COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF DUKE ENERGY KENTUCKY, INC. FOR: 1) AN ADJUSTMENT OF THE ELECTRIC RATES; 2) APPROVAL OF AN ENVIRONMENTAL COMPLIANCE PLAN AND SURCHARGE MECHANISM; 3) APPROVAL OF NEW TARIFFS; 4) APPROVAL OF ACCOUNTING PRACTICES TO ESTABLISH REGULATORY ASSETS AND LIABILITIES; AND 5) ALL OTHER REQUIRED APPROVALS AND RELIEF	)))))))))	CASE NO. 2017-00321

ORDER

Duke Energy Kentucky, Inc. ("Duke Kentucky") is a jurisdictional electric utility that generates, transmits, distributes, and sells electricity to approximately 140,600 consumers in Boone, Campbell, Grant, Kenton, and Pendleton counties.[1] Duke Kentucky also is a utility engaged in purchasing, selling, storing, and transporting natural gas to approximately 98,200 customers in Boone, Bracken, Campbell, Gallatin, Grant, Kenton, and Pendleton counties.[2] Its most recent general rate increase for its electric operations was granted in Case No. 2006-00172.[3]

---

[1] Application at 2. *See also*, Direct Testimony of James P. Henning ("Henning Testimony") at 4.

[2] *Id.*

[3] Application at 4. Case No. 2006-00172, *Application of the Union Light, Heat and Power Company D/B/A Duke Energy Kentucky for an Adjustment of Electric Rates* (Ky. PSC Dec. 21, 2006).

BACKGROUND

On September 1, 2017, Duke Kentucky filed an application requesting authorization to increase its electric base rate revenue to a new total of $357.5 million, which reflects an increase from its current rates of approximately $48.6 million.[4] The monthly residential electric bill increase due to the proposed electric base rates would be 17.1 percent, or approximately $15.17, for a typical residential customer using 1,000 kWh of electricity.[5] Duke Kentucky subsequently revised its proposed revenue increase to $30.12 million.[6] The revised revenue requirement would amount to an 11 percent increase, or approximately $9.73, for a typical residential customer using 1,000 kWh of electricity each month.[7] Duke Kentucky states that the primary reason for the requested increase is that Duke Kentucky's earned rate of return on capitalization obtained from its current electric operations is 2.850 percent, which is inadequate to enable Duke Kentucky to continue providing safe, reasonable, and reliable service to its customers, and is insufficient to afford Duke Kentucky a reasonable opportunity to earn a fair return on its investment property that is used to provide such service while attracting necessary capital at reasonable rates.[8] In addition to the base rate increase, Duke Kentucky also is requesting authority to recover certain regulatory assets, including storm restoration expenses resulting from Hurricane Ike in 2008; research and development investments;

---

[4] Application at 5.

[5] *Id.*

[6] Amended Rebuttal Testimony of Sarah E. Lawler at 1.

[7] Duke Kentucky's response to Commission Staff's Post-Hearing Data Request ("Staff's PH-DR"), Item 9.

[8] Application at 6.

incremental operations and maintenance ("O&M") related to the acquisition of the entirety of the East Bend Generating Station ("East Bend"); and O&M expenses related to the creation of a residential Advanced Metering Infrastructure ("AMI") opt-out tariff.[9]

Duke Kentucky also is proposing to implement a distribution reliability and integrity improvement plan that will be comprised of specific new and Commission-approved measures to enhance the safety and reliability of Duke Kentucky's distribution system.[10] Duke Kentucky requests to recover the costs of this plan through a surcharge mechanism called Rider Distribution Capital Investment ("Rider DCI").[11] Duke Kentucky proposes, as part of this application, a Targeted Underground program to improve distribution reliability by relocating at-risk overhead circuits to underground service.[12] Rider DCI would include incremental capital investment, depreciation, taxes, and a reasonable return that is incremental to base rates.[13] Rider DCI would be adjusted and subject to annual true-up following Commission review and approval; the annual application also would include any new reliability or integrity programs for Commission consideration and approval for implementation as part of Duke Kentucky's distribution integrity and reliability plan.[14]

---

[9] *Id.*

[10] *Id.* at 13–14.

[11] *Id.*

[12] Application at 14.

[13] *Id.*

[14] *Id.*

Also as part of the instant application, Duke Kentucky is requesting approval of an environmental compliance plan and the establishment of an environmental surcharge mechanism, both pursuant to KRS 278.183.[15]

Duke Kentucky is seeking approval of a new reconciliation mechanism to recover FERC-jurisdictional transmission expenses that Duke Kentucky incurs, incremental (above and below) to what is reflected in base rates ("Rider FTR").[16] According to Duke Kentucky, Rider FTR will operate much like its fuel adjustment clause ("FAC") and Accelerated Service Replacement Program in that such transmission costs will be filed regularly and subject to periodic review by the Commission.[17]

Lastly, Duke Kentucky also is proposing to modify the following existing policies and tariffs and implement the following new programs and measures: a voluntary Enhanced Customer Solutions, including optional billing alternatives and notifications; a revised FAC; a revised Profit Sharing Mechanism Rider ("Rider PSM"); a new LED street lighting tariff; and revisions to its cogeneration tariff.[18] Duke Kentucky submitted a depreciation study in support of its application, and requests that its proposed depreciation rates be approved.

By letter dated September 7, 2017, the Commission notified Duke Kentucky that its application was rejected because it contained filing deficiencies and that the application would not be deemed filed until the deficiencies were cured. Duke Kentucky submitted information on September 15, 2017, addressing the deficiencies. By Order

---

[15] Application at 15.

[16] Application at 18–19.

[17] Application at 19.

[18] Application at 20.

dated September 27, 2017, the Commission determined that Duke Kentucky had cured all of the filing deficiencies and that Duke Kentucky's application was deemed filed as of September 15, 2017. The September 27, 2017 Order also found that the earliest date that Duke Kentucky's proposed rates could be effective was October 15, 2017. Pursuant to the September 27, 2017 Order, the Commission suspended Duke Kentucky's proposed rates for six months, up to and including April 14, 2018. Further, the September 27, 2017 Order established a procedural schedule for the processing of this matter, which provided for a deadline for filing intervention requests; two rounds of discovery upon Duke Kentucky's application; a deadline for the filing of intervenor testimony; one round of discovery upon any intervenor testimony; and an opportunity for Duke Kentucky to file rebuttal testimony.

The following parties were granted intervention in this proceeding: the Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention ("Attorney General"); Kentucky Industrial Utility Customers, Inc. ("KIUC"); Kentucky School Board Association ("KSBA"); Kroger Company ("Kroger"); and Northern Kentucky University ("NKU").

The Commission held an information session and public meeting for the purpose of taking public comments on February 8, 2018, at Boone County High School in Florence, Kentucky. A formal hearing was held at the Commission's offices on March 6–8, 2018. Duke Kentucky provided responses to post-hearing data requests on March 23, 2018, and April 10, 2018. All of the parties filed simultaneous post-hearing briefs on April 2, 2018. The matter now stands submitted for a decision.

REVENUE AND EXPENSES

Contested Revenue Requirement Issues

Duke Kentucky originally proposed an annual increase in its electric revenues of $48,646,213.[19] Duke Kentucky subsequently revised its requested revenue requirement increase to $30,119,059.[20] The Attorney General is the only intervenor who presented evidence addressing Duke Kentucky's proposed revenue increase, arguing that Duke Kentucky should be required to decrease its electric revenues by $11,901,000.[21] The Commission must consider the evidentiary record on these issues as presented by Duke Kentucky and the Attorney General and render a decision based on a determination of Duke Kentucky's capital, rate base, operating revenues, operating expenses, and revenue allocation.

Test Period

Duke Kentucky proposes the 12-month period ending March 31, 2019, as the forecasted test period for determining the reasonableness of its proposed rates. None of the intervenors contested the use of this period as the test period. The Commission finds it is reasonable to use the 12-month period ending March 31, 2019, as the test period in this case. That 12-month period is the most feasible period to use for setting rates based on the timing of Duke Kentucky's filing and, except for the adjustments approved herein, the revenues and expenses incurred during that period are neither unusual nor

---

[19] Application, Schedule C-1.

[20] Amended Rebuttal Testimonies of William Don Wathen, Jr. and Sarah E. Lawler ("Amended Rebuttal Testimonies of Wathen and Lawler") at page 3.

[21] Testimony Errata for Lane Kollen at page 4. In his Post-Hearing Brief, the Attorney General revised his recommended decrease to $14.839 million.

extraordinary. In using this forecasted test period, the Commission has given full consideration to appropriate known and measurable changes.

Jurisdictional Rate Base Ratio

Duke Kentucky proposed a test-year-end Kentucky jurisdictional rate base of $700,204,561.[22] The Kentucky jurisdictional electric rate base is divided by Duke Kentucky's test-year-end total company electric rate base to derive the Kentucky jurisdictional electric rate base ratio ("Jurisdictional Ratio") for Duke Kentucky. This Jurisdictional Ratio is then applied to Duke Kentucky's total company electric capitalization to derive its Kentucky jurisdictional electric capitalization. The Jurisdictional Ratio uses the test-year-end rate base before any ratemaking adjustments applicable to either Kentucky jurisdictional operations or other jurisdictional operations. Duke Kentucky used a Jurisdictional Ratio of 100 percent.[23] The Commission has reviewed and agrees with the calculation of Duke Kentucky's test-year electric rate base for purposes of establishing the Jurisdictional Ratio.

Pro Forma Jurisdictional Rate Base

Duke Kentucky calculated a pro forma jurisdictional rate base of $700,204,561,[24] which reflects the types of adjustments made by the Commission in prior rate cases to determine the pro forma rate base. The Attorney General provided testimony and several adjustments to Duke Kentucky's proposed rate base as discussed below. The Commission finds seven adjustments are warranted to Duke Kentucky's rate base. The

---

[22] Application, Schedule B-1.

[23] *Id.*, Schedule B-7.

[24] *Id.*, Schedule B.1. Duke Kentucky is not requesting to include recovery of Construction Work in Progress in base rates.

Commission finds that the excess amortization of the Carbon Management Research Group regulatory asset in the test year and the amortization of excess accumulated deferred income tax ("ADIT") should be added to the rate base. The Commission also finds that the East Bend Operations and Maintenance Expense ("East Bend O&M") regulatory asset, the East Bend Ash Pond Asset Retirement Obligation ("East Bend Ash Pond ARO") regulatory asset, the reduction in cash working capital ("CWC"), and the reduction in depreciation expense as discussed herein due to the Commission's decision to deny use of the Equal Life Group ("ELG") procedure and require use of the Average Life Group ("ALG") procedure for computing depreciation rates, net of the related ADIT as found reasonable herein, should be removed from rate base.

The Commission accepts Duke Kentucky's proposed amortization of the protected excess ADIT. The amortization for the protected excess ADIT is based upon the Average Rate Assumption Method ("ARAM"). For the unprotected excess ADIT, the Attorney General initially proposed a 20-year amortization period.[25] Subsequently, the Attorney General proposed a five-year amortization period for the unprotected excess ADIT but did not amend his testimony to reflect the change in the amortization period.[26] The Commission finds that a reasonable amortization period for the excess ADIT for Duke Kentucky's unprotected assets should be 10 years. A 10-year amortization period for the unprotected excess ADIT will balance the impact to Duke Kentucky's cash flow and provide ratepayers the full benefit of the reduction in the federal corporate income tax in a timely manner. As a result of the foregoing adjustments, the Commission finds the total

---

[25] *Id.*

[26] March 8, 2018, Video Transcript of Evidence at 3:35:00.

test-year amortization for the total excess ADIT to be $4,471,984, which is an increase of $1,651,639 over the amount proposed by Duke Kentucky. The Commission finds that the amortization of the excess ADIT related to protected and unprotected excess ADIT found reasonable herein should be removed from Duke Kentucky's ADIT, which increases its rate base. Therefore, Duke Kentucky's rate base should be increased by $4,471,984 for this adjustment.

Duke Kentucky deferred $2 million it incurred to fund carbon management research by the Carbon Management Research Group ("CMRG"). In Case No. 2008-00308, Duke Kentucky sought and obtained authorization from the Commission to defer these costs for accounting purposes.[27] The regulatory asset, net of ADIT, is included in the capitalization in this proceeding. In the instant matter, Duke Kentucky sought to recover the amortization of the deferred asset over a five-year period at $400,000 per year. In the Commission's Order in Case No. 2008-00308, it stated that the CMRG regulatory asset will be amortized over a 10-year period or $200,000 per year. Therefore, the Commission finds that the Duke Kentucky's capitalization should be increased by $200,000 to reflect the proper amount of the regulatory asset in the rate base.

The Commission finds that the ADIT arising from its requirement to change Duke Kentucky's procedure for computing depreciation rates from the ELG to the ALG procedure should reduce Duke Kentucky's rate base. As discussed in the testimony of the Attorney General, the ELG procedure front-loads depreciation expense in earlier

---

[27] Case No. 2008-00308, *Joint Application of Duke Energy Kentucky, Kentucky Utilities Company and Louisville Gas and Electric Company for an Order Approving Accounting Practices to Establish Regulatory Assets* (Ky. PSC Oct. 30, 2008).

years and decreases it in the later years of an asset's depreciable life, creating a mismatch of revenues and expenses.[28] The Attorney General states that the ALG procedure is the dominant procedure for other electric utilities, including all other electric utilities in Kentucky.[29] Therefore, the Commission finds that the Attorney General's position on this issue is reasonable and that Duke Kentucky should use the ALG procedure for computing depreciation rates, and that its rate base should be reduced by $2,733,299 to reflect the increase in ADIT.

The East Bend O&M regulatory asset was approved by the Commission in Case No. 2014-00201.[30] In addition, in that proceeding, the Commission authorized Duke Kentucky to defer carrying charges on the O&M expense at its cost of debt. The Attorney General disputed the amount of the regulatory asset and made a recommendation of the amount of amortization assuming that the regulatory asset was included in rate base.[31]

The Commission finds that the East Bend O&M regulatory asset should be removed from rate base and Duke Kentucky's request to amortize the East Bend O&M regulatory asset over a 10-year period is reasonable and should be approved. The Commission also finds that carrying charges should be based on the cost of debt approved herein. This adjustment reduces Duke Kentucky's rate base by $36,540,123.

---

[28] Direct Testimony of Lane Kollen ("Kollen Testimony") beginning at 31.

[29] *Id.* at 32

[30] Case No. 2014-00201, *Application of Duke Energy Kentucky, Inc. for (1) a Certificate of Public Convenience and Necessity Authorizing the Acquisition of the Dayton Power & Light Company's 31% Interest in the East Bend Generating Station; (2) Approval of Duke Energy Kentucky, Inc.'s Assumption of Certain Liabilities in Connection with the Acquisition; (3) Deferral of Costs Incurred as part of the Acquisition; and (4) All Other Necessary Waivers, Approvals and Relief* (Ky. PSC Dec. 4, 2014).

[31] Kollen Testimony at 31.

The East Bend Ash Pond ARO was approved by the Commission in Case No. 2015-00187.[32] Duke Kentucky proposed that the East Bend Ash Pond ARO amortization be recovered through the Environmental Surcharge Mechanism ("ESM") in its application. In addition, Duke Kentucky requested a 10-year amortization period. The Attorney General proposed that the East Bend Ash Pond ARO be removed from capitalization, as it was erroneous for Duke Kentucky to include it in both its ESM rider rate base and in base rates. The Commission finds the East Bend Ash Pond ARO should not be included in base rates because that amount is proposed to be recovered through Duke Kentucky's ESM. The Commission also finds that a 10-year amortization period is reasonable and should be approved. The parties have agreed upon this issue. This adjustment reduces Duke Kentucky's rate base by $18,509,346.

The CWC allowance included in rate base shown below is based on the adjusted operation and maintenance expenses discussed in this Order, as approved by the Commission. This adjustment reduces Duke Kentucky's rate base by $2,008,320.

Based on the Commission's finding herein where it denied Duke Kentucky's proposal to use ELG procedure rather than the ALG procedure for computing depreciation rates, the Commission finds that Duke Kentucky's accumulated depreciation in its rate base should be increased by $6,919,475.

We have determined Duke Kentucky's pro forma jurisdictional rate base for rate-making purposes for the test year to be as follows:

---

[32] Case No. 2015-00187, *Application of Duke Energy Kentucky, Inc. for an Order Approving the Establishment of a Regulatory Asset for the Liabilities Associated with Ash Pond Asset Retirement Obligations* (Ky. PSC Dec. 15, 2015).

Total Utility Plant in Service	$1,675,994,650
Add:	
Cash Working Capital Allowance	12,207,087
Other Working Capital Allowances	40,420,974
Subtotal	$52,628,061
Deduct:	
Accumulated Depreciation	839,228,648
Accumulated Deferred Income Taxes	237,388,861
Subtotal	$1,076,617,509
Pro Forma Rate Base	$652,005,202

Reproduction Cost Rate Base

KRS 278.290 (1) states, in relevant part, that:

> the commission shall give due consideration to the history and development of the utility and its property, original cost, cost of reproduction as a going concern, capital structure, and other elements of value recognized by the law of the land for rate-making purposes.

Neither Duke Kentucky nor the Attorney General provided information relative to Duke Kentucky's proposed Kentucky jurisdictional reproduction cost rate base. Therefore, the Commission finds that using Duke Kentucky's historic costs for deriving its rate base is appropriate and consistent with Commission precedents involving Duke Kentucky as well as other Kentucky jurisdictional utilities.

Revenue and Expenses

For the test year, Duke Kentucky reported actual net operating income from its electric operations of $19,212,679.[33] Duke Kentucky proposed 33 adjustments to revenues and expenses to reflect more current and anticipated operating conditions, resulting in an adjusted net operating income of $20,091,071.[34] Through discovery, this amount was adjusted to $38,533,427. With this level of net operating income, Duke Kentucky reported an adjusted test-year revenue deficiency of $30,119,059.[35]

The Attorney General accepted 28 of Duke Kentucky's proposed adjustments to its test-year revenues and expenses; adjustments that are also acceptable to the Commission.[36] A list of the accepted adjustments is contained in the attached Appendix A.

The Attorney General proposed 17 adjustments to Duke Kentucky's operating income. Through discovery, the Attorney General and Duke Kentucky agreed on four of the operating income issues. The four items agreed upon are the inclusion of PJM make-whole and other revenues not included in Duke Kentucky's revenue forecast, the reduction in RTEP charges, the CMRG regulatory amortization expense, and the reduction in income tax expense for the research tax credits. The remaining operating income issues relate to: 1) including off-system sales ("OSS") margins to reset Rider PSM to zero; 2) reduce replacement power expense; 3) reduce vegetation management

[33] Application, Schedule C-2.

[34] *Id.*

[35] Amended Rebuttal Testimonies of Wathen and Lawler at 3.

[36] Appendix A shows the 33 adjustments to revenues and expenses accepted by the Attorney General.

expense to historic levels; 4) reduce planned outage O&M normalization; 5) reduce incentive compensation expense tied to financial performance; 6) reduce retirement plan expense; 7) increase AMI benefit levelization adjustment; 8) reduce amortization of East Bend regulatory asset to reflect lower O&M expense prior to test year; 9) reduce depreciation expense by using the ALG procedure; 10) reduce depreciation expense by removing terminal net salvage for generating units; 11) reduce remaining net salvage value included in depreciation expense; 12) reduce income tax expense to reflect reduction in federal rate; and, 13) reduce income tax expense to reflect amortization of excess ADIT, which the Commission makes the following conclusions listed below. In addition, the Commission has a discussion on the impacts of the Tax Cuts and Jobs Act ("TCJA") which was enacted on December 23, 2017.

These adjustments, and the discussion and findings thereon pertain solely to Duke Kentucky's base-rate revenue requirements. In addition to base rates, Duke Kentucky's application includes a number of proposed riders or surcharges. On the various base-rate adjustments, the Commission makes the following findings:

Rider PSM Margins

Duke Kentucky proposes to continue to include all OSS margins in the Rider PSM and that the margins be shared between customers and shareholders. Currently, ratepayers receive the benefit of the first $1 million and any margins above $1 million are shared 75 percent to ratepayers and 25 percent to shareholders. Duke Kentucky proposes to have all margins shared 90 percent to ratepayers and 10 percent to shareholders. In response to Staff's Post-Hearing Data Request, Item 11, regarding a comparison of the level of sharing under the current methodology and under the proposed change for the last three years, if Duke Kentucky's proposed split had been in effect for the years 2015, 2016, and 2017, customers would have benefited by an additional $2.1 million in 2015, $0.8 million in 2016, and $1.6 million in 2017.

The Attorney General recommends the forecasted OSS margins be removed from Rider PSM and be included as a reduction to base rates. The Attorney General states that the Commission has historically included OSS margins in the base revenue requirement and contemporaneously reset the relevant sharing mechanism to $0. The impact of this adjustment would be to reduce Duke Kentucky's proposed revenue requirement by $3.826 million.

The Commission finds that Duke Kentucky's proposal to not include PSM margins in base rates is reasonable and should be approved because the proposal would provide savings to its customers. The other Duke Kentucky proposals related to Rider PSM are discussed in the Proposed Tariff Changes section of this Order.

Replacement Power Expense

Duke Kentucky proposes to include $5.668 million that cannot be recovered through the FAC as replacement power expense for the incremental fuel and other expenses due to unplanned outages at the East Bend Station.[37] Duke Kentucky also requests authority to defer replacement power expense greater than or less than the expense included in the base rate requirement, subject to future review for ratemaking recovery.

[37] Duke Kentucky's response to the Attorney General's First Set of Data Requests ("AG's First Request"), Item 11.

The Attorney General argues that Duke Kentucky's forecasted replacement power expense is excessive compared to the actual replacement power expense of the East Bend Station for the last three years.[38] Based on the average actual replacement power expense of $1.610 million for the years 2015–2017, the Attorney General recommends Duke Kentucky's purchased power expense be reduced by $4.058 million. The Attorney General, however, agrees that Duke Kentucky should be authorized to establish a deferral mechanism for those incremental amounts greater than or less than what is in base rates for replacement power expense.[39]

The Commission agrees with the Attorney General's recommendation to reduce replacement power expense by $4.058 million, as Duke Kentucky's proposed adjustment is significantly greater than its actual costs for the prior three years (2015-2017). The changes in Duke Kentucky's generation mix, the abnormal purchased power costs in 2014 due to the polar vortex, and the use of future years in the computation of the replacement power expense make Duke Kentucky's proposed adjustment unreasonable relative to historical normalized costs. The Commission also finds that Duke Kentucky's proposed deferral mechanism is reasonable and should be approved.

Vegetation Management Expense

Duke Kentucky proposed a vegetation management expense of $4.480 million in its application.[40] This number is based in part upon Duke Energy Business Services' ("DEBS") experience in the Midwest market in its three jurisdictions (Kentucky, Indiana,

---

[38] Kollen Testimony at 11.

[39] *Id.* at 12.

[40] Duke Kentucky's response to Commission Staff's Second Request for Information ("Staff's Second Request"), Item 18.

and Ohio) for the period that extends into the first quarter of 2019. The proposed amount for the vegetation management expense represents an increase of $2.879 million over the base period amount.

Duke Kentucky states that its vegetation management service is almost exclusively performed by outside contractors.[41] It maintains that the large increase was primarily due to market forces as resources eligible to properly engage in vegetation management activities have become constrictive and extremely competitive for limited qualified resources.[42] Duke Energy Corporation contracts for vegetation management services throughout its service territory.[43] Its sourcing specialists engage in a Request for Proposal ("RFP") process to seek out companies that can provide the best service at the least cost throughout its entire service territory.[44] Duke Energy Corporation issued a RFP for vegetation management services for calendar years 2018 through 2020. Duke Kentucky chose a contractor who could perform the required service, but it resulted in a substantially higher cost than it had historically incurred.

Duke Kentucky maintains that it is not cost-effective for a supplier to split up vegetation management services by a smaller geographic area in its service territory.[45] Duke Kentucky further states that the means to gain the most effective contract pricing is to have sufficient work to keep a contractor's resources working all year, and that

---

[41] April N. Edwards Rebuttal Testimony at 5.

[42] *Id*. at 6.

[43] *Id.*

[44] *Id*.

[45] Duke Kentucky's response to Staff's Post-Hearing Data Request, Item 2.b.

subdividing its zone into smaller segments would not provide enough work to allow that to take place.[46]

The Attorney General argued that Duke Kentucky's proposed vegetation management expense is excessive compared to the company's actual expense in the years 2012 through 2016, which ranged from a low of $1.774 million to a high of $2.309 million, with an average of $2.080 million.[47] The Attorney General recommended the Commission use a more realistic forecast based on the actual average expense mentioned above, which results in a reduction in vegetation management expense of $2.400 million.

The Commission has reviewed the confidential cost-benefit study[48] and other information related to vegetation management expense in the record of this case. We understand the market forces that have influenced this area of expense. However, we are concerned about the large increase and will require Duke Kentucky to study this issue further in order to find ways of making its vegetation management more cost-effective.

The Commission finds Duke Kentucky's proposed vegetation management expense should be reduced by $0.444 million, based on deducting the four-year average for fiscal years ending March 31, 2019, through March 31, 2022, of $4,035,571 from Duke Kentucky's proposed test year amount of vegetation management expense of $4,479,887.[49] Further, the Commission finds that, in conjunction with its next Master

---

[46] *Id.*

[47] Kollen Testimony at 15.

[48] Duke Kentucky's response to the Attorney General's Post-Hearing Data Request, Item 4.

[49] Duke Kentucky response to Commission Staff's Third Request for Information ("Staff's Third Request"), Item 14.

Agreement for Vegetation Management Service ("MAVMS") contract, DEBS, in conjunction with Duke Kentucky, should bid the next MAVMS contract for the Midwest market that includes Kentucky, Indiana, and Ohio, and for a smaller geographic area limited to Duke Kentucky's service territory. The smaller geographic area should include Duke Kentucky's service territory by itself or by county or such other discrete area(s) within its service territory that it deems to be reasonable. Duke Kentucky shall provide an update of this process in its annual Vegetation Management Plan ("VMP") filings beginning with the 2019 VMP.

Planned Outage Expense

Duke Kentucky's forecasted test year included $8.400 million in East Bend planned outage expense, which was calculated based on the average of the actual expense for years 2013 through 2016 and forecast expense for years 2017 and 2018.[50] Duke Kentucky also requests authority to defer any actual planned outage expense that is more or less than the normalized planned outage expense included in its base rates.

The Attorney General contends that the amount is excessive because Duke Kentucky failed to include the forecast expense for 2019, which would have reduced the average amount of planned outage expenses to $7.200 million.[51] The Attorney General recommends reducing Duke Kentucky's revenue requirement by $1.200 million for the planned outage expense.[52] The Attorney General also recommends denying Duke Kentucky's request for a new accounting deferral mechanism for its planned outage

[50] Duke Kentucky's response to Staff's Second Request, Item 23.

[51] Kollen Testimony at 16.

[52] *Id.* at 17.

expense, arguing that such a mechanism would remove any incentive for Duke Kentucky to minimize planned outage costs.

The Commission finds that Duke Kentucky's planned outage expense should be reduced by $1.223 million based on Commission precedent of using the average of four historical and four projected years for the calculation.[53] The Commission also finds Duke Kentucky's request for a deferral mechanism is reasonable and should be approved.

Incentive Compensation

Duke Kentucky included $1.634 million of incentive compensation plan expense tied to financial performance in its test year.[54] The Attorney General recommends reducing Duke Kentucky's incentive compensation expense tied to Duke Kentucky's financial performance by $1.634 million.[55]

Duke Kentucky argues that its incentive compensation plans are designed to be market-based and competitive and that disallowing recovery of a portion of its compensation program would place Duke Kentucky at a competitive disadvantage and hinder its ability to attract the talent the company needs to run a safe, efficient, and reliable electric system.[56] Duke Kentucky asserts that the earnings-per-share ("EPS") or total-shareholder-reward metrics, whether tied to long-term or short-term incentive compensation, encourage eligible employees to reduce expenses, operate efficiently,

---

[53] Duke Kentucky's response to Staff's Post-Hearing Request, Item 12.

[54] Kollen Testimony at 21.

[55] *Id.*

[56] Thomas Silinski Rebuttal Testimony ("Silinski Rebuttal Testimony") at 2.

and conserve financial resources, all of which inure to the benefit of ratepayers by keeping rates competitive.[57]

The Attorney General asserts that Duke Kentucky included $0.751 million in Short-Term Incentive Plan expense tied to the achievement of earnings per share and $0.883 million in Long-Term Incentive Plan expense paid in the form of performance shares and restricted stock units tied primarily to Duke Kentucky's financial performance. The Attorney General argues that the Commission has historically disallowed all incentive compensation expenses from the revenue requirement that were incurred to incentivize the achievement of shareholder goals as measured by financial performance.

The Commission is in agreement with the Attorney General on this matter. Incentive criteria based on a measure of EPS, with no measure of improvement in areas such as service quality, call-center response, or other customer-focused criteria, are clearly shareholder-oriented. As noted in Case Nos. 2010-00036[58] and 2013-00148,[59] the Commission has long held that ratepayers receive little, if any, benefit from these types of incentive plans. It has been the Commission's practice to disallow recovery of the cost of employee incentive plans that are tied to EPS or other earnings measures and we find that Duke Kentucky's argument to the contrary does nothing to change this holding, as it is unpersuasive. The Commission finds the Attorney General's position is

---

[57] *Id.*

[58] Case No. 2010-00036, *Application of Kentucky-American Water Company for an Adjustment of Rates Supported by a Fully Forecasted Test Year* (Ky. PSC Dec. 14, 2010).

[59] Case No. 2013-00148, *Application of Atmos Energy Corporation for an Adjustment of Rates and Tariff Modifications*, (Ky. PSC Apr. 22, 2014).

reasonable and that Duke Kentucky's incentive compensation expense should be reduced by $1.634 million.

Retirement Plan Expense

Duke Kentucky included $1.580 million in retirement plan expense related to its employees or its affiliates' employees who were covered by both a defined dollar benefit ("DDB") plan and a defined contribution ("DC") plan.[60]

The Attorney General recommends reducing Duke Kentucky's retirement plan expense by $1.584 million based on recent decisions in which the Commission denied recovery of retirement expenses in which a utility made contributions to both a DDB pension plan and a DC plan for certain employees.[61]

Duke Kentucky contends that the Attorney General has offered no justification as to why the company's test-year retirement plan expense is unreasonable.[62] Duke Kentucky argues that it has significantly reduced retirement-related expenses by transitioning many employees eligible for pension benefits from a DDB plan to a less rich formula and partially utilizing those pension savings to enhance DC 401(k) matching formulas.[63] Duke Kentucky states that it has aggressively managed costs related to its retirement benefits program by closing the DDB pension plans to new hires, and, for existing employees, lock and freezing final average pay benefit formulas for all non-union employees and transitioning those employees from a final average pay formula to a more

---

[60] Duke Kentucky's response to Staff's Post-Hearing Request, Item 4.

[61] Kollen Testimony at 19–21.

[62] Silinski Rebuttal Testimony at 9.

[63] *Id.*

"Defined Contribution like" cash balance benefit formula.[64] Lastly, Duke Kentucky asserts that its benefits packages, including retirement programs, as a whole are designed to be market competitive and are benchmarked to ensure that is the case.[65]

The Commission is in partial agreement with Duke Kentucky on this issue and concludes that Duke Kentucky's retirement plan expense should be accepted as proposed. However, the Commission notes that the changes Duke Kentucky has made to the DDB pension plan were not applicable to union employees.[66] We will not make a distinction between union and non-union employees at this time in order to provide Duke Kentucky an opportunity to address these costs prior to its next base rate case, as rate recovery of these duplicative pension contributions for union employees will be evaluated for appropriateness as part of its next base rate case.

AMI Benefit Levelization Adjustment

Duke Kentucky incorporated an AMI benefit levelization adjustment, as required by the stipulation approved by the Commission in Case No. 2016-00152,[67] of $2.321 million.[68] However, Duke Kentucky's calculation of the AMI benefit was based on the net present value annual savings forecast for the five years from 2018 through 2022.

---

[64] Duke Energy Kentucky Inc.'s Brief at 57.

[65] *Id.* at 9–10.

[66] Duke Energy Kentucky Inc.'s Brief at 57.

[67] 2016-00152, *Application of Duke Energy Kentucky, Inc. for (1) A Certificate of Public Convenience and Necessity Authorizing the Construction of an Advanced Metering Infrastructure; (2) Request for Accounting Treatment; and (3) All Other Necessary Waivers, Approvals, and Relief* (Ky. PSC May 25, 2017).

[68] Kollen Testimony at 21.

The Attorney General contends that the economic analysis conducted by Duke Kentucky and reflected in the stipulation in Case No. 2016-00152 represents a savings period of 15 years.[69] The Attorney General argues that Duke Kentucky unilaterally shortened the benefits period in providing the AMI benefit adjustment in this case, causing the adjustment to be reduced.[70] The Attorney General maintains that using a 15-year benefits period results in an increase in the AMI levelization adjustment to $3.177 million. This reflects an increase of $0.856 million from the $2.321 million calculated by Duke Kentucky.

Based on the changes made by Duke Kentucky to the AMI levelization calculation to reflect a full 15-year benefits period, Duke Kentucky maintains that the maximum adjustment the Commission should make to Duke Kentucky's request is $0.855 million if the Attorney General's position is accepted.[71]

The Attorney General filed Errata Testimony for Lane Kollen and, based on the changes made during discovery, amended his AMI benefit levelization adjustment to a revenue requirement reduction of $0.858 million.

Given the parties changes in position and the small difference in the amount of the AMI benefit levelization adjustment, the Commission finds that the levelization adjustment should be based on cost savings before gross-up of $0.855 million.

---

[69] *Id.* at 22.

[70] *Id.*

[71] Rebuttal Testimony of William Don Wathen, Jr., at 11.

East Bend O&M Expense Regulatory Asset

Duke Kentucky is seeking to recover the East Bend O&M expense regulatory asset in the amount of $4.490 million, based on a levelized recovery of the $36.540 million regulatory asset over 10 years using Duke Kentucky's forecasted cost of debt.[72] This correction reduced the East Bend O&M expense related to the regulatory asset by $0.323 million. Duke Kentucky also provided an adjustment in rebuttal reducing its revenue requirement by $1.555 million to reflect the debt return that is already accruing on the regulatory asset at Duke Kentucky's long-term debt rate.[73]

The Attorney General argues that Duke Kentucky's forecast deferrals from January 2017 through March 2018 are excessive.[74] The Attorney General recommends that the regulatory asset be reduced to reflect the actual deferrals through October 2017, and to revise the forecast so that it is consistent with the actual monthly deferrals for the 12 months ending October 2017.[75] The Attorney General thus recommends that Duke Kentucky's revenue requirement be reduced by $0.406 million.

The Commission finds that Duke Kentucky's adjustment for the East Bend O&M regulatory asset amortization is more accurate as it is based upon corrections made to the Attorney General's calculation. Therefore, the Commission finds that no further adjustment is warranted for this issue.

---

[72] Amended Rebuttal Testimony of Wathen and Waller, Errata Sheet at 1.

[73] Amended Rebuttal Testimony of Sarah E. Lawler at 1.

[74] Kollen Testimony at 29.

[75] *Id.* at 30-31.

Depreciation Expense

Duke Kentucky proposes, as part of developing its depreciation rates, the continued use of the ELG procedure. The Attorney General recommends the Commission adopt the ALG procedure in developing Duke Kentucky's depreciation rates. The Attorney General contends that the ALG methodology is the predominant method that is used in the electric industry for developing depreciation rates. The Attorney General contends that, under the ELG methodology, the capital recovery periods are accelerated and shortened and, thus, the depreciation rates are greater than if the ALG procedure was used.[76] The Attorney General argues that the ALG procedure is as accurate as the ELG procedure and the ALG procedure smooths the data so that the depreciation rates for the group of assets tend to remain constant.[77] Use of the ALG procedure will result in a decrease in Duke Kentucky's depreciation expense of $6.920 million.

Duke Kentucky requested an increase in depreciation expense of $6.920 million, based on its request to utilize the ELG procedure for computing depreciation rates. As was discussed in the rate base section of this Order, this Commission has found that the ELG procedure does not accurately match revenues and expenses, is front-loaded, and Duke Kentucky is the only Kentucky based utility that utilizes the ELG procedure for computing depreciation rates.

Regulatory accounting requires the proper matching of revenues and expense in order to produce fair, just and reasonable rates. The Commission finds Duke Kentucky's

[76] *Id.* at 33.

[77] *Id.* at 35

proposed ELG procedure does not meet that criteria and that Duke Kentucky's depreciation expense should be reduced by $6.920 million.

Terminal Net Salvage – Generation Units

Duke Kentucky included an adjustment of its depreciation expense of $4.506 million to reflect the impact of terminal net salvage value.[78] Duke Kentucky's proposed depreciation rates reflect terminal net salvage, which the company contends is required under the Federal Energy Regulatory Commissions' Uniform System of Accounts.[79] Duke Kentucky further contends that, to avoid intergenerational inequity, these costs should be borne by those ratepayers who receive the benefit from the production assets.[80]

The Attorney General recommends reducing the proposed depreciation rates by removing terminal net salvage from production plant depreciation rates. The Attorney General argues that Duke Kentucky's proposed recovery of future terminal net negative salvage for production plant is unreasonable because those costs are not known with reasonable certainty today.[81] The Attorney General's recommendation is to reduce Duke Kentucky's depreciation expense by $4.506 million.[82]

The Commission finds Dukes Kentucky's recommendation on the treatment of terminal net salvage value in the computing the depreciation rates for generating units is reasonable in order to avoid intergenerational inequity and should be approved.

---

[78] *Id.* at 42.

[79] John J. Spanos Rebuttal Testimony ("Spanos Rebuttal Testimony") at 4–5.

[80] Spanos Rebuttal Testimony at 4.

[81] Kollen Testimony at 39.

[82] *Id.* at 42.

Interim Net Salvage

Duke Kentucky proposed a $4.617 increase in depreciation expense to reflect the impact of interim net salvage value in its depreciation rates.[83] Duke Kentucky included interim net salvage based on forecasts of the future cost of removal and salvage income.[84]

The Attorney General contends that Duke Kentucky's methodology front-loads forecasted costs based on limited data applied to the interim retirement portion of the production plant accounts and the entirety of the transmission and distribution plant accounts.[85] By presuming to recover costs that have not and may not be incurred, the Attorney General argues that Duke Kentucky's methodology overstates depreciation rates and expense. The Attorney General recommends applying a methodology that calculates the interim net salvage based on the same historical data used by Duke Kentucky, but uses the average annual historic interim net salvage dollars divided by the interim retirement portion of the production plant account and the entirety of the transmission and distribution plant accounts, rather than the annual historic retirements. Under the Attorney General's recommended methodology, Duke Kentucky's depreciation expense would decrease by $4.617 million.

The Commission finds Duke Kentucky's recommendation for the treatment of interim net salvage value in the computing of its depreciation rates to be reasonable to avoid intergenerational inequity and should be approved.

---

[83] *Id.* at 45.

[84] *Id.* at 43.

[85] *Id.* at 44.

Federal Income Tax Expense

In its rebuttal testimony, Duke Kentucky proposed a reduction in Federal Income Tax ("FIT") of $10.623 million to reflect the impacts of the TCJA.[86] Duke Kentucky states that the adjustment is due to updating the gross-revenue conversion factor ("GRCF") for the decrease in the federal income tax rate.[87] The Attorney General proposed a $10.255 million reduction to reflect the impact of the TCJA, using the same methodology.[88]

The Commission has carefully reviewed the parties' methodology and computations in determining their respective FIT impacts of the TCJA. The Commission finds the Attorney General's calculations to be more accurate and therefore will reduce Duke Kentucky's revenue requirement by $10.255 million.

Excess Deferred Taxes

Duke Kentucky proposed a reduction in its revenue requirement of $3.782 million to reflect the impact of the TCJA on the amortization of its excess ADIT.[89] The Attorney General proposed a reduction of $6.054 million. Both Duke Kentucky and the Attorney General utilized the ARAM method to compute the amortization of the protected excess ADIT and both parties originally utilized a 20-year amortization for the unprotected excess ADIT. As was discussed in the rate base section of this Order, the Commission has accepted the ARAM calculation of the protected excess ADIT and has found a ten-year amortization period for the unprotected excess ADIT to be reasonable. As a result, the

[86] Sarah E. Lawler Rebuttal Testimony ("Lawler Rebuttal Testimony") at 3.

[87] *Id.*

[88] Kollen Testimony at 48.

[89] Lawler Rebuttal Testimony at 3.

Commission finds that Duke Kentucky's test-year federal income tax expense should be reduced by $4.472 million to reflect this adjustment.

Net Operating Income Summary

After considering all pro forma adjustments and applicable income taxes, Duke Kentucky's adjusted net operating income is as follows:

Operating Revenues	$308,549,356
Operating Expenses	270,589,404
Adjusted Net Operating Income	$ 37,959,952

Capitalization

Duke Kentucky's proposed capitalization represents the end-of-year balances of the 13-month average for the test period ending March 31, 2019. Because Duke Kentucky's total capitalization is for its electric and gas operations, the amount allocated to its electric operations is determined by taking the total capitalization for both electric and gas and applying the electric rate base ratio.[90] This is consistent with the approach used in previous Duke Kentucky rate cases. Accordingly, the total capitalization allocated to its electric operations is $705,051,140.[91]

The Attorney General recommended several adjustments to Duke Kentucky's capitalization. Each adjustment was made proportionally based upon Duke Kentucky's capital ratio for a final capitalization of $647,314,275.[92] No other intervenor

[90] *See* Application, Work Papers, WPA1 d for the electric rate base ratio.

[91] Direct Testimony of Sarah E. Lawler ("Lawler Testimony") at 5.

[92] Kollen Testimony, Exhibit 23.

recommended any capitalization adjustment. The Attorney General proposed the following adjustments:

- A reduction of $5.126 million for loans Duke Kentucky made to other Duke Energy affiliates as a member of Duke Energy Money Pool ("Money Pool"). The Money Pool is used to meet short-term cash requirements and the Attorney General states that Duke Kentucky should not be allowed a return on these investments because if the revenue requirements were calculated using rate base this Money Pool investment would be excluded. The Attorney General adjusted the capitalization downward by Duke Kentucky's forecasted test year Money Pool investments, reducing Duke Kentucky's revenue requirement by $0.451 million.[93] In its rebuttal testimony, Duke Kentucky states that the money pool is used to manage short-term cash positions and any reduction to its capitalization should be solely attributed to the short-term debt portion of the capital structure and not applied proportionally based on its capital ratio of short-term debt, long-term debt, and common equity.[94] The Commission agrees that any adjustment should be made solely to short-term debt and will adjust the capitalization downward for a revenue reduction of $0.158 million.[95]

- A reduction of $39.162 million to reflect the removal of the East Bend O&M expense regulatory asset. The Attorney General argues that Duke Kentucky has already included a debt-only rate of return in the levelized amortization expense for the East Bend O&M expense regulatory asset and in the revenue requirement. The adjustment reduces

---

[93] *Id.* at 51–52.

[94] Rebuttal Testimony of Stephen G. De May at 17–18.

[95] This adjustment alters the capitalization ratio. Further adjustments are made to this revised capitalization.

Duke Kentucky's revenue requirement by $3.449 million. In its rebuttal testimony, Duke Kentucky agrees to remove this regulatory asset from capitalization and, in response to Duke Kentucky's Post-Hearing Data Request, the projected East Bend O&M Expense regulatory asset was updated to $36.540 million.[96] Removing this updated amount from the Commission adjusted capitalization results in a decrease in the revenue requirement of $3.231 million.

- The removal of the demand-side management ("DSM") regulatory asset for a reduction of $1.477 million from the capitalization and a reduction in the revenue requirement of $0.130 million. The Attorney General states that Duke Kentucky erred by not removing the DSM regulatory asset from its electric capitalization. Duke Kentucky counters that all DSM revenue and expenses have been removed, but the deferred balance should not be removed as it is exclusively related to a cash flow issue and is financed by shareholders and recommended rejecting this adjustment as it is an asset on Duke Kentucky's balance sheet and is not accruing carrying costs.[97] The Commission agrees that the DSM regulatory asset is a cash flow issue and rejects the proposed adjustment.

- The removal of $18.509 million from capitalization for the East Bend coal ash regulatory asset as the Attorney General proposed that these costs be recovered through the proposed Environmental Surcharge Mechanism Rider. The impact of this adjustment is a reduction in Duke Kentucky's revenue requirement of $1.630 million.

[96] Duke Kentucky's Response to Staff's PH–DR, Item 2.

[97] Rebuttal Testimony of Sarah E. Lawler ("Lawler Rebuttal") at 7.

Duke Kentucky agreed with this adjustment.[98] The Commission finds this proposed adjustment to be reasonable and will remove this from the Commission's adjusted capitalization, which results in a decrease of $1.637 million in the revenue requirement.

- An increase to the revenue requirement of $0.018 million to reflect a $0.200 million increase to capitalization to account for the impact of amortizing the Carbon Management Research Group regulatory asset over a ten-year period as compared to Duke Kentucky's proposed five-year period. Duke Kentucky agrees with this recommendation and the Commission finds this adjustment to be reasonable and should be accepted. This adjustment increases the revenue requirement by $0.018 million on the Commission's adjusted capitalization.

- An increase of $2.733 million to reflect the reduction in depreciation expense resulting from use of the ALG depreciation method instead of Duke Kentucky's proposed ELG depreciation method. As stated earlier, the Commission agrees with the application of the ALG methodology in developing Duke Kentucky's depreciation rates and, accordingly, accepts the corresponding adjustment to capitalization. Based on the revised capitalization, the revenue impact is $0.242 million.

- The Attorney General recommends Duke Kentucky's revenue requirement be increased $0.157 million to reflect the $1.780 million increase in capitalization resulting from the reduction in depreciation expense from the proposed removal of terminal net salvage value. As stated earlier, the Commission rejected the Attorney General's recommendation on this issue and, therefore, no corresponding adjustment to capitalization will be made.

---

[98] Duke Kentucky's Response to the Attorney General's Second Request for Information, Item 4e.

- An increase of $1.824 million to capitalization to reflect the increased capitalization resulting from the reduction in depreciation expense from the proposed removal of the remaining net salvage. The Commission rejected the Attorney General's recommendation on this issue and, therefore, no corresponding adjustment to capitalization will be made.

Appendix B illustrates the impact of each capitalization adjustment. The total Commission approved adjustments lower Duke Kentucky's electric operations capitalization to $647,809,050.

Rate of Return, Capital Structure, and Cost of Debt

Duke Kentucky proposed a test-year-end capital structure consisting of 40.68 percent long-term debt at a cost of 4.24 percent; 10.43 percent short-term debt at a cost of 3.08 percent; and 48.89 percent common equity with a proposed return of 10.30 percent.[99] Although the capitalization is lower, the capital structure proposed by the Attorney General maintains the same capital ratios and short-term and long-term debt costs but adjusts the cost of common equity. Neither NKU, KSBA, nor Kroger addressed the capital structure.

Return on Equity

In its application, Duke Kentucky developed its proposed return on equity ("ROE") using the discounted cash flow method ("DCF"), the capital asset pricing model ("CAPM"), the Empirical CAPM model, and Risk Premium analysis ("RP"). Derived from these cost of capital evaluations, Duke Kentucky proposed an ROE range, adjusted for flotation costs, of 9.0 percent to 10.7 percent, and recommended an ROE be awarded within the

[99] Application, Schedule J-1, page 2.

upper half portion of this range, or between 9.9 and 10.7 percent.[100] Duke Kentucky used the midpoint of this upper portion, or 10.3 percent, in calculating its revenue requirements. Duke Kentucky maintained that an ROE in this range fairly compensates investors, maintains Duke Kentucky's credit strength and attracts the capital needed for utility infrastructure and reliability capital investments.[101] Duke Kentucky further emphasized that an ROE in the upper portion of the recommended range accounts for the high external financing risks facing Duke Kentucky relative to its small size, forecasted increases in interest rates, a highly concentrated generation mix, and a higher degree of regulatory risk.[102] The table below summarizes Duke Kentucky's ROE estimates:[103]

STUDY	ROE
DCF – Value Line Growth	9.4%
DCF – Analyst Growth	9.0%
CAPM	9.5%
Empirical CAPM	10.0%
Historical Risk Premium Electric	10.7%
Allowed Risk Premium	10.5%

Direct testimony and analysis regarding the ROE were also provided by the Attorney General. The Attorney General employed the DCF and CAPM models for its analysis but based its recommendation on the results of the DCF model.[104] The Attorney General used 19 proxy companies as compared to the 23 Duke Kentucky utilized. The Attorney General stated that due to significant events, including acquisition activity,

---

[100] Direct Testimony of Roger A. Morin, PhD ("Morin Testimony") at 4.

[101] *Id*. at 5.

[102] *Id*. at 4.

[103] *Id*. at 62.

[104] Direct Testimony of Richard A. Baudino ("Baudino Testimony") at 3.

natural disasters, and capital investment cancellations, the exclusion of the four proxy companies was warranted.[105] In the DCF model, the Attorney General employed both the average and the median values for the expected growth rates. The model results indicated equity cost rates ranging from 8.07 percent to 9.16 percent for the average growth rates and for the median growth rates, 8.19 percent to 9.21 percent. The Attorney General recommended removing the low end of the average growth range, stating that 8.07 percent appeared to be understated and that the remaining DCF estimates reflect a range of approximately 8.2 percent to 9.2 percent. Thus, the Attorney General recommended a point slightly higher than the midpoint, or 8.8 percent.[106]

The Attorney General disagreed with Duke Kentucky's overall analysis, stating that Duke Kentucky's requested ROE is overstated, inconsistent with the current low–interest-rate environment, and not supported by current market evidence.[107] In particular, the Attorney General disagreed with Duke Kentucky's DCF analysis, arguing that Duke Kentucky's exclusion of forecasted dividend growth in the DCF analysis, due to Duke Kentucky's concern regarding slower dividend growth in the near term was not reflective of long-run expected earnings growth. The Attorney General also questioned Duke Kentucky's use of 1+g to calculate the expected dividend yield as compared to 1+.5g. The Attorney General noted that although the two approaches do not yield significantly different results, the 1+g approach is overstated as it assumes an investor receives the

---

[105] *Id.* at 19. The four companies were Avista Corp. (which had announced that it would be acquired by Hydro One); PG&E Corp. (which recently announced that it would be eliminating its common and deferred stock dividends); SCANA (who's stock price has fallen significantly due to the cancellation of the Summer nuclear power plant); and Sempra Energy (which recently announced its acquisition of Oncor).

[106] *Id.* at 31.

[107] *Id.* at 32.

full amount of growth throughout the next year and given the timing of dividend increases and the level of the dividend, the investor may or may not actually receive a full year of increased dividend payments.[108]

The Attorney General's CAPM results range from 7.01 percent to 7.23 percent for the forward-looking CAPM ROE estimates and 6.02 percent to 7.39 percent using historical risk premiums.[109] The Attorney General stated that Duke Kentucky's CAPM analysis employed an inflated projected interest rate, and that current interest rates and bond yields embody all relevant market data and expectations of investors.[110] He further argues that the use of the Empirical CAPM analysis is not a reasonable method to use for Duke Kentucky's ROE estimate, as the use of an adjustment factor to "correct" the CAPM results for companies with betas less than 1.0 suggests that published betas are incorrect and investors should not rely on them.[111] The Attorney General rejects the RP analysis calling it imprecise and stating that it should only be used for general guidance.[112]

Finally, the Attorney General disagreed with Duke Kentucky's inclusion of an upward adjustment for flotation costs. The Attorney General notes that flotation costs attempt to collect the costs of issuing common stock and that these costs are already accounted for in current stock prices and that adding an adjustment for flotation costs

---

[108] *Id.* at 34.

[109] *Id.* at 30.

[110] *Id.* at 34.

[111] *Id.* at 39.

[112] *Id.* at 40.

amounts to double counting.[113] The Attorney General further notes that if flotation costs are excluded from the Duke Kentucky's DCF analysis, the cost of equity results fall to a range of 8.86 percent to 9.27 percent.[114]

In its rebuttal testimony, Duke Kentucky contends that the Attorney General's proposed ROE would be one of the lowest authorized returns in the industry, that it lies outside the zone of reasonableness, and, if adopted, would cause adverse consequences to Duke Kentucky's creditworthiness, financial integrity, capital-raising ability and ultimately to its customers. Duke Kentucky further disagrees with the Attorney General exclusively relying on the results of the DCF analysis and the procedures and methodologies used in his analysis.

In his post-hearing brief, the Attorney General pointed out that in the recent Kentucky Power Company ("Kentucky Power") rate case,[115] the Commission noted that the increase in interest rates is happening slowly and interest rates are still historically low. He also noted that the Commission stated that models supporting a low-interest-rate environment should be given more weight. The Attorney General contends that Duke Kentucky did not provide any evidence to sway this Commission from that position and that an ROE of 8.8 percent should be adopted.[116] Duke Kentucky's post-hearing brief

---

[113] *Id.* at 33.

[114] *Id.*

[115] Case No. 2017-00179, *Electronic Application of Kentucky Power Company for (1) A General Adjustment of its Rates for Electric Service, (2) An Order Approving its 2017 Environmental Compliance Plan; (3) An Order Approving its Tariffs and Riders; (4) An Order Approving Accounting Practices to Establish Regulatory Assets and Liabilities; and (5) An Order Granting All Other Required Approvals and Relief* (Ky. PSC Jan. 18, 2018).

[116] Attorney General's Post Hearing Brief at 5–6.

contends that the Attorney General's proposed ROE is unreasonable and lies outside the zone of currently authorized ROEs for electric utilities.[117] For the reasons discussed below, the Commission finds a ROE of 9.725 percent to be reasonable, and for the purpose of base rate revenues and certain tariffs, an ROE of 9.725 percent should be applied.

The Commission agrees that financial markets are still in a low–interest-rate environment. However, economic data indicates a healthy outlook with steady growth, low unemployment, and inflation at the Federal Reserve's ("Fed") target level. Citing a solid economic outlook, the Fed increased the federal funds interest rate to 1.75 percent this past March, the highest level in a decade, and signaled that two to three more rate hikes are possible in 2018. Increased government spending, the possible impact of current tariff policy on net imports, and the Tax Cut and Jobs Act of 2017 should all contribute to a healthier economy. These macroeconomic inputs point to a robust outlook and an economy that has recovered from the Great Recession. However, notwithstanding these improvements, interest rates are still historically low, the impact of interest rate changes is unpredictable, and increases in the federal funds rate are not guaranteed.

The Commission agrees with the Attorney General that flotation costs should be excluded from the analysis as they are already accounted for in the current stock prices. Removal of the flotation costs from Duke Kentucky's ROE model produces the following results:

---

[117] Duke Kentucky's Post-Hearing Brief at 73.

STUDY	ROE
DCF – Value Line Growth	9.3%[118]
DCF – Analyst Growth	8.9%[119]
CAPM	9.3%[120]
Empirical CAPM	9.8%[121]
Historical Risk Premium	10.5%[122]
Allowed Risk Premium	10.5%[123]

For 2017, the average authorized ROE in the electric utility industry as reported in the Regulatory Research Associates ("RRA") quarterly review was 9.80 percent, and the average of allowed ROEs for the proxy group of 19 companies is 9.88.[124] Further, the Commission notes its last award of 9.7 percent for an investor-owned electric utility. The Commission believes these ROE reports are benchmarks worthy of consideration in determining a reasonable ROE. The Commission believes that since its last award of 9.7 percent, the economy has shown quantifiable signs of improvement. Further, the Commission recognizes the risk inherent to Duke Kentucky's lack of diversity in its generation fleet. Based on the entire record developed in this proceeding, we find that the approved ROE of 9.725 falls within the range of Duke Kentucky's proposed ROE of 8.86 percent to 10.5 percent, adjusted for flotation costs. While the ROE of 9.725 exceeds the Attorney General's range of 8.2 percent to 9.2 percent, the Commission believes that

---

[118] Morin Testimony at 30.

[119] *Id*. at 31.

[120] *Id*. at 44.

[121] *Id*. at 47.

[122] *Id*. at 49.

[123] *Id*. at 52. No flotation cost is noted.

[124] *Id*. *See also*, Rebuttal Testimony of Roger A. Morin, PhD at 10.

the Attorney General recommended range is unreasonably low. The Commission agrees with Duke Kentucky that awarding an ROE that is significantly lower than other electric utility authorized ROEs may cause it financial stress and fails to take into account Duke Kentucky's highly concentrated generation portfolio. Additionally, an ROE of 9.725 is within the range of the benchmarks provided by RRA and approved for the proxy group, and recognizes the economic improvements since the last Commission decisions involving rate cases of other investor-owned electric utilities in Kentucky.

Rate-of-Return Summary

Applying the rates of 3.08 percent for short-term debt, 4.24 percent for long-term debt, and 9.725 for common equity to the Commission adjusted capital structure consisting of 9.77 percent, 40.98 percent, and 49.25 percent, respectively, produces an overall cost of capital of 6.83 percent.[125]

Base Rate Revenue Requirement

The Commission has determined that, based upon Duke Kentucky's capitalization of $647,809,050 and an overall cost of capital of 6.83 percent, Duke Kentucky's net operating income that could be justified by the evidence of record is $44,245,358. Based on the adjustments found reasonable herein, Duke Kentucky's pro forma net operating income for the test year is $37,959,952. Therefore, Duke Kentucky would need an increase in annual base rate operating income of $6,285,406. After the provision for uncollectible accounts, the PSC Assessment, and state and federal income taxes, Duke Kentucky would have a base-rate electric revenue deficiency of $8,428,645.

The calculation of this base-rate revenue deficiency is as follows:

---

[125] *See*, Appendix B.

Net Operating Income Found Reasonable	$ 44,245,358
Pro Forma Net Operating Income	37,959,952
Net Operating Income Deficiency	$ 6,285,406
Gross Revenue Conversion Factor	1.3409866
Base Rate Revenue Deficiency	$ 8,428,645

REVENUE ALLOCATION AND RATE DESIGN

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

Duke Kentucky prepared three fully embedded COSSs in this proceeding that contain essentially the same data, except that different methodologies were used to develop the allocation factor for the demand component of Production-related costs. The demand allocation methods are as follows: (1) 12-CP method; (2) the Average and Excess method; and (3) the Summer/NonSummer method. Of those three, Duke Kentucky recommends using the 12-CP methodology, stating that it is generally accepted in the utility industry and was approved by the Commission in its most recent electric base rate case.[126] Using the 12-CP method, the allocation of capacity costs to each customer class is based on the class load contribution to the maximum peak, at the time of peak, regardless of what their respective loads were at other times of the day. Duke Kentucky states that due to an anticipated future replacement of its billing system, it is not seeking to implement any significant rate design changes. Duke Kentucky is proposing to increase customer charges and energy charges and, where applicable, demand charges, across the board. Duke Kentucky's proposed rate design is based upon its 12-CP COSS

[126] Case No. 2006-00172, Duke Kentucky (Ky. PSC Dec. 21, 2006).

increases are supported by the COSS.[127] For the residential class, the customer charge is proposed to increase from $4.50 to $11.10, or 147 percent.[128] This amount represents nearly the full customer charge as calculated by the COSS.[129] Duke Kentucky is also proposing to increase its street lighting and traffic lighting rates. The revised proposed increase by rate class is as follows:[130]

Rate RS	14,780,440
Rate DS	7,870,484
Rate GS-FL	51,793
Rate EH	54,744
Rate SP	1,897
Rate DT-Secondary	3,854,808
Rate DT-Primary	2,442,311
Rate DP	105,930
Rate TT	807,689
Lighting	146,956
Total	30,117,052

The Attorney General's witness, Mr. Glenn Watkins, prepared two COSSs but stated that he accepts Duke Kentucky's 12-CP method for evaluating class profitability. While Mr. Watkins stated that he believes that Duke Kentucky's revenue distribution is reasonable for the residential class, he states that Duke Kentucky's proposed revenue allocation produces anomalous results for several nonresidential classes but did not offer any suggested changes. In addition, Mr. Watkins calculated a customer charge between

[127] As originally proposed, the customer charges for rate class DT, both Primary and Secondary, were not supported by the COSS. However, through discovery, Duke Kentucky proposed that the customer charges be revised to reflect the COSS.

[128] As revised in the billing analysis provided in Duke Kentucky's response to Staff's PH-DR, Item 9.

[129] The revised COSS filed by Duke Kentucky in response to Staff's PH-DR, Item 8, supports a residential customer charge of $11.31.

[130] *See* revised billing analysis provided in Duke Kentucky's response to Staff's PH-DR, Item 9, Tab Sch M-2.2.

any suggested changes. In addition, Mr. Watkins calculated a customer charge between $2.69 and $3.49 using "a direct customer cost analysis" and objected to any increase in the residential customer charge. Mr. Watkins asserts that Duke Kentucky's proposed residential rate design violates the principle of gradualism, the theory of efficiency competitive prices and is contrary to effective conservation efforts.

NKU did not object to Duke Kentucky's 12-CP COSS and did not oppose Duke Kentucky's revenue allocation. Kroger's witness, Mr. Justin Bieber, proposed that the Commission allocate 50 percent of the benefits of the tax impact to all rate classes and then use the remaining 50 percent to further reduce interclass subsidies, as he believes the proposed 10 percent subsidy reduction is insufficient. Duke Kentucky believes Mr. Bieber's proposal is not a fair result for its customers, stating the changes due to the tax reduction should follow the customer contribution to costs.

The Commission accepts Duke Kentucky's revised 12-CP COSS to use as a guide in determining revenue allocation and rate design. The Commission also accepts Duke Kentucky's proposed revenue allocation and finds that the proposed revenue allocation, which reduces class subsidies by 10 percent, conforms to the principle of gradualism. As previously stated, the Commission is granting less of an increase than that requested by Duke Kentucky. Therefore, the Commission will allocate the increase granted herein on a proportional basis to each of the rate classes, based generally on Duke Kentucky's proposed revenue allocation.

Rate Design

Duke Kentucky's revised 12-CP COSS supports a residential customer charge in the amount of $11.31, which includes all costs identified as customer-related in its

COSS.[131] This method of calculating the customer charge is generally accepted in the utility industry and is being accepted by the Commission. Although the Commission has been reluctant to approve an increase in the residential customer charge in excess of 50 percent due to the principle of gradualism, we believe that a larger increase is warranted in this proceeding given Duke Kentucky's lowest-in-Kentucky current residential customer charge of $4.50 and the amount of time that has passed since the charge was established. Therefore, the Commission will approve a residential customer charge of $11.00. Given the reduction to the requested increase granted herein, allocating the entirety of the increase authorized for the residential class to the customer charge will not achieve an $11.00 customer charge. Therefore, the Commission will decrease the current residential energy charge in order to establish an $11.00 customer charge and achieve the increase authorized for the residential class. The Commission will also accept Duke Kentucky's proposed customer charges and demand charges for the nonresidential rate classes, as revised. Therefore, in order to achieve the decrease in the requested increase granted herein, the Commission has adjusted the energy charges of all rate classes. The monthly increase for the residential class results in an increase of 3.2 percent, or approximately $2.56, for a typical residential customer using 1,000 kWh of electricity per month.

PROPOSED TARIFF CHANGES

Fixed Bill Program. Duke Kentucky is proposing to offer a Fixed Bill program to its customers. A customer signing up for the Fixed Bill program would pay a flat monthly billing charge for electric service for 12 months. The flat monthly charge would include a

[131] Duke Kentucky's Response to Staff's PH-DR, Item 8, Attachment, Tab Customer Charge.

premium in order to take into account the risk of weather and commodity volatility. Duke Kentucky stated that the premium has not yet been finalized for inclusion in the program but that, if approved, the premium to be charged to customers would be determined and added to the applicable section in the compliance tariff.[132] Duke Kentucky also states that significant changes in the customer's consumption behavior may require the Fixed Bill amount to be recalculated before the 12-month period ends. If a customer's actual usage is more than 30 percent higher than their expected weather-adjusted usage, Duke Kentucky stated that it would send them a warning letter and, if the excessive usage continues, the company would have the right to remove the customer from the program or adjust their fixed bill amount to reflect the increased usage.[133] At the end of 12 months, Duke Kentucky would calculate a new charge to the customer, which will factor in any changes in usage patterns for the customer. The customer would be required to re-enroll in the Fixed Bill payment option every 12 months.

Duke Kentucky's initial proposed tariff did not contain the provisions of the Fixed Bill Program but Duke Kentucky indicated that it would be willing to include the provisions of the Fixed Bill Program in its tariff if the program is approved.[134]

Mr. Watkins, the Attorney General's witness, filed testimony recommending that the Fixed Bill Program be rejected. Mr. Watkins stated that the Fixed Bill program is not in the public interest and provides windfall profits to Duke Kentucky with no realistic benefits to consumers. Mr. Watkins also states that the Fixed Bill program would provide

---

[132] Duke Kentucky's Response to Staff's Fourth Request for Information ("Staff's Fourth Request"), Item 17 b.

[133] Duke Kentucky's Response to Staff's Fourth Request, Item 17. a.

[134] Duke Kentucky's Response to Commission Staff's Second Request for Information ("Staff's Second Request"), Item 9 d.

benefits to consumers. Mr. Watkins also states that the Fixed Bill program would provide for a constant "flat" bill to customers regardless of how much energy they consume or when they consume it, and that policies such as this are contrary to the objectives of efficient pricing.

The Commission finds that the Fixed Bill Program is not reasonable and should not be approved. A jurisdictional utility must charge its filed rates for usage and the Commission finds that this program does not adhere to the Commission's filed rate doctrine. Because Duke Kentucky included $122,230 in the forecasted test year as the amount of premium associated with this program, in rejecting the Fixed Bill Program, the Commission has made an adjustment to increase the revenue requirement by $122,230.

Rate RTP-M, Real-Time Pricing. Duke Kentucky is proposing to cancel and withdraw Rate RTP-M, Real-Time Pricing – Market-Based Pricing. Duke Kentucky states that this rate option has not been utilized by any customers since its inception and that it was proposed when Duke Kentucky purchased all of its power from Duke Energy Ohio, which is no longer the case. Duke Kentucky states that it has another RTP tariff available for nonresidential customers. There were no objections to this tariff change from the intervenors. The Commission finds that the proposed tariff change is reasonable and should be approved.

Rate TT, Time of Day Rate – Transmission Voltage. Duke Kentucky is proposing to add a summer and winter on-peak energy rate similar to Rate DT. There were no objections to this tariff change from the intervenors. The Commission finds that the proposed tariff change is reasonable and should be approved.

Rate DT, Time of Day Rate – Distribution Voltage. Duke Kentucky is proposing to remove language referencing an expired optional pilot rate for low load factor customers from this tariff. There were no objections to this tariff change from the intervenors. The Commission finds that the proposed tariff change is reasonable and should be approved.

Rate LED, LED Outdoor Lighting Service. Duke Kentucky is proposing to introduce a LED lighting tariff due to increased customer requests for LED fixtures. The minimum term for the tariff is proposed to be 10 years. The rates proposed by Duke Kentucky included a carrying charge based on a 10.30 percent ROE. As previously stated, the ROE approved in this proceeding is 9.725 percent. Therefore, the Commission has recalculated the proposed LED rates using a ROE of 9.725 percent. With this recalculation of rates, the Commission finds that the proposed LED lighting tariff is reasonable and should be approved.

Rate OL, Outdoor Lighting Service. Duke Kentucky is proposing to cancel and withdraw Rate OL, Outdoor Lighting Service. Per Duke Kentucky's current tariff, this rate schedule terminated December 31, 2016. Duke Kentucky is proposing that all remaining participants be moved to Rate UOLS, Unmetered Outdoor Lighting and, as applicable, Rate OL-E – Outdoor Lighting Equipment Installation. There were no objections to this tariff change from the intervenors. The Commission finds that the proposed tariff change is reasonable and should be approved.

Rate NSP, Private Outdoor Lighting Service for Nonstandard Units. Duke Kentucky is proposing to cancel and withdraw Rate NSP, Private Outdoor Lighting for Non-Standard Units. Per Duke Kentucky's current tariff, this rate schedule terminated December 31, 2016. Duke Kentucky is proposing that all remaining participants be moved to Rate UOLS, Unmetered Outdoor Lighting and, as applicable, Rate OL-E, Outdoor Lighting Equipment Installation. There were no objections to this tariff change from the intervenors. The Commission finds that the proposed tariff change is reasonable and should be approved.

Rider LM, Load Management Rider. Duke Kentucky is proposing to revise Rider LM to reflect the fact that it no longer utilizes the magnetic tape recording devices included in Section II of the Rider. Section II will be eliminated and all participants utilizing interval data recorders and time-of-use meters will be combined under Section I.[135] There were no objections to this tariff change from the intervenors. The Commission finds that the proposed tariff change is reasonable and should be approved.

Rate MDC, Meter Data Charges. Duke Kentucky is proposing to revise Rate MDC to clarify that it is for nonresidential customers and to rename it Meter Data Charges for Enhanced Usage Data Services. In addition, the name of the software that enables the service is changed from EnFocus to Energy Profiler Online (EPO).[136] There were no objections to this tariff change from the intervenors. The Commission finds that the proposed tariff change is reasonable and should be approved.

Rider GSS, Generation Support Service. Duke Kentucky is proposing to combine the Monthly Distribution Reservation Charge, Monthly Transmission Reservation Charge, and Monthly Ancillary Services Reservation Charge values into a combined value called Monthly Transmission and Distribution Reservation Charge.[137] Duke Kentucky clarified

[135] Direct Testimony of Bruce L. Sailers ("Sailers Testimony") at 17.

[136] Sailers Testimony at 20.

[137] Sailers Testimony at 20.

in the discovery and at the hearing in this matter that proposed Rider GSS does not include a Monthly Ancillary Services Reservation Charge.[138] There were no objections to this tariff change from the intervenors. The Commission finds that the proposed tariff change is reasonable and should be approved.

Rider FAC, Fuel Adjustment Clause. Duke Kentucky is proposing to include additional PJM Interconnection, LLC ("PJM") Billing Line Items for recovery through its FAC. Duke Kentucky's proposal is the same, with respect to the PJM billing line items, as was made by Kentucky Power in its recent base-rate proceeding and approved by the Commission.[139] There were no objections to this tariff change from the intervenors. The Commission will approve Duke Kentucky's proposal with the requirement that Duke Kentucky list each of the PJM billing line items that will flow through the FAC in its compliance tariff.

Rider PSM, Off-System Sales Profit Sharing Mechanism. Duke Kentucky is proposing changes to its Rider PSM to expand the categories of revenues (net of costs) available for inclusion in Rider PSM and to streamline the administration and calculation of Rider PSM. Duke Kentucky is proposing to make adjustments to Rider PSM to reflect PJM billing line items that are related to credits and charges attributable to the off-system sales shared with customers under Rider PSM. Duke Kentucky is proposing to adjust the categories of eligible net proceeds (credits and charges) that can be flowed through the PSM to include all wholesale energy, capacity, and ancillary services markets (net of costs and credits) that are now available or may become available in PJM. This will

[138] Duke Kentucky's response to Staff's Fourth Request, Item 14, and March 7, 2018 hearing at 2:07:45.

[139] Case No. 2017-00179, Kentucky Power (Ky. PSC Jan. 18, 2018).

capacity performance market requirements and for short-term capacity purchases necessary to meet Duke Kentucky's three-year fixed resource requirement plan. Duke Kentucky is also proposing to include costs of any capacity payments made to cogeneration facilities under the terms of its cogeneration tariffs, as well as any net proceeds from the sale of renewable energy certificates derived from any Company-owned renewable generating resources. Since Duke Kentucky is proposing to implement an environmental surcharge mechanism, cost recovery and the sharing of any gains or losses on the sale of emission allowances will begin to be addressed in Rider ESM.[140] None of the intervenors filed testimony objecting to the expansion of items proposed to be included in Rider PSM. However, in its post-hearing brief, the Attorney General stated that the proposed changes to Rider PSM should be denied because Duke Kentucky has not met its burden as to the necessity of the changes. The Attorney General argued that Duke Kentucky is attempting to turn Rider PSM into a way to pass costs on to customers instead of a way to share profits.

Duke Kentucky is also proposing to revise the sharing percentage between customers and shareholders. Currently, the first $1 million in annual margins from off-system sales flow to customers and anything over $1 million is shared 75 percent to customers and 25 percent to Duke Kentucky shareholders. Duke Kentucky is proposing to revise the sharing percentage between customers and shareholders to a 90/10 split and eliminate the $1 million threshold in the formula. Duke Kentucky argues that the proposed split will simplify and streamline the process. Duke Kentucky also provided

[140] Direct Testimony of William Don Wathen, Jr. ("Wathen Testimony") at 14 and 15.

calculations showing that the change to Rider PSM would benefit customers during the forecasted period in the amount of $322,294.[141]

The Attorney General did not provide testimony opposing Duke Kentucky's proposed 90/10 customer/shareholder split but did recommend that the forecasted off-system sales margins be removed from Rider PSM and be included in base rates, as discussed previously in this Order.

Having reviewed the record in this proceeding, the Commission finds Duke Kentucky's proposed changes to Rider PSM to be reasonable and will approve Duke Kentucky's proposal with the requirement that Duke Kentucky list each of the PJM billing line items that will flow through Rider PSM in its compliance tariff. In addition, the Commission will require Duke Kentucky to notify the Commission within seven days of incurring any capacity performance assessment from PJM.

Reconnection of Service. Duke Kentucky is proposing to revise its reconnection fees as follows:

Charge	Current Charge	Proposed Charge
Remote Reconnection	$0.00	$25.00
Reconnection (Nonremote, Electric Only)	25.00	75.00
Reconnection (Nonremote, Electric & Gas)	38.00	88.00
Reconnection at pole (Electric Only)	65.00	125.00
Reconnection at pole (Electric & Gas)	90.00	150.00
Collection Fee	15.00	50.00

[141] Duke Kentucky's Response to Staff's Second Request, Item 28.

Duke Kentucky filed cost support for its proposed reconnection charges. In response to questioning from the Attorney General regarding the calculation of the remote reconnection charge, Duke Kentucky offered to revise its remote reconnection charge using an alternate labor rate which would result in a remote reconnection charge of $3.45. Duke Kentucky stated that if this revised rate was approved rather than the proposed rate, a corresponding adjustment totaling $170,759 would need to be made to its revenue requirement to account for the loss of the reconnection revenue.[142]

With the exception of the remote reconnection charge, the Commission finds that the proposed charges in the table above are reasonable and should be approved. The Commission also finds that the remote reconnection charge should be $3.45 and has made an adjustment to increase Duke Kentucky's revenue requirement in the amount of $170,759.

<u>Rate CATV, Rate for Pole Attachments of Cable Television Systems.</u> Duke Kentucky is proposing to increase the pole attachment rates and to broaden the rate language to apply the per foot charge to other pole attachments on a contract basis based on the footage required for the attachment. Duke Kentucky is also proposing that this rate schedule be renamed to Rate DPA, Distribution Pole Attachment Rate, thereby limiting the attachments to distribution poles.[143] There were no objections to this tariff change from the intervenors. The Commission will approve Duke Kentucky's proposed changes to this tariff; however, the rates proposed by Duke Kentucky will not be approved as they were calculated using a rate of return based on a 10.30 percent ROE. Therefore,

---

[142] Sailers Rebuttal Testimony at 15.

[143] Sailers Testimony at 18.

the Commission has recalculated the proposed pole attachment rates using the Commission approved ROE of 9.725 percent and will approve a two-user-pole rate of $5.92 and a three-user-pole rate of $4.95. Because this change to the proposed pole attachment rates will impact revenue, the Commission has made an adjustment to increase Duke Kentucky's revenue requirement in the amount of $15,601.

Cogeneration and Small Power Production Sale and Purchase Tariffs ("Cogen Tariffs"). Duke Kentucky has two Cogen Tariffs, one for cogeneration facilities that are 100 kW or less ("Small Cogen Tariff") and one for cogeneration facilities that are greater than 100 kW ("Large Cogen Tariff"). For the Small Cogen Tariff, Duke Kentucky is proposing to revise the Energy Purchase Rate to reflect avoided energy cost equal to a two-year average PJM Locational Marginal Price ("LMP") at the Duke Energy node. The Energy Purchase for the Large Cogen Tariff is based on the PJM real-time LMP for power at the DEK Aggregate price node for each hour of the billing month.

For both Cogen Tariffs, Duke Kentucky proposes to recover required energy purchases through the FAC as an economy energy purchase. Duke is also proposing to add a Capacity Purchase Rate to both Cogen tariffs that will be based on the Company's avoided capacity cost in Duke Kentucky's last Integrated Resource Plan, which was reviewed in Case No. 2014-00273.[144] Duke Kentucky proposes to adjust the Capacity Purchase Rate after the Commission completes its review of the next IRP, which is due to be filed in June 2018. Due to the fact that Duke Kentucky may need to purchase

[144] Case No. 2014-00273, *2014 Integrated Resource Plan of Duke Energy Kentucky, Inc.* (Ky. PSC Sept. 23, 2015).

capacity to meet its own resource needs in PJM, it is proposing to reconcile and recover costs of any purchases of capacity under these tariffs through Rider PSM.

Duke Kentucky is also proposing to add language to both of its Cogen Tariffs stating that no capacity purchase will be made if the qualifying facility cannot satisfy the Company's capacity need or the Company does not have a capacity need.

The Commission finds that the proposed changes to Duke Kentucky's Cogen Tariffs should be approved except as discussed below.

Capacity Rate. Duke Kentucky's calculation of the capacity rate used an ROE of 10.3 percent. As the ROE approved in this proceeding is 9.725 percent, the Commission has recalculated the capacity rate using an ROE of 9.725 percent and will approve a capacity rate of $3.61 per kW-month.

Language related to Capacity Purchases. 807 KAR 5:054, Section 6 states, in relevant part, as follows:

> (1) Each electric utility shall purchase any energy and capacity which is made available from a qualifying facility except as provided in subsections (2) and (3) of this section.
>
> (2) The qualifying facility's right to sell power to the utility shall be curtailed in periods when purchases from qualifying facilities will result in costs greater than those which the utility would incur if it generated an equivalent amount of energy instead of purchasing that energy.
>
> (3) During any system emergency, an electric utility may discontinue:
>
> (a) Purchases from a qualifying facility if such purchases would contribute to such emergency; and
>
> (b) Sales to a qualifying facility if discontinuance is nondiscriminatory.

The Commission finds that Duke Kentucky's proposed language stating that no capacity purchase will be made if the qualifying facility cannot satisfy Duke Kentucky's capacity need or when Duke Kentucky does not have a capacity need is inconsistent with the requirements of 807 KAR 5:054, Section 6(1). The regulation requires Duke Kentucky to purchase energy and capacity from a qualifying facility except as set forth in subsections 2 and 3, both of which do not apply in the language proposed by Duke Kentucky. Therefore, the proposed language should not be approved.

In addition, Duke Kentucky is reminded that 807 KAR 5:054, Section 5, requires all electric utilities with annual retail sales greater than 500 million kWhs to provide data to the Commission from which avoided costs may be derived not less often than every two years unless otherwise determined by the Commission.

Rider DCI and Targeted Underground Program. Duke Kentucky requests authority to implement Rider DCI to recover the incremental capital costs, above what is to be included in base rates, for specific Commission-approved programs aimed at accelerating, improving, and enhancing the performance of Duke Kentucky's electric delivery system in terms of reliability and integrity.[145] Duke Kentucky states that Rider DCI is modeled after similar Commission-approved programs for its gas operations as well as similar mechanisms implemented in by its affiliates in Ohio and Indiana.[146] Duke Kentucky explains that it will file an annual application to set and true-up its Rider DCI for the duration of a Commission-approved program.[147] The annual applications will

---

[145] Henning Testimony at 24.

[146] *Id.*

[147] *Id.*

establish new rider rates based on the actual incremental investment in the eligible plant in service as of the end of each calendar year. The revenue requirement for the rider will include a return on incremental rate base, income taxes on the equity component of the return, property taxes, and depreciation expense associated with the incremental investment. The rider will not include recovery of incremental O&M expenses. Duke Kentucky is proposing to allocate the resulting revenue requirement based on the allocation factors used for the underground distribution equipment from its COSS.

Duke Kentucky is seeking authority for a CPCN to implement a Targeted Underground program to be included in Rider DCI.[148] Duke Kentucky maintains that due to the advancements in consumer electronics, customer expectations are evolving and customers are requiring a higher degree of reliability, performance, and response with respect to the provision of electric service.[149] As part of its philosophy to evolve to meet new and growing customer demands, Duke Kentucky is proposing to implement a Targeted Underground program, which will identify specific areas of the company's distribution system that experience higher-than-acceptable frequency of outages and replace overhead wires with underground cables to harden the system, thereby increasing reliability.[150] The Targeted Underground program will focus on undergrounding certain small overhead distribution conductors which have been identified as having the highest likelihood of outages within Duke Kentucky's distribution

[148] *Id.*

[149] Platz Testimony at 20.

[150] Platz Testimony at 25.

system.[151] The types of overhead line segments that have performed worse as compared to the remainder of Duke Kentucky's overhead facilities are remote lines that are located close to trees and certain line segments located along major thoroughfares.[152] Tree-related customer interruptions and public action (i.e., cars crashing into poles) customer interruptions account for 18 percent and 9 percent, respectively, of all customer interruptions for Duke Kentucky.[153] Duke Kentucky states that it will also ultimately take ownership of those underground service lines that are replaced either as part of the Targeted Underground program or existing customer-owned underground service lines that experience a failure and are replaced by Duke Kentucky.[154] Duke Kentucky maintains that hardening these underperforming line segments provides broad benefits for all customers while addressing these poor performing areas.[155] Over the next 10 years, Duke Kentucky expects to spend approximately $67 million as part of its Targeted Underground efforts.[156]

The Attorney General, Kroger, and NKU recommend that Rider DCI be rejected. The Attorney General argues that automatic capital and investment adjustment clauses, such as Rider DCI, are poor policies and do not allow the requisite amount of regulatory review that is provided in a full base-rate proceeding.[157] The Attorney General contends

---

[151] Platz Testimony at 25–26.

[152] Platz Testimony at 27.

[153] *Id.*

[154] Platz Testimony at 26.

[155] *Id.*

[156] Platz Testimony at 28–29.

[157] Baudino Testimony at 46.

that Duke Kentucky has failed to quantify any customer benefits associated with either Rider DCI or the Targeted Underground Program.[158] The Attorney General also contends that the areas that have been identified by Duke Kentucky as experiencing higher than average outages should be considered a high priority and addressed by the company as part of its normal budgeting and system operations regardless of the existence of Rider DCI.[159] Should the Commission consider approving Rider DCI, the Attorney General recommends that the Commission take the following into consideration: 1) Rider DCI should be limited to a three-year pilot program; 2) Duke Kentucky should only be allowed to include actual investment costs after the year they are closed to plant in service; 3) the inclusion of a yearly 2.5 percent cap on rate increases associated with Rider DCI; 4) the inclusion of a cumulative cap of 5 percent on rate increases from Rider DCI between base rate cases; and 5) offsets that reflect the build-up of accumulated depreciation and ADIT associated with investments included in Rider DCI during the period that the mechanism is in effect.[160]

NKU states that Duke Kentucky has not demonstrated that the costs to be recovered through Rider DCI are volatile, unpredictable, or outside its control.[161] NKU argues that the risk of recovery of these costs is mitigated by Duke Kentucky's use of a forecasted test year and that, to the extent the projects that would be recovered under Rider DCI are prudent projects that are beneficial to consumers, Duke Kentucky should

---

[158] Baudino Testimony at 47.

[159] Baudino Testimony at 49.

[160] Baudino Testimony at 52–54.

[161] Direct Testimony of Brian C. Collins at 14.

plan the projects as part of the normal capital budgeting process and include the project costs in future rate cases.[162]

Kroger argues that the proposed DCI rider amounts to single-issue ratemaking and reduces Duke Kentucky's incentive to manage its costs effectively, particularly with respect to the proposed Targeted Underground program.[163]

On rebuttal, Duke Kentucky asserts that recovery of any costs associated with the proposed Targeted Underground program through Rider DCI will be subjected to greater scrutiny because those would be the only costs that would be the subject of review in any Rider DCI proceeding.[164] Duke Kentucky avers that in these separate rider proceedings, the company would have more detailed cost estimates for the near-term work to be performed and would not be able to recover costs until the plant was in service.[165] Thus, according to Duke Kentucky, the Commission would have greater transparency into how Duke Kentucky's program is impacting reliability performance for customers.[166] Further, Duke Kentucky maintains that it would have the burden of proof that any new program would be reasonable and performed at a reasonable cost prior to cost recovery being included in Rider DCI.[167]

---

[162] *Id.*

[163] Bieber Testimony at 4, 13–14.

[164] Rebuttal Testimony of Anthony J. Platz ("Platz Rebuttal") at 3.

[165] *Id.*

[166] *Id.*

[167] Platz Rebuttal at 5.

Duke Kentucky also takes issue with the Attorney General's argument that the company has failed to quantify the benefits of the proposed Targeted Underground program, noting that the company provided those quantifications in response to the Attorney General's discovery requests, which were referenced by one of the Attorney General's witnesses in the pre-filed testimony.[168] Duke Kentucky argues that the Targeted Underground program would reduce major event day ("MED") outage events by 16 percent and reduce MED outage duration by 15–20 percent.[169]

Having reviewed the record, the Commission finds that Duke Kentucky has failed to establish a need for either Rider DCI or the Targeted Underground program. Rider DCI and the Targeted Underground program are designed to improve and enhance Duke Kentucky's electric distribution system and to allow Duke Kentucky timely cost recovery of those investments. The record, however, indicates that Duke Kentucky's electric distribution system is performing well based on customer expectations and reliability metrics. As noted in the pre-filed testimony of Mr. James P. Henning and according to a J.D. Power 2017 Electric Utility Residential Customer Satisfaction Study, the overall satisfaction scores of Duke Kentucky Energy Midwest, which includes Duke Kentucky, outperformed both the Midwest Region average scores and the large utility industry average, finishing in the second quartile among large utilities nationally.[170] The J.D. Power 2017 Electric Utility Residential Customer Satisfaction Study calculates overall

[168] Platz Rebuttal at 5–6.

[169] Platz Rebuttal at 7.

[170] Henning Testimony at 13; *See also*, Henning Testimony, Exhibit JPH–1.

customer satisfaction based on six performance areas.[171] One of those performance areas is power quality and reliability, which was weighted the highest at 28 percent.[172]

In addition, Duke Kentucky conducts internal customer satisfaction studies, which surveys residential customers who have had a recent service interaction with the company.[173] The internal customer satisfaction surveys show that Duke Kentucky customers were highly satisfied overall with the services provided by Duke Kentucky and that the level of customer satisfaction was either steady or improving.[174] In particular, one of the processes measured in the internal customer satisfaction study was outage restoration and experiences.[175] The study indicates that 77 percent of Duke Kentucky residential customers were highly satisfied with their overall outage and restoration experience.[176]

Lastly, Duke Kentucky witness Anthony J. Platz testified that Duke Kentucky's distribution system has performed well and that the company's reliability scores have exceeded industry average reliability scores and are among the best performing throughout Duke Energy's six-state electric service areas.[177]

---

[171] Henning Testimony at 12.

[172] Henning Testimony, Exhibit JPH–1 at 2 of 17.

[173] Henning Testimony at 13.

[174] Henning Testimony at 14.

[175] Henning Testimony at 14–15.

[176] Henning Testimony, Exhibit JPH–2 at 2–3 of 24.

[177] Platz Testimony at 13–15. Duke Kentucky's 2016 Customer Average Interruption Duration Index ("CAIDI"), which measures the average interruption duration or average time to restore service per interrupted customer was 130 minutes, excluding major event days. Duke Kentucky's 2016 System Average Interruption Duration Index ("SAIDI"), which measures the average time each customer was interrupted, 99 minutes, excluding major event days. Duke Kentucky's 2016 System Average Interruption Frequency Index ("SAIFI"), which measures the average number of interruptions that a customer would experience, was 0.76 interruptions, excluding major event days.

Duke Kentucky states that Rider DCI is modeled after its existing riders to recover costs associated with the accelerated replacements of gas pipeline mains and service lines. We note, however, that the need to have a surcharge mechanism to timely recover the substantial investments required to replace aging and bare steel gas pipelines with polyethylene pipelines was based on a public safety concern that those gas pipelines be replaced on an accelerated schedule in order to minimize the risk of a catastrophic pipeline failure. In the instant proceeding, Duke Kentucky has identified no critical system-wide need to justify the implementation of a surcharge to recover costs associated with improvements to the company's distribution system. We note that the proposed Targeted Underground program targets only discrete sections of Duke Kentucky's distribution system that have experienced higher outage occurrences as compared to the rest of the company's distribution system.[178] The Targeted Underground program would impact approximately 5,600 customers over the next 10 years, but at a cost of almost $67 million.[179] While Duke Kentucky projects that there will be a reduction in MED outage events by 16 percent and a reduction in MED outage duration by 15–20 percent, the Targeted Underground program would have no impact on the projected frequency of system outages as measured by SAIFI and would have very little impact in the projected duration of a customer's outage as measured by SAIDI.[180] Given the absence of a need

[178] Duke Kentucky identified approximately 140 miles of overhead distribution lines that will need to be placed underground and approximately 5,600 customers impacted by the Targeted Underground program over the next 10 years. *See*, Duke Kentucky's response to the Attorney General's Second Data Request, Item 41.

[179] Platz Testimony at 28 – 29.

[180] Duke Kentucky's response to the Attorney General's First Data Request, Item 89. Duke Kentucky forecasted that system-wide SAIDI would improve by from 66 minutes to 60 minutes due to the Targeted Underground program.

and the limited impact of the proposed Targeted Underground program and Rider DCI, the Commission finds that any such distribution related improvements should be performed by Duke Kentucky as part of its normal operations and those costs should be recovered in base rates and not through a surcharge mechanism.

Rate UDP-R, Underground Residential Distribution Policy. Duke Kentucky is proposing to add language to this tariff to create the ability for the Company to pay for and own, with revenues to be recovered through Rider DCI, underground installations associated with the Targeted Underground program. Since neither Rider DCI nor the Targeted Underground program are being approved, the Commission denies this tariff change.

Rate UDP-G, General Underground Distribution Policy. Duke Kentucky is proposing to add language to this tariff to create the ability for the Company to pay for and own, with revenues to be recovered through Rider DCI, underground installations associated with the Targeted Underground program. Since neither Rider DCI nor the Targeted Underground program are being approved, the Commission denies this tariff change.

Rate RTP. Duke Kentucky is proposing to combine the energy delivery charge and ancillary services charge. Duke Kentucky is also proposing to correct the reference to the "PJM Real-Time Total Locational Marginal Price" to "PJM Day-Ahead Total Locational Marginal Price." There were no objections to this tariff change from the intervenors. The Commission finds that the proposed tariff change is reasonable and should be approved.

Rider FTR, FERC Transmission Cost Reconciliation Rider. Duke Kentucky is proposing to implement Rider FTR, which is intended to recover or credit specific PJM transmission costs. The specific costs include network integration transmission service, both firm and non-firm point-to-point market administration fees, and potentially other transmission costs that may be billed in the future related to serving retail load that is above or below the level included in the Company's base rates established in this proceeding. Duke Kentucky is also proposing that the rider track incremental changes in costs associated with PJM's Regional Transmission Expansion Plan costs that are incremental to what the Company is proposing to include in its base rates.[181]

On a quarterly basis, Duke Kentucky proposes to adjust Rider FTR based on the most recent actual monthly invoices received from PJM. Duke Kentucky also proposes to submit to an annual review of this rider by the Commission of the invoiced costs and the revenue collected under the rider. The rider will be filed 30 days before it is scheduled to go into effect.[182]

Both the Attorney General and NKU filed testimony recommending that Rider FTR be rejected by the Commission. The Attorney General's witness, Mr. Lane Kollen, states that the rider would increase the retail revenue requirement in real time based on net expense pursuant to FERC tariffs, and would change recovery from a fixed amount based on the test-year expense revised with periodic base rate increases to a series of automatic quarterly Rider FTR rate increases. Mr. Kollen also states that Rider FTR "would change

[181] Wathen Testimony at 18.

[182] Wathen Testimony at 19.

Duke Kentucky's incentives to attempt to influence these expenses or to reduce other expenses to compensate for the increases in these expenses due to the selective single nature of these expenses."[183] NKU witness Mr. Brian Collins argues that Duke Kentucky has not demonstrated that the incremental transmission costs not included in base rates proposed to be recovered through Rider FTR would significantly impact Duke Kentucky's ability to earn its authorized rate of return.

After reviewing the evidence of record in this proceeding, the Commission finds that Duke Kentucky's proposed Rider FTR should not be approved. Although the Commission is aware that it recently approved a similar rider for Kentucky Power in Case No. 2017-00179, the decision in that proceeding was based on evidence which demonstrated that Kentucky Power's transmission costs were significant and volatile; therefore, the approval of such a rider was warranted in that proceeding. Duke Kentucky testified during the hearing in this matter that Duke Kentucky's transmission rates are significantly less than those for Kentucky Power and "the volatility has a much bigger impact" on Kentucky Power than Duke Kentucky.[184] The Commission finds no evidence in this proceeding to suggest that the proposed FTR is warranted for Duke Kentucky at this time.

Budget Payment Plan. Duke Kentucky's current and initially proposed tariff do not comply with 807 KAR 5:006, Section 14(2)(a)(3), which requires that the provisions of the budget payment plan be included in a utility's tariffed rules. Through discovery, Duke

---

[183] Kollen Testimony at 62.

[184] March 7, 2018 Hearing at 3:50:48.

Kentucky indicated that it would be willing to include the provisions of the budget payment plan in its tariff.[185] Duke Kentucky is directed to do so when filing its compliance tariff.

Pick Your Own Due Date and Usage Alerts and Outage Alerts with AMI. Duke Kentucky is proposing to implement a pick your own due date billing option and a Usage Alerts and Outage Alerts with AMI service; however, Duke Kentucky did not include the provisions of these items in its proposed tariff. Through discovery, Duke Kentucky indicated that it would be willing to include the provisions of these programs/services in its tariff.[186] Duke Kentucky is directed to do so when filing its compliance tariff.

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

Bill and Bill Format. Duke Kentucky is proposing to update its bill format to reflect the riders proposed in this case and the new company logo. The Commission approves Duke Kentucky's proposal to change its bill format to the extent that the bill reflects the riders and rates approved herein.

Duke Kentucky's tariff contains its bill format, which consists of three pages. However, when Duke Kentucky bills its customers, it does not include page 2, which contains the billing details, unless the customer checks a block that indicates he or she would like to receive page 2. The Commission finds that page 2 provides customers with the ability to check the accuracy of the bill and should be sent to every customer. With this Order, the Commission will require the entire bill be sent to every customer, thereby

---

[185] Duke Kentucky's Response to Staff's Second Request, Item 9 c.

[186] Duke Kentucky's Response to Commission Staff's Third Request for Information ("Staff's Third Request"), Item 6 b.

eliminating the requirement that the customer elect to receive the entire bill. This directive applies to all Duke Kentucky customers, including those that are gas customers only.

Tariff Format. Numerous tariff pages Duke Kentucky submitted in this case did not appear to comply with 807 KAR 5:006, Section 3(4), which states "[e]ach tariff sheet shall contain a blank space at its bottom right corner that measures at least three and one-half (3.5) inches from the right of the tariff sheet by two and one-half (2.5) inches from the bottom of the tariff sheet to allow space for the commission to affix the commission's stamp." This ensures that no language is obscured by the Commission's stamp. When filing its compliance tariff reflecting the rates, rules, and terms of service approved in this Order, Duke Kentucky should ensure that all of its tariff pages comply with 807 KAR 5:006, Section 3(4).

Rider DSM, Demand-Side Management. The Commission finds that, upon the implementation of new base rates, the Lost Revenue from Lost Sales Recovery component of Duke Kentucky's DSM cost-recovery rider should be reset to zero. Duke Kentucky's compliance tariff should reflect this revision to Rider DSM.

KSBA Recommendations. The KSBA made certain recommendations that the Commission will address herein.

1. Elimination of Demand Ratchet from Rate DS. KSBA witness Mr. Ron Willhite recommends that the Commission eliminate the demand ratchet from Rate DS for P–12 public and private schools or alternatively minimize the demand ratchet for said schools billed under this rate schedule. KSBA argues that Duke Kentucky is a summer peaking utility and that schools are not typically in session during the summer peak but peak during the month of September. As a result, because of the demand ratchet for

Rate DS, a school's September billing demand becomes the basis for demand billing in many of the non-summer revenue months. Mr. Willhite states that schools billed under Rate DS are subsiding other customers within the class and that the demand ratchet for schools should be eliminated or reduced. As an alternative, Mr. Willhite suggests the establishment of a new P–12 School Tariff. Duke Kentucky opposes the creation of a new P–12 School Tariff, stating that Mr. Willhite provided no information that specifically demonstrates how the energy demand requirements of schools are substantially dissimilar from other Rate DS Rate DS.

The Commission is not convinced that public school usage characteristics support special treatment compared to other customers serviced under Rate DS and will not approve KSBA's recommendation.

2. Rate SP, Seasonal Sports Service. KSBA recommends that the Commission allow some sports fields to move to Rate SP. Currently, Rate SP is a closed tariff and has been closed since June 25, 1981. According to KSBA, subsequent to 1981new sports fields are being served on Rate DS and must pay a demand charge and minimum payments based on off-peak night-time load in the months they are not in full operation. KSBA argues that sports fields clearly are not similar to other commercial and industrial loads served on Rate DS. KSBA states that it is aware of three sports fields that are interested in taking service under the closed tariff. Duke Kentucky is opposed to reopening the tariff, stating that KSBA has not met the burden of proof to establish the reasonableness of re-opening Rate SP.

At the hearing in this matter, Duke Kentucky could not explain why the tariff was closed or whether it had been reopened temporarily over the intervening years. In its post-hearing brief, Duke Kentucky stated that it was closed due to lack of interest and has remained closed since 1981. The Commission finds that the load for sports fields would differ significantly from that of other customers and that Duke Kentucky should be directed to reopen Rate SP permanently. Given that there will be a revenue impact to Duke Kentucky if current customers move to Rate SP, the Commission will allow Duke Kentucky to defer the difference between what it would have billed the sports field customer under its current rate and what it will bill under Rate SP as a regulatory asset and request recovery in its next base-rate proceeding.

3. Funding for SEMP, School Energy Manager Program. KSBA recommends that the Commission require Duke Kentucky to fund the SEMP through shareholder funds. Mr. Willhite states that public schools must pursue energy savings pursuant to KRS 160.325 and that SEMP has significantly improved cost savings for schools in the territories of other jurisdictional utilities. Duke Kentucky opposes Mr. Willhite recommendation, stating that he does not "offer any evidence that shows the Company's choice not to fund SEMP to date has somehow prevented school districts in the Company's service territory from moving forward with meaningful energy efficiency programs."[187]

The Commission agrees with Duke Kentucky on this issue and will not approve KSBA's recommendation to require Duke Kentucky to fund SEMP.

2018 ENVIRONMENTAL COMPLIANCE PLAN AND ENVIRONMENTAL SURCHARGE

[187] Duke Kentucky's Post-Hearing Brief at 119–120.

As part of this proceeding, Duke Kentucky filed an application, pursuant to KRS 278.183, for authority to establish and assess an environmental surcharge rider ("Rider ESM") and for approval of its environmental compliance plan ("2018 Plan").[188] KRS 278.183 provides that a utility shall be entitled to the current recovery of its costs of complying with the Federal Clean Air Act ("CAA") as amended and those federal, state, or local environmental requirements that apply to coal combustion wastes and by-products from facilities utilized for the production of energy from coal. Pursuant to KRS 278.183(2), a utility seeking to recover its environmental compliance costs through an environmental surcharge must first submit to the Commission a plan that addresses compliance with the applicable environmental requirements. The plan must also include the utility's testimony concerning a reasonable return on compliance-related capital expenditures and a tariff addition containing the terms and conditions of the proposed surcharge applied to individual rate classes. Within six months of submission, the Commission must conduct a hearing to:

(a) Consider and approve the compliance plan and rate surcharge if the plan and rate surcharge are found reasonable and cost-effective for compliance with the applicable environmental requirements;

(b) Establish a reasonable return on compliance-related capital expenditures; and

(c) Approve the application of the surcharge.

---

[188] Duke Kentucky's Application and witness testimony refers to the environmental compliance plan as the 2017 Plan. In prior compliance plan orders, the Commission has named the plan according to the year in which the order is issued. Accordingly, the Commission will refer to the subject environmental compliance plan as the 2018 Plan.

The 2018 Environmental Compliance Plan

As required by KRS 278.183, Duke Kentucky filed its 2018 Plan, consisting of five projects necessary to comply with the CAA or other environmental regulations applicable to coal combustion wastes and by-products. Duke Kentucky's 2018 Plan reflects environmental compliance costs at its only coal-fired generation facility, East Bend. The projects include:[189]

1. Project EB020290 Lined Retention Basin West;
2. Project EB020745 Lined Retention Basin East;
3. Project EB020298 East Bend SW/PW Reroute;
4. ARO amortization for Pond Closure; and
5. Consumables (Reagents and emission allowances).

The 2018 Plan includes projects that were previously approved Case Nos. 2015-00187[190] and 2016-00398.[191] At the time of the filing of this case, two projects at East Bend were in progress, with planned in-service dates after the test period in this proceeding.[192]

---

[189] Application at 16.

[190] Case No. 2015-00187, *Application of Duke Energy Kentucky Inc. for an Order Approving the Establishment of a Regulatory Asset for the Liabilities Associated with Ash Pond Asset Retirement Obligations* (Ky. PSC Dec. 15, 2015). The Commission approved Duke Kentucky's proposed accounting treatment to classify ARO costs for the East Bend Ash Pond, including amortization and depreciation expenses, closure costs, and carrying charges on the unamortized balance as regulatory assets for 2015 and subsequent years ("East Bend Coal Ash ARO regulatory asset").

[191] Case No. 2016-00398, *Electronic Application of Duke Energy Kentucky, Inc. for a Certificate of Public Convenience and Necessity Authorizing the Company to Close the East Bend Generation Station Coal Ash Impoundment and for All Other Required Approvals and Relief* (Ky. PSC June 6, 2017). Duke Kentucky received certificates of public convenience and necessity to close and repurpose its existing East Bend ash impoundment and construct new water redirection and wastewater treatment systems.

[192] Application at 17. Construction has begun for the process water system and pond repurposing projects.

Duke Kentucky states that the pollution control projects included in the 2018 Plan amendment are necessary for Duke Kentucky to comply with the CAA and other federal, state, and local regulations, which apply to coal combustion wastes and by-products from facilities utilized for the production of energy from coal.

Environmental Requirements

Clean Air Interstate Rule and Cross-State Air Pollution Rule. The Clean Air Interstate Rule ("CAIR") and Cross-State Air Pollution Rule ("CSAPR") are regional rules that set state-level annual standards for the emission of sulfur dioxide ("SO_2") and nitrogen oxides ("NO_x") from electric generating units.[193] Published in the Federal Register on October 26, 2016, the CSAPR Update reduced the number of ozone season NO_x allowances for East Bend effective January 1, 2017.[194] The East Bend selective catalytic reduction controls and allowances from Duke Kentucky's retired Miami Fort Unit 6 station are expected to comply with the CSAPR Update, but East Bend can also buy allowances on the market if necessary.[195]

CCR Rule. Coal combustion residuals ("CCRs") include fly ash, bottom ash, and flue-gas desulfurization byproducts. The Disposal of Coal Combustion Residuals from Electric Utilities Final Rule ("CCR Rule") was published as a Subtitle D, nonhazardous waste rule on April 17, 2015. The CCR Rule includes dam safety requirements for ash ponds and new requirements for the handling, disposal, and beneficial reuse of CCRs

[193] Direct Testimony of Tammy Jett ("Jett Testimony") at 5.

[194] *Id.*

[195] *Id.* at 6.

except when reused in encapsulated applications, such as concrete and wallboard.[196] Together with the Steam Electric Effluent Limitation Guidelines Final Rule ("ELG Rule"), the CCR Rule requires dry handling of fly and bottom ash, increased use of landfills, closure of existing wet ash storage ponds, and alternative wastewater treatment systems.[197]

ELG Rule. The ELG Rule was published on November 3, 2015, and sets requirements for wastewater streams, including fly ash and bottom ash wastewaters, at steam electric generating units.[198] Compliance activities include converting ash handling systems from wet to dry handling and clean closure of the existing East Bend Ash Pond. The ELG Rule compliance deadline was originally set for November 1, 2018, through December 31, 2023, but has been stayed as the EPA requests reconsideration. However, East Bend's compliance projects schedules are not impacted, as the ELG Rule was not the only driver.[199]

RIDER ESM

Duke Kentucky is proposing a new tariff to implement Rider ESM. Through discovery, Duke Kentucky was made aware of inconsistencies in the Rider ESM tariff and proposed changes through rebuttal testimony to make the tariff consistent with the proposed mechanism.[200] The Commission finds that the tariff as discussed and modified

---

[196] Jett Testimony at 11–12.

[197] *Id.* at 12.

[198] *Id.* at 12–13.

[199] *Id.*

[200] Lawler Rebuttal at 12–13.

in this order should become effective for service rendered on and after the date of this order.

Costs Associated with the 2018 Plan. Duke Kentucky proposes to recover the costs associated with the amortization of the East Bend Coal Ash ARO regulatory asset, including projected costs, on a levelized basis over ten years.[201] The Attorney General recommends that the Commission authorize recovery of current ARO–related costs in the second month after they are incurred and of amortization of only previously incurred costs.[202] The Attorney General explains that KRS 278.183(2) allows recovery of environmental compliance costs "in the second month following the month in which they are incurred" and, furthermore, that recovery of ARO–related costs before they are actually incurred would result in increased current income tax expense and negative deferred income tax expense, which would increase E(m).[203] The Commission concurs with the Attorney General that KRS 278.183 does not allow for recovery of projected or estimated costs. Therefore, the Commission finds that Duke Kentucky should amortize only the actual balance of the East Bend Coal Ash ARO regulatory asset over 10 years and recover additional actual costs associated with the settlement of the East Bend Coal Ash ARO in the second month after they are incurred.

Duke Kentucky has identified the environmental compliance costs for the 2018 Plan projects and these are the costs that Duke Kentucky proposes to recover through

---

[201] Lawler Testimony at 11–12.

[202] Kollen Testimony at 60.

[203] *Id.* at 59–60.

its environmental surcharge. Duke Kentucky has removed these costs from the base period and excluded these costs from its forecasted period in this proceeding to ensure that no costs are recovered through its base rates and Rider ESM.[204] The costs identified here by Duke Kentucky, as modified above, are eligible for surcharge recovery if they are shown to be reasonable and cost-effective for complying with the environmental requirements specified in KRS 278.183. The Commission finds that the costs identified for the 2018 Plan projects have been shown to be reasonable and cost-effective for environmental compliance. Thus, they are reasonable and should be approved for recovery through Duke Kentucky's environmental surcharge.

Qualifying Costs. The qualifying costs included in E(m) will reflect only the Commission-approved environmental projects from the 2018 Plan. Should Duke Kentucky desire to include other environmental projects in the future, it will have to apply for an amendment to its approved compliance plan.

Rate of Return. As specified in this order, Duke Kentucky is authorized to use a 9.725 percent return on equity that will be utilized in Rider ESM to determine the Weighted Average Cost of Capital ("WACC").

Capitalization and Gross Revenue Conversion Factor. As specified in this order and proposed by Duke Kentucky, Duke Kentucky should utilize a WACC of 6.830 percent and a gross revenue conversion factor ("GRCF") of 1.337304[205] in determining the rate of return to be used in the monthly environmental surcharge filings. Duke Kentucky

[204] Application at 17 and Lawler Testimony at 9.

[205] Lawler Rebuttal, Attachment SEL-Rebuttal-2(b), page 3 of 11. Duke Kentucky's proposed GRCF has been updated for the 21 percent federal income tax rate.

proposes to update the WACC and GRCF when it files a base rate case. The WACC and GRCF should remain constant until such time as the Commission sets base rates in Duke Kentucky's next base rate case proceeding.

Surcharge Mechanism and Calculation. As proposed by Duke Kentucky, the environmental revenue requirement ("E(m)") is comprised of a return on the environmental compliance rate base, plus specified environmental compliance operating expenses, less proceeds from emission allowance sales, plus or minus prior period adjustments as determined by the Commission during six-month and two-year review cases, plus or minus surcharge over- or under-recovery adjustments.[206] Environmental compliance rate base is defined as electric plant in service for specified environmental compliance projects adjusted for accumulated depreciation, accumulated deferred income taxes, accumulated investment tax credits, construction work in progress, and emission allowance inventory.

To calculate the monthly Rider ESM factor, Duke Kentucky proposes to divide the E(m) by the average revenues excluding Rider ESM revenue of the preceding 12-month period ("R(m)").

Surcharge Allocation. Duke Kentucky proposes to allocate the E(m) to residential[207] and nonresidential[208] rate schedules on the basis of the percentage of total

[206] Lawler Rebuttal, Attachment SEL-Rebuttal 1(b).

[207] *Id.* Residential includes the following rate schedules: Residential Service.

[208] *Id.* Nonresidential includes the following rate schedules: Service at Secondary Distribution Voltage, Optional Rate for Electric Space Heating, Seasonal Sports Service, Service at Primary Distribution Voltage, Time-of-Day Rate for Service at Distribution Voltage, General Service Rate for Small Fixed Loads, Time-of-Day Rate for Service at Transmission Voltage, Street Lighting Service, Traffic Lighting Service, Unmetered Outdoor Lighting, Street Lighting Service for Nonstandard Units, Street Lighting Service – Customer Owned, Street Lighting Service – Overhead Equipment, and LED Outdoor Lighting Service.

R(m) for the 12-month period ending with the current expense month. Rider ESM will be implemented as a percentage of R(m) for the Residential rate schedule and as a percentage of R(m) excluding fuel revenues for Nonresidential rate schedules.[209]

Duke Kentucky proposes to utilize a jurisdictional allocation ratio of 100 percent to allocate E(m) to native retail customers because Duke Kentucky has no firm wholesale customers and PJM Manual 15 does not allow nonvariable production costs to be included in offer cost components.[210] The Commission finds this argument unpersuasive.[211] The jurisdictional allocation ratio should be calculated as total jurisdictional retail revenues excluding Rider ESM revenues, divided by total company revenues excluding Rider ESM revenues, consistent with all other electric utilities that have an environmental surcharge mechanism pursuant to KRS 278.183.

Monthly Reporting Forms. Duke Kentucky provided proposed monthly reporting forms to be used in the monthly environmental reports.[212] Duke Kentucky provided revised forms to make clerical adjustments and revisions necessary to align the forms with the revised Rider ESM tariff.[213] The Commission finds that Duke Kentucky's proposed monthly environmental surcharge reporting forms, as revised through testimony and this order, should be approved.

---

[209] Lawler Rebuttal at 12.

[210] Lawler Testimony, Attachment SEL-2, page 2 of 10, and Duke Kentucky's response to Commission Staff's Third Request for Information ("Staff's Third Request"), Item 3.

[211] *See* Case No. 1994-00332, *The Application of Louisville Gas and Electric Company for Approval of Compliance Plan and to Assess a Surcharge Pursuant to KRS 278.183 to Recover Costs of Compliance with Environmental Requirements for Coal Combustion Wastes and By-Products* (Ky. PSC Apr. 6, 1995), Order Denying Rehearing at 1–2.

[212] Lawler Testimony, Attachment SEL-2.

[213] Lawler Rebuttal, Attachments SEL-Rebttual-2(a) and SEL-Rebuttal-2(b).

IT IS THEREFORE ORDERED that:

1. The rates and charges proposed by Duke Kentucky are denied.

2. The rates and charges, as set forth in Appendix C to this Order, are approved as fair, just, and reasonable rates for Duke Kentucky and these rates and charges are approved for service rendered on and after April 14, 2018.

3. Duke Kentucky's depreciation rates, as modified herein, are approved.

4. Duke Kentucky's proposal for a deferral mechanism for planned outage expense is approved.

5. Duke Kentucky's request to amortize the East Bend O&M regulatory asset over a ten-year period is approved.

6. Duke Kentucky's carrying charges on the East Bend O&M regulatory asset shall be based on its cost of debt.

7. Duke Kentucky request to amortize the East Bend Ash Pond ARO over a ten-year period is approved.

8. Duke Kentucky proposal for a deferral mechanism for replacement power expense is approved.

9. Duke Kentucky, in conjunction with DEBS, shall bid the next MAVMS contract for the Midwest market that includes Kentucky, Indiana, and Ohio and for a smaller geographic area limited to Duke Kentucky's service territory. The smaller geographic area shall include Duke Kentucky's service territory by itself or by county or such other discrete area(s) within its service territory that it deems to be reasonable. Duke Kentucky shall also provide an update of this process in each annual VMP filings beginning with the 2019 VMP.

10. Duke Kentucky's request to implement a Fixed Bill Program is denied.

11. Duke Kentucky's request to cancel and withdraw Rate RTP – M is approved.

12. Duke Kentucky's request to revise Rate TT as discussed herein is approved.

13. Duke Kentucky's request to revise Rate DT as discussed herein is approved.

14. Duke Kentucky's request to revise Rate LED is approved as modified herein.

15. Duke Kentucky's request to cancel and withdraw Rate OL is approved.

16. Duke Kentucky's request to cancel and withdraw Rate NSP is approved.

17. Duke Kentucky's request to revise Rate LM as discussed herein is approved.

18. Duke Kentucky's request to revise Rate MDC as discussed herein is approved.

19. Duke Kentucky's request to revise Rider GSS as discussed herein is approved.

20. Duke Kentucky's request to revise Rider FAC is approved as directed herein.

21. Duke Kentucky's request to revise and modify Rider PSM is approved as directed herein. Duke Kentucky shall notify the Commission within seven days of incurring any capacity performance assessments from PJM.

22. Duke Kentucky's request to modify its reconnection fees is approved as modified herein.

23. Duke Kentucky's request to revise Rate CATV is approved as modified herein.

24. Duke Kentucky's request to revise its Cogen Tariffs is denied in part and granted in part. Duke Kentucky's request to include language in its Cogen Tariffs limiting capacity purchases from qualifying facilities is denied. Duke Kentucky's request to revise its capacity rate is approved as modified herein. All other proposed revisions to the Cogen Tariffs are approved.

25. Duke Kentucky's request to implement Rider DCI is denied.

26. Duke Kentucky's request for a CPCN to implement the Targeted Underground program is denied.

27. Duke Kentucky's request to make revisions to Rate UDP – R and Rate UDP – G related to the Targeted Underground program is denied.

28. Duke Kentucky's request to revise Rate RTP as discussed herein is approved.

29. Duke Kentucky's request to implement Rider FTR is denied.

30. Duke Kentucky's 2018 Environmental Compliance Plan is approved.

31. Duke Kentucky shall file its Budget Payment Plan tariff in compliance with 807 KAR 5:006, Section 14(2)(a)(3).

32. Duke Kentucky shall provide to each of its customers, including gas only customers, the entire content of its bills as provided in its tariff.

33. Duke Kentucky shall ensure that all of its tariff pages comply with 807 KAR 5:006, Section 3(4) when filing its compliance tariff reflecting the rates, rules, and terms of service approved herein.

34. Duke Kentucky shall reopen Rate – SP to allow any sports field to receive service under this rate schedule. Duke Kentucky shall be authorized, for accounting purposes only, to defer the difference between what it would have billed the sports field customer under its current rate and what it will bill under Rate SP as a regulatory asset.

35. Duke Kentucky's Rider ESM tariff, as described in this order, is approved for service rendered on and after the date of this order.

36. The Rider ESM reporting formats described in this order shall be used for the monthly environmental surcharge filings.

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

38. This case is closed and removed from the Commission's docket.

By the Commission

ENTERED

APR 13 2018

KENTUCKY PUBLIC
SERVICE COMMISSION

ATTEST:

Gwen R. Pinson

Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2017-00321 DATED APR 13 2018

Adjustments	Amounts
Adjust Revenue from Base Period to Test Period	($5,133,384)
Adjust Fuel & Purchased Power	($1,284,619)
Adjust Other Production Expense	$12,650,083
Adjust Transmission Expense	$919,747
Adjust Regional Market Expense	$79,447
Adjust Distribution Expense	($43,555)
Adjust Customer Account Expense	$671,968
Adjust Customer Service and Information Expense	$183,121
Adjust Sales Expense	($151,501)
Adjust A &G Expense	($1,497,124)
Adjust Other Operating Expense	$2,680,605
Adjust Other Tax Expense	$2,105,609
Amortization of Deferred Asset	$463,931
Rate Case Expense	$120,538
Eliminate ESM Expense from Base Rates	($12,398,573)
Interest Expense Adjustment (Net)	($107,901)
Eliminate Non-Native Revenue and Expense (Net)	($1,823,636)
Amortization of Deferred Depreciation	$490,618
DSM Elimination (Net)	($225,378)
Eliminate Miscellaneous Expense	($539,892)
Eliminate Unbilled Revenue	$3,258,473
Eliminate Merger CTA Expense	($237,780)
Annualize PJM Charges and Credits	$774,947
Annualize East Bend Maintenance	$4,777,143
Amortization of Deferred Expenses	$6,247,623
Adjust Uncollectible Expense	($1,418,703)
Annualize RTEP Expense	$1,979,833
Adjust Revenue to Reconcile Schedule M with Budget	$4,801,375

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2017-00321 DATED APR 13 2018

DUKE FILED

	Duke Energy KY Electric Capitalization	Adjustment	Capital Ratio	Component Costs	Weigted Avg cost	Grossed Up Cost	Revenue Requirment
Stort Term Debt	$ 73,522,733		10.428%	3.083%	0.321%	0.321%	$ 2,266,706
Long Term Debt	$ 286,807,753		40.679%	4.243%	1.726%	1.726%	$ 12,169,253
Common Equity	$ 344,720,654		48.893%	10.30%	5.036%	8.208%	$ 57,868,571
	$ 705,051,140		100%		7.083%	10.26%	$ 72,304,530

TAX IMPACT

	Duke Energy KY Electric Capitalization	Adjustment	Adjusted Capitalization	Capital Ratio	Component Costs	Weigted Avg cost	Grossed Up Cost	Revenue Requirment	Incremmental revenue requirement
Stort Term Debt	$ 73,522,733		$ 73,522,733	10.428%	3.083%	0.321%	0.321%	$ 2,266,706	$ -
Long Term Debt	$ 286,807,753		$ 286,807,753	40.679%	4.243%	1.726%	1.726%	$ 12,169,253	$ -
Common Equity	$ 344,720,654		$ 344,720,654	48.893%	10.300%	5.036%	6.753%	$ 47,613,375	$ (10,255,196)
	$ 705,051,140		$ 705,051,140	100%		7.083%	8.800%	$ 62,049,334	$ (10,255,196)
				100.000%					

ST DEBT IMPACT

	Duke Energy KY Electric Capitalization	Adjustment	Adjusted Capitalization	Capital Ratio	Component Costs	Weigted Avg cost	Grossed Up Cost	Revenue Requirment	Incremmental revenue requirement
Stort Term Debt	$ 73,522,733	$ (5,125,578)	$ 68,397,155	9.772%	3.083%	0.301%	0.301%	$ 2,108,684	$ (158,022)
Long Term Debt	$ 286,807,753		$ 286,807,753	40.977%	4.243%	1.739%	1.739%	$ 12,169,253	$ -
Common Equity	$ 344,720,654		$ 344,720,654	49.251%	10.300%	5.073%	6.803%	$ 47,613,375	$ -
	$ 705,051,140	$ (5,125,578)	$ 699,925,562	100%		7.113%	8.843%	$ 61,891,312	$ (158,022)
				100.000%					

EAST BEND O&M REG ASSET

	Duke Energy KY Electric Capitalization	Adjustment	Adjusted Capitalization	Capital Ratio	Component Costs	Weigted Avg cost	Grossed Up Cost	Revenue Requirment	Incremmental revenue requirement
Stort Term Debt	$ 68,397,155	$ (3,570,734)	$ 64,826,421	9.772%	3.083%	0.301%	0.301%	$ 1,998,599	$ (110,086)
Long Term Debt	$ 286,807,753	$ (14,973,186)	$ 271,834,567	40.977%	4.243%	1.739%	1.739%	$ 11,533,941	$ (635,312)
Common Equity	$ 344,720,654	$ (17,996,544)	$ 326,724,110	49.251%	10.300%	5.073%	6.803%	$ 45,127,663	$ (2,485,712)
	$ 699,925,562	$ (36,540,465)	$ 663,385,097	100%		7.113%	8.843%	$ 58,660,202	$ (3,231,110)

East End Coal Ash ARO

	Duke Energy KY Electric Capitalization	Adjustment	Adjusted Capitalization	Capital Ratio	Component Costs	Weigted Avg cost	Grossed Up Cost	Revenue Requirment	Incremmental revenue requirement
Stort Term Debt	$ 64,826,421	$ (1,808,733)	$ 63,017,687	9.772%	3.083%	0.301%	0.301%	$ 1,942,835	$ (55,763)
Long Term Debt	$ 271,834,567	$ (7,584,575)	$ 264,249,992	40.977%	4.243%	1.739%	1.739%	$ 11,212,127	$ (321,814)
Common Equity	$ 326,724,110	$ (9,116,038)	$ 317,608,072	49.251%	10.300%	5.073%	6.803%	$ 43,868,541	$ (1,259,122)
	$ 663,385,097	$ (18,509,346)	$ 644,875,751	100%		7.113%	8.843%	$ 57,023,504	$ (1,636,699)

Carbon Management Reg Asset

	Duke Energy KY Electric Capitalization	Adjustment	Adjusted Capitalization	Capital Ratio	Component Costs	Weigted Avg cost	Grossed Up Cost	Revenue Requirment	Incremmental revenue requirement
Stort Term Debt	$ 63,017,687	$ 19,544	$ 63,037,231	9.772%	3.083%	0.301%	0.301%	$ 1,943,438	$ 603
Long Term Debt	$ 264,249,992	$ 81,954	$ 264,331,946	40.977%	4.243%	1.739%	1.739%	$ 11,215,604	$ 3,477
Common Equity	$ 317,608,072	$ 98,502	$ 317,706,574	49.251%	10.300%	5.073%	6.803%	$ 43,882,147	$ 13,605
	$ 644,875,751	$ 200,000	$ 645,075,751	100%		7.113%	8.843%	$ 57,041,189	$ 17,685

ASL Methodology

	Duke Energy KY Electric Capitalization	Adjustment	Adjusted Capitalization	Capital Ratio	Component Costs	Weigted Avg cost	Grossed Up Cost	Revenue Requirment	Incremmental revenue requirement
Stort Term Debt	$ 63,037,231	$ 267,098	$ 63,304,329	9.772%	3.083%	0.301%	0.301%	$ 1,951,672	$ 8,235
Long Term Debt	$ 264,331,946	$ 1,120,024	$ 265,451,970	40.977%	4.243%	1.739%	1.739%	$ 11,263,127	$ 47,523
Common Equity	$ 317,706,574	$ 1,346,177	$ 319,052,751	49.251%	10.300%	5.073%	6.803%	$ 44,068,083	$ 185,936
	$ 645,075,751	$ 2,733,299	$ 647,809,050	100%		7.113%	8.843%	$ 57,282,882	$ 241,693

ROE

	Duke Energy KY Electric Capitalization	Adjustment	Adjusted Capitalization	Capital Ratio	Component Costs	Weigted Avg cost	Grossed Up Cost	Revenue Requirment	Incremmental revenue requirement
Stort Term Debt	$ 63,304,329		$ 63,304,329	9.772%	3.083%	0.301%	0.30%	$ 1,951,672	$ -
Long Term Debt	$ 265,451,970		$ 265,451,970	40.977%	4.243%	1.739%	1.74%	$ 11,263,127	$ -
Common Equity	$ 319,052,751		$ 319,052,751	49.251%	9.725%	4.790%	6.42%	$ 41,607,971	$ (2,460,111)
	$ 647,809,050		$ 647,809,050	100%		6.830%	8.46%	$ 54,822,771	$ (2,460,111)

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

APPENDIX C

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2017-00321 DATED APR 1 3 2018

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

RATE RS
RESIDENTIAL SERVICE

Customer Charge per month	$	11.00
Energy Charge per kWh:		
All kWh per month	$	0.071520

RATE DS
SERVICE AT SECONDARY DISTRIBUTION VOLTAGE

Customer Charge per month:		
Single Phase Service	$	17.14
Three Phase Service	$	34.28
Demand Charge per kW:		
First 15 kW	$	.00
Additional kW	$	8.25
Energy Charge per kWh:		
First 6,000 kWh	$	0.080075
Next 300 kWh/kW	$	0.049155
Additional kWh	$	0.040254

The maximum monthly rate, excluding the customer charge, and all applicable riders, shall now exceed $0.236547 per kWh

For customers receiving service under the provisions of former Rate C, Optional Rate for Churches, as of June 25, 1981, the maximum monthly rate per kWh shall not exceed $0.145219 per kWh

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

Customer Charge per month:	
Single Phase	$ 63.50
Three Phase	$ 127.00
Primary Voltage Service	$ 138.00
Demand Charge per kW:	
Summer on-peak	$ 13.78
Winter on-peak	$ 13.04
Off-peak	$ 1.24
Energy Charge per kWh:	
Summer on-peak	$ 0.043370
Winter on-peak	$ 0.041403
Off-peak	$ 0.035516
Primary Service Discount:	
Metering of on-peak billing demand per kW:	
First 1,000 kW	$ (0.70)
Additional kW	$ (0.54)

RATE EH
OPTIONAL RATE FOR ELECTRIC SPACE HEATING

Winter Period

Customer Charge per month:	
Single Phase Service	$ 17.14
Three Phase Service	$ 34.28
Primary Voltage Service	$ 117.00
Energy Charge per kWh:	
All kWh per month	$ 0.062202

RATE SP
SEASONAL SPORTS SERVICE

Customer Charge per month:	$ 17.14
Energy Charge per kWh:	
All kWh per month	$ 0.096130

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

Base Rate per kWh:		
Load range of 540 to 720 hours per month	$	0.082708
Loads less than 540 hours per month	$	0.095240
Minimum per Fixed Load Location per month:	$	2.98

RATE DP
SERVICE AT PRIMARY DISTRIBUTION VOLTAGE

Customer Charge per month:		
Primary Voltage Service (12.5 or 34.5 kV)	$	117.00
Demand Charge per kW:		
All kW	$	7.92
Energy Charge per kWh:		
First 300 kWh/kW	$	0.051092
Additional kWh	$	0.043219

The maximum monthly rate, excluding the customer charge, electric fuel component charges, and DSM charge shall not exceed $0.241312 per kWh.

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

Customer Charge per month:	$	500.00
Demand Charge per kW:		
Summer on-peak	$	8.07
Winter on-peak	$	6.62
Off-peak	$	1.22
Energy Charge per kWh:		
Summer on-peak	$	0.048997
Winter on-peak	$	0.046775
Off-peak	$	0.040124

RIDER GSS
GENERATION SUPPORT SERVICE

Administrative Charge:	$	50.00
Monthly Transmission and Distribution Reservation Charge:		
Rate DS – Secondary Distribution Service	$	0.047126
Rate DT – Distribution Service	$	0.058517
Rate DP – Primary Distribution Service	$	0.059794
Rate TT – Transmission Service	$	0.026391

RATE SL
STREET LIGHTING SERVICE

Base Rate per Unit per Month:

OVERHEAD DISTRIBUTION AREA

Standard Fixture (Cobra Head)	
Mercury Vapor:	
7,000 Lumen	$ 7.27
7,000 Lumen (Open Refractor)	$ 6.07
10,000 Lumen	$ 8.39
21,000 Lumen	$ 11.23
Metal Halide:	
14,000 Lumen	$ 7.27
20,500 Lumen	$ 8.39
36,000 Lumen	$ 11.23
Sodium Vapor:	
9,500 Lumen	$ 8.04
9,500 Lumen (Open Refractor)	$ 6.04
16,000 Lumen	$ 8.77
22,000 Lumen	$ 11.37
27,500 Lumen	$ 11.37
50,000 Lumen	$ 15.28
Decorative Fixtures	
Sodium Vapor:	
9,500 Lumen (Rectilinear)	$ 10.00
22,000 Lumen (Rectilinear)	$ 12.36
50,000 Lumen (Rectilinear)	$ 16.35
50,000 Lumen (Setback)	$ 24.31

Spans of Secondary Wiring: For each increment of 50 feet of secondary wiring beyond the first 150 feet from the pole, the following price per month shall be added to the price per month per street lighting unit: $ 0.53

UNDERGROUND DISTRIBUTION AREA

Standard Fixture (Cobra Head)	
Mercury Vapor:	
7,000 Lumen	$ 7.40
7,000 Lumen (Open Refractor)	$ 6.07
10,000 Lumen	$ 8.54
21,000 Lumen	$ 11.50

Metal Halide:	
14,000 Lumen	$ 7.40
20,500 Lumen	$ 8.54
36,000 Lumen	$ 11.50
Sodium Vapor:	
9,500 Lumen	$ 8.04
9,500 Lumen (Open Refractor)	$ 6.12
16,000 Lumen	$ 8.74
22,000 Lumen	$ 11.37
27,500 Lumen	$ 11.37
50,000 Lumen	$ 15.28
Decorative Fixture:	
Mercury Vapor:	
7,000 Lumen (Town & Country)	$ 7.65
7,000 Lumen (Holophane)	$ 9.61
7,000 Lumen (Gas Replica)	$ 21.96
7,000 Lumen (Granville)	$ 7.73
7,000 Lumen (Aspen)	$ 13.91
Metal Halide:	
14,000 Lumen (Traditionaire)	$ 7.64
14,000 Lumen (Granville Acorn)	$ 13.91
14,000/14,500 Lumen (Gas Replica)[214]	$ 22.04
Sodium Vapor:	
9,500 Lumen (Town & Country)	$ 11.17
9,500 Lumen (Holophane)	$ 12.10
9,500 Lumen (Rectilinear)	$ 9.02
9,500 Lumen (Gas Replica)	$ 22.75
9,500 Lumen (Aspen)	$ 14.09
9,500 Lumen (Traditionaire)	$ 11.17
9,500 Lumen (Granville Acorn)	$ 14.09
22,000 Lumen (Rectilinear)	$ 12.42
50,000 Lumen (Rectilinear)	$ 16.41
50,000 Lumen (Setback)	$ 24.31

[214] Duke Kentucky's billing analysis lists both a 14,000 and 14,500 Lumen Gas Replica light at the same rate.

POLE CHARGES

Pole Description:

Wood:

17 Foot (Wood Laminated) (a)	$	4.50
30 Foot	$	4.44
35 Foot	$	4.50
40 Foot	$	5.39

Aluminum:

12 Foot (Decorative)	$	12.23
28 Foot	$	7.09
28 Foot (Heavy Duty)	$	7.16
30 Foot (Anchor Base)	$	14.16

Fiberglass:

17 Foot	$	4.50
12 Foot (Decorative)	$	13.15
30 Foot (Bronze)	$	8.56
35 Foot (Bronze)	$	8.79

Steel:

27 Foot (11 gauge)	$	11.56
27 Foot (3 gauge)	$	17.43

Spans of Secondary Wiring: For each increment of 25 feet of secondary wiring beyond the first 25 feet from the pole, the following price per month shall be added to the price per month per street lighting unit: $ 0.77

RATE TL
TRAFFIC LIGHTING SERVICE

Base Rate per kWh:		
Energy only	$	0.038903
Energy from separately metered source w/maintenance	$	0.021543
Energy w/maintenance	$	0.060446

RATE UOLS
UNMETERED OUTDOOR LIGHTING ELECTRIC SERVICE

Base Rate per kWh:		
All kWh per month	$	0.038305

RATE LED
LED OUTDOOR LIGHTING ELECTRIC SERVICE

Base Rate per kWh:

All kWh per month	$	0.038305

Monthly Maintenance and Fixture Charge Per Unit Per Month

Fixtures:

	Fixture		Maintenance	
50W Standard LED-Black	$	4.96	$	4.24
70W Standard LED-Black	$	4.95	$	4.24
110W Standard LED-Black	$	5.62	$	4.24
150W Standard LED-Black	$	7.44	$	4.24
220W Standard LED-Black	$	8.43	$	5.17
280 W Standard LED-Black	$	10.38	$	5.17
50W Deluxe Acorn LED-Black	$	14.47	$	4.24
50W Acorn LED-Black	$	13.04	$	4.24
50W Mini Bell LED-Black	$	12.30	$	4.24
70W Bell LED-Black	$	15.66	$	4.24
50W Traditional LED-Black	$	9.45	$	4.24
50W Open Traditional LED-Black	$	9.45	$	4.24
50W Enterprise LED-Black	$	12.70	$	4.24
70W LED Open Deluxe Acorn	$	14.11	$	4.24
150W LED Teardrop	$	18.95	$	4.24
50W LED Teardrop Pedestrian	$	15.37	$	4.24
220W LED Shoebox	$	13.13	$	5.17
LED 50W 4521 Lumens Standard LED Black Type III 4000K	$	4.96	$	4.24
LED 70W 6261 Lumens Standard LED Black Type III 4000K	$	4.95	$	4.24
LED 110W 9336 Lumens Standard LED Black Type III 4000K	$	5.62	$	4.24
LED 150W 12642 Lumens Standard LED Black Type III 4000K	$	7.44	$	4.24
LED 150W 13156 Lumens Standard LED Type IV Black 4000K	$	7.44	$	4.24
LED 220W 18642 Lumens Standard LED Black Type III 4000K	$	8.43	$	5.17
LED 280W 24191 Lumens Standard LED Black Type III 4000K	$	10.38	$	5.17
LED 50W Deluxe Acorn Black Type III 4000K	$	14.47	$	4.24
LED 70W Open Deluxe Acorn Black Type III 4000K	$	14.11	$	4.24
LED 50W Acorn Black Type III 4000K	$	13.04	$	4.24
LED 50W Mini Bell LED Black Type III				

4000K Midwest	$	12.30	$	4.24
LED 70W 5508 Lumens Sanibell Black Type III 4000K	$	15.66	$	4.24
LED 50W Traditional Black Type III 4000K	$	9.45	$	4.24
LED 50W Open Traditional Black Type III 4000K	$	9.45	$	4.24
LED 50W Enterprise Black Type III 4000K	$	12.70	$	4.24
LED 150W Large Teardrop Black Type III 4000K	$	18.95	$	4.24
LED 50W Teardrop Pedestrian Black Type III 4000K	$	15.37	$	4.24
LED 220W Shoebox Black Type IV 4000K	$	13.13	$	5.17
150W Sanibel	$	15.66	$	4.24
420W LED Shoebox	$	19.58	$	5.17
50W Neighborhood	$	4.04	$	4.24
50W Neighborhood with Lens	$	4.21	$	4.24

Monthly Pole Charges Per Unit Per Month:

12' C-Post Top Anchor Base-Black	$	9.39
25' C-Davit Bracket-Anchor Base-Black	$	24.69
25' C-Boston Harbor Bracket-Anchor Base-Black	$	24.96
12' E-AL – Anchor Base-Black	$	9.38
35' AL-Side Mounted-Direct Buried Pole	$	15.89
30' AL-Side Mounted-Anchor Base	$	12.24
35' AL-Side Mounted-Anchor Base	$	11.91
40' AL-Side Mounted-Anchor Base	$	14.73
30' Class 7 Wood Pole	$	5.82
35' Class 5 Wood Pole	$	6.33
40' Class 4 Wood Pole	$	9.53
45' Class 4 Wood Pole	$	9.88
20' Galleria Anchor Based Pole	$	8.40
30' Galleria Anchor Based Pole	$	9.93
35' Galleria Anchor Based Pole	$	28.56
MW-Light Pole-12' MH-Style A-Aluminum-Anchor Base-Top Tenon-Black	$	5.69
MW-Light Pole-Post Top-12' MH-Style A-Alum-Direct Buried-Top Tenon-Black	$	4.87
Light Pole-15' MH-Style A-Aluminum-Anchor Base-Top Tenon-Black	$	5.85
Light Pole-15' MH-Style A-Aluminum-Direct Buried-Top Tenon-Black	$	5.07
Light Pole-20' MH-Style A-Aluminum-Anchor Base-Top Tenon-Black	$	6.14

Light Pole-20' MH-Style A-Aluminum-Direct Buried-Top Tenon-Black	$ 9.41
Light Pole-25' MH-Style A-Aluminum-Anchor Base-Top Tenon-Black	$ 7.27
Light Pole-25' MH-Style A-Aluminum-Direct Buried-Top Tenon-Black	$ 10.49
Light Pole-30' MH-Style A-Aluminum-Anchor Base-Top Tenon-Black	$ 8.60
Light Pole-30' MH-Style A-Aluminum-Direct Buried-Top Tenon-Black	$ 11.67
Light Pole-35' MH-Style A-Aluminum-Anchor Base-Top Tenon-Black	$ 9.93
Light Pole-35' MH-Style A-Aluminum-Direct Buried-Top Tenon-Black	$ 12.61
MW-Light Pole-12' MH- Style B Aluminum Anchor Base-Top Tenon Black Pri	$ 6.93
MW-Light Pole-12' MH-Style C-Post Top-Alum-Anchor Base-TT-Black Pri	$ 9.39
MW-LT Pole-16' MH-Style C-Davit Bracket-Alum-Anchor Base-TT-Black	$ 12.56
MW-Light Pole-25' MH-Style C-Davit Bracket-Alum-Anchor Base-TT-Black Pri	$ 24.69
MW-LT Pole-16' MH-Style C-Boston Harbor Bracket-AL-AB-TT-Black Pri	$ 10.07
MW-LT Pole-25' MH-Style C-Boston Harbor Bracket-AL-AB-TT-Black Pri	$ 24.96
MW-LT Pole 12 Ft MH Style D Alum Breakaway Anchor Base TT Black Pri	$ 9.29
MW-Light Pole-12' MH-Style E-Alum-Anchor Base-Top Tenon-Black	$ 9.38
MW-Light Pole-12' MH-Style F-Alum-Anchor Base-Top Tenon-Black Pri	$ 10.06
MW-15210-Galleria Anchor Base-20FT Bronze Steel-OLE	$ 8.40
MW-15210-Galleria Anchor Base-30FT Bronze Steel-OLE	$ 9.93
MW-15210-Galleria Anchor Base-35FT Bronze Steel-OLE	$ 28.56
MW-15310-35FT MH Aluminum Direct Embedded Pole-OLE	$ 15.89
MW-15320-30FT Mounting Height Aluminum Anchor Base Pole-OLE	$ 12.24
MW-15320-35FT Mounting Height Aluminum Anchor Base Pole-OLE	$ 11.91
MW-15320-40FT Mounting Height Aluminum Anchor Base Pole-OLE	$ 14.73
MW-POLE-30-7	$ 5.82
MW-POLE-35-5	$ 6.33
MW-POLE-40-4	$ 9.53
MW-POLE-45-4	$ 9.88

RATE NSU
STREET LIGHTING SERVICE - NONSTANDARD UNITS

Rate per Unit per Month:

Company Owned

Boulevard Units Served Underground:

2,500 Lumen Incandescent - Series	$	9.42
2,500 Lumen Incandescent - Multiple	$	7.32

Holophane Decorative Served Underground:

10,000 Lumen Mercury Vapor on Fiberglass Pole	$	17.16

The cable span charge of $0.77 per each increment of 25 feet of secondary wiring shall be added to the rate/unit charge for each increment of secondary wiring beyond the first 25 feet from the pole base.

Street Lighting Served Overhead:

2,500 Lumen Incandescent	$	7.26
2,500 Lumen Mercury Vapor	$	6.87
21,000 Lumen Mercury Vapor	$	10.89

Customer Owned

Steel Boulevard Units Served Underground:

2,500 Lumen Incandescent - Series	$	5.56
2,500 Lumens Incandescent - Multiple	$	7.07

RATE SC
STREET LIGHTING SERVICE – CUSTOMER OWNED

Base Rate per Unit per Month:
Standard Fixture (Cobra Head):
Mercury Vapor:

7,000 Lumen	$	4.28
10,000 Lumen	$	5.45
21,000 Lumen	$	7.56

Metal Halide:

14,000 Lumen	$	4.28
20,500 Lumen	$	5.45
36,000 Lumen	$	7.56

Sodium Vapor:		
9,500 Lumen	$	5.15
16,000 Lumen	$	5.74
22,000 Lumen	$	6.31
27,500 Lumen	$	6.31
50,000 Lumen	$	8.54
Decorative Fixture:		
Mercury Vapor:		
7,000 Lumen (Holophane)	$	5.44
7,000 Lumen (Town & Country)	$	5.39
7,000 Lumen (Gas Replica)	$	5.44
7,000 Lumen (Aspen)	$	5.44
Metal Halide:		
14,000 Lumen (Traditionaire)	$	5.39
14,000 Lumen (Granville Acorn)	$	5.44
14,000 Lumen (Gas Replica)	$	5.44
Sodium Vapor:		
9,500 Lumen (Town & Country)	$	5.07
9,500 Lumen (Traditionaire)	$	5.07
9,500 Lumen (Granville Acorn)	$	5.29
9,500 Lumen (Rectilinear)	$	5.07
9,500 Lumen (Aspen)	$	5.29
9,500 Lumen (Holophane)	$	5.29
9,500 Lumen (Gas Replica)	$	5.29
22,000 Lumen (Rectilinear)	$	6.68
50,000 Lumen (Rectilinear)	$	8.84
Pole Description:		
Wood:		
30 Foot	$	4.44
35 Foot	$	4.50
40 Foot	$	5.39
Customer Owned and Maintained Units per kWh	$	0.038305

RATE SE
STREET LIGHTING SERVICE – OVERHEAD EQUIVALENT

Base Rate per Unit per Month:		
Decorative Fixtures:		
Mercury Vapor:		
7,000 Lumen (Town & Country)	$	7.45
7,000 Lumen (Holophane)	$	7.48

7,000 Lumen (Gas Replica)	$	7.48
7,000 Lumen (Aspen)	$	7.48
Metal Halide:		
14,000 Lumen (Traditionaire)	$	7.45
14,000 Lumen (Granville Acorn)	$	7.48
14,000 Lumen (Gas Replica)	$	7.48
Sodium Vapor:		
9,500 Lumen (Town & Country)	$	8.12
9,500 Lumen (Holophane)	$	8.23
9,500 Lumen (Rectilinear)	$	8.12
9,500 Lumen (Gas Replica)	$	8.22
9,500 Lumen (Aspen)	$	8.22
9,500 Lumen (Traditionaire)	$	8.12
9,500 Lumen (Granville Acorn)	$	8.22
22,000 Lumen (Rectilinear)	$	11.67
50,000 Lumen (Rectilinear)	$	15.44
50,000 Lumen (Setback)	$	15.44

RATE DPA
DISTRIBUTION POLE ATTACHMENTS

Annual rental per pole per foot:		
Two-User pole	$	5.92
Three-User pole	$	4.95

COGENERATION AND SMALL POWER PRODUCTION SALE AND PURCHASE TARIFF-100 kW OR LESS

Rates for Purchases from Qualifying Facilities		
Energy Purchase Rate per kWh	$	0.027645
Capacity Purchase Rate per kW-month	$	3.61

COGENERATION AND SMALL POWER PRODUCTION SALE AND PURCHASE TARIFF-GREATER THAN 100 kW

Rates for Purchases from Qualifying Facilities

The Energy Purchase Rate for all kWh delivered shall be the PJM Real-Time Locational Marginal Price for power at the DEK Aggregate price node, inclusive of the energy, congestion and losses charges, for each hour of the billing month.

Capacity Purchase Rate per kW-month	$	3.61

SCHEDULE RTP
REAL-TIME PRICING PROGRAM

Energy Delivery Charge (Credit) per kW per hour from CBL		
Secondary Service	$	0.009104
Primary Service	$	0.007850
Transmission Service	$	0.003576

NON-RECURRING CHARGES

Remote Reconnection	$	3.45
Reconnection – Non-remote (Electric Only)	$	75.00
Reconnection - Non-remote (Electric and Gas)	$	88.00
Reconnection at pole (Electric Only)	$	125.00
Reconnection at pole (Electric and Gas)	$	150.00
Collection Charge	$	50.00

RIDER LM
LOAD MANAGEMENT RIDER

When a customer elects the off-peak provision, the monthly customer charge of the applicable Rate DS or DP will be increased by an additional monthly charge of $5.00 for each installed time-of-use or interval data recorder meter.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

*Adele Frisch
Duke Energy Kentucky, Inc.
139 East Fourth Street
Cincinnati, OH 45201

*Joan M Gates
VP for Legal Affairs & General Counsel
NKU
Administrative Center, Room 824
Highland Heights, KENTUCKY 41099

*Duke Energy Kentucky, Inc.
139 East Fourth Street
Cincinnati, OH 45202

*L Allyson Honaker
Goss Samford, PLLC
2365 Harrodsburg Road, Suite B325
Lexington, KENTUCKY 40504

*James P Henning
President
Duke Energy Kentucky, Inc.
139 East Fourth Street
Cincinnati, OH 45201

*Larry Cook
Assistant Attorney General
Office of the Attorney General Office of Rate
700 Capitol Avenue
Suite 20
Frankfort, KENTUCKY 40601-8204

*Amy B Spiller
Associate General Counsel
Duke Energy Kentucky, Inc.
139 East Fourth Street
Cincinnati, OH 45201

*Jody Kyler Cohn
Boehm, Kurtz & Lowry
36 East Seventh Street
Suite 1510
Cincinnati, OHIO 45202

*E. Minna Rolfes-Adkins
Paralegal
Duke Energy Kentucky, Inc.
139 East Fourth Street
Cincinnati, OH 45201

*William H May, III
Hurt, Deckard & May
The Equus Building
127 West Main Street
Lexington, KENTUCKY 40507

*Justin M. McNeil
Office of the Attorney General Office of Rate
700 Capitol Avenue
Suite 20
Frankfort, KENTUCKY 40601-8204

*Honorable Michael L Kurtz
Attorney at Law
Boehm, Kurtz & Lowry
36 East Seventh Street
Suite 1510
Cincinnati, OHIO 45202

*David S Samford
Goss Samford, PLLC
2365 Harrodsburg Road, Suite B325
Lexington, KENTUCKY 40504

*Honorable Kurt J Boehm
Attorney at Law
Boehm, Kurtz & Lowry
36 East Seventh Street
Suite 1510
Cincinnati, OHIO 45202

*Honorable Matthew R Malone
Attorney at Law
Hurt, Deckard & May
The Equus Building
127 West Main Street
Lexington, KENTUCKY 40507

*Dennis G Howard, II
Howard Law PLLC
740 Emmett Creek Lane
Lexington, KENTUCKY 40515

*Kent Chandler
Assistant Attorney General
Office of the Attorney General Office of Rate
700 Capitol Avenue
Suite 20
Frankfort, KENTUCKY 40601-8204

*Rebecca W Goodman
Assistant Attorney General
Office of the Attorney General Office of Rate
700 Capitol Avenue
Suite 20
Frankfort, KENTUCKY 40601-8204

*William Don Wathern, Jr.
Director Rates & Reg. Strategy
Duke Energy Kentucky, Inc.
139 East Fourth Street
Cincinnati, OH 45201

*Duke Energy Kentucky, Inc.
139 East Fourth Street
Cincinnati, OH 45202

*Rocco O D'Ascenzo
Duke Energy Kentucky, Inc.
139 East Fourth Street
Cincinnati, OH 45201