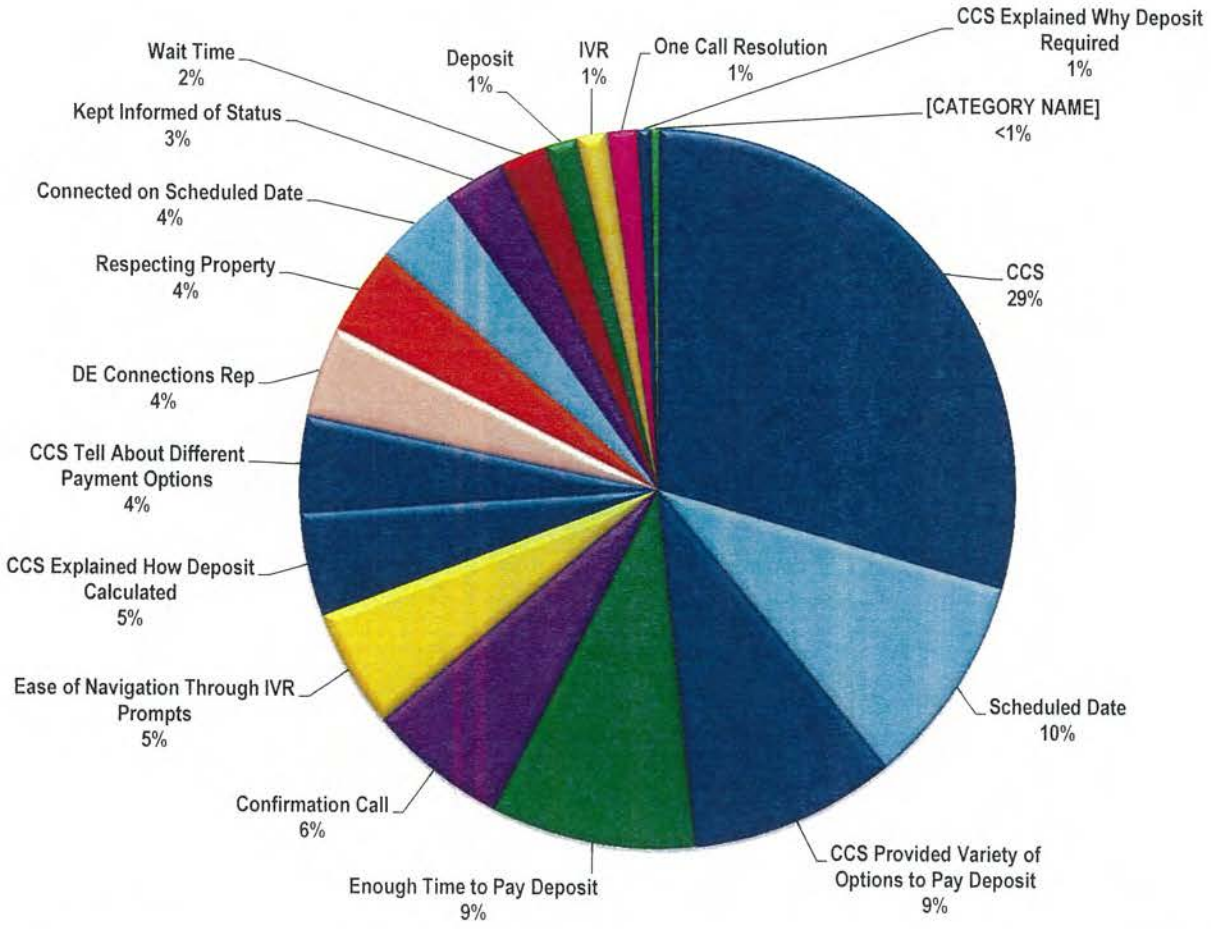
	YTD-17	Q1-18	Q2-18	Q3-18	Q4-18	YTD-18
Would you say that this recent service experience has had a positive, negative, or no effect on your overall satisfaction with Duke Energy?						
Net Effect[1]						
Service Initiation	65	64				64
Service Initiation (Gas)	58	62				62
Outdoor Lighting	43	45				45
Billing (Internal)	46	43				43
Billing (Outsource)	41	38				38
Outage	34	37				37

[1] *Net Effect = A positive effect – A negative effect.*

DUKE ENERGY.

Service Initiation (Gas) – Deposit Required

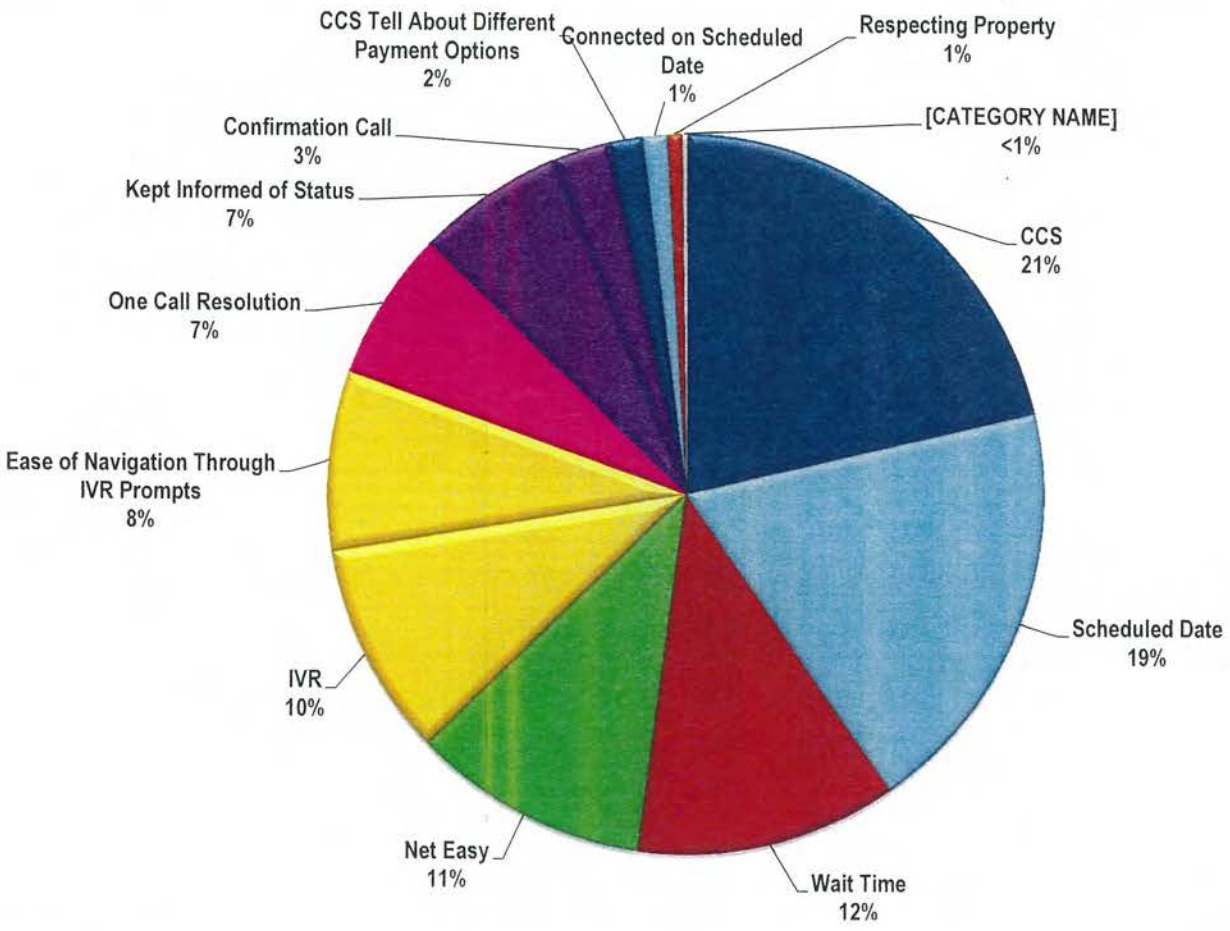
DEOHKY Q1-18 Opportunity Score



DUKE ENERGY.

Service Initiation (Gas) – Deposit NOT Required

DEOHKY Q1-18 Opportunity Score



DUKE ENERGY.

Service Initiation (Gas)
Call Center Metrics – Deposit Required

	YTD-17	Q1-18	Q2-18	Q3-18	Q4-18	YTD-18
Overall Satisfaction with IVR	76	77				77
	9	6				6
Ease of navigation through the phone menu prompts	83	83				83
	5	4				4
Amount of time you waited to be transferred to CCS	89	93				93
	3	2				2
Overall Satisfaction with Customer Care Specialist	93	100				100
	4	0				0
Payment options explained (% Yes)	*75*	*79*				*79*
One call resolution (% Yes)	*80*	*92*				*92*
Overall Satisfaction with Duke Energy Connections Representative	86	81				81
	9	14				14

Rating Scale (0 - 10): % (8-10) / % (0-4)

DUKE ENERGY.

Service Initiation (Gas)

Call Center Metrics – Deposit NOT Required

	YTD-17	Q1-18	Q2-18	Q3-18	Q4-18	YTD-18
Overall Satisfaction with IVR	74	73				73
	8	7				7
Ease of navigation through the phone menu prompts	79	81				81
	6	5				5
Amount of time you waited to be transferred to CCS	88	87				87
	2	2				2
Overall Satisfaction with Customer Care Specialist	91	94				94
	2	2				2
Payment options explained (% Yes)	*63*	72				72
One call resolution (% Yes)	*87*	*87*				*87*
Overall Satisfaction with Duke Energy Connections Representative	82	87				87
	7	9				9

Rating Scale (0 - 10): % (8-10) / % (0-4)

DUKE ENERGY.

Service Initiation (Gas)
Deposit

	YTD-17	Q1-18	Q2-18	Q3-18	Q4-18	YTD-18
Required to Pay Deposit (% Yes)	25	26				26
Deposit affected overall satisfaction	44	45				45
SOME effect on overall satisfaction	23	30				30
BIG effect on overall satisfaction	13	9				9
BIGGER impact on overall satisfaction than anything else	8	6				6
CCS explained why the deposit was required (% Yes)	72	65				65
CCS explained how the deposit was calculated (% Yes)	58	55				55
CCS provided a variety of options to pay or satisfy the deposit (% Yes)	82	92				92
Overall satisfaction with providing enough time to pay the deposit	84	87				87
	4	2				2

Rating Scale (0 - 10): % (8-10) / % (0-4)

DUKE ENERGY.

Service Initiation (Gas)
Appointment

	YTD-17	Q1-18	Q2-18	Q3-18	Q4-18	YTD-18
Appointment*						
Did CCS inform you someone had to be home? (% Yes)	96	99				99
Were you able to schedule the time window you wanted? (% Yes)	87	88				88

** Appointment questions only asked to RECN, UNSL and TONC customers starting in Q1-15.*

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Service Initiation (Gas)
Scheduled Date & Performance

	YTD-17	Q1-18	Q2-18	Q3-18	Q4-18	YTD-18
Scheduled Date & Performance						
Satisfaction with scheduled connection date	93	96				96
	3	1				1
Service connected on scheduled date (%Yes)	96	97				97
Received confirmation call or phone message (% Yes)	50	62				62
Kept Informed About Status of Request (% Yes)	83	84				84

Rating Scale (0 - 10):	% (8-10)
	% (0-4)

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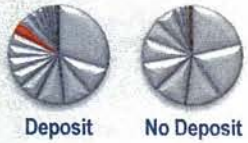

Service Initiation (Gas)
Field Service Technician

	YTD-17	Q1-18	Q2-18	Q3-18	Q4-18	YTD-18
Respecting your property	98	96				96
	1	2				2
Talked with field service technician DURING visit (% Yes)	*27*	*18*				*18*
Overall Satisfaction with service provided by Field Service Technician at your property	96	94				94
	1	0				0

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Service Initiation (Gas)

Net Easy – Connected on Scheduled Date

	YTD-17	Q1-18	Q2-18	Q3-18	Q4-18	YTD-18
Net Easy*	88	93				93
Easy	93	96				96
Neither easy nor difficult	2	1				1
Difficult	5	3				3
% Indicating Connected on Scheduled Date	96	97				97
Easy	94	97				97
Neither easy nor difficult	1	1				1
Difficult	4	3				3
% Indicating NOT Connected on Scheduled Date	4	3				3
Easy	61	77				77
Neither easy nor difficult	8	6				6
Difficult	31	18				18

*Net Easy = Easy – Difficult.

DUKE ENERGY.

Service Initiation (Gas)
Net Easy – Deposit Required

	YTD-17	Q1-18	Q2-18	Q3-18	Q4-18	YTD-18
Net Easy*	88	93				93
Easy	93	96				96
Neither easy nor difficult	2	1				1
Difficult	5	3				3
% Indicating Required to Pay Deposit	25	26				26
Easy	93	99				99
Neither easy nor difficult	1	1				1
Difficult	6	0				0
% Indicating NOT Required to Pay Deposit	75	74				74
Easy	93	95				95
Neither easy nor difficult	2	1				1
Difficult	5	4				4

*Net Easy = Easy – Difficult.

DUKE ENERGY.

Net Easy
DE-MW Fastrack Modules

	YTD-17	Q1-18	Q2-18	Q3-18	Q4-18	YTD-18
All things considered, would you say it was easy - or difficult - for you to get your request resolved?						
Net Easy*						
Service Initiation	93	94				94
Service Initiation (Gas)	88	93				93
Outage	76	79				79
Billing (Internal)	84	77				77
Billing (Outsource)	69	76				76
Outdoor Lighting	51	61				61

*Net Easy = Easy – Difficult.

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1DF – Duke OHKY
Fastrack

June 2018 Update

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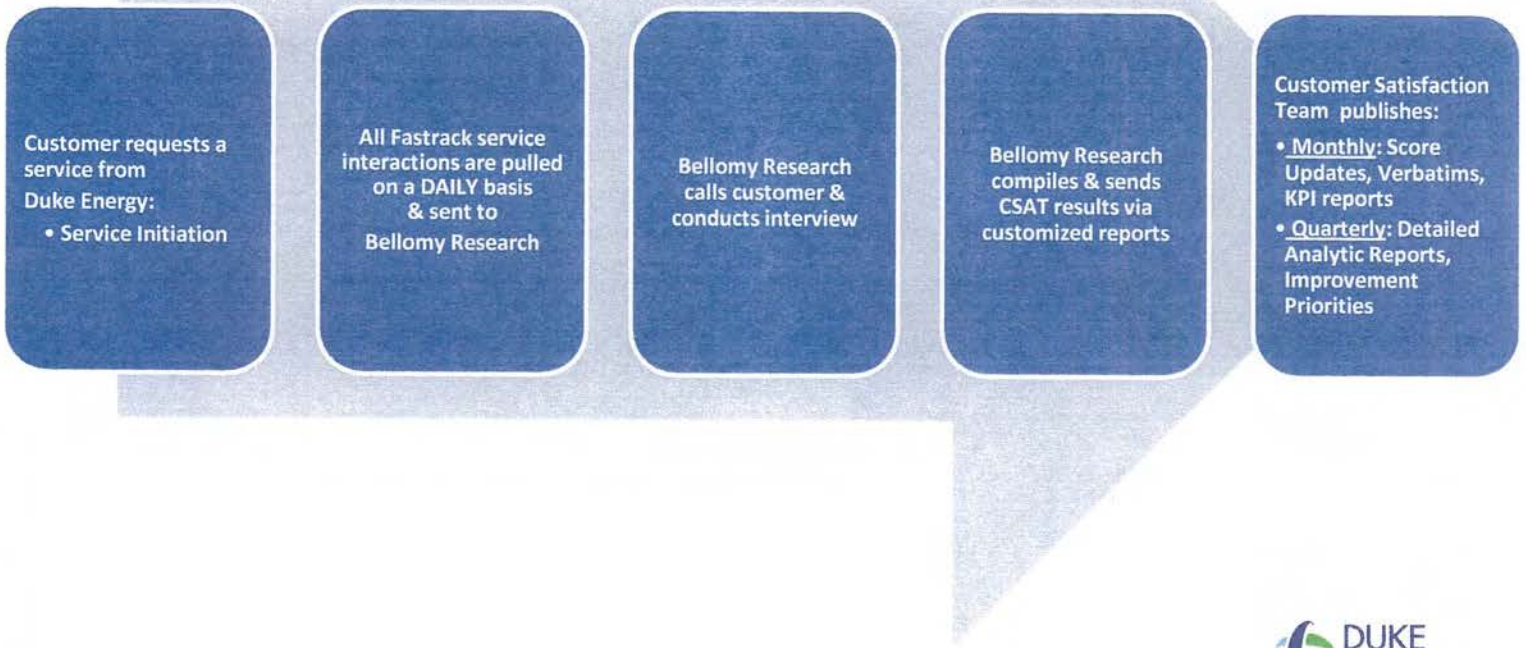
MARKET INTELLIGENCE

Fastrack Description
The Process



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Fastrack Description
The Score Question

*"**All things considered**, how satisfied were you with Duke Energy handling your recent service request, where 10 is completely satisfied and 0 is not at all satisfied?"*

0 1 2 3 4 5 6 7 **8 9 10**

Highly Dissatisfied= % '0-4'

Highly Satisfied= % '8,9,10'

$$\textbf{Fastrack Score} = \frac{\text{\# of customers rating the score question '8, 9, 10'}}{\text{TOTAL customers interviewed}}$$

Example

If there are 10 total interviews:

- 1 rated the score question '5'
- 3 rated the score question '8'
- 2 rated the score question '9'
- 4 rated the score question '10'

The Fastrack Score would = $\frac{(3+2+4)}{10} = 90$

DUKE ENERGY.

Midwest Fastrack

Service Initiation Gas

June 2018

DUKE ENERGY®

Service Initiation Gas
Goal Update – June 2018

	June Score	2018 YTD	2018 Goal	Goal Status
Service Initiation Gas	**86**	**90**	**88**	
Field Service Technician	100	95		

***Scores** = % Customers rating their overall satisfaction an '8, 9 or 10' on a '0-10' scale*

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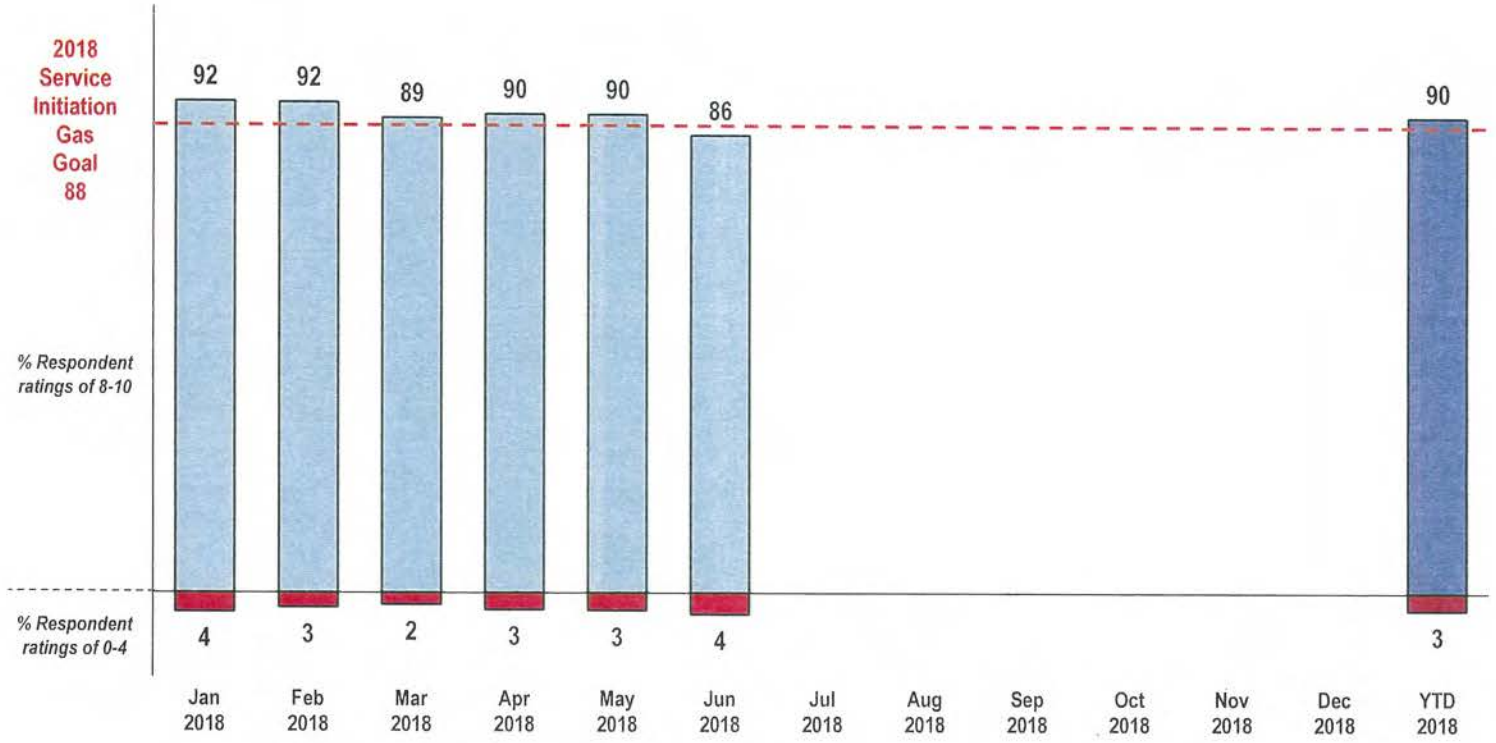
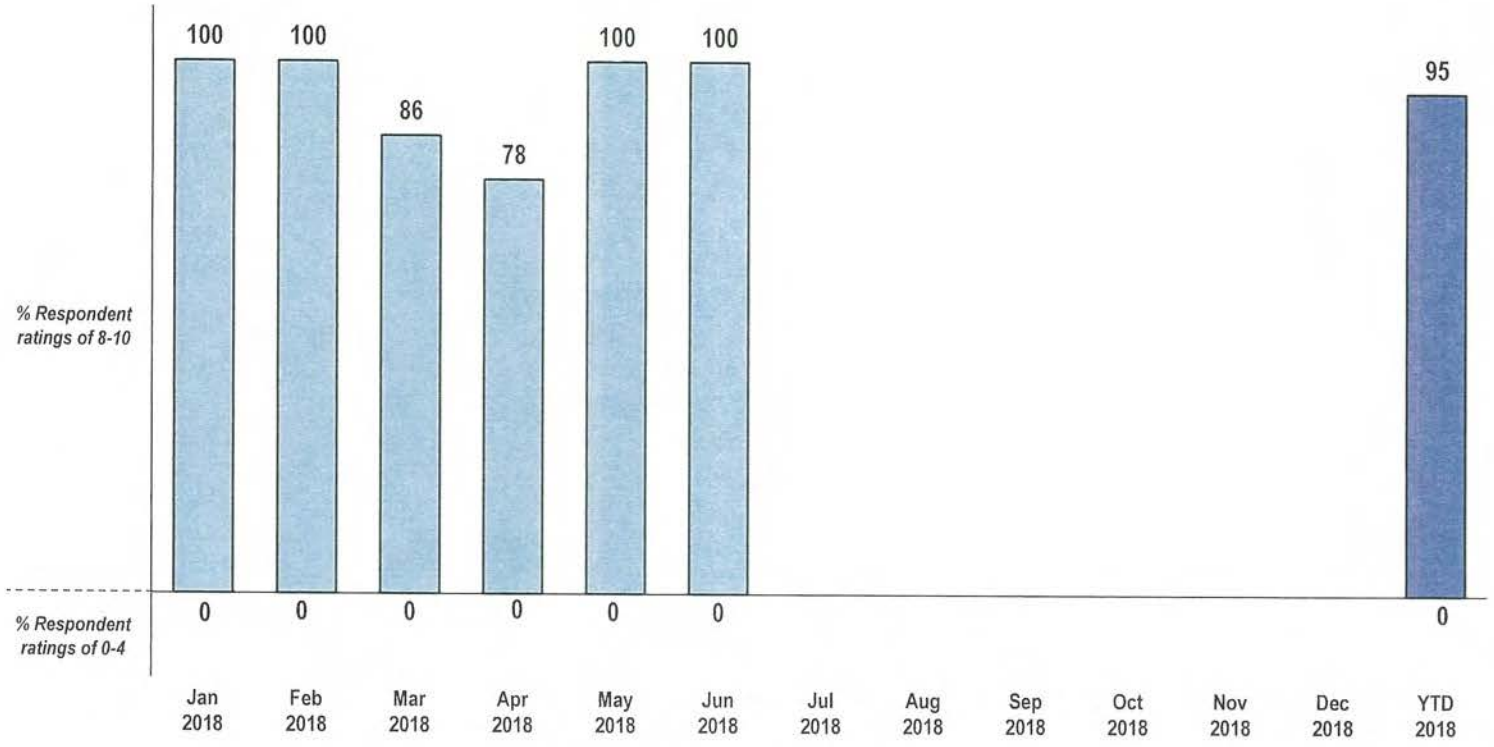
Service Initiation Gas
Monthly Fastrack Score Trend



DUKE ENERGY.

Field Service Gas Technician

Monthly Gas FST Score Trend



DUKE ENERGY.

Service Initiation Gas
Monthly Fastrack Scores by Module

	2018												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
Service Initiation Gas	92	92	89	90	90	86							90
Field Service Technician	100	100	86	78	100	100							95

***Scores** = % Customers rating their overall satisfaction an '8, 9 or 10' on a '0-10' scale*

2018 Service Initiation Gas Fastrack Goal = 88

DUKE ENERGY.

Service Initiation Gas
Field Service Technician 2018

	Jan	Feb	Mar	Q1	Apr	May	Jun	Q2	Jul	Aug	Sep	Q3	Oct	Nov	Dec	Q4	YTD
Overall Satisfaction with service provided by FST at your property	100	100	86	94	78	100	100	95									95
	0	0	0	0	0	0	0	0									0
Respecting your property	98	96	94	96	99	99	100	99									98
	2	<1	3	2	1	0	0	<1									1
Talked with FST DURING visit (% Yes)	*16*	*16*	*22*	*18*	*10*	*20*	*20*	*17*									***18***

Rating Scale (0 - 10): | % (8-10) | % (0-4) |

Service Initiation Gas
Agreed Date & Performance 2018

	Jan	Feb	Mar	Q1	Apr	May	Jun	Q2	Jul	Aug	Sep	Q3	Oct	Nov	Dec	Q4	YTD
Agreed Date & Performance																	
Satisfaction with scheduled date	96	93	97	96	93	98	95	95									95
	1	<1	1	1	3	1	2	2									2
Service connected on scheduled date (% Yes)	*98*	*100*	*95*	*97*	*96*	*100*	*96*	*97*									*97*
Received confirmation call or phone message (% Yes)	*59*	*62*	*65*	*62*	*67*	*64*	*58*	*63*									*63*

Rating Scale (0 - 10): % (8-10) / % (0-4)

Service Initiation Gas
Kept Informed 2018

	Jan	Feb	Mar	Q1	Apr	May	Jun	Q2	Jul	Aug	Sep	Q3	Oct	Nov	Dec	Q4	YTD
Kept Informed About Status of Request (% Yes)	87	83	82	84	88	81	83	84									84


DUKE
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COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

The Electronic Application of Duke Energy Kentucky, Inc., for: 1) An Adjustment of the Natural Gas Rates; 2) Approval of a Decoupling Mechanism; 3) Approval of New Tariffs; and 4) All Other Required Approvals, Waivers, and Relief.	)))))))	Case No. 2018-00261

DIRECT TESTIMONY OF

TYLER A. BARBARE

ON BEHALF OF

DUKE ENERGY KENTUCKY, INC.

August 31, 2018

TABLE OF CONTENTS

I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Tyler A. Barbare and my business address is 4720 Piedmont Row Drive, Charlotte, North Carolina 28210.

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

A. I am employed by Piedmont Natural Gas Company Inc. (Piedmont), as Director of Gas Technical Field Operations. Piedmont provides various administrative and other services to Duke Energy Kentucky, Inc. (Duke Energy Kentucky), and other affiliated companies of Duke Energy Corporation (Duke Energy).

Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.

A. I started my career with Piedmont Natural Gas as a Meter Reader in 1998. In the summer of 1999, I was promoted to a Service Tech and my duties included installation of new residential and commercial meter sets, inspection of natural gas fired equipment venting installations, gas piping and regulators based on code requirements in South Carolina. In 2001, I transferred to the Measurement Department and performed Industrial Meter Repair duties. In this role I tested, repaired and installed Large Volume Meter Sets at commercial and industrial facilities in South Carolina and North Carolina. I also learned how to install, troubleshoot and repair electronic equipment such as electronic correctors, SCADA monitoring equipment and setup reliefs and regulators based on engineering design and customer pressure requirements. In 2003, I was promoted to Telemetering Specialist in which I tested large regulator stations, wired up

Remote Terminal Unit panels, installed telecommunications equipment and worked closely with Gas Control. Also, during this time I attended ITT Technical College in Greenville, South Carolina where I earned a Bachelor of Science Degree in Electronics Engineering during the spring of 2005.

In 2009, I was promoted to Measurement Supervisor in South Carolina. I served four years in that role and then relocated to Nashville, Tennessee in 2013. While working in Nashville, I performed Measurement Supervisor duties for nine months and my Measurement and Regulation team supported a new twenty-inch transmission pipeline installation project. In the spring of 2014, I was named both Operations and Maintenance Manager and Spartanburg Resource Center Operations Site Manager for Piedmont Natural Gas Southern Zone which includes South Carolina, Hickory North Carolina and Spruce Pine, North Carolina. In 2017, I was promoted to Director, Gas Technical Field Operations supporting the natural gas operations in Kentucky, Ohio, Tennessee, North Carolina and South Carolina.

Q. PLEASE DESCRIBE YOUR DUTIES AS DIRECTOR OF GAS TECHNICAL FIELD OPERATIONS.

A. As Director of Gas Technical Field Operations, I am responsible for ensuring the highest level of safety as my team performs their required job responsibilities. My duties include maintaining an operator qualified work force, oversight of the Gas Measurement Center Meter Testing Facility and working collaboratively with various functions within Duke Energy's Natural Gas Operations, including

engineering, system planning, major projects, and distribution/construction to provide excellent customer service.

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

A. No.

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

A. The purpose of my testimony is to support Duke Energy Kentucky's request for a waiver pursuant to KRS 278.210 and 807 KAR 5:022 Section 8(5) to amend its natural gas meter testing schedule for positive-displacement meters with rated capacity up to and including 500 cubic feet per hour from a 10-year testing parameter to a 15-year schedule. The purpose of this waiver is to align the testing timeline with the useful/depreciable life of the natural gas advanced metering infrastructure/automated meter reading modules (AMI/AMR) approved as part of Case No. 2016-152 (AMI Deployment Case).

II. DISCUSSION

Q. PLEASE DESCRIBE DUKE ENERGY KENTUCKY'S CURRENT NATURAL GAS METER TESTING TIMING PROTOCOL FOR RESIDENTIAL METERS.

A. Currently, Duke Energy Kentucky follows 807 KAR 5:022 Section 8(5) testing protocols, which provides the following for testing of natural gas meters:

(5) Periodic tests.

(a) Periodic tests of all meters shall be made according to the following schedule based on rated capacities. Rated meter capacity is defined as the capacity of the meter at five-tenths (0.5) of one (1) inch water column differential for diaphragm meters and as specified by the manufacturer for all other meters.

1. Positive-displacement meters, with rated capacity up to and including 500 cubic feet per hour, shall be tested at least once every ten (10) years.
2. Positive-displacement meters, with rated capacity above 500 cubic feet per hour, up to and including 1,500 cubic feet per hour, shall be tested at least once every five (5) years.
3. Positive-displacement meters above 1,500 cubic feet per hour shall be tested at least once every year.

Duke Energy Kentucky's residential natural gas meters generally fall into the first category (Category 1 Meters) set forth under the rule and thereby are tested at least once every 10-years. In order to achieve this 10-year requirement for natural gas meters, Duke Energy Kentucky amended its practices several years ago to strive to test these meters within the ninth year so as not to exceed the 10-year threshold. The next largest group of meters Duke Energy Kentucky has installed at customer premises would fall into the second category (Category 2 Meters) set forth under the rule above and are tested at least once every five years. Duke Energy has very few meters that would fall into the third category (Category 3 Meters) which are tested at least once a year.

Q. PLEASE EXPLAIN HOW DUKE ENERGY KENTUCKY TESTS THE ACCURACY OF ITS NATURAL GAS METERS?

A. In accordance with Commission regulations, Duke Energy Kentucky removes the meter from the customer's premise and brings the meter back to the Company's testing facility to conduct the accuracy test in a temperature-controlled environment. When the Company removes a meter for testing, a new meter must be set in its place to continue natural gas service to the customer's premise. This means that the typical residential customer receives a new natural gas meter approximately every 10 years.

Once the meter is brought back to the testing facility, it is placed in the environment of the testing equipment for a minimum of five (5) hours to ensure that the meter's accuracy will not be adversely impacted by any changes in temperature. The meter is then connected to the testing equipment and tested in accordance with industry standard methodology in compliance with Commission regulations. Under Kentucky's regulations any meter that is found to have a meter error of two percent or less, fast or slow, is considered to be accurate.

The meter is connected to a calibrated SNAP Prover for accuracy testing. The test consists of a measured amount of air pulled through the meter under vacuum for several minutes. This test is performed using the "Check" and "Open" methodology which uses two different levels of volume at half an inch of water column differential. The low volume test, or "Check" is at 20 percent of the meter's rated capacity. The high volume test or "Open" is at 100 percent of the meter's rated capacity. If the results of that test shows the meter is accurate within

the established tolerance levels, the testing is complete and the meter is found to be accurate. If the meter test falls outside of the acceptable accuracy tolerance range, the Open and Check tests are performed two additional times. The average of these three tests is then used to determine the accuracy of the meter.

Q. DOES DUKE ENERGY KENTUCKY RE-DEPLOY METERS AFTER TESTING?

A. Category 3 Meters are generally refurbished and re-deployed. Category 1 and Category 2 Meters are not redeployed. The Category 1 and 2 Meters are diaphragm meters and the Company generally disposes of these category of meters after completing the testing. This is because the costs to refurbish, repair, store, and redeploy a once-used diaphragm meter were determined to exceed the costs of simply purchasing a new meter. Category 3 Meters are larger rotary meters and are more costly to purchase. When Duke Energy Kentucky removes the Category 1 and 2 Meters from service we will attempt to sell them to a third party for potential future use if there is a market for that type of meter. For those meters that cannot be resold, the Company will scrap the meter for recycling. Any revenues received through this recycling or third party sales are credited against (reducing) the overall meter plant accounts. This is a more cost-efficient process than having to refurbish, repaint, store, and redeploy all meters.

Q. PLEASE BRIEFLY DESCRIBE THE PROCESS AND ESTIMATED COSTS FOR REFURBISHING A CATEGORY 1 METER.

A. Refurbishing a Category 1 Meter requires cleaning and replacement of parts. The meter is then tested again for accuracy and additional adjustments are made if

necessary. The meter is repeatedly tested and adjusted until it is determined to be accurate. A hydro test is then performed to ensure repairs and adjustment did not result in any leaks. Under this hydro test, the AMI/AMR module is removed, the meter is submerged in a tank of water and air is pumped into the meter to ensure there are no leaks. Once the meter passes the test and is dried, the AMI/AMR module is reattached and the meter is painted. The meter information is updated in the Company's meter tracking system. All of the testing, repairs, and data entry takes time. In a best case scenario, if the meter requires little adjustment and immediately passes all tests, at least one hour of labor is required per meter to complete the refurbishment process. More time may be required depending upon the number of adjustments. The Company will then have to store the meter until it can be redeployed in the field. The estimated, fully loaded labor costs per meter for the refurbishment of a typical meter is approximately $115.80. This does not include any additional costs for replacement parts, materials, or storage if refurbishment were to occur. Conversely, purchasing a new Itron Category 1 Meter with an AMI or AMR module installed costs approximately $105.00 or $102.00, respectfully.

Q. PLEASE EXPLAIN DUKE ENERGY KENTUCKY'S REQUEST FOR A WAIVER TO SWITCH TO A FIFTEEN (15) YEAR TESTING CYCLE FOR ITS CATEGORY 1 METERS.

A. The desire to switch to a 15-year testing cycle for Category 1 Meters is driven by the Company's addition of AMI/AMR modules to its natural gas meters. As I understand, the Commission approved the Company's deployment of AMI/AMR

modules in the AMI Deployment Case. For Duke Energy Kentucky's combination electric and gas customers (combination customers), the technology consists of an AMI electric meter and an AMI gas module attached to their existing gas meter. Usage data from the gas modules will be collected through nearby electric AMI meters and transmitted to the Company. In areas where Duke Energy Kentucky only provides gas service (gas-only customers) the Company does not have the electric AMI infrastructure in place to support communications for a gas AMI solution. The technology for these customers is an AMR gas module that is attached to their existing gas meters. The Company reads the AMR gas modules remotely by driving past the customer's premise.

As part of the AMI Deployment Case, the Commission approved a 15-year depreciable life for those AMI/AMR modules. This was based in part, upon the estimated 13-20 year battery life of those modules and the Company's experience in other jurisdictions with the useful life of such modules. As the Company explained in that case, the actual battery life will depend upon the data transmission, programming mode, and firmware downloads. In other words, the more the meters are used and data is transferred, the shorter the lifespan of the battery. Under the current 10-year testing cycle, the Company believes itis unlikely that these modules will last through two complete 10-year meter-testing cycles because of how the devices will be used and amount of data transferred.

As part of its AMI/AMR deployment, Duke Energy Kentucky is purchasing the modules and installing them on existing meters. Going forward, Duke Energy Kentucky will be purchasing these meters with the modules already

installed. This is a less expensive alternative than continuing to purchase separate modules to install ad hoc upon failure or end of life of the original modules.

The Company originally proposed to depreciate the AMI/AMR modules over 10-years in its AMI Case so to align the life of the modules with the meter testing cycle. This was to avoid the incremental cost of having to implement a program to replace the devices every 15-years or upon battery failure. Instead the company could address the issue of the misaligned module life as part of the 10-year testing protocol.

With a 15-year depreciable (and likely similar useful) life of these modules, it is economically efficient for customers that the Company move its meter testing to a 15-year cycle so as to take advantage of the full AMI/AMR module life and not incur AMI/AMR module replacement costs before the end of the useful life of the module. Moreover, if the Company were to continue with its current 10 year meter testing it would require extra handling of the AMI/AMR module in order to remove the modules and install on another meter. This extra handling could increase the risk of damage of the module.

Q. DOES MOVING TO A FIFTEEN-YEAR TESTING CYCLE CREATE A CONCERN FOR ACCURACY OF THE NATURAL GAS METERS AND CUSTOMER BILLS?

A. No.

Q. PLEASE EXPLAIN.

A. The Company examined a sample size of Category 1 natural gas meters from the Ohio and Kentucky service territories that were more than ten years between

meter accuracy tests and determined that the vast majority of meters tested remained within the accuracy tolerances and that the incremental number of meters that did not pass the accuracy test was immaterial. It should be noted that Ohio does not have a meter change-out/testing program like that of Kentucky. Attachment TB-1 is a spreadsheet detailing the results.

Q. HOW DID THE COMPANY PERFORM THIS ANALYSIS?

A. To perform this analysis, the Company examined the Category 1 Meter accuracy testing results for both Kentucky and Ohio for the period between 2007 and 2016. Because the period included multiple types of residential natural gas meters, some of which were of a type that are no longer in use, Duke Energy Kentucky filtered the results to only include the type of natural gas meters that are currently being installed by the Company. Put another way, obsolete meter types were eliminated from the survey. This resulted in a total sample size of 73,215 total Category 1 Meters that were tested between 2007 and 2016. Of those meters, the Company further filtered the results into the categories of years between meter tests. The Company then focused its analysis to only include those meters that were functional upon testing, registering a test result. This resulted in a sample size of 70,653. The Company then examined the number of meters that went ten years or more between tests. This produced a sample size of approximately 10,623 Category 1 Meters having ten or more years between accuracy tests. The Company then considered Kentucky's meter accuracy threshold in 807 KAR 5:006 Section 11 whereby meters that register more than 2 percent fast or slow are considered inaccurate.

Q. PLEASE EXPLAIN THE RESULTS OF THIS ANALYSIS.

A. The analysis shows that of the total 10,623 Category 1 residential natural gas meters that went more than ten years between accuracy tests, only 151 meters or 1.42 percent of the meters were found to have registered outside the 2 percent threshold tolerance in terms of slowness. Similarly, there were 275 meters that registered outside the tolerances for running fast. This is approximately 2.59 percent of the total number of meters tested. Put another way, approximately 96 percent of all meters that were tested at intervals greater than ten years were determined accurate. These results strongly support the Company's position that a change in the testing cycle will not create a concern of accuracy of natural gas meters or customer billings.

Q. DOES MOVING TO A FIFTEEN-YEAR METER TESTING CYCLE CREATE ANY SAFETY CONCERNS?

A. No. The Company will continue to perform all required inspections in compliance with all Federal and Kentucky Regulations. For example, the Company will continue to perform inspections, at intervals not to exceed the periodic meter test intervals, on the individual residential customer service regulators, vents, and relief valve vents for operable condition in accordance with 807 KAR 5:006 Section 25(5)(b). The Company currently inspects curb boxes annually in full compliance with 807 KAR 5:006 Section 25(5)(c) and will continue to do so. The Company also continues to perform all inspections required under CFR 49 CFR Part 192.

Q. IS MOVING TO A FIFTEEN-YEAR METER TESTING CYCLE BENEFICIAL TO CUSTOMERS?

A. Yes. Moving to a 15-year meter testing cycle would be beneficial to Kentucky customers because it would increase customer satisfaction by reducing inconvenience, avoid costs the Company will incur under the current conditions, and potentially reduce costs going forward.

Moving to a longer testing cycle should improve customer satisfaction in that it reduces the inconvenience of meter testing to customers by reducing the frequency of the tests. Customers must be present in order for their gas meter to be removed (for testing) and replaced with a new gas meter. The customer must set a four-hour appointment window and be available during the entire four-hour period. Experience shows that customers often reschedule or forget about these testing appointments causing delays in the Company performing these tests. Moving to a 15-year testing cycle will lessen the frequency that customers will need to make appointments over the course of their time as a Duke Energy Kentucky customer.

Adjusting the residential natural gas meter-testing requirement to a 15-year cycle will also allow the Company to avoid increased costs created due to the misalignment between the current 10-year testing cycle and the 15-year depreciable/useful life of the AMI/AMR modules. Unless this is changed, the Company will find itself facing increased costs for deploying a meter technician to the same premises more often to either service the AMI/AMR modules between testing cycles (assuming the AMI/AMR device can be removed and

reattached to the new meter on site during the meter change out for testing) or disposing of the AMI/AMR devices after the initial 10 years when meters are replaced.

The Company will first deploy personnel to the customer's premises to test the meter after 10 years to replace/test the natural gas meter, and then five years later, deploy additional personnel to exchange the AMI/AMR module on the meter. Then, within the next 5 to 8 years, sometime before the next meter testing deadline, the Company would send personnel to the premises to proactively replace the AMI/AMR device to avoid losing the ability to communicate with the meter upon device failure. Finally, the technician would return again to the premises prior to the 10 year testing deadline, to test/replace the meter, thereby increasing costs. Adding these extra steps to service the modules results in incremental costs.

Further, as I previously described, the AMI/AMR module is attached directly to the natural gas meter. Under testing protocol, the meter, including the AMI/AMR device is removed from the premises and transported to the Company's facility for testing. This presents a risk of damage to the AMI/AMR module during meter removal and transport of the meter back to the Company's testing facility.

Along with improving the overall customer experience through less premises visits, this waiver proposal will serve to avoid additional costs if the Company has to deploy personnel multiple times in a meter testing cycle for testing, module replacement and further meter testing.

III. CONCLUSION

Q. WAS ATTACHMENT TB-1 PREPARED AT YOUR DIRECTION AND UNDER YOUR CONTROL?

A. Yes.

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

A. Yes.

VERIFICATION

STATE OF NORTH CAROLINA)
) **SS:**
COUNTY OF Mecklenburg)

The undersigned, Tyler A. Barbare, Director of Gas Technical Field Operations, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing testimony and that it is true and correct to the best of his knowledge, information and belief.

Tyler A. Barbare Affiant

Subscribed and sworn to before me by Tyler A. Barbare on this 10 day of August, 2018.

NOTARY PUBLIC

My Commission Expires: Feb. 26, 2021

BARBARA J ASHFORD
NOTARY PUBLIC
MECKLENBURG COUNTY, NC
My Commission Expires
February 26, 2021

Gas Regulatory Report

Company: Duke Energy Kentucky Beginning Date: 01/01/2007 Ending Date: 12/31/2016

Meters From Service - Percent of ERROR	SLOW									FAST								
	DR	10+	5.1 to 10	4.1 to 5	3.1 to 4	2.1 to 3	1.6 to 2	0 to 1.5	100	0 to 1.5	1.6 to 2	2.1 to 3	3.1 to 4	4.1 to 5	5.1 to 10	10+	Total	Total Excl. DR.
Yrs. Since Last Test																		
Less Than 2 Yrs	309	13	25	10	15	43	0	3,393	68	5,998	41	16	6	1	8	4	9,950	9,641
2 to 4 Yrs	143	4	6	1	7	21	0	456	4	1,159	54	16	2	2	4	3	1,882	1,739
4 to 6 Yrs	114	2	3	2	4	13	0	246	2	581	51	19	4	2	3	1	1,047	933
6 to 8 Yrs	112	0	2	2	0	4	0	114	1	552	42	11	4	0	1	1	846	734
8 to 10 Yrs	399	15	12	7	10	51	0	3,282	41	20,409	3,413	1,505	92	14	19	10	29,279	28,880
10 to 15 Yrs	57	6	6	0	3	16	0	532	11	7,316	709	155	17	1	8	5	8,842	8,785
Over 15 years	0	0	0	0	0	0	0	0	0	12	1	0	0	0	0	0	13	13
Time Unknown	7	0	0	0	0	13	0	25	2	81	6	1	0	0	0	1	136	129
Total	1,141	40	54	22	39	161	0	8,048	129	36,108	4,317	1,723	125	20	43	25	51,995	50,854

Total Meters Tested This Period: 51995

																	TOTAL
10 to 15 Yrs	57	6	6	0	3	16	0	532	11	7,316	709	155	17	1	8	5	8,785
Over 15 years	0	0	0	0	0	0	0	0	0	12	1	0	0	0	0	0	13
Total > 10 yrs																	8,798

Total Slow	31
% inaccurate slow	0.35%
Total Fast	186
% inaccurate fast	2.11%
% total inaccurate	2.47%

Gas Regulatory Report

Company: Duke Energy Ohio Beginning Date: 01/01/2007 Ending Date: 12/31/2016

Meters From Service - Percent of ERROR	SLOW									FAST								
	DR	10+	5.1 to 10	4.1 to 5	3.1 to 4	2.1 to 3	1.6 to 2	0 to 1.5	100	0 to 1.5	1.6 to 2	2.1 to 3	3.1 to 4	4.1 to 5	5.1 to 10	10+	Total	Total Excl. DR
Yrs. Since Last Test																		
Less Than 2 Yrs	201	5	8	9	4	32	0	2194	73	11056	44	22	3	3	2	2	13658	13457
2 to 4 Yrs	221	1	2	1	3	6	0	175	11	933	66	20	3	0	2	1	1445	1224
4 to 6 Yrs	174	0	2	1	0	3	0	48	2	280	71	32	1	0	1	0	615	441
6 to 8 Yrs	216	0	0	0	0	2	0	15	1	139	74	33	0	0	2	0	482	266
8 to 10 Yrs	193	1	1	1	0	0	0	17	0	129	27	6	0	0	0	1	376	183
10 to 15 Yrs	180	1	1	0	11	50	0	268	1	864	101	51	5	0	4	0	1537	1357
Over 15 years	218	2	0	1	7	47	0	169	0	186	27	20	4	3	1	1	686	468
Time Unknown	18	2	1	0	2	8	0	1420	8	890	60	10	0	1	1	0	2421	2403
Total	1421	12	15	13	27	148	0	4306	96	14477	470	194	16	7	13	5	21220	19799

Total Meters Tested This Period: 21220

10 to 15 Yrs	0	268	1	864	101		1357
Over 15 years	0	169	0	186	27		468
Total > 10 yrs							1825

Total Slow	120
% inaccurate slow	6.58%
Total Fast	89
% inaccurate fast	4.88%

TOTAL KENTUCKY/OHIO METER ACCURACY 10 YRS OR MORE BETWEEN TESTS

Meters From Service - Percent of ERROR	SLOW										FAST							
	10+	5.1 to 10	4.1 to 5	3.1 to 4	2.1 to 3	1.6 to 2	0 to 1.5		100		0 to 1.5	1.6 to 2	2.1 to 3	3.1 to 4	4.1 to 5	5.1 to 10	10+	Total
10 to 15 Yrs	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	800	0	12	0	8,180	810	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10,142
Over 15 years	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0	169	0	0	0	198	28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	481
Total > 10 yrs																		10,623

Total Slow	151
% inaccurate slow	1.42%
Total Fast	275
% inaccurate fast	2.59%
% Total Inaccurate	4.01%

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

The Electronic Application of Duke Energy Kentucky, Inc., for: 1) An Adjustment of the Natural Gas Rates; 2) Approval of a Decoupling Mechanism; 3) Approval of New Tariffs; and 4) All Other Required Approvals, Waivers, and Relief.	)))))))	Case No. 2018-000261

DIRECT TESTIMONY OF

MICHAEL COVINGTON

ON BEHALF OF

DUKE ENERGY KENTUCKY, INC.

August 31, 2018

TABLE OF CONTENTS

I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Michael Covington and my business address is 4720 Piedmont Row Drive, Charlotte, North Carolina 28210.

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

A. I am employed by Duke Energy Business Services LLC (DEBS), as Director, Gas Utilities & Infrastructure Accounting. DEBS provides various administrative and other services to Duke Energy Kentucky, Inc. (Duke Energy Kentucky or Company) and other affiliated companies of Duke Energy Corporation (Duke Energy).

Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.

A. I earned a Bachelor of Science degree in accounting from the University of North Carolina at Charlotte in 1981, a Master's Degree in Ministry from the Southern Wesleyan University in 2006, and a Master's Degree in Practical Theology from Wesley Seminary at Indiana Wesleyan University in 2016. I am a Certified Public Accountant in the state of North Carolina and a member of the American Institute of Certified Public Accountants and the North Carolina Association of Certified Public Accountants. My professional work experience began in 1981 with Duke Energy as a Financial Analyst in the Corporate Controller's department and assumed my first management role in March of 1990. While at Duke Energy, I have held various positions of increasing responsibility in a number of areas including the Corporate Controller's department, Corporate Treasury, Corporate Planning and Duke's unregulated generation subsidiary. Following the merger

between Duke Energy Corp and Piedmont Corporation in 2016, I assumed my current position as the Director, Gas Utilities and Infrastructure Accounting.

Q. PLEASE DESCRIBE YOUR RESPONSIBILITIES AS DIRECTOR, GAS UTILITIES AND INFRASTRUCTURE ACCOUNTING.

A. I am responsible for the books of account and reporting the financial position and the results for the Gas Segment within Duke Energy including Duke Energy Kentucky's gas operations as well as Duke Energy Ohio's gas operations, Piedmont Natural Gas and various gas pipeline development projects within the segment.

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

A. No.

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

A. My testimony in this proceeding addresses the various capital and operating expenditures and accounting adjustments to Duke Energy Kentucky's books of account in support of Duke Energy Kentucky's application in this proceeding. I sponsor the historic data in Schedule B-8 provided in satisfaction of Filing Requirement FR 16(8)(b); and Filing Requirements FR 12(2)(i), FR 16(7)(i), FR 16(7)(k), FR 16(7)(m), FR 16(7)(n), FR 16(7)(o), FR 16(7)(p), and FR 16(7)(q). Finally, I also sponsor the historic data on Schedules I-1 through I-5 in response to FR 16(8)(i), and Schedule K in response to FR 16(8)(k).

II. OVERVIEW OF DUKE ENERGY KENTUCKY'S ACCOUNTING RECORDS

Q. ARE YOU FAMILIAR WITH THE ACCOUNTING PROCEDURES AND BOOKS OF ACCOUNT OF DUKE ENERGY KENTUCKY?

A. Yes. The books of account for Duke Energy Kentucky's regulated business follow the Uniform System of Accounts prescribed by the Federal Energy Regulatory Commission (FERC).

Q. ARE THE BOOKS OF ACCOUNT FOR THE NATURAL GAS BUSINESS OF DUKE ENERGY KENTUCKY PREPARED AT YOUR DIRECTION AND UNDER YOUR SUPERVISION?

A. Yes.

Q. ARE THE CAPITAL AND OPERATING EXPENDITURES REPRESENTED ON DUKE ENERGY KENTUCKY'S BOOKS OF ACCOUNT ACCURATE AND REASONABLE?

A. Yes. Duke Energy Kentucky has various budgeting, planning, and review procedures in place to establish and monitor the capital and operating budgets, as well as actual expenditures. The system of internal accounting controls provides reasonable assurance that all transactions are executed in accordance with management's authorization and are recorded properly.

The system of internal accounting controls is annually reviewed, tested, and documented by Duke Energy Kentucky to provide reasonable assurance that amounts recorded on the books and records of the Company are accurate and proper. In addition, independent certified public accountants perform an annual audit to provide assurance that internal accounting controls are operating

effectively and that Duke Energy Kentucky's financial statements are materially accurate. Duke Energy Kentucky will continue recording deferrals, per normal regulatory accounting standards, for riders that are subject to being trued-up. Over- or under-recovery of costs are flowed through riders such as the gas cost adjustment clause; the Company records the amounts to be trued-up in future periods as regulatory assets or regulatory liabilities.

III. SCHEDULES AND FILING REQUIREMENTS SPONSORED BY WITNESS

Q. PLEASE DESCRIBE B-8.

A. Schedule B-8 contains the Comparative Balance Sheets for Duke Energy Kentucky for the most recent five calendar years, the base period and the forecasted period.

Q. PLEASE DESCRIBE FR 12(2)(i).

A. FR 12(2)(i) consists of Duke Energy Kentucky's detailed income statement and balance sheet for the period ended June 30, 2018.

Q. PLEASE DESCRIBE FR 16(7)(i).

A. FR 16(7)(i) consists of the Company's most recent Federal Energy Regulatory Commission (FERC) audit report, reporting the results of the Company's last FERC audit.

Q. PLEASE DESCRIBE FR 16(7)(k).

A. FR 16(7)(k) consists of Duke Energy Kentucky's most recent FERC Form 1 and FERC Form 2.

Q. PLEASE DESCRIBE FR 16(7)(m).

A. FR 16(7)(m) consists of Duke Energy Kentucky's current chart of accounts.

Q. PLEASE DESCRIBE FR 16(7)(n).

A. FR 16(7)(n) consists of the latest twelve months of the monthly management reports providing financial results of the Company's operations in comparison to the forecast.

Q. PLEASE DESCRIBE FR 16(7)(o).

A. FR 16(7)(o) consists of management's monthly budget variance reports for Duke Energy Kentucky gas operations.

Q. PLEASE DESCRIBE FR 16(7)(p).

A. FR 16(7)(p) consists of Duke Energy's most recent Form 10-K and Form 8-K as well as those forms for the last two years. Additionally, the Company is submitting copies of its Form 10-Qs that were filed during the past six quarters.

Q. PLEASE DESCRIBE FR 16(7)(q).

A. FR 16(7)(q) consists of the independent auditor's annual opinion report for Duke Energy Kentucky. The auditor did not note any material weaknesses in internal controls.

Q. PLEASE DESCRIBE THE INFORMATION YOU SUPPORT IN RESPONSE TO FR 16(8)(i), SCHEDULES I-1 THROUGH I-5.

A. Schedule I-1 contains comparative income statements for the Company. Schedules I-2.1 through I-5 contains comparative revenue and sales statistical information as required by the Commission's filing requirements. I support the historic information contained on these schedules.

Q. PLEASE DESCRIBE THE INFORMATION YOU SUPPORT IN RESPONSE TO FR 16(8)(k), THE "K" SCHEDULES.

A. The information I support in response to FR 16(8)(k) consists of the Consolidated Condensed Income Statement and other Comparative Financial Data as presented on pages 2, 4 and 5 of Schedule K for Duke Energy Kentucky. I provided this information to Mr. Pratt for his use in preparation of the forecast.

IV. CONCLUSION

Q. WAS THE INFORMATION YOU SPONSORED IN SCHEDULES B-8, I-1, I-2.1, I-3, I-4, I-5 AND K AS WELL AS FR 12(2)(i), FR 16(7)(i), FR 16(7)(k), FR 16(7)(m), FR 16(7)(n), FR 16(7)(o), FR 16(7)(p), FR 16(7)(q), FR16(8)(i), AND FR 16(8)(k) PREPARED BY YOU OR UNDER YOUR DIRECTION AND SUPERVISION?

A. Yes.

Q. IS THE INFORMATION YOU SPONSORED IN THOSE SCHEDULES AND FILING REQUIREMENTS ACCURATE TO THE BEST OF YOUR KNOWLEDGE AND BELIEF?

A. Yes.

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

A. Yes.

VERIFICATION

STATE OF NORTH CAROLINA)
)
COUNTY OF MECKLENBURG)

SS:

The undersigned, Michael Covington, Director, Gas Utilities & Infrastructure Accounting, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing testimony and it is true and correct to the best of his knowledge, information and belief.

Michael Covington., Affiant

Subscribed and sworn to before me by Michael Covington on this 10th day of August 2018.

NOTARY PUBLIC

My Commission Expires: March 1, 2020

JANET P CURETON
NOTARY PUBLIC
Mecklenburg County
State of North Carolina

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

The Electronic Application of Duke Energy Kentucky, Inc., for: 1) An Adjustment of the Natural Gas Rates; 2) Approval of a Decoupling Mechanism; 3) Approval of New Tariffs; and 4) All Other Required Approvals, Waivers, and Relief.	)))))))	Case No. 2018-00261

DIRECT TESTIMONY OF

GARY J. HEBBELER

ON BEHALF OF

DUKE ENERGY KENTUCKY, INC.

August 31, 2018

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I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Gary J. Hebbeler and my business address is 139 East 4th Street, Cincinnati, Ohio 45202.

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

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

Q. PLEASE BRIEFLY SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I began working for The Cincinnati Gas & Electric Company (CG&E), now known as Duke Energy Ohio, Inc. (Duke Energy Ohio) in 1987, as an engineer in the Gas Engineering Department. I initially worked as a project engineer. I was responsible for designing gas mains and water lines; coordinating projects with governmental agencies and consulting firms; calculating pipe capacity and stress calculations on pipes; and evaluating company paving standards and designs. I worked for CG&E, and later for Cinergy Services, Inc., until 1998. I was Vice President for Michels Concrete Construction, Inc. during 1998 and returned to Cinergy Corp.'s Gas Engineering Department in 1999. In 2000, I was promoted to Manager, Contractor Construction. In this position, I helped design the Accelerated Main Replacement Program (AMRP). I also managed the

construction activities for replacing the cast iron/bare steel pipe under the AMRP. In 2002, I was promoted to Manager, Gas Engineering. I was responsible for managing the engineering activities and the capital expenditures for Gas Operations in Duke Energy Ohio's and Duke Energy Kentucky's gas distribution systems. In 2006, I was promoted to General Manager, Gas Engineering. In addition to responsibilities for gas engineering activities and capital expenditures, I was responsible for construction activities for the AMRP, street improvements, pressure improvements and major projects for Gas Operations in Duke Energy Ohio's and Duke Energy Kentucky's gas distribution systems. In 2010, I was promoted to General Manager, Gas Field and System Operations, where I was responsible for managing the construction, installation, operation and maintenance of the natural gas delivery systems for both Duke Energy Kentucky and Duke Energy Ohio. In 2017, I assumed my current position of Vice President, Gas Operations for the Duke Energy Natural Gas Business Unit.

Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES AS VICE PRESIDENT, GAS OPERATIONS FOR THE NATURAL GAS BUSINESS UNIT.

A. I direct the day-to-day natural gas operations for Distribution Construction, Field Operations, and Technical Field Operations of Duke Energy Kentucky and four other jurisdictions across the Natural Gas Business Unit including Duke Energy Kentucky's parent, Duke Energy Ohio. In this role, I am responsible for maintaining the integrity of the system and providing safe, reliable, adequate, reasonable, and affordable natural gas service. I am responsible for the

construction, measurement and regulation, and operations and maintenance of the natural gas delivery system.

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

A. Yes. I have previously testified before this and other state commissions.

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

A. The purpose of my testimony is to provide an overview of Duke Energy's Natural Gas Business Unit and Duke Energy Kentucky's natural gas utility operations. I also discuss the major safety, reliability and efficiency initiatives for the Company's natural gas operations. In doing so, I discuss the progress of and changes to Duke Energy Kentucky's safety initiatives: the Integrity Management Program, and the Distribution Integrity Management Program. I discuss the major investments in Duke Energy Kentucky's natural gas operations since the Company's last general gas rate case, including, but not limited to, Duke Energy Kentucky's Accelerated Service Replacement Program (ASRP). I support Duke Energy Kentucky's request to discontinue the ASRP and place all of the associated investment into rate base.

I support the operation and maintenance (O&M), purchased fuel mixture information and purchased gas expense for the base period and the forecasted test period. I discuss how the gas capital expenditure budget is prepared and I support the gas capital budget, including retirements, supplied to Mr. Pratt for his preparation of the Company's forecast. I also sponsor and support Filing

Requirements (FR) 16(7)(b), FR 16(7)(f) and FR 16(7)(g). Finally, I sponsor Filing Requirement (FR) 16(7)(h)(8), which provides the mix of gas supply utilized in the financial forecast, and the O&M information relied on by Mr. Pratt.

II. DUKE ENERGY'S GAS OPERATIONS BUSINESS UNIT

Q. PLEASE DESCRIBE DUKE ENERGY'S NATURAL GAS BUSINESS UNIT.

A. The Natural Gas Business Unit is responsible for ensuring safe, reliable, adequate, reasonable, and affordable natural gas service to Duke Energy Kentucky's customers and that these services are provided in accordance with applicable federal and state laws and regulations. The Natural Gas Business Unit is designed to maintain and expand customer-centered strategies and support models, and to enable organic growth by focusing on the customer and core values. This is accomplished through engaging and enabling our workforce by establishing clear metric driven accountabilities, facilitating people development, linking workforce strategies to our goals of safe, reliable, adequate, reasonable and affordable service. The Natural Gas Business Unit employs approximately 1,950 individuals who manage the day-to-day operations of the Kentucky, Ohio, Tennessee, North Carolina, and South Carolina businesses. Additionally, the Natural Gas Business Unit has approximately 2,500 contract employees to assist in our mission.

Duke Energy's Natural Gas Business Unit is organized into four major segments which are further defined by function within each segment. The four major segments of the Natural Gas Business Unit are Utility Operations, Commercial Operations, Ventures and Business Development, and Public Affairs, Rates, & Regulatory.

A. NATURAL GAS BUSINESS UNIT'S UTILITY OPERATIONS SEGMENT

Q. PLEASE DISCUSS THE NATURAL GAS BUSINESS UNIT'S UTILITY OPERATIONS SEGMENT.

A. Utility Operations is responsible for safe and reliable natural gas delivery, safe work execution, investment prioritization, and compliance at an affordable cost. Utility Operations is defined by five functions: Pipeline Operations, Asset Management/Engineering, Major Projects, Operations, and Operation Support.

Q. PLEASE DESCRIBE THE NATURAL GAS BUSINESS UNIT'S PIPELINE OPERATIONS FUNCTION.

A. Pipeline Operations is responsible for gas control operations and emergency response for the natural gas network, including transmission and distribution systems, and the safe and reliable delivery of natural gas into the system. This team provides oversight of gas control, maintenance of SCADA applications, coordination of SCADA activities, and operations and maintenance of all compression, Liquefied Natural Gas (LNG) and propane peaking facilities.

Q. PLEASE DESCRIBE THE NATURAL GAS BUSINESS UNIT'S ASSET MANAGEMENT AND ENGINEERING FUNCTION.

A. The Asset Management and Engineering function is responsible for investment

prioritization and compliance, which enables the business unit to gain O&M and capital efficiency while reducing risk. This team provides risk analysis of investments and repository and focus on records and data. They also facilitate the upkeep of standards, reporting, and regulatory audits, optimize long term planning, and provide a central engineering organization of technical skill.

Q. PLEASE DESCRIBE THE NATURAL GAS BUSINESS UNIT'S MAJOR PROJECTS FUNCTION.

A. Major Projects is responsible for project management, implementation and PMO activities on the natural gas transmission pipeline, facilities, privatization, compression and liquefied natural gas infrastructure.

Q. PLEASE DESCRIBE THE NATURAL GAS BUSINESS UNIT'S OPERATIONS FUNCTION.

A. Operations is responsible for distribution construction, operations and maintenance, fabrication/welding, and measurement and regulation. This team provides the appropriate level of project and contractor management for the construction of the distribution system that align with industry standards. In addition, this team provides singular accountability on work planning and system matters from central direction and ensures regional collaboration while meeting all compliance standards.

Q. PLEASE DESCRIBE THE OPERATIONS SUPPORT FUNCTION.

A. Operations Support is responsible for work and resource planning and management to ensure performance and continuous improvement. This team provides overall support to core gas functions. This team manages distribution

resource performance, scheduling/dispatch, work management, technical training, operator qualification, continuous improvement, quality assurance and quality control, application and configuration support activities. It is also responsible for IT and Non-IT project governance.

B. NATURAL GAS BUSINESS UNIT'S COMMERCIAL OPERATIONS SEGMENT

Q. PLEASE DISCUSS THE NATURAL GAS BUSINESS UNIT'S COMMERCIAL OPERATIONS SEGMENT AND MAJOR FUNCTIONS.

A. Commercial Operations is responsible for emergency response, field customer service, natural gas supply and optimization, customer growth and retention, account management, and economic development across all residential, commercial and industrial customers. Commercial Operations is currently defined by three major functions: Field Customer Service, Gas Supply Optimization, and Gas Sales and Delivery.

Q. PLEASE DESCRIBE THE FIELD CUSTOMER SERVICE FUNCTION.

A. Field Customer Service is responsible for planning, scheduling, controlling and managing field customer service activities to meet or exceed customer expectations and maintain compliance while meeting financial targets without jeopardizing safety. Field Customer Service activities include providing first responder resources to natural gas emergencies, serving as customer facing field technicians, and performing compliance work on above ground appurtenances. Examples of work performed at the request of customers includes turning on/off natural gas service at the meter, transferring service from one customer to another (also known as succession requests), and setting meters for new customers.

Examples of compliance work performed include leak survey of designated buildings and meter age changes.

In addition, customer satisfaction is monitored and measured using surveys at various levels (transaction, employee, company levels). Customer feedback is also gathered and utilized to support efforts to continuously improve customer satisfaction.

Q. PLEASE DESCRIBE THE GAS SUPPLY OPTIMIZATION FUNCTION.

A. The Gas Supply Optimization Function is responsible for Pipeline Services, Gas Scheduling, and Gas Trading. The Pipeline Services division is responsible for all aspects of Duke Energy Kentucky's pipeline management including capacity planning, forecasting, oversight of Federal activities, and management of third party shipper business on the Duke Energy Kentucky system. As the name implies, the Gas Scheduling group is responsible for all physical wholesale natural gas sales and purchases for Duke Energy Kentucky as well as city gate operations. Finally, Gas Trading procures physical natural gas supply to meet customers' demands, ensure storage optimal storage levels to meet current and forecasted demand, and when not needed, optimizes pipeline, storage and supply assets.

Q. PLEASE DESCRIBE THE GAS SALES AND DELIVERY SERVICES FUNCTION.

A. Gas Sales and Delivery Services is primarily responsible for driving customer growth through system expansion projects designed to serve new construction residential and commercial markets in addition to existing homes and businesses

desiring to convert to natural gas from alternative fuel sources. Gas Sales and Delivery Services is also responsible for initiating and administering projects and contracts to serve large industrial end users and gas-fired power generation facilities across the Company's footprint as well as contracts for off-system natural gas deliveries to directly connected municipal customers.

C. NATURAL GAS BUSINESS UNIT'S VENTURES AND BUSINESS DEVELOPMENT SEGMENT

Q. PLEASE DISCUSS THE NATURAL GAS BUSINESS UNIT VENTURES AND BUSINESS DEVELOPMENT SEGMENT.

A. Ventures and Business Development is responsible for investment prioritization and performance, grow midstream ventures, and manage the KO Transmission Pipeline business. Ventures and Business Development is defined by four major functions; Midstream Development, Asset Management and Investment, Compressed Natural Gas for motor fuels (CNG), and Investment and Strategic Planning.

Q. PLEASE BREIFLY DESCRIBE THE MIDSTREAM DEVELOPMENT FUNCTION.

A. Midstream Development is responsible for sourcing and evaluating commercial investment opportunities including mergers and acquisitions.

Q. PLEASE BREIFLY DESCRIBE THE ASSET MANAGEMENT AND INVESTMENT FUNCTION.

A. The Asset Management and Investment Function is responsible for managing current projects and for operating commercial joint venture assets.

Q. PLEASE BREIFLY DESCRIBE THE CNG FOR MOTOR VEHICLES FUNCTION.

A. The CNG Function is responsible for the safe operation of all CNG stations and commercial contracts for supplying private CNG stations. The CNG Function currently operates and maintains eleven CNG public filling stations in the Duke Energy's North Carolina, South Carolina and Tennessee jurisdictions.

Q. PLEASE BREIFLY DESCRIBE THE INVESTMENT AND STRATEGIC PLANNING FUNCTION.

A. The Investment and Strategic Planning Function is responsible for performing all financial analysis, budgets and forecasts for the Ventures and Business Development Segment.

D. NATURAL GAS BUSINESS UNIT'S PUBLIC AFFAIRS, RATES, AND REGULATORY SEGMENT

Q. PLEASE DISCUSS THE NATURAL GAS BUSINESS UNIT'S PUBLIC AFFAIRS, RATES, AND REGULATORY RESPONSIBILITIES.

A. Public Affairs, Rates, and Regulatory responsibilities are to enhance community relations, provide regulatory reporting, and rate case preparation. These activities for Kentucky and Ohio are supported by the President of Duke Energy Kentucky and Duke Energy Ohio.

III. DUKE ENERGY KENTUCKY'S LOCAL NATURAL GAS UTILITY OPERATIONS

Q. PLEASE DESCRIBE DUKE ENERGY KENTUCKY'S LOCAL NATURAL GAS OPERATIONS.

A. Duke Energy Kentucky serves a relatively densely populated territory that, though

not heavily industrialized, consists of a diverse mix of industrial customers. Duke Energy Kentucky currently provides natural gas distribution service to customers in Boone, Campbell, Gallatin, Grant, Kenton and Pendleton counties in northern Kentucky. Duke Energy Kentucky has approximately 1,453 miles of gas mains on its natural gas distribution system. There are approximately 170 employees in Duke Energy Kentucky's and Duke Energy Ohio's Gas Operations Department, many of whom perform services for Duke Energy Kentucky. The capital expenditures for Duke Energy Kentucky's Gas Operations in 2017 were approximately $50 million.

Duke Energy Kentucky purchases and delivers natural gas to approximately 99,500 customers.

Q. PLEASE SUMMARIZE HOW DUKE ENERGY KENTUCKY PROCURES NATURAL GAS.

A. During the 2017/2018 winter period, Duke Energy Kentucky purchased nearly all of its gas supply under firm supply contracts with established marketers and producers, who manage diversified natural gas supply and energy portfolios. These firm agreements are composed of a base supply component, which assures a continuous supply designed to meet minimum customer demands, and a swing supply component. Swing supply provides Duke Energy Kentucky flexibility to accommodate daily temperature-sensitive fluctuations in customer demand. Duke Energy Kentucky sources its gas through a competitive bidding process to enable it to obtain the optimal mix of suppliers and prices for its customers. The small remaining portion of Duke Energy Kentucky's 2017/2018 gas supply was

obtained from the daily and monthly markets.

Duke Energy Kentucky contracts with interstate pipelines for firm transportation and storage services. During 2017, Duke Energy Kentucky contracted for firm transportation and storage services with Columbia Gas Transmission Corporation (Columbia Gas). Duke Energy Kentucky also contracted for firm transportation service from Tennessee Gas Pipeline Company (Tennessee Pipeline), Columbia Gulf Transmission Corporation (Columbia Gulf), Texas Gas Transmission Company and KO Transmission Corporation. This diverse group of interstate pipeline companies allows Duke Energy Kentucky to negotiate lower transportation rates than it otherwise would be able to obtain from a smaller group of transportation providers.

The Company's gas procurement policies and practices have traditionally resulted in some of the most competitive gas cost adjustment (GCA) rates in the Commonwealth. Using techniques such as "expected value analysis" and *Monte Carlo* simulation, Duke Energy Kentucky has successfully made the transition from being a pre-Order 636[1] pipeline-supply dependent customer to an independent, aggressive buyer managing a diversified gas commodity and pipeline services portfolio.

Duke Energy Kentucky has used asset management agreements, where the Company has contracted with a third-party, to manage Duke Energy Kentucky's gas supply contracts, interstate pipeline transportation contracts and storage gas in exchange for a monthly fee that the asset manager credits to Duke Energy

[1] Docket No. RD91-11-000 In Re Pipeline Service Obligations and Revisions to Regulations Governing Self-Implementing Transportation Under Part 284 of the Commission's Regulations. (FERC Order No. 636).

Kentucky. This fee, which Duke Energy Kentucky flows through 100 percent to customers through the monthly GCA, allows Duke Energy Kentucky to optimize the value of these assets. Additionally, Duke Energy Kentucky revises its GCA price monthly in order to send accurate price signals to its customers, which the Commission approved in an order dated November 6, 2003, in Case No. 2003-00386.

Q. WHAT STEPS HAS DUKE ENERGY KENTUCKY TAKEN TO HELP ASSURE THAT NATURAL GAS COSTS ARE REASONABLE?

A. Duke Energy Kentucky utilizes a "Best Cost" approach to purchasing gas. This approach involves five components: the price of gas, the security of gas supply, the flexibility of gas supply, gas deliverability, and supplier relationships. Duke Energy Kentucky has taken a number of steps to manage its gas costs consistent with its best cost policy including active participation at FERC, restructuring of supply and capacity contracts to adjust to market conditions, and the utilizing an asset manager to promote more efficient use of its system and of its capacity and commodity rights.

Additionally, the Company offers various bill management and payment options to assist customers with managing their Duke Energy Kentucky bills. Company witness Amy B. Spiller describes these options in her testimony.

IV. SYSTEM SAFETY, INTEGRITY, RELIABILITY AND EFFICIENCY INITIATIVES

Q. PLEASE IDENTIFY THE REGULATIONS THAT DRIVE DUKE ENERGY KENTUCKY'S DISTRIBUTION AND TRANSMISSION INTEGRITY MANAGEMENT INITIATIVES.

A. Local natural gas distribution companies are required by regulations imposed by the federal government to ensure that infrastructure is fit for service. These regulations apply to operators' infrastructure, including service lines per 49 C.F.R. 192.1007, as well as the totality of 49 C.F.R. Chapter 192. Section 192.1007 is the DIMP and the definition of service line is explained in 49 C.F.R. 192.3 The DIMP is part of the Pipeline Safety Regulations, CFR Part 192, administered by PHMSA.

CFR 192 Subpart P – Gas Distribution Pipeline Integrity Management defines the required Integrity Management Program as "an overall approach by an operator to ensure the integrity of its gas distribution system."

CFR 192 Subpart O – Gas Transmission Pipeline Integrity Management states that "an operator of a covered pipeline segment must develop and follow a written integrity management program that contains all the elements described in §192.911 and that addresses the risks on each covered transmission pipeline segment."

Q. WHY IS DISTRIBUTION AND TRANSMISSION INTEGRITY MANAGEMENT IMPORTANT?

A. As stated previously, integrity management is an overall approach to ensure the integrity (*i.e.*, safety) of the gas distribution and transmission system. These regulations impose upon the Company an obligation to continuously evaluate the reliability of its natural gas distribution and transmission system and to maintain and improve its safety and performance.

Q. PLEASE DESCRIBE DUKE ENERGY KENTUCKY'S CURRENT DIMP.

A. Duke Energy Kentucky's DIMP is summarized in a written document that meets all the requirements of CFR 192 Subpart P – Gas Distribution Pipeline Integrity Management and follows the following seven elements outlined in the regulation:

1) Knowledge of the gas distribution system;
2) Identify threats;
3) Evaluate and rank risk;
4) Identify and implement measures to address risks;
5) Measure performance, monitor results, and evaluate effectiveness;
6) Periodic evaluation and improvement; and
7) Report results.

These elements support the basis of the DIMP and provide direction in evaluating initiatives to reduce risks in the distribution system.

Q. PLEASE EXPLAIN HOW DUKE ENERGY KENTUCKY IDENTIFIES, DESIGNS, PRIORITIZES, AND IMPLEMENTS PROJECTS BASED ON ITS DIMP.

A. Duke Energy Kentucky identifies, evaluates, and ranks risks in its distribution system and prioritizes measures to address these risks based on a relative risk model that takes into consideration threats to the system as defined in CFR 192.1007, which include corrosion, natural forces, excavation damage, material, weld or joint failure, incorrect operation, and other concerns that would threaten the integrity of the pipeline. The method used to determine the risk in Duke Energy Kentucky's distribution system is based on the relative risk associated

with repaired leaks. This risk is then aggregated for the entire system. The model is configured to utilize consequence values and a probability of one for each individual leak repair. Risk is calculated for each repair along with the inclusion of facility and location data. Individual leak risk is then summed up to develop risk scores at a system level. Threats with the highest total risk scores are then reviewed to determine appropriate measures to reduce and/or eliminate the risk.

Q. PLEASE DESCRIBE GAS OPERATIONS' MAJOR DISTRIBUTION INTEGRITY, SAFETY AND RELIABILITY INITIATIVES.

A. All of the activities within Gas Operations incorporate safety and reliability considerations. Safety and reliability are organizational responsibilities and not the purview of any one part of the organization. For example, the Gas Resources group purchases gas that meets current pipeline quality standards. Gas Engineering designs and installs the Duke Energy Kentucky's natural gas system in accordance with applicable safety codes promulgated in Title 49 of the Code of Federal Regulations. Gas Field and System Operations follows PHMSA and Commission safety regulations when installing, operating, and maintaining transmission and distribution facilities. This deliberate focus on safety and reliability is also demonstrated by Gas Operations, including our individual functional groups and is evidenced by the Company's exemplary safety record for natural gas distribution service in the Commonwealth.

In addition to these daily safety measures, Gas Operations is constantly exploring opportunities for implementation of programs that focus on safety and reliability, all of which are relevant to these proceedings. The first such program

was Duke Energy Kentucky's very successful accelerated main replacement program (AMRP), which was designed to replace the Company's cast iron and bare steel mains and associated services on an accelerated basis. The AMRP significantly reduced leak repairs on Duke Energy Kentucky's gas distribution system and the costs associated with such repairs. Duke Energy Kentucky was the first natural gas utility to implement such a program and operated the program such that it was completed on schedule. Duke Energy Kentucky maintained a replacement rate that allowed it to complete the program by 2010, as originally anticipated. Additionally, Duke Energy Kentucky efficiently managed the program by awarding the construction contracts for the AMRP through an annual bidding process. This allowed Duke Energy Kentucky to reduce the program costs.

The second, major program is the Accelerated Riser Replacement Program (RRP), which was designed to replace certain types of service head adapter-style risers that have been associated with riser leaks. The RRP was completed in 2012.

The third major program is the ASRP. The ASRP, like its predecessor AMRP, was designed to replace out of date and aging natural gas delivery service line (main to curb and curb to meter) infrastructure that has a high likelihood of developing leaks or even failure. By installing new and current industry standard facilities, the ASRP improves safety and reliability of the gas delivery system. As a component to the ASRP, the Company assumes ownership of these services replaced. Rider ASRP was implemented in 2016 as a five-year program. Duke Energy Kentucky has worked diligently at managing the costs of this program and

anticipates its completion within the forecasted test period in this proceeding. As a result, the Company is seeking to end the associated Rider with implementation of new base natural gas rates.

Finally, Duke Energy Kentucky has been focused on Pipeline Integrity Management, which is a comprehensive, risk-based approach to managing pipeline safety that is required for both transmission and distribution systems. Again, integrity management requires the entire organization's focus.

Q. PLEASE EXPLAIN THE TRANSMISSION INTEGRITY MANAGEMENT PROGRAM (TIMP).

A. Duke Energy Kentucky's TIMP is summarized in a written document that meets all the requirements of CFR 192 Subpart O – Gas Transmission Pipeline Integrity Management. TIMP consists of seven main steps:

1) High Consequence Area (HCA) identification;

2) Data integration;

3) Risk analysis;

4) Assessment;

5) Repair;

6) Minimize risk; and

7) Improve.

As a whole, this is a continuous evaluation and assessment process. As stated in 49 CFR 192, "An operator's initial integrity management program begins with a framework and evolves into a more detailed and comprehensive integrity management program, as information is gained and incorporated into the

program. An operator must make continual improvements to its program."

PHMSA emphasizes the importance of the operator's management responsibility to fully understand and acknowledge the implications of these program evaluations and to take the necessary steps to address deficiencies and make continuous program improvements. Program evaluation is one of the key required program elements established in the Integrity Management rules. Additionally, operator senior management is required to certify the TIMP performance information submitted annually to PHMSA.

Recently, Duke Energy Kentucky performed a major TIMP review using an outside consultant. This included a review of plans and procedures, as well as documentation supporting the implementation of the program. Based on this review, Duke Energy Kentucky is implementing a strategy to enhance the overall effectiveness of its TIMP. This program targets the following areas: 1) Inline Inspection (ILI) and pressure testing techniques, and 2) MAOP verification.

Q. PLEASE DESCRIBE GAS OPERATIONS' MAJOR TRANSMISSION INTEGRITY, SAFETY AND RELIABILITY INITIATIVES.

A. Currently, Duke Energy Kentucky uses direct assessment techniques as the primary method of integrity assessments. The data collected from these methods are limited and do not cover all potential threats. Increasing the percent of ILI and pressure test assessment methods to align with known threats provides more data for detecting defects and is a requirement of federal regulations and prudent operations. An ILI/Hydrotest capability study was recently completed which will aid in determining how to retrofit existing pipelines for ILI is necessary.

In compliance with Pipeline Safety Act of 2011 (Public Law 112-90), to maintain the integrity of its natural gas delivery system, and to ensure that it continues to operate the system at the appropriate MAOP, Duke Energy Kentucky conducted a very thorough segment-by-segment review for all transmission pipelines and facilities. Gaps were identified in records that are used to support MAOP's for the pipelines that resulted in pressures being adjusted and projects developed to bring the system back to full operating pressure. Pressure testing of some existing transmission pipeline segments must be performed in order to provide traceable, verifiable, and complete documentation to support all MAOP pursuant to CFR Title 49 Part 192.619 and 192.501. This was specifically emphasized in the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 passed by Congress on December 13, 2011, in response to the gas pipeline incident that occurred in San Bruno, California in 2010. In addition, pressure testing addresses the requirement in CFR Title 49 Part 192, Subpart O, which covers Transmission Integrity Management, to assess unstable manufacturing and construction defects. Using the data from the review, Duke Energy Kentucky has developed work plans for addressing each segment with inadequate records. The verification process includes developing a plan segment by segment, ranking the importance of each segment, planning a schedule for the work to be conducted based on importance and resource logistics, and execution of the work. During this work, no major interruptions are planned to service to Duke Energy Kentucky customers and the Company will be doing due-diligence to inform stakeholders of the work.

Q. HOW HAS GAS OPERATIONS PERFORMED ON ITS MAJOR SAFETY AND RELIABILITY MEASURES?

A. Duke Energy's Gas Operations in Kentucky and Ohio have consistently performed as a leader in safety. Duke Energy was honored as an industry leader in employee safety having received the AGA Safety Achievement Award for achieving the lowest DART (Days Away, Restricted, or Transferred) incident rate twice since 2013.

Gas Operations' major safety and reliability measures are leaks repaired for its gas distribution system. Duke Energy Kentucky's number of service corrosion leaks repaired has declined significantly with the program implemented, from a recent peak in 2014 to an approximate 71 percent reduction in 2017. The Company's safety and reliability programs have resulted in a significant reduction in the number of system damages due to excavation. For example, in 2011, the Company experienced approximately 6.69 damages per thousand locates. In 2017, this number has been reduced to 1.79.

Q. PLEASE DISCUSS THE COMPANY'S EFFICIENT MANAGEMENT OF ITS GAS OPERATIONS BUSINESS.

A. Duke Energy Kentucky has aggressively investigated and, where justified, implemented new products, technologies, and work methods to increase our productivity. Duke Energy Kentucky and Ohio participate in the AGA's Gas Utility Operations Best Practices Benchmarking Program. In this program, gas distribution companies from the United States and Canada routinely benchmark three to five distribution operations topics each year. Duke Energy Kentucky has

implemented process improvements and utilized new technology, materials, and equipment as a result of what it has learned through participating in this program.

Similarly, Duke Energy Kentucky shares its practices with the other participating AGA members. As a result of this information exchange, Duke Energy's Gas Operations was recognized as a unique performer due to the AMRP and was selected to present at the AGA's Distribution Best Practices Roundtable for Main and Service Replacements in both 2007 and 2010. In addition, Duke Energy's Gas Operations was selected to present at the AGA's Best Practices Roundtable for Leak Management in 2011, based on Duke Energy Gas Operations' top quartile performance in the following areas: (1) jurisdictional leaks found by leak survey per total jurisdictional leaks reported; (2) total leak survey cost per mile of mains and services surveyed; (3) service repair labor hours per service leak repaired; and (4) leak repair total cost per leak repaired.

Duke Energy was again selected to present at the AGA's Gas Utility Operations Best Practices Roundtable for Leak Management in 2014, based on Duke Energy top quartile performance in 2013 the following areas: (1) jurisdictional leaks found by leak survey; (2) number of open leaks at the end of the year per 1000 miles of mains and services; (3) number of open leaks at the end of the year per 1000 customers; (4) average age at year end of Grade II leaks in calendar days; and (5) percent of services surveyed in 2013. Duke Energy was also selected in 2014 to present at the AGA's Best Practices Roundtable for Damage Prevention, Marking and Locating for improvements made in our damage prevention program since the previous benchmark in 2011.

The Company also participates in the AGA Peer to Peer review program. This voluntary safety initiative is for local natural gas utilities throughout North America. The National AGA Peer Review Program is a peer-to-peer safety and operational practices review program that allows AGA member companies to observe their peers, share leading practices and identify opportunities to better serve customers and communities.

V. OTHER MAJOR INFRASTRUCTURE CAPITAL INVESTMENTS

Q. PLEASE BRIEFLY DESCRIBE THE STATUS OF DUKE ENERGY KENTUCKY'S ASRP.

A. As I previously described, Duke Energy Kentucky implemented the ASRP following Commission approval in 2016. Since that time, Duke Energy Kentucky has successfully replaced approximately 6,345 services under this program, resulting in a safer and more reliable natural gas delivery system. The Company anticipates needing to replace approximately 5,229 additional qualifying services under the program. The Company has successfully managed its costs and is projected to finish the program in 2019, slightly ahead of the initial contemplated schedule, and well under the initial projected costs of $50 million. The Company is projecting the final costs of the ASRP to be approximately $42.3 million.

Q. WHAT IS DUKE ENERGY KENTUCKY REQUESTING WITH RESPECT TO THE ASRP AS PART OF THIS PROCEEDING?

A. Duke Energy Kentucky is scheduled to complete its ASRP project during the test period of in this case. The Company is thus requesting to discontinue to Rider ASRP mechanism effective with new base rates and subject to any final necessary

true-up required for the balance of Rider ASRP revenue requirement collections and the effective date of new rates in this case.

Q. OTHER THAN THE ASRP, HAS THE COMPANY MADE ANY OTHER SIGNIFICANT INVESTMENTS SINCE ITS LAST NATURAL GAS GENERAL RATE CASE?

A. Yes. The Company is continually making prudent investments in its system to fulfill our mission of providing safe, reliable, adequate, reasonable, and affordable natural gas service. The major investments that have occurred since the Company's last natural gas rate case include the completion of our Big Bone Natural Gas pipeline and the advanced metering infrastructure upgrade for natural gas.

Q. PLEASE BRIEFLY DESCRIBE THE BIG BONE PIPELINE PROJECT.

A. In 2016, Duke Energy Kentucky received Commission authorization to commence construction of a new, approximate nine and a half-mile in length, twelve-inch steel natural gas pipeline at the southern end of the Company's natural gas delivery system. This new pipeline enables the flow of natural gas from west to east across the lower central part of the Company's service territory. Additionally, the Company received authorization to construct a 4,000 feet, eight-inch pipeline to serve our Richwood distribution system. The project required two pressure regulating stations. The station at Richwood Church Road was designed to reduce the pressure to sixty pounds per square inch gauge (psig) for the Richwood distribution system. The east regulating station will provide over pressurization for another of the Company's pipelines, the AM-03.

Additionally, the Company is anticipating completion of its advanced natural gas metering infrastructure by the end of 2018. The primary driver of this deployment was through the Company's electric operations. However, because Duke Energy Kentucky is a combination natural gas and electric utility and relies upon the same metering personnel for reading electric and natural gas meters, it was reasonable to upgrade the natural gas metering technology at the same time as the electric.

Q. WHY WAS THE BIG BONE PIPELINE PROJECT NEEDED?

A. The Project adds needed supply and improved reliability in the central portion of the Company's natural gas delivery system in an area that is seeing growth. Although Duke Energy Kentucky has been able to meet customer needs with safe and reliable natural gas service, the Company must properly time its infrastructure investments to respond to anticipated needs of our customers, improve the system integrity, and to alleviate stresses to the overall distribution system. The project was necessary to respond to the needs of our customers and maintain existing levels of quality service and enhance reliability. This new pipeline provides additional reliability to Duke Energy Kentucky's natural gas delivery system by connecting two existing north-south pipelines with another west-east pipeline at the central part of the Company's service territory. The project allows additional natural gas pipeline capacity in areas of the service territory that are close to capacity. This area is experiencing low pressure in times of high consumption and the new pipeline will alleviate this pressure issue by increasing access to supply.

Q. PLEASE BRIEFLY SUMMARIZE THE METERING INFRASTRUCTURE UPGRADE DEPLOYMENT AS IT RELATES TO NATURAL GAS OPERATIONS.

A. For Duke Energy Kentucky's combination electric and gas customers (combination customers), the metering upgrade technology consists of an AMI electric meter and an AMI gas module attached to their existing gas meter. Usage data from these gas modules will be collected through nearby electric AMI meters. In areas where Duke Energy Kentucky only provides gas service (gas-only customers) the Company will not have the electric AMI infrastructure in place to support communications for a gas AMI solution. The technology for these customers is an AMR gas module attached to their existing gas meters. The Company will read the AMR gas modules remotely by driving past the customer's premise. With these technologies, the Company should not have to enter the customer's home or property just to read a meter any longer. Additionally, the fewer daily and monthly "truck rolls" will directly translate to cost savings through a reduction in O&M expense related to meter reading that all customers will eventually experience through Duke Energy Kentucky's rates.

VI. OPERATIONS AND MAINTENANCE BUDGET

Q. PLEASE DISCUSS HOW DUKE ENERGY KENTUCKY'S RESPONSIBILITY BUDGET WAS PREPARED FOR USE IN THE COMPANY'S FORECASTED TEST PERIOD DATA.

A. The responsibility budget is prepared by Gas Operations. Gas Operations prepares a detailed monthly budget every year for O&M costs. Duke Energy Kentucky

reviews every aspect of Gas Operations' O&M activities by individual FERC account. The Company then performs a historical analysis of the O&M accounts and uses this as a starting point. The Company analyzes whether any unusual conditions caused any category of O&M costs to be higher than normal and adjusts estimates accordingly. Gas Operations also analyzes whether there are any new O&M activities or requirements that will occur in future years that are not reflected in previous years' costs.

For example, as I previously discussed, DIMP and TIMP compliance requires a continuous reevaluation of system risks and the development of programs and actions to address such risks. Duke Energy Kentucky has identified additional DIMP and TIMP compliance work that will involve significant new O&M costs. For such programs, we estimate the costs required for that particular new O&M activity and we adjusted our estimate of O&M costs accordingly for purposes of this case.

Detailed estimates of O&M costs were prepared for the 2018 annual budget, which were provided to Mr. Pratt for his use in the preparation of the last six months of the base period in this proceeding. The Company has identified additional costs that will occur going forward that were not included in the budget and a pro-forma adjustment to the test period revenue requirement was made as discussed in the testimony of Company witness Sarah E. Lawler.

VII. CAPITAL EXPENDITURE BUDGET PROCESS

Q. PLEASE GENERALLY DESCRIBE THE PROCESS FOLLOWED TO DEVELOP DUKE ENERGY KENTUCKY'S GAS OPERATIONS CAPITAL BUDGET FOR THE NEXT FIVE YEARS.

A. Mr. Pratt supports this information in his direct testimony. Blanket projects consist of customer growth projects, equipment replacement projects, government mandated projects and capital expenditures associated with capital tools and building upgrades. Customer growth projects involve new main installations related to general growth in Duke Energy Kentucky's customer load. Prior-period customer and load growth is used to estimate how much incremental infrastructure will be required in future periods. Government mandated projects consist of street improvement projects and other construction projects Duke Energy Kentucky is required to undertake by permit.

We develop the blanket capital expenditure budget for these projects through a qualitative and quantitative review of historical data. We use historical average installation footage and determine whether any unusual factors existed during any year for the historical data, such that the data for that year should be discounted or a forecasted footage for the current year should be used. We then prepare a five-year future look. We use specific cost projections related to a particular project, to the extent that such information is available. For example, government entities notify us about many street improvement projects well in advance, and we prepare the capital budget for these items by incorporating the projected cost for the known parameters of these projects.

Specific projects are larger projects that Duke Energy Kentucky can identify in advance which are needed to maintain the integrity of the system, strengthen infrastructure to meet design-day requirements, or are initiated by governmental entities for public improvements. Integrity projects consist of casing projects, corrosion control and general transmission and distribution integrity projects required to maintain a safe pipeline system. These projects are driven by prior-period O&M work done to inspect the system for safety and reliability. System infrastructure projects are projected by computer modeling when areas of the distribution system have deficient minimum pressure levels. We budget for specific projects based on engineering cost estimating methods for labor and material costs, based on the known scope for each project. The costs are generated by historical costing data based on past projects and adjusting to current resource and material trends.

The Company prepares a five-year forecast for these capital expenditures, including retirements, each year. This information is used for the annual budget and the five-year forecasts discussed by Mr. Pratt. Gas Operations is responsible for preparing the capital expenditures budget (except for gas meters, information technology and corporate initiatives) used by Mr. Pratt to develop the forecasted test period financial data. I am also responsible for reviewing the capital expenditure budget (except for gas meters, information technology and corporate initiatives) for 2018, 2019 and 2020.

VIII. SCHEDULES SPONSORED BY WITNESS

Q. WHAT PORTIONS OF THE COMPANY'S FILING REQUIREMENTS 16(7)(d) AND 16(7)(h)(8) DO YOU SPONSOR?

A. I co-sponsor the O&M information used in filing requirement (FR) 16(7)(d), which is the annual and monthly budget for the twelve months preceding the filing date, and the monthly budget detail used in the preparation of the base and the forecasted test period.

Q. PLEASE EXPLAIN FR 16(7)(b).

A. FR 16(7)(b) provides the budget for Duke Energy Kentucky's gas capital expenditures for 2018, 2019 and 2020. Gas Operations provided, and I reviewed, the underlying information for this filing requirement, to Mr. Pratt, using the methodology I discussed earlier in my testimony. Mr. Pratt used this information to prepare Duke Energy Kentucky's forecasted test period financial data.

Q. PLEASE EXPLAIN FR 16(7)(f).

A. FR 16(7)(f) requires the applicant to list all major construction projects, defined as projects five percent or more of the annual construction budget within the three-year forecast.

Q. PLEASE EXPLAIN FR 16(7)(g).

A. FR 16(7)(g) requires the applicant to list certain cost information, in aggregate form, for all other construction projects not listed on FR 16(7)(f) within the three-year forecast. Gas Operations provided, and I reviewed, the information for these projects, using the methodology I discussed earlier in my testimony for preparing the Gas Operations capital expenditure budget.

IX. CONCLUSION

Q. WERE (FR) 16(7)(b), FR 16(7)(f), FR 16(7)(g), (FR) 16(7)(h)(8) AND THE O&M PROVIDED TO MR. PRATT FOR (FR) 16(7)(d) OBTAINED OR PREPARED BY YOU OR UNDER YOUR DIRECTION AND CONTROL?

A. Yes.

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

A. Yes.

VERIFICATION

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

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

Gary J. Hebbeler, Affiant

Subscribed and sworn to before me by Gary J. Hebbeler on this 30th day of August, 2018.

NOTARY PUBLIC

ADELE M. FRISCH
Notary Public, State of Ohio
My Commission Expires 01-05-2019

My Commission Expires: 1/5/2019

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

The Electronic Application of Duke Energy Kentucky, Inc., for: 1) An Adjustment of the Natural Gas Rates; 2) Approval of a Decoupling Mechanism; 3) Approval of New Tariffs; and 4) All Other Required Approvals, Waivers, and Relief.	))))))))	Case No. 2018-00261

DIRECT TESTIMONY OF

SARAH E. LAWLER

ON BEHALF OF

DUKE ENERGY KENTUCKY, INC.

August 31, 2018

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I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Sarah E. Lawler, and my business address is 139 East Fourth Street, Cincinnati, Ohio 45202.

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

A. I am employed by Duke Energy Business Services LLC (DEBS) as Director Rates & Regulatory Planning. DEBS provides various administrative and other services to Duke Energy Kentucky, Inc., (Duke Energy Kentucky or Company) and other affiliated companies of Duke Energy Corporation (Duke Energy).

Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.

A. I earned a Bachelor of Science in Accountancy from Miami University, Oxford, Ohio in 1993. I am also a Certified Public Accountant.

I began my career in September 1993 with Coopers & Lybrand, L.L.P., as an audit associate and progressed to a senior audit associate. In August 1997, I moved to Kendle International Inc., where I held various positions in the accounting department, ultimately being promoted to Corporate Controller. In August 2003, I began working for Cinergy Corp., as External Reporting Manager, where I was responsible for the company's Securities & Exchange Commission (SEC) filings. In August 2005, I then moved into the role of Manager, Budgets & Forecasts. In June 2006, following the merger between Cinergy Corp. and Duke Energy, I became Manager, Financial Forecasting. In February 2015, I was

promoted to Utility Strategy Director, Midwest. In December 2017 I began in my current role as Director, Rates and Regulatory Planning.

Q. PLEASE DESCRIBE YOUR RESPONSIBILITIES AS DIRECTOR, RATES AND REGULATORY PLANNING.

A. I am responsible for the preparation of financial and accounting data used in retail rate filings and various other rate recovery mechanisms for Duke Energy Kentucky and Duke Energy Ohio, Inc.

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

A. Yes.

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

A. I support the revenue requirement proposed by Duke Energy Kentucky. Toward that end, I support various adjustments to the projected data for the forecasted test period provided by Duke Energy Kentucky witness, Robert "Beau" Pratt. I also sponsor Filing Requirements (FR) 16(6)(b), 16(6)(c), 16(6)(f) and 16(7)(t). I also sponsor the following schedules: Schedule A in satisfaction of FR 16(8)(a) and Schedule B-1, in response to FR 16(8)(b); Schedules C-1 through C-2.1 in compliance with FR 16(8)(c); Schedules D-1, D-2.15 through D-2.22, D-2.24, and D-2.26 in compliance with FR 16(8)(d); Schedules F-1 through F-7 in compliance with FR 16(8)(f); and Schedules G-1 and H in response to FR 16(8)(g) and FR16((8)(h), respectively.

II. TEST PERIOD AND RATE BASE

Q. WHAT IS THE TEST PERIOD IN THIS PROCEEDING?

A. The Company has elected to use a forecasted test period in this proceeding. The forecasted test period reflects the twelve months ending March 31, 2020, adjusted for known and measurable changes, and a base period of twelve months ending November 30, 2018. The base period consists of six months of actual data, through May 31, 2018, and the remaining six months consist of forecasted data.

Q. HOW WERE THE RATE BASE AND CAPITALIZATION DETERMINED IN THIS PROCEEDING?

A. The Company determined rate base and capitalization using a thirteen-month average for the forecasted test period ending March 31, 2020. The base period rate base and capitalization represent end-of-period balances.

Q. DID THE COMPANY FOLLOW THE COMMISSION'S GUIDELINES IN DEVELOPING THE BASE AND FORECASTED TEST PERIOD DATA?

A. Yes. Per the Commission's rules, 807 KAR 5:001, Section 16(7)(e)(2), "the forecast contains the same assumptions and methodologies as used in the forecast period for use by management." As described by Mr. Pratt, the base and forecasted test periods were developed using the same methods applied in the Company's annual budgeting process. The first six months of the base period are actual results and are taken from the Company's books and records.

III. FILING REQUIREMENTS SPONSORED BY WITNESS

Q. PLEASE DESCRIBE FR 16(6)(b).

A. FR 16(6)(b) requires that the forecasted adjustments are limited to the twelve months immediately following the suspension period.

Q. PLEASE DESCRIBE FR 16(6)(c).

A. FR 16(6)(c) requires that capitalization and net investment rate base are based on a thirteen-month average for the forecasted test period, in this case, the twelve months ending March 31, 2020.

Q. PLEASE DESCRIBE FR 16(6)(f)

A. FR 16(6)(f) contains a reconciliation of the capital and rate base used to determine the revenue requirement in this case.

Q. PLEASE DESCRIBE FR 16(7)(t)

A. FR 16(7)(t) contains a list of all commercially available or in-house developed computer software, programs, and models used in the development of the schedules and workpapers associated with the filing of the utility's application.

Q. PLEASE DESCRIBE SCHEDULE A.

A. Schedule A is the overall financial summary for both the base period and the forecasted period at present rates. Based on the filing in this proceeding, as adjusted, the Company's gas operations are projected to earn a return on rate base of 4.66 percent for the forecasted test period, which is considerably less than the 7.181 percent return requested in this proceeding. In order to achieve the appropriate return on rate base, Duke Energy Kentucky's base gas revenues must increase $10,542,199, as shown in Schedule A.

Q. WHY IS THE COMPANY USING RATE BASE AS THE BASIS FOR COMPUTING ITS REVENUE REQUIREMENT?

A. The Company believes that using gas rate base to calculate the revenue requirement is the simplest and most transparent method. The Company has previously used jurisdictional capitalization but KRS 278.290 allows the Commission to use other bases for this computation.

Q. PLEASE DESCRIBE SCHEDULE B-1.

A. Schedule B-1 is the jurisdictional rate base summary for both the base and forecasted periods and is supported by various schedules in Section B of the Company's filing. The plant in service, and reserve for accumulated depreciation and amortization for the base and forecasted periods were summarized from Schedules B-2, B-3, and B-3.2 as supported by Company witnesses Ms. Cynthia S. Lee and Mr. Pratt. The working capital component was summarized from Schedule B-5, as supported by Mr. Pratt, and other items of rate base were obtained from Schedule B-6, as supported by Mr. John R. Panizza. The jurisdictional gas rate base for the forecast period as contained in Schedule B-1 is $313,675,239.

Q. PLEASE DESCRIBE SCHEDULE C-1.

A. Schedule C-1 is a jurisdictional operating income summary for the forecasted period ended March 31, 2020. This schedule includes the operating income summary at both current and proposed rates. It assumes that the Commission allows the total amount of the requested gas base revenue increase of $10,542,199. The adjusted operating results at current rates were summarized from Schedule C-2 and the

proposed increase was obtained from Schedule M. The revenue at proposed rates was developed by adding the revenue increase to the operating revenues at current rates. The related expenses and taxes on the proposed increase were added to the current adjusted operating results to determine the jurisdictional *pro forma* amounts and the corresponding rate of return. The rate base as shown on this schedule is calculated on Schedule B-1.

Q. PLEASE DESCRIBE SCHEDULE C-2.

A. Schedule C-2 is a jurisdictional operating income statement to be used for ratemaking purposes. In order to develop the forecasted test period that is appropriate for ratemaking, a two-step process was required. First, as required by 807 KAR 5:001, Section 16(6)(a), it was necessary to show the adjustments necessary to transform the financial data for the base period into the forecasted period. Second, it was necessary to adjust the forecasted period data to reflect any adjustments required to ensure that the revenues and expenses to be recovered in rates are representative of the expected costs to serve Duke Energy Kentucky gas customers on an ongoing basis.

Schedule C-2 starts with the unadjusted base period and shows the adjustments required to extend the Company's income statement from the base period to the forecasted period. The next column on the schedule summarizes the adjustments to the unadjusted forecasted test period. These adjustments are described below. Generally, they relate to costs that were not reflected in the Company's forecasted data, or were reflected in the forecasted data but not allocable to Duke Energy Kentucky's gas customers, or were made to reflect traditional

ratemaking methodology. The unadjusted operating results are summarized from Schedule C-2.1. The adjusted amounts include the effects of the adjustments summarized on Schedule D-1.

Q. PLEASE DESCRIBE SCHEDULE C-2.1.

A. Schedule C-2.1 sets forth the detail of total Company operating results for both the base and forecasted periods. The operating results as shown in this Schedule C-2.1 are listed by account and are summarized on Schedule C-2.

Q. PLEASE DESCRIBE SCHEDULE D-1.

A. Schedule D-1 is a summary of the detailed adjustments to test period operating revenues and operating expenses as set forth in Schedules D-2.1 through D-2.26.

Q. WHY ARE ADJUSTMENTS TO THE BASE AND FORECASTED PERIOD INFORMATION NECESSARY?

A. The adjustments shown in Schedules D-2.1 through D-2.14 reflect the normal budgetary changes that are expected to occur from the base period through the forecasted period. Schedules D-2.1 through D-2.14, are sponsored by Mr. Pratt. The remaining adjustments, shown in Schedules D-2.15 through D-2.26, present adjustments to the forecasted period data needed to ensure that the correct level of revenue and expense is included in rates at the proper ongoing level. Some costs, although reflected in the normal forecasting process, are not recoverable from Duke Energy Kentucky's gas customers. Other adjustments were made to reflect traditional ratemaking methodology (*e.g.*, amortizing a regulatory asset to reflect the Commission's prior orders). The reflection of a proper cost level is necessary in order to ensure that customers are not paying for more than the cost of providing

service and to give the Company a reasonable opportunity to earn its authorized return. Ignoring appropriate adjustments to the test period used for setting rates puts customers at risk for overpaying for service and puts the Company at risk for potentially under-recovering its ongoing costs. Schedule D-2.23 is sponsored by Ms. Lee. Schedule D-2.25 is sponsored by Mr. Pratt. Schedules D-2.15 through D-2.22, D-2.24, and D-2.26 are discussed in my testimony below.

Q. HOW ARE THE TAX EFFECTS OF THESE ADJUSTMENTS SHOWN ON YOUR SCHEDULES?

A. All applicable adjustments to taxes, including taxes other than income taxes and state and federal income taxes resulting from the adjustments, described below, are shown for each individual adjustment on Schedule D-1.

Q. PLEASE DESCRIBE SCHEDULE D-2.15.

A. Schedule D-2.15 is an adjustment for uncollectible expenses. The Company sells all of its accounts receivable to an affiliate, Cinergy Receivables, L.L.C. (Cinergy Receivables) at a discount. The discount is based on a formula that compensates the purchasing company for the time value of money and reflects Duke Energy Kentucky's net bad debt expense.

Since the short-term debt component of the Company's weighted-average cost of capital calculation in Schedule J-1 includes the average balance of receivables at the interest rate being paid to Cinergy Receivables, the adjustment shown in Schedule D-2.15 ensures that there is no double recovery of the time value of money in the uncollectible expense. Consequently, the time value of money component of the discount being charged to Uncollectible Expense

(Account 904) is eliminated from the forecasted test period expenses. The adjustment reduces test period expenses by $588,781.

Q. PLEASE DESCRIBE SCHEDULE D-2.16.

A. The adjustment in Schedule D-2.16 is to amortize the projected cost of presenting the instant case. Duke Energy Kentucky proposes to amortize these costs over five years, which increases test period operating expenses by $115,100.

Q. PLEASE DESCRIBE SCHEDULE D-2.17.

A. Schedule D-2.17 summarizes the Company's proposal for recovering the amortization of a regulatory asset approved by the Commission. The regulatory asset represents the cost associated with the Company's Integrity Management program which was authorized by the Commission in Case No. 2016-00159. The Company is proposing to amortize this expense over five years. The effect of this adjustment on gas operations is an increase in test period operating expenses of $577,423.

Q. PLEASE DESCRIBE SCHEDULE D-2.18.

A. Interest synchronization is used to ensure that the revenue requirement reflects the appropriate income tax effects for interest expense determined in the weighted-average cost of capital. Schedule D-2.18 presents the calculation of the state and federal income taxes on the interest cost included in the cost of capital. The adjustment is calculated by first determining the debt portion of total gas rate base. The rate base allocated to gas is multiplied by the long-term and short-term debt percentage of total capital structure.

The result is then multiplied by the average cost of long-term and short-term debt. The sum of these results represents the annualized gas interest cost deductible for income tax purposes. From this annualized total, we subtract the forecasted test period gas book interest to determine the gas interest expense adjustment for income tax purposes. The effect of this adjustment on gas operations is to increase test period federal income taxes by $64,943 and to increase test period state income taxes by $16,168.

Q. PLEASE DESCRIBE SCHEDULE D-2.19.

A. Schedule D-2.19 reflects the elimination of revenues and expenses applicable to gas operations devoted to other than Duke Energy Kentucky customers associated with the propane storage cavern and related mixing facilities, odorization stations, and various feeder lines.

The effect of this elimination is to reduce other revenue by $514,092; O&M expenses for production by $382,795 and distribution by $102,870; property tax expense by $44,738; state deferred taxes by $11,312; and federal deferred taxes by $45,422. Depreciation expense applicable to these facilities is not included in the annualized depreciation expense calculated on Schedule B-3.2, as a result of the plant investment being excluded on Schedule B-2.1, and therefore has been eliminated from the test period via Schedule D-2.23.

Q. PLEASE DESCRIBE SCHEDULE D-2.20.

A. Schedule D-2.20 summarizes the costs associated with ongoing integrity management initiatives that have not been included within the forecasted test

period, as discussed in the testimony of Company witness Gary J. Hebbeler. This adjustment results in an increase to test period operating expenses of $1,065,488.

Q. PLEASE DESCRIBE SCHEDULE D-2.21.

A. Schedule D-2.21 summarizes the Company's proposal to credit customers for the reduction in federal income taxes arising from the Tax Cuts and Jobs Act of 2017 (TCJA) in the Company's current Accelerated Services Replacement Program Rider (Rider ASRP). The Rider ASRP in effect beginning January 2018 reflected federal income taxes at a 35 percent federal income tax rate (FIT). Changing the FIT to 21 percent would result in a $171,902 decrease in the revenue requirement currently being collected under Rider ASRP. The Company has proposed to amortize this amount over five years and as a result, reduces test period operating expenses by $34,380.

Q. PLEASE DESCRIBE SCHEDULE D-2.22.

A. Schedule D-2.22 is an adjustment to eliminate miscellaneous expenses such as community relations, advertising, donations, employee recognition, governmental affairs, club dues and miscellaneous events expenses from the forecasted test period. These adjustments were made in order to comply with the Commission's orders in prior rate proceedings. The effect of the adjustment on gas operations is a decrease in test period operating expenses of $368,743.

Q. PLEASE DESCRIBE SCHEDULE D-2.24.

A. Schedule D-2.24 is an adjustment to eliminate unbilled revenue and gas costs from the forecasted test period. The adjustment decreases revenue in the forecasted test period by $390,078 and decreases gas costs by $80,549.

Q. PLEASE DESCRIBE SCHEDULE D-2.26.

A. Schedule D-2.26 is an adjustment to eliminate incentive compensation from the forecasted test period to eliminate a portion of incentive compensation expense included in the test period related to the achievement of financial goals. The adjustment utilizes a methodology similar to the one adopted by the Commission in Case No. 2017-00321 and removes incentive compensation included in the forecasted test period tied to the achievement of financial goals of the Company. The adjustment decreases incentive compensation expense in the forecasted test period by $277,270.

Q. PLEASE DESCRIBE SCHEDULE F-1.

A. Schedule F-1 sets forth the detail, by account, of Social and Service Club Dues for both the base and unadjusted forecasted test periods. All amounts are either charged below the line or have been removed from operating expenses on Schedule D-2.22 and, thus, not included in the forecasted test period revenue requirement.

Q. PLEASE DESCRIBE SCHEDULE F-2.1.

A. Schedule F-2.1 sets forth the detail, by account, of Charitable Contributions for both the base period and unadjusted forecasted test periods. All amounts are charged below the line and, thus, not included in the forecasted test period revenue requirement.

Q. PLEASE DESCRIBE SCHEDULE F-2.2.

A. Schedule F-2.2 indicates that the Initiation Fees and Country Club expenses for the base and forecasted test periods are included on Schedule F-1.

Q. PLEASE DESCRIBE SCHEDULE F-2.3.

A. Schedule F-2.3 sets forth the detail, by account of Employee Party, Outing, & Gift Expense for both the base and forecasted test periods.

Q. PLEASE DESCRIBE SCHEDULE F-3.

A. Schedule F-3 sets forth the detail, by account, of Customer Service and Informational Expense, Sales Expense and General Advertising Expense for both the base and unadjusted forecasted test periods. Advertising costs included in Account 913 have been removed from operating expenses on Schedule D-2.22 and, thus, not included in the forecasted test period revenue requirement.

Q. PLEASE DESCRIBE SCHEDULE F-4.

A. Schedule F-4 sets forth additional details supporting advertising costs for both the base and unadjusted forecasted test periods. As noted above, these costs are not included in the forecasted test period revenue requirement.

Q. PLEASE DESCRIBE SCHEDULE F-5.

A. Schedule F-5 sets forth the detail of Professional Services Expenses for both the base and forecasted test periods.

Q. PLEASE DESCRIBE SCHEDULE F-6.

A. Schedule F-6, entitled "Rate Case Expense," indicates the estimated expense of presenting this case. The top half of this schedule details the estimated expense of this proceeding. Also included is a comparison to the rate case expense in the Company's last two rate case proceedings. The bottom half of this schedule shows the amortization over a five-year period. This amount is included in expense through the adjustment contained in Schedule D-2.16.

Q. PLEASE DESCRIBE SCHEDULE F-7.

A. Schedule F-7 sets forth Civic, Political and Related Expense for both the base and unadjusted forecasted test periods. All amounts are charged below the line and, thus, not included in the forecasted test period revenue requirement.

Q. PLEASE DESCRIBE SCHEDULE G-1.

A. Schedule G-1 contains a summary of all payroll costs and related benefits and taxes included in gas O&M expense for both the base and forecasted test periods.

Q. PLEASE DESCRIBE SCHEDULE H.

A. Schedule H, entitled "Computation of Gross Revenue Conversion Factor," (GRCF) sets forth the calculation of the GRCF. This is the factor, or multiplier, used to gross-up the operating income deficiency to a revenue deficiency amount. It includes the Kentucky Public Service Commission assessment, and state and federal income taxes. The GRCF is included on Schedule A and is used to compute the calculated revenue deficiency.

IV. CONCLUSION

Q. WERE FR 16(6)(b), FR 16(6)(c), FR 16(6)(f), AND FR 16(7)(t), SCHEDULES A, B-1, C-1 THROUGH C-2.1, D-1, D-2.15 THROUGH D-2.22, D-2.24, AND D-2.26, F-1 THROUGH F-7, G-1 AND H PREPARED BY YOU OR UNDER YOUR DIRECTION AND SUPERVISION?

A. Yes.

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

A. Yes.

VERIFICATION

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

The undersigned, Sarah E. Lawler, Director Rates & Regulatory Planning, being duly sworn, deposes and says that she has personal knowledge of the matters set forth in the foregoing testimony and that it is true and correct to the best of her knowledge, information and belief.

Sarah E. Lawler Affiant

Subscribed and sworn to before me by Sarah E. Lawler on this 30th day of AUGUST, 2018.

NOTARY PUBLIC

ADELE M. FRISCH
Notary Public, State of Ohio
My Commission Expires 01-05-2019

My Commission Expires: 1/5/2019

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

The Electronic Application of Duke Energy Kentucky, Inc., for: 1) An Adjustment of the Natural Gas Rates; 2) Approval of a Decoupling Mechanism; 3) Approval of New Tariffs; and 4) All Other Required Approvals, Waivers, and Relief.	)))))))	Case No. 2018-00261

DIRECT TESTIMONY OF

CYNTHIA S. LEE

ON BEHALF OF

DUKE ENERGY KENTUCKY, INC.

August 31, 2018

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I. INTRODUCTION AND PURPOSE

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Cynthia S. Lee, and my business address is 550 South Tryon Street, Charlotte, North Carolina 28202.

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

A. I am employed by Duke Energy Business Services LLC (DEBS), as Director, Asset Accounting. DEBS provides various administrative and other services to Duke Energy Kentucky, Inc., (Duke Energy Kentucky or Company) and other affiliated companies of Duke Energy Corporation (Duke Energy).

Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.

A. I am a graduate of Rollins College, with a Bachelor of Arts degree in Economics, and a graduate of The Johns Hopkins University, with a Master of Business Administration. I am a Certified Public Accountant in the State of North Carolina. I am also a member of the Edison Electric Institute Property Accounting and Valuation Committee.

I began my employment with Duke Energy in 2002 in the Accounting Department for Progress Energy Service Company, predecessor to what is now DEBS. My responsibilities included oversight of financial reporting, general and regulatory accounting and asset accounting. I transitioned into my current position as the leader of the asset accounting group within Duke Energy's Regulated Utilities business segment in February 2015.

Q. PLEASE DESCRIBE YOUR RESPONSIBILITIES AS DIRECTOR, ASSET ACCOUNTING.

A. As Director, Asset Accounting, I have responsibility for the accounting activities within Duke Energy's Electric and Gas Utilities and Infrastructure related to fixed assets, including electric plant in service, construction work in progress (CWIP), depreciation and asset retirement obligations, materials and supplies inventory, and fuel (including both inventory and payment of fuel invoices) and emission allowances.

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

A. Yes.

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

A. I am responsible for actual net plant in service and construction work in progress contained in rate base and other actual plant-related items that Duke Energy Kentucky witness, Mr. Robert "Beau" Pratt uses in his testimony. In particular, I sponsor the following Schedules in satisfaction of Filing Requirements (FR) 16(8)(b): B-2, B-2.1, B-2.2, B-2.3, B-2.4, B-2.5, B-2.6, B-2.7, B-3, B-3.1, B-3.2, and B-4. I sponsor the following Schedules in satisfaction of FR 16(8)(d): D-2.23 as well as the actual plant data on Schedule K page 1, and the composite depreciation rates on Schedule K, both being in response to FR 16(8)(k). The source and sponsor of the budgeted and projected data as shown on these schedules is Mr. Pratt. The source and sponsor of the proposed depreciation and

amortization accrual rates used in these schedules, including the supporting depreciation study, is Company witness Mr. John J. Spanos.

II. SCHEDULES SPONSORED BY WITNESS

Q. PLEASE DESCRIBE THE INFORMATION CONTAINED IN THE SECTION B SCHEDULES.

A. The Section B schedules develop the Jurisdictional Net Plant In Service. The schedules are based on the Company's budget records as of the end of the base period (November 30, 2018) and the end of the forecast period (March 31, 2020).

Q. PLEASE DESCRIBE SCHEDULE B-2.

A. Schedule B-2 shows the plant in service including allocated common plant by major property grouping for the base period and the 13-month average as of the plant valuation date of March 31, 2020. The amount shown in the column labeled "Adjusted Jurisdiction" on page 1 of 2, and "13-Month Average Adjusted Jurisdiction" on page 2 of 2, represents plant in service that is deemed used and useful in providing gas service to our Kentucky jurisdictional customers.

Q. PLEASE DESCRIBE SCHEDULE B-2.1.

A. Schedule B-2.1 consists of a further breakdown of Schedule B-2 by the Federal Energy Regulatory Commission (FERC) and Company Account for each major property grouping for the base period and the forecast period. The plant in service investment shown in the column labeled "Adjusted Jurisdiction" on pages 1 through 6, and "13-Month Average Adjusted Jurisdiction" on pages 7 through 12, represents electric plant in service including allocated common plant that is deemed used and useful in providing gas service to the Company's Kentucky jurisdictional customers.

Q. PLEASE DESCRIBE SCHEDULE B-2.2.

A. Schedule B-2.2 shows proposed adjustments to plant in service for the base period and the forecast period. The adjustments shown on this schedule are related to the manufactured gas production plant, distribution plant and general plant and are related to gas facilities devoted to other than Kentucky customers.

Q. PLEASE DESCRIBE SCHEDULE B-2.3.

A. Schedule B-2.3 shows gross additions, retirements and transfers by FERC and Company Account for each major property grouping for the base period and the forecast period.

Q. PLEASE DESCRIBE SCHEDULE B-2.4.

A. Schedule B-2.4 is entitled "Property Merged or Acquired" for the base period and the forecast period. Duke Energy Kentucky projects that no property will be merged or acquired during the forecast period, so no items appear in this schedule.

Q. PLEASE DESCRIBE SCHEDULE B-2.5.

A. Schedule B-2.5 is entitled "Leased Property" and provides data for the base period and the forecast period. Duke Energy Kentucky leases for gas meters and regulators end in June 2019. Duke Energy Kentucky also entered into a lease for a building on Cox Road in Erlanger, Kentucky, in 2005 to house its gas and electric construction and maintenance operations. Schedule B-2.5 contains the cost of gas meters and regulators and the cost associated with the building lease prior to allocation. The schedule also shows the monthly payment made for each of the leases.

Q. PLEASE DESCRIBE SCHEDULE B-2.6.

A. Schedule B-2.6 shows the property held for future use included in rate base for the base period and forecast period. The Company has not included any property held for future use in rate base.

Q. PLEASE DESCRIBE SCHEDULE B-2.7.

A. Schedule B-2.7 contains data on utility property excluded from rate base for the base period and forecast period. There are no exclusions of utility property from rate base.

Q. PLEASE DESCRIBE SCHEDULE B-3.

A. Schedule B-3 shows the total plant investment and Reserve for Accumulated Depreciation and Amortization by FERC and Company Account grouping for the base period and the forecast period. The amounts for the forecast period, on pages 5 through 8, are 13-month averages. The adjusted jurisdictional reserve in the last column is applicable to the jurisdictional plant shown on Schedule B-2, "Adjusted Jurisdiction" and "13-Month Average Adjusted Jurisdiction."

Q. PLEASE DESCRIBE SCHEDULE B-3.1.

A. Schedule B-3.1 shows adjustments to Accumulated Depreciation and Amortization for the base period and the forecast period. The adjustments shown on this schedule are the related accumulated depreciation balances for the adjustments to Plant in Service shown on Schedule B-2.2, which is described above.

Q. PLEASE DESCRIBE SCHEDULE B-3.2.

A. Schedule B-3.2 lists the 13-month average jurisdictional plant investment and reserve balance as of March 31, 2020, for each FERC and Company Account within

each major property grouping. It also shows the proposed depreciation and amortization accrual rate, calculated annual depreciation and amortization expense, percentage of net salvage value, average service life and curve form, as applicable for each account. The calculated annual depreciation and amortization was determined by multiplying the 13-month average adjusted jurisdictional plant investment for the forecast period by the proposed depreciation and amortization accrual rates.

With this filing, the Company proposes depreciation and amortization accrual rates prepared in 2018 and sponsored by Mr. Spanos of Gannett Fleming, Inc., who prepared the depreciation study. The account numbers referred to in the depreciation study were those in effect in 2018 for Duke Energy Kentucky. The Company requests that the Commission approve these new depreciation and amortization accrual rates included in this filing and that the depreciation and amortization accrual rates be effective April 1, 2019, corresponding with the effective date of the natural gas rates established in this case.

Q. PLEASE DESCRIBE SCHEDULE B-4.

A. Schedule B-4 is a list of construction work in progress (CWIP) by major property grouping. Duke Energy Kentucky is not requesting to include its investment in CWIP in rate base.

Q. PLEASE DESCRIBE SCHEDULE D-2.23

A. Schedule D-2.23 reflects the adjustment to the forecasted period depreciation expense to reflect annualized depreciation expense as calculated on Schedule B-3.2. Schedule B-3.2 shows annual depreciation on 13-month average plant balance at March 31, 2020, using the new proposed depreciation rates.

Q. PLEASE DESCRIBE THE INFORMATION YOU SPONSOR IN SCHEDULE K.

A. I sponsor the actual plant data submitted on page 1 of Schedule K. This information includes Plant in Service by major property grouping and Reserve for Accumulated Depreciation and Amortization by utility service for the 13-month average forecast period, for the base period and as of December 31 for each of the last ten years. Plant held for future use and construction work in progress have also been provided for the same periods. I also sponsor the composite depreciation rates shown on Schedule K.

III. INFORMATION PROVIDED TO OTHER WITNESSES

Q. DID YOU SUPPLY ANY INFORMATION TO OTHER WITNESSES FOR THEIR USE IN THIS PROCEEDING?

A. Yes, I provided Mr. Pratt with the actual net book value for the existing gas and common plant for the period ending May 31, 2018, for his use in calculating the forecasted financial data.

IV. CONCLUSION

Q. WERE SCHEDULES B-2, B-2.1, B-2.2, B-2.3, B-2.4, B-2.5, B-2.6, B-2.7, B-3, B-3.1, B-3.2, B-4, D-2.23, THE INFORMATION YOU PROVIDED ON SCHEDULE K, AND THE INFORMATION YOU PROVIDED TO MR. PRATT, (EXCLUDING THE BUDGET AND FORECAST NUMBERS PREPARED BY MR. PRATT AND THE PROPOSED DEPRECIATION AND AMORTIZATION ACCRUAL RATES AND SUPPORTING DEPRECIATION STUDY PREPARED BY MR. SPANOS) PREPARED BY YOU OR UNDER YOUR DIRECTION AND SUPERVISION?

A. Yes.

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

A. Yes.

VERIFICATION

STATE OF NORTH CAROLINA)
) **SS:**
COUNTY OF MECKLENBURG)

The undersigned, Cynthia S. Lee, Director, Asset Accounting, being duly sworn, deposes and says that she has personal knowledge of the matters set forth in the foregoing testimony and that it is true and correct to the best of her knowledge, information and belief.

Cynthia S. Lee Affiant

Subscribed and sworn to before me by Cynthia S. Lee on this 8 day of August, 2018.

NOTARY PUBLIC

VIRGINIA M. ADAMS NOTARY PUBLIC MECKLENBURG COUNTY, NC Exp. 10/02/2021

My Commission Expires:
October 2, 2021