COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:


DUKE ENERGY KENTUCKY, INC.'S POST-HEARING BRIEF

Comes now Duke Energy Kentucky, Inc. (Duke Energy Kentucky or Company), by counsel, pursuant to the Commission’s February 21, 2020 Order, and other applicable law, and does hereby tender to the Commission its Brief, respectfully stating as follows:

I. INTRODUCTION

Duke Energy Kentucky seeks to adjust its electric base rates (including fuel) to a new total of $355.5 million, which reflects an increase from its current rates of $44.2 million. The monthly residential electric bill increase (total bill) due to the proposed electric base rates will be 15.7% or approximately $15.14 for a residential customer using 1,000 kWh of electricity (the typical monthly consumption of a Duke Energy Kentucky residential customer). The proposed rate increase is driven in large part by a projected capital requirement of $700 million during the 2019-

1 See Sarah E. Lawler Rebuttal Testimony (Lawler Rebuttal), p. 27 (Jan. 31, 2020). Mr. Lane Kollen, on behalf of the Attorney General, recommends that the Commission increase the Company’s base revenues by $26.2 million. See Lane Kollen Direct Testimony (Kollen Direct), p. 3 (Dec. 13, 2019).
2021 period, with approximately $600 million being devoted to capital expenditures and $100 million for debt maturities.²

In addition, the Company is presenting several new and updated initiatives that, if approved, will significantly contribute to improvements in the Company’s provision of service to customers, their experience interacting with the Company and the overall betterment of the communities Duke Energy Kentucky serves. These innovative efforts include: an Electric Vehicle Charging Station (EVCS) Program Pilot; a modest investment in an energy storage solution to gain better understanding of how to integrate renewable energy and storage solutions into the PJM Interconnection, LLC (PJM) market which will also help to improve reliability; a new Customer Connect platform to update the Company’s current obsolete customer information system (CIS); a Green Source Advantage (GSA) Tariff to help non-residential customers achieve their corporate sustainability objectives without causing cross-subsidization from other customer classes; the elimination of annoying transactions fees charged to customers using electronic payment channels; and an adjustment to the Fuel Adjustment Clause (FAC) Rider to reduce volatility in customer charges. Each of these proposals is fully supported by the administrative record and the Company respectfully requests approval of each of these programs in addition to the increase in base rates set forth above.

II. BACKGROUND

A. Overview of Duke Energy Kentucky

Duke Energy Kentucky is a wholly owned subsidiary of Duke Energy Ohio, Inc. (Duke Energy Ohio), which is itself a wholly owned subsidiary of Cinergy.³ Cinergy is wholly owned

² See Christopher M. Jacobi Direct Testimony (Jacobi Direct), pp. 13-14 (Sept. 3, 2019); see also See Duke Energy Kentucky Response to Staff Post-Hearing-DR-01-012.
by Duke Energy.\textsuperscript{4} Duke Energy is one of the largest utility companies in the United States, serving approximately 7.4 million electric customers and over 1.5 million natural gas customers (representing a population of over 24 million) in Kentucky, Ohio, Indiana, Florida, North Carolina, South Carolina, and Tennessee.\textsuperscript{5} As a result of this corporate structuring, Duke Energy Kentucky's customers benefit from being part of an enterprise with vast resources and a highly skilled workforce. This allows Duke Energy Kentucky's customers to benefit from the combined knowledge, experience and expertise of a large utility, while only incurring the costs of a much smaller utility.\textsuperscript{6}

1. Customers/Service Territory

Duke Energy Kentucky is a utility engaged in the natural gas and electric business. Duke Energy Kentucky generates electricity, which it distributes and sells to approximately 142,900 customers in Boone, Campbell, Grant, Kenton and Pendleton Counties.\textsuperscript{7} The Company also provides natural gas service in Boone, Bracken, Campbell, Gallatin, Grant, Kenton and Pendleton Counties to approximately 98,700 customers.\textsuperscript{8}

2. Generation, Transmission and Distribution Facilities

a. East Bend Generating Station

East Bend is a 648-megawatt (MW) (nameplate rating) coal-fired steam unit located along the Ohio River in Rabbit Hash, Kentucky.\textsuperscript{9} East Bend was commissioned in 1981 and the Company now owns 100% of the station, having completed the purchase of the Dayton Power and Light

\textsuperscript{4} See id., p. 5.
\textsuperscript{5} See id.
\textsuperscript{6} See id., pp. 6-7.
\textsuperscript{7} See Application, p. 2; Ash M. Norton Direct Testimony (Norton Direct), p. 3 (Sept. 3, 2019).
\textsuperscript{8} See Application, p. 2.
\textsuperscript{9} See James Michael Mosley Direct Testimony (Mosley Direct), p. 3 (Sept. 3, 2019).
Company's 31% interest in the station in 2014. The net rating for East Bend is 600 MWs. The station has river facilities to allow barge deliveries of coal and lime. East Bend is designed to burn eastern bituminous coal and achieved a net plant heat rate of 11,016 Btu/kWh for calendar year 2018. The major pollution control features are: a high-efficiency hot side electrostatic precipitator, a lime-based wet flue gas desulfurization (FGD) system, and a selective catalytic reduction control (SCR) system designed to reduce nitrogen oxide (NOx) emissions by 85%. The FGD system was upgraded in 2005 to increase the sulfur dioxide (SO2) emissions removal to an average of 97%. The station's electrical output is directly connected to the Duke Energy Midwest (consisting of Kentucky and Ohio) 345 kilovolt (kV) transmission system. Byproducts of East Bend’s scrubber are mixed with the station’s fly ash and are used to create Poz-O-Tec, a stable, concrete-like substance that is placed in the on-site landfill. Since 2018, bottom ash is processed through a Dry Bottom Ash system and disposed of in East Bend’s West Landfill. East Bend is scheduled for a major planned outage in the spring of 2021, during which the Company plans to perform significant maintenance to the station's turbine, generator, boiler, and FGD.

b. Woodsdale Generating Station

Woodsdale is a six-unit, simple cycle, combustion turbine (CT) station located in Butler County, Ohio, just north of Cincinnati, with a collective net winter rating of 564 MW and a net

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10 See id.
11 See id.
12 See id.
13 See id.
14 See id., pp. 3-4.
15 See id., p. 4.
16 See id.
17 See id.
18 See id.
19 See id., p. 8.
summer rating of 462 MW.\textsuperscript{20} Woodsdale was designed to provide peaking service and to have black start and dual fuel capability.\textsuperscript{21} Woodsdale is connected to the Texas Eastern Transmission Company interstate pipeline that transports natural gas to supply the station.\textsuperscript{22} The design of Woodsdale as a peaking unit with low capacity factors does not support acquiring firm natural gas transportation through the available natural gas interstate pipelines.\textsuperscript{23}

c. Miami Fort 6 Generating Facility

Miami Fort 6 is a 168 MW (nameplate rating) coal-fired base/intermediate load unit located at Miami Fort Station along the Ohio River in Hamilton County, Ohio.\textsuperscript{24} Miami Fort 6 officially retired from commercial operation on June 1, 2015, however, Duke Energy Kentucky retains responsibility for assuring that the unit’s facilities are decommissioned in a safe and reasonable manner. Because of the close proximity of Miami Fort 6 and shared facilities with other station generating units that are still in operation, the Company cannot immediately perform all necessary decommissioning and demolition work.\textsuperscript{25} Activities completed or commenced to date include: (1) removal of all lubricating/insulating oils, chemicals, and coal combustion residuals (CCR) materials from the generating unit and systems; (2) removal of all asbestos containing material from the generating unit/ductwork and facilities; (3) removal of coal conveyor systems associated with Unit 6; (4) Unit 6 electrical isolation from balance of station; (5) chimney condition assessment and minor repairs; and (6) other additional actions.\textsuperscript{26}

\begin{itemize}
  \item \textsuperscript{20} See id., p. 12.
  \item \textsuperscript{21} See id.
  \item \textsuperscript{22} See id., p. 13.
  \item \textsuperscript{23} See id.
  \item \textsuperscript{24} See id., p. 14.
  \item \textsuperscript{25} See id.
  \item \textsuperscript{26} See id., pp. 15-16.
\end{itemize}
d. Transmission Facilities

Duke Energy Kentucky owns, operates and maintains approximately 107 miles of transmission lines operating at 69 kilovolts (kV). All higher voltage lines to which Duke Energy Kentucky connects are part of the bulk transmission facilities owned by Duke Energy Ohio. The Duke Energy Kentucky electric system is interconnected with East Kentucky Power Cooperative, Inc. via a 69-kV tie line at the Kenton substation.

e. Distribution Facilities

The Company’s distribution system is comprised of approximately 2,146 miles of primary distribution lines operating at 34.5 kV or lower and approximately 787 miles of secondary distribution circuits operating at 480 volts or below. The delivery system also includes approximately 43 combined transmission and distribution substations with a combined capacity of approximately 1,928,000 kVA and various other equipment and facilities. The Company enjoys positive scores for reliability.

Duke Energy Kentucky is making substantial investments in its distribution system. In the Company’s last electric base rate case, Duke Energy Kentucky's forecasted cost of electric delivery system plant in service was $485,008,652 (thirteen-month average forecasted balance ending March 31, 2019). However, as of March 31, 2019, Duke Energy Kentucky's actual cost of electric delivery system plant in service was $491,099,939. The Company's forecasted test year

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27 See Norton Direct, p. 3.
28 See id.
29 See id., p. 4.
30 See id.
31 See id.
32 See Norton Cross-Examination, HVR 9:26:00 (Feb. 20, 2020).
33 See Norton Direct, p. 4.
34 See id.
balance (ending March 31, 2021) in this case is projected to be $579,372,092.\textsuperscript{35} While load growth across the entire Duke Energy Kentucky system has not changed significantly, localized growth has had a significant impact upon the Company and is driving the current and near-term investments.\textsuperscript{36} Maintaining reliability, particularly as older equipment must be replaced, also accounts for a significant portion of this investment.\textsuperscript{37}

3. Community Involvement

Duke Energy Kentucky prides itself on its high level of community engagement and development. Site Selection magazine recently named Duke Energy to its Top 10 Utilities in Site Selection for North America for the twentieth consecutive year.\textsuperscript{38} Since 2011, Duke Energy's Urban Revitalization Initiative has provided over $2.4 million to seventy-two (72) projects in the Duke Energy Kentucky and Duke Energy Ohio service areas for urban redevelopment projects in the urban core that spur commercial redevelopment and job creation.\textsuperscript{39} Approximately half of that funding has gone to projects in Northern Kentucky.\textsuperscript{40} Moreover, the Company’s active participation in over a dozen local economic development, education and community-minded organizations has helped to generate nearly thirty thousand (30,000) jobs and $4.5 billion of capital investment in Northern Kentucky since 2006.\textsuperscript{41} Since 2009, Duke Energy Kentucky and the Duke Energy Foundation have contributed $5.3 million of shareholder dollars to charitable organizations in Kentucky.\textsuperscript{42} The Company also encourages its employees to directly engage in community

\textsuperscript{35} See Schedule B-2. This number reflects the adjusted total.


\textsuperscript{37} See Norton Direct, pp. 6, 16-19.

\textsuperscript{38} See Spiller Direct, p. 8.

\textsuperscript{39} See id.

\textsuperscript{40} See id.

\textsuperscript{41} See Spiller Direct, pp. 8-10.

\textsuperscript{42} See id., p. 10.
improvement projects, and, in 2018 alone, the Company participated in sixty-one (61) volunteer events in Kentucky where employees and retirees and their families volunteered over 3,662 hours of their time.43

4. Customer Satisfaction and Expectations

Duke Energy Kentucky is constantly looking for ways to improve its customers’ experience. Over the past several years, the Company has developed and implemented a variety of programs to interact with customers and make the process of managing and paying their bills more convenient.44 The Company utilizes three different resources to stay informed as to overall customer satisfaction – the CX Monitor Survey, J.D. Power Studies and Fastrack.45 While the results have been consistently good, and improving, the top complaint received from customers is the need to pay a transaction fee when paying a bill by credit card, debit card or automated clearing house (ACH).46 In an increasingly technology-driven world, customers continue to expect the same type of service from Duke Energy Kentucky as they would receive from large internet retailers.47

5. Developments Since the Company’s Prior Rate Case

Several significant events have occurred since the Company’s 2017 electric base rate case. For instance, Duke Energy Kentucky recently completed its Advanced Metering Infrastructure (AMI) deployment.48 In addition, the Company completed a project to make the Woodsdale

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43 See id.
44 See id., pp. 10-15.
45 See id., pp. 15-19.
46 See id.; Lesley G. Quick Direct Testimony (Quick Direct), p. 8 (Sept. 3. 2019).
47 See Retha Hunsicker Cross-Examination, Hearing Video Record (HVR) at 14:00:15 (Feb. 19, 2020).
Generating Station a dual-fuel facility, thereby allowing it to comply with the Capacity Performance requirements of PJM.\textsuperscript{49}

Looking forward, the Company has several projects in development to assure that the Company can continue to meet expected load growth,\textsuperscript{50} particularly in and around the new Amazon hub at the Greater Cincinnati/Northern Kentucky International Airport. Additional improvements include the replacement of the Company’s current CIS with a new, fully integrated CIS system (Customer Connect) that will significantly expand Duke Energy Kentucky’s capability to offer customers new and innovative programming.\textsuperscript{51} Additional investments in the Company’s distribution system will also allow municipalities in Duke Energy Kentucky’s service territory to develop “smart city” projects,\textsuperscript{52} for which there is an emerging demand.\textsuperscript{53}

\textbf{B. Procedural History}

Duke Energy Kentucky filed its Notice of Intent to File an Application for the Adjustment of Rates on August 1, 2019.\textsuperscript{54} The Application was filed on September 3, 2019, concurrent with the publication of public notice of the proposed rate increase.\textsuperscript{55} In making the filing, the Company complied with all regulatory commitments.\textsuperscript{56} After finding the Application to be free of filing defects, the Commission issued a Suspension Order on September 13, 2019. Proof of publication of customer notice was filed on October 18, 2019.

\textsuperscript{49} \textit{See id.}, p. 20.

\textsuperscript{50} \textit{See id.}

\textsuperscript{51} \textit{See id.}; Hunsicker Cross-Examination, HVR at 14:00:15 (Feb. 19, 2020).

\textsuperscript{52} \textit{See Spiller Direct}, pp. 20-22.

\textsuperscript{53} \textit{See Spiller Cross-Examination, HVR at 8:47:00 (Feb. 19, 2020).

\textsuperscript{54} \textit{See Application, Vol. 1, Tab 1.}

\textsuperscript{55} \textit{See id., Vol. 1, Tab 12.}

\textsuperscript{56} \textit{See William Don Wathen, Jr. Direct Testimony (Wathen Direct), pp. 24-27 (Sept. 3, 2020).}
The Kroger Company (Kroger) filed a motion for leave to intervene on September 10, 2019. Northern Kentucky University (NKU) filed a similar motion on September 26, 2019. Chargepoint, Inc., filed a motion for leave to intervene on October 2, 2019, and Zeco Systems, Inc., d/b/a Greenlots (Greenlots) and the Attorney General (AG) filed motions to intervene on the following day. Kroger’s motion was granted on October 2, 2019. The AG’s and NKU’s motions were granted and Chargepoint’s and Greenlot’s motions were both denied on October 14, 2019.

The Commission issued an Order on January 17, 2020, setting a formal hearing on Duke Energy Kentucky’s Application to commence on February 19, 2020. Prior to the formal hearing, however, a public comment hearing was held at Gateway Community and Technical College in Edgewood, Kentucky, on February 13, 2020. The Company filed a copy of its Request for Publication of Hearing Notice on January 28, 2020, and filed the Proof of Publication of Hearing Notice on February 14, 2020. A formal hearing was held on February 19-20, 2020, in the Richard Raff Hearing Room at the Commission’s offices in Frankfort. In all, twenty-eight witnesses took the stand on behalf of Duke Energy Kentucky and the intervenors. Following the hearing, Duke Energy Kentucky responded to additional Post-Hearing Requests for Information from Commission Staff, the AG and Kroger. In all, Duke Energy Kentucky responded to 876 separate written questions, including subparts, from Commission Staff and intervenors.

III. Argument

A. Jurisdiction and Standard of Review

Duke Energy Kentucky is a "utility" as defined in KRS 278.010(3) and is subject to the Commission's jurisdiction pursuant to KRS 278.040. It is firmly established that "the regulation of public utilities has and does serve a public purpose. It has a substantial relation to the public

57 See Application, p. 2.
welfare, safety and health and, in a real degree, promotes these objects." The Commission is a creature of statute and has only such powers as granted by the General Assembly. The Commission’s jurisdiction is therefore limited to the “rates” and “service” of the Company. As the Kentucky Supreme Court has stated, “rates are merely the means designed for achieving a predetermined objective, which in this instance was how much additional revenue should the Company be allowed to earn.” The Company’s rates may be increased pursuant to the procedures set forth in KRS 278.180, KRS 278.190, KRS 278.192 and regulations promulgated thereunder.

It is well-established that “[t]he manifest purpose of the Public Service Commission is to require and insure fair and uniform rates, prevent unjust discrimination, and prevent ruinous competition.” In undertaking this purpose, the Commission is affecting the natural property rights of Duke Energy Kentucky. Accordingly, the principles of due process, equal protection and other rights and guarantees afforded under the Constitutions of the United States of America and the Commonwealth of Kentucky apply with full force and effect. The Commission “has no

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60 See Public Service Comm’n v. Blue Grass Natural Gas Co., 197 S.W.2d 765, 768 (Ky. 1946) (“We have held that the jurisdiction of the Public Service Commission is clearly and unmistakably limited to the regulation of rates and service of utilities.”) citing Smith v. Southern Bell Telephone and Telegraph Co., 104 S.W.2d 961 (Ky. 1937); Benzinger, etc., v. Union Light, etc., 170 S.W.2d 38 (Ky. 1943); Peoples Gas Co. of Kentucky v. City of Barbourville, 165 S.W.2d 567 (Ky. 1942).
63 See Bobinchuck v. Levitch, 380 S.W.2d 233, 236 (Ky. 1964). In contrast, the right to receive utility service is merely a right that may be conferred by statute and lacks the same fundamental constitutional protections. See Smith v. Southern Bell Tel. & Tel. Co., 104 S.W.2d 961, 964 (Ky. 1937).
64 See Kentucky Indus. Utility Customers, Inc. v. Kentucky Utilities Co., 983 S.W.2d 493, 497 (Ky. 1998).
authority to impose a new duty on utilities when that duty has no foundation in law. To do so is an unconstitutional legislative act by the Commission."

The Commission’s statutory mandates therefore provide “an integrated, comprehensive system aimed at providing stability and notice to all entities involved in the rate process.” In undertaking this process, “the Commission has discretion in working out the balance of interests necessarily involved and...it is not the method, but the result, which must be reasonable.” Kentucky’s highest court has commented, “the task of the [Commission] Staff is to conduct investigations to facilitate a thorough exploration of the interests and issues involved. The traditional role of the Staff is ‘generally to analyze the evidence and advise the Commission.’” The Commission has considerable discretion to take into account the multitude of factors affecting the rates of a utility. Indeed, the Kentucky Court of Appeals commented upon the breadth of this discretion, stating:

It is certainly broad enough to consider such things as replacement cost, debt retirement, operating cost, and at least some excess capacity in order to insure continuation of adequate service during periods of high demand and some potential for growth and expansion. It also allows for consideration of whether expansion investments were prudently or imprudently made, and whether a particular utility is investor owned or a cooperative operation. Any of these factors might be extremely significant in varying situations when determining what ultimately would be a fair, just and reasonable rate and would allow for a balancing of interests.

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65 Henry v. Parrish, 211 S.W.2d 418 (Ky. 1948).
68 Kentucky American Water Co. v. Com. ex rel. Cowan, 847 S.W.2d 737, 740 (Ky. 1993) (citation omitted).
69 National-Southwire, p. 512.
However, the Commission ultimately must approve rates that are “fair, just and reasonable.” Accordingly, approved rates must “enable the utility to operate successfully, to maintain its financial integrity, to attract capital and to compensate its investors for the risks assumed...” By contrast, an unreasonable rate “has been construed in a rate-making sense to be the equivalent of confiscatory.” In considering the rates to be authorized herein, the Commission must consider both the present and the future impact of such rates upon the Company’s financial condition. It is critically important for Duke Energy Kentucky to meet its financial objectives and maintain strong credit quality. As the Applicant, the Company bears the burden of proof.

B. Duke Energy Kentucky’s Proposed Increase in Base Rates, As Amended, is Reasonable

Duke Energy Kentucky’s present electric rates and charges, which are based on costs forecasted during the twelve months ended March 31, 2019, were authorized by this Commission by Order dated April 13, 2018, and as amended on rehearing by Order dated October 2, 2018, in Case No. 2017-00321. The necessity of having suitable rates is well summarized in the testimony of Duke Energy Kentucky witness Christopher Jacobi:

Financial strength and access to capital are necessary for Duke Energy Kentucky to provide cost-effective, safe, environmentally-compliant, and reliable service to its customers. The Company seeks

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70 KRS 278.030(1).
72 Public Service Comm’n of Kentucky v. Dewitt Water District, 720 S.W.2d 725, 730 (Ky. 1986).
73 Dewitt Water District, p. 730 (“When considering the concept of confiscation, the future as well as the present must be considered. It must be determined whether the rates complained of are yielding and will yield a sum sufficient to meet operating expenses.”) citing McCardle v. Indianapolis Water Company, 272 U.S. 400 (1926).
74 See Jacobi Direct, p. 3.
to maintain its financial strength and flexibility, including its strong investment-grade credit ratings, ensuring reliable access to capital on reasonable terms. Specific targets that support financial strength and flexibility include: 1) maintaining an equity component of the capital structure that is within the rating agencies' guidelines for Duke Energy Kentucky's credit rating; 2) maintaining strong credit quality; 3) ensuring timely recovery of prudently incurred costs; 4) maintaining sufficient cash flows to meet obligations; and 5) maintaining a sufficient return on equity to fairly compensate shareholders for their invested capital.77

In this case, the Company's capital requirement is projected to be approximately $700 million during the period 2019 through 2021, consisting of approximately $600 million in projected capital expenditures and approximately $100 million in debt maturities.78 Indeed, the increase in gross utility plant from the 2017 electric rate case through the forecasted test year in the current case is approximately $219 million.79 This, along with increases in depreciation expense and property taxes and the impact of the Tax Cuts and Jobs Act of 2017, is the principal reason that Duke Energy Kentucky is seeking an increase in base rates.80 Despite these upward pressures on rates, the record reflects that Duke Energy Kentucky has consistently controlled its non-production operations and maintenance (O&M) expense since its last rate case.81 Likewise, the Company's cost of capital has marginally decreased.82

1. The Company's Base Period and Forecasted Test Year Expenses are Reasonable.

The Company utilized a base period ending on November 30, 2019, which consists of actual data from December 1, 2018, through May 31, 2019, and six months of budgeted data.83

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77 See Jacobi Direct, p. 3.
79 See Wathen Direct, p. 5.
80 See id., pp. 5-7.
81 See id., p. 8.
82 See id., pp. 9-10.
allowing it to ultimately use a fully forecasted test period spanning the twelve-month period ending March 31, 2021. The forecasted test year data was developed by using the Company’s standard forecasting methods. In accordance with KRS 278.192(2)(b) the Company filed its updated base period data on January 14, 2020. The Company has made appropriate adjustments based upon known and measurable factors, with data appropriately normalized and annualized. In conformity with Commission regulations, the forecast contains the same assumptions and methodologies as used in the forecast prepared for use by the Company’s management.

2. Rate Base

Duke Energy Kentucky is using a valuation based upon rate base in this case largely because it is simpler and more straightforward than using a capitalization approach. Indeed, Mr. Kollen, the Attorney General’s witness in this case has described rate base as “allow[ing] the Commission to more precisely determine the costs that will be allowed a rate of return and included in the revenue requirement.” The Company originally proposed a total rate base of $946.4 million. The only witness to challenge the Company’s proposed rate base value was Mr. Lane Kollen, on behalf of the Attorney General, who proposed five adjustments to rate base. Duke

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84 See id., p. 14; Lawler Direct, p. 3.

85 See Jacobi Direct, p. 15. The forecasting methodology is described in significant detail in Mr. Jacobi’s direct testimony. See id., pp. 15-23.

86 See Lawler Direct, p. 3 (Sept. 3, 2019); Public Service Comm’n of Ky. v. Continental Tel. Co. of Kentucky, 692 S.W.2d 794, 799 (Ky. 1985) (“Generally accepted rate-making principles permit matters within the test year to be both normalized and annualized. There is also a provision for an adjustment because of known and measurable changes outside the test year”).

87 See 807 KAR 5:001, Section 16(7)(e)(2).

88 See Jacobi Direct, p. 24; Lawler Direct, p. 3.

89 See Wathen Direct, p. 11.

90 See id., p. 13, quoting In the Matter of the Electronic Application of Duke Energy Kentucky, Inc. for Authority to (1) Adjust Natural Gas Rates; (2) Approval of a Decoupling Mechanism; (3) Approval of New Tariffs and (4) All Other Required Approvals, Waivers and Relief, Testimony of Lane Kollen, Case No. 2018-00261, p. 6 (Dec. 17, 2018).

91 See Application, Schedule B-1.
Energy Kentucky agreed with one of Mr. Kollen's adjustments, removing Accumulated Deferred Income Taxes (ADITs) associated with the Solar Investment Tax Credit (ITC), which has the effect of reducing the Company’s revenue requirement by $250,000. Duke Energy Kentucky disagrees with the remaining adjustments proposed by Mr. Kollen for the reasons set forth below.

a. Reduction of Fuel and Materials and Supply Inventories and Cash Working Capital (CWC)

Within the Application, the Company included $19.518 million in fuel inventories and $18.759 million in materials and supplies ("M&S") inventories in rate base. As it has always done in rate cases, Duke Energy Kentucky accounted for vendor financing through its calculation of CWC using the 1/8th O&M methodology. The Company acted in a manner consistent with its past cases, but also within the parameters of the Commission’s regulations which do not require the preparation or filing of a lead/lag study. On behalf of the AG, Mr. Kollen takes issue with the fuel inventory amount, claiming that it should be offset by $2.258 million to account for accounts payables, which are a form of vendor financing. Mr. Kollen also claims that Duke Energy Kentucky’s CWC should be set to zero. He goes on to recommend that if the Commission does not set Duke Energy Kentucky’s CWC to zero, another adjustment to inventories should be made, recommending that material and supplies inventories be set to zero. This adjustment would have the effect of reducing the Company’s revenue requirement by $1.478 million. It is inexplicable why he would recommend that this adjustment only be made if CWC is not set to zero, but yet insists that his adjustment to fuel inventories should be made in addition to setting

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92 See Lawler Rebuttal Testimony, p. 23 (Jan. 31, 2020).
93 See Application, Schedule B-5.
95 See id., HVR 10:47:50.
96 See Kollen Direct, pp. 8-9.
CWC to zero. Both recommended adjustments relate to the financing of inventories and neither should be made. But if the Commission sets the Company’s CWC to zero, both adjustments would be unnecessary and considered “double dipping.” The financing of inventory is a component of CWC. CWC and inventory are two traditionally acceptable components of rate base and should be addressed separately.

Specifically as it relates to setting CWC to zero, Mr. Kollen takes issue with the Company’s use of the 1/8th of non-fuel O&M expense method for calculating the forecasted CWC. He argues that a lead/lag study is more appropriate given that Duke Energy Kentucky sells its receivables to a receivables facility and that, in the absence of a lead/lag study, CWC should be set at zero. The only Commission precedent cited by Mr. Kollen, however, is two cases where the utility in question chose to use a lead/lag study instead of the 1/8th non-fuel O&M expense methodology. He cites no authority mandating that his recommendation be followed. If accepted, Mr. Kollen’s resetting of CWC to $0 would result in a reduction in Duke Energy Kentucky’s revenue requirement by $1.242 million.

The problem with Mr. Kollen’s approach is that it effectively establishes a requirement that is not currently present in either state or federal law. The Commission has never required a utility to perform a lead/lag study, and, except for the two cases cited where a utility has voluntarily prepared a lead/lag study, the 1/8th O&M methodology remains the standard ratemaking approach in Kentucky. Even as recently as last year, the 1/8th O&M method was accepted in the

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97 See id., p. 11.
98 See id., pp. 13, 16.
100 See id., p. 5.
101 See Lawler Rebuttal, p. 7 citing In re Application of Duke Energy Kentucky, Inc. for an Adjustment of Gas Rates, Case No. 2009-00202, Direct Testimony of Robert J. Henkes, p. 18 (Oct. 12, 2009) (“... it is my understanding that the Commission has consistently allowed [Duke Energy Kentucky’s] cash working capital to be determined based on
Company’s natural gas base rates case.\textsuperscript{102} This Commission also recently found that the 1/8th O&M methodology is a reasonable estimate of CWC absent a lead/lag study filed in a rate case.\textsuperscript{103} Mr. Kollen emphasizes that the natural gas base rate case was a settled case, but he omits the fact that the Commission did not accept the settlement without any modifications. Clearly, the Commission could have acted upon the AG’s recommendation to reduce CWC in that case, but chose not to do so. Moreover, the 1/8\textsuperscript{th} O&M method is the method used by FERC for Duke Energy Kentucky as well as Duke Energy Ohio and Duke Energy Indiana.\textsuperscript{104}

Conducting a lead/lag study is expensive and often must be outsourced.\textsuperscript{105} The 1/8th O&M method has long been considered a reasonable approximation of working capital and has been approved by this Commission to establish the Company’s rates in the past.\textsuperscript{106} There is no reason in this case to diverge from that precedent. Indeed, the Company’s method for calculating CWC is the same method used by utilities across the country.\textsuperscript{107}

Moreover, Mr. Kollen’s attempts to vilify Duke Energy Kentucky for using a receivables facility are short-sighted and self-defeating. The facility has been in place for over eighteen years and has been an important part of the Company’s capital structure.\textsuperscript{108} It offers a diversified and low-cost financing option, benefitting customers by effectively reducing the Company’s overall

\textsuperscript{102}See Lawler Rebuttal, pp. 7-8.
\textsuperscript{103}In the Matter of: Electronic Application of Atmos Energy Corporation for an Adjustment of Rates and Tariff Modifications, Case No. 2017-00349, Order pg. 25 (Ky. P.S.C. May 3, 2018)
\textsuperscript{104}See Lawler Rebuttal, pp. 10-11; Lawler Cross-Examination, HVR 11:25:10 (Feb. 20, 2020).
\textsuperscript{105}See id., HVR 10:48:01.
\textsuperscript{106}See id., HVR 10:44:52.
\textsuperscript{107}See id., HVR 10:59:40.
cost of capital. If the Company were to discontinue using the facility, it would have to access the capital markets and issue long-term debt at a significantly higher cost to account for this portion of its capital structure. The result would increase the overall weighted average cost of capital, which would increase the Company's revenue requirement. For any and all of these reasons, Mr. Kollen's recommendations with regard to fuel and to materials and supplies inventories should be rejected. So too should his unsupported claim to reset CWC to $0.

b. Regulatory Asset for Deferred Rate Case Expense and Remove Amortization of Rate Case Expenses for New Depreciation Study

Within its Application, Duke Energy Kentucky proposes to amortize rate case expense associated with this case as well as the unamortized balance of rate case expense from Case No. 2017-00321. Specifically, Duke Energy Kentucky included approximately $949,000 as a regulatory asset for the forecasted rate case expenses in this proceeding and unamortized rate case expenses in the 2017 electric rate case proceeding. The Company proposes a five-year amortization period, rather than the three-year amortization that is given in many base rate cases. Included within the forecasted rate case expense for this case is approximately $60,000 to cover the cost of the Company's depreciation study.

Mr. Kollen argues that the expense associated with the depreciation study should be excluded on the basis that it was "unduly aggressive" to update a depreciation study only two years after the last study was completed. Such a position is again inconsistent with Kentucky law.

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109 See Duke Energy Kentucky Response to Staff Post-Hearing-DR-01-014.
110 See id.
111 See Application, p. 15.
112 See id., Schedule F-6.
113 See Kollen Direct, pp. 18-19.
which imposes no minimum time between depreciation studies. Mr. Kollen’s credibility on this subject is further reduced by the fact that he is himself unaware of the filing requirements for a rate case and made no effort to determine whether the Commission has ever addressed this issue. Given the amount of new investment in the Company’s plant, both in the base period and through the forecasted test year, the Company would have been severely criticized had it not performed a new depreciation study. The Company has the burden of proof and submitted this study to determine and demonstrate the reasonableness of depreciation expense. Given Mr. Kollen’s dogmatic reliance upon the “known and measurable” principle when it suits his interest, it is ironic that he would prefer to not know precisely what impact these investments would have through an updated depreciation study. Updating a depreciation study in the midst of a multi-hundred million capital investment period is inherently reasonable. Mr. Kollen’s recommendation to the contrary should be rejected.

Mr. Kollen also recommends that the Commission allocate 100% of the return on the deferred recovery of the rate case regulatory asset to shareholders, which has the effect of depriving shareholders of the time value of money associated with the regulatory asset. The basis for this position is the unsupported claim that rate case expense primarily benefits shareholders. That argument has been considered and rejected by the United States Supreme Court, which properly recognized that reasonable rate case expenses are recoverable as a cost of doing business. Treating them any differently would amount to an unconstitutional confiscation of

114 See generally 807 KAR 5:001; Lawler Rebuttal, pp. 17-18.
116 See Kollen Direct, p. 30.
117 See id., p. 19.
118 See id.
property. The Commission has acknowledged the Supreme Court’s ruling in its own orders.\footnote{See e.g. In the Matter of the Electronic Proposed Adjustment of the Wholesale Water Service Rates of Lebanon Water Works, Order, Case No. 2017-00417, p. 19 (Ky. P.S.C. July 12, 2018).} There is nothing unique about rate case expense that would allow its deferral of recovery to prejudice shareholders. Moreover, in Atmos Energy Corporation’s recent natural gas base rate proceeding, Case No. 2018-00281, the Commission specifically authorized the inclusion of rate case expense regulatory asset in rate base,\footnote{See In the Matter of the Electronic Application of Atmos Energy Corporation for an Adjustment of Rates, Order, Case No. 2018-00281, p. 29 (Ky. P.S.C. May 7, 2019).} which further undermines Mr. Kollen’s position.\footnote{Mr. Kollen even contradicts himself where he agrees that the Customer Connect O&M expense regulatory asset should be included in base rates. See Kollen Direct, p. 27 (“I also recommend that the regulatory asset be included in rate base and amortized over the same service life used for the depreciation rate applied to the plant costs I the next base rate proceeding.”).} His unsupported recommendation to adjust rate case expenses is inconsistent with law and prudence and should be denied.

3. **Operating Income Adjustments**

Only the AG sponsored any expert testimony to challenge the Company’s calculation of operating income during the test year. Of the ten adjustments proposed by Mr. Kollen, the Company agrees with three of them: (1) deferring the test year and future Customer Connect development and implementation O&M expense ($911,000 in the test year);\footnote{See Lawler Rebuttal, pp. 23-24. Agreement on this point was conditioned upon: (1) the regulatory asset accumulating all actual O&M expenses, including carrying costs, associated with the Customer Connect program incurred (beginning with those incurred during the test period in this case); (2) the Company being able to request recovery of the total actual costs for the project in a subsequent rate proceeding; and (3) including the regulatory asset in rate base in that subsequent rate proceeding with an amortization period equal to the service life used for the depreciation rate applied to the capital costs.} (2) removing Supplemental Executive Retirement Plan (SERP) costs from the revenue requirement ($122,000);\footnote{See id., pp. 24-25.} (3) removing payroll taxes associated with reduced short-term incentive
compensation ($66,000). Duke Energy Kentucky opposes the remaining adjustments proposed by Mr. Kollen.

a. Reduce Payroll Expense and Associated Payroll Tax Expense

Mr. Kollen makes a proposed reduction to the revenue requirement based upon what he believes is an inconsistency in the amount of employee expense (and associated payroll tax expense) between the base period and the forecasted period. In essence, Mr. Kollen concludes that the Company’s forecasted test year expense is higher than its actual expense in 2019 for employee payroll and payroll taxes. He therefore recommends that the Commission use the most recent actual monthly payroll expense and escalate it by 3.0% annually for his estimate of the test year expense. His recommendation would result in a $1.127 million reduction in the Company’s revenue requirement for payroll expense and a commensurate $0.086 million reduction in the revenue requirement for the associated payroll tax expense.

As frequently happens, Mr. Kollen “looks at payroll expenses in isolation and his recommendation is based on a narrow set of data. This approach cherry picks certain data points and fails to consider other changes in O&M.” As discussed at the hearing, Duke Energy forecasts payroll expenses based on budgets by managers and supervisors throughout the Company; consequently, headcount is not the basis for projecting labor costs for Duke Energy Kentucky or any other Duke Energy affiliate. This makes the actual payroll expense less critical than the total labor force (payroll and contractors) expense when determining whether the

125 See id., p. 23.
126 See Kollen Direct, p. 23.
127 See id., p. 24.
Company is performing to budget. If the same approach used by Mr. Kollen was applied to the Company’s contractor expense during the same period, it would require a $7.1 million \emph{upward} adjustment to the Company’s revenue requirement.\textsuperscript{130} Mr. Kollen’s selective analysis results in a skewed outcome by only taking a portion of the Company’s overall labor force expense into account. Mr. Kollen’s recommendation should therefore be rejected.

\textit{b. Retain Credit/Debit/ACH Transaction Fees as a Separate Charge to Customers}

As part of its Application, Duke Energy Kentucky proposed to eliminate transaction fees ($1.50 per transaction) for credit card, debit card, and electronic check payments made by customers to an unaffiliated third-party pay vendor, thereby eliminating one of the largest frustrations customers experience.\textsuperscript{131} Besides the obvious dissatisfaction of having to pay an additional fee to pay their bills, the transaction fees also create customer confusion as customers often think that the transaction fee is imposed by Duke Energy Kentucky or is paid to the Company.\textsuperscript{132} And although the Company has earned praise from customers in general, as evidenced by the FastTrack reports, the imposition of a transaction fee being a customer’s primary complaint is plainly evident on CX Monitor reports.\textsuperscript{133} No additional surveys are necessary or cost-effective to substantiate that the transaction fee is a real source of customer dissatisfaction.\textsuperscript{134} The proposed change would place these types of electronic payment channels on an even footing with the Company’s other payment options where the cost of collection is embedded in Duke Energy Kentucky’s base rates.\textsuperscript{135} The change is also consistent with most other vendors who

\textsuperscript{130} \textit{See} Jacobi Rebuttal, p. 3.
\textsuperscript{131} \textit{See} Application, p. 13; Quick Direct, p. 8 (Sept. 3, 2019); Quick Cross-Examination, HVR at 11:55:45 (Feb. 19, 2020).
\textsuperscript{132} \textit{See id.}, HVR at 12:11:00.
\textsuperscript{133} \textit{See id.}, HVR at 11:56:30, 11:57:20.
\textsuperscript{134} \textit{See id.}, HVR at 11:59:30.
\textsuperscript{135} \textit{See Quick Direct, p. 16.}
include the cost of an electronic payment in the cost of their products. The change is intended to keep pace with customer expectations and will have no negative detriment to the Company’s existing pay channels. The forecasted cost of the transaction fees was approximately $493,000 during the test year. As more customers begin to use electronic means to pay utility bills, Duke Energy Kentucky will be able to further harness its buying power to further reduce the transaction fee, although its current fee is believed to already be the second lowest in the country.

A close reading of Mr. Kollen’s testimony confirms that he does not philosophically oppose the inclusion of these transaction fees in the Company’s revenue requirement. Rather, he objects to them because the Company did not quantify a “known and measurable” savings that will be realized as a result of reduced payment processing expense, call center expense, uncollectible accounts expense and interest expense. In other words, he believes that, in the absence of a known and measurable savings, the known and measurable cost should be excluded.

During cross-examination, however, Mr. Kollen’s suppositions were unsustainable. He agreed that waiving the transaction fee was unlikely to result in fewer customer questions about their bills. Nor would it make a customer less likely to call in an outage. Likewise, an increase in usage of an electronic payment channel does not mean that customers will pay their bill more quickly, which means there will be no savings in interest expense. And waiving the transaction fees would not have a meaningful impact upon the number of customers who request

136 See Quick Cross-Examination, HVR at 12:11:30 (Feb. 19, 2020).
137 See Spiller Cross-Examination, HVR at 8:45:30 (Feb. 19, 2020).
139 See id., HVR at 12:12:30.
140 See Kollen Direct, p. 28.
141 See Cross-Examination of Lane Kollen, HVR at 15:07:07 (Feb. 20, 2020).
142 See id., HVR at 15:09:40.
143 See id., HVR at 15:08:58.
paperless billing. The reality is that, even if some savings do materialize by customers using electronic payment methods at a higher rate in the future, there will still be a need for customer call centers and payment processing centers just as much as there will still be uncollectible accounts and interest expense. The savings are likely to be so meager that they must bear themselves out over time to be recognizable. Indeed, based upon the Company’s survey of other utilities that have also eliminated transaction fees for electronic payments, not one has been able to quantify specific savings. But that alone is not a reason to continue to make customers pay a transaction fee for the convenience of using an electronic payment method when they are already paying the cost of other payment channels as well. Whether the Company sees incremental savings from whatever source, the primary objective of the program is to address a significant source of customer dissatisfaction. The socialized cost of the credit card fees will have a minimal impact on customers’ bills, but eliminating the charge will, at a minimum, improve overall customer satisfaction. Once again, Mr. Kollen’s recommendations should be rejected.

c. Refund RTEP Costs That Have Never Been Recovered from Customers

The Company recorded refunds in 2018 due to FERC’s issuance of Order 494, which approved settlements of disputes arising from overcharges to Duke Energy Kentucky and others as part of PJM’s Regional Transmission Expansion Plan (RTEP) process. The refunds, totaling $8 million, covered overcharges incurred from 2012 through the mid-part of 2018. The Company began receiving these refunds in July 2018 and will continue receiving them through December 31, 2025. Duke Energy Kentucky believes that approximately $260,000 of this

144 See id., HVR at 15:10:00.
145 See Quick Cross-Examination, HVR at 12:08:35 (Feb. 19, 2020).
146 See id., HVR at 12:11:40.
147 See Kollen Direct, p. 34.
148 See id.; Wathen Rebuttal, p. 2.
settlement should be returned to customers as it reflects the time period (May-June 2018) when customers actually paid for RTEP charges.\textsuperscript{149}

In contrast, Mr. Kollen believes that the entire proceeds of the RTEP settlement should be given to customers. In his testimony, he proposes to reduce base rates by $1.603 million\textsuperscript{150} based on a five-year amortization of a refund received by Duke Energy Kentucky for the period January 1, 2012, through June 30, 2018. He supports his opinion by inaccurately arguing that the component of Duke Energy Kentucky's base rates related to transmission expenses that were being collected from retail customers from 2012 through 2018 exceeded its transmission costs. He also attempts to compare Duke Energy Kentucky's ratemaking treatment for this item with Kentucky Power Company, which was ordered to refund its RTEP settlement amounts in a recent case.\textsuperscript{151}

Mr. Kollen suggests that the Commission consider whether the amount of transmission expenses included in the Company's base rates be compared to its actual transmission expenses over an arbitrary period he selected for this comparison. He makes no proposal to compare any other component of base rates (e.g., production costs, distribution costs, depreciation expense, etc.) to actual costs, which would seemingly be appropriate if his ratemaking theory was valid. Instead, he selectively focuses his attention only on the transmission expense component of base rates because he believes it serves his purpose. Obviously, Mr. Kollen's proposal to selectively retroactively compare individual components of base rates to actual costs for these individual cost components would turn decades of retail ratemaking on its head.

Even if the Commission decides to indulge Mr. Kollen's ratemaking theory, the Commission must consider the total amount of transmission expense paid by Duke Energy

\textsuperscript{149} See Duke Energy Kentucky's Response to AG-DR-02-032.
\textsuperscript{150} See Kollen Direct, p. 38.
\textsuperscript{151} See id., pp. 36-37.
Kentucky against the total amount embedded in its 2006 rate case. As Mr. Wathen explained in his rebuttal testimony, the answer is very different from what Mr. Kollen suggests in his limited analysis of the 2012-2018 timeframe:

If we assume that Duke Energy Kentucky recovered the amount included in base rates ($16.940 million) from the 2006 rate case, from 2007 through April 30, 2018, and then at the level included in the 2017 rate case ($21.240 million on an annualized basis) for the period May 1, 2018, through December 31, 2018, and compare that to the total transmission O&M expense (Accounts 560-576) charged to Duke Energy Kentucky over that period, it is clear that Duke Energy Kentucky has significantly under-recovered its transmission O&M expense over that period. The total transmission costs charged to Duke Energy Kentucky over that period is $243.5 million compared to $206.1 million in revenue it has received from retail customers.152

As Mr. Wathen’s rebuttal explains, Duke Energy Kentucky has actually under-collected its transmission revenue requirement since its 2006 rate case. Mr. Kollen’s suggestion to the contrary is based – yet again – on the selective interpretation of limited data. In the 2006 rate case, all transmission O&M expense was recorded in Accounts 560 through 574. As a result of FERC’s Order 668,153 certain transmission costs that had been recorded in Accounts 560 through 574 were moved to Accounts 575 and 576; so, the same expenses that had been included in the Company’s 2006 base revenue requirement for transmission expense, Accounts 560 through 574, were now spread out over two additional accounts. For an apples-to-apples comparison of expenses after 2006, one would have to include all transmission O&M accounts, Accounts 560-576. Mr. Kollen only considered the accounts that were included in the 2006 base rate case; consequently, he understated the Company’s actual transmission O&M expenses in his analysis. As Mr. Wathen’s

153 FERC Order 668 (Docket RM04-12, dated December 16, 2005).
rebuttal testimony makes clear, correcting that error reveals that the Company actually under-collected its transmission revenue requirement over that period.

Mr. Kollen’s proposal to selectively look at one category of expense compared to the amount collected in base rates should be rejected on its face as inconsistent with ratemaking principles. However, even if the Commission decided to indulge Mr. Kollen’s proposal, application of his ratemaking principles would actually suggest that the Company should receive more from customers to compensate for being underfunded for transmission expense since the 2006 rate case. Of course, the Company is not suggesting that the Commission increase its base revenue requirement for under-recovering transmission expenses, but it does highlight the absurdity of Mr. Kollen’s proposal.

Likewise, Mr. Kollen’s reliance upon the Kentucky Power case is also misplaced. The record of that case reflects that during the time the disputed RTEP charges were being charged to Kentucky Power, the utility was recovering those expenses from its customers in rates.\textsuperscript{154} Thus, it is understandable and logical to assume that costs charged to customers would be refunded when the costs were reversed. That is not the situation here as, once again, Mr. Kollen overlooks a critical distinction. As explained by Company witness Wathen, Duke Energy Kentucky’s customers only started paying for RTEP (or any RTO-related transmission expansion plan expense) effective with the implementation of its last base electric rate case in May 2018.\textsuperscript{155} Prior to that, Duke Energy Kentucky shareholders alone paid RTEP. Accordingly, customers should only share in the RTEP refund for periods that they actually were paying the related expense in rates.

\textsuperscript{154} See Wathen Rebuttal, pp. 6-7.

\textsuperscript{155} See Duke Energy Kentucky Response to AG-DR-02-034; Wathen Rebuttal, p. 6.
d. Reduce Cost of Capital Included in Duke Energy Business Services (DEBS) Expense

Mr. Kollen also objects to the cost of capital component of the DEBS expense charge to Duke Energy Kentucky. He argues that the cost of capital should only reflect the intercompany debt rate available to DEBS through the Duke Energy Money Pool Agreement, which would result in a $678,000 reduction to the Company’s revenue requirement. While Duke Energy Kentucky disagrees with Mr. Kollen’s analysis and conclusion, it is a moot point. As set forth in the Company’s rebuttal testimony, Duke Energy Kentucky inadvertently excluded $915,000 of costs representing all the return (debt and equity) on the DEBS assets from the revenue requirement. In post-hearing data requests, it was confirmed that the Company also inadvertently excluded $1,241,796 in credits for the loss on sale of accounts receivable from its revenue requirement. While the Company believes these omissions do not fundamentally change the forecast, if the credit amounts are included, it is only fair that the DEBS return should be included in the revenue requirement as well.

e. Reject Changes to Depreciation Expense

Duke Energy Kentucky prepared an updated depreciation study in this case in light of the substantial investments made since the prior electric base rate case. The method for this depreciation study was no different than the method used for preparation of the Company’s last depreciation study. The only changes made to the prior depreciation study occurred where the investment in Duke Energy Kentucky’s system significantly changed. In undertaking the study, the Company’s independent expert used the straight line remaining life method of depreciation,

156 See Kollen Direct, pp. 40-41.
158 See Duke Energy Kentucky Response to Staff Post-Hearing-DR-01-001.
159 See John J. Spanos Cross-Examination, HVR at 11:41:30 (Feb. 19, 2020).
160 See id., HVR at 11:28:50.
with the average service life procedure for all plant assets except for some general plant accounts. The outcome of the study is therefore based on a method of depreciation accounting that seeks to distribute the unrecovered cost of fixed capital assets over the estimated remaining useful life of each unit, or group of assets, in a systematic and rational manner. For Common Plant Accounts 1910, 1911, 1940, 1970, and 1980 and for General Plant Accounts 3910, 3911, 3940 and 3970, the Company's expert used the straight-line remaining life method of amortization. The annual amortization is based on amortization accounting that distributes the unrecovered cost of fixed capital assets over the remaining amortization period selected for each account and vintage. Based upon the results of the depreciation study, 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.

Depreciation expense has increased significantly since 2017, but not because the depreciation methodology has changed. Rather, the Company is making substantial investments in its generation and distribution systems. The investments which cause the overall generation asset depreciation expense to increase are necessary for the generation assets in question to reach their current scheduled service lives, but do not extend the services lives beyond that date. This has the effect of increasing the overall depreciation expense as there is more investment to recover

162 See id.
163 See id.
164 See id.
165 See Melissa Abernathy Direct Testimony (Abernathy Direct), p. 6 (Sept. 3, 2019).
over a shorter time frame.\textsuperscript{168} It is important for the depreciable life of an asset to match its useful life.\textsuperscript{169}

Mr. Kollen objects to increasing the depreciation expense on the basis that there is “no urgency” and the proposed depreciation rates are “unduly aggressive.”\textsuperscript{170} Although he considers it unnecessary to update a depreciation study two years after completing the last one, the evidence at the hearing demonstrated that circumstances are forcing utilities to prepare updates to their depreciation studies much more frequently, both across the country and within Kentucky.\textsuperscript{171}

Mr. Kollen cites no legal authority to support his request to reduce the Company’s revenue requirement by $7.446 million, nor does he cite any precedent to suggest that the substantial investments made since 2018 should not be recognized in the Company’s depreciation rates. There is nothing aggressive about the Company’s proposed depreciation expense:

\begin{quote}
As shown in the depreciation study, the life and net salvage characteristics have changed, therefore, an update of these parameters better matches future recovery to asset utilization. Additionally, for life span property, the Company has added property to its generating facilities. All else equal, these types of additions typically result in an increase in depreciation rates even if life and net salvage estimates do not change because new additions have to be recovered over the remaining life span of the facility.\textsuperscript{172}
\end{quote}

Moreover, to the extent that Mr. Kollen seeks to push the costs of Capacity Performance compliance upgrades at Woodsdale to future Company ratepayers by suggesting that the station’s service life will go ten years longer than currently predicted,\textsuperscript{173} he is in error again. There is no

\textsuperscript{168} See id.; Spanos Cross-Examination; HVR at 11:11:40 (Feb. 19, 2020).


\textsuperscript{170} Kollen Direct, p. 48.


\textsuperscript{172} See John J. Spanos Rebuttal Testimony (Spanos Rebuttal), p. 12 (Jan. 31, 2020); Duke Energy Kentucky Response to AG-DR-01-032.

\textsuperscript{173} See Kollen Direct, p. 53; Kollen Cross-Examination, HVR 14:48:05, 14:54:00 (Feb. 20, 2020).
evidence in the record that supports his position that Woodsdale’s service life has somehow extended an additional ten years. The dual fuel system installed at Woodsdale was neither designed nor intended to extend the service life of the station. Nor does it in practice. As Mr. Spanos explains, “the life span for the Woodsdale facility was estimated at 40 years based on a unique set of these planning factors and without clear or significant changes to those factors, there is no compelling reasoning for altering the life span.” Mr. Kollen relies upon decisions by a few other utilities to extend the service life of other CTs, but was unable to provide any details as to what investments may have been made to extend the service life of those assets. Once again, Mr. Kollen is engaging in idle, self-serving speculation while the Company’s witnesses are making assertions based upon currently known facts. And his suggestion at the hearing that a utility may somehow game its depreciation rates in order to gain a windfall profit is not only offensive but silly. Any over- or under-recovery of depreciation is accounted for when an asset is finally taken out of service. Adopting Mr. Kollen’s recommendation means that a significant amount of undepreciated plant would be remaining on the Company’s books when the station actually retires, meaning future customers will pay more for the remaining plant balance and the cost of new generation required to replace the retired assets. Mr. Kollen’s recommendation creates intergenerational subsidies that have no support in the record.

Mr. Kollen’s only specific objections to the Company’s terminal net salvage cost estimates is the inclusion of a contingency amount and an escalation factor. Much of Mr. Kollen’s argument is premised upon the assumption that the dual fuel improvement to Woodsdale will somehow extend

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174 Spanos Rebuttal, p. 11 (emphasis added); see also Duke Energy Kentucky Response to AG-DR-02-007(a).
175 See Kollen Cross-Examination, HVR at 14:56:25 (Feb. 20, 2020).
177 See Kollen Direct, pp. 50-52.
the service life (and also the depreciable life) of the generating station to fifty years. Both points are incorrect. First, the Commission specifically approved the exact same depreciation methodology in Duke Energy Kentucky's last electric base rate case. Second, as with many of his other recommendations, Mr. Kollen cites no actual authority to support his position. Third, the decommissioning study is based upon the most current information. Fourth, it is widely recognized that the actual cost of decommissioning a generation unit in the future is unknown in the present and that the recognition of a contingency cost and escalation rate is inherently reasonable. Finally, it must be noted that Mr. Kollen has no particular expertise in this area as he has never performed a depreciation study. Each of Mr. Kollen's claims lack merit and should be rejected.

\textit{f. Long-Term Debt Rates}

Mr. Kollen also proposes to reduce the Company's revenue requirement by $56,000 to reflect what he believes will result from savings from lower long-term debt rates. This is another example of him using selective data to benefit his interest while ignoring other relevant data. The Company's forecast of a long-term debt rate of 4.0% in September 2020 remains reasonable, which is all that the requirements of a forecasted test year require. Apart from Mr. Kollen's selective "updating" of a favorable data point, the record reflects that the particular update he applied was incorrect. As Company witness Jacobi explains:

\begin{footnotesize}
\begin{enumerate}
\item See Kollen Direct, pp. 54-56.
\item See Order, Case No. 2017-00321, p. 27 (Apr. 13, 2018).
\item See Spanos Cross-Examination, HVR at 11:05:00 Feb. 19, 2020.
\item See Kollen Cross-Examination, HVR at 14:48:52 (Feb. 20, 2020); AG's Response to Duke Energy Kentucky's DR-01-0026.
\item See Kollen Direct, p. 58.
\end{enumerate}
\end{footnotesize}
[E]ven if the commission were to determine that the Treasury yield for the 2020 debt issuance should be updated to reflect updated market rates, Mr. Kollen’s calculation of the long-term rate is incomplete. The proposed 3.68 percent rate is representative of a December 6, 2019 debt issuance, not a September 2020 issuance. The calculation fails to consider the forward curve, which is representative of the current market expectation for interest rates at the time of the issuance. In doing so, Mr. Kollen underestimates the cost of debt.184

Plainly, Mr. Kollen’s recommendation is flawed both with regard to concept and execution. It should therefore be rejected. As is evident from the Company’s response to a post-hearing data request, the forward curve for long-term interest rates can shift quickly.185 Nevertheless, the Company’s original forecasted interest rate of 4.00% is reasonable.

**g. Vegetation Management Expense**

Though not specifically challenged by any intervenor, the Company appreciates the concerns expressed at the hearing regarding the increasing cost of vegetation management. As explained at the hearing, utilities in the Midwest in particular, are experiencing the “perfect storm,” which conspires against them with regard to managing vegetation management expense. The factors comprising this situation include: (1) the pull of higher paying work in the Western United States; (2) consolidation within the ranks of contractors available to do the work, which makes it more difficult to attract bidders; and (3) the ability of contractors to use their skills in other fields, thus expanding the demand for their work. Even contractors themselves have found it difficult to maintain a suitable workforce.186

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184 *See* Jacobi Rebuttal, pp. 5-6.

185 *See* Duke Energy Kentucky Response to Staff Post-Hearing-DR-01-009.

186 *See* Christie Cross-Examination, HVR at 10:20:20, 10:23:10 (Feb. 20, 2020).
The Company remains vigilant to find ways to maintain or reduce its vegetation management expense, which grew to $6 million in 2019.\(^{187}\) The Company was successful in avoiding price escalation for 2020 and helped its contractors achieve higher productivity.\(^{188}\) Based upon anecdotal evidence, the Company’s vegetation management expense is lower than other utilities in the Midwest.\(^ {189}\) While it is theoretically possible that a utility could undertake its vegetation management tasks with in-house resources, there are capital costs associated with purchasing vehicles and equipment and additional training and risks that make this approach unattractive.\(^{190}\) Indeed, the Company is unaware of any other investor owned utility in the United States that does not contract for managing vegetation on its right of ways.\(^ {191}\) Duke Energy Kentucky is committed to looking for ways to manage its right of ways and reassess each year whether it is better to reopen contracts for bidding or to seek savings through renewal of existing agreements.

4. Rate of Return

a. Capitalization Ratio and Current Rates of Return

The proposed capitalization is comprised of 51.8 percent debt and 48.2 percent equity,\(^{192}\) and has not been challenged.\(^{193}\) As Company witness Jacobi explains:

> The greater the equity component of capitalization, the safer the returns are to debt investors, which translates into higher credit quality and lower borrowing costs. In addition, the allowed return on equity is a key component in the generation of earnings and cash


\(^{188}\) See Christie Cross-Examination, HVR 10:32:05 (Feb. 20, 2020).

\(^{189}\) See id., HVR 10:35:45.

\(^{190}\) See, HVR 10:24:20, 10:26:37.

\(^{191}\) See, HVR 10:24:50.

\(^{192}\) See Jacobi Direct, p. 4.

\(^{193}\) The only intervenor offering testimony on the subject accepted Duke Energy Kentucky’s proposed capital structure. See Richard Baudino Direct Testimony (Baudino Direct), p. 32 (Dec. 13, 2019).
flows. An adequate return on equity helps ensure equity investors receive fair compensation for their investment while also helping to protect the interests of debt investors. A strong capital structure and an adequate return on equity provide balance sheet protection and cash flow generation to support high credit quality. High credit quality creates financial flexibility by providing more readily available access to the capital markets on reasonable terms, and ultimately lower debt financing costs.194

The rates for return on equity (ROEs) are closely scrutinized by investors and financial analysts alike, and they have a meaningful impact upon investment decisions and the ability of a utility to attract capital.195 In their reviews of Duke Energy Kentucky’s credit ratings, the rating agencies have consistently noted three specific credit challenges: (1) elevated capital expenditures in recent years; (2) the Company’s relatively small size when compared to other integrated utilities; and (3) an elevated risk associated with transitioning away from carbon generation.196

b. The Company’s Proposed ROE is Reasonable

To evaluate what would be an appropriate ROE, the Company retained the expert who literally wrote the book on utility finance, Dr. Roger A. Morin, Ph.D.197 In preparing his recommendation of an appropriate ROE, Dr. Morin utilized several methodologies, including Discounted Cash Flow, the Capital Asset Pricing Model and Risk Premium.198 This analysis provided a range of ROE estimates from 8.9% to 10.5%.199 Taking all this into account, Dr. Morin’s recommendation was that: “[a] minimum ROE of 9.8% for Duke Energy Kentucky is required in order for the Company to: (i) attract capital on reasonable terms, (ii) maintain its

194 See Jacobi Direct, p. 10.
195 See Richard Baudino Cross-Examination, HVR at 10:45:00 (Feb. 19, 2020).
196 See Jacobi Direct, p. 8.
197 Dr. Morin’s qualifications and expertise are unquestioned. He is recognized as world-renown expert on utility finance and has offered testimony in vast and diverse contexts and venues. See Roger A. Morin, Ph.D. Direct Testimony (Morin Direct), Attachment RAM-1 (filed Sept. 3, 2019).
198 See Morin Direct, pp. 4-5.
199 See id., p. 60.
financial integrity, and (iii) earn a return commensurate with returns on comparable risk investments.\textsuperscript{200} Dr. Morin deliberately characterized the 9.8% ROE as “minimum” in light of several critical factors: (1) Duke Energy Kentucky’s relatively small size; (2) a five-year plan to attract approximately $914 million in financing; (3) regulatory lag; and (4) generation concentration in fossil fuels.\textsuperscript{201} Based upon intervening events, Dr. Morin lowered his required “bare bones” ROE to 9.7%, but maintains that the 9.8% as filed is still within the reasonable range of ROEs, particularly given Duke Energy Kentucky’s unique risks and robust capital plan.\textsuperscript{202}

c. The Attorney General’s Proposed ROE is Patently Unreasonable

The AG was the only intervenor to offer testimony challenging Dr. Morin’s recommended ROE. Mr. Richard Baudino, on behalf of the AG, recommends a 9.0% ROE, however, his analysis was less comprehensive and relied almost exclusively upon the discounted cash flow (DCF) methodology.\textsuperscript{203} In undertaking the DCF analysis, Mr. Baudino used the same proxy group that was used by Dr. Morin.\textsuperscript{204} Mr. Baudino arrived a range of 8.48% to 8.53% as an appropriate ROE using the DCF method, based upon average growth rates and median growth rates.\textsuperscript{205} Then, apparently recognizing that his analysis was over 110 basis points below the actual average ROEs awarded in the United States in the first half of 2019, Mr. Baudino factored in the highest possible DCF score he could come up with (9.45%) to arrive at a “midpoint” recommendation of 9.0%.\textsuperscript{206}

\textsuperscript{200} Morin Direct, p. 4.
\textsuperscript{201} See Morin Direct, pp. 61-63.
\textsuperscript{202} See Roger A. Morin, Ph.D. Rebuttal Testimony (Morin Rebuttal), p. 2 (Jan. 31, 2020).
\textsuperscript{203} See Baudino Direct, p. 3 (Dec. 13, 2019); Baudino Cross-Examination, HVR at 9:38:15 (Feb. 19, 2020).
\textsuperscript{204} See Baudino Direct, p. 17.
\textsuperscript{205} See id., pp. 22, 30.
\textsuperscript{206} See id., p. 32.
According to Mr. Kollen, a 9.0% ROE would reduce the Company’s revenue requirement by $4.761 million.\(^{207}\)

In rebuttal testimony, Dr. Morin offered this general assessment of Mr. Baudino’s recommendation:

[If adopted, [Mr. Baudino’s recommendation] would result in one of the lowest ROEs authorized in the utility industry. Mr. Baudino's low ROE recommendation would cause adverse consequences on the Company's creditworthiness, its financial integrity, the Company's capital raising ability, and ultimately its customers. Moreover, Mr. Baudino's recommended ROE lies below the zone of his own comparable companies authorized and expected ROEs. These facts provide clear proof that his ROE recommendation for Duke Energy Kentucky is too low. My second general reaction to Mr. Baudino's testimony, is that his recommendation of 9.0% rests exclusively on the results of a DCF analysis. Mr. Baudino has put all of his eggs in the DCF basket which causes him to recommend returns that are well below investors' required returns. This narrow approach stands in sharp contrast with the cost of capital estimation practices of investment analysts, finance experts, corporate analysts, and finance professionals who rely on a variety of methodologies.\(^{208}\)

Dr. Morin elaborated on his concerns by specifying several areas of disagreement that are relative to the DCF analysis: (1) an understated dividend yield component in the DCF model, (2) the absence of a flotation cost adjustment; (3) the reliance upon a dividend growth rate instead of an earnings growth rate in the DCF model.\(^{209}\) Mr. Baudino understated the dividend yield component in his DCF model by multiplying the current dividend by one-half (1/2) the growth rate as opposed to the full growth rate as required by the model.\(^{210}\) This creates a downward bias

\(^{207}\) See Kollen Direct, p. 59.

\(^{208}\) See Morin Rebuttal, p. 2.

\(^{209}\) See id., pp. 5-6. In addition to these errors, Dr. Morin identifies three additional methodological errors in Mr. Baudino’s analysis, all of which relate to an improper calculation of the CAPM. Since Mr. Baudino relied primarily upon the DCF to arrive at his recommendation, these additional CAPM errors are not included in this brief, however, Duke Energy Kentucky reserves the right to rely upon them in any further proceedings involving Mr. Baudino’s analysis.

\(^{210}\) See id., p. 11.
which renders an unreasonable outcome.211 When asked to identify a single college-level textbook that would support his bizarre adaptation of the traditional DCF analysis, Mr. Baudino could not name one.212 He did, however, confirm that his approach is different from that used by FERC.213

Mr. Baudino further underestimated the appropriate ROE by excluding flotation costs, which incorrectly presupposes that the costs of issuing equity are imperceptible, which they are not.214 Mr. Baudino’s analysis is also skewed to the extent that he relied upon a dividend growth rate as a proxy for the DCF growth rate.215 The earnings growth rate Mr. Baudino relied upon was appropriate, however, the inclusion of a speculative dividend growth rate yields an incorrect outcome.216 Finally, Mr. Baudino’s dismissal of Duke Energy Kentucky’s relative risk factors is also critical to understanding the incompleteness of his analysis.217

In short, there are a variety of methods available to evaluate the appropriate ROE for equities. Dr. Morin used several such methods to arrive at a recommendation of 9.8%.218 Mr. Baudino purposefully used only one such method.219 Dr. Morin tediously applied his method and cross-checked it against outcomes of other methods, which gives a high degree of confidence that his analysis is correct. Mr. Baudino failed to correctly apply the single methodology upon which he relied and arrived at a recommendation that would put Duke Energy Kentucky at the very bottom of authorized ROEs across the country. And when subject to cross-examination, Mr.

211 See id., p. 11.
212 See AG Response to Duke Energy Kentucky’s DR-01-015.
213 See AG Response to Staff-DR-01-011.
214 See Morin Rebuttal, pp. 12-14.
215 See id., pp. 14-16.
216 See id.
217 See id., pp. 28-30.
218 See id., p. 35.
219 See Baudino Cross-Examination, HVR at 10:35:15 (Feb. 19, 2020).
Baudino admitted that: (1) he has historically recommended ROEs that are approximately eighty-three (83) basis points below what the Commission has approved;\(^{220}\) (2) he intentionally used current interest rates rather than forecasted interest rates despite finance being a forward-looking endeavor;\(^{221}\) (3) the average ROE for all electric utilities in the United States in 2019 is just a few basis points higher than that which is Dr. Morin’s “bare bones” recommendation;\(^{222}\) and (4) ROEs for utilities rose in the latter half of 2019 even while interest rates fell.\(^{223}\) When all of these factors are taken into account, Dr. Morin’s analysis is significantly more credible than Mr. Baudino’s paltry 9.0% recommendation. The bare bones 9.7% ROE proposed by Dr. Morin is reasonable, although a higher ROE such as the 9.8% contained in his Direct Testimony is appropriate given Duke Energy Kentucky’s unique risk factors and robust capital plan.

5. Reflect One-Time Refund of DEBS Excess ADIT

Mr. Kollen claims that Duke Energy Kentucky’s revenue requirement should be lowered by $215,000 to reflect a one-time refund of excess ADITs held by DEBS following the passage of the Tax Cuts and Jobs Act of 2017.\(^{224}\) However, Mr. Kollen’s recommendation is based upon a flawed premise. As explained in the rebuttal testimony of Company witness Jeff Setser:

> The current income taxes expense is a result of the return on DEBS assets for which the jurisdictions have a corresponding current deduction. Deferred income tax assets or liabilities are considered temporary differences and have always been maintained at DEBS. Therefore, any adjustments to deferred income taxes through the income statement should remain on DEBS. The depreciation for DEBS assets that is charged out to the utilities is based on straight-line book depreciation. Bonus and MACRS depreciation is a tax adjustment resulting in deferred tax liabilities that are not allocated out to the jurisdictions. Prior to the Cinergy Service Company

\(^{220}\) See id., HVR at 9:43:00.
\(^{221}\) See id., HVR at 10:42:20.
\(^{222}\) See Duke Energy Kentucky Confidential Hearing Exhibit 1 (Feb. 19, 2020).
\(^{223}\) See id.
\(^{224}\) See Kollen Direct, pp. 43-44.
(DESS) being merged with Duke Energy Business Services (DEBS), the DESS service company did allocate out income tax expense. At the point that DESS merged into DEBS, the company had a deferred tax asset of $109 million. The jurisdictions received the benefit of this, but the reversal of this asset stayed on DEBS. The jurisdictions have not been charged for this tax expense and we currently are not seeking reimbursement.225

Without a full understanding of the history of DEBS, it is not surprising that Mr. Kollen would jump to the wrong conclusion. However, there is no factual support for his recommendation and it is contradicted by the actual history offered by Mr. Setser. Accordingly, Mr. Kollen’s recommendation should also be rejected.

6. Cost of Service Study

As part of its Application, the Company prepared a comprehensive Class Cost of Service Study (CCOSS) that used different methodologies to develop the allocation factor for the demand component of production-related costs.226 The demand allocation methods are as follows: (1) the Average of the Twelve (12) Coincident Peaks (12 CP) method; (2) the Average and Excess (A&E) method; and (3) the Production Stacking method. The Company believes that the 12 CP method is the most useful in this context and it is the outcome of this element of the CCOSS that forms the basis for the proposed rate design.227 Mr. Beiber (on behalf of Kroger) and Mr. Collins (on behalf of NKU) recommend that the Commission approve the CCOSS using the 12 CP method.228

7. Proposed Rate Design

The Company’s revenues come predominately from the following rate classes: (1) Rate RS - Residential Service (Rate RS); (2) Rate DS - Service at Secondary Distribution Voltage (Rate...

226 See James E. Ziolkowski Direct Testimony (Ziolkowski Direct), pp. 4-5 (Sept. 3, 2019).
227 See id., pp. 7-9.
DS); (3) Rate DP - Service at Primary Distribution Voltage (Rate DP); (4) Rate DT - Time of Day Rate for Service at Distribution Voltage (Rate DT); and (5) Rate TT - Time of Day Rate for Service at Transmission Voltage (Rate TT). The rate design objectives for these rate schedules are to generally increase the rates to maintain a similar structure that minimizes impacts to the class of customers. However, to mitigate the rate shock that may come from eliminating the subsidy/excess (or rate disparities) among the rate classes, the Company is proposing to use a two-step process to distribute the proposed revenue increase. The first step eliminates 5% of the subsidy/excess revenues between customer classes based on present revenues. The second step allocates the rate increase to customer classes based on electric original cost depreciated (OCD) rate base. The Company’s goal was to keep the residential rate increase under 20%.

Most of the proposed rate design is unchallenged by the intervenors in this case, however, the AG offered testimony challenging the proposed increase in the customer charge and Kroger offered testimony making suggestions as to how any reduction in the Company’s proposed revenue requirement should be allocated among the various customer classes. In addition, two municipalities offered comments questioning the Company’s proposed revisions to the revised street lighting tariffs.

229 See Jeff L. Kern Direct Testimony (Kern Direct), pp. 8-9 (Sept. 3, 2019).
230 See Kern Direct, p. 9. The Company is proposing similar updates with regard to Rate RTP and Rider GSS. The changes are driven by the COSS and are not contested by any intervenor.
231 See Ziolkowski Direct, p. 25.
232 See id.
233 See id.
a. The Proposed Increase in the Rate RS Customer Charge is Reasonable

As part of its Application, Duke Energy Kentucky proposed modest increases to several of its customer charges, however, only the proposed change to the customer charge applying to Rate RS was challenged by any intervenor. At $11.00, Duke Energy Kentucky currently has the third lowest residential customer charge of any regulated electric utility in Kentucky. Approving the increase of the customer charge to $14.00 per month will make Duke Energy Kentucky the ninth lowest in the state. Moreover, the Company’s CCOSS demonstrated that the actual cost to serve residential customers conservatively justified a customer charge of $14.29.

One of the AG’s witnesses took issue with the proposed increase in the residential customer charge. Mr. Glenn Watkins argued that it is inappropriate to include distribution system costs upstream from the customer’s service line while developing a customer charge. Using an analytical method that does not appear to have been adopted by any other jurisdiction in the country, Mr. Watkins arrived at a “reasonable” range for the residential customer charge being between $4.40 and $4.44. However, Mr. Watkins did not recommend a reduction in the Company’s current residential customer charge, only that it be retained at $11.00.

Contrary to Mr. Watkins’ claim of rate shock, one must consider how an increase in the customer charge impacts the volumetric charge. Looking at the total increase in a residential

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235 See Kern Direct, p. 9.
236 See id., Attachment JLK-2.
237 See id.
238 See Application, FR-16(7)(v); Jeff L. Kern Rebuttal Testimony (Kern Rebuttal), p. 5, (Jan. 31. 2020).
240 See id., p. 16.
241 See id., p. 17.
242 See id., pp. 2-3.
customer’s bill reveals that the total percentage increase for a customer using only 300 kWh a month is very close to the average 1000 kWh a month residential customer’s increase.\textsuperscript{243} In the most extreme case, a customer with no electric consumption would only see a $3 per month increase as a result of the change in the customer charge.\textsuperscript{244} Mr. Watkins’ claims of “rate shock” are not credible.

Likewise, Mr. Watkins’ claim that the majority of distribution costs are not properly characterized as “customer related” leads to the absurd result where much of a utility’s distribution system is not accounted for in the calculation of the customer charge. On this point, Mr. Watkins affirmed that he was generally uninformed as to how the Commission traditionally treats such costs.\textsuperscript{245} And Mr. Watkins’ proposition that customers somehow have a “clear preference for volumetric pricing” is unsupported and unscientific.\textsuperscript{246} Indeed, Mr. Watkins bragged about how unsupported and unscientific his notion truly is, claiming in a data request response: “This is common knowledge to the common man [and woman] wherein no research or studies are required or have been conducted.”\textsuperscript{247} When asked by Staff to provide an analysis of how the customer charge would impact high, low and average usage customers, Mr. Watkins declined stating that “doing so would require original work.”\textsuperscript{248}

\textsuperscript{243} See Kern Rebuttal, p. 2.
\textsuperscript{244} See id.
\textsuperscript{245} See AG’s Response to Duke Energy Kentucky’s DR-01-045 (“Mr. Watkins is not aware of this Commission either accepting or rejecting a direct customer cost analysis.”); AG’s Response to Duke Energy Kentucky’s DR-01-046 (“Mr. Watkins is not aware of this Commission either accepting or rejecting the exclusion of costs associated with conductors and poles in determining an appropriate customer charge.”);
\textsuperscript{246} See Kern Rebuttal, p. 3; Watkins Cross-Examination, HVR 2:29:15 (Feb. 20, 2020).
\textsuperscript{247} AG’s Response to Duke Energy Kentucky’s DR-01-037; AG’s Response to Duke Energy Kentucky’s DR-01-0039. Mr. Watkins’ opinion is plainly inconsistent with the vast library or publicly available resources on pricing theories. A simple search for “pricing theory” under “Books” on Amazon yields over 500 hits (https://www.amazon.com/s?crid=3VR3AE61WRFPS&ie=stripbooks&k=pricing%20strategy&ref=nb_sb_ss_i_2_7&sprefix=pricing%2Cstripbooks%2C189?url=search-alias%3Dstripbooks) This does not account for the thousands of dissertations, theses, term papers and random homework assignments that also touch upon the subject.
\textsuperscript{248} AG’s Response to Staff DR-01-019.
Indeed, the capacity of Mr. Watkins to even offer expert opinion testimony in this case is called into question by the cavalier nature of his responses to data requests. In order to proffer an expert opinion, Kentucky’s courts require an individual to first demonstrate that the opinion is both reliable and relevant to the question before the trier-of-fact.\textsuperscript{249} Kentucky’s Supreme Court has long adhered to the \textit{Daubert} standard, which requires judges to function “as a ‘gatekeeper’ charged with keeping out unreliable, pseudoscientific evidence…”\textsuperscript{250} Where the expert witness has relied primarily upon the work of others, even stricter scrutiny of their ability to render opinion testimony is required.\textsuperscript{251} The fact that Mr. Watkins is unable to provide any support for his opinion and was unwilling to undertake any “original work” strongly undercuts his authority and credibility. Granted, the Commission is not strictly bound by the Kentucky Rules of Evidence,\textsuperscript{252} but that does not mean that the Commission’s proceedings should disregard the principles of evidence altogether. In this case, there has been no adequate demonstration of the competency of Mr. Watkins to speak authoritatively on the subject of which he opines.

\textsuperscript{249} \textit{See Miller v. Eldridge}, 146 S.W.3d 909, 913 (Ky. 2004).

In evaluating the reliability of expert testimony, a trial court may consider a variety of factors:

The factors set forth in \textit{Daubert} and adopted in \textit{Mitchell} that a trial court may apply in determining the admissibility of an expert's proffered testimony include, but are not limited to: (1) whether a theory or technique can be and has been tested; (2) whether the theory or technique has been subjected to peer review and publication; (3) whether, with respect to a particular technique, there is a high known or potential rate of error and whether there are standards controlling the technique's operation; and (4) whether the theory or technique enjoys general acceptance within the relevant scientific, technical, or other specialized community.

\textsuperscript{250} \textit{Id}.

\textsuperscript{251} \textit{See Burton v CSX Transp., Inc.}, 296 S.W.3d 1, 7 (Ky. 2008) (“A high standard must be met for an expert's testimony based primarily or fully on literature review to be properly admitted in court under \textit{Daubert}.”).

\textsuperscript{252} \textit{See} KRS 278.310.
The Company’s proposed customer charge is very reasonable, both when compared to other utilities in Kentucky and even when compared to the other jurisdictions upon whom Mr. Watkins relies upon for support.\textsuperscript{253} The Company’s requested $14.00 customer charge is a gradual and modest increase from its existing customer charge and should be approved.

\textit{b. Kroger’s Proposed Revenue Allocation Changes}

Both Kroger and NKU agreed with the Company’s proposed revenue allocation between rate schedules at the proposed revenue requirement.\textsuperscript{254} However, in the event the Commission awards less than the proposed revenue requirement in this case, Kroger’s expert, Mr. Bieber, recommended that “the Commission take advantage of the opportunity to improve the alignment between revenue responsibility and cost causation while still reducing the requested rate increase for all rate classes.”\textsuperscript{255} Specifically, Mr. Bieber recommends allocating 50\% of any reduction in the revenue targets to all customers classes, with the remaining 50\% of any reduction “allocated to the subsidy-paying classes on a pro rata basis in proportion to the amount of the subsidy each class is currently paying in its present rates.”\textsuperscript{256} The Company takes no position at this time with regard to Mr. Bieber’s proposal.

\textit{c. Street Lighting Tariffs}

Duke Energy Kentucky is proposing two changes with regard to its street lighting tariffs. First, it proposes an increase in street lighting rates to recover revenues allocated by the CCOSS.\textsuperscript{257} The purpose of this change is to have street lighting rates rise in an amount commensurate to the

\begin{flushleft}
\textsuperscript{253} See Kern Rebuttal, pp. 5-6.
\textsuperscript{254} See Bieber Direct, p. 3; Collins Direct, p. 8.
\textsuperscript{255} See Bieber Direct, p. 10.
\textsuperscript{256} See id., pp. 10, 11.
\textsuperscript{257} See Kern Direct, p. 10.
\end{flushleft}
overall percentage increase allocated to street lighting customers under the CCOSS. Second, the Company proposes changes to Rate LED such that the rate will be based on the sum of various components including new components not previously included in Rate LED costs. The current list of available options under Rate LED will be expanded to provide customers with additional fixtures and poles, allowing for thousands of options as customers can combine the components in a wide variety of ways. Also, new categories of charges for the type of pole foundation, brackets and wiring equipment are added. Previously, costs incurred by the Company for these installations were not recovered. The expansion to Rate LED is necessary due to the ever-expanding range of options for LED lighting that customers are requesting. During the hearing, Staff questioned the proposed provision in Rate LED for customers to pay a monthly charge for additional facilities. Examples of these additional facilities include: single-phase pad-mount transformers; nonstandard concrete foundations required due to terrain constraints; vaults or junction boxes in urban areas; or other equipment not typically used in lighting systems but required to serve in a specific situation. In addition LED lights must be adjacent to a suitable and adequate electric power line. These additional facilities will be owned and maintained by the Company the same as other distribution facilities. For all of these reasons, the Company’s revised street lighting tariffs are fair, just and reasonable and should be approved.

258 See Kern Direct, p. 10.
259 See id.
260 See id., p. 11.
261 See id.
262 See Duke Energy Kentucky Response to Staff Post-Hearing-DR-01-023.
263 See id.
C. The Company’s Other Proposed Tariff Changes are Reasonable

1. Green Source Advantage Tariff

The Company is also proposing a new voluntary Green Source Advantage Program (GSA Program) for non-residential customers wishing to invest in renewable energy resources to meet sustainability goals. The GSA Program is a voluntary opportunity for qualifying non-residential customers to partner with Duke Energy Kentucky to meet their specific, internal corporate sustainability goals in a convenient and cost-effective way. Participating customers may request that the Company procure renewable energy resources on behalf of the customer, with the cost and any net revenues of these commitments captured and billed to the customer through this new tariff.

Duke Energy Kentucky will utilize a request for proposals process to source the renewable power necessary under the GSA Program. Participating customers will then enter into a service contract with Duke Energy Kentucky for the same term of years (up to 20) and compatible terms and conditions as the PPA. The participating customer will then receive the net benefits created under their program contract, including the value of any RECs. The energy needs of the participating customer will continue to be satisfied by Duke Energy Kentucky's own generation assets and participating customers will continue to pay all applicable rates and charges. The result is a program that: 1) provides an easy, seamless way for interested, eligible customers to

\[\text{\textsuperscript{264}} \text{ See Application, p. 13.} \]
\[\text{\textsuperscript{265}} \text{ See Andrews S. Ritch Direct Testimony (Ritch Direct), p. 2 (Sept. 3, 2020); Spiller Cross-Examination, HVR at 8:48:00 (Feb. 19, 2020).} \]
\[\text{\textsuperscript{266}} \text{ See Ritch Direct, p. 3.} \]
\[\text{\textsuperscript{267}} \text{ See id., p. 4.} \]
\[\text{\textsuperscript{268}} \text{ See id.} \]
\[\text{\textsuperscript{269}} \text{ See id.} \]
\[\text{\textsuperscript{270}} \text{ See id., p. 5.} \]
satisfy individual sustainability goals; and 2) creates a hedge against the regulated costs of electricity by using the wholesale energy markets.\textsuperscript{271} The output of the GSA Program’s contracted energy will be dispatched and sold and any revenues received from such sales will be netted against the costs of the resource.\textsuperscript{272} The net cost of these two transactions is the amount that will be billed to the participating customer.\textsuperscript{273} To the extent the revenues for energy from these resources exceed the costs on any given month, the participating customer will see a credit. However, in months where the costs exceed the revenues, customer will see an incremental charge. Because this resource is "outside" the Company's generation and paid for solely by the contracting customer there will be no impact to the Company's fuel adjustment clause or profit-sharing mechanism. Contractual terms will protect the interest of Duke Energy Kentucky and its customers in the event a GSA Program customer ever defaulted on its obligation purchase renewable energy.\textsuperscript{274} Importantly, the program will also prevent Duke Energy Kentucky’s non-participating customers from subsidization of the GSA Program participant’s purchase of renewable energy.\textsuperscript{275} No intervenor has opposed this new tariff which should be approved.

2. \textbf{Revised Cogeneration Tariff}

The Company proposes to make adjustments to its cogeneration tariff.\textsuperscript{276} The purpose of these adjustments is to comply with 807 KAR 5:054 by providing a biennial update of avoided

\begin{itemize}
  \item \textsuperscript{271} See \textit{id}.
  \item \textsuperscript{272} See \textit{id}.
  \item \textsuperscript{273} See \textit{id.}, pp. 5-6.
  \item \textsuperscript{274} See \textit{id.}, p. 10.
  \item \textsuperscript{275} See Spiller Cross-Examination, HVR at 9:08:35 (Feb. 19, 2020).
  \item \textsuperscript{276} See Application, p. 13.
\end{itemize}
cost calculations.\textsuperscript{277} No intervenor opposes this tariff change, which should be approved as requested.

3. Fraud/Tamper Penalty Charges

As part of its Application, Duke Energy Kentucky proposed to establish a $200 residential penalty charge and a $1,000 nonresidential penalty charge for instances of fraud and tampering with Company equipment.\textsuperscript{278} In addition, based upon the Company’s judgment, an offending customer may be required to take service under the advanced meter opt-out tariff so that the meter is observed more frequently.\textsuperscript{279} Based upon the number of cases of fraud and tampering in 2018 alone, this would result in $22,400 of penalty payments.\textsuperscript{280} Duke Energy Kentucky has included this revenue as an offset to its revenue requirement in the test year.\textsuperscript{281} If the Commission rejects this proposal, it must increase the Company’s revenue requirement by $22,400 (before any gross up) to account for the fact that the Company will not receive this incremental revenue. Additional deterrence will be useful as the AMI system deployed throughout the Company’s service territory requires less visual observations and the Company is still developing the proper analytical tools to detect tampering and fraud via data alone.\textsuperscript{282} Duke Energy Kentucky understands that the imposition of penalties have led to a reduction in instances of fraud and tampering with the assets of other utilities with similar programs.\textsuperscript{283} No intervenor has opposed these changes. They are reasonable and should be approved.

\textsuperscript{277} See Kern Direct, pp. 12-14.
\textsuperscript{278} See id., p. 14; Paul Halstead Cross-Examination, HVR at 18:21:50 (Feb. 19, 2020).
\textsuperscript{279} See Kern Cross-Examination, HVR 13:48:00 (Feb. 20, 2020).
\textsuperscript{280} See Quick Direct, p. 15.
\textsuperscript{281} See Application, Schedule D-2.21.
\textsuperscript{282} See Duke Energy Kentucky Response to Staff DR-03-032.
\textsuperscript{283} See Quick Cross-Examination, HVR at 11:58:25 (Feb. 19, 2020).
4. **Reconnection Charges**

Duke Energy Kentucky proposes several minor adjustments to its reconnection charges.\(^{284}\) The charges are based upon actual costs,\(^ {285}\) and have not been opposed. As a result of the reconnection charge adjustments, the Company is also proposing a minor change to Rate SP to avoid customer confusion.\(^ {286}\) No intervenor has opposed the tariff changes, which should be approved.

5. **Franchise Fee Tariff**

The Company also proposes to update the name of the current Franchise Fee Tariff to more fully reflect that the tariff applies to all local government charges and taxes, not just franchise fees.\(^ {287}\) The text of the tariff itself is not changing. With no opposition from any party, this name change should be approved.

6. **Mitigating Fuel Adjustment Clause (FAC) Volatility**

The Company also proposes to make an adjustment to the FAC in order to reduce future volatility and thereby ease swings in customers’ bills. Specifically, the Company proposes to change its Rider FAC calculation by calculating the rate on a rolling twelve-month average basis as opposed to a monthly basis.\(^ {288}\) The Company will not be harmed or benefit from the proposal, however, customers will greatly benefit from seeing less dramatic swings in their monthly bills that are currently attributable to the FAC.\(^{289}\) Moreover, the Commission’s process for review currently in place will not change, only the timeframe over which the true up is measured will be

\(^{284}\) See Kern Direct, p. 15.

\(^{285}\) See id., Attachment JLK-5.

\(^{286}\) See id., p. 16.

\(^{287}\) See id., p. 17.

\(^{288}\) See Wathen Direct, p. 17.

\(^{289}\) See id., pp. 18-19; Duke Energy Kentucky’s Response to Staff DR-03-022.
different. Revising the FAC to account for a rolling twelve-month average will benefit customers and should be approved. No party raised any objection to this proposal in testimony or during the hearing.

D. Other Issues

1. Electric Battery Storage

The Company originally proposed to construct and operate a single circuit 5.5 MW distribution system battery storage project to study the benefits and potential reliability benefits for distribution-connected battery storage technologies. During the course of the case, however, the proposal evolved to a 3.4 MW battery storage installation near the Crittenden Solar Farm. The new site allows the Company to experiment with solar smoothing, solar shifting and voltage support, while enabling the Company to study how battery storage can mitigate the impact of distributed generation resources on the distribution system and improve reliability. The total capital cost of the project is estimated at $8.2 million, with the annual O&M estimated at $163,000.

Gaining familiarity with the operation of a distribution battery storage system within PJM will provide significant value to Duke Energy Kentucky while its customers benefit from the battery’s participation in the PJM market. As more intermittent generation resources connect to the grid, it is imperative that utilities gain experience and insight as to how to best integrate energy storage facilities onto the grid as well. The battery is expected to follow PJM's REG D signal

290 See Duke Energy Kentucky’s Response to Staff DR-03-021.
291 See Application, p. 13.
292 See Duke Energy Kentucky Response to Staff DR-02-080.
294 See id., p. 6. The O&M expense has not been included in Duke Energy Kentucky’s forecasted test year or revenue requirement.
295 See Zachary Kuznar, Ph.D. Direct Testimony, p. 4 (Sept. 3, 2019).
that is designed for fast response resources and helps to stabilize the electric grid in a manner that is more efficient than traditional resources. Participation in REG D will allow the proposed battery to realize approximately $470,000 in revenue each year, which will flow through Rider PSM to the benefit of Duke Energy Kentucky’s customers. Due to the complexity of how the battery will operate in a regulated market such as PJM, gaining operational knowledge now is critical.

Kroger did not offer any opposition to the proposed battery project. NKU also did not object to the project, but suggested three conditions that should attach to the Commission’s approval: (1) record-keeping to fully track the revenues generated from the battery through Rider FAC or Rider PSM; (2) a cost/benefit study to be filed at the earlier of six months after the expiration of the pilot program or the Company’s next electric rate case; and (3) no further investment in battery storage until the proposed pilot expires and its outcomes are reviewed by the Commission. The Company agrees with the first two recommendations but believes that a complete ban on any further battery storage investment until the three year pilot program concludes is overly restrictive and should not be adopted.

Mr. Kollen opposes any investment in this energy storage solution, claiming: (1) it is uneconomic; (2) it is not required for reliability purposes; and (3) the project will be managed by

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296 See id., pp. 4-5.
297 See Kuznar Rebuttal, p. 4.
298 See Kuznar Direct, pp. 7-8. Additional revenue could be realized in the future depending upon the final disposition of FERC’s Order 841. See Kuznar, Cross-Examination, HVR at 18:57:25 (Feb. 19, 2020).
299 A detailed description of how the battery will interact with PJM is included in Duke Energy Kentucky Response to Staff DR-03-067. Duke Energy has a battery project in Ohio, however, since it is an unregulated state, the ability of information gleaned from that project to be shared with Duke Energy Kentucky’s regulated business is severely constrained. See Kuznar Cross-Examination, HVR at 19:02:30 (Feb. 19, 2020).
300 See id., HVR at 18:35:00.
301 See Collins Direct, p. 20.
302 See Kuznar Rebuttal, pp. 10-11.
a Company affiliate. Mr. Kollen’s objections are well-meaning, but misplaced. First, most, if not all, new technologies are non-economic in their earliest iterations. There is simply a great deal of uncertainty in the cost/benefit analysis associated with new technology when compared to technologies that have been around for decades or centuries. However, all signs point to energy storage being a critical path to the utility systems of the not-so-far-ahead future. Furthermore, FERC’s Order 841 is changing the costs and market rules applicable to energy storage and could profoundly improve the underlying economics.

Second, reliability is not the touchstone by which all utility investments must be made. The proposed energy storage will have some reliability value as it helps with frequency regulation in PJM’s REG D market, however, the primary benefits arise from renewable integration testing. Small investments now will better enable Duke Energy Kentucky to gain the necessary experience with battery projects on its distribution system that in turn could lead to broader reliability-based projects in the future as the technology continues to develop. Third, Mr. Kollen’s concern that the project will be managed by a Duke Energy Kentucky affiliate is unfounded. Mr. Kuznar manages all of Duke Energy’s battery storage projects and will be directly involved with Duke Energy Kentucky’s leadership throughout the pilot. The battery itself will be owned and operated by the Company. While other Duke Energy operating companies may develop similar projects, none of them can gain experience developing such a project in a regulated state within

303 See Kollen Direct, p. 62.
304 See Kuznar Rebuttal, p. 12.
305 See id.
306 See id.
307 See id.
PJM. 309 The Commission has a long-standing history of encouraging utilities to engage in and support reasonable experimentation associated with advancing the art and science of the industry. 310 This project is consistent with those efforts and should be approved.

2. Electric Vehicle Charging Program

Regulated utilities across the country are investing over $1 billion in infrastructure to support a growing electric vehicle (EV) market. 311 As part of its Application, Duke Energy Kentucky proposes to offer an EV pilot program that includes Company ownership of a limited number of fast charging stations and incentives offered to residential and non-residential customers who invest in electric vehicle infrastructure. 312 The thirty-six (36) month proposal includes: (1) the EV Fast Charge Program; (2) the Electric Transit Bus Charging Program; (3) a Non-Road Electrification Incentive Program; (4) a Residential EV Charging Incentive Program; and (5) a Commercial EV Charging Incentive Program. EV programs offer benefits to Duke Energy

309 See Kuznar Cross-Examination, HVR at 18:35:00 (Feb. 19, 2020).

310 See, e.g., In the Matter of the Joint Application of Duke Energy Kentucky, Inc., Kentucky Power Company, Kentucky Utilities Company and Louisville Gas & Electric Company for an Order Approving Accounting Practices to Establish Regulatory Assets and Liabilities Related to Certain Payments Made to Carbon Management Research Group and the Kentucky Consortium for Carbon Storage, Order, Case No. 2008-00308, p. 3 (Ky. P.S.C. Oct. 30, 2008) (“The Commission appreciates the Applicants’ participation in the projects being undertaken by CMRG and KCCS. The issues of carbon management and carbon sequestration hold the potential for affecting the customers of all electric utilities subject to our jurisdiction. Accordingly, the Commission is greatly interested in the work of entities such as CMRG and KCCS which addresses these issues.”); In Re the Application of Delta Natural Gas Company, Inc. for an Adjustment of Rates, Order, Case No. 2004-00067, p. 2 (Dec. 21, 2004) (“We have long supported policies encouraging research and development in the gas utility industry and noted this support in our Order. The [Gas Technology Institute] Rider furthers such research. Moreover, we agree with Delta that the use of the GTI Rider is the easiest and most efficient means of assessing the cost of such research and terminating the collection of such costs when Delta's payments to the GTI end.”); Id., Order, p. 59 (Nov. 10, 2004) (“The Commission has provided a clear signal to jurisdictional gas utilities in the past that it supports research and development efforts in the gas industry.”); In re the Application of Kentucky-American Water Company and Thames Water Aqua Holdings GmbH for Approval of a Transfer of Control, Order, Case No. 2002-00018 (May 30, 2002) (“The Commission strongly supports R&D and commends the Applicants for their commitments to such programs. Benefits can be realized whether research is sponsored solely by one utility or through a larger organization funded by multiple utilities or stakeholders. The benefits of R&D may well help the Applicants in fulfilling their commitments to ensure rate stability and high-quality service.”).


312 See Application, p. 13.
Kentucky's customers regardless of whether they drive EVs. As Company witness Lang Reynolds explains:

As incremental load is created through the implementation of broader public and private EV charging facilities, a broader base is created through which to spread utility costs. Thus, savings to all customers are anticipated to result from increasing EV adoption due to incremental net revenue received by selling electricity to charge EVs in excess of any increases in costs of service related to the additional load.\(^{313}\)

According to a Duke Energy study using the Department of Energy’s analytical model,\(^{314}\) at a modest growth rate, nearly 35,000 EVs could be registered in the Duke Energy Kentucky service territory in ten years, necessitating approximately 125 Direct Current Fast Charging (DCFC) stations and 1,500 Level II (L2) workplace and public charging plugs to provide adequate EV infrastructure.\(^{315}\) The biggest obstacle to reaching these outcomes, however, remains the fact that there is limited EV infrastructure in northern Kentucky.\(^{316}\)

As proposed, the EV Fast Charge Program would consist of five (5) charging locations, each with two charging stations, located throughout northern Kentucky.\(^{317}\) Electricity will be charged on a per kWh basis with revenue intended to cover the costs of electric service, transaction and network service costs and operational maintenance costs.\(^{318}\) The EV Fast Charge Program will enable Duke Energy Kentucky to gather data on several key subjects,\(^{319}\) which will allow it to further refine and improve the program in the future. The stations will be sited in coordination

\(^{313}\) See Lang W. Reynolds Direct Testimony (Reynolds Direct), p. 3 (Sept. 3, 2020).


\(^{315}\) See Reynolds Direct, p. 5.

\(^{316}\) See Reynolds Cross-Examination, HVR 8:38:50, 8:51:00 (Feb. 20, 2020).

\(^{317}\) See Reynolds Direct, p. 10.

\(^{318}\) See id., pp. 10-11.

\(^{319}\) Mr. Reynolds provides a list of these benefits in his Direct Testimony. See id., p. 13.
with a study of travel patterns and existing infrastructure that was prepared by an independent coalition of state governments in the Tri-State area.\textsuperscript{320} There is no conceivable way that the EV Fast Charge Program could somehow distort the market for EV charging services on the basis that Duke Energy Kentucky is a regulated utility.\textsuperscript{321}

The Electric Transit Bus Charging Program opens the pathway for transit buses to transition to EVs through the construction and operation of five EV Transit Bus charging stations.\textsuperscript{322} Again, there are substantial opportunities to expand the Company’s understanding of how best to employ this sort of infrastructure through the proposed pilot program.\textsuperscript{323}

The three incentive programs are equally beneficial. The Non-Road Electrification Incentive Program will encourage the use of electrified forklifts, truck refrigeration standby units, ground service equipment and ground power unit equipment.\textsuperscript{324} The Residential EV Charging Incentive will establish a $500 incentive for up to 300 eligible residential customers to install LV2 chargers in their homes.\textsuperscript{325} For those customers willing to participate in load management events, they are eligible to receive an additional $500 over the three years of the pilot program.\textsuperscript{326} Finally, the Commercial EV Charging Incentive Program will establish a $2,500 incentive for commercial customers who purchase and install a LV2 charging station for a non-residential location.\textsuperscript{327}

\begin{flushleft}
\textsuperscript{320} See Reynolds Cross-Examination, HVR 9:07:40 (Feb. 20, 2020).
\textsuperscript{321} See id., HVR 9:06:30.
\textsuperscript{322} See Reynolds Direct, p. 13.
\textsuperscript{323} See id., pp. 14-15.
\textsuperscript{324} See id., p. 16.
\textsuperscript{325} See id., p. 18.
\textsuperscript{326} See id.
\textsuperscript{327} See id., p. 20.
\end{flushleft}
The total capital costs for these programs are projected to be $1,375,000 and total operations and maintenance costs are expected to be approximately $1,459,000. Duke Energy Kentucky hopes to offset a portion of the capital investment by utilizing a portion of the proceeds from the Volkswagen Mitigation Trust Fund. The Company further proposes to revise Rider PSM to include net revenues associated with Company-owned electric vehicle charging stations. Likewise, the Company is requesting a deferral for the incremental O&M expenses associated with the Incentive Programs, the Electric Transit Bus Charging Program and education and outreach discussed in Mr. Reynolds' testimony. Of all the components of the Company’s rate case, the EV proposal received the most significant comments of support from local government and agencies.

Mr. Collins, on behalf of NKU, did not object to the Company’s proposal, but offered specific suggestions on how the program could be modified to provide greater protections for customers:

1. The investment and O&M costs in the EV Pilots should be limited to those total dollar values listed on Table 1 of DEK witness Reynolds’ direct testimony at page 9.

2. All revenues generated from all EV Pilot programs should be recorded as an offset to the deferred O&M costs (regulatory asset) proposed by DEK. To the extent the revenues exceed the O&M costs, then a regulatory liability would be created to capture those revenues to be returned to customers in the next rate case.

328 See Lawler Direct, p. 16; Reynolds Direct, pp. 9, 24.
329 See id., p. 27.
331 See Lawler Direct, p. 17.
332 See, e.g., Letter from Greater Cincinnati-Northern Kentucky International Airport to Michael Schmitt (Feb. 1, 2020); Letter from Ohio-Kentucky-Indiana Regional Council of Governments to Michael Schmitt (Feb. 3, 2020); Letter from the City of Southgate, Kentucky to Michael Schmitt (Feb. 5, 2020); Letter from the City of Highland Heights, Kentucky to Michael Schmitt (Feb. 6, 2020).
3. No extension of the Pilot Program’s recovery of investment in EV Bus Charging Stations and Fast Charging Stations should occur beyond three years without prior Commission approval.

4. DEK should maintain all documentation to perform a cost/benefit study either at the conclusion of the EV Pilots or included with the direct testimony of DEK during its next rate case if that rate case occurs before the expiration of the EV Pilots. If DEK is required to file a cost/benefit study prior to the expiration of the EV Pilots, DEK will still be required to file a cost/benefit study at the expiration of the EV Pilots.

5. DEK should be prohibited from expanding the EV Pilots before the expiration of the current program. If the Commission does allow DEK to seek expansion of the program before the currently proposed expiration by way of a subsequent filing, all Parties to the current rate case should be notified by DEK and be afforded the opportunity to participate in the filing or proceeding.

6. Once the Pilot program has expired, the Commission should consider whether a separate EV class should be created. This approach would ensure that EV customers pay actual, non-subsidized cost of service rates for this service and help prevent other DEK customers from subsidizing EV investment.

7. Any funds received from the Volkswagen Environmental Mitigation Trust Program should be recorded as a regulatory liability to reduce the EV investment in a future DEK rate case.

In rebuttal testimony, Mr. Reynolds confirmed that Duke Energy Kentucky could accept Mr. Collins’ first, fifth and seventh recommendations. Further, it could accept his second recommendation, but just if applied only to the EV Fast Charging Program, and Mr. Collins’ fourth recommendation appears to be consistent with what the Company has already proposed. As Mr.

335 See id., pp. 4-6, 8.
Reynolds explained, the Company cannot agree to Mr. Collins’ third and sixth recommendations as they are too restrictive and will unnecessarily stifle the potential grown of the EVCS market.336

Mr. Kollen, however, simply opposes the EV Charging Program, claiming: (1) it is not necessary for the provision of electric service; (2) the program only benefits participating customers; (3) the program is not economic; (4) the program is simply a “down payment” on future, larger investments; (5) the program will be managed by a Company affiliate; (6) private industry should be relied upon to create this infrastructure; and (7) the service will further degrade the Company’s capacity margins in PJM.337

Here again, Mr. Kollen’s myopic perspective seeks to head-off the Company’s efforts to innovate and expand its base for the benefit of its members. His concern that EVCSs are incompatible with the provision of electric service disregards the fact that EVs are a growing portion of the vehicle fleet and it will be incumbent upon electric utilities to serve them just as they currently serve homes, businesses and factories. To the owner of an electric car, provision of EV charging services is just as vital as provision of electricity to run the coffee pot. Likewise, the concerns that the program is not economic and only a “down payment” on future investment are self-contradictory. While the proposed pilot might be non-economic, it is necessary to gain understanding so that future investment will be economic.338 In other words, present experience is needed to determine whether future investment makes sense from a cost/benefit perspective, not just in theory, but in practice. Getting this information from charging service providers is difficult.

336 See id., pp. 5-6, 7-8.
337 See Kollen Direct, pp. 64-65.
338 See Reynolds Rebuttal, p. 9.
because usage is “behind the meter.” Mr. Kollen’s recommendation is rooted in the belief that any costs invested now could never give rise to future benefits, which is patently absurd.

Likewise, as with the battery storage proposal, the EVCS at issue here will be operated under the direct supervision of Duke Energy Kentucky’s leadership. And rather than respond to the Company’s economic analysis of how its EV Program could put downward pressure on utility rates in the future, Mr. Kollen simply throws out a bombastic objection that lacks support or credibility. Mr. Kollen’s final argument that the EV Program will impair Duke Energy Kentucky’s ability to manage its capacity in the FRR market at PJM is also more sensational than factual. The EV Program represents a very small amount of energy compared to Duke Energy Kentucky’s total load and the Integrated Resource Planning process is the perfect vehicle for assessing and anticipating future capacity needs. Needless to say, authorization to proceed with the EV Program on a pilot basis will not force Duke Energy Kentucky to construct a new power plant.

3. Regulatory Deferrals

a. Major Storms

Duke Energy Kentucky has proposed to include a normalized expense of $1 million in its base rates to account for restoration costs associated with Major Storm Events. Related to this, the Company also proposes to create a deferral mechanism to track actual costs of restoration for major storms incremental to amounts included in base rates. The deferral authority will allow the Company to debit or credit regulatory asset accounts when actual expenses for these costs in a...
year are under or over the amount established in base rates in this proceeding.\textsuperscript{344} Duke Energy Kentucky proposes to defer, with carrying charges based upon the Company's cost of debt, on an annual basis any such over recovery or under recovery and establish a regulatory liability or asset as may be required.\textsuperscript{345} Each year the incremental amount over or under what is established in base rates will be added or subtracted from the total balance deferred with any incremental recovery or refund to be amortized as part of the Company's next base electric rate case.\textsuperscript{346} Creating this mechanism will alleviate the need for the Company to file and the Commission to review multiple separate deferrals that may occur throughout the year.\textsuperscript{347} Additionally, it will reduce the Commission's burden in reviewing concurring applications from multiple utilities when these events occur.\textsuperscript{348}

NKU's witness, Mr. Collins, opposes the tracker in claiming that it amounts to "single-issue ratemaking."\textsuperscript{349} Mr. Collins also claims that the use of a tracker eliminates the utility's incentive to control costs and would effectively guaranty recovery of costs associated with a major storm.\textsuperscript{350} Mr. Collins suggests that Duke Energy Kentucky should continue to rely upon regulatory deferrals to account for future recovery of the costs of major storm expense restoration.\textsuperscript{351}

Mr. Collins' concerns are easily satisfied. First, the proposed tracker does not amount to single-issue ratemaking. It is being proposed in the context of a base rate case, which is exactly

\textsuperscript{344} See id.; Wathen Direct, pp. 22-24; Danielle L. Weatherston Direct Testimony (Weatherston Direct), pp. 2-3 (Sept. 3, 2019).
\textsuperscript{345} See Application, p. 14.
\textsuperscript{346} See id.
\textsuperscript{347} See Weatherston Direct, p. 6.
\textsuperscript{348} See id. The Company proposes an annual filing to make the administration of this regulatory asset simple and straightforward. See Lawler Cross-Examination, HVR 11:21:56 (Feb. 20, 2020).
\textsuperscript{349} See Collins Direct, p. 10.
\textsuperscript{350} See id., p. 11.
\textsuperscript{351} See id., p. 12.
the procedural context of one of the Company’s original rate trackers – the Accelerated Mains Replacement Rider – which the Kentucky Supreme Court expressly confirmed as being within the scope of the Commission’s jurisdiction and authority to approve within or outside of a rate case.\textsuperscript{352} Second, the tracker is functionally equivalent to the forced outage purchased power expense deferral mechanism and planned outage O&M expense deferral mechanism approved in Duke Energy Kentucky’s last electric base rate case.\textsuperscript{353} Mr. Collins’ concern that the Company’s proposal will somehow cause the Company to disregard cost-consciousness is equally invalid. The Company’s goal in any storm restoration situation is to restore power as quickly as possible.\textsuperscript{354} It does not look at such disasters as opportunities to “gold plate” the system as Mr. Collins suggests.\textsuperscript{355} While the Company can in fact continue to rely upon the current regulatory process to account for storm restoration cost recovery, history demonstrates that the frequency of such major storms is sufficient to justify a tracking mechanism that assures that customers neither pay too much or too little for such restoration efforts.\textsuperscript{356} The request is reasonable and should be approved.

\textit{b. Electric Vehicle Pilot Program}

As described above, the Company is proposing a process for galvanizing the development of electric vehicle charging and passing any net revenues from Company-owned charging stations back to customers through its profit-sharing mechanism, Rider PSM. The Company is requesting authority to include O&M costs (along with carrying costs) associated with this pilot program in a regulatory asset to be recovered in a future rate proceeding. The associated regulatory asset will

\textsuperscript{352} See Kentucky Pub. Serv. Comm’n v. Com. ex rel. Conway, 324 S.W.3d 373, 374 (Ky. 2010).
\textsuperscript{353} See Order, Case No. 2017-00321, p. 16 (Apr. 13, 2018).
\textsuperscript{354} See Lawler Rebuttal, p. 21.
\textsuperscript{355} See id.
\textsuperscript{356} See id., p. 22.
ensure that only the actual costs will be recovered and that the Company does not over or under recover for these costs.\textsuperscript{357} The use of carrying costs for this regulatory asset is appropriate and simply represents the time-value of money being deferred for future recovery/crediting to customers.\textsuperscript{358} The cost of debt is a reasonable rate and represents the Company's borrowing rate if it were to seek funds elsewhere.\textsuperscript{359} These carrying costs will work both ways in that they would accrue on both the regulatory asset as well as the liability.\textsuperscript{360} The request is reasonable and should be approved.

c. Customer Connect O&M Expenses

The need for Duke Energy Kentucky's Customer Connect project is discussed in greater detail below. However, an adjustment to the Company’s operating expense was included in Mr. Kollen's recommendations and was conditionally accepted by the Company. Specifically, Mr. Kollen recommended that the Commission removed $908,000 in O&M expense associated with development and implementation of the Customer Connect project from the Company’s revenue requirement and instead treat it as a deferred asset.\textsuperscript{361} This is acceptable to Duke Energy Kentucky so long as: (1) the regulatory asset accumulates all actual O&M expenses, including carrying costs, associated with the Customer Connect program incurred (beginning with those incurred during the test period in this case); (2) the Company is able to request recovery of the total actual costs for the project in a subsequent rate proceeding; and (3) the regulatory asset shall be included in rate

\begin{itemize}
\item \textsuperscript{357} See Weatherston Direct, p. 7.
\item \textsuperscript{358} See id., p. 8.
\item \textsuperscript{359} See id.
\item \textsuperscript{360} See id.
\item \textsuperscript{361} See Kollen Direct, pp. 25-27.
\end{itemize}
base in that subsequent rate proceeding with an amortization period equal to the service life used for the depreciation rate applied to the capital costs. 362

d. Rate Case Expense

Duke Energy Kentucky filed its updated actual and pending rate case expense on March 10, 2020. 363 Although rate case expense is typically amortized over a three-year period, the Company proposes a five-year amortization period in this case. With the exceptions noted above, 364 there have been no concerns expressed regarding the Company's recovery of rate case expense, which should be authorized.

4. Customer Connect Waivers

In order to effectively implement the enterprise-wide Customer Connect CIS, Duke Energy Kentucky has also requested several waivers from existing Commission regulations. 365 The CIS currently used by Duke Energy Kentucky was developed more than thirty years ago and was put in service in 1993. 366 The current system supports Duke Energy Kentucky, Duke Energy Ohio and Duke Energy Indiana. 367 The current CIS does not permit for a customer's usage history to be ported with them to a new service address within a Duke Energy territory, nor does it allow for including personalized experiences for customers, advanced pricing structures and billing options or tools for customers to better manage their energy consumption. 368 Complex billing functions

363 See Duke Energy Kentucky's Sixth Supplemental Response to Staff-DR-01-014, Attachment 1.
364 See Notes 114-122 and accompanying text, supra.
365 See Application, p. 13.
366 See Retha Hunsicker Direct Testimony (Hunsicker Direct), p. 3 (Sept. 3, 2019).
367 See id.
368 See id.
must be performed manually. The current CIS is inefficient and makes the ability of customers to interact with Duke Energy Kentucky more complex than current technology requires.

By contrast, the Customer Connect CIS platform will offer substantial and transformative improvements. Costing only $26 million, customers will benefit from a universal, simple and consistent experience across channels. Moreover, billing and receivables systems will be aligned with the current market to enable efficient billing for net metering and other complex billing customers that did not exist when the legacy customer information systems were built. The integrated operational and analytics platform will aggregate and understand customer preferences and behaviors and leverage that understanding to personalize customer experiences and serve customers as individuals. As spelled out in the direct testimony of Company witness Retha Hunsicker, key customer benefits include the following: (1) a modern, configurable billing engine; (2) a consumer-centric data model; (3) holistic customer profiles; (4) integrated analytics; (5) multi-jurisdictional scope. From the delivery of the first phase in 2018 through the multi-phased delivery of additional components until full deployment is reached in 2022, Customer Connect is already providing Duke Energy Kentucky’s customers with enhanced service. By

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369 See id., pp. 4-5.
370 See id., pp. 5-6.
371 See Hunsicker Cross-Examination, HVR at 13:58:25 (Feb. 19, 2020). Approximately half of this expense will be capitalized. See id. at 14:00:05 (Feb. 19, 2020). For the test year, $1.4 million in capital costs are included and will be included on Duke Energy Kentucky’s books. The Company has agreed to defer as a regulatory asset the approximate $900,000 in O&M costs for the test year. See Lawler Cross-Examination, HVR 10:50:10, 11:10:00 (Feb. 20, 2020).
372 See Hunsicker Direct, pp. 6-7.
373 See id., p. 7.
374 See Hunsicker Cross-Examination, HVR at 14:00:15 (Feb. 19, 2020).
375 See Hunsicker, pp. 9-11.
376 See id., pp. 12-14.
using commercial off-the-shelf technology, the new CIS system should last much longer than the current customer CIS platform.\textsuperscript{377}

To fully leverage the usefulness of Customer Connect, the Company is seeking several waivers from existing customer regulations. Specifically, the Company requests a waiver of:

- 807 KAR 5:006 Section 14(5) to allow the Company to employ customers' preferred channel of communication as it relates to the 10-day disconnect notice for those customers who request the Company communicate with them in more modern ways such as email, phone call or text message. By continuing to provide this information in a format other than the customers' preferred method of communication, there is an increased risk for the notice to go unseen.

- 807 KAR 5:006 Section 8(1)(d)(3)(a) to allow the Company to recalculate customer deposits retained for twelve (12) months or more. The Company believes it is in the best interest of its customers to recalculate residential and small-medium business customer deposits annually to ensure the deposit aligns with the customer's usage history. Furthermore, upon recalculation of the deposit, the Company intends to refund any excess amount to the customer if the recalculated amount is less than what is currently being held on the account. Residential customers will not be billed an incremental deposit unless the recalculated amount is $50 dollars or greater.

- 807 KAR 5:006 Section 8(1)(d)(3)(c) to ensure an incremental deposit is billed to small-medium business customers upon recalculation only if the difference is $100 dollars or greater.

- 807 KAR 5:006 Section 7(1)(a)(3) to eliminate the requirement to provide the beginning and ending meter readings for certain interval-billed rates, thereby allowing the Company to provide usage information only on the monthly bill. The inclusion of meter readings was more meaningful under traditional rate structures; however, with interval usage data comes more dynamic pricing structures; therefore, the beginning and ending meter readings are no longer relevant to the customer bills under those structures. The customer bills will continue to provide information regarding usage that occurred during relevant bill periods such as on/off-peak, shoulder and demand. The waiver would apply to the following Company rates: Service at Primary Distribution Voltage (DP), Service at Distribution Voltage (DS), Time-of-Day Rate for Service at Distribution Voltage (DT), Time-of-Day for

Service at Transmission Voltage (TT), and Optional Rate for Electric Space Heating (EH), as well as any future proposed rate that utilizes AMI usage data for billing purposes.

- 807 KAR 5:006 Section 8 so that landlords or property owners who enroll in the Revert to Owner program may enable service to automatically transfer back into a landlord/property owner’s name without service disconnection between tenants. For these customers, the Company is proposing to hold a standard $50-dollar deposit per unit or property owned, as this aligns to the minimum average bill incurred when service is in the landlord’s name between tenants. There are a number of benefits for property owners to enroll in the new Revert to Owner program that will be implemented in Duke Energy Kentucky in 2022; it will allow these customers to easily manage their properties via a new digital portal. Landlords will be able to see all properties in their name, the service status, and administer billing/payment for one or multiple properties conveniently from the site. Additionally, the move in/move out process will be simplified and will eliminate repetitive credit checks and other deposit-related activities that would be traditionally experienced when applying for or disconnecting electric service at a location.378

The Company respectfully requests the Commission to grant these waivers.

5. Revised Bill Format

Duke Energy Kentucky also requested that it be allowed to revise its bill format. The new format will remove confusing content, simplify information and make the bill more user friendly.379 The new bill format will include easy-to-understand graphs, explanations of commonly used abbreviations and terms and easier to find contact information.380 The proposed bill format complies with 807 KAR 5:006 Section 7(1)(a) and its approval is requested.

378 See Hunsicker Direct, pp. 18-21.
379 See id., p. 15.
380 See id.
6. Forced Generation Outage Hedging

Finally, the Company seeks authorization to engage in hedging activities to mitigate risk associated with forced generation outages.\textsuperscript{381} Duke Energy Kentucky currently manages its exposure to scheduled outages through a Backup Power Supply Plan.\textsuperscript{382} Essentially, the Company manages risks through the PJM daily energy market during forced outages and uses fixed forward contract purchases during scheduled outages.\textsuperscript{383} This mitigates the risk of price spikes during scheduled outages because the price for back-up power would be fixed.\textsuperscript{384} The Company proposes to expand this to also allow for hedging activity as a risk mitigation tool for forced generation outages. Since forced outages are by their nature unexpected, the forced outage risk mitigation strategy will likely include short-term financial products to mitigate price exposure.\textsuperscript{385} Depending on the anticipated length of the forced outage, the Company proposes to utilize daily, weekly, and potentially monthly financial futures contracts to reduce replacement power cost volatility.\textsuperscript{386} Authorizing this expansion will allow Duke Energy Kentucky to mitigate risks for both forced and scheduled generation outages in a like manner.\textsuperscript{387}

IV. CONCLUSION

The Company has aggressively managed its O&M costs since its last electric base rate case, but significant new capital continues to be invested in order for Duke Energy Kentucky to continue to provide safe, efficient and reliable service to its customers. The Company’s proposed

\begin{footnotesize}
\begin{enumerate}
\item See Application, p. 13. \hfill (381)
\item See John A. Verderame Direct Testimony, p. 5 (Sept. 3, 2019). \hfill (383)
\item See id. \hfill (384)
\item See id., p. 7. \hfill (385)
\item See id. \hfill (386)
\item See id. \hfill (387)
\end{enumerate}
\end{footnotesize}
rate increase and ROE are both reasonable and should be approved. Moreover, each of the new and innovative programs and revisions to the Company's existing tariffs afford the Company the opportunity to continue to provide additional services and meet the increasing expectations of its customers. The Company is grateful to the Commission for its consideration of the many issues presented in this proceeding. The Company also expresses its appreciation to Staff and Intervenors who have contributed to the development of a full and complete administrative record.

WHEREFORE, on the basis of the foregoing, Duke Energy Kentucky does respectfully request the Commission to declare and award the following relief:

A) The Company's rates shall be set to increase revenue by $44.2 million using a valuation based upon rate base and return on equity of 9.8%;

B) Approve the proposed depreciation and amortization rates included in the Application with said rates to be effective April 1, 2020;

C) The Company's cost of service study and allocation of revenue requirement shall be approved;

D) The Company's proposed monthly customer charges shall be approved;

E) The Company's battery storage project shall be approved, subject to the recommendations by NKU witness Collins as agreed to by Duke Energy Kentucky witness Kuznar in rebuttal testimony;

F) The Company's electric vehicle pilot shall be approved, subject to the recommendations by NKU witness Collins as agreed to by Duke Energy Kentucky witness Reynolds in rebuttal testimony;

G) The Company's fee-free payment proposal shall be approved as filed;

H) The Company's Green Source Advantage program shall be approved as filed;
I) The Company’s Street Lighting tariffs shall be approved as updated;
J) The Company’s Cogeneration Tariffs shall be approved as updated;
K) The Company’s Fraud/Tamper Penalty proposal shall be accepted and authorized;
L) The Company’s revised Reconnection Charges shall be authorized;
M) The Company’s renaming of its Franchise Fee Tariff shall be approved;
N) The Company’s major storm deferral mechanism shall be approved;
O) The Company’s regulatory assets for rate case expenses, EV pilot O&M expenses and Customer Connect O&M expenses shall be approved as filed;
P) The Company’s waivers needed to implement the Customer Connect project shall be authorized;
Q) The Company’s proposal for a levelized FAC shall be approved as filed;
R) The Company’s proposed bill format shall be approved;
S) The Company’s request to hedge forced generation outages shall be approved;
T) Unless otherwise stated, all other provisions of the Company’s Application shall be approved as filed; and
U) Any other relief to which the Company may be entitled shall be awarded.

This 16th day of March 2020.

Respectfully submitted,

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CERTIFICATE OF SERVICE

This is to certify that the foregoing electronic filing is a true and accurate copy of the document being filed in paper medium; that the electronic filing was transmitted to the Commission on March 16, 2020; that there are currently no parties that the Commission has excused from participation by electronic means in this proceeding; and that a copy of the filing in paper medium is being delivered within two business days.

[Signature]
Counsel for Duke Energy Kentucky, Inc.