COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

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)

CASE NO. 2017-00179

ORDER

Kentucky Power Company ("Kentucky Power"), a wholly owned subsidiary of American Electric Power Company, Inc. ("AEP") is an electric utility that generates, transmits, distributes, and sells electricity to approximately 168,000 consumers in all or portions of 20 counties in eastern Kentucky.¹ Kentucky Power owns and operates a 285-megawatt ("MW") gas-fired steam-electric generating unit in Louisa, Kentucky, and owns and operates a 50 percent undivided interest in a coal-fired generating station in Moundsville, West Virginia; Kentucky Power's share consists of 780 MW. Kentucky Power obtains an additional 393 MW from Rockport (Indiana) Plant Generating Units No. 1 and No. 2 under a unit power agreement ("Rockport UPA"). Kentucky Power's transmission system is operated by PJM Interconnection, LLC ("PJM"), a regional

¹ Application at 2. Kentucky Power also furnishes electric service at wholesale to the Cities of Olive Hill and Vanceburg, Kentucky.

electric grid and market operator. Kentucky Power's most recent general rate increase was granted in June 2015 in Case No. 2014-00396.²

BACKGROUND

On April 26, 2017, Kentucky Power filed notice of its intent to file an Application ("Application") for approval of an increase in its electric rates based on a historical test year ending February 28, 2017. By Order entered May 24, 2017, the Commission granted Kentucky Power's motion to deviate from certain filing requirements, which Kentucky Power requested in order to obtain additional time to review its Application before its proposed filing date of June 28, 2017.

Kentucky Power tendered its Application on June 28, 2017, which included new rates to be effective on or after July 29, 2017, based on a request to increase its electric revenues by \$65,387,987, or 11.80 percent. On August 7, 2017, Kentucky Power supplemented its Application to reflect the impact of refinancing of certain debts in June 2017, which reduced Kentucky Power's requested annual increase in revenues to \$60,397,438. In its Application, Kentucky Power also requested approval of its environmental compliance plan, and proposed to revise, add, and delete various tariffs applicable to its electric service. After Kentucky Power cured filing deficiencies, its Application was deemed filed as of July 20, 2017. To determine the reasonableness of these requests, the Commission suspended the proposed rates for five months from their effective date, pursuant to KRS 278.190(2), up to and including January 18, 2018.

² Case No. 2014-00396, Application of Kentucky Power Company for: (1) A General Adjustment of Its Rates for Electric Service; (2) An Order Approving Its 2014 Environmental Compliance Plan; (3) An Order Approving Its Tariffs and Riders; and (4) An Order Granting All Other Required Approvals and Relief (Ky. PSC June 22, 2015) ("Case No. 2014-00396, Final Order").

The following parties requested and were granted full intervention: 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 Boards Association ("KSBA"); Kentucky League of Cities ("KLC"); Kentucky Commercial Utility Customers, Inc. ("KCUC"); Kentucky Cable Telecommunications Association ("KCTA"); and Wal-Mart Stores East, LP and Sam's East, Inc. (jointly, "Walmart").

By order entered on July 17, 2017, the Commission established a procedural schedule that provided for discovery, intervenor testimony, rebuttal testimony from Kentucky Power,³ a formal evidentiary hearing, and an opportunity for the parties to file post hearing briefs.⁴ On October 26, 2017, and November 7, 2017, an informal conference ("IC") was held at the Commission's offices to discuss procedural matters and the possible resolution of pending issues. All parties participated in the IC held on October 26, 2017, with the exception of KCTA, who engaged in separate discussions with Kentucky Power regarding possible resolution of issues pertaining to the Cable Television Pole Attachment Tariff ("Tariff C.A.T.V.") The Attorney General did not attend the November 7, 2017 IC due to a scheduling conflict, but indicated that the IC should proceed as scheduled. At the November 7, 2017 IC, the parties in attendance,

³ On October 11, 2017, the Attorney General filed a motion to amend the procedural schedule to permit him to file rebuttal testimony. Kentucky Power and KLC each filed responses in opposition. By order issued October 24, 2017, the Commission found the Attorney General failed to establish good cause to amend the procedural schedule and denied the Attorney General's motion.

⁴ The Commission conducted public meetings in Kentucky Power's service territory on November 2, 2017, in Prestonsburg, Kentucky; on November 6, 2017, in Hazard, Kentucky; and on November 8, 2017, in Ashland, Kentucky.

with the exception of KCUC, arrived at an agreement in principle for the resolution of the issues raised in this case.

On November 22, 2017, Kentucky Power, KIUC, KLC, KSBA, KCTA, and Walmart ("Settling Intervenors") filed a Settlement Agreement ("Settlement") that addressed all of the issues raised in this proceeding. The Attorney General and KCUC are not signatories to the Settlement. The Settlement is attached as Appendix A to this Order.

Because the Settlement was not unanimous, the December 6, 2017, evidentiary hearing was held as scheduled for the purposes of hearing testimony in support of the Settlement and on contested issues. On January 5, 2018, Kentucky Power, the Attorney General, KIUC, and KCUC filed their respective post hearing briefs. The matter now stands submitted to the Commission for a decision.

SETTLEMENT AGREEMENT

The Settlement reflects the agreement of the parties, except for the Attorney General and KCUC, on all issues raised in this case. The major substantive areas addressed in the Settlement are as follow:

• Kentucky Power's electric retail revenues should be increased by \$31,780,734, effective January 19, 2018.⁵ This amount consists of a base rate revenue reduction of \$28,616,704 from the \$60,397,438 requested in Kentucky Power's August 7, 2017 supplemental filing.

⁵ Settlement, paragraphs 2(a) and 17.

 Establishment of deferral mechanisms for \$50 million in non-fuel, nonenvironmental Rockport UPA expenses.⁶

• Amendment of the Purchase Power Adjustment tariff ("Tariff P.P.A.") to recover incremental PJM Open Access Transmission Tariff ("OATT") Load Serving Entity ("LSE") charges and credits above or below net PJM OATT LSE charges and credits in base rates.⁷

• Amendment of Tariff P.P.A. as described in the Direct Testimony of Alex E. Vaughan ("Vaughan Direct Testimony") to collect from, or credit to, customers the amount of purchased power costs that are excluded from recovery through the Fuel Adjustment Clause ("FAC"), and gains and losses from incidental sales of natural gas purchased for use at Big Sandy Unit 1, but not used or stored.⁸

 Establishment of 20-year service life for Big Sandy Unit 1 for depreciation rates.⁹

Establishment of a return on equity of 9.75 percent.¹⁰

• Agreement to lower the Kentucky Economic Development Surcharge rate ("Tariff K.E.D.S.") for residential customers and increase the rate for non-residential customers, with matching contribution by Kentucky Power.¹¹

⁶ Id. at paragraph 3.

⁷ Id. at paragraph 4.

⁸ Id. at paragraph 6.

⁹ *Id.* at paragraph 7.

¹⁰ *Id.* at paragraph 8.

¹¹ Id. at paragraph 10.

Agreement to continue Tariff K-12 School as a permanent customer class
instead of a pilot rate.¹²

• Agreement that Kentucky Power will not request a general adjustment of base rates for rates that would be effective prior to the January 2021 billing cycle.¹³

Increase Kentucky Power's customer charge for Residential Service customers to \$14.00 per month.¹⁴

CONTESTED REVENUE REQUIREMENT AND REVENUE ALLOCATION ISSUES

Kentucky Power proposed an annual increase in its electric revenues of \$60,397,438 in its August 7, 2017 supplemental filing. Through testimony, the Attorney General contended that Kentucky Power should be allowed to increase its electric revenues by \$39.9 million.¹⁵ Through testimony, KCUC contended that the revenue allocation contained in the Settlement does not provide fair or reasonable treatment for customers in the Large General Service class ("Tariff L.G.S."). Because the parties have not reached a unanimous settlement on the increase in revenues, the Commission must consider the evidentiary record on these issues as presented by Kentucky Power, the Attorney General, and KCUC, and render a decision based on a determination of Kentucky Power's capital, rate base, operating revenues, operating expenses, and revenue allocation, as would be done in a fully litigated rate case

14 Id. at paragraph 16.

¹² *Id.* at paragraphs 1213.

¹³ Id. at paragraph 5.

¹⁵ Direct Testimony of Ralph C. Smith ("Smith Testimony") at 12.

TEST PERIOD

Kentucky Power proposed the 12-month period ending February 28, 2017, as the 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 February 28, 2017, as the test period in this case. Due to the timing of Kentucky Power's filing, the 12-month period ending February 28, 2017, is the most recent feasible period to use for setting rates and, except for the adjustments approved herein, the revenues and expenses incurred during that period are neither unusual nor extraordinary.¹⁶ In using this historic test period, the Commission has given full consideration to appropriate known and measurable changes.

RATE BASE

Jurisdictional Rate Base Ratio

Kentucky Power proposed a test-year-end Kentucky jurisdictional rate base of \$1,323,494,246.¹⁷ The Kentucky jurisdictional rate base is divided by Kentucky Power's test-year-end total company rate base to derive the Kentucky jurisdictional rate base ratio ("jurisdictional ratio"). This jurisdictional ratio is then applied to Kentucky Power's total company capitalization to derive the Kentucky jurisdictional capitalization. The jurisdictional ratio uses the test-year-end rate base before any ratemaking adjustments

¹⁶ On May 22, 2017, Kentucky Power filed a motion to deviate from filing requirement 807 KAR 5:001, Section 12(1)(a), which requires the submission of a detailed financial exhibit for the 12-month test period ending not more than 90 days prior to the date of its application. Kentucky Power requested to deviate by filing the required financial exhibit for 12-month period ending 120 days, rather than 90 days, prior to the date of its application. By Order, the Commission approved Kentucky Power's motion to deviate from 807 KAR 5:001, Section 12(1)(a) (Ky. PSC May 24, 2017).

¹⁷ Application, Section V, Exhibit 1, Schedule 4.

applicable to either Kentucky jurisdictional operations or other jurisdictional operations. Kentucky Power used a jurisdictional ratio of 98.3 percent.¹⁸ The Commission finds the calculation of Kentucky Power's test-year electric rate base reasonable for purposes of establishing the jurisdictional ratio.

Pro Forma Jurisdictional Rate Base

Kentucky Power calculated a pro forma jurisdictional rate base of \$1,194,888,447,¹⁹ which reflects the types of adjustments made by the Commission in prior rate cases to determine the pro forma rate base.

The Attorney General proposed one adjustment to Kentucky Power's proposed rate base for the Cash Working Capital ("CWC") allowance. The Attorney General proposed an allowance of \$18,953,980, which is \$740,459 lower than the \$19,694,529 proposed by Kentucky Power in its Application. While indicating a preference for using a lead-lag study, the Attorney General stated that if CWC is to be calculated using the Commission's long-standing 1/8th formula approach, then the proper level of CWC for ratemaking purposes should be based on the pro forma operations and maintenance expenses allowed by the Commission.²⁰ The Attorney General also stated that since Kentucky Power's revenue requirement is calculated based upon its jurisdictional capitalization rather than its adjusted jurisdictional rate base, any adjustment to CWC would have no impact on the revenue requirement.²¹

21 Id. at 23.

¹⁸ *Id.* The non-jurisdictional percentage of approximately 1.7 percent is due to the furnishing of electric service at wholesale to the City of Olive Hill and the City of Vanceburg.

¹⁹ *Id*.

²⁰ Smith Testimony at 22.

While the Commission agrees with the methodology the Attorney General utilized for calculating the CWC, the Commission does not agree with the Attorney General's proposed CWC. The CWC allowance included in the rate base, as shown below, is based on the adjusted operation and maintenance ("O&M") expenses discussed in this Order, as approved by the Commission. The Commission has determined Kentucky Power's pro forma jurisdictional rate base for ratemaking purposes for the test year to be as follows:

Total Utility Plant in Service	\$2,264,648,845
Add: Materials & Supplies Prepayments Cash Working Capital Allowance Subtotal	36,344,575 49,905,719 18,905,292 <u>\$105,155,586</u>
Deduct: Accumulated Depreciation Customer Advances Accumulated Deferred Income Taxes Contributions in Aid of Construction Subtotal	764,544,392 27,076,876 384,084,108 <u>\$1,175,705,376</u>
Pro Forma Rate Base	<u>\$1,194,099,055</u>

Reproduction Cost Rate Base

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

[T]he 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 ratemaking purposes.

Neither Kentucky Power, the Attorney General, nor KCUC provided information

regarding Kentucky Power's proposed Kentucky jurisdictional reproduction cost rate

base. Therefore, the Commission finds that using Kentucky Power's historic costs for deriving its rate base is appropriate and consistent with Commission precedent involving Kentucky Power, as well as other Kentucky jurisdictional utilities.

CAPITALIZATION

Kentucky Power proposed an adjusted Kentucky jurisdictional capitalization of \$1,191,785,493.²² This amount was derived through adjustments to exclude certain environmental compliance investments that remain part of the environmental rate base and are included in Kentucky Power's environmental surcharge mechanism.

Kentucky Power determined its electric capitalization by multiplying its total company capitalization by the rate base jurisdictional allocation ratio described earlier in this Order. This is consistent with the approach used in previous Kentucky Power rate cases.

The Attorney General did not recommend any adjustments to Kentucky Power's capitalization. The Attorney General proposed one adjustment to rate base for CWC, since it does not affect Kentucky Power's jurisdictional capitalization, but recommended no change to the amount proposed by Kentucky Power.

The Commission finds the proposed amount of Kentucky Power's jurisdictional capitalization is reasonable.

REVENUES AND EXPENSES

For the test year, Kentucky Power reported actual net operating income from its electric operations of \$85,033,742.²³ Kentucky Power proposed 55 adjustments to

²² Application, Section II, Exhibit L.

²³ Application, Section V, Exhibit 1, Supplemental Schedule 4 (filed Aug. 7, 2017).

revenues and expenses to reflect more current and anticipated operating conditions, resulting in an adjusted net operating income of \$43,690,670.²⁴ With this level of net operating income, Kentucky Power reported an adjusted test year revenue deficiency of \$60,397,438.²⁵

The Attorney General accepted 45 of Kentucky Power's proposed adjustments to its test-year revenues and expenses.

A list of the non-contested adjustments is contained in Appendix B to this Order. The Attorney General proposed 14 additional adjustments to Kentucky Power's operating income relating to: 1) theft recovery revenue; 2) payroll expense – employee merit increase; 3) overtime payroll expense related to employee merit increase; 4) payroll tax expense; 5) incentive compensation expense; 6) stock-based compensation; 7) savings plan expense; 8) supplemental executive retirement program expense; 9) affiliate charge for corporate aviation expense; 10) storm damage expense; 11) relocation expense; 12) gain on sale of utility property; 13) cash surrender value of life insurance policies; and 14) rate case expense.

The Attorney General's proposed adjustments pertain solely to Kentucky Power's base rate revenue requirements. The Commission makes the following determinations regarding the Attorney General's proposed base rate adjustments.

Theft Recovery Revenue

The Attorney General proposed an adjustment to increase Kentucky Power's theft recovery revenue by \$166,698 based upon Kentucky Power's estimate of

²⁴ Id.

²⁵ *Id.* at Schedule V, Supplemental Exhibit 2 (filed Aug. 7, 2017).

increased theft recovery revenue.²⁶ Kentucky Power expects to increase theft recovery revenue due to the addition of a new administrative assistant who would allow Kentucky Power's field investigators to spend more time on suspected energy theft.

The Commission finds that the Attorney General's proposed adjustment regarding theft recovery revenue is reasonable, and therefore the proposed adjustment for theft recovery revenue of \$166,698 should be allowed for ratemaking purposes.

Payroll Expenses: Employee Merit Increase, Overtime Payroll Expense, and Payroll Taxes

The Attorney General proposed adjustments to payroll expense for employee merit increases for non-exempt salaried employees, overtime payroll expense related to employee merit increases, and associated payroll taxes in the amount of \$57,205, \$4,148, and \$48,362, respectively. The Attorney General argued that Kentucky Power did not justify basing its proposed payroll expense adjustment on an annual merit increase of 3.5 percent. The Attorney General maintained that the payroll expense adjustment should be based upon a 3.0 percent merit increase.²⁷ Limiting the merit increase to 3.0 percent results in corresponding adjustments to overtime and payroll tax expenses. The payroll tax adjustment includes the impact of limiting the merit increase to 3.0 percent and other adjustments to incentive compensation and stock-based compensation proposed by the Attorney General.

Kentucky Power maintained that the test year wage increases are reasonable. A comparison of Kentucky Power's total target compensation with the 2016 EAPDIS

²⁶ Smith Testimony at 24; Kentucky Power's Response to the Attorney General's First Request for Information ("Attorney General's First Request"), Item 319.

²⁷ Id. at 26-30.

Energy, Technical, Craft & Clerical Survey (Southeast region data) reveals that, on average, Kentucky Power's compensation was 5.4 percent below the average for the region.²⁸ Kentucky Power claimed that, in light of the survey results, the test year wage increases were necessary to provide market competitive wages to target and retain employees.

The Commission finds that Kentucky Power's test year wages are reasonable and that the Attorney General's proposed adjustments to payroll expense for employee merit increases for non-exempt salaried employees, overtime payroll expense related to employee merit increase and payroll taxes should be denied.

Incentive Compensation and Stock Based Compensation

Kentucky Power included \$3,900,806 of incentive compensation plan ("ICP") costs²⁹ and \$1,758,874 in Long-Term Incentive Plan ("LTIP") costs in its Kentucky jurisdictional revenue requirement.³⁰ These amounts reflect the adjustments made by Kentucky Power.³¹ In the Settlement, Kentucky Power and the Settling Intervenors agreed to reduce incentive compensation expenses by \$3.15 million, which included incentive compensation and stock-based compensation.

²⁸ Application, Direct Testimony of Andrew J. Carlin ("Carlin Direct Testimony"), Exhibit ARC-4.

³¹ Application, Direct Testimony of Tyler H. Ross ("Ross Direct Testimony") at 14.

²⁹ Kentucky Power's Response to Commission Staff's Second Request for Information (Staff's Second Request"), Item 85; Kentucky Power's Response to KIUC's First Request for Information ("KIUC's First Request"), Item 31.

³⁰ Smith Testimony at 31. This consists of Kentucky Power direct-charged jurisdictional O&M expense of \$2,255,760, AEP allocated amount of \$3,118,781 and charges from other affiliates of \$51,300 less \$1,525,035 that was removed from the revenue requirement per the Application, Section V, Exhibit 2, Workpaper 32.

The Attorney General recommended reducing incentive compensation expense by a total of \$3,096,868. The Attorney General recommended an adjustment of ICP costs that decreased test year expense by \$1,350,120 on a Kentucky jurisdictional basis, which represented the removal of the 25 percent of ICP costs that represent performance measures tied to increasing shareholder value.³² The Attorney General maintained that ratepavers should not be responsible for those costs because Kentucky Power's shareholders are the main beneficiaries of the 25 percent performance measure for quantitative financial objectives, which include earnings per share.33 Similarly, the Attorney General argued that \$1,746,748 in stock-based compensation costs should be removed because ratepayers should not be required to pay management compensation based on the performance of Kentucky Power's stock price, which primarily benefits Kentucky Power's parent company.³⁴ In support of his argument, the Attorney General pointed to previous cases in which the Commission held that ratepayers should not bear the cost of stock-based compensation programs unless there is clear and definitive quantitative evidence demonstrating a benefit to ratepayers.35

In response, Kentucky Power argued that the Attorney General's adjustment to the proposed incentive compensation expense was not warranted because the

³² Smith Testimony at 35, Exhibit RCS-1, page 3 of 32; Smith Testimony at 30-31. The 2016 ICP was weighted 75 percent to AEP's earnings per share and 25 percent to other metrics

³³ Id. at 31.

³⁴ Id. at 39.

³⁵ Case No. 2014-00397, Final Order at 27-28; Case No. 2005-00042, An Adjustment of the Gas Rates of the Union Light, Heat and Power Company (Ky. PSC Feb. 2, 2006); 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).

incentive compensation programs provide benefits to both Kentucky Power's customers and its shareholders.³⁶

The Commission finds that the Settlement provision that reduces incentive compensation by \$3.15 million, which is a greater reduction than the adjustment recommended by the Attorney General, is reasonable and should be approved.

Savings Plan Expense

Kentucky Power included \$1,662,975 in its jurisdictional revenue requirement for savings plan expense for employees who participate in a defined benefit plan and have matching 401(k) contributions from Kentucky Power.³⁷

The Attorney General proposed a Kentucky jurisdictional adjustment of \$1,102,496 for savings plan expense for employees who participate in a defined benefit plan and have matching 401(k) contributions from Kentucky Power.

In rebuttal, Kentucky Power explained that participation in the defined benefit plan ended in 2000 and benefits were frozen in 2010.³⁸ Therefore, Kentucky Power does not contribute to a defined benefit plan and 401(k) matching plan at the same time. The Commission has disallowed such matching contributions when both a defined benefit plan and 401(k) matching and 401(k) matching contribution exist concurrently. This is not the case with Kentucky Power.

The Commission finds that Kentucky Power's savings plan expense is reasonable and should be allowed for ratemaking purposes.

-15-

³⁶ Rebuttal Testimony of Andrew R. Carlin ("Carlin Rebuttal Testimony") at 7.

³⁷ Kentucky Power's Response to Staff's Second Request, Item 56.h. and i.

³⁸ Dec. 7, 2017 H.V.T. at 4:50:20.

Supplemental Executive Retirement Plan ("SERP")

The Attorney General proposed an adjustment of \$52,453 for the expense associated with Kentucky Power's Supplemental Executive Retirement Plan ("SERP"). The Attorney General argued that such plans provide benefits to executives that exceed amounts limited in qualified retirement plans by the Internal Revenue Service.³⁹ The Attorney General also maintained that the provision of additional retirement compensation to Kentucky Power's highest paid executives is not a reasonable expense that should be recovered in rates.

In rebuttal, Kentucky Power stated that the total benefit it provides under both its qualified and non-qualified plan is equal to the benefit that would be produced by the formulas utilized under the qualified plans if these plans were not subject to the benefit limitations imposed on qualified plans.⁴⁰

The Commission finds the SERP expenses reasonable and, therefore, should be allowed for ratemaking purposes.

Affiliate Charge for Corporate Aviation Expense

The Attorney General proposed an adjustment of \$382,769 to remove the cost of the AEP corporate aviation expense charged to Kentucky Power during the test year.⁴¹ The Attorney General argued that AEP corporate aviation is a perquisite for AEP executives and directors and, as such, shareholders should bear the cost, not ratepayers.

³⁹ Smith Testimony at 42.

⁴⁰ Carlin Rebuttal Testimony at R-32.

⁴¹ Smith Testimony at 43-44.

The Commission disagrees with the Attorney General's proposed adjustment for corporate aviation expense. While private jet travel may appear to be an extravagance, legitimate travel expenses would have been incurred through commercial airlines. The Commissions finds that the aviation expense proposed by Kentucky Power is reasonable and should be approved.

Storm Damage Expense

Kentucky Power proposed an adjustment of \$595,932 for storm damage expense based upon a three-year average of major storm expense. The Attorney General proposed an adjustment to reduce storm damage expense by \$595,932, arguing that Kentucky Power had not demonstrated a compelling reason to increase test year storm damage expense.⁴²

Kentucky Power explained that it used a three-year average to normalize the level of costs to address the uncertainty regarding when, and how much, a major storm will affect Kentucky Power and because using only the test year amount in a base rate filing could lead to major swings in adjustments for storm damage expense.⁴³

The Commission finds that Kentucky Power's storm damage expense adjustment is reasonable and should be allowed for ratemaking purposes.

Test Year Relocation Expense

Kentucky Power included a \$318,073 adjustment for relocation expense in its test year revenue requirement.⁴⁴ The Attorney General proposed an adjustment to

⁴² Id. at 44.

⁴³ Rebuttal Testimony of Ranie K. Wohnhas ("Wohnhas Rebuttal Testimony") at R-18 – R-19.

⁴⁴ Kentucky Power's Response to the Attorney General's First Request, Item 251.

normalize relocation expenses that reduced the test year operating expenses by \$140,972 on a Kentucky jurisdictional basis.⁴⁵

In response to Commission Staff's Post-Hearing Data Request, Item 14, Kentucky Power stated that its relocation expense for the eight-month period March 1, 2017 to October 31, 2017 totaled \$125,736. Annualized over a twelve-month period ending February 28, 2018, relocation expenses are forecasted to total \$188,604. On a Kentucky jurisdictional basis, relocation expenses for the twelve months ending February 28, 2018 amount to \$185,964.

The Commission finds that the relocation expense should be adjusted based upon the Kentucky jurisdictional relocation expenses for the twelve months ending February 28, 2018. This results in a decrease to the Kentucky jurisdictional relocation expense of \$132,109.

Gain on Sale of Utility Property

The Attorney General proposed an adjustment to amortize a \$996,669 gain on the sale of utility property ("Carrs Site") over three years for \$327,240 per year on a Kentucky jurisdictional basis.⁴⁶ The Attorney General maintained that the Kentucky jurisdictional gain on the sale of utility property should flow back to customers.

In rebuttal, Kentucky Power argued that the gain on the sale of the property should not be adjusted to reduce its revenue requirement because the Carrs Site had not been included in rate base, and thus Kentucky Power had not received a return on

⁴⁵ Smith Testimony at 46.

⁴⁶ Id. at 47.

the Carrs Site for the last 33 years.⁴⁷ Kentucky Power also noted that it removed \$60,539 in property taxes from its cost of service in this case.⁴⁸

The Commission finds that, since Kentucky Power has not received a return on this investment and has excluded the property taxes from its cost of service, the proposed adjustment by the Attorney General is not reasonable and should be denied.

Cash Surrender Value of Life Insurance

Kentucky Power recorded expense in the test year associated with the cash surrender value of life insurance of former executives in a Kentucky jurisdictional amount of \$26,941.⁴⁹

The Attorney General asserted that Kentucky Power's ratepayers should not be responsible for paying the expenses for the cash surrender value of life insurance for former executives and recommended the \$26,941 of expense be denied for ratemaking purposes.⁵⁰

In rebuttal, Kentucky Power explained that the expense is part of the total compensation/benefit package given to executives (current or former) that should be recovered whether or not the executive is a current or a former employee.⁵¹

The Commission finds that the proposed expense is reasonable, and therefore the Attorney General's proposed adjustment should be denied.

⁴⁸ *Id.*

⁵⁰ *Id.*

⁴⁷ Wohnhas Rebuttal Testimony at R-20.

⁴⁹ Smith Testimony at 48.

Rate Case Expense

The Attorney General proposed an adjustment to remove \$458,333 in rate case expenses.⁵² The Attorney General proposed to remove certain rate case expenses billed by a consultant who conducted witness preparation but did not sponsor testimony on Kentucky Power's behalf. The Attorney General also proposed to remove remaining rate case expenses as a penalty for Kentucky Power not seeking a reduction in the Rockport UPA ROE, which was established by the Federal Energy Regulatory Commission ("FERC").

In rebuttal, Kentucky Power argued that witness preparation is a necessary part of litigating a base rate case and that, regardless of who performs the function, the cost should be recovered.⁵³ Kentucky Power further argued that FERC's determination of the Rockport UPA ROE was fair, just, and reasonable, and that the decision was within FERC's exclusive jurisdiction. Kentucky Power asserted that the Attorney General's proposal to deny rate case expense as a penalty for the Rockport UPA ROE was an unlawful and unconstitutional attempt to overturn a FERC decision.

The Commission finds that the Attorney General's adjustment to remove rate case expenses for witness preparation and as a penalty for the Rockport UPA ROE is unreasonable, and should be denied. Given the type of service provided, the Attorney General's argument to remove the witness preparation consultant's fees is not

Case No. 2017-00179

⁵¹ Wohnhas Rebuttal Testimony at 17.

⁵² Smith Testimony at 52.

⁵³ Wohnhas Rebuttal Testimony at R-20.

persuasive.⁵⁴ In regard to adjusting the rate case expenses as a penalty not related to ratemaking, as set forth in *South Central Bell v. Utility Reg. Comm'n*, 637 S.W.2d 649, 653 (Ky. 1982), the imposition of penalty that is not germane to the factors that go into the ratemaking process is arbitrary and subjective. If the Attorney General objects to the ROE awarded by FERC, the appropriate forum to address that issue is at FERC, and not the Commission.

COMMISSION ADJUSTMENTS TO REVENUES AND EXPENSES Off System Sales ("OSS") Margins, System Sales Clause Tariff ("Tariff S.S.C.")

During the test year, Kentucky Power included OSS margins in the amount of \$7,163,948. Kentucky Power operated the converted Big Sandy Unit 1 for only nine months of the test period. While Kentucky Power annualized the plant maintenance expense for Big Sandy Unit 1,⁵⁵ there was no adjustment or annualization to OSS margins.

The Commission finds that OSS margins should be adjusted to reflect an annualized amount. For the 12-month period ending September 30, 2017, Kentucky Power had OSS margins of \$7,650,360.⁵⁶ Therefore, the Commission will utilize the OSS margins of \$7,650,360 for the 12-month period ending September 30, 2017, rather than the test year amount, resulting in an increase in operating revenue of \$486,412. Additionally, the amount of OSS margins to be collected in base rates is \$7,650,360, rather than the \$7,163,948 proposed in the application.

⁵⁴ See Kentucky Power Fifth Supplemental Response to Staff's First Request (filed Jan. 2, 2018), Item 56. The witness preparation fees were \$42,623; Kentucky Power's other legal fees were \$677,547.

⁵⁵ Application, Section V, Exhibit 2, Workpaper 41.

⁵⁶ Response to Commission Staff's Fourth Request for Information, Item 2.

Weather Normalized Commercial Sales

Kentucky Power proposed an adjustment to increase revenues to reflect normal temperatures, but its adjustment applied only to residential customer sales. In discovery, Kentucky Power stated that commercial revenues would have been \$914,000 greater based on weather normalized temperatures.⁵⁷ After the related variable expenses are removed from revenues, the rate increase is reduced by \$400,000.

The Commission finds this adjustment reasonable as temperatures affect the revenues in both the residential and commercial classes. Therefore, the Commission will reduce the rate increase by \$400,000 to reflect this adjustment.

Purchased Power Limitation and Forced Outage Purchase Power Limitation Expense

Kentucky Power proposed adjustments to include the purchased power limitation and forced outage purchase power limitation expense in base rates in its application in the amount of \$3,150,582 and \$882,204, respectively.

As discussed under the FAC Purchase Power Limitation section below, the Commission is denying Kentucky Power's proposal to recover such costs under Tariff P.P.A. Accordingly, the Commission finds these adjustments unreasonable and should be denied.

Net Operating Income Summary

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

⁵⁷ Direct Testimony of Lane Kollen at 16-17.

Operating Revenues	\$568,163,551
Operating Expenses	519,965,870
Adjusted Net Operating Income	<u>\$ 48,197,681</u>

RATE OF RETURN

Capital Structure and Cost of Debt

Kentucky Power proposed an adjusted test-year-end capital structure consisting of 54.45 percent long-term debt at 5.32 percent; zero percent short-term debt at 0.80 percent; 3.87 percent accounts receivable financing at 1.95 percent; and 41.68 percent common equity at a return of 10.31 percent.⁵⁸ On August 7, 2017, Kentucky Power filed a supplement to its Application reflecting the results of Kentucky Power's June 2017 refinancing of \$325 million 6.00 percent Senior Unsecured Notes, and \$65 million WVEDA Mitchell Project, Series 2014A Variable Rate Demand Notes as authorized in Case No. 2016-00345.⁵⁹ This refinancing reduced the annual cost of long-term debt to 4.36 percent.⁶⁰ The capital structure proposed by the Settlement downwardly adjusts the long-term debt by one percent and places this percent onto the short-term debt at an interest rate of 1.25 percent.⁶¹

⁵⁸ Application, Direct Testimony of Zachary C. Miller ("Miller Direct Testimony") at 3.

⁵⁹ Case No. 2016-00345 Electronic Application of Kentucky Power Company for Authority Pursuant to KRS 278.300 to Issue and Sell Promissory Notes of One or More Series and for Other Authorizations (Ky. PSC Dec. 21, 2016).

⁶⁰ Supplemental Direct Testimony of Zachary C. Miller at 5.

⁶¹ Settlement Testimony of Mattew J. Satterwhite ("Satterwhite Settlement Testimony") at Exhibit 6a.

The Attorney General employed Kentucky Power's proposed capital structure and senior capital cost rates.⁶² KCUC was silent on this topic.

Kentucky Power stated that it sells its receivables to AEP for cost savings due to default risks and to improve cash flow.⁶³ However, Kentucky Power's uncollectible accounts remain with Kentucky Power and are not sold with the accounts receivable.⁶⁴ The Commission notes that the cost of accounts receivable financing is higher than traditional short-term financing. The Commission believes that selling the receivables but maintaining the bad debt places an undue burden onto Kentucky Power's customers. Therefore, the Commission will blend the funds between short-term debt and accounts receivable financing so that the weighted average cost percentage of accounts receivable financing is decreased three basis points and placed on the short-term debt weighted average cost percentage. This reduces the percent of accounts receivable financing to 1.67 percent of the total capital structure and increases the percent of short-term debt to 3.20 percent of the total capital structure. The Commission finds that the cost of long-term debt and short-term debt of 4.36 percent and 1.25 percent, respectively, to be reasonable.

Return on Equity

In its Application, Kentucky Power developed its return on equity ("ROE") using the discounted cash flow method ("DCF"), the capital asset pricing model ("CAPM"), the empirical capital asset pricing model ("ECAPM"), and the utility risk premium ("RP"). In

⁶² Direct Testimony of J. Randall Woolridge, Ph.D. ("Woolridge Testimony") at 3.

⁶³ Dec. 8, 2017 H.V.T. at 12:15:22.

⁶⁴ Dec. 6, 2017 H.V.T. at 5:43:36.

addition, Kentucky Power referenced the expected earnings approach.⁶⁵ Based on the results of the methods employed in its analysis, Kentucky Power recommended an ROE range of 9.71 percent to 10.91 percent, including flotation cost.⁶⁶ Kentucky Power recommended awarding the midpoint of this range, 10.31 percent, to maintain financial integrity and to support additional capital investment.⁶⁷ Kentucky Power further stressed that consideration of all models, not just the DCF model, is important as the DCF model results may reflect the impact from the recent recession and such financial inputs are not representative of what may prevail in the near future.⁶⁸

Direct testimony and analysis regarding ROE was provided by the Attorney General. The Attorney General employed the DCF and CAPM models for his analysis and both models were evaluated using Kentucky Power's proxy group and the Attorney General's own proxy group. This was mostly for comparison purposes, as the Attorney General stated that, on balance, the two proxy groups were similar in risk.⁶⁹ The Attorney General's DCF model results indicated equity cost rates of 8.25 percent and 8.7 percent for the Attorney General and Kentucky Power proxy groups, respectively. The Attorney General disagreed with Kentucky Power's DCF analysis, specifically noting Kentucky Power's elimination of low-end DCF results and the use of growth forecasts that the Attorney General believes are overly optimistic and upwardly biased.⁷⁰

- 68 ld. at 7.
- 69 Id. at 25.
- 70 Id. at 65.

 ⁶⁵ Application, Direct Testimony of Adrian M. McKenzie, CFA ("McKenzie Direct Testimony") at 6.
 ⁶⁶ Id. at Exhibit AMM-2 at 1.

⁶⁷ ld. at 6.

The Attorney General's CAPM results were 7.6 percent for both proxy groups. The Attorney General stated that Kentucky Power's CAPM analysis is flawed as the ECAPM version of the CAPM was used, which the Attorney General claims makes an inappropriate adjustment to the risk-free rate and the market risk premium.⁷¹ Additionally, the Attorney General stated that Kentucky Power's CAPM analysis employed an inflated projected interest rate, an unwarranted size adjustment, and an excessive market or equity risk premium.⁷²

The Attorney General recommended relying primarily on the DCF model, determined the ROE range of the two proxy groups, 8.25 percent and 8.7 percent, to be reasonable, and recommended an ROE of 8.6 percent.⁷³ In support of his recommendation, the Attorney General noted that: as investment risk, Kentucky Power's credit ratings are on par with the proxy groups; capital costs for utilities remain at historical low levels and are likely to remain at low levels; the risk associated with the electric utility industry is among the lowest and, as such, the cost of equity capital is amongst the lowest; and authorized ROEs have been gradually decreasing in recent years.⁷⁴

The Attorney General also disagreed with Kentucky Power's upward adjustment of 0.11 percent to the equity cost rate recommendation to account for flotation costs. The Attorney General argued that Kentucky Power did not identify any flotation costs

⁷² Id.

74 Id. at 59.

⁷¹ Id. at 68.

⁷³ Woolridge Testimony at 58.

that are specifically associated with Kentucky Power.⁷⁵ The Attorney General stated that it is commonly argued that a flotation cost adjustment is necessary to recover issuance costs, but should not be recovered through the regulatory process, as these costs are already known to the investor upon buying the stock.⁷⁶

The parties to the Settlement agreed that the revenue requirement increases for Kentucky Power will reflect a 9.75 percent ROE as applied to Kentucky Power's capitalization and capital structure of the proposed revenue requirement increases as modified through discovery. As a result, use of a 9.75 percent ROE reduced Kentucky Power's proposed electric revenue requirement by \$4.7 million.⁷⁷ In his post hearing brief, the Attorney General recognized the significant reduction from the original ROE, but still believes it is in excess of the return shareholders require.⁷⁸ The Attorney General further argued that utilities seem to overstate necessary ROE, and does not support the 9.75 percent.⁷⁹ For the reasons discussed below, the Commission finds a ROE of 9.75 percent to be unreasonable, and for the purpose of base rate revenues and certain tariffs, an ROE of 9.70 percent should be applied.

In his testimony, the Attorney General noted that differing opinions between Kentucky Power and the Attorney General regarding capital market conditions result in differing ROE recommendations.⁸⁰ Kentucky Power's analysis assumes higher interest

⁷⁵ Id. at 80.

⁷⁶ Id. at 81.

⁷⁷ Settlement at 4.

⁷⁸ Attorney General's Post Hearing Brief ("Attorney General's Brief") (filed Jan. 5, 2018) at 18.

⁷⁹ Id. at 19 and 20.

⁸⁰ Woolridge Testimony at 5.

rates and capital costs whereas the Attorney General concludes that interest rates and capital costs are at low levels and likely to remain low for some time.⁸¹ The Commission agrees with the Attorney General that, although interest rates are increasing, they are doing so slowly and are still historically low. In fact, the Federal Reserve noted the following:

The Committee expects that economic conditions will evolve in a manner that will warrant gradual increases in the federal funds rate; the federal funds rate is likely to remain, for some time, below levels that are expected to prevail in the longer run. However, the actual path of the federal funds rate will depend on the economic outlook as informed by incoming data.⁸²

The Commission further agrees that models supporting the low interest rate environment should be given more weight than those supporting high interest rate expectations.

The Commission also agrees with the Attorney General that flotation costs should be excluded from the analysis. The Commission believes that flotation costs are accounted for in the current stock prices, as the price includes the underwriting spread and adding the adjustment amounts to double counting. Removal of the flotation costs from Kentucky Power's initial cost of equity range lowers the range to 9.6 percent from 10.8 percent.⁸³

The 2017 economic environment has shown signs of relative improvement. In response to low inflation and low unemployment, the Federal Reserve increased interest rates a guarter of a percent three times in 2017. Current outlooks for 2018 are

⁸¹ Id.

⁸² Testimony of Richard A. Baudino at 8.

⁸³ McKenzie Direct Testimony, Exhibit AMM-2 at 1.

healthy, with gross domestic product growth rates expected to remain between two and three percent, unemployment forecasted to continue at the natural rate, and inflation expected to hover at around two percent.⁸⁴ However, notwithstanding these improvements, the economy of Eastern Kentucky has lagged behind national and state trends. Employment trends have not recovered to pre-recession levels, earnings trends remain stagnant and lag behind the state trends, and poverty rates in the majority of Kentucky Power's service territory are 24.4 percent or higher.⁸⁵

The Commission is cognizant of the risk inherent to Kentucky Power's service territory and load profile. The Commission notes the Attorney General's position that Eastern Kentucky has been economically depressed for the past decade and that the Commission should consider the economic conditions of the region in evaluating the overall rates and rate design.⁸⁶ Therefore, given the adverse economic situation of the service territory of high unemployment, low earnings, and high poverty rates, the Commission finds a lower ROE will allow Kentucky Power to earn a fair return while reflecting the economic situation of its customers.

For 2016, the median ROE of the utilities in the Attorney General's proxy group was 9.3 percent; for Kentucky Power's proxy group, the median ROE was 9.4 percent.⁸⁷ In addition, the average authorized ROE reported by SNL Financial for 2017 is

- ⁸⁶ Dismukes Testimony at 6.
- ⁸⁷ Woolridge Testimony, Exhibit JRW-4 at 1.

⁸⁴ https://www.thebalance.com/us-economic-outlook-3305669.

⁸⁵ Attorney General's Brief at 12; Dismukes Testimony at 5-6; Dec. 6, 2017 H.V.T., PSC Exhibit 1.

approximately 9.7 percent.⁸⁸ The Commission agrees with Kentucky Power that this is a benchmark worthy of consideration, but disagrees that a downward adjustment will be injurious to customers and the Kentucky economy.⁸⁹ Based on the entire record developed in this proceeding, we find that an ROE of 9.7 falls within the range of the Attorney General's proposed 8.6 percent to the initial proposed ROE of 10.31 percent, and within Kentucky Power's original range of 9.6-10.8 percent, adjusted for flotation costs. Additionally, an ROE of 9.7 is within the range of the benchmarks provided by SNL, the proxy groups, and recent Commission Orders⁹⁰.

Rate-of-Return Summary

Applying the rates of 4.36 percent for long-term debt, 1.25 percent for short-term debt, 1.95 percent for accounts receivable financing, and 9.70 percent for common equity to the Commission adjusted capital structure produces an overall cost of capital of 6.44 percent.⁹¹ The cost of capital produces a return on Kentucky Power's rate base of 6.42 percent.

BASE RATE REVENUE REQUIREMENTS

In the Settlement, Kentucky Power and the Settling Intervenors agreed to a base rate increase of \$31.8 million. The Attorney General's expert witness proposed a base

⁸⁸ Direct Testimony and Exhibits of Gregory W. Tillman on behalf of Wal-Mart Stores East, LP and Sam's East, Inc. at 11.

⁸⁹ Rebuttal Testimony of Adrien M. McKenzie, CFA at 73.

⁹⁰ Case No. 2016-00370 Electronic Application of Kentucky Utilities Company For An Adjustment Of Its Electric Rates and For Certificates of Public Convenience and Necessity (Ky. PSC Jun. 22, 2017) and Case No. 2016-00371 Electronic Application of Louisville Gas and Electric Company For An Adjustment Of Its Electric and Gas Rates and For Certificates Of Public Convenience and Necessity (Ky. PSC Jun. 22, 2017).

rate increase of \$39.8 million. The Commission finds that, subject to the adjustments discussed in this Order, a base rate increase of \$12.35 million is reasonable, as is discussed in the Total Jurisdictional Revenue Requirement section below.

REVENUE REQUIREMENT-RELATED RIDERS AND DEFERRALS

Big Sandy Retirement Rider

In its Application, Kentucky Power proposed to rename the Big Sandy Retirement Rider to the Decommissioning Rider to alleviate customer confusion regarding the purpose of the rider. Pursuant to the settlement agreement approved in Case No. 2014-00396, Kentucky Power recovers the coal-related retirement costs of Big Sandy Unit 1, the retirement costs of Big Sandy Unit 2, and other site-related retirement costs through this rider. Only the rider name will change; the rider will continue to operate in the manner approved by the Commission in Case No. 2014-00396.

The Commission finds the name change reasonable and that it should be approved. The Commission further finds that the carrying charges associated with this rider should be based on the weighted average cost of capital ("WACC"), after reflecting the impacts of the reduction in the federal corporate income tax rates approved in this Order, should become effective as of the date of this Order. However, the monthly amounts collected will not change until Kentucky Power makes its annual filing on or before August 15, 2018, to adjust the amounts collected under this rider.

Big Sandy Unit 1 Operation Rider

In its Application, Kentucky Power proposed to eliminate the Big Sandy Unit 1 Operation Rider ("Tariff B.S.1.O.R.") and to recover through base rates the costs

⁹¹ The Commission adjusted capital structure consists of 54.45 percent long-term debt, 3.2

currently recovered through Tariff B.S.1.O.R. Once new rates become effective in this case, Tariff B.S.1.O.R. will have an under- or over-recovery balance. Therefore, Kentucky Power also requested authority to establish a regulatory asset or liability that will allow Kentucky Power to track and defer any under- or over-recovery balance until its next rate case.

In Case No. 2014-00396, the Commission approved Tariff B.S.1.O.R. to permit Kentucky Power to recover the non-fuel costs of operating Big Sandy Unit 1 as a coal burning unit until its conversion to natural gas, the non-fuel costs of its operation as a natural gas unit and capital investment required for its conversion to natural gas once it is placed in service. Tariff B.S.1.O.R. was designed to be in effect until the rates established in Kentucky Power's next base rate case were implemented.

The Commission has previously approved regulatory assets for other jurisdictional utilities. Such approval has been granted when a utility has incurred: (1) an extraordinary, nonrecurring expense which could not have reasonably been anticipated or included in the utility's planning; (2) an expense resulting from a statutory or administrative directive; (3) an expense in relation to an industry-sponsored initiative; or (4) an extraordinary or nonrecurring expense that over time will result in a saving that fully offsets the cost.⁹² Since Tariff B.S.1.O.R. was approved by the Commission in Case No. 2014-00396, the establishment of a regulatory asset to address the under-

percent of short term debt, 1.67 percent of accounts receivable financing, and 41.68 percent of common equity.

⁹² Case No. 2008-00436, The Application of East Kentucky Power Cooperative, Inc. for an Order Approving Accounting Practices to Establish a Regulatory Asset Related to Certain Replacement Power Costs Resulting from Generation Forced Outages (Ky. PSC Dec. 23, 2008), at 4. See also Case No. 2010-00449, Application of East Kentucky Power Cooperative, Inc. for an Order Approving the Establishment of a Regulatory Asset for the Amount Expended on Its Smith 1 Generating Unit (Ky. PSC Feb, 28, 2011), at 7.

recovery of Tariff B.S.1.O.R. is consistent with the second example listed above. Regarding a possible regulatory liability, the Commission notes that it is appropriate that Kentucky Power customers be the beneficiaries of any over-recovery of Tariff B.S.1.O.R.

The Commission finds the establishment of a regulatory asset or liability due to the elimination of Tariff B.S.1.O.R. to be reasonable and that it should be approved. This approval is for accounting purposes only, and the appropriate ratemaking treatment for the regulatory asset or liability account will be addressed in Kentucky Power's next general rate case.

Tariff A.T.R.

In its Application, Kentucky Power proposed to eliminate Tariff Asset Transfer Rider ("Tariff A.T.R."). Given that Kentucky Power has recovered the full amount that Tariff A.T.R. was designed to recover, the Commission finds the elimination of Tariff A.T.R. to be reasonable and that it should be approved.

Tariff K.E.D.S.

In its Application, Kentucky Power proposed to increase Tariff K.E.D.S. from \$0.15 per meter per month to \$0.25 per meter per month. In the Settlement, Kentucky Power and the Settling Intervenors agreed to a surcharge of \$0.10 per meter for residential customers and \$1.00 per meter for non-residential customers. KCUC did not provide testimony regarding Tariff K.E.D.S.

Tariff K.E.D.S. imposes an economic development surcharge, which was approved in Kentucky Power's last rate case,⁹³ to fund economic development initiatives

⁹³ Case No. 2014-00396, Final Order at 49-51.

in Kentucky Power's service territory, with funds collected through the surcharge matched equally by Kentucky Power from AEP shareholder funds. As a basis for the increase, Kentucky Power argued that additional economic development funds were needed to grow its load and customer base. One of the reasons for Kentucky Power's proposed rate increase is a significant decline in load and customers since the economic downturn in 2008.⁹⁴ A decrease in customers and load concentrates costs among a smaller customer base, which results in fewer customers paying a larger share of the cost. Correspondingly, a growth in load and customer base spreads costs among a greater number of customers.

The Attorney General recommended that the economic development surcharge be eliminated.⁹⁵ The Attorney General asserted that Kentucky Power failed to provide evidence of a direct tie between Kentucky Power's economic development efforts and increased jobs and electricity sales.⁹⁶ The Attorney General further asserted that the economic development surcharge simply redistributes ratepayer dollars without evidence of an identifiable benefit for ratepayers.

In rebuttal, Kentucky Power countered that it maintains economic development metrics, including job counts, investments, and grants, which it uses to evaluate the

⁹⁴ Application, Direct Testimony of Brad N. Hall ("Hall Direct Testimony") at 5. Between 2008 and 2016, Kentucky Power lost 6,931 customers, and its total annual sales declined from 7.24 GWh to 5.80 GWh.

⁹⁵ Direct Testimony of David E. Dismukes ("Dismukes Testimony") at 4; Direct Testimony of Roger McCann ("McCann Testimony") at 6, 17.

⁹⁶ Dismukes Testimony at 4, 41.

success of its economic development program.⁹⁷ In a subsequent discovery response, Kentucky Power provided its written economic development action plan with strategic goals and metrics set forth in specific detail.⁹⁸ Kentucky Power contended that its economic development program achieves identifiable goals, and that Kentucky Power's customers receive benefits from the economic development surcharge. As an example, Kentucky Power asserted that its economic development efforts are projected to create 1,705 new full-time positions, with an additional 1,000 construction jobs.⁹⁹

The Commission recognizes the importance of economic development efforts, especially given the economic needs of Kentucky Power's service area. However, the Commission also recognizes that 26 percent, or 35,756, of Kentucky Power's residential customers are at or below the poverty level.¹⁰⁰ In 2016, Kentucky Power disconnected more than 11,000 residential customers who could not pay their electric bill.¹⁰¹ In the course of this proceeding, the Commission received a large number of public comments from residential customers who questioned why they are charged for Kentucky Power's economic development efforts, particularly given the difficulty that residential customers have in paying their electric bills. Residential customers, especially those on fixed incomes, cannot pass along their costs; to a certain extent, non-residential customers

101 Id. at 11:58:19.

⁹⁷ Dec. 8, 2017 H.V.T. at 10:44:56.

⁹⁸ Kentucky Power Response to KCUC's Post Hearing Data Request ("Response to KCUC Post Hearing Request"), Item No. 1, Attachment 1.

⁹⁹ Hall Direct Testimony at 12; Dec. 8, 2017 H.V.T. at 10:31:23. On December 7, 2017, there was an announcement that 875 jobs would result from a business locating in Pikeville, Kentucky. Prior to that announcement, there were 830 projected new jobs created from Kentucky Power economic development efforts.

¹⁰⁰ Dec. 8, 2017 H.V.T. at 11:58:01 and 5:33:49.

can pass along their costs to their customers. The Commission finds that the residential customer economic development surcharge of \$0.10 per meter per month, as set forth in the Settlement, is unreasonable and therefore should be denied. The Commission further finds that the residential customer economic development surcharge should be eliminated. However, the Commission finds that the economic development surcharge on non-residential customers of \$1.00 per meter per month, as set forth in the Settlement, is reasonable. Therefore, the Commission approves the portion of the Settlement applicable to the economic development surcharge for non-residential customers only.

Home Energy Assistance Program Surcharge

In its Application, Kentucky Power proposed to increase the HEAP surcharge from \$0.15 per residential meter per month to \$0.20 per residential meter per month. Similar to the economic development surcharge, funds collected through the HEAP surcharge are matched equally by Kentucky Power from AEP shareholder funds.

HEAP funds provide subsidies to assist eligible low-income customers in Kentucky Power's service territory to pay electric bills during seven peak heating and cooling months.¹⁰² There is a waiting list of eligible customers because there are not sufficient HEAP funds available to assist all eligible customers.¹⁰³

The Attorney General supported the five-cent increase to \$0.20 per residential meter per month, but argued that the increase was inadequate to keep pace with

¹⁰² McCann Testimony at 5-6, 14. Subsidies are available in January, February, March, July, August, September, and December.

 $^{^{103}}$ Id. at 15. As of Sept. 20, 2017, there were 1,475 eligible customers on a wait-list for HEAP subsidies.

Kentucky Power's rate increases. The Attorney General proposed that the Commission approve the HEAP surcharge increase and, if the Commission discontinued the economic development surcharge, that the HEAP surcharge be increased in the same amount by which the economic development is reduced.¹⁰⁴

Kentucky Power's President, Matthew J. Satterwhite, testified that, if the Commission modified the Settlement to eliminate the \$0.10 per meter per month economic development surcharge for residential customers, Kentucky Power could agree to a commensurate increase in the HEAP surcharge by \$0.10 per residential meter per month, with matching shareholder funds.¹⁰⁵

The Settlement is silent as to the HEAP surcharge.

The Commission finds that the proposed increase in the HEAP surcharge is insufficient to address the demonstrable need to assist eligible low-income customers with their electric bills. The Commission further finds that the HEAP surcharge should be increased by the corresponding amount that the economic development surcharge for residential customers is reduced. Therefore, the Commission rejects Kentucky Power's proposed increase in the HEAP surcharge to \$0.20 per residential meter per month. The Commission finds an increase of the HEAP surcharge to \$0.30 per residential meter per month is reasonable and should be approved.

Rockport Deferral Mechanism

In the Settlement, Kentucky Power and the Settling Intervenors agreed to defer \$50 million of non-fuel and non-environmental lease expenses from Rockport Unit 2

¹⁰⁴ McCann Testimony at 6, 17; Dismukes Testimony at 4.

over five years, with the establishment of a regulatory asset for later recovery ("Rockport Deferral Regulatory Asset") of these expenses. This Rockport Deferral Regulatory Asset, plus a carrying charge based on a WACC of 9.11 percent, will be recovered through Kentucky Power's Tariff P.P.A. over five-years starting in December of 2022. The dates of the end of the deferral period and the start of the five-year amortization period coincide with the anticipated end of the Rockport UPA lease agreement.¹⁰⁶

The Settlement proposed a deferral of \$15 million in 2018 and 2019, \$10 million in 2020, and \$5 million in 2021 and 2022. The Settlement's annual revenue requirement reflects a decrease to base rates of the 2018 \$15 million adjustment. In 2020, 2021 and 2022 the decrease in the deferral will be offset with an increase in the amount recovered through Tariff P.P.A. Additionally, in 2022, the increase in the amount recovered through Tariff P.P.A. will be prorated through December 8, 2022, as the Rockport UPA will terminate on that date. By utilizing Tariff P.P.A., Kentucky Power is able to reduce the annual deferral amount and concurrently keep base rates unchanged. Beginning in December 2022, the five-year deferral period will end and the recovery of the Rockport Deferral Regulatory Asset will be amortized through 2027 and be subject to carrying charges until it is fully recovered. Kentucky Power estimates that the Rockport Deferral

¹⁰⁵ Dec. 7, 2017 H.V.T. at 10:53:09.

¹⁰⁶ Satterwhite Settlement Testimony at S-10.

Regulatory Asset will total approximately \$59 million in December 2022. That amount will decrease incrementally until fully collected over the five-year amortization period.¹⁰⁷

Neither the Attorney General nor KCUC offered testimony concerning the Rockport Deferral. However, during the hearing and in his post-hearing brief, the Attorney General expressed his concerns about the "very large financing costs" associated with the deferrals, stating that the "\$50M over the entire deferral period is going to have financing costs piled on top of it... [t]hese financing costs are at the weighted average cost of capital including the 9.75 percent return of equity which then gets a tax gross up on top of it."¹⁰⁸ The Attorney General further stated that a concern that the costs of the deferral will eventually require rate recovery in future rate proceedings.¹⁰⁹ The Attorney General recommended that the carrying charge be reduced to 4.36 percent for Kentucky Power's current long term debt.¹¹⁰

In response, Kentucky Power argued that the 9.11 percent WACC made Kentucky Power financially whole because of its need to finance the deferral through a combination of debt and equity, and therefore was appropriate.¹¹¹

The recovery period of the proposed Rockport Deferral Mechanism is contingent upon Kentucky Power not renewing the Rockport UPA.¹¹² If the lease is not renewed,

- ¹¹⁰ Attorney General's Brief at 31.
- ¹¹¹ Kentucky Power's Post Hearing Brief ("Kentucky Power's Brief") (filed Jan. 5, 2018) at 48.

¹⁰⁷ See Appendix A, paragraph 3 for details of the Rockport UPA Expense Deferral.

¹⁰⁸ Dec. 6, 2017 H.V.T. at 04:01:19; See also Attorney General's Brief at 31.

¹⁰⁹ Dec. 6, 2017 H.V.T. at 04:01:19

¹¹² Kentucky Power stated that it is unlikely that the Rockport lease will be renewed. Dec. 6, 2017 H.V.T. at 5:47:44; Kentucky Power Response to Staff's Second Request, Item 72.

the expenses associated with the Rockport UPA will be removed from rate base, which allows the regulatory asset to be funded without a change in rate base. However, if the lease is renewed, the deferred expenses will have to be recovered from future ratepayers, and possibly through an increase in rate base.¹¹³ The Commission recognizes that there are inherent risks associated with any deferral mechanism, especially since the deferral recovery is contingent upon not renewing the Rockport UPA. Given Kentucky Power's excess capacity and slow load growth, the Commission believes the benefits of the deferral outweigh the associated risks, and approves the Rockport Deferral Mechanism and the associated \$15 million decrease to rate base. The carrying charges associated with this rider shall be based on the WACC approved in this Order and are effective as of the date of this Order. This approval is for accounting purposes only, and the appropriate ratemaking treatment for this regulatory asset account will be addressed in Kentucky Power's next general rate case.

Environmental Surcharge Tariff E.S.

Kentucky Power proposed an addition to its Environmental Compliance Plan to recover the cost of installing Selective Catalytic Reduction ("SCR") technology at Rockport Unit 1, affecting the amounts collected under Tariff E.S The project is discussed later in the Environmental Compliance Plan section of this Order. Kentucky Power estimated the revenue requirement for the SCR project to be \$3,903,065.¹¹⁴ The Commission finds the Rockport Unit 1 revenue requirement to be reasonable.

¹¹³ Satterwhite Settlement Testimony at S-13.

¹¹⁴ Elliott Testimony, Exhibit AJE-5.

TOTAL JURISDICTIONAL REVENUE REQUIREMENTS

The Commission has found that Kentucky Power's required ROE falls within a range of 8.60 percent to 10.31 percent, and approves an ROE of 9.70 percent. The Settlement proposed a base rate increase of \$31.8 million and environmental surcharge revenues of \$3.9 million, for a total of \$35.7 million. The environmental surcharge is discussed farther below. Because Kentucky Power recovers the costs associated with the decommissioning of coal-related assets at Big Sandy through the Decommissioning Rider, those costs are not included for recovery in the base rates. However, for the twelve months ending September 30, 2018, Kentucky Power will recover approximately \$20.2 million through the Decommissioning Rider,

Due to the modifications the Commission makes to the Settlement and the provision for the reduction in the federal corporate income tax rate from 35 percent to 21 percent in the Tax Cuts and Jobs Act, the Commission finds that an increase in base rate revenues of \$12.35 million, as shown in Appendix F to this Order, exclusive of the environmental surcharge, will result in fair, just, and reasonable electric rates for Kentucky Power and its ratepayers. The Commission utilized Kentucky Power's equity gross up revenue conversion factor ("GRCF"), as provided in Kentucky Power's revised Environmental Surcharge forms filed on January 3, 2018, to reflect the reduction in the federal corporation income tax rate effective with the date of this Order. Additionally, the adjustments the Commission makes to the test year operating income and expense items reflect the income tax rate reduction and change in the GRCF. The excess accumulated deferred income tax ("ADIT") impacts resulting from the reduction federal corporate income tax rate will be addressed in Case No. 2017-00477. The Commission

-41-

also finds that Kentucky Power should establish a mechanism to track the over/undercollection of federal income taxes, and that a true-up of any over/under-collections be addressed in Case No. 2017-00477.

Due to the economic conditions in Kentucky Power's service territory, the Commission believes that the impact of the federal corporate income tax reduction on rates should be put into place effective with the date of this Order. In addition, the lower rates should serve as an impetus for economic development through recruiting new businesses as well as maintaining existing business customers.

NONREVENUE REQUIREMENT RIDERS AND TARIFFS

The following sections address riders and a tariff that have no direct impact on Kentucky Power's revenue requirement. The discussion covers both those that have been contested, and those that are included in the Settlement.

Non-Utility Generator Tariff

In its Application, Kentucky Power proposed to revise the Non-Utility Generator Tariff ("Tariff N.U.G.") to eliminate a provision that requires a 30-day written notice to customers taking service under Tariff N.U.G. if a transmission provider implements charges for transmission congestion. Kentucky Power asserted that this clause is no longer necessary because PJM has already created transmission congestion charges.¹¹⁵ Kentucky Power also proposed to revise language in the special terms and conditions section of Tariff N.U.G. to clarify the requirement to take service for remote

¹¹⁵ Application, Vaughan Direct Testimony at 25.

self-supply.¹¹⁶ The Settlement is silent as to Tariff N.U.G. Neither KCUC nor the Attorney General contested the proposed revisions to Tariff N.U.G.

The Commission finds the revisions to Tariff N.U.G. to be reasonable and that they should be approved.

Systems Sales Clause

In its Application, Kentucky Power proposed to reduce monthly bill volatility by revising its Tariff S.S.C. to change from a monthly system sales adjustment factor to an annual sales adjustment factor. Kentucky Power further proposed to set the Tariff S.S.C. rate to \$0, with the difference between actual off-system sales margins and a base amount of \$7,163,948 deferred based on the current 75/25 customer sharing mechanism approved in Case No. 2014-00396.¹¹⁷ The net deferred credit or charge to customers would then be the base for the annual Tariff S.S.C. rate update.¹¹⁸ Kentucky Power proposed to file the required true-up information no later than August 15 of each year, with rates to be effective with Cycle 1 of October. The first filing would be made by August 15, 2018. The Settlement is silent as to Tariff S.S.C. Neither the Attorney General nor KCUC contested the proposed revisions to Tariff S.S.C.

The Commission finds the revisions to Tariff S.S.C., as adjusted to include \$7,650,350 in base rates, to be reasonable and should be approved.

¹¹⁶ Sharp Direct Testimony at 28.

¹¹⁷ Kentucky Power credits 75 percent of the difference between base and actual off system sales margins amounts to customers and retains 25 percent.

¹¹⁸ Vaughan Direct Testimony at 36-37.

PJM Billing Line Items

In the Application, Kentucky Power proposed to include additional PJM Billing Line Items ("BLIs") for recovery through its FAC. Kentucky Power stated that these BLIs represent items that either require generation resources to be running and online, or are associated with other BLIs that require generation resources to be running and online. Kentucky Power stated that all of the service functions represented by the BLIs are related to fuel-related services previously received by Kentucky Power when it was a member of the AEP East Pool, and that those amounts were previously included in Kentucky Power's base fuel cost. The Settlement is silent as to the BLIs. Neither the Attorney General nor KCUC contested this proposal.

The Commission has reviewed the additional BLIs and finds that they are appropriate for inclusion in the FAC, as these BLIs represent charges and credits that relate to fuel consumed by resources that are running and online. Furthermore, the Commission finds that when Kentucky Power files its compliance tariff, it should amend its Tariff F.A.C to include PJM BLIs 2211, 2215, and 2415, as those BLIs have replaced BLI 2210.

MODIFICATIONS TO TERMS AND CONDITIONS OF SERVICE TARIFFS

In its Application, Kentucky Power proposed certain revisions to its terms and conditions for service. The revisions include: verification of a customer's identity and proof of ownership or lease of property where service is requested at the time an application for service is filed; information to be considered when evaluating whether to waive a deposit; payment arrangements; mobile alerts; elimination of the employee discount; modifying the equal payment plan; and denial or discontinuance of service.

-44-

Kentucky Power also requested a deviation from 807 KAR 5:006, Section 14(2)(a) to amend when a customer can sign up for the Equal Payment Plan, and the annual settleup month for certain customers.

Neither the Attorney General nor KCUC contested the revisions.

The Commission finds that the proposed revisions to the terms and conditions of service as contained in the Application are reasonable, with the exception of the denial or discontinuance of service, and should be approved. The Commission further finds that Kentucky Power established good cause to deviate from 807 KAR 5:006, Section 14(2)(a), and that its request for a deviation should be granted.

As to the denial or discontinuance of service, the Commission finds that the proposed revisions as contained in the Application are overbroad and do not comply with Commission precedent.¹¹⁹ In response to Commission Staff's Post Hearing Data Request, Kentucky Power revised the terms for denial or discontinuance of service as follows:

The Company reserves the right to refuse or discontinue service to any customer if the customer is indebted to the Company for any service theretofore rendered at any location. Service will not be supplied or continued to any premises if at the time of application for service the Applicant is merely acting as an agent of a person or former customer who is indebted to the Company for service previously supplied at the same, or other premises, until payment of such indebtedness shall have been made;

The Commission finds that the revised language regarding denial or discontinuance of service as filed on in the Supplemental Response on December 21, 2017, is reasonable and should be approved.

¹¹⁹ See H.V.T., PSC Exhibits 2, 3, 4, and 6.

RATE DESIGN, TARIFFS AND OTHER ISSUES

Rate Design

Kentucky Power filed a fully allocated jurisdictional cost-of-service study ("COSS") to determine the cost to service each customer class as well as the rate of return on rate base for each class during the test year. The results of the COSS illustrate the amount of cross-subsidization between the rate classes and show that all non-residential rate classes subsidize the residential class. In its Application, Kentucky Power proposed to reduce these subsidies by five percent in its proposed rates. The Settlement modifies this proposed revenue allocation and proposes to use the first \$5.8 million of any Commission-authorized revenue increase to the Industrial General Service ("IGS") rate class to fully eliminate the subsidy Rate IGS would have paid under the rate increase as originally proposed by Kentucky Power.¹²⁰ The remaining revenue increase is spread uniformly among the rate classes, further reducing interclass subsides.¹²¹

The Attorney General did not offer any testimony concerning the allocation of any proposed revenue increase, aside from recommending limiting any revenue increase, and stating that Kentucky Power's customers are unable to afford a rate increase and that a large increase would set the entire economy of Eastern Kentucky back, counteracting any economic expansion.¹²²

¹²⁰ Satterwhite Settlement Testimony at S-9; Dec. 8, 2017 H.V.T. at 2:59:20; Direct Testimony of Stephen J. Baron ("Baron Testimony") at 15 and Table 2.

¹²¹ Satterwhite Settlement Testimony at S-9.

¹²² Dismukes Testimony at 3.

The KCUC does not support the revenue allocation as set forth in the Settlement, contending that the Settlement does not provide fair or reasonable treatment of the Tariff L.G.S. customer class. KCUC stated that in addition to bearing a subsidy burden associated with the overall rate structure, the L.G.S. class must also absorb an additional \$500,000 subsidy resulting from the Public and Private School service ("PS") tariff.¹²³ To remedy this, the KCUC proposes that the first \$500,000 of any additional Commission-directed decrease in the revenue requirement be applied to the Tariff L.G.S. customer class and any revenue reduction beyond \$500,000 be uniformly spread among all the rate classes in proportion to each class's revenue requirement.¹²⁴

Residential Customer Charge

In its Application, Kentucky Power proposed an increase in the residential customer charge from \$11.00 to \$17.50, an increase of 59 percent. The cost-of-service study filed by Kentucky Power in this proceeding supports a customer charge of \$37.88.¹²⁵ The Settlement allows for an increase in the residential customer charge to \$14.00, an increase of 27 percent.

The Attorney General objected to any increase on the residential customer charge.¹²⁶ The Attorney General contended that shifts towards fixed cost recovery disproportionally hurt low-income customers and Kentucky Power did not provide

¹²³ Settlement Testimony of Kevin Higgins ("Higgins Settlement Testimony") at 2.

¹²⁴ Id. at 4.

¹²⁵ Vaughan Direct Testimony, Exhibit AEV-2 at 1.

¹²⁶ Dismukes Testimony at 6.

sufficient evidence to justify an increase.¹²⁷ The Attorney General argued that Kentucky Power's fixed cost calculation of almost \$38.00 is flawed because a portion of demandrelated costs are assigned as fixed costs, which the Attorney General argued is fundamentally incorrect.¹²⁸ The Attorney General noted that none of the parties to the proposed Settlement represent the interests of residential ratepayers, and the proposed \$14 would recover too much of any potential revenue increase through the customer charge and undermine future incentives for efficiency, resulting in an erosion of LIHEAP funds.¹²⁹

The Commission believes an increase to the Residential Basic Service Charge is warranted, and finds that the Settlement's increase to \$14.00 is reasonable. The proposed 27 percent increase is consistent with the principle of gradualism that the Commission has long employed. Consistent with this change, the Commission also approves the customer charges of \$14.00 as set forth in the Settlement for the three optional residential tariffs: 1) Residential Service Load Management Time-of-Day; 2) Residential Service Time-of-Day; 3) and Experimental Residential Service Time-of-Day 2. The Commission also approves a customer charge of \$14.50 for the new optional Residential Demand Metered Electric Service ("Tariff R.S.D.").¹³⁰

¹²⁷ Id.

¹²⁸ Id. at 20.

¹²⁹ Attorney General's Brief at 32-33.

¹³⁰ The Settlement and supporting testimony state that Kentucky Power and the Settling Intervenors agreed to a residential customer charge of \$14.00. Settlement at paragraph 16(a); Satterwhite Settlement Testimony at S-22. The proposed Settlement Tariff R.S.D. filed on Dec. 1, 2017, inadvertently contains a monthly customer charge of \$17.50.

General Service Rate Class

Kentucky Power proposed to combine the Small General Service ("S.G.S.") and Medium General Service ("M.G.S.") rate classes into a single General Service ("G.S.") rate class under which all general service customers with average demands up to 100 kilowatts ("kW") will take service. Kentucky Power stated that both the S.G.S. and M.G.S. rate classes currently incur a monthly service charge and a blocked energy charge. Additionally, the M.G.S. rate class incurs a demand charge. Due to this current tariff structure, there is movement between the S.G.S. and M.G.S. rate classes as load characteristics vary month to month for many commercial customers. Kentucky Power stated that combining the S.G.S. and M.G.S. into a single tariff allows for administration efficiencies by eliminating this movement between the two rate classes.¹³¹ The new G.S. tariff combines rate design features from the S.G.S. and M.G.S. tariffs, and will include a monthly service charge, two blocked energy charges, and a demand charge for monthly billing demand greater than 10 kW. The blocked energy charge transition point is 4,450 kilowatt hours ("kWh"). Kentucky Power stated that setting the kWh block at 4,450 kWh ensures that almost all usage that was billed under the current S.G.S. tariff will continue to be billed on an energy charge only and such a rate design will minimize bill impact on current S.G.S. and M.G.S. customers.¹³²

Although the proposed rate design minimizes the impact on an average commercial customer, due to the proposed increase in the demand charge from \$1.91

¹³¹ Vaughan Direct Testimony at 21.

¹³² Id. at 21.

for all kW to \$7.95 for all kW greater than 10 kW, it negatively affects customers whose load characteristics include low usage coupled with high demand.¹³³ The Commission believes that Kentucky Power's proposed increase in the demand charge of over 300 percent is excessive. For this reason, the Commission will minimize the impact on high demand commercial customers, apply a 2-step phase-in increase of demand rates, and limit the increase in year 2 to \$6.00 per kW. In addition, Kentucky Power must identify and contact G.S. class customers whose average monthly demand is 25 kW or greater to meet to discuss the impacts of the rate increase on those customers' bills and analyze other tariff options, such as time-of-day rates, that may offer relief to these customers. Last, Kentucky Power should file with the Commission, within twelve months of this Order, a report listing the commercial customers who meet this load profile and the results of each meeting.

Rate Adjustment

In setting the rates shown in Appendix C, the Commission maintained the basic service charge for each class that was included in the Settlement. The reduction of Kentucky Power's revenue increase was allocated to the energy charges of those customer classes for which revenue increases were proposed. The reduction to each class's proposed revenue increase was approximately in proportion to the increase set forth in the Settlement.

¹³³ Dec. 8, 2017 H.V.T. at 4:53:40.

Tariff Purchased Power Adjustment

In its Application, Kentucky Power proposed to include the following additional cost of service items to be tracked and recovered through Tariff P.P.A.: (1) PJM OATT charges and credits that it incurs or receives from its participation as a LSE in the organized wholesale power markets of PJM; (2) purchased power costs excluded from recovery through the FAC as a result of the purchased power limitation; and (3) gains and losses from incidental gas sales. In addition, Kentucky Power proposed to change Tariff P.P.A. from a monthly adjusting surcharge to an annually updated surcharge.

The Attorney General filed testimony stating that these cost-of-service items should continue to be collected through base rates as Kentucky Power has not demonstrated a compelling reason to have these items tracked and recovered through Tariff P.P.A.¹³⁴

1. PJM LSE OATT Charges and Credits

Kentucky Power proposed to include the following PJM LSE transmission charges and credits to costs recoverable through Tariff P.P.A.: network integration transmission service ("NITS"); transmission owner scheduling system control and dispatch service ("TO"); regional transmission expansion plan ("RTEP"); point-to-point transmission service; and RTO start-up cost recovery. An adjusted level of the net OATT charges and credits in the amount of \$74,377,364 will be included in base rates.¹³⁵ The amount above or below the base rate level would be tracked monthly and the annual net over- or under-collection would then be collected from or credited to customers through the operation of Tariff P.P.A.

¹³⁴ Smith Testimony at 70.

Kentucky Power stated that the proposed tracking mechanism for PJM OATT LSE Charges is necessary due to the volatility of these PJM charges and credits, which Kentucky Power claimed are largely out of its control. Kentucky Power estimated that its PJM OATT LSE expenses will increase in 2018 by approximately \$14 million, or 19 percent over the test year amount.¹³⁶ Kentucky Power expects increasing investment in the transmission grid by PJM member transmission owners, which will increase transmission charges allocated to LSEs in PJM. Kentucky Power stated that tracking the PJM LSE charges and credits via Tariff P.P.A. could preclude it from seeking more frequent rate cases.¹³⁷

Finally, two proceedings currently before the FERC may affect the level of PJM LSE OATT charges incurred by Kentucky Power. One proceeding is a challenge to the ROE included in the AEP Zone formula, which determines the PJM transmission costs of service for the AEP Transmission Zone. Kentucky Power stated that at this time, any change resulting from this proceeding is not known and measurable. Therefore, an adjustment in this case is not possible. The second proceeding is a pending non-unanimous settlement regarding the cost allocation methodology historically used by PJM to allocate costs of transmission enhancement projects to the LSEs in its footprint. If approved, the proposed stipulation is expected to result in lower PJM LSE OATT

¹³⁵ Vaughan Direct Testimony at 29.

¹³⁶ Satterwhite Settlement Testimony at S-14–S-15.

¹³⁷ Vaughan Direct Testimony at 27-28.

charges. However, the timing or magnitude of the possible cost allocation changes are not currently known.¹³⁸

The Settlement revised the proposal regarding the PJM OATT LSE charges and credits as follows:

• Kentucky Power will recover and collect 80 percent of the annual over- or under-collection of PJM OATT LSE charges, as compared to the annual amount included in base rates, ("Annual PJM OATT LSE Recovery") through Tariff P.P.A.

• Kentucky Power will credit against the Annual PJM OATT LSE Recovery 100 percent of the difference between the return on its incremental transmission investments calculated using the FERC approved PJM OATT return on equity, and the return on its incremental transmission investments calculated using the 9.75 percent return on equity provided for in the settlement.

• The changes to Tariff P.P.A. to allow for the Annual PJM OATT LSE Recovery will terminate on the effective date when base rates are reset in the next base rate proceeding unless otherwise extended by the Commission.

Due to the volatility of the OATT charges and credits, the Commission finds the proposal to include the PJM LSE transmission charges and credits to the costs recoverable through Tariff P.P.A., as modified in the Settlement, reasonable with one modification. When calculating the credit against the Annual PJM OATT LSE Recovery, the return on equity amounts used to calculate the incremental transmission investments shall be 9.7 percent, the Commission-approved ROE amount.

¹³⁸ Id. at 28-29.

In conjunction with approving the PJM OATT LSE tracker, the Commission finds that the three-year stay-out provision in the Settlement is reasonable and should be accepted. In approving the tracker, the Commission addresses Kentucky Power's primary concern, raised in the last rate case and in this case, that an increase in major expenses not directly under Kentucky Power's control would result in more frequent rate cases.

Regarding proposed transmission projects at PJM, the Commission expects Kentucky Power to work through the PJM stakeholder process to protect its customer interests.

2. FAC Purchased Power Limitations.

Kentucky Power proposed to track, on a monthly basis, the amount of purchased power costs excluded for recovery through the FAC over or above the base rate level using deferral accounting. The annual net over- or under-collection of these purchase power costs would be collected from or credited to customers through Tariff P.P.A.¹³⁹

The FAC Purchase Power Limitation is a calculation that caps the amount of purchase power expense to be recovered through the monthly FAC surcharge. The calculation compares the cost of actual purchased power on an hourly basis to the cost of Kentucky Power's highest cost unit or the theoretical peaking unit equivalent, and caps the FAC-recoverable purchase power expense at the cost (\$/MWh) of the highest generating unit (Kentucky Power owned or peaking unit equivalent). Kentucky Power claims that, because it relies on factors outside of its control, the FAC Purchase Power Limitation and the peaking unit equivalent calculation promote variability and volatility.

¹³⁹ *Id.* at 29.

The Commission is not convinced that this issue requires special ratemaking treatment. The Commission has long held that any purchased power costs not recoverable through the FAC are eligible for recovery through base rates. The Commission finds Kentucky Power's proposal to include an estimated amount of FAC Purchased Power Limitation Expense in base rates, and to subsequently true up that amount through Tariff P.P.A., is unreasonable, and therefore should be denied. The Commission notes that Kentucky Power filed this case using a historic test period. The Commission will allow recovery of the test year amount of purchased power reasonably incurred, but excluded from the FAC. To the extent that Kentucky Power incurs any expense due to purchased power that is appropriately incurred after the test year, but excluded from the FAC, it can file a base rate case seeking recovery of those expenses. For the foregoing reasons, adjustments W26 and W27, which total \$4,032,786, are unreasonable and should be removed from the revenue requirement.

3. Peaking Unit Equivalent Calculation

Kentucky Power proposed to change the methodology for calculating the peaking unit equivalent ("PUE") used in determining the FAC Purchased Power Limitation. In its Application, Kentucky Power proposes to include the cost of firm gas service as an expense in the calculation of its PUE. Kentucky Power stated that since the hypothetical combustion turbine ("CT") could be dispatched any day of the year, it requires firm gas service. The Commission disagrees. While firm gas service would certainly allow the CT to be dispatched any day of the year, the Commission is unaware of any jurisdictional utility utilizing firm gas service for a CT. Because CTs typically operate at low capacity factors and are primarily utilized during the summer peaking

-55-

months, when pipeline capacity would typically not be constrained, the Commission finds the inclusion of firm gas service in the calculation of the PUE to be unreasonable, and therefore, this change in the PUE calculation should be denied. Kentucky Power's proposal to include startup costs and variable O&M expense is reasonable and should be approved.

4. Gains and Losses from Incidental Gas Sales.

Kentucky Power proposed to recover gains and losses from incidental sales of natural gas through Tariff P.P.A. Kentucky Power nominates Big Sandy Unit 1 in the PJM day-ahead electric power market based in part on the price of natural gas purchased for delivery the next day. If the Big Sandy Unit 1 Day Ahead nomination price is higher than the PJM electric power market clearing price, Big Sandy Unit 1 is not selected to run in the Real Time Market. In such a case, the natural gas purchased must either be stored by Columbia Gas or be sold. Kentucky Power stated that in August, September, and November of 2016, there were days that it was required to sell natural gas that had been purchased for delivery because Big Sandy Unit 1 was not selected by PJM to run.¹⁴⁰

In Case No. 2014-00078, Duke Energy Kentucky ("Duke Energy") proposed similar treatment of gains and losses it experienced in January and February of 2014 from incidental sales of natural gas.¹⁴¹ Duke Energy amended its request to apply to similar losses or gains occurring in the future. The Commission approved the treatment of the January and February 2014 gains and losses. However, the Commission found

¹⁴⁰ Application, Direct Testimony of John A. Rogness at 26-27

¹⁴¹ Case No. 2014-00078, An Investigation of Duke Energy Kentucky, Inc.'s Accounting Sale of Natural Gas Not Used in Its Combustion Turbines (Ky. PSC Nov. 25, 2014).

Duke Energy's proposal to apply such treatment to similar losses or gains in the future to be overly broad and did not approve such treatment, finding that such gains and losses should be investigated on a case-by-case basis.

In this case, the Commission finds, as it did in Case No. 2014-00078, that gains and losses from the incidental sale of natural gas should be investigated on a case-bycase basis. If such gains or losses occur in the future, Kentucky Power should notify the Commission so those matters may be addressed in a formal proceeding. For purposes of this case, the Commission finds that the gain on the incidental sale of natural gas of \$13,982 should be utilized to reduce Kentucky Power's revenue requirement.

Tariff K-12 School

In its Application, Kentucky Power proposed to discontinue the pilot Tariff K-12 School under which public schools in Kentucky Power's service territory took service under discounted rates. Kentucky Power stated that its load research and class cost of service study demonstrated that Tariff K-12 School customers would be better off in the Tariff L.G.S. customer class than they were previously a part of prior to the pilot Tariff K-12.

Tariff Pilot K-12 School was approved as part of the settlement agreement in Case No. 2014-00396. In Case No. 2014-00396, KSBA argued, as it does in this proceeding, that public school load characteristics were sufficiently unique to justify a distinct rate class for K-12 schools. Because school load data did not exist, Kentucky Power agreed to establish a pilot tariff with load research meters at 30 K-12 schools.

Kentucky Power further agreed to evaluate whether to continue Tariff K-12 School in its next base rate case using the load research data.

Tariff K-12 School rates were designed to produce an annual revenue requirement that was \$500,000 less than would be produced under the L.G.S. rates from customers eligible to take service under Tariff K-12 School.¹⁴² Tariff L.G.S. and Tariff M.G.S. customers rates were designed to include the \$500,000 subsidy to Tariff K-12 Schools.¹⁴³

Under the Settlement, Tariff K-12 School would cease to be a pilot, and would continue as a separate rate class. The tariff would be available to all K-12 schools, public and private, in Kentucky Power's service territory with normal maximum demands greater than 100 kW. Tariff K-12 School rates continue to be designed with a \$500,000 subsidy absorbed by Tariff L.G.S. customers.

In its Settlement Testimony, KCUC asserted that the Settlement is unfair and unreasonable because L.G.S. customers had to absorb the subsidy to provide a \$500,000 benefit for Tariff K-12 School customers, in addition to a significant inter-class subsidy burden as part of the overall rate structure.¹⁴⁴ KCUC stated that it did not object to the \$500,000 discount to Tariff K-12 School customers, but instead objected that the discount is funded by L.G.S. customers, and not spread out among all customer classes. As a remedy, KCUC proposed that, if the Commission reduced the revenue requirement, that the first \$500,000 of any reduction be applied first to reduce the revenue requirement of the L.G.S. class.

¹⁴² Case No. 2014-00396, Final Order, at 19.

¹⁴³ Id.

The Commission finds that load research data collected and analyzed by Kentucky Power demonstrates that a separate, discounted K-12 schools tariff is not justified and that public school usage characteristics do not support the discounted rates paid by Tariff K-12 School customers relative to the L.G.S. class. The Commission finds that it is unreasonable to continue Tariff K-12 School, and therefore rejects this portion of the Settlement.

Green Pricing Option Rider/Renewable Power Option Rider

Kentucky Power proposed to revise its Green Pricing Option Rider to expand the categories of renewable energy credits available, to allow participating customers to purchase their full requirements from renewable energy generators, and to change the name of the rider to the Renewable Power Option Rider ("Rider R.P.O"). The Commission finds that the Rider R.P.O. provision in the Settlement is reasonable and should be approved.

Tariff C.A.T.V.

In its Application, Kentucky Power proposed to increase Tariff C.A.T.V. rates for pole attachments on a two-user pole from \$7.21 per year to \$11.97 per year, and for pole attachments on a three-user pole from \$4.47 per year to \$7.52 per year. In the Settlement, Kentucky Power and the Settling Intervenors agreed to a rate of \$10.82 per year for attachments on a two-user pole, and \$6.71 per year for attachments on a three-user pole.

The Commission finds that the rates for Tariff C.A.T.V. as set forth in the Settlement are reasonable and should be approved.

¹⁴⁴ Higgins Settlement Testimony at 2.

Temporary Service Tariff

In its Application, Kentucky Power proposed to revise its Temporary Service Tariff ("Tariff T.S.") to limit service provided under Tariff T.S. to ensure that customers do not continue to take service under Tariff T.S. even after construction is complete and the facility is occupied. The Commission finds these changes to be reasonable and that they should be approved.

Optional Residential Demand Charge Tariff

Kentucky Power proposed a new optional residential rate schedule ("Tariff R.S.D.") that will be available to up to 1,000 residential customers. The rate structure will consist of a monthly service charge, on-peak and off-peak kWh energy charges, and an on-peak kW demand charge. Kentucky Power stated that the goal of Tariff R.S.D. is to send targeted price signals that will reward customers for shifting usage away from the peak time periods that cause Kentucky Power to incur higher costs. Kentucky Power also stated that certain electric heating customers may benefit from Tariff R.S.D. due to their potentially higher load factor usage characteristics, and that the rate design is revenue neutral to the standard residential tariff.¹⁴⁵

The Commission finds the proposed Tariff R.S.D. to be reasonable, that it should be approved, and that the rates included in Appendix C of this Order should be approved.

Tariff C.S.-Coal, Tariff C.S.-I.R.P. and Tariff E.D.R.

The Settlement extends through December 31, 2018, Tariff C.S.-Coal and the amendments to Tariff C.S.-I.R.P. and Tariff E.D.R., which were due to expire December

¹⁴⁵ Vaughan Direct Testimony at 19

31, 2017. The Commission finds the extension of the tariffs reasonable and that they should be approved. Any financial loss incurred in connection with these tariffs will be deferred for review and recovery in Kentucky Power's next base rate proceeding.

ENVIRONMENTAL COMPLIANCE PLAN

In its Application, Kentucky Power requested Commission approval of an amended environmental Compliance Plan ("2017 Plan") and an amended Environmental Surcharge tariff ("Tariff E.S.").

The 2017 Environmental Compliance Plan

The 2017 Plan includes previously approved projects and two new projects, Project 19 and Project 20. The 20 projects included in the 2017 Plan are listed in Appendix D to this Order.

Project 19 will install SCR technology at Rockport Unit 1 ("Rockport Unit 1 SCR Project"). The Rockport Unit 1 SCR project will reduce the plant's nitrogen oxide emissions, and is required under terms of a 2007 Consent Decree ("Consent Decree") among several AEP entities including Kentucky Power and I&M, and the Environmental Protection Agency and several environmental plaintiffs.

Project 20 seeks to include a return on inventories for consumables used in conjunction with approved projects through Tariff E.S. Kentucky Power currently recovers the cost of the consumption of consumables through Tariff E.S. The return on consumable inventories is currently part of the general rate base. Kentucky Power proposed that the return on consumable inventories be recovered through Tariff E.S. to align that cost with the cost recovery of items consumed.

Kentucky Power stated that the pollution control projects included in the 2017 Plan amendment are necessary to comply with the Federal Clean Air Act ("CAA") and other federal, state, and local regulations that apply to coal combustion wastes and byproducts from facilities utilized for the production of energy from coal. Kentucky Power asserted that the costs associated with its 2017 Plan are reasonable, and that the projects are a reasonable and cost-effective means to comply with environmental requirements.

The Attorney General argued that Kentucky Power should not be permitted to recover the cost of the Rockport Unit 1 SCR Project.¹⁴⁶ The Attorney General asserted that Kentucky Power's customers have been paying increasing amounts for environmental costs resulting from the Consent Decree because AEP voluntarily made environmental upgrades at generating stations, including the Rockport generating units, that were not identified in the original EPA litigation that led to the Consent Decree. Because Rockport was not part of the original litigation, the Attorney General asserts Kentucky Power should not recover the costs for the Rockport Unit 1 SCR project from its ratepayers.

In rebuttal, Kentucky Power stated that the decision to include Rockport in the Consent Decree settlement was a way to remove the significant risk of additional litigation at those units not named in any pending complaints, as well as to provide a more favorable outcome than would be expected on an individual basis.¹⁴⁷ Kentucky Power further stated that the Consent Decree provided certainty regarding the timing of

¹⁴⁶ Smith Testimony at 59.

¹⁴⁷ Rebuttal Testimony of John McManus at 3.

additional control installations across the AEP fleet. At the time of the settlement, Kentucky Power was still participating in the AEP Pool, which meant that the outcome of litigation involving all units across the AEP fleet contributing to the pool was in the best interest of Kentucky Power and its customers.

The Settlement was silent on the 2017 Environmental Compliance Plan.

The Commission finds that the 2017 Plan is reasonable as set forth in the Application and should be approved.

ENVIRONMENTAL SURCHARGE TARIFF MODIFICATIONS

Kentucky Power updated its Tariff E.S. to reflect the changes proposed in its Application and the Settlement. Kentucky Power updated the list of projects in the tariff to match the projects included in the 2017 Plan as noted previously in this Order. Kentucky Power updated Tariff ES to reflect the rate of return included in the Settlement to this case. Kentucky Power also updated the tariff to reflect the new monthly base environmental costs based on that rate of return. Kentucky Power determined the annual base revenue requirement level for environmental cost recovery to be \$47,513,461.¹⁴⁸ The Commission has determined that the correct annual base revenue requirement is \$44,379,316, which reflects the Commission authorized return on equity, capital structure changes, reduction of the federal corporate income tax rate from 35 percent to 21 percent and the depreciation rates set forth in Exhibit 5 of the

¹⁴⁸ In the Tariff E.S. filed December 1, 2017, Kentucky Power reflected an annual base revenue requirement of \$47,811,215. Kentucky Power updated this amount to \$47,513,461 to reflect the depreciation rates included in Exhibit 5 to the Settlement Agreement. See Response to Commission Staff's Post-Hearing Request for Information ("Staff's Post-Hearing Request"), Item 20 attachment KPCO_R_KPSC_PH_20_Attachment1.xls.

Settlement.¹⁴⁹ Kentucky Power shall file a revised Tariff ES to reflect the Commission authorized return on equity and capitalization discussed in this Order, and the annual base revenue requirement as shown on Appendix E attached to this order. Per the settlement agreement in Case No. 2012-00578,¹⁵⁰ all costs associated with the Mitchell FGD equipment are excluded from base rates and therefore are not included in the base revenue requirement noted above, but will be included as part of the current period environmental revenue requirement. The Commission finds that Tariff E.S. as discussed and modified in this Order should become effective for service rendered on and after the date of this Order.

Costs Associated with the 2015 Plan

Tariff E.S. revenue requirement is determined by comparing the base period revenue requirement with the current period revenue requirement. Kentucky Power proposed to incorporate the costs associated with the 2017 Plan into the existing surcharge mechanism used for previous compliance plans. Kentucky Power identified the environmental compliance costs for the 2017 Plan projects, which Kentucky Power proposed to recover through its environmental surcharge. Kentucky Power proposed to apply a gross-up factor to environmental expenses to account for uncollectible accounts and the Commission assessment fee. The factor will be applied to the incremental change in operating, maintenance, and other expenses from the base period. The

¹⁴⁹ Response to Staff's Post-Hearing Request, Item 20.

¹⁵⁰ Case No. 2012-00578, Application of Kentucky Power Company for (1) a Certificate of Public Convenience and Necessity Authorizing the Transfer to the Company of an Undivided Fifty Percent Interest in the Mitchell Generating Station and Associated Assets; (2) Approval of the Assumption by Kentucky Power Company of Certain Liabilities in Connection with the Transfer of the Mitchell Generating Station; (3) Declaratory Rulings; (4) Deferral of Costs Incurred in Connection with the Company's Efforts to Meet Federal Clean Air Act and Related Requirements; and (5) All Other Required Approvals and Relief (Ky. PSC Oct. 7, 2013).

costs identified by Kentucky Power 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 2017 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 Kentucky Power's environmental surcharge.

Qualifying Costs

As stated previously, the qualifying costs included in Kentucky Power's annual baseline level for environmental cost recovery under the tariff shall be \$44,379,316. The qualifying costs included in the current period revenue requirement will reflect the Commission-approved environmental projects from Kentucky Power's 1997, 2005, 2007, 2015 and 2017 Plans. Per the settlement agreement in Case No 2012-00578, all costs associated with Mitchell Units 1 and 2 FGD equipment have been excluded from base rates and the environmental baseline level and shall be recovered exclusively through Tariff E.S. Should Kentucky Power desire to include other environmental projects in the future, it will have to apply for an amendment to its approved compliance plans.

Rate of Return

Paragraph 8(a) of the Settlement authorizes Kentucky Power to use a 9.75 percent ROE to be utilized in Tariff E.S. to determine the WACC for non-Rockport environmental projects. However as previously noted, the Commission has authorized a 9.70 percent ROE that should be used for all non-Rockport environmental projects.

Case No. 2017-00179

-65-

Kentucky Power's ROE for environmental projects at the Rockport Plant is 12.16 percent as established by the FERC-approved Rockport Unit Power Agreement.

Capitalization and Gross Revenue Conversion Factor

Paragraph 3(c) and Exhibit 6 of the Settlement provide that Kentucky Power shall utilize a WACC of 6.48 percent and a gross revenue conversion factor ("GRCF") of 1.6433 to determine a rate of return of 9.11 percent to be used in the monthly environmental surcharge filings. As a result of the reduction of the federal corporate tax rate from 35 percent to 21 percent, the Commission has determined that Kentucky Power should use a GRCF of 1.352116. Because of the change in the authorized ROE, capitalization, and the GRCF, the WACC to be used for non-Rockport environmental projects is 6.44 percent. Utilizing a WACC of 6.44 percent and a GRCF produces a rate of return of 7.88 percent to be used in the monthly environmental surcharge filings. The WACC and GRCF shall remain constant until the Commission sets base rates in Kentucky Power's next base rate case proceeding.

Surcharge Formulas

The inclusion of the 2017 Plan into Kentucky Power's existing surcharge mechanism will not result in changes to the surcharge formulas. The costs associated with the Mitchell FGD will be excluded from base rates and the base rate revenue requirement of the environmental surcharge at least until June 30, 2020, but will be included in the current period revenue requirement for the environmental surcharge. The Commission finds that the formulas used to determine the environmental surcharge revenue requirement as proposed by Kentucky Power should be approved.

Surcharge Allocation

-66-

The retail share of the revenue requirement will be allocated between residential and non-residential customers based upon their respective total revenue during the previous calendar year. The environmental surcharge will be implemented as a percentage of total revenues for the residential class and as a percentage of non-fuel revenues for all other customers.

Monthly Reporting Forms

The inclusion of the 2017 Plan into the existing surcharge mechanism will require modifications to the monthly environmental surcharge reporting forms. Kentucky Power provided its proposed revised forms to be used in the monthly environmental reports. The revised forms include the changes necessary to reflect the proposed 2017 Plan, as well as changes necessitated by the application of a gross-up factor to the incremental operating, maintenance and other expenses. The Commission finds that Kentucky Power's proposed monthly environmental surcharge reporting forms as revised should be approved.

FINDINGS ON SETTLEMENT AGREEMENT

Based upon a review of all the provisions in the Settlement, an examination of the entire record, and being otherwise sufficiently advised, the Commission finds that the provisions of the Settlement are in the public interest and should be approved, subject to the modifications as discussed in this Order. Our approval of the Settlement as modified is based solely on its reasonableness and does not constitute precedent on any issue except as specifically provided for in this Order.

OTHER ISSUES

Vegetation Management

Kentucky Power's current Vegetation Management Plan ("2015 Vegetation Management Plan") was modified from its 2010 Vegetation Management Plan in Kentucky Power's last rate case, Case No. 2014-00396. In Case No. 2014-00396, it was determined that funding for the 2010 Vegetation Management Plan, which was scheduled to move to a four-year cycle within seven years of initial circuit clearing, needed modification. However, the work required to transition to a four-year cycle was significantly greater than initially estimated, and Kentucky Power could not wait until all circuits had an initial clearing ("Task 1") to begin re-clearing the circuits. Thus, the modification was approved allowing the continuation of Task 1 and a simultaneous undertaking of interim re-clearing ("Task 2"). Under this schedule, Task 1 would be completed by December 31, 2018, Task 2 would be completed by June 30, 2019, and on July 1, 2019, Kentucky Power's entire distribution system would commence to be recleared on a five-year cycle ("Task 3"), rather than a four-year cycle. Funding was approved for the 2015 Vegetation Management Plan, as well as a provision requiring Kentucky Power to obtain Commission approval prior to modifying its annual projected vegetation management spending on both an aggregate and a district basis if the change is more than 10 percent of the budget.

Kentucky Power is on pace to exceed the December 31, 2018 target for Task 1, and expects to complete Task 1 circuit clearing in the first quarter of 2018. In addition, Task 2 circuit re-clearing is expected to be completed by December 31, 2018, six months sooner than projected. To date, Kentucky Power has exceeded targets on budget as total expenditures are 101 percent of target level.¹⁵¹ Reliability has increased

¹⁵¹ Application, Direct Testimony of Everett G. Phillips ("Phillips Testimony") at 35.

and Kentucky Power customers have seen a 60 percent decrease in interruptions related to rights-of-way trees and vegetation.¹⁵² Task 3 is estimated to begin in January 2019.

Embedded in Kentucky Power's current base rates are annual vegetation management O&M expenses of \$27.661 million. Due to early completion of Tasks 1 and 2, Kentucky Power estimates a reduction of O&M expenses related to Tasks 1 and 2 from \$27.661 million in 2017 to \$21.639 million 2018. According to the 2015 Vegetation Management Plan, at the start of Task 3, O&M expenses are projected to decrease, resulting in a decrease of O&M expenses of \$11.780 million. However, Kentucky Power has determined that the estimates of the annual O&M expenditures for Task 3 as estimated in the 2015 Vegetation Management Plan are undervalued and need to be increased.¹⁵³ Due to the re-clearing in Task 2, Kentucky Power now has a better grasp on regrowth, the effect of higher-than-average rainfall, and growing customer demand to remove tree debris, and proposes to increase the annual O&M expenses for Task 3. This re-estimation calculates costs for Task 3 to increase from the original \$15.880 million to \$21.284 million in 2019, and \$21.473 in 2020.¹⁵⁴ Kentucky Power proposes the amount of vegetation management O&M expenses to be recovered through base rates for the instant case to be equal to the average of the revised estimated annual vegetation management plan O&M spending over 2018-2020, or \$21.465 million.155

¹⁵² *Id* at 40.
 ¹⁵³ *Id*.
 ¹⁵⁴ *Id*. at 46

Kentucky Power also proposes two changes to its current vegetation management reporting requirements. First, Kentucky Power proposes to modify the pre-approval requirement for deviation of 10 or more percent from projected annual vegetation management O&M expenditures to eliminate the district-specific threshold and retain only the requirement for pre-approval if overall Kentucky Power vegetation management expenditures deviate more than 10 percent. Second, Kentucky Power proposes to manage its vegetation work and expenditures on a calendar year basis, as opposed to managing its vegetation work on a fiscal year and expenditures on a calendar year. Kentucky Power stresses that neither modification will change their overall vegetation management obligation, but provides for more flexibility to manage its obligations.¹⁵⁶

The 2015 Vegetation Management Plan included a one-way balancing account. In this balancing account, any annual shortfall or excess in vegetation management O&M expenditures that is over the amount in base rates is added to or subtracted from future expenditures over four years. At the end of the four-year period, Kentucky Power will record a cumulative shortfall as a regulatory liability that will either be refunded to the customers or used to reduce the revenue requirement in its next filed base-rate case. If Kentucky Power has overspent on a cumulative basis during the four-year period, it will not seek recovery of such costs in a future base-rate proceeding. As of the end of November 2017, Kentucky Power testified that cumulative expenditures were slightly over the budgeted amount.¹⁵⁷

¹⁵⁵ Application, Section V, Exhibit 2, page 59.

¹⁵⁶ Id. at 43.

The Commission finds that the one-way balancing adjustment should be continued; however due to the change in the annual revenue requirement as noted in the Application, it should be adjusted accordingly. All expenses will be recorded against the annual budget. The annual shortfall or excess will be applied to the balance account. Through 2023, or until Kentucky Power's next base rate application, whichever occurs first, the expenditures will be balanced against the annual projected expenditures as found in the Application.¹⁵⁸

The Commission approves the proposed modifications allowing Kentucky Power to request Commission approval for any spending deviation greater than 10 percent on an aggregate level as opposed to a district level. The Commission also approves Kentucky Power's request to manage its vegetation management program on a calendar year basis to coincide with the budgetary year. The Commission notes that Kentucky Power has exceeded the goals of the 2015 Vegetation Management Plan resulting in a reduction of O&M expenses 24 months earlier than estimated. The Commission approves Kentucky Power's proposed revenue requirement of \$21.465 million. All other provisions of the 2015 Vegetative Management Plan are to remain unchanged.

The Commission will continue to review closely the vegetation management annual work plans and expenditures filed by Kentucky Power. In addition, the Commission will monitor the progress of the five-year maintenance cycle.

Bill Redesign

¹⁵⁷ Dec. 8, 2017 H.V.T. at 2:09:38.

¹⁵⁸ Phillips Testimony, Table 9 at 46.

On June 12, 2017, Kentucky Power filed an Application requesting approval to implement new bill formats that change the bill layout and composition, which is being implemented concurrently for all AEP operating companies, and to combine certain billing line items. That Application was docketed as Case No. 2017-00231.¹⁵⁹ By Order dated July 17, 2017, that case was consolidated into this proceeding. By further Order dated September 12, 2017, the Commission approved Kentucky Power's request to redesign the appearance of its bills, but stated that a decision on the proposed substantive changes to consolidate billing line items would be determined in the final Order in this proceeding.

Kentucky Power proposed to consolidate eight residential billing line items,¹⁶⁰ and seven commercial and industrial billing line items¹⁶¹ into a single "Rate Billing" line item. Kentucky Power explained that customer satisfaction regarding billing correspondence was below the industry average according to a survey commissioned by Kentucky Power.¹⁶² Kentucky Power asserted that its customers found the number of billing line

¹⁵⁹ Case No. 2017-00231, Electronic Application of Kentucky Power Company for (1) Approval of Its Revised Terms and conditions of Service Implementing New Bill Formats; (2) An Order Granting All other Required Approvals and Relief (filed June 12, 2017).

¹⁶⁰ The residential billing line items Kentucky Power proposes to consolidate into a single line items are Rate Billing, Residential Home Energy Assistance Program Charge, Kentucky Economic Development Surcharge, Capacity charge, Big Sandy 1 Operation Rider, Big Sandy Retirement Rider, Purchased Power Adjustment, and Green Pricing Option. The residential charges that Kentucky Power proposes to continue to display as individual billing line items are the Fuel Adjustment Charge, Demand-Side Management Factor, Environmental Surcharge, School Tax, Franchise Fee, State Sales tax, and HomeServe Warranty.

¹⁶¹ The commercial and industrial billing line items Kentucky Power proposes to consolidate into a single line items are Rate Billing, Kentucky Economic Development Surcharge, Capacity charge, Big Sandy 1 Operation Rider, Big Sandy Retirement Rider, Purchased Power Adjustment, and Green Pricing Option. The commercial and industrial charges that Kentucky Power proposes to continue to display as individual billing line items are the Fuel Adjustment Charge, Demand-Side Management Factor, Environmental Surcharge, School Tax, Franchise Fee, and State Sales tax.

¹⁶² Case No. 2017-00231, Direct Testimony of Stephen L. Sharp, Jr. (filed June 12, 2017) at 2.

items were "unhelpful," made the bills "difficult to understand," and obscured the information customers most wanted to know, which was the total amount owed and payment due date.¹⁶³ Kentucky Power further asserted that customers requested that line items be consolidated in order to simplify the bills. Customers who want detailed billing information could contact a Kentucky Power customer service center.

In the Settlement, the Settling Intervenors agreed to Kentucky Power's proposed consolidation of billing line items.

Neither KCUC nor the Attorney General filed testimony in this proceeding regarding the consolidation of billing line items. However, in a motion filed in Case No. 2017-00231 before it was incorporated into this proceeding, the Attorney General argued that consolidating the billing line items would result in a lack of transparency that impeded customers' understanding of how rates and their bills are calculated.¹⁶⁴

The Commission finds that Kentucky Power's proposed consolidation of billing line items is unreasonable and should be denied. The Commission concurs with the Attorney General that displaying discrete billing line items on customer bills promotes transparency and customer understanding of their billing amounts. Further, it is not reasonable to require customers to take additional steps in order to obtain a detailed accounting for their bills. This is especially so given that the billing line items that Kentucky Power wishes to consolidate represent charges in addition to the base rate charge for utility service.

Analysis of Kentucky Power's Participation in PJM

¹⁶³ Id. at 3; Id. at Application, paragraph 11.

Kentucky Power currently elects to self-supply its PJM capacity requirements under the Fixed Resource Requirement ("FRR") alternative. As discussed in testimony at the hearing, AEP conducts regular evaluations to determine whether its operating companies in PJM should elect to participate in the Reliability Pricing Model ("RPM") capacity market, or to self-supply under FRR.¹⁶⁵

The Commission finds that Kentucky Power should file an annual update of the FRR/RPM election analysis. The Commission recognizes that this information is deemed confidential during the AEP internal decision-making process. However, once PJM is notified of the election, the information becomes public and ceases to be confidential. Kentucky Power should file the annual update after the information becomes public.

Further, the Commission recognizes that Kentucky Power's interests may not be aligned with the interests of other AEP operating companies. The Commission is aware that PJM bills AEP based on a one-coincident peak methodology, and that AEP subsequently allocates those costs to its operating companies using a twelve-coincident peak methodology. The Commission finds that Kentucky Power should file an annual report with the supporting calculations used by AEP to allocate these costs.

Last, the Commission strongly encourages Kentucky Power to recognize that it must make a determination regarding its participation in PJM that aligns with the interests of Kentucky Power and its ratepayers.

Reduction in Corporate Tax Rates

¹⁶⁴ Case No. 2017-00231, Attorney General's Motion to Consolidate Cases (filed July 13, 2017) paragraphs 4-5.

¹⁶⁵ Dec. 7, 2017 H.V.T. at 10:43:18, and Kentucky Power Exhibit 9.

Effective January 1, 2018, the federal corporate income tax rate was reduced from 35 percent to 21 percent. Consistent with Kentucky Power's revised gross-up factor calculation in certain riders, the Commission finds that it is reasonable to utilize the 21 percent corporate income tax rate in the gross-up factor calculation. The Commission will address the impact of the recently enacted tax cuts on the excess ADIT and the rates of all investor-owned utilities, including Kentucky Power, on a prospective basis in pending cases that were opened on December 27, 2017.¹⁶⁶

Based on the evidence of record and the findings contained herein, HEREBY ORDERS that:

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

2. The provisions in the Settlement, as set forth in Appendix A to this Order, are approved, subject to the modifications and deletions set forth in this Order.

3. The rates and charges for Kentucky Power, as set forth in Appendix C to this Order, are the fair, just, and reasonable rates for Kentucky Power, and these rates are approved for service rendered on and after January 19, 2018.

Kentucky Power's request to deviate from 807 KAR 5:006, Section 14(2)(a) by limiting enrollment in its Equal Payment Plan to the months of April through December is granted.

5. Kentucky Power's proposed depreciation rates, with the exception of the changes proposed in the Settlement are approved.

¹⁶⁶ Case No. 2017-00477, Kentucky Industrial Utility Customers, Inc. v. Kentucky Utilities Company, Louisville Gas and Electric Company, Kentucky Power Company, and Duke Energy Kentucky, Inc. (Ky PSC Dec. 27, 2017); Case No. 2017-00481, An Investigation of the Impact of the Tax Cuts and Job Act on the Rates of Atmos Energy Corporation, Delta Natural Gas Company, Inc., Columbia Gas of Kentucky, Inc., Kentucky-American Water Company, and Water Service Corporation of Kentucky (Ky. PSC Dec. 27, 2017).

6. The regulatory asset or liability account established by under- or overrecovery from the elimination of Tariff B.S.1.O.R. is approved for accounting purposes only.

7. The regulatory asset account established by the deferral of Rockport UPA expenses is approved for accounting purposes only.

8. Kentucky Power's 2017 Environmental Compliance Plan is approved.

9. Kentucky Power's environmental surcharge tariff is approved for service rendered on and after the date of this Order.

10. The base period and current period revenue requirements for the environmental surcharge shall be calculated as described in this Order.

11. The environmental reporting formats described in this Order shall be used for the monthly environmental surcharge filings. Previous reporting formats shall no longer be submitted.

12. The Commission approves the sample forms that were filed by Kentucky Power on January 3, 2018.

13. Within three months of the date of this Order, Kentucky Power shall identify and contact GS class customers whose average monthly demand is 25 kW or greater for the purpose of meeting to discuss the impact of the rate increase on their bills and analyze other available tariff options, such as time-of-day rates.

14. Within twelve months of the date of this Order, Kentucky Power shall file a report listing the names of each GS class customers whose average monthly demand is 25 kW or greater, and stating the date and method of contact with the customer, whether Kentucky Power has met with the customer, and the results of each meeting.

Case No. 2017-00179

-76-

15. Kentucky Power's request to revise its billing format to consolidate billing line items, as set forth in the application, is denied.

16. Kentucky Power's Vegetation Management Plan, as set forth in the Application, is approved.

17. Kentucky Power's request to obtain Commission approval for any spending deviation from its Vegetation Management Plan greater than 10 percent on an aggregate level as opposed to a district level is approved.

18. Kentucky Power's request to manage its Vegetation Management Plan on a calendar year basis is approved.

19. Kentucky Power shall file an annual update of the FRR/RPM election analysis conducted by AEP and its operating companies within 30 days of notifying PJM of the election.

20. Kentucky Power shall file annually the supporting calculations for allocating PJM bills, which are based on a one-coincident peak methodology, AEP's operating companies using a twelve-coincident-peak methodology.

21. Within 20 days of the date of this Order, Kentucky Power shall, using the Commission's electronic Tariff Filing System, file its revised tariffs setting out the rates authorized herein and reflecting that they were approved pursuant to this Order.

By the Commission

EN	TEF	RED
JAN	18	2018

ATTEST:

Executive Director

Case No. 2017-00179

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2017-00179 DATED JAN 1 8 2018

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

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 Or Liabilities; And (5) An Order Granting All Other Required Approvals And Relief

Case No. 2017-00179

SETTLEMENT AGREEMENT

This Settlement Agreement, made and entered into this 22nd day of November, 2017, by and among Kentucky Power Company ("Kentucky Power" or "Company"); Kentucky Industrial Utility Customers, Inc. ("KIUC"); Kentucky School Boards Association ("KSBA"); Kentucky League of Cities ("KLC"); Wal-Mart Stores East, LP and Sam's East, Inc. ("Wal-Mart"); and Kentucky Cable Telecommunications Association ("KCTA"); (collectively Kentucky Power, KIUC, KSBA, KLC, Wal-Mart, and KCTA, are "Signatory Parties").

RECITALS

1. On June 28, 2017 Kentucky Power filed an application pursuant to KRS 278.190, KRS 278.183, and the rules and regulations of the Public Service Commission of Kentucky ("Commission"), seeking an annual increase in retail electric rates and charges totaling \$69,575,934, seeking approval of its 2017 Environmental Compliance Plan, an order approving accounting practices to establish regulatory assets or liabilities, and further seeking authority to implement or amend certain tariffs ("June 2017 Application").

2. On August 8, 2017, Kentucky Power supplemented its filing to reflect the impact of subsequent refinancing activities on the Company's Application ("August 2017 Refinancing Update"). The refinancing activities reduced the Company's requested annual increase in retail electric rates and charges from \$69,575,934 to \$60,397,438.

 KIUC, KSBA, KLC, Wal-Mart, and KCTA filed motions for full intervention in Case No. 2017-00179. The Commission granted the intervention motions. Collectively KIUC, KSBA, KLC, Wal-Mart, and KCTA are referred to in this Settlement Agreement as the "Settling Intervenors."

4. The Attorney General of the Commonwealth of Kentucky ("Attorney General") and Kentucky Commercial Utility Customers, Inc. ("KCUC") also filed motions to intervene. The Attorney General and KCUC, who are not parties to this agreement, were granted leave to intervene.

 Certain of the Settling Intervenors, KCUC, and the Attorney General filed written testimony in Case No. 2017-00179 raising issues regarding Kentucky Power's Rate Application.

6. Kentucky Power, KCUC, the Attorney General, and the Settling Intervenors have had a full opportunity for discovery, including the filing of written data requests and responses.

7. Kentucky Power offered the Settling Intervenors, KCUC, and the Attorney General, along with Commission Staff, the opportunity to meet and review the issues presented by Kentucky Power's application in this proceeding and for purposes of settlement.

8. The Signatory Parties execute this Settlement Agreement for purposes of submitting it to the Kentucky Public Service Commission for approval pursuant to KRS 278.190 and KRS 278.183 and for further approval by the Commission of the rate increase, rate structure, and tariffs as described herein.

 The Signatory Parties believe that this Settlement Agreement provides for fair, just, and reasonable rates.

NOW, THEREFORE, for and in consideration of the mutual promises set forth above, and the agreements and covenants set forth herein, Kentucky Power and the Settling Intervenors hereby agree as follows:

AGREEMENT

1. Kentucky Power's Application

(a) Except as modified in this Settlement Agreement, Kentucky Power's June 2017
 Application as updated by the August 2017 Refinancing Update is approved.

2. <u>Revenue Requirement</u>

(a) Effective for service rendered on or after January 19, 2018, Kentucky Power shall implement a base rate adjustment sufficient to generate additional annual retail revenues of \$31,780,734. This annual retail revenue amount represents a \$28,616,704 million reduction from the \$60,397,438 sought in the Company's August 2017 Refinancing Update.

(b) The \$28,616,704 million reduction was the result of the following adjustments to the Company's request in the June 2017 Rate Application as modified in the August 2017 Refinancing Update:

Adjustment	Reduction in Revenue Requirement (\$Millions)
Defer a portion of Rockport UPA non-fuel, non-environmental expenses	15.0
Increase revenues to Apply Weather Normalization to Commercial Sales Net of Variable O&M	0.40
Reduce Incentive Compensation	3.15
Reduce Amortization Expense to Recalibrate Storm Damage Amortization	1.22

Total Adjustments	28.6
Change in Return on Equity from 10.31% to 9.75%	4.70
Increase Short Term Debt to 1% and Set Debt Rate at 1.25%	0.36
Reduce Depreciation Expense by Removing Terminal Net Salvage for Mitchell	0.57
Reduce Depreciation Expense by Removing Terminal Net Salvage for BSU1	0.37
Reduce Depreciation Expense by Extending Service Life of BS1 to 20 years	2.84

(c) Kentucky Power agrees to allocate the \$31,780,734 in additional annual revenue as illustrated on EXHIBIT 1. The Company will design rates and tariffs consistent with this allocation of additional revenue.

(i) As part of the Commission's consideration of the reasonableness of this Settlement Agreement, the tariffs designed in accordance with this subparagraph shall be filed with the Commission and served on counsel for all parties to this case no later than December 1, 2017.

(ii) Within ten days of the entry of the Commission's Order approving without modification this Settlement Agreement and the rates thereunder, Kentucky Power shall file with the Commission signed copies of the tariffs in conformity with 807 KAR 5:011.

Rockport UPA Expense Deferral

(a) Kentucky Power is a party to a FERC-approved Unit Power Agreement with AEP Generating Company for capacity and energy produced at the Rockport Plant ("Rockport UPA"). The Rockport UPA expires on December 8, 2022.

(b) Kentucky Power will defer a total of \$50 million in non-fuel, non-environmental Rockport UPA Expense for later recovery as follows:

(i) Kentucky Power will defer \$15M annually of Rockport UPA Expense in
 2018 and 2019 for later recovery.

 (ii) Kentucky Power will defer \$10M of Rockport UPA Expense in 2020 for later recovery.

 (iii) Kentucky Power will defer \$5M annually of Rockport UPA Expense in years 2021 and 2022 for later recovery.

(c) The Rockport UPA Expense of \$50 million described in Paragraph 3(b) above will be deferred into a regulatory asset ("the Rockport Deferral Regulatory Asset") and will be subject to carrying charges based on a weighted average cost of capital ("WACC") of 9.11%¹ until the Regulatory Asset is fully recovered. From January 1, 2018 through December 8, 2022, the WACC will be applied to the monthly Rockport Deferral Regulatory Asset principal balance net of accumulated deferred income taxes ("ADIT"). From December 9, 2022 until the Rockport Deferral Regulatory Asset is fully recovered, the WACC will be applied to the monthly Rockport Deferral Regulatory Asset is fully recovered, the WACC will be applied to the monthly Rockport Deferral Regulatory Asset balance including deferred carrying charges net of ADIT. The Rockport Deferral Regulatory Asset shall be recovered on a levelized basis through the demand component of Tariff P.P.A. and amortized over five years beginning on December 9, 2022. Kentucky Power estimates that the regulatory asset balance will total approximately \$59 million on December 8, 2022.

(d) Additional expenses reflecting the declining deferral amount in years 2020 through
 2022 will be recovered through the demand component of Tariff P.P.A. as follows:

- (i) Kentucky Power will recover \$5 million through Tariff P.P.A. in 2020
- (ii) Kentucky Power will recover \$10 million through Tariff P.P.A. in 2021

¹ 6.48% grossed up for applicable State and Federal taxes, uncollectible accounts expense, and the KPSC maintenance fee

 (iii) Kentucky Power will recover \$10 million through Tariff P.P.A. in 2022, prorated through December 8, 2022.

(e) The Signatory Parties acknowledge that the Company's decision whether to seek Commission approval to extend the Rockport UPA will be made at a later date. Whether or not the Company seeks to extend the Rockport UPA, beginning December 9, 2022, the Capacity Charge recovered through Tariff C.C., approved in Case No. 2004-00420, will end. Any final over- or under-recovery balance will be included in the subsequent calculation of the purchase power adjustment under Tariff P.P.A. In the event that Kentucky Power elects not to extend the Rockport UPA, it will experience a reduction in Rockport UPA fixed costs ("Rockport Fixed Costs Savings").

(f) If Kentucky Power elects not to extend the Rockport UPA, it will, beginning December 9, 2022, credit the Rockport Fixed Cost Savings through the demand component of Tariff P.P.A. until new base rates are set. However, for 2023 only, the Rockport Fixed Cost Savings credit will be offset by the amount, if any, necessary for the Company to earn its Kentucky Commission-authorized return on equity (ROE) for 2023 ("Rockport Offset"). An example of the calculation of the Rockport Offset is included as **EXHIBIT 2**.

(g) For the purposes of implementing the Rockport Fixed Costs Savings credit described in Paragraph 3(f) above, the following definitions apply:

 (i) "Rockport Fixed Costs Savings" shall mean the annual amount of non-fuel, non-environmental Rockport UPA expense included in base rates for rates effective in November 2022.

 (ii) "Estimated Rockport Offset" shall mean the amount of additional annual revenue the Company estimates would be necessary for it to earn the Commission-authorized return on equity for 2023 considering the termination of the Rockport UPA and the Rockport Fixed Cost Savings.

(iii) "Actual Rockport Offset" shall mean the amount of additional annual revenue that would have been necessary for the Company to earn the Commission-authorized return on equity for 2023 considering the termination of the Rockport UPA and the Rockport Fixed Cost Savings. The Company shall calculate the Actual Rockport Offset using a comparison of the per books return on equity for 2023 to the Commission-approved return on equity. The Actual Rockport Offset cannot exceed the Rockport Fixed Costs Savings.

 (iv) "Rockport Offset True-Up" shall mean the difference between the Estimated Rockport Offset and the Actual Rockport Offset.

(h) The Company shall implement the Rockport Fixed Costs Savings credit described in Paragraph 3(f) above as follows:

(i) By November 15, 2022, the Company shall file an updated purchase power adjustment factor under Tariff P.P.A. for rates effective December 9, 2022. This filing shall reflect the impact of the Rockport Fixed Cost Savings and the Estimated Rockport Offset on the purchase power adjustment factor. This filing shall also reflect the commencement of recovery of the Rockport Deferral Regulatory Asset.

(ii) The Company shall make its normal August 15, 2023 Tariff P.P.A. filing for rates effective in October 2023. The Rockport Fixed Cost Savings and the Estimated Rockport Offset will continue to be factored into the calculation of the purchase power adjustment factor through the end of 2023. Beginning in January 2024, the Estimated Rockport Offset will not be factored into the calculation of the purchase power adjustment factor. (iii) By February 1, 2024, the Company shall file an updated purchase power adjustment factor under Tariff P.P.A. for rates effective March 1, 2024. This filing shall only reflect the impact of the Rockport Offset True-Up on the purchase power adjustment factor. The purchase power adjustment factor shall be established to recover or credit the Rockport Offset True-Up amount in three months.

(iv) Beginning with the August 15, 2024 Tariff P.P.A. filing, the Company will incorporate the Rockport Fixed Cost Savings in its annual calculation of the purchase power adjustment factor.

PJM OATT LSE Expense Recovery

(a) As described in the testimony of Company Witness Vaughan, Kentucky Power has included an adjusted test year amount of net PJM OATT LSE charges and credits in base rates. Kentucky Power will track, on a monthly basis, the amount of OATT LSE charges and credits above or below the base rate level using deferral accounting. Kentucky Power will recover and collect 80% of the annual over or under collection of PJM OATT LSE charges, as compared to the annual amount included in base rates, ("Annual PJM OATT LSE Recovery") through the operation of Tariff P.P.A.

(b) Kentucky Power will credit against the Annual PJM OATT LSE Recovery 100% of the difference between the return on its incremental transmission investments calculated using the FERC-approved PJM OATT return on equity and the return on its incremental transmission investments calculated using the 9.75% return on equity provided for in this settlement (the "Transmission Return Difference"). Kentucky Power shall calculate the Transmission Return Difference as shown in **EXHIBIT 3**.

(c) These changes to Tariff P.P.A. to allow for the Annual PJM OATT LSE Recovery will terminate on the effective date when base rates are reset in the next base rate proceeding unless otherwise specifically extended by the Commission. Nothing in this Paragraph 4(c) prohibits Kentucky Power or any other Signatory Party from taking any position regarding the extension of the Annual PJM OATT LSE Recovery mechanism or any other treatment of the Company's PJM OATT LSE expenses.

Rate Case Stay Out

(a) Kentucky Power will not file an application for a general adjustment of base rates for rates that would be effective prior to the first day of the January 2021 billing cycle. This rate case "stay out" is expressly conditioned on Commission approval of this Settlement Agreement without modification including the recovery of the Rockport Deferral Regulatory Asset as described in Section 3 above and the incremental PJM OATT LSE expense through Tariff P.P.A. as described in Section 4 above.

(b) This stay out will not apply if a change in law occurs that will result in a material adverse effect on the Company's financial condition.

(c) Nothing in this stay out provision should be interpreted as prohibiting the Commission from altering the Company's rates upon its own investigation, or upon complaint, including to reflect changes in the tax code, including the federal corporate income tax rate, depreciation provisions, or upon a request by the Company to seek leave to address an emergency that could adversely impact Kentucky Power or its customers. In the event the Commission initiates an investigation or a complaint is filed with the Commission regarding the Company's rates, the Company retains the right to defend the reasonableness of its rates in such proceedings.

Tariff P.P.A.

6.

(a) Kentucky Power's proposed changes to Tariff P.P.A., as set forth in the testimony of Company Witness Vaughan and modified by Sections 2 and 3 above, are approved.

(b) A revised version of Tariff P.P.A. incorporating the modifications described in Sections 2 and 3 above is included as EXHIBIT 4.

7. Depreciation Rates

(a) Kentucky Power and the Settling Intervenors agree that Big Sandy Unit 1 has an expected life of 20 years following its conversion from a coal-fired to a natural gas-fired generating unit. The depreciation rates for Big Sandy Unit 1 have been adjusted to reflect the 20 year expected life. Kentucky Power and the Signatory Parties retain the right to propose updated depreciation rates for Big Sandy Unit 1 in future proceedings to reflect updates to the expected life.

(b) Kentucky Power has adjusted depreciation rates for Big Sandy Unit 1 and for the Mitchell Plant to remove terminal net salvage costs. Kentucky Power retains the right to propose updated depreciation rates for Big Sandy Unit 1 and for the Mitchell Plant in future proceedings to include terminal net salvage costs, and the Settling Intervenors retain the right to challenge the inclusion of such costs in future proceedings.

(c) Kentucky Power's updated depreciation rates are included as EXHIBIT 5.

8.

Return on Equity, Capitalization, WACC, and GRCF

(a) Kentucky Power shall be authorized a 9.75% return on equity. The authorized return on equity of 9.75% will be used in the calculation of the Company's Environmental Surcharge factor (for non-Rockport environmental projects) and the carrying charges for the Rockport Deferral and Decommissioning Rider regulatory assets. (b) Kentucky Power will update its capitalization to reflect short term debt as 1% of the Company's total capital structure. The annual interest rate for the short term debt will be set at 1.25%.

(c) Kentucky Power shall utilize a weighted average cost of capital ("WACC") of 9.11% including a gross revenue conversion factor ("GRCF") of 1.6433%. The GRCF does not include a Section 199 deduction. This WACC and GRCF shall remain constant (including for the riders and surcharges described in Paragraph 8(a) above) until such time as the Commission sets base rates in the Company's next base rate case proceeding. The calculations of the WACC and GRCF are shown on **EXHIBIT 6**.

Storm Damage Expense Amortization

(a) Kentucky Power will recover and amortize the remaining unamortized balance of its deferred storm expense regulatory asset authorized in Case No. 2012-00445 over a period of five years beginning January 1, 2018, consistent with the recommendation of KIUC. The unamortized balance of the regulatory asset authorized in Case No. 2012-00445 will total \$6,087,000 on December 31, 2017 and will be amortized over five years at an annual amount of \$1,217,400.

(b) Kentucky Power will recover and amortize the deferred storm expense regulatory asset authorized in Case No. 2016-00180 over a period of 5 years beginning January 1, 2018 consistent with the testimony of Company Witness Wohnhas. The balance of the regulatory asset authorized in Case No. 2016-00180 totals \$4,377,336 and will be amortized over five years at an annual amount of \$875,467.

(c) The combined balance of the Kentucky Power's deferred storm expense regulatory assets (the remaining unamortized balance authorized in Case No. 2012-00445 and the amount authorized in Case No. 2016-00180) will total \$10,464,336 on December 31, 2017 and will be amortized over five years at an annual amount of \$2,092,867.

Kentucky Economic Development Surcharge

(a) Kentucky Power's new Kentucky Economic Development Surcharge Tariff
 ("Tariff K.E.D.S.") shall be approved with rates amended as follows:

(i) The KEDS rate for residential customers will be set at \$0.10 per meter instead of \$0.25 as proposed by the Company.

(ii) The KEDS rate for non-residential customers for which the KEDS applies will be set at \$1.00 per meter instead of \$0.25 as proposed by the Company.

(b) All KEDS funds collected by Kentucky Power shall be matched dollar-for-dollar by Kentucky Power from shareholder funds. The proceeds of KEDS and Kentucky Power's shareholder contribution shall be used by Kentucky Power for economic development projects, including the training of local economic development officials, in the Company's service territory. The KEDS, and the matching shareholder contribution, shall remain in effect until changed by order of the Commission.

(c) Kentucky Power will continue to file on or before March 31st of each year a report with the Commission describing: (i) the amount collected through the Economic Development Surcharge; and (ii) the matching amount contributed by Kentucky Power from shareholder funds. The annual report to be filed by the Company shall also describe the amount, recipients, and purposes of its expenditure of the funds collected through the Economic Development Surcharge and shareholder contribution.

(d) Kentucky Power shall serve a copy of the annual report to be filed with the Commission in accordance with subparagraph (c) on counsel for all parties to this proceeding.

11. Backup and Maintenance Service

(a) In order for Marathon Petroleum LP ("Marathon") to evaluate the economics of self or co-generation, Kentucky Power and Marathon will begin negotiations regarding the terms, conditions and pricing for backup and maintenance service within 30 days of a Commission Order approving this provision and will complete negotiations within the next 120 days. Prior to the start of the 120 day negotiation period, Marathon will provide Kentucky Power with specific information regarding the MW size of a potential self or co-generation facility and the type of generation technology being considered.

(b) If Kentucky Power and Marathon cannot reach an agreement on backup and maintenance service within 120 days, Kentucky Power and Marathon agree to submit the issue to the Commission for resolution.

12. School Energy Manager Program

(a) Kentucky Power shall seek leave from the Commission to include up to \$200,000 for the School Energy Manager Program in its each of its 2018 and 2019 DSM Program offerings.

(b) Kentucky Power and KSBA both expressly acknowledge that there is in Case No. 2017-00097 a currently-pending Commission investigation of the Company's DSM programs and funding and that the outcome of that investigation could impact the School Energy Manager Program.

13. Tariff K-12 School

(a) Kentucky Power shall continue its current Pilot Tariff K-12 School but shall remove the Pilot designation as set forth in EXHIBIT 7. Tariff K-12 School shall be available for general service to all K-12 schools in the Company's service territory, public and private, with normal maximum demands greater than 100 kW. Tariff K-12 School shall reflect rates for

customers taking service under the tariff designed to produce annually in the aggregate \$500,000 less from Tariff K-12 School customers than would be produced under the new L.G.S. rates to be established under this Settlement Agreement from customers eligible to take service under Tariff K-12 School. The aggregate total revenues to be produced by Tariff K-12 School and Tariff L.G.S. shall be equal to the revenues that would be produced in the aggregate by the new rates in the absence of Tariff K-12 School. Service under Tariff K-12 School shall be optional.

14. Bill Format Changes

(a) The bill formatting changes proposed by the Company in Case No. 2017-00231 and consolidated into this case by Commission Order dated July 17, 2017, to the extent not already approved, are approved.

(b) Within 180 days of a Commission Order approving this Settlement, Kentucky Power will conduct a training session with representatives from its municipal clients and KLC to explain the new bill format and tools available to clients to evaluate their electric usage.

15. Renewable Power Option Rider

(a) The proposed changes to the Company's Green Pricing Option Rider, including renaming the rider to the Renewable Power Option Rider ("Rider R.P.O."), are approved except that the availability of service provision for Option B will state the following:

"Customers who wish to directly purchase the electrical output and all associated environmental attributes from a renewable energy generator may contract bilaterally with the Company under Option B. Option B is available to customers taking metered service under the Company's I.G.S., and C.S.-I.R.P. tariffs, or multiple L.G.S. tariff accounts with common ownership under a single parent company that can aggregate multiple accounts to exceed 1000 kW of peak demand."

A revised version of Rider R.P.O. incorporating the modifications described above is included as **EXHIBIT 8**. Bills for customers receiving service under Rider R.P.O. will include a separate line item for Rider R.P.O. charges.

(b) Beginning no later than March 31, 2018, and no later than each March 31 thereafter, Kentucky Power will file a report with the Commission describing the previous year's activity under Rider R.P.O. This annual report will replace the semi-annual reports filed in Case No. 2008-00151.

Modifications To Kentucky Power's Rate Tariffs

In addition to the rate and tariff changes described and agreed to above, Kentucky Power and the Settling Intervenors agree that the following tariffs shall be modified or implemented as described below:

(a) The Customer charge for the Residential Class ("Tariff R.S.") shall be increased to \$14.00 per month instead of the \$17.50 per month proposed by the Company in its filing in this case.

(b) The Company is extending the termination date for Tariff C.S. – Coal and the amendments to Tariff C.S. – I.R.P. and Tariff E.D.R. approved in Case No. 2017-00099 from December 31, 2017 to December 31, 2018.

(c) The pole attachment rate under Tariff C.A.T.V. shall be \$10.82 for attachments on two-user poles and \$6.71 for attachments on three-user poles for all attachments instead of the \$11.97 for attachments on two-user poles and \$7.42 for attachments on three-user poles proposed by the Company in its filing in this case.

17. Filing Of Settlement Agreement With The Commission And Request For Approval

Following the execution of this Settlement Agreement, Kentucky Power and the Settling Intervenors shall file this Settlement Agreement with the Commission along with a joint request to the Commission for consideration and approval of this Settlement Agreement so that Kentucky

Power may begin billing under the approved adjusted rates for service rendered on or before January 19, 2018.

18. Good Faith And Best Efforts To Seek Approval

(a) This Settlement Agreement is subject to approval by the Public Service Commission.

(b) Kentucky Power and the Settling Intervenors shall act in good faith and use their best efforts to recommend to the Commission that this Settlement Agreement be approved in its entirety and without modification and that the rates and charges set forth herein be implemented.

(c) Kentucky Power and the Settling Intervenors filed testimony in this case. Kentucky Power also filed testimony in support of the Settlement Agreement. For purposes of any hearing, the Settling Intervenors and Kentucky Power waive all cross-examination of the other Signatory Parties' witnesses except for purposes of supporting this Settlement Agreement unless the Commission disapproves this Settlement Agreement. Each further stipulates and recommends that the Notice of Intent, Application, testimony, pleadings, and responses to data requests filed in this proceeding be admitted into the record.

(d) The Signatory Parties further agree to support the reasonableness of this Settlement Agreement before the Commission, and to cause their counsel to do the same, including in connection with any appeal from the Commission's adoption or enforcement of this Settlement Agreement.

(e) No party to this Settlement Agreement shall challenge any Order of the Commission approving the Settlement Agreement in its entirety and without modification.

19. Failure Of Commission To Approve Settlement Agreement

If the Commission does not accept and approve this Stipulation in its entirety, then any adversely affected Party may withdraw from the Stipulation within the statutory periods provided for rehearing and appeal of the Commission's order by (1) giving notice of withdrawal to all other Parties and (2) timely filing for rehearing or appeal. Upon the latter of (1) the expiration of the statutory periods provided for rehearing and appeal of the Commission's order and (2) the conclusion of all rehearing's and appeals, all Parties that have not withdrawn will continue to be bound by the terms of the Stipulation as modified by the Commission's order.

20. Continuing Commission Jurisdiction

This Settlement Agreement shall in no way be deemed to divest the Commission of jurisdiction under Chapter 278 of the Kentucky Revised Statutes.

21. Effect of Settlement Agreement

This Settlement Agreement shall inure to the benefit of, and be binding upon, the parties to this Settlement Agreement, their successors, and assigns.

22. Complete Agreement

This Settlement Agreement constitutes the complete agreement and understanding among the parties to this Settlement Agreement, and any and all oral statements, representations, or agreements. Any and all such oral statements, representations, or agreements made prior hereto or contained contemporaneously herewith shall be null and void and shall be deemed to have been merged into this Settlement Agreement.

23. Independent Analysis

The terms of this Settlement Agreement are based upon the independent analysis of the parties to this Settlement Agreement, are the product of compromise and negotiation, and reflect a fair, just, and reasonable resolution of the issues herein. Notwithstanding anything contained in this Settlement Agreement, Kentucky Power and the Settling Intervenors recognize and agree that the effects, if any, of any future events upon the income of Kentucky Power are unknown and this Settlement Agreement shall be implemented as written.

24. Settlement Agreement And Negotiations Are Not An Admission

(a) This Settlement Agreement shall not be deemed to constitute an admission by any party to this Settlement Agreement that any computation, formula, allegation, assertion, or contention made by any other party in these proceedings is true or valid. Nothing in this Settlement Agreement shall be used or construed for any purpose to imply, suggest or otherwise indicate that the results produced through the compromise reflected herein represent fully the objectives of the Signatory Parties.

(b) Neither the terms of this Settlement Agreement nor any statements made or matters raised during the settlement negotiations shall be admissible in any proceeding, or binding on any of the parties to this Settlement Agreement, or be construed against any of the parties to this Settlement Agreement, except that in the event of litigation or proceedings involving the approval, implementation or enforcement of this Agreement, the terms of this Settlement Agreement shall be admissible. This Settlement Agreement shall not have any precedential value in this or any other jurisdiction.

25. Consultation With Counsel

The parties to this Settlement Agreement warrant that they have informed, advised, and consulted with their respective counsel with regard to the contents and significance of this Settlement Agreement and are relying upon such advice in entering into this agreement.

26. Authority To Bind

Each of the signatories to this Settlement Agreement hereby warrant they are authorized to sign this agreement upon behalf of, and bind, their respective parties.

27. Construction Of Agreement

This Settlement Agreement is a product of negotiation among all parties to this Settlement Agreement, and no provision of this Settlement Agreement shall be construed in favor of or against any party hereto. This Settlement Agreement is submitted for purposes of this case only and is not to be deemed binding upon the parties hereto in any other proceeding, nor is it to be offered or relied upon in any other proceeding involving Kentucky Power or any other utility.

28. Counterparts

This Settlement Agreement may be executed in multiple counterparts.

29. Future Rate Proceedings

Nothing in this Settlement Agreement shall preclude, prevent, or prejudice any party to this Settlement Agreement from raising any argument or issue, or challenging any adjustment, in any future rate proceeding of Kentucky Power.

IN WITNESS WHEREOF, this Settlement Agreement has been agreed to as of this 22nd day of November 2017.

KENTUCKY POWER COMPANY

By:-Its: Course

KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC.

By: Mill. Kurt Its: Counsel

KENTUCKY SCHOOL BOARDS ASSOCIATION, INC.

By: Mitta Molere______ Its: Legal Coursel

KENTUCKY LEAGUE OF CITIES

By: Mary il Municipal Laws Training

KENTUCKY CABLE TELECOMMUNICATION ASSOCIATION, INC.

By: Josen HD 27 Its: KCTA Board Chairman

WAL-MART STORES EAST, LP AND SAM'S EAST, INC.

By: UM Its: Counsel

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2017-00179 DATED JAN 1 8 2018

Adjustments	Amounts
Capacity Charge Revenues Removal	(\$6,396,832)
Removal of Effects of Decommissioning Rider Revenue and	(\$18,512,331)
Expenses	
Eliminate Mitchell FGD Operating Expenses	(\$13,308,197)
Remove Mitchell plant FGD and Consumable inventory from Rate	(\$1,610,192)
Base	
Removal of Mitchell FGD Environmental Surcharge Rider	(\$538,417)
Revenues	
Remove Big Sandy Unit 1 Operation Rider Deferrals	(\$4,333,902)
Fuel Under (Over) Revenues	\$4,574,472
Reset OSS Margin Baseline to 2016 Test Year OSS Margins	(\$8,800,856)
PPA Rider Synchronization Adjustment	\$372,542
Remove DSM Revenue Expense	(\$5,503,380)
Remove HEAP Revenue and Expense	(\$246,772)
Remove Economic Development Surcharge Revenue and Expense	(\$303,011)
Tariff Migration Adjustment	\$1,026,263
Customer Annualization Revenue Adjustment	(\$1,342,364)
Weather Normal Load Revenue Adjustment	\$4,080,748
O&M Expense Interest on Customer Deposit	\$67,254
Amortization of Major Storm Cost Deferral	\$874,592
Postage Rate Decrease Adjustment	(\$6,656)
Eliminate Advertising Expense	\$100,444
Adjust Pension and OPEB Expense	\$148,679
Employee Related Group Benefit Expense	\$429,241
Remove PJM BLIs From Base for FAC Inclusions	(\$516,659)
Adjustment to Include Purchase Power Limitation Expense in Rate Base	\$3,150,582
Adjustment to Include Forced Outage Purchase Power Limitation in Base Rates	\$882,204
Annualize NITS/PJM LSE OATT Expense	\$3,825,858
Annualize PJM Admin Charges	\$118,606
Amortization of NERC Cost Deferral	\$14,275
Severance Expense Adjustment	\$2,363
Annualization of Payroll Expense Adjustment	\$244,837
Social Security Tax Base Adjustment	\$26,009
Eliminate Non-Recoverable Business Expenses	\$14,914
Plant Maintenance Normalization	(\$274,334)
Depreciation Annualization Adjustment Electric Plant in Service	\$2,037,359
Decrease ARO Depreciation Expense to an Annualized Level	(\$3,818)
Decrease ARO Accretion Expense to an Annualized Level	(\$109,495)
Annualization of Cable Pole Attachment Revenue	\$532,369
KPSC Maintenance Assessment	(\$1,801)
State Gross Receipts Tax Adjustment	\$78,776

Interest Synchronization Adjustment (Per 8/7/2017 Amendment)	\$6,449,828
AFUDC Offset Adjustment (Per 8/17/2017 Amendment)	\$28,197
Adjustment to Recognize Accrued Surcharge Revenue Differences	(\$62,588)
Mitchell Plant ADSIT Amortization	\$1,292,491
Decrease O&M for Vegetation Management Tree Trimming	(\$6,794,282)
Annualization of Property Taxes	\$595,507

APPENDIX C

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2017-00179 DATED JAN 1 8 2018

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

TARIFF R.S. RESIDENTIAL SERVICE

Service Charge per month Energy Charge per kWh Storage Water Heating Provision - Per kWh Load Management Water Heating Provision - Per kWh		14.00 .09660 .06072 .06072			
Home Energy Assistance Program Charge Per meter per month		.30			
TARIFF R.SL.MT.O.D. RESIDENTIAL SERVICE LOAD MANAGEMENT TIME-OF-DAY					
Service Charge per month	\$	16.00			
Energy Charge per kWh: All kWh used during on-peak billing period All kWh used during off-peak billing period Separate Metering Provision Per Month		.14346 .06072 3.75			
Home Energy Assistance Program Charge Per meter per month	\$.30			
TARIFF R.ST.O.D. RESIDENTIAL SERVICE TIME-OF-DAY					
Service Charge per month	\$	16.00			
Energy Charge per kWh: All kWh used during on-peak billing period All kWh used during off-peak billing period		.14386 .06072			
Home Energy Assistance Program Charge Per meter per month		.30			

TARIFF R.S.-T.O.D. 2 EXPERIMENTAL RESIDENTIAL SERVICE TIME-OF-DAY 2

Service Charge per month		16.00			
Energy Charge per kWh: All kWh used during summer on-peak billing period All kWh used during winter on-peak billing period All kWh used during off-peak billing period	\$ \$ \$.17832 .15342 .08094			
Home Energy Assistance Program Charge Per meter per month	\$.30			
TARIFF R.S.D. RESIDENTIAL DEMAND-METERED ELECTRIC SERVICE					
Service Charge per month Energy Charge per kWh:	\$	17.50			
All kWh used during on-peak billing period All kWh used during off-peak billing period Demand Charge per kW		.09738 .07029 4.02			
Home Energy Assistance Program Charge Per meter per month	\$.30			
TARIFF G.S. GENERAL SERVICE					
<u>Secondary Service:</u> Service Charge per month Energy Charge per kWh: Phase 1	\$	22.50			
First 4,450 kWh per month Over 4,450 kWh per month Phase 2 First 4,450 kWh per month Over 4,450 kWh per month Demand Charge per kW greater than 10 kW Phase 1 Phase 2		.10198 .10188			
		.09807 .09798			
		4.00 6.00			
Primary Service: Service Charge per month	\$	75.00			
Energy Charge per kWh: First 4,450 kWh per month Over 4,450 kWh per month Demand Charge per kW greater than 10 kW		.08629 .08659 7.18			

<u>Subtransmission Service:</u> Service Charge per month Energy Charge per kWh:	\$	364.00
First 4,450 kWh per month	\$.07822
Over 4,450 kWh per month	\$ \$ \$.07855
Demand Charge per kW greater than 10 kW	\$	5.74
<u>TARIFF G.S.</u> <u>GENERAL SERVICE</u> <u>RECREATIONAL LIGHTING SERVICE PROVIS</u>	ION	
Service Charge per month Energy Charge per kWh	\$ \$	22.50 .09968
<u>TARIFF G.S.</u> <u>GENERAL SERVICE</u> LOAD MANAGEMENT TIME-OF-DAY PROVISI	<u>ON</u>	
Service Charge per month Energy Charge per kWh:	\$	22.50
All kWh used during on-peak billing period All kWh used during off-peak billing period	\$ \$.14423 .06072
TARIFF G.S.		
GENERAL SERVICE OPTIONAL UNMETERED SERVICE PROVISIO	DN	
Service Charge per month Energy Charge per kWh: Phase 1	\$	14.00
First 4,450 kWh per month	\$.10198
Over 4,450 kWh per month Phase 2	\$.10188
First 4,450 kWh per month Over 4,450 kWh per month	\$ \$.09807 .09798
	Ŷ	
<u>TARIFF S.G.ST.O.D.</u> SMALL GENERAL SERVICE TIME-OF-DAY		
Service Charge per month Energy Charge per kWh:	\$	22.50
All kWh used during summer on-peak billing period All kWh used during winter on-peak billing period All kWh used during off-peak billing period	\$\$.17034 .14372 .07511

TARIFF M.G.S.-T.O.D. MEDIUM GENERAL SERVICE TIME-OF-DAY

Service Charge per month Energy Charge per kWh:	\$	22.50
All kWh used during on-peak billing period All kWh used during off-peak billing period	\$ \$.16747 .06072
TARIFF L.G.S. LARGE GENERAL SERVICE		
<u>Secondary Service Voltage</u> : Service Charge per month Energy Charge per kWh Demand Charge per kW	\$\$	85.00 .07712 7.97
Primary Service Voltage: Service Charge per month Energy Charge per kWh Demand Charge per kW	\$ \$ \$	127.50 .06711 7.18
<u>Sub-transmission Service Voltage</u> : Service Charge per month Energy Charge per kWh Demand Charge per kW	\$ \$ \$	660.00 .05112 5.74
<u>Transmission Service Voltage</u> : Service Charge per month Energy Charge per kWh Demand Charge per kW	() () ()	660.00 .04997 5.60
<u>All Service Voltages</u> : Excess Reactive Charge per KVA	\$	3.46
TARIFF L.G.S.		

LARGE GENERAL SERVICE LOAD MANAGEMENT TIME-OF-DAY PROVISION

Service Charge per month	\$ 85.00
Energy Charge per kWh:	
All kWh used during on-peak billing period	\$.14063
All kWh used during off-peak billing period	\$.06088

TARIFF L.G.S. – T.O.D. LARGE GENERAL SERVICE TIME-OF-DAY

<u>Secondary Service Voltage</u> : Service Charge per month Energy Charge: On-Peak Energy Charge per kWh Off-Peak Energy Charge per kWh Demand Charge per kW	\$ \$ \$ \$	85.00 .09670 .04132 10.87
<u>Primary Service Voltage</u> : Service Charge per month Energy Charge:	\$	127.50
On-Peak Energy Charge per kWh Off-Peak Energy Charge per kWh Demand Charge per kW	\$ \$ \$.09300 .04010 7.84
<u>Sub-transmission Service Voltage</u> : Service Charge per month Energy Charge:	\$	660.00
On-Peak Energy Charge per kWh Off-Peak Energy Charge per kWh Demand Charge per kW	\$\$\$.09176 .03970 1.52
<u>Transmission Service Voltage</u> : Service Charge per month Energy Charge:	\$	660.00
On-Peak Energy Charge per kWh Off-Peak Energy Charge per kWh Demand Charge per kW	\$\$\$.09049 .03928 1.49
<u>All Service Voltages</u> : Excess Reactive Charge per KVA	\$	3.46
TARIFF I.G.S. INDUSTRIAL GENERAL SERVICE		
Secondary Service Voltage:		

Secondary Service Voltage:	
Service Charge per month	\$ 276.00
Energy Charge per kWh	\$.02663
Demand Charge per kW	
Of Monthly On-Peak Billing Demand	\$ 24.13
Of Monthly Off-Peak Billing Demand	\$ 1.60

Primary Service Voltage: Service Charge per month	\$ \$	276.00
Energy Charge per kWh Demand Charge per kW	φ	.02553
Of Monthly On-Peak Billing Demand	\$	20.57
Sub-transmission Service Voltage:		
Service Charge per month	\$	794.00
Energy Charge per kWh	\$.02793
Demand Charge per kW		
Of Monthly On-Peak Billing Demand	\$	13.69
Of Monthly Off-Peak Billing Demand	\$	1.51
Transmission Service Voltage:		
Service Charge per month	\$1,353.00	
Energy Charge per kWh Demand Charge per kW	\$.02792
Of Monthly On-Peak Billing Demand	\$	13.26
Of Monthly Off-Peak Billing Demand	\$	1.49

All Service Voltages:

Reactive demand charge for each kilovar of maximum leading or lagging reactive demand in excess of 50 percent of the kW of monthly metered demand is \$.69 per KVAR.

Minimum Demand Charge

The minimum demand charge shall be equal to the minimum billing demand times the following minimum demand rates per kW:

Secondary	\$ 25.83
Primary	\$ 22.21
Subtransmission	\$ 15.30
Transmission	\$ 14.86

TARIFF M.W. MUNICIPAL WATERWORKS

Service Charge per month	\$ 22.90
Energy Charge - All kWh per kWh	\$.09135

Subject to a minimum monthly charge equal to the sum of the service charge plus \$8.89 per kW as determined from customer's total connected load.

TARIFF O.L. OUTDOOR LIGHTING

OVERHEAD LIGHTING SERVICE

High Pressure Sodium per Lamp: 100 Watts (9,500 Lumens) 150 Watts (16,000 Lumens) 200 Watts (22,000 Lumens) 250 Watts (28,000 Lumens) 400 Watts (50,000 Lumens) Mercury Vapor per Lamp: 175 Watts (7,000 Lumens) 400 Watts (20,000 Lumens)	\$\$\$\$\$	8.50 9.30 10.90 15.04 16.01 9.04 14.64
POST-TOP LIGHTING SERVICE		
High Pressure Sodium per Lamp: 100 Watts (9,500 Lumens) 150 Watts (16,000 Lumens) 100 Watts Shoe Box (9,500 Lumens) 250 Watts Shoe Box (28,000 Lumens) 400 Watts Shoe Box (50,000 Lumens) Mercury Vapor per Lamp: 175 Watts (7,000 Lumens)	\$ \$ \$ \$ \$ \$	14.05 23.30 29.50 24.99 36.16 10.59
FLOOD LIGHTING SERVICE		
High Pressure Sodium per Lamp: 200 Watts (22,000 Lumens) 400 Watts (50,000 Lumens) Metal Halide 250 Watts (20,500 Lumens) 400 Watts (36,000 Lumens) 1,000 Watts (110,000 Lumens) 250 Watts Mongoose (19,000 Lumens) 400 Watts Mongoose (40,000 Lumens)	\$\$ \$\$	13.10 17.06 15.27 18.39 30.94 20.57 23.59
Per Month: Wood Pole Overhead Wire Span not over 150 Feet Underground Wire Lateral not over 50 Feet	\$ \$ \$	3.40 2.00 7.40

Per Lamp plus \$0.02725 x kWh in Sheet No. 14-3 in Company's tariff

TARIFF S.L. STREET LIGHTING

Rate per Lamp: Overhead Service on Existing Distribution Poles High Pressure Sodium 100 Watts (9,500 Lumens) 150 Watts (16,000 Lumens) 200 Watts (22,000 Lumens) 400 Watts (50,000 Lumens)	\$ \$ \$ \$	7.02 7.55 8.95 11.71
Service on New Wood Distribution Poles High Pressure Sodium 100 Watts (9,500 Lumens) 150 Watts (16,000 Lumens) 200 Watts (22,000 Lumens) 400 Watts (50,000 Lumens)	\$ \$ \$ \$	10.80 11.55 12.95 16.61
Service on New Metal or Concrete Poles High Pressure Sodium 100 Watts (9,500 Lumens) 150 Watts (16,000 Lumens) 200 Watts (22,000 Lumens) 400 Watts (50,000 Lumens)	\$ \$ \$ \$	27.45 28.15 26.70 27.11

Per Lamp plus \$0.02725 x kWh in Sheet No. 15-2 in Company's tariff

TARIFF C.A.T.V. CABLE TELEVISION POLE ATTACHMENT

Charge for attachments	
On a two-user pole	\$ 10.82
On a three-user pole	\$ 6.71

TARIFF COGEN/SPP I COGNERATION AND/OR SMALL POWER PRODUCTION 100 KW OR LESS

Monthly Metering Charges:	
Single Phase:	
Standard Measurement	\$ 9.25
Time-of-Day Measurement	\$ 9.85

Polyphase: Standard Measurement Time-of-Day Measurement	\$ \$	12.10 12.40			
Energy Credit per kWh: Standard Meter – All kWh Time-of-Day Meter:	\$.03240			
On-Peak kWh Off-Peak kWh	\$ \$.03860 .02790			
Capacity Credit: Standard Meter per kW Time-of-Day Meter per kW	\$	3.11 7.47			
TARIFF COGEN/SPP II COGNERATION AND/OR SMALL POWER PRODUCTION OVER 100 KW					
Metering Charges: Single Phase:					
Standard Measurement Time-of-Day Measurement	\$\$	9.25 9.85			
Polyphase: Standard Measurement Time-of-Day Measurement	\$	12.10 12.40			
Energy Credit per kWh: Standard Meter – All kWh	\$.03240			
Time-of-Day Meter: On-Peak kWh Off-Peak kWh	\$ \$.03860 .02790			
Capacity Credit: Standard Meter per kW Time-of-Day Meter per kW	\$ \$	3.11 7.47			
TARIFF K.E.D.S. KENTUCKY ECONOMIC DEVELOPMENT SURCHARGE					

er month per account:	
Residential	\$.00
All Other	\$ 1.00

TARIFF C.C. CAPACITY CHARGE

Energy Charge per kWh: Service Tariff I.G.S. All Other

\$.000749 \$.001435

RENEWABLE POWER OPTION RIDER OPTION A

Hydro & Other RECs: Block Purchase per 100 kWh per month All Usage per kWh consumed	\$ \$.30 .00300
Wind RECs: Block Purchase per 100 kWh per month All Usage per kWh consumed	\$ \$	1.00 .01000
Solar RECs: Block Purchase per 100 kWh per month All Usage Purchase per kWh consumed	\$ \$	1.00 .01000

RIDER A.F.S. ALTERNATE FEED SERVICE RIDER

Monthly Rate for Annual Test of Transfer Switch/Control Module	\$ 14.67
Monthly Capacity Reservation Demand Charge per kW	\$ 6.29

APPENDIX D

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2017-00179 DATED JAN 1 8 2018

ENVIRONMENTAL COMPLIANCE PLAN

Project	Plant	Pollutant	Description	In-Service Year		
	Previously Approved Environmental Compliance Projects					
1	Mitchell	NOx, SO2, and SO3	Mitchell Units 1 & 2, Water Injection, Low NOx Burners, Low NOx Burner Modification, SCR, FGD, Landfill, Coal Blending Facilities & SO3 Mitigation	1993-1994- 2002-2007		
2	Mitchell	SO2, NOx and Gypsum	Mitchell Plant Common CEMS, Replace Burner Barrier Valves & Gypsum Material Handling Facilities	1993-1994- 2007		
3	Rockport	SO2 / NOx	Continuous Emission Monitors ("CEMS")	1994		
4	Rockport	NOx, Fly Ash, & Bottom Ash	Rockport Units 1 & 2 Low NOx Burners, Over Fire Air & Landfill	2003-2008		
5	Mitchell & Rockport	SO2, NOx, Particulates & VOC and etc.	Title V Air Emissions Fees at Mitchell and Rockport Plants	Annual		
6	Big Sandy, Mitchell & Rockport	NOx	Costs Associated with NOx Allowances	As Needed		
7	Big Sandy, Mitchell & Rockport	SO2	Costs Associated with SO2 Allowances	As Needed		
8	Big Sandy, Mitchell & Rockport	SO2 / NOx	Costs Associated with the CSAPR Allowances	As Needed		
9	Mitchell	Particulates	Mitchell Units 1 & 2 - Precipitator Modifications	2007-2013		
10	Mitchell	Particulates	Mitchell Units 1 & 2 - Bottom Ash & Fly Ash Handling	2008-2010		
11	Mitchell	Mercury	Mitchell Units 1 & 2 - Mercury Monitoring ("MATS")	2014		
12	Mitchell	Selenium	Mitchell Units 1 & 2 - Dry Fly Ash Handling Conversion	2014		
13	Mitchell	Fly Ash, Bottom Ash, Gypsum & WWTP Solids	Mitchell Units 1 & 2 - Coal Combustion Waste Landfill	2014		
14	Mitchell	Particulates	Mitchell Unit 2 - Electrostatic Precipitator Upgrade	2015		
15	Rockport	Particulates	Rockport Units 1 & 2 - Precipitator Modifications	2004-2009		
16	Rockport	Mercury	Rockport Units 1 & 2 - Activated Carbon Injection ("ACI") & Mercury Monitoring	2009-2010		

Case No. 2017-00179

17	Rockport	Hazardous Air Pollutants ("HAPS")	Rockport Units 1 & 2 - Dry Sorbent Injection	2015			
18	Rockport	Fly Ash & Bottom Ash	Rockport Plant Common - Coal Combustion Waste Landfill Upgrade to Accept Type 1 Ash	2013 & 2015			
	Proposed Environmental Compliance Projects						
19	Rockport	NOx	Rockport Unit 1 - Selective Catalytic Reduction equipment	2017			
20	Mitchell Rockport	SO2 / NOx, Mercury, Particulates, Hazardous Air Pollutants ("HAPS")	Cost of consumables used in conjunction with approved ECP projects including the cost of the consumables used and a return on consumable inventories. Consumables include, but are not limited to sodium bicarbonate, activated carbon, anhydrous ammonia, trona, lime hydrate, limestone, polymer, and urea.	As Needed			

APPENDIX E

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2017-00179 DATED JAN 1 8 2018

MONTHLY BASE PERIOD REVENUE REQUIREMENT

Billing Month	Base Period Cost
January	\$ 3,664,681
February	3,581,017
March	3,353,024
April	3,661,574
Мау	3,595,145
June	3,827,332
July	3,747,320
August	3,888,262
September	3,636,247
October	3,824,697
November	3,717,340
December	3,882,677
	\$ 44,379,316

Case No. 2017-00179

APPENDIX F

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICES 2018 COMMISSION IN CASE NO. 2017-00179 DATED

Commission Staff Adjustments to the Revenue Requirement in the Settlement Agreement Case No. 2017-00179 Kentucky Power Company (Kentucky Jurisdiction)

Increase Per Settlement				 Staff RR Amount 31,780,734
Operating Income Issues	Pre-Tax Operating Income Amount	NOI Amount	GRCF	
OSS Rider Adjustment	(486,412)	(361,693)	1.352116	\$ (489,051)
Theft Recovery Revenue	(166, 198)	(123,584)	1.352116	\$ (167,100)
Purchased Power Adj (WP 26&27)	(4,032,786)	(2,998,755)	1.352116	\$ (4,054,664)
Relocation Expense	(132,109)	(98,235)	1.352116	\$ (132,826)
Cost of Capital Issues Total Change in ROE and capitalization Change in GCRF		(476,714)	1.352116	\$ (644,573) (13,943,890)
Total Adjustments to the Settlement Agreement				\$ (19,432,104)
Recommended Change in Base Rates	:			\$ 12,348,630

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