Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Fourth Set of Data Requests
Dated August 10, 2020

DATA REQUEST

KPSC_4_001 Provide a copy of all schedules requested herein in Excel spreadsheet format with all formulas intact and unprotected and with all columns and rows accessible.

RESPONSE

The Company will provide the requested schedules in the requested format.

Witness: Brian K. West

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Fourth Set of Data Requests
Dated August 10, 2020

DATA REQUEST

KPSC_4_002 Kentucky Power's Response to Staff's Second Request for Information (Staff's Second Request), Item 1.b, was non-responsive. Provide a descriptive list (including the amount of quantifiable, realized, and projected savings) of all activities, initiatives, and programs conducted for the purpose of minimizing costs or improving operational and maintenance efficiencies.

RESPONSE

1.) Lean Management System: This program has been in existence for many years with a focus on eliminating inefficiencies or inefficient processes and implementing standard work practices intended to streamline processes. It can be difficult to capture accurate dollar savings with any Lean initiative since the primary goals are to capture efficiencies and eliminate waste. For example, if a Lean initiative saves an employee one hour per day, that employee is backfilling that time with other work they now have time to do. The Company has not eliminated positions as a result of any Lean initiatives. The goal is to make processes more efficient and to improve productivity. See KPCO_R_KPSC_4_2_Attachment1 for information regarding Lean initiatives the Company has implemented. In any given year, O&M would have been higher but for the savings from these initiatives.

2.) Achieving Excellence Program: This program began in 2019 as an employee-based O&M optimization effort designed to gather ideas from employees on how to be more productive or eliminate inefficiencies. Ideas generated by employees were collected in 2019 and vetted in late 2019 and early 2020. The Achieving Excellence Program was temporarily halted due to COVID-19 and then restarted in July 2020. See KPCO_R_KPSC_4_2_Attachment1 for information regarding Achieving Excellence estimated O&M savings beginning in 2021 through 2023. Estimated O&M savings are provided for generation, transmission and distribution. These are estimates only and are not known and measurable at this time. No Achieving Excellence ideas were implemented at Kentucky Power during the test year ended March 31, 2020.

Witness: Brian K. West

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Fourth Set of Data Requests
Dated August 10, 2020

DATA REQUEST

KPSC_4_003 Refer to the application, Exhibit E, page 8 of 216. Indicate whether Kentucky Power requires an additional or subsequent deposit from residential customers with a satisfactory payment history if the customer has a change in usage.

RESPONSE

If there is a change in a residential customer's usage the Company does not require an additional or subsequent deposit for customers who maintain a satisfactory payment history. Customers who make two or more late payments within a twelve month period, and thus fail to maintain a satisfactory payment history, may be billed an additional or subsequent deposit if usage changes. Any additional or subsequent deposit would be billed in three equal installments.

Witness: Scott E. Bishop

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Fourth Set of Data Requests
Dated August 10, 2020

DATA REQUEST

KPSC_4_004 Refer to the application, Exhibit E, page 9 of 216. Explain how Kentucky Power will determine whether to offer the Equal Payment Plan to nonresidential customers requesting to be placed on that plan.

RESPONSE

Nonresidential customers are eligible for the Equal Payment Plan if the customer's account is current and it meets the satisfactory credit criteria as defined at Sheet 2-3 of the Company's Terms and Conditions of Service below:

"A nonresidential customer does not maintain satisfactory credit criteria when its credit score at any national independent credit rating service falls to a level that is deemed to present a risk of nonpayment, including but not limited to: below a "BB+" level at Standard and Poor's or below "Ba1" at Moody's. If a nonresidential customer is not rated by a national independent credit rating service, its credit may be evaluated by using credit scoring services, public record financial information, or financial scoring and modeling services…"

Witness: Scott E. Bishop

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Fourth Set of Data Requests
Dated August 10, 2020

DATA REQUEST

KPSC_4_005 Refer to the application, Exhibit E, page 11 of 216. Explain how Kentucky Power currently recovers costs when a city or town requests underground service and when Kentucky Power is required to install underground facilities or relocate existing overhead facilities underground pursuant to a municipal or other governmental requirement or directive.

RESPONSE

If a city or town requests underground service, the Company calculates a cost estimate for providing both underground and overhead service. Pursuant to the Company's underground service plan, filed with the Commission on August 26, 2020, the Company will charge the city or town upfront for the difference between the two costs if the cost of providing underground service is greater than the cost of providing overhead services.

Witness: Scott E. Bishop

DATA REQUEST

KPSC_4_006 Refer to the application, Exhibit E, page 11 of 216. If the proposed tariff is approved, explain how the costs will be recovered from the residents of the city or town, the period over which the costs will be recovered, and how the residents of the city or town will be notified of the increased cost.

RESPONSE

If the proposed tariff is approved, the Company's preferred method of cost recovery is the current method of billing the city or town upfront for the cost difference. If, however, the city or town were unable to pay the upfront cost, then a period over which the costs would be recovered would be negotiated, which may vary depending on the size, scope and cost of the project. The additional costs would be added either to the current franchise fee billing line item or a new billing line item could be created with Commission approval. Notification would be handled with bill messages, the Company's website, and social media.

Witness: Scott E. Bishop

DATA REQUEST

KPSC_4_007 Refer to the application, Exhibit E, page 11 of 216. Provide a copy of Kentucky Power's underground service plan, indicating when it was last filed with the Commission, and a copy of Kentucky Power's most recent annual filing made pursuant to 807 KAR 5:041, Section 21(5)(b).

RESPONSE

In preparation for filing the instant case, the Company reviewed the final order in Case No. 2019-00271, Duke Kentucky’s case for an adjustment to electric rates. In that order, at page 65, the Commission found that Duke Kentucky had not been filing the required annual update of its underground cost differential. Kentucky Power subsequently determined it had omitted an annual update of its underground cost differential. The Company immediately began the process of updating the calculations and preparing to file its updated underground cost differential information. When this discovery request was received on August 10, 2020, the Company was making final preparations for filing the underground cost differential update. Please see KPCO_R_KPSC_4_7_Attachment1 (in Excel) and KPCO_R_KPSC_4_7_Attachment2 for a copy of Kentucky Power’s underground service plan as filed on August 26, 2020. The last plan filed with the Commission was on August 1, 1996. Please see KPCO_R_KPSC_4_7_Attachment3 for a copy of the 1996 filing.

Witness: Scott E. Bishop

August 26, 2020

Mark R. Overstreet
(502) 209-1219
(502) 779-8349 FAX
moverstreet@stites.com

VIA E-MAIL TRANSMISSION (PSCED@KY.GOV)

Lindsey Flora
Deputy Executive Director
Public Service Commission
211 Sower Boulevard
P.O. Box 615
Frankfort, KY 40602-0615

RE: Kentucky Power Company's 2020 Underground Electric Distribution Filing In Accordance With 807 KAR 5:041, Section 21(5)

Dear Mr. Flora:

Kentucky Power is filing with this letter its 2020 detailed supporting data for its estimated average cost differential for underground electric distribution systems for residential customers. The filing is being made in accordance with 807 KAR 5:041, Section 21(5).

Kentucky Power Company reviewed the April 27, 2020 Order in Case No. 2019-00271[1] in connection with the Company's preparation of its application in Case No. 2020-00174. The Commission noted in its April 27, 2020 Order in Case No. 2020-00271 that Duke Energy Kentucky, Inc. had not been filing an annual update of the average estimated cost differential for underground distribution systems for service to residential customers.

Kentucky Power reviewed its records and determined that it had likewise omitted the annual filing. The Company immediately began the process of updating its calculations and preparing to file its updated underground cost differential information. Kentucky Power was making final preparations for filing its 2020 update when Commission Staff filed its August 10, 2020 data requests. KPSC 4-7 seeks information regarding the status of the Company's annual update of the average estimated cost differential for underground distribution systems for service to residential customers.

Kentucky Power's 2020 update of the average estimated cost differential for underground distribution systems for service to residential customers also is being made in connection as part of the Company's response to KPSC 4-7.

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[1] *In the Matter of: Electronic Application of Duke Energy Kentucky, Inc. For: 1) An Adjustment Of The Electric Rates; 2) Approval Of New Tariffs; 3) Approval Of Accounting Practices To Establish Regulatory Assets And Liabilities; And 4) All Other Required Approvals And Relief.*

This filing is being made by e-mail transmission in accordance with the Commission's March 16, 2020 Order in Case No. 2020-00085.

Please do not hesitate to contact me if you have any questions.

Very truly yours,

Mark R. Overstreet

MRO

KENTUCKY POWER COMPANY
UNDERGROUND SERVICE PLAN FOR RESIDENTIAL SUBDIVISIONS AND RESIDENTIAL SERVICE LATERALS

DIFFERENTIAL COST SCHEDULE

PRIMARY AND SECONDARY DISTRIBUTION SYSTEM

Charge: **$ 88.23** per foot of lot width (average x number of lots)

Credit for trenching, installing conduit, and backfilling by Customer
$ 29.77 per foot of lot width (average x number of lots)

Charge: **$ 58.46** per foot of lot width (average x number of lots)

SERVICE LATERALS

FROM OVERHEAD FACILITIES
Charge: **$ 24.88** per foot of trench length from Overhead Facilities

Credit for trenching, installing conduit, and backfilling by Customer
$ 16.05 per foot of trench length from Overhead Facilities

Charge: **$ 8.83** per foot of trench length from Overhead Facilities

FROM UNDERGROUND FACILITIES
Charge: **$20.42** per foot of trench length from Overhead Facilities

Credit for trenching, installing conduit, and backfilling by Customer
$ 16.15 per foot of trench length from Overhead Facilities

Charge: **$ 4.27** per foot of trench length from Overhead Facilities

REPLACEMENT OF USEFUL OVERHEAD SERVICE DROP

Charge: **$ 150.00** for each removal in addition to any underground differential costs.

Effective: 10/1/2020

Reviewed: 8/4/2020

AMERICAN ELECTRIC POWER-KENTUCKY
UNDERGROUND SERVICE PLAN FOR RESIDENTIAL SUBDIVISIONS

DIFFERENTIAL COST SCHEDULE

PRIMARY AND SECONDARY DISTRIBUTION SYSTEM

Charge: $8.15 per foot of lot width

Credit for trenching, installing conduit, and backfilling by application: $6.55 per foot of lot width

SERVICE LATERALS

Charge: $9.30 per foot of trench length

Credit for trenching, installing conduit, and backfilling by application: $6.55 per foot of trench length

REPLACEMENT OF USEFUL OVERHEAD SERVICE DROP

Charge: $100.00 for each replacement in addition to any underground differential costs

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE

AUG 01 1996

PURSUANT TO 807 KAR 5:011,
SECTION 9 (1)
BY: Jordan C. Neel
FOR THE PUBLIC SERVICE COMMISSION

Effective: August 1, 1996
Reviewed: June 19, 1996

**AMERICAN ELECTRIC POWER-KENTUCKY
OVERHEAD VS. UNDERGROUND COST DATA
June 17, 1996**

I. SERVICE LATERALS

Estimated Cost of Underground Service	$10.91
Estimated Cost of Equivalent Overhead Service	1.59
Cost Differential	$ 9.32

II. CREDIT FOR TRENCHING, CONDUIT INSTALLATION AND BACKFILL BY CUSTOMER

Estimated Cost of UG Service - AEP Trenched	$10.91
Estimated Cost of UG Service - Customer Trenched	4.36
Cost Differential	$ 6.55

III. PRIMARY AND SECONDARY DISTRIBUTION SYSTEM

Estimated Cost of UG System - Customer Trenched	$ 9.30
Estimated Cost of Equivalent Overhead System	7.68
Cost Differential	$ 1.62

CUSTOMER TRENCHED COST DIFFERENTIAL	$ 1.62
CREDIT FOR TRENCHING	6.55
DIFFERENTIAL COST FOR AEP TO PROVIDE TRENCHING	$ 8.17

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE

AUG 01 1996

PURSUANT TO 807 KAR 5:011,
SECTION 9 (1)
BY: Jordan C. Neel
FOR THE PUBLIC SERVICE COMMISSION

DATA REQUEST

KPSC_4_008 Refer to the application, Exhibit E, page 64 of 216, Tariff F.P., number 12, which discusses the policy of customers requesting termination of service off-cycle during the billing period.
a. Explain why a customer requesting termination of service off-cycle should be responsible for fixed charges past their termination date.
b. Explain whether Kentucky Power has the same policy for its post-pay customers.

RESPONSE

a.) Tariff F.P. states, "If the account terminates off-cycle during the billing period, the remaining monthly fixed charges and fees that have not yet been collected will be applied to the final bill." This is referring to fixed charges and fees that have not yet been collected. It does not indicate that a customer is responsible for fixed charges and fees past their termination date. For example, if a customer on Tariff F.P. has a normal billing cycle of 3, but requests account termination as of cycle 12, and has a credit balance on their account sufficient only to pay for fixed charges and fees through cycle 10, the customer would be responsible for paying any remaining fixed charges and fees for billing cycles 11 and 12.

b.) The same policy applies for post-pay customers.

Witness: Brian K. West

DATA REQUEST

KPSC_4_009 Refer to the application, Exhibit E, page 79 of 216, Tariff C.S.-I.R.P. Confirm that the first change under Conditions of Service is simply updating the name of the PJM Program. If not confirmed, explain the reason for the change.

RESPONSE

Confirmed.

Witness: Alex E. Vaughan

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Fourth Set of Data Requests
Dated August 10, 2020

DATA REQUEST

KPSC_4_010 Refer to the application, Exhibit E, page 79 of 216, Tariff C.S.-I.R.P. Explain the reason for the deletion of the following sentence under Conditions of Service: "If insufficient MWs are available for PJM enrollment by Kentucky Power, the Company shall offer to substitute one of the other PJM Emergency Demand Response Programs that is available."

RESPONSE

As of June 1, 2020 there is only one PJM demand response program. The referenced sentence was deleted in light of that change. All PJM demand response resources as of the current delivery year are "capacity performance" product resources, and no substitute programs are available.

Witness: Alex E. Vaughan

DATA REQUEST

KPSC_4_011 Refer to the application, Exhibit E, page 79 of 216, Tariff C.S.-I.R.P. Explain the reason for the addition of the three new paragraphs under Conditions of Service.

RESPONSE

Each of the three paragraphs added to the Conditions of Service section represents a set of requirements included previously in Commission-approved CS-IRP contract addenda, but which did not appear in the tariff itself. The Company's addition to the tariff is meant to increase transparency and harmonize the tariff and its standard CS-IRP addenda.

Witness: Alex E. Vaughan

DATA REQUEST

KPSC_4_012 Refer to the application, Exhibit E, page 82 of 216, Tariff C.S.-I.R.P. Explain the deletion of the sentence under Special Terms and Conditions.

RESPONSE

The language was unnecessary and duplicative as it also appears in Tariff IGS, under which CS-IRP customers take service.

Witness: Alex E. Vaughan

DATA REQUEST

KPSC_4_013	Refer to the application, Exhibit E, page 90 of 216, Outdoor Lighting, and page 95 of 216, Street Lighting. Provide supporting documentation for the monthly maintenance charge amounts for the flexible lighting options.

RESPONSE

The monthly maintenance charge amounts under the proposed flexible lighting options are roughly averages of the Company's standard LED lamp offerings for tariffs OL and SL. Please refer to KPCO_R_KPSC_4_13_Attachment1 and KPCO_R_KPSC_4_13_Attachment2 for the requested supporting documentation.

Witness: Alex E. Vaughan

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Fourth Set of Data Requests
Dated August 10, 2020

DATA REQUEST

KPSC_4_014 Refer to the application, Exhibit E, page 109 of 216, Tariff System Sales Clause (SSC). Explain why the amount of the Annual System Sales Adjustment Factor is not listed in the tariff.

RESPONSE

The Company's system sales clause is a formula rate adjusted each year in conformity with the Commission approved tariff sheets 19-1 through 19-2. The Company followed long-standing past practice by not including the Annual System Sales Adjustment Factor in creating Exhibit E, page 109 of 216. The Company has no objection to including the adjustment factor in future tariff filings.

KPCO_R_KPSC_4_014_Attachment1 provides a clean version of tariff sheet 19-1 incorporating the most recently updated factor.

Witness: Scott E. Bishop

KENTUCKY POWER COMPANY P.S.C. KY. NO. 12 ORIGINAL SHEET NO. 19-1 T
CANCELLING P.S.C. KY. NO. 11 ORIGINAL SHEET NO. 19-1 T

TARIFF S. S. C.
(System Sales Clause)

APPLICABLE.

To Tariffs R.S., R.S.D., R.S.-L.M.-T.O.D., R.S.-T.O.D., Experimental R.S.-T.O.D.2, G.S., S.G.S.-T.O.D., M.G.S.-T.O.D., L.G.S., L.G.S.-T.O.D., I.G.S., C.S.- I.R.P., C.S. Coal, M.W., O.L. and S.L.

RATE.

1. When the annual net revenues from system sales are above or below the annual base net revenues from system sales, as provided in paragraph 2 below, an additional credit or charge equal to the product of the KWHs and a system sales adjustment factor (A) shall be made, where "A", calculated to the nearest 0.0001 mill per kilowatt-hour, is defined as set forth below.

   Annual System Sales Adjustment Factor (A) = (.75 [Ta – Tb+U/a])/Sa

   In the above formula "T" is Kentucky Power Company's (KPCo) annual net revenues from system sales in the current annual (a), base (b) periods, and "S" is the KWH sales in the current annual (a) period, all defined below. "U/a" represents any under-or-over recovery from the prior period.

   The applicable rate for service rendered on and after September 28, 2020, calculated in accordance with the above formula, is $0.00004 per kWh. N

2. The net revenue from KPCo's sales to non-associated companies as reported in the FERC Energy Regulatory Commission's Uniform System of Accounts under Account 447, Sales for Resale, shall consist of and be derived as follows:

   a. KPCo's total revenues from system sales as recorded in Account 447, less b. and c. below.

   b. KPCo's total out-of-pocket costs incurred in supplying the power and energy for the sales in a. above.

      The out-of-pocket costs include all operating, maintenance, tax, transmission losses and other expenses that would not have been incurred if the power and energy had not been supplied for such sales, including demand and energy charges for power and energy supplied by Third Parties.

   c. KPCo's environmental costs allocated to non-associated utilities in the Company's Environmental Surcharge Report.

(Cont'd on Sheet No. 19-2)

DATE OF ISSUE: August 26, 2020
DATE EFFECTIVE: Service Rendered On And After January 14, 2021
ISSUED BY: /s/ Brian K. West
TITLE: Director, Regulatory Services
By Authority Of an Order of the Public Service Commission
In Case No. 2020-00174 Dated XXXXXX

DATA REQUEST

KPSC_4_015	Refer to the application, Exhibit E, page 109 of 216, Tariff SSC. a. Explain Kentucky Power's considerations when determining when to self-schedule generating resources as opposed to waiting to operate pursuant to PJM's direction. b. Explain how Kentucky Power's self-scheduling impacts Tariff SSC. c. Given that Kentucky Power participates in PJM, explain how Kentucky Power makes off-system sales. d. Explain in specific detail Kentucky Power's participation in off-system sales, including Kentucky Power's considerations in determining when to make off-system sales.

RESPONSE

a. On a daily basis, AEPSC Commercial Operations conducts a review that incorporates a variety of information including, but not limited to, unit availability, market price expectations, compliance testing requirements, and contractual constraints on the plants' fuel supply. From this review, AEPSC Commercial Operations determines the commitment status of each unit for the next market day.

b. The Company's unit commitment decisions, including but not limited to self-scheduling its units and offering them for economic dispatch, has contributed in large part to the $7.34 million of off system sales margins in the test year, which are tracked and shared with customers through Tariff S.S.C.

c. On an hourly basis the Company purchases all of its load requirements from PJM and sells into PJM all of its scheduled generation resources. For the purpose of monthly settlements, including the calculation of the Company's fuel cost for internal load customers and the determination of off-system sales margins, the Company performs an hourly economic dispatch analysis where the lowest cost resources are used to service internal load customers. If resources are greater than load in an hour, then an off-system sale is made, the margins from which are tracked and shared via the Company's SSC.

d. Besides what is described in part C, AEPSC Commercial Operations also participates in the various ancillary service markets of PJM on behalf of the AEP operating companies with the goal of optimizing the financial results for customers in those markets. When internal load requirements are met and additional sales can be made, those are also classified as off system sales which are tracked and shared through the Company's SSC. Additionally, please refer to the Company's responses to KIUC-AG 1-

56, 1-57, and 1-58 for information regarding the Company's sales of excess capacity in PJM.

Witness: Alex E. Vaughan

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Fourth Set of Data Requests
Dated August 10, 2020

DATA REQUEST

KPSC_4_016 Refer to the application, Exhibit E, page 138 of 216, Non-Utility Generator Tariff. Provide the reason for the deletion of the Monthly Billing Demand and Monthly Billing Energy sections.

RESPONSE

Customers taking service under Tariff Non-Utility Generator are billed for their load requirements based on the standard tariff rates their load qualifies for; as such, the billing demand and energy portions of those standard tariffs determine the monthly billings.

Witness: Alex E. Vaughan

DATA REQUEST

KPSC_4_017 Refer to the application, Exhibit E, page 214 of 216, Decommissioning Rider. Explain why the amounts of the Decommissioning Rider Adjustment Factors are not listed in the tariff.

RESPONSE

The Company's decommissioning rider is a formula rate adjusted each year in conformity with the Commission approved tariff sheets 38-1 through 38-2. The Company followed past practice by not including the Decommissioning Rider Factor in creating Exhibit E, page 214 of 216. The Company has no objection to including the adjustment factors in future tariff filings.

KPCO_R_KPSC_4_017_Attachment1 provides a clean version of tariff sheets 38-1 and 38-2 incorporating the most recently updated factor.

Witness: Scott E. Bishop

DECOMMISSIONING RIDER
(D.R.)

APPLICABLE.

To Tariffs R.S., R.S.D., R.S.-L.M.-T.O.D., R.S.-T.O.D., Experimental R.S.-T.O.D.2, G.S., S.G.S.-T.O.D., M.G.S.-T.O.D., L.G.S., L.G.S.-T.O.D., I.G.S., C.S.- I.R.P., C.S. Coal, M.W., O.L., and S.L..

RATE.

1. Pursuant to the final order of the Kentucky Public Service Commission in Case No. 2012-00578 and the Stipulation and Settlement Agreement dated July 2, 2013 as filed and approved by the Commission, Kentucky Power Company is to recover from retail ratepayers the coal-related retirement costs of Big Sandy Unit 1, the retirement costs of Big Sandy Unit 2 and other site-related retirement costs that will not continue in use on a levelized basis, including a weighted average cost of capital (WACC) as set in the Company's most recent Rate Case carrying cost over a 25 year period beginning with the date rates became effective in Case No. 2014-00396. The term "Retirement Costs" are defined as and shall include the net book value, materials and supplies that cannot be used economically at other plants owned by Kentucky Power, and removal costs and salvage credits, net of related ADIT. Related ADIT shall include the tax benefits from tax abandonment losses.

   The applicable rates for service rendered on and after September 28, 2020 to be applied to the revenues described in paragraph 5 of this tariff are: N

$$\text{Residential Adjustment Factor} = \frac{\$11,232,715}{\$209,767,899} = 5.3548\%$$

$$\text{All Other Classes Adjustment Factor} = \frac{\$13,856,916}{\$170,590,394} = 8.1229\%$$

2. The allocation of the actual revenue requirement (ARR) between residential and all other customers shall be based upon their respective contribution to total retail revenues for the most recent twelve month period, ending June 30 according to the following formula:

$$\text{Residential Allocation RA(y)} = \text{ARR(y)} \times \frac{\text{KY Residential Retail Revenue RR(b)}}{\text{KY Retail Revenue R(b)}}$$

$$\text{All Other Allocation OA(y)} = \text{ARR(y)} \times \frac{\text{KY All Other Classes Retail Revenue OR(b)}}{\text{KY Retail Revenue R(b)}}$$

   Where:
   (y) = the expense year~~;~~

   (b) = Most recent available twelve month period ended June 30.

(Cont'd on Sheet No. 38-2)

DATE OF ISSUE: August 26, 2020
DATE EFFECTIVE: Service Rendered On And After January 14, 2021
ISSUED BY: /s/ Brian K. West
TITLE: Director, Regulatory Services
By Authority Of an Order of the Public Service Commission
In Case No. 2020-00174 Dated XXXXXX

DECOMMISSIONING RIDER (CONT'D)

RATE. (Cont'd)

3. The Residential D.R. Adjustment shall provide for annual adjustments based on a percent of total revenues, according to the following formula:

Residential D.R. Adjustment Factor	=	Net Annual Residential Allocation NRA(y) / Residential Retail Revenue RR(b)

Where:

Net Annual Residential Allocation NRA(b)	=	Annual Residential Allocation RA(y), net of Over/ (Under) Recovery Adjustment;
Residential Retail Revenue RR(b)	=	Annual Retail Revenue for all KY residential classes for the year (b).

4. The All Other Classes D.R. Adjustment shall provide for annual adjustments based on a percent of non-fuel revenues, according to the following formula:

All Other Classes D.R. Adjustment Factor	=	Net Annual All Other Allocation NOA (y) / All Other Classes Non-Fuel Retail Revenue ONR(b)

Where:

Net Annual All Other Allocation NOA(y)	=	Annual All Other Allocation OA(y), net of Over/ (Under) Recovery Adjustment;
All Other Classes Non-Fuel Retail Revenue ONR(b)	=	Annual Non-Fuel Retail Revenue for all classes other than residential for the year (b).

5. The Revenues to which the residential Decommissioning Rider factor are applied is the sum of the customer's Service Charge, Energy Charge(s), Fuel Adjustment Clause, System Sales Clause, Demand-Side Management Adjustment Clause, Federal Tax Cut, Residential Energy Assistance, Capacity Charge, Purchase Power Adjustment and Grid Modernization Rider. T

   The Revenues to which the all other customer Decommissioning Rider factor are applied is the sum of the customer's Service Charge, Demand Charge, Energy Charge(s) less Base Fuel, Minimum Charge, Reactive Charge, System Sales Clause, Demand-Side Management Adjustment Clause, Federal Tax Cut, Kentucky Economic Development Surcharge, Capacity Charge, Purchase Power Adjustment and Grid Modernization Rider. T

6. The annual Decommissioning Rider adjustments shall be filed with the Commission no later than August 15th of each year before it is scheduled to go into effect on Cycle 1 of the October billing cycle, along with all the necessary supporting data to justify the amount of the adjustments, which shall include data, and information as may be required by the Commission.

7. Copies of all documents required to be filed with the Commission shall be open and made available for public inspection at the office of the Public Service Commission pursuant to the provisions of KRS 61.870 to 61.884.

DATE OF ISSUE: August 26, 2020
DATE EFFECTIVE: Service Rendered On And After January 14, 2021
ISSUED BY: /s/ Brian K. West
TITLE: Director, Regulatory Services
By Authority Of an Order of the Public Service Commission
In Case No. 2020-00174 Dated XXXXXX

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Fourth Set of Data Requests
Dated August 10, 2020

DATA REQUEST

KPSC_4_018 Refer to the application, Exhibit E, page 214 of 216, Decommissioning Rider. Also refer to Case No. 2017-00179,2 Big Sandy Decommissioning Rider 2019 Annual Update, Tab "Calculation."
a. Explain in detail the expense items included in the Additions column for December 2018 through June 2019.
b. Provide a copy of the Big Sandy Decommissioning Rider 2020 Update in addition to filing a copy in the post-case correspondence file of Case No. 2017-00179.

RESPONSE

a. Please refer to KPCO_R_KPSC_4_018_Attachment1 for the requested information.

b. Please see KPCO_R_KPSC_4_018_Attachment2 through KPCO_R_KPSC_4_018_Attachment5 for the Decommissioning Rider 2020 Update which was also filed under Case No. 2017-00179 post-case correspondence on August 11, 2020.

Witness: Alex E. Vaughan

Witness: Heather M. Whitney

DATA REQUEST

KPSC_4_019	Refer to the application, Section IV, Page 3 of 20. Additionally, refer to the Excel provided in Kentucky Power's response to Commission Staff's Second Request for Information, KPCO_R_KPC_2_16_Attachment1.xlsx, Tab Sch 4. a. The amounts recorded in Section IV, column (6), entitled "Adjusted as of March 31, 2020 (Schedule 4)" do not appear to correspond to the amounts recorded in column (6) of the spreadsheet in the tab labeled Sch 4. Reconcile the differences in the amounts between these two schedules. b. The amount of accumulated deferred income taxes listed in Section IV, column (3), "Per Books as of March 31, 2020" does not correspond to column (2), "KPCo Total Company Per Books" of the spreadsheet in the tab labeled Sch 4, line 237, "Accumulated Deferred Income Taxes." Reconcile these amounts.

RESPONSE

a. Please refer to KPCO_R_KPSC_4_19_Attachment 1, column (7) for the requested reconciliation.

b. The difference between the two schedules is the exclusion of deferred taxes (accounts 2814001, 2823001, 2824001, 2832001, 2833001, 2833002, and 2834001) in KPCO_R_KPC_2_16_Attachment 1 that are not collected from customers in rates as a result of previous flow-through of current tax benefits.

Witness: Allyson L. Keaton

Witness: Heather M. Whitney

DATA REQUEST

KPSC_4_020 Refer to the Direct Testimony of Scott E. Bishop (Bishop Testimony), page 6, line 9, through page 7, line 19, which explains Kentucky Power's revision to the Fuel Adjustment Clause Tariff.

a. Explain whether there have been PJM Customer Payment Defaults other than GreenHat Energy, LLC, and if so, provide for each of the last ten years the name of the defaulting party, the amount of the default, and the amount allocated to Kentucky Power.

b. Of any amounts of previous defaults allocated to Kentucky Power in the last ten years, explain which billing line items were used to pass along the defaulted amounts in each year and the respective amount in each billing line item.

c. Of any amounts of previous defaults allocated to Kentucky Power in the last ten years, explain how Kentucky Power passed along the incremental default amounts to its customers.

RESPONSE

a. There have been customer payment defaults other than GreenHat Energy. PJM does not have a list of specific defaults. The PJM Independent Market Monitor (Monitoring Analytics) provides an annual "State of the Market report for PJM" that provides an aggregate number of defaults for the year, as well as the total defaulted amount. See KPCO_R_KPSC_4_20_Attachment1 for a list of defaults by year.

b.-c. Previous defaults would have been recovered through base rates or the system sales clause. Any off-system sales default allocation would have gone through the Company's System Sales rider. The Company does not have information regarding prior defaults to answer the request.

Witness: Scott E. Bishop

DATA REQUEST

KPSC_4_021 Refer to the Bishop Testimony, page 6, lines 11–14.
a. Explain why Kentucky Power is proposing to include PJM Customer Payment Defaults through the inclusion of billing line item 1999.
b. Explain whether there are any risks associated with Kentucky Power's participation in PJM.
c. Explain whether shareholders receive any benefits from Kentucky Power's participation in PJM.
d. Explain why losses arising from the risk of participating in PJM is not shared between shareholders and Kentucky Power's customers.

RESPONSE

a. Kentucky Power proposes to recover PJM customer fuel-related default expenses (BLI 1999) through the fuel adjustment clause. Like other fuel-related PJM expenses, customer fuel-related default expenses are properly recoverable through the fuel adjustment clause. In fact, the Commission's December 26, 2019 Order in Case Number 2019-00002 recognized that Financial Transmission Rights, such as customer default charges, are costs associated with the cost of generation. In the same order the Commission directed that "[s]hould Kentucky Power want to recover fuel-related costs such as the GreenHat default cost that are not passed through the FAC tariff via listed PJM billing line items, it has a number of options such as seeking recovery through base rates in a base rate case or requesting to update its FAC tariff in a base rate case." Kentucky Power is requesting to include the billing line item 1999 for recovery through the Company's FAC Tariff as suggested by the Commission.

b. The Company acknowledges there are risks and benefits associated with any business arrangement. With respect to its participation in PJM, the Company is exposed to the risk of financial penalties for non-performance and non-compliance. However, the opportunity exists for the Company and its customers to financially benefit from the opportunities created by other parties' non-performance, market events such as extreme weather and generation unit outages, and opportunities for investment in transmission that would serve customers outside its service area. The Commission approved Kentucky Power's application in Case No. 2002-00475 to transfer functional control of its generating assets and transmission system to PJM. Among the benefits identified in the Commission's May 19, 2004 Order were "(1) greater off-system sales profits; (2) net revenues from the sale of financial rights to transmit power on the AEP-East transmission system; and (3) avoided contract costs for services that will now be performed by PJM."

c. In general, all stakeholders, including customers and Kentucky Power's shareholders receive benefits from participation in a Regional Transmission Organization; otherwise no entity would participate in such organizations. Kentucky Power's shareholders benefit from the retention of the Company's share of off system sales margins and return on equity embedded in the transmission charges billed by PJM to those entities who use transmission service. Retail ratepayers benefit through their share of off system sales margins as well as the revenues earned by the Company for the provision of transmission service, which are used to reduce the cost of providing retail electric service.

d. As a participant in PJM, the Company is required to pay all costs as billed by PJM and is entitled to all revenues earned through its participation. Such costs and revenues are contained in the FERC-approved PJM tariff. As discussed in part c of this response, retail ratepayers are receiving benefits from the Company's participation and it is appropriate to also reflect the costs of the Company's participation in retail rates.

Witness: Jason M. Stegall

Witness: Scott E. Bishop

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DATA REQUEST

KPSC_4_022 Refer to the Bishop Testimony, page 8, line 17, through page 9, line 2. Explain whether any participating or prospective customers have approached Kentucky Power with concerns about not being able to choose the timing of the contractual discounts under the Economic Development Rider (Tariff E.D.R.).

RESPONSE

Although no particular customer has raised this issue with Kentucky Power, allowing flexibility for the timing of the contractual discounts was raised in discussions with economic development agencies in the Company's service territory with regard to making Tariff E.D.R. a better fit for the circumstances of a growing company. It stands to reason that most start-up companies could take advantage of the rate flexibility given it can take time to reach full production capacity after a company's initial start-up.

Witness: Scott E. Bishop

DATA REQUEST

KPSC_4_023 Refer to the Direct Testimony of Jaclyn N. Cost (Cost Testimony), page 12, line 12. Ms. Cost states that there is no difference in the presentation of Kentucky Power's jurisdictional cost of service study (COSS). Further, on page 8, line 11, Ms. Cost states that there were no changes in the energy and demand allocation factors. Explain whether this implies there were no changes in the process of determining the factors or whether it implies that there was no change in the percent allocated to each rate class.

RESPONSE

Please refer to KPCO_R_KPSC_4_23_Attachment1 and KPCO_R_KPSC_4_23_Attachment2 which show respectively the 2020 Base Case demand and energy allocation process and the 2017 Base Case demand and energy allocation process. The demand and energy allocation process followed the same methodology accepted by the Commission in Case No. 2017-00179. The final demand and energy factors resulted in the same allocation percentage that was used in Case No. 2017-00179.

Witness: Jaclyn N. Cost

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DATA REQUEST

KPSC_4_024 Refer to the Direct Testimony of Kimberly Kaiser (Kaiser Testimony), page 5, regarding the overview and descriptions of AEP's short-term incentive compensation (STI) long-term incentive compensation programs (LTI). Provide percentages associated earnings per share, safety and compliance measures, and strategic initiatives tied to the funding of AEP's STI. If these percentages vary by business unit within AEP, provide a breakdown of percentages by business unit.

RESPONSE

For 2019, the annual incentive plan budget was primarily (70%) funded based on AEP's earnings per share (EPS). The remainder was funded based upon safety and compliance (10%) and strategic initiatives (20%).
For 2020, the annual incentive plan funding will be based entirely on EPS. This change for 2020 underscores the need to operate efficiently and reduce costs during the current uncertain economic environment facing the nation and the AEP System, its customers and the communities it serves. For 2020, the AEP System is still focusing, measuring and reporting out on safety, compliance and strategic initiatives goals and these results will be considered by AEP's Board of Directors and its Human Resources Committee for any discretionary funding adjustments, which could be either negative or positive.

The funding percentages do not vary by business unit. The funding measures determine the overall corporate funding which is then allocated to each business unit based on their performance against their annual goals. There were separate annual incentive plans for employees in Customer & Distribution Services, Generation, Transmission, shared services, and each operating company. The annual incentive plans for AEP System's operating companies used a balanced scorecard consisting of customer-focused, operational and financial goals. For 2019 90% of the Kentucky Power's incentive plan goals are non-financial, and for 2020 80% are non-financial.

Please refer to KPSC_R_KIUC_AG_1_25_Attachment1 and KPSC_R_KIUC_AG_1_25_Attachment2 for the full incentive plan descriptions.

Witness: Kimberly K. Kaiser

DATA REQUEST

KPSC_4_025 If the earnings per share (EPS) goal is not met, confirm that only the portion of the STI attributed to the EPS goal will not be funded, and identify the adjustment to test-year expenses and to payroll tax expense to remove the portions of the STI Plans from test-year expenses that would not be paid out if the EPS goal was not met.

RESPONSE

The Company has not performed the requested adjustment to expenses. The EPS goal is a range with a threshold and a maximum target. If the EPS threshold is not met, there is no incentive payout on any of the STI goals. However, as shown in KPCO_R_KPSC_4_25_Attachment1, the EPS threshold was met in each of the past ten years and target was met in nine of these years. Even though target was not met in 2017, the plan was still funded at 92% of target. Given historical scores, the probability of an STI payout above target is highly likely.

Witness: Kimberly K. Kaiser

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DATA REQUEST

KPSC_4_026 Provide the number of times the EPS goal was met in the past five years.

RESPONSE

Please see the Company's response to KPSC 4-25.

Witness: Kimberly K. Kaiser

DATA REQUEST

KPSC_4_027 Refer to the Kaiser Testimony, page 11.
a. Explain whether Kentucky Power has performed any specific studies or analyses to quantify the effect incentive compensation has on attraction and retention of employees.
b. Explain whether Kentucky Power has performed any specific studies or analyses to quantify the direct benefits of incentive compensation to its customers.

RESPONSE

a. No, neither Kentucky Power nor AEPSC has performed any such study. It would not be feasible to conduct this type of scientific or academic study in a complex environment, such as Kentucky Power, given the innumerable variables that would need to be controlled to produce statistically valid results. However, it is logical that in the absence of incentive compensation, Kentucky Power and AEP as a whole would be paying below market total compensation. This would adversely affect the Company's and AEP’s ability to attract and retain talent with the skills needed to provide service to Kentucky Power customers efficiently, effectively and safely.

b. Although conducting a rigorous scientific or academic study to quantify the benefits of incentive compensation is not feasible for the reason cited in 27a above, it is possible to make a connection that providing market competitive compensation, which includes incentive compensation, is beneficial to customers. AEP’s incentive plan goals benefit customers from the standpoint of promoting efficient operations, financial responsibility, and strong customer service. These objectives create a culture of high performance, align work with the objectives of Kentucky Power and the needs of its customers, and encourage cost consciousness, which in turn allows for reliable and efficient service to customers at a reasonable cost.

Witness: Kimberly K. Kaiser

DATA REQUEST

KPSC_4_028 Refer for the Direct Testimony of D. Brett Mattison (Mattison Testimony), page 11, lines 14–19. State whether Kentucky Power is capable of offering the Flex Pay Program with its current Automatic Meter Reading (AMR) infrastructure. If not, indicate whether there are modifications that could be made to the AMR infrastructure that would allow Kentucky Power to offer the Flex Pay Program.

RESPONSE

The Company cannot offer Tariff F.P. ("Flex Pay") with its current AMR infrastructure. An AMI meter's ability to use two-way communications such that the meter can send information back to the utility and the utility can communicate instructions to the meter is what makes Flex Pay possible. AMI meters provide interval data with a meter reading every 15 minutes. This constant flow of information is what allows the Company's billing system to calculate a daily bill and make it available to a customer electronically. AMR meters are only capable of one-way communications from the meter to a receiver and cannot be modified to provide the two-way communication required for the Flex Pay Program. Also, meter readings can be obtained only by driving close enough to the meter for it to communicate with a receiver mounted in the vehicle and transmit a meter reading. It is not practicable for meter reading vehicles to drive the Company's entire service territory on a daily basis. Other benefits, such as outage notifications, when the AMI meter sends an alert that it is without power, or alerts the customer they only have a certain number of days of service remaining at the current funding level unless a payment is made, also are not possible with AMR meters.

Witness: D. Brett Mattison

DATA REQUEST

KPSC_4_029	Refer to the Mattison Testimony, page 13, line 22. Mr. Mattison states that customer usage has declined by more than 576 million kilowatt-hours at a cost of $19.5 million in net revenue. a. Provide a breakout of the percentage of declining customer usage that can be attributed to each of the residential, commercial, and industrial customer classes.

RESPONSE

Please refer to KPCO_R_KPSC_4_29_Attachment1 for the requested information.

Witness: Alex E. Vaughan

Witness: D. Brett Mattison

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DATA REQUEST

KPSC_4_030	Refer to the Mattison Testimony, page 14, lines 4–9. Explain how Kentucky Power obtains equity capital. If all equity capital is obtained from the AEP parent corporation, include in the explanation a discussion of how and when AEP decides to issue additional common equity and the basis upon which that additional equity is allocated to (invested in) each of the jurisdictional operating companies.

RESPONSE

Kentucky Power's equity capital can increase through additional retained earnings or through capital contributions from AEP Inc. Kentucky Power's equity capital can decrease when it declares dividends out of retained earnings to AEP Inc. AEP Inc. makes additional capital contributions or foregoes dividends from [its utility subsidiaries/Kentucky Power] during times of elevated capital spending to support customer service or to maintain investment grade credit metrics. AEP Inc. issues equity primarily through direct sales of shares or through financing instruments that convert into equity. The proceeds from those equity issuances are not allocated to the operating companies. Those proceeds could be used to pay down AEP Inc.'s debt and for other corporate purposes.

Witness: D. Brett Mattison

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DATA REQUEST

KPSC_4_031 Refer to the Mattison Testimony, page 14, lines 14–16. Kentucky Power proposes a return on equity (ROE) of 10.0 percent, yet studies have shown that the average S&P market return is also 10.0 percent. Explain why an ROE of 10.0 for a risk adverse investment is justified when the average return for the stock market, a more risky investment, is also 10.0 percent.

RESPONSE

Kentucky Power disagrees with the premise of this question, which asserts that investors' expected return on the S&P 500 is 10.0%. As documented at page 60-61 of Company Witness McKenzie's Direct Testimony, a forward-looking estimate of the expected return on the S&P 500 is 12.5%, with Kentucky Power's requested ROE falling significantly below this level.

Witness: Adrien M. McKenzie

Witness: D. Brett Mattison

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DATA REQUEST

KPSC_4_032 Refer to the Direct Testimony of Adrien M. McKenzie (McKenzie Testimony), pages 4, line 23, through page 5, line 1, and page 47, lines 6–17.

a. Provide a list of all current authorized ROE for each of the AEP operating companies, the effective date of the ROE, and whether the ROE was the result of a settlement or fully litigated rate case.

b. Explain the extent to which state regulatory commission authorized ROEs influence how AEP allocates capital for comparable capital projects across the various jurisdictional operating companies.

c. For 2019, provide the amount of budgeted capital earmarked for transmission and distribution related expenses at the AEP corporate level and how that capital was ultimately distributed to each AEP jurisdictional operating company. Include in the response, separate amounts for transmission and distribution capital projects to each operating company.

RESPONSE

a. Please see KPCO_R_KPSC_4_32_Attachment1 for the requested authorized ROE information. The ROEs for the Company, Ohio Power Company (AEP OH), AEP Texas, Appalachian Power Company (APCO) WVA, Indiana and Michigan Power Company (I&M) MI, Kingsport Power Company (KgPCo), and Public Service Company of Oklahoma (PSO) resulted from settlements. Fully litigated rate cases determined the ROEs for APCO VA, I&M IN, Southwestern Electric Power Company (SWEPCO) AR, SWEPCO LA, and SWEPCO TX.

b. As with any business, one factor taken into consideration when establishing capital forecasts is the projection of earnings. However, AEP's process for allocating capital across jurisdictions is complex. AEP informs me that it carefully assesses many operational factors including but not limited to the effect of environmental laws, market prices, and the economy. Particular attention is given to the expected load and resulting revenue and expenses including O&M, Depreciation, Taxes and Interest. Each operating company provides input into the development of AEP's overall financial plan, and spending is allocated to meet operational and strategic needs.

c. Please see KPCO_R_KPSC_4_32_Attachment2 for the requested information.

Witness: Brian K. West

AEP OPCO AUTHORIZED ROE, ROR							
Jurisdiction	**Docket Number**	**Filing Date**	**Order Date**	**Requested ROE**	**Authorized ROE**	**Authorized ROR**	**Effective Date**
AEP OH	16-1852-EL-SSO	11/23/2016	4/25/2018	10.41%	10.00%	7.80%	6/1/2018
AEP Texas	49494	5/1/2019	4/6/2020	10.5%	9.4%	6.4536%	5/29/2020
APCO							
TN (KgPCo)	16-00001	1/4/2016	10/19/2016	10.66%	9.85%	6.18%	8/9/2016
VA	PUR-2018-00048	3/29/2018	11/7/2018	10.22%	9.42%	N/A	11/7/2018
WVA	18-0646-E-42T	10/24/2018	2/27/2019	10.22%	9.75%	7.28%	4/6/2019
I&M							
IN	44967	7/26/2017	5/30/2018	10.60%	9.95%	5.51%	7/1/2018
MI	U-18370	5/15/2017	4/12/2018	10.60%	9.90%	5.76%	4/26/2018
KY (KPCo)	2017-00179	6/28/2017	1/18/2018	10.31%	9.70%	6.44%	1/2018 bill cycle
OK (PSO)	PUD201800097	6/30/2017	2/27/2019	10.30%	9.40%	6.97%	3/14/2019
SWEPCO							
AR	19-008-U	2/28/2019	12/27/2019	10.5%	9.45%	4.93%	1/1/2020
LA	U-34200-A	N/A	4/19/2017	N/A	9.80%	7.32%	5/1/2017
TX	46449	12/16/2016	1/11/2018	10.00%	9.60%	7.18%	5/20/2017

DATA REQUEST

KPSC_4_03 3 Refer to the McKenzie Testimony, page 14, lines 3–11.
a. For the utilities included in the proxy group, explain whether any has had a credit downgrade as a result of the risk of carbon transition risk.
b. Explain whether any of the utilities listed in the proxy group assign a high, moderate, or low probability of carbon regulation in their long range resource plans.

RESPONSE

a. Mr. McKenzie has not conducted any research studies to determine whether the utilities included in his proxy group have been downgraded over some past period or for what reasons; nor was such a study necessary to support the conclusions and recommendations contained in his testimony.

b. Mr. McKenzie has not reviewed the long range resource plans for the utilities included in his proxy group; nor was this necessary to support the conclusions and recommendations contained in his testimony.

Witness: Adrien M. McKenzie

DATA REQUEST

KPSC_4_034	Refer to the McKenzie Testimony, page 19, lines 8–14. Explain whether this Commission has denied recovery of federally mandated environmental compliance expenditures and, if not, explain whether the recovery of such expenditures reduces the risks associated with heightened capital expenditure programs.

RESPONSE

Mr. McKenzie is not aware of any instance in which this Commission has denied recovery of federally mandated environmental compliance expenditures. To the extent that recovery of such expenditures impacts the investment community's assessment of Kentucky Power's risks, that would be reflected in the credit ratings referenced in Mr. McKenzie's testimony. As noted at page 19, irrespective of the Commission's past policies, the rating agencies remain attuned to the impact of the Company's capital expenditure program on its financial profile.

Witness: Adrien M. McKenzie

DATA REQUEST

KPSC_4_035 Refer to the McKenzie Testimony, page 22, lines 8-21. Many of the utilities in the proxy group are holding companies with non-jurisdictional and foreign operations. Explain the extent to which COVID-19 risk exposure is affecting the proxy group utilities through these other operations.

RESPONSE

As explained in Mr. McKenzie's direct testimony at pages 38-42, the companies included in Mr. McKenzie's proxy group are all classified as regulated electric utilities by the Value Line Investment Survey and would be considered by investors as comparable in risk to Kentucky Power. Mr. McKenzie has not conducted any research studies to evaluate "COVID-19 risk exposure" attributable to any specific subsidiaries or operating divisions of these companies; nor was such a study necessary to support his recommendations and conclusions.

Witness: Adrien M. McKenzie

DATA REQUEST

KPSC_4_036 Refer to the McKenzie Testimony, Figure AMM-4, page 27. Provide the underlying monthly data in Excel spreadsheet format with cells and formulas visible and unprotected. Include an update to the data in the Figure showing the yield spread between each of the AEP jurisdictional operating companies and each company in the proxy group, and 30-year treasuries beginning May 2019 through the most current date

RESPONSE

In reviewing the data underlying Figure AMM-4 in connection with preparing this response, Mr. McKenzie identified two discrepancies requiring correction. The yield spread of 143 basis points identified as being for January 2020 actually corresponds with December 2019. In addition, the yield spread for March 2020 should be 255 basis points, not 294 basis points. An Excel file containing this data and a corrected Figure AMM-4, along with updated data through July 31, 2020, is attached as KPCO_R_KPSC_4_36_Attachment1. These corrections do not affect or alter Mr. McKenzie's recommendation and conclusion.

Mr. McKenzie did not conduct any analysis of yield spreads "between each of the AEP jurisdictional operating companies and each company in the proxy group, and 30-year treasuries" in support of his direct testimony; nor was this information necessary to support his recommendation and conclusion. Nor is it clear as to how such "yield spreads" would be computed, as there is no available published benchmark yield for individual AEP operating companies or the utilities included in Mr. McKenzie's proxy group.

Witness: Adrien M. McKenzie

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DATA REQUEST

KPSC_4_037 Refer to the McKenzie Testimony, page 32, lines 4–16, and Table AMM-2, page 33.
a. Explain the reason beta values are calculated on five years of data versus one year of data.
b. Provide an update to Table AMM-2 by including two additional columns with beta values calculated using the traditional five-year historical period, with
one column for five years ending March 31, 2020, and one column for five years ending December 31, 2019.
c. Explain whether it would be appropriate to use the beta values in Table AMM-2 in CAPM models.

RESPONSE

a. The true beta of a security captures the forward-looking volatility of a security in relation to the entire market of investment opportunities, and can never be observed. Historically estimated betas serve only as proxies for this true beta and the choice of the time period used to calculate historical betas involves a balancing between enhancing statistical significance and ensuring that the calculated value reflects a current assessment of the security's risk. Adopting a five year period for this purpose, as used by the Value Line Investment Survey ("Value Line"), is a widely accepted means of accommodating these objectives.

b. Please refer to KPCO_R_KPSC_4_37_Attachment1, which contains the five-year beta values reported by Value Line from its December 27, 2019 and March 27, 2020 editions, which are the closest to the requested time periods, along with more recent data for August 14, 2020.

c. As explained at pages 62-63, Mr. McKenzie applied the CAPM model using beta Values from Value Line, which are based on a five-year lookback period. While Mr. McKenzie believes that this is a sound and defensible approach in this proceeding, the use of shorter time periods as the basis to compute beta values could be appropriate where the analyst believes that this would result in a closer approximation of the true beta due to a change in the forward-looking risk of the security relative to the market.

Witness: Adrien M. McKenzie

DATA REQUEST

KPSC_4_038 Refer to the McKenzie Testimony, page 35, lines 4–10. The first statement appears to contain a non sequitur. If investors' future expectations are reflected in current capital market data, then explain how that data would not already contain and account for any evidence regarding expected changes in long-term capital costs.

RESPONSE

The characterization of the referenced statement as containing a non sequitur is incorrect. Please refer to Mr. McKenzie's direct testimony at page 35, lines 11-22. As explained there, the financial models relied on to evaluate investors' forward-looking cost of equity are premised on projected data. Similarly, near-term projections of interest rates also provide relevant data in assessing the future direction of long-term capital costs and in ensuring that the ROE established in this proceeding reflects investors' cost of capital over the time when rates will be in effect. As Mr. McKenzie explains, expectations of future trends are highly relevant to investors in evaluating their cost of equity. Investors recognize that bond yields can and do shift over time, which is supported by the fact that recognized forecasting services devote considerable resources to informing investors regarding future trends in interest rates. As a result, projected bond yields are a relevant consideration in evaluating a fair ROE for Kentucky Power, particularly in light of the unsettled nature of present capital markets in light of the impacts of the coronavirus pandemic.

Witness: Adrien M. McKenzie

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DATA REQUEST

KPSC_4_039 Refer to the McKenzie Testimony, Table AMM-4, page 41. For each company listed in the table, provide the percent of total operations obtained from regulated U.S. operations, the percent of total operations obtained from non-regulated U.S. operations, and the percent of total operations obtained from non-regulated foreign operations.

RESPONSE

Mr. McKenzie did not calculate the requested information in the course of preparing his direct testimony; nor was it necessary to support his conclusions and recommendations. To the extent such information is publicly available, it can be obtained from the Form 10-K reports filed with the Securities and Exchange Commission, which can be accessed at https://www.sec.gov/edgar/searchedgar/legacy/companysearch.html.

Witness: Adrien M. McKenzie

DATA REQUEST

KPSC_4_040 Refer to the McKenzie Testimony, and Table AMM-5, pages 57–59 and Exhibit AMM-4, page 4.
a. Explain whether FERC is applying its 100 basis point adjustment methodology utilized the exact method in Exhibit AMM-4 page 4. If not, explain the differences between FERC methodology and that in Exhibit AMM-4 page 4.
b. Explain why it is reasonable to accept that an average of six months of bond yields in 2007 plus six months of bond yields from 2008 is appropriate for use as a current bond yield and as a projected bond yield.

RESPONSE

a. As noted at page 57, lines 2-5 of Mr. McKenzie's testimony, FERC generally referenced a 100 basis point threshold over six-month average utility bond yields as the basis for evaluating low end cost of equity estimates, recognizing that this is a flexible test. More recently, FERC adopted a low end threshold calculated by adding 20% of the CAPM market risk premium to the average yield on Baa utility bond yields. *Ass'n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc., Opinion No. 569-A, 171 FERC ¶ 61,154 (2020).*

b. The average bond yield of 6.69% corresponds to the average yield over the two study periods in the cases where FERC determined that the 100 basis point risk premium was a relevant threshold. In evaluating the amount of any change in interest rates from that time—whether compared with current yields or projected yields—this 6.69% average yield serves as the appropriate base period.

Witness: Adrien M. McKenzie

DATA REQUEST

KPSC_4_041 Refer to the McKenzie Testimony, Exhibit AMM-4. Explain why it is reasonable to assign equal weights to the Value Line, IBES, and Zacks estimates given that IBES and Zacks growth estimates are based upon a compilation of multiple analysts' estimates, but Value Line's estimates are based upon a single analyst.

RESPONSE

Similar to the reasoning for relying on multiple financial models, utilizing additional recognized sources of growth rates more closely aligns the DCF analysis with how investors analyze and compare investment opportunities, provides an important cross-check on any single projection, and yields a more robust indication of investors' growth expectations. Each source of growth rates is considered independently and there is no basis to assign greater weight to one source because it is presumed to be based on a consensus of more than one estimate. In fact, growth rates published by services such as IBES do not always reflect the input of multiple analysts. In addition, it is incorrect to characterize Value Line's growth rate projections as being based on a single analyst. This reflects the fact that while the commentary and projections in a Value Line report on an individual firm may be sponsored by a single analyst, the reports are developed under a common, proprietary analytical framework supported by a network of analysts within the Value Line organization, and are reviewed by an internal panel of other analysts prior to publication.

Witness: Adrien M. McKenzie

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DATA REQUEST

KPSC_4_042 Refer to the McKenzie Testimony, pages 62, lines 1–10, and Exhibit AMM6. If not provided previously, provide in Excel spreadsheet format with all cells unprotected and formulas intact the worksheets supporting the calculation of the average growth rate of 9.3 percent and the average year ahead dividend yield of 3.1 percent.

RESPONSE

Excel files supporting Mr. McKenzie’s testimony were previously provided as part of the Company's response to Staff Set 3 Question 1.

Witness: Adrien M. McKenzie

DATA REQUEST

KPSC_4_043 Refer to the McKenzie Testimony, page 63, lines 6–15.
a. Provide a detailed explanation and supporting documentation why the beta measure needs to be adjusted to account for company size in order to capture investors' required rates of return.
b. Explain whether any of the firms that compute company betas have incorporated adjustments to correct for this "deficiency." If they have, provide the documentation that supports the new beta calculations.
c. Provide a list of state regulatory commissions that regulate an AEP operating company that accepted the size adjustment as proposed in the CAPM analysis, and a list of state regulatory commissions that rejected this adjustment to the CAPM analysis.

RESPONSE

a. According to the CAPM, the expected return on a security should consist of the riskless rate, plus a premium to compensate for the systematic risk of the particular security. The degree of systematic risk is represented by the beta coefficient. Because financial research indicates that differences in investors' required rates of return that are related to firm size are not fully captured by beta, a modification is required to account for this size effect. As Duff & Phelps concluded:
Examination of market evidence shows that within the context of the CAPM, beta does not fully explain the difference between small company returns and large company returns. In other words, the actual (historical) excess return smaller companies earn tends to be greater than the excess return predicted by the CAPM for these companies. This 'premium over CAPM' is commonly known as a 'beta-adjusted size premium' or simply 'size premium.' Duff & Phelps, 2016 Valuation Handbook, Guide to Cost of Capital 8-1 (John Wiley & Sons 2016).
Consistent with this financial research, the Federal Energy Regulatory Commission recently concluded, "[w]e also continue to find that the size adjustment is necessary to correct for the CAPM's inability to fully account for the impact of firm size when determining the cost of equity." *Ass'n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc., Opinion No. 569-A, 171 FERC ¶ 61,154 at P 75 (2020).*

b. Mr. McKenzie is not aware of any service that has incorporated adjustments to calculated beta values in an attempt to correct for the size affect.

c. Mr. McKenzie did not conduct any research studies of regulatory orders in other state jurisdictions regarding treatment of the size adjustment in past proceedings to support the size adjustment used in his application of the CAPM and ECAPM methods; nor was such a study necessary to support his analyses and conclusions. Moreover, in Mr. McKenzie's experience, regulatory agencies often do not rule on specific details underlying the results of financial models or even indicate precisely which results were relied on specifically in arriving at their authorized ROE.

Witness: Adrien M. McKenzie

DATA REQUEST

KPSC_4_044 Refer to the McKenzie Testimony, Exhibits AMM-6 and AMM-7. Explain the rule that governs the size adjustment addition or subtraction. The adjustment does not appear to be consistent when compared to firm market capitalization. For example, NextEra Energy Inc. and Xcel Energy Inc. both have a negative 0.28 percent adjustment to the CAPM and ECAPM analyses.

RESPONSE

As noted in footnotes (e) and (f) to Exhibits AMM-6 and AMM-7, the size adjustments were based on Duff & Phelps, 2020 CRSP Deciles Size Study—Supplementary Data Exhibits, Cost of Capital Navigator, with a copy of this document being previously provided as “WP-30” to Mr. McKenzie’s workpapers. The table of size premiums based on this study is reproduced in KPCO_R_KPSC_4_44_Attachment1. As shown there, the size premiums correspond to deciles based on market capitalization. Because NextEra Energy Inc. and Xcel Energy Inc. both fall within the range of capitalizations for Decile 1, they are both assigned a size adjustment of -0.28%.

Witness: Adrien M. McKenzie

CRSP Deciles Size Premiums

Decile	Market Capitalization of Smallest Company (in millions)		Market Capitalization of Largest Company (in millions)	Size Premium (Return in Excess of CAPM)
Mid-Cap 3-5	$ 2,688.889	-	$ 13,100.225	0.80%
Low Cap 6-8	515.621	-	2,685.865	1.42%
Micro-Cap 9-10	1.973	-	515.602	3.16%
Breakdown of Deciles 1-10				
1-Largest	$ 31,090.379	-	$ 1,061,355.011	-0.28%
2	13,142.606	-	30,542.936	0.50%
3	6,618.604	-	13,100.225	0.73%
4	4,312.546	-	6,614.962	0.79%
5	2,688.889	-	4,311.252	1.10%
6	1,669.856	-	2,685.865	1.34%
7	993.855	-	1,668.282	1.47%
8	515.621	-	993.847	1.59%
9	230.024	-	515.602	2.22%
10- Smallest	1.973	-	229.748	4.99%
Breakdown of CRSP 10th Decile				
10a	$ 120.519	-	$ 229.748	3.49%
10w	181.408	-	229.748	2.69%
10x	120.519	-	181.170	4.42%
10b	$ 1.973	-	$ 120.178	8.02%
10y	62.612	-	120.178	6.62%
10z	1.973	-	62.199	10.91%

Source: Duff & Phelps; 2020 CRSP Deciles Size Study -- Supplementary Data Exhibits.

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Fourth Set of Data Requests
Dated August 10, 2020

DATA REQUEST

KPSC_4_045 Refer to the McKenzie Testimony, page 64, lines 7–14. Provide an explanation and demonstrate how the forecasted long term Treasury bond yields were developed from data obtained from Value Line, HIS Global Insight and Blue Chip.

RESPONSE

Calculations underlying the forecasted long-term Treasury bond yield are contained at tab "Bond Yields" in McKenzie KPCo Excel.1.xlsm, which was previously provided as part of the Company's response to Staff Set 3 Question 1.

Witness: Adrien M. McKenzie

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Fourth Set of Data Requests
Dated August 10, 2020

DATA REQUEST

KPSC_4_046 Refer to the McKenzie Testimony, page 69, lines 22–25, and Exhibit AMM-8.

a. Explain whether any adjustments were made to the authorized ROEs to account for regulatory climate, whether the ROE was the result of a fully litigated full rate case, and any adders, penalties, or other types of incentives that other state commissions may have attached to utility ROEs. Also explain what adjustments were made in which years and to which state authorized ROEs.

b. Explain in detail how a ROE awarded to a utility operating in another state with a different regulatory climate and under different circumstances than that experienced by Kentucky Power has any bearing on an estimated ROE for Kentucky Power.

c. Explain whether the Average Utility Interest Rates on page 4 of the exhibit are the Average Utility Bond Yields found on page 3.

RESPONSE

a. Mr. McKenzie relied on the annual average ROE reported in the RRA Regulatory Focus report and made no adjustments to these values.

b. As noted at page 69 of Mr. McKenzie’s testimony, authorized ROEs presumably reflect regulatory commissions' best estimates of the cost of equity, however determined, at the time they issued their final order. As a result, these ROEs should represent a balanced and impartial outcome that considers the need to maintain a utility’s financial integrity and ability to attract capital. In addition, they provide an important guide for the opportunity cost considered by investors. While there are certainly differences between individual proceedings, on average and considered over a long historical horizon, this data provides a logical and frequently referenced basis for estimating equity risk premiums for regulated utilities.

c. Yes.

Witness: Adrien M. McKenzie

DATA REQUEST

KPSC_4_047	Refer to the McKenzie Testimony, Exhibit AMM-8, pages 1–2. a. For page 1, show the calculation in footnote (b) and explain why it is reasonable to average the yield on all utility bonds and a specific subset for a current average bond yield of 3.43 percent. b. For page 2, show the calculation in footnote (b) and explain why it is reasonable to average the yield on all utility bonds and a specific subset for a current average bond yield of 4.45 percent. c. For pages 1 and 2, explain why different utility bond subsets (Baa and A) were used in the calculations described in footnote (b).

RESPONSE

a. Calculations underlying the average utility bond yield of 3.43% and the average yield on Baa utility bonds of 3.79% are contained at tab "Bond Yields" in McKenzie KPCo Excel.1.xlsm, which was previously provided as part of the Company's response to Staff Set 3 Question 1. The average yield on all utility bonds was used as the basis for developing the adjusted risk premium because this measure best reflects the average ratings of the utility industry over the long historical horizon of the study period. In order to better reflect the average risks of this proxy group, the adjusted risk premium was combined with the current average yield on Baa-rated utility bonds to compute the estimated cost of equity.

b. Calculations underlying the average projected utility bond yield of 4.45% and the average projected yield on Baa utility bonds of 5.09% are contained at tab "Bond Yields" in McKenzie KPCo Excel.1.xlsm, which was previously provided as part of the Company's response to Staff Set 3 Question 1. Please refer to the response to subpart (a) regarding the use of the average utility bond yields and Baa subset.

c. Please refer to the response to subpart (a).

Witness: Adrien M. McKenzie

DATA REQUEST

KPSC_4_048	Refer to the McKenzie Testimony, Exhibit AMM-8, page 3. a. Confirm that over the 45-year study period, the data in the Allowed ROE column is based upon state jurisdictional electric utilities only. If not, explain whether there are natural gas, gas pipeline, water, sewer, telecommunication companies or other that comprise the data set. b. Currently, Kentucky Power issues its own debt but does not issue its own equity. AEP issues stock and is the sole equity investor in Kentucky Power. Confirm that this has been the case over the 45-year study period. If not, explain how this arrangement has changed over the years. c. Over the 45-year study period, on an annual basis, explain how many of the state jurisdiction electric utilities with awarded ROEs are standalone companies and those that are a part of a larger holding company. d. Confirm that when a holding company issues stock, all of the holding companies operating companies are included in a rating agency's analysis of a company's overall current and future financial strength and that the return on that stock depends on the current and anticipated financial performance of the holding company as a whole. e. Over the 45-year study period, explain whether the data in the Average Utility Bond Yield column is tied to individual state jurisdictional electric utility issuances only. If not, explain whether there are natural gas, gas pipeline, water, sewer, telecommunication companies or other that comprise the data set. f. Over the 45-year study period, explain whether the debt-issuing entity is part of a holding company that issues debt or securities and allocates the capital to state jurisdictional utility operating companies through a money pool or other type arrangement. g. Over the 45-year study period, explain whether the return of a state jurisdictional utility that issues debt is tied to the financial strength of a parent holding company, or to quality measures such as investment grade and Value Lines' financial strength and safety ratings. If quality measures influence the return, explain whether all the bond yields are issued by companies of similar quality.

RESPONSE

a. Confirm.

b. The requested information is unrelated to the analysis presented in Exhibit AMM-8, which is based on data for the electric utility industry and is not premised on Kentucky Power directly.

c. Mr. McKenzie did not undertake any study of the annual average allowed ROEs used in his study to determine the requested information; nor was is necessary or relevant to support his conclusions and recommendations.

d. Mr. McKenzie agrees that the rating agencies' assessment of the credit risks associated with an electric utility holding company would consider the implications of operating companies on the credit risk of the holding company. The return that investors receive as a result of owning common stock depends on the dividends they receive and the price at which the stock is sold at the end of their holding period.

e. It is unclear what is meant by the phrase "individual state jurisdictional electric utility issuances." As indicated in footnote (b) on page 3 of Exhibit AMM-8, the average utility bond yield is compiled and reported by Moody's Investors Service and reflects a widely recognized index for utility bond yields.

f. It is unclear what is meant by the phrase "debt-issuing entity." As indicated in footnote (b) on page 3 of Exhibit AMM-8, the average utility bond yield is compiled and reported by Moody's Investors Service and reflects a widely recognized index for utility bond yields.

g. It is unclear what is meant by the reference to "the return of a state jurisdictional utility that issues debt." If the term "return" is meant to refer to the yield to maturity on bonds, as indicated in footnote (b) on page 3 of Exhibit AMM-8, the average utility bond yield is compiled and reported by Moody's Investors Service and reflects a widely recognized index for utility bond yields. This index is computed based on bonds rated AAA, AA, A, and Baa, where applicable, and is reflective of the average yield for seasoned bonds with a remaining maturity of at least 20 years.

Witness: Adrien M. McKenzie

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Fourth Set of Data Requests
Dated August 10, 2020

DATA REQUEST

KPSC_4_049 Refer to the McKenzie Testimony, page 76, lines 6–20, and page 77, lines 1–12.
a. Explain whether and how flotation costs are recovered such that investors who invest in non-regulated competitive industries have the opportunity to earn their required ROE.
b. Explain the extent to which investors' required ROEs for holding company stock are influenced by the non-regulated operations of holding companies which include regulated utilities, such as Kentucky Power.

RESPONSE

a. Unlike regulated utilities, firms in the competitive sector are not regulated on the basis of the book value of their investment and are free to set their own prices, subject to market forces. As a result, the fact that a portion of stock proceeds is not reflected in rate base or otherwise accounted for in the revenue requirements used to establish prices has no direct relevance in the nonregulated sector.

b. While the firms included in Mr. McKenzie's proxy group are regarded by the investment community as primarily electric utilities, investors' required ROEs for holding company stocks would consider the risks and expectations for both regulated and unregulated operations.

Witness: Adrien M. McKenzie

DATA REQUEST

KPSC_4_050	Provide a copy of the following documents cited in the McKenzie Testimony: a. The Moody's Investor Service credit opinion cited on page 8, footnote 7. b. The document cited on page 14, footnote 13. c. The document cited on page 19, footnote 17.

RESPONSE

a. The requested document is included as file "WP-4" to Mr. McKenzie's workpapers, which were previously provided as part of the Company's response to Staff Set 3 Question1.

b. The requested document is included as file "WP-7" to Mr. McKenzie's workpapers, which were previously provided as part of the Company's response to Staff Set 3 Question1.

c. The requested document is attached as KPCO_R_KPSC_4_50_Attachment1.

Witness: Adrien M. McKenzie


AMERICAN ELECTRIC POWER
BOUNDLESS ENERGY
Investor Meetings
March 17, 2020

“Safe Harbor” Statement under the Private Securities Litigation Reform Act of 1995

This presentation contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934. Although AEP and each of its Registrant Subsidiaries believe that their expectations are based on reasonable assumptions, any such statements may be influenced by factors that could cause actual outcomes and results to be materially different from those projected. Among the factors that could cause actual results to differ materially from those in the forward-looking statements are: changes in economic conditions, electric market demand and demographic patterns in AEP service territories, inflationary or deflationary interest rate trends, volatility in the financial markets, particularly developments affecting the availability or cost of capital to finance new capital projects and refinance existing debt, the availability and cost of funds to finance working capital and capital needs, particularly during periods when the time lag between incurring costs and recovery is long and the costs are material, decreased demand for electricity, weather conditions, including storms and drought conditions, and the ability to recover significant storm restoration costs, the cost of fuel and its transportation, the creditworthiness and performance of fuel suppliers and transporters and the cost of storing and disposing of used fuel, including coal ash and spent nuclear fuel, the availability of fuel and necessary generation capacity and performance of generation plants, the ability to recover fuel and other energy costs through regulated or competitive electric rates, the ability to build or acquire renewable generation, transmission lines and facilities (including the ability to obtain any necessary regulatory approvals and permits) when needed at acceptable prices and terms and to recover those costs, new legislation, litigation and government regulation, including oversight of nuclear generation, energy commodity trading and new or heightened requirements for reduced emissions of sulfur, nitrogen, mercury, carbon, soot or particulate matter and other substances that could impact the continued operation, cost recovery and/or profitability of generation plants and related assets, evolving public perception of the risks associated with fuels used before, during and after the generation of electricity, including coal ash and nuclear fuel, timing and resolution of pending and future rate cases, negotiations and other regulatory decisions, including rate or other recovery of new investments in generation, distribution and transmission service and environmental compliance, resolution of litigation, the ability to constrain operation and maintenance costs, prices and demand for power generated and sold at wholesale, changes in technology, particularly with respect to energy storage and new, developing, alternative or distributed sources of generation, the ability to recover through rates any remaining unrecovered investment in generation units that may be retired before the end of their previously projected useful lives, volatility and changes in markets for coal and other energy-related commodities, particularly changes in the price of natural gas, changes in utility regulation and the allocation of costs within regional transmission organizations, including ERCOT, PJM and SPP, changes in the creditworthiness of the counterparties with contractual arrangements, including participants in the energy trading market, actions of rating agencies, including changes in the ratings of debt, the impact of volatility in the capital markets on the value of the investments held by the pension, other postretirement benefit plans, captive insurance entity and nuclear decommissioning trust and the impact of such volatility on future funding requirements, accounting standards periodically issued by accounting standard-setting bodies, and other risks and unforeseen events, including wars, the effects of terrorism (including increased security costs), embargoes, naturally occurring and human-caused fires, cyber security threats and other catastrophic events, the ability to attract and retain requisite work force and key personnel.

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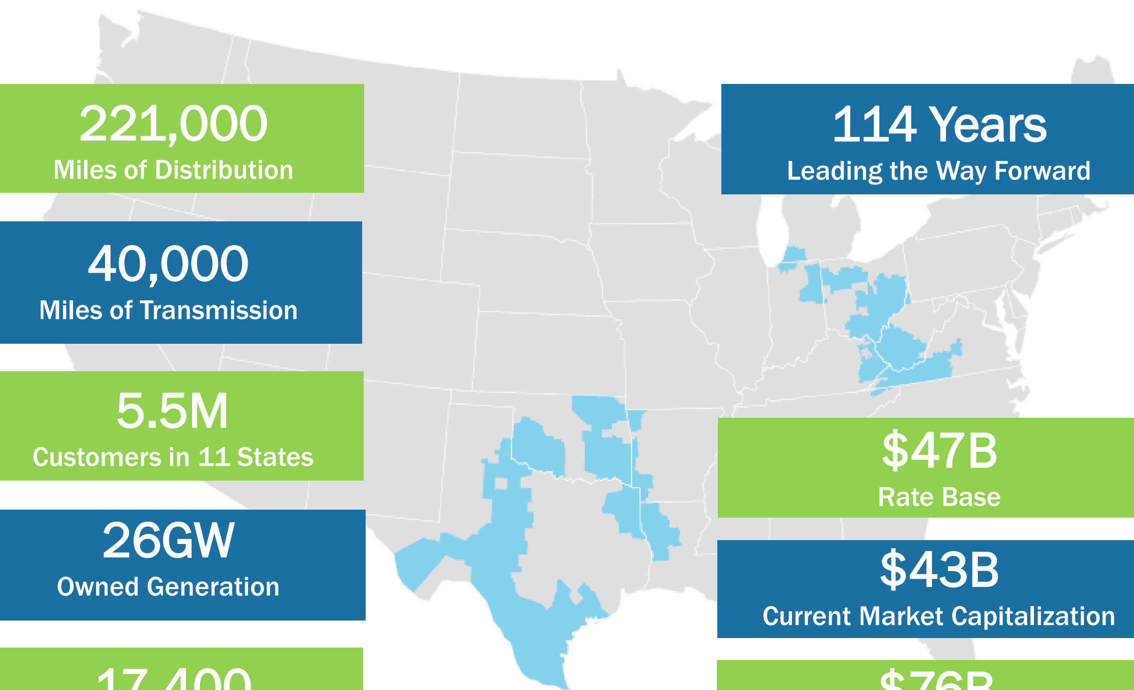
The Premier Regulated Energy Company

AMERICAN ELECTRIC POWER



221,000
Miles of Distribution

40,000
Miles of Transmission

5.5M
Customers in 11 States

26GW
Owned Generation

17,400
Employees

114 Years
Leading the Way Forward

$47B
Rate Base

$43B
Current Market Capitalization

$76B
Total Assets

Statistics as of December 31, 2019 except for market capitalization as of March 13, 2020

AEP Leading the Way Forward

Confidence in Steady and Predictable Earnings Growth Rate of 5%-7%	Commitment to Growing Dividend Consistent with Earnings	Well Positioned as a Sustainable Regulated Business	Compelling Portfolio of Premium Investment Opportunities

Strategic Vision and Priorities

Invest in transmission and distribution networks

Invest in regulated and contracted renewables

Mitigate generation risk and optimize operations

Superior capital allocation

Relentless O&M optimization/Future of work

Improve customer experience

We are focused on executing our strategy while concurrently improving our operations and keeping rates affordable


KEY AEP THEMES
5%-7% Earnings Growth Rate
Proven Track Record of TSR and EPS Performance
Strong Dividend Growth
O&M Optimization
Transforming Our Generation Fleet
AMERICAN ELECTRIC POWER

Strong Profile for Investors

AMERICAN ELECTRIC POWER

Incentive Comp Tied to High End of EPS

Investment Pipeline

Steady Growth

TOTAL SHAREHOLDER RETURN

~3%

DIVIDEND YIELD

5%-7% CAGR

5%-7%

EPS GROWTH

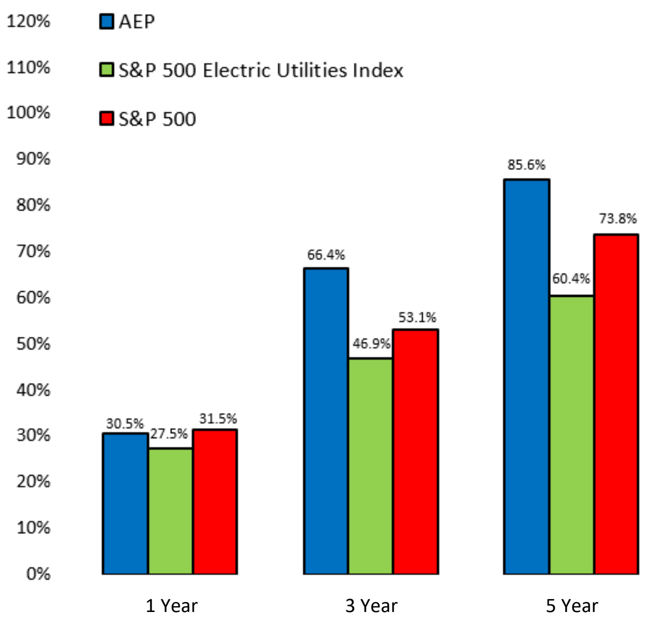
2020 Operating Earnings Guidance
$4.25-$4.45 per share

Consistent Dividends

Low Risk, Regulated Assets

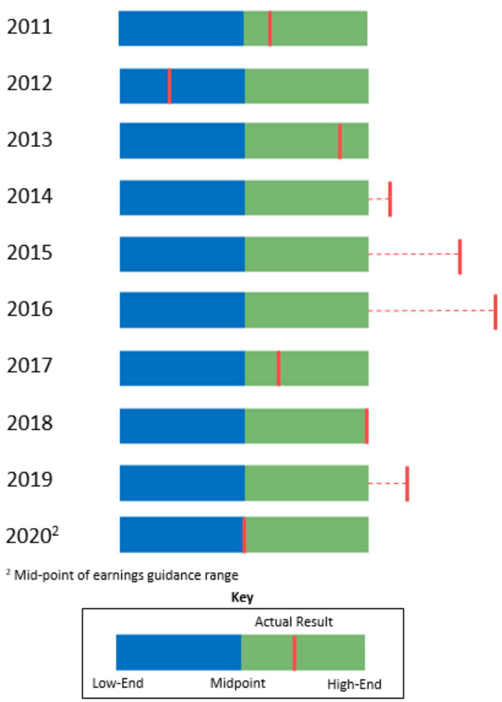
Proven Track Record of Performance

Favorable Total Shareholder Return[1]



[1] Data as of December 31, 2019

Decade of Meeting or Exceeding Original Guidance



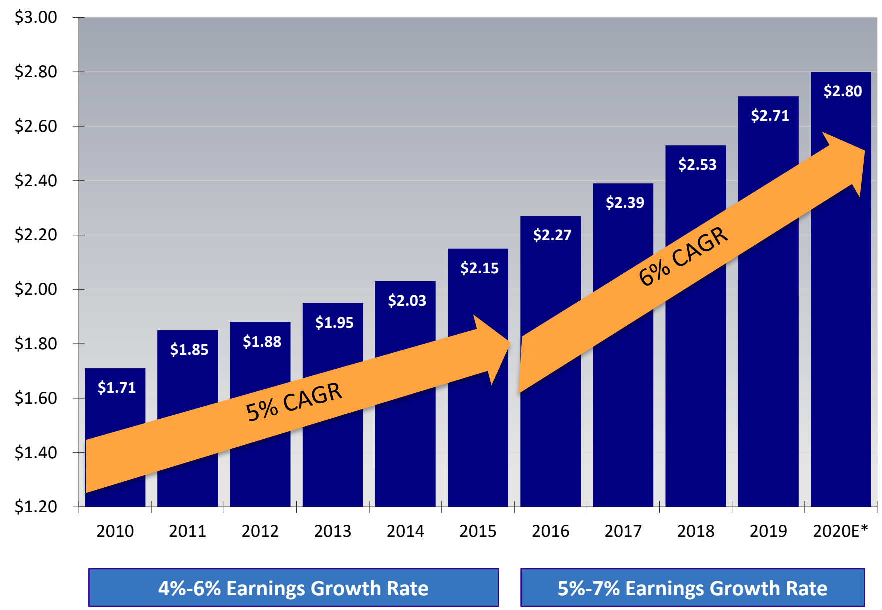
[2] Mid-point of earnings guidance range

Strong Dividend Growth

Targeted payout ratio 60-70% of operating earnings

Over 109 years of consecutive quarterly dividends

Targeted dividend growth in line with earnings

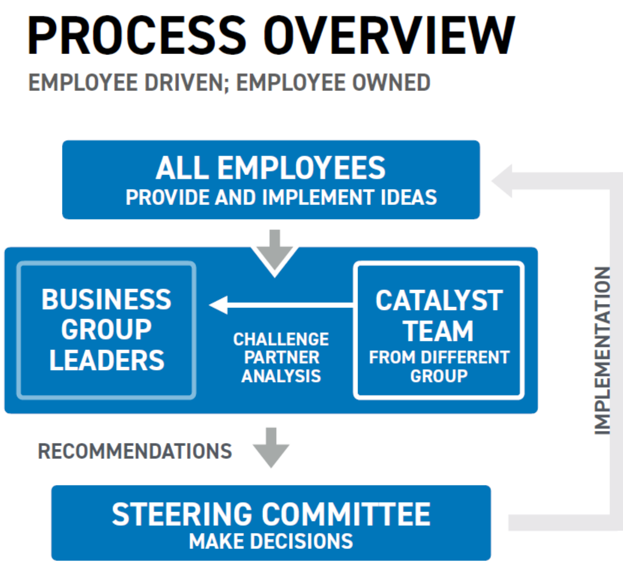


EPS Growth + Dividend Yield = 8% to 10% Annual Return Opportunity

* Subject to Board approval

O&M Optimization – Achieving Excellence Program

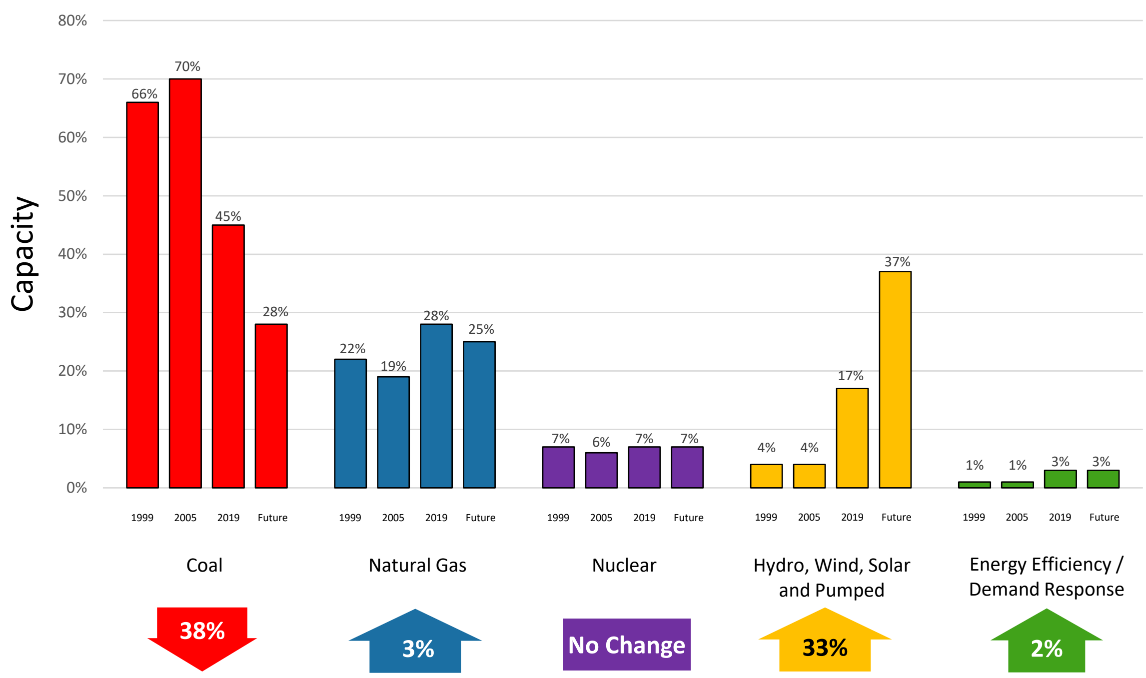
Achieving Excellence: A disciplined O&M optimization process to improve our business



KEY FEATURES

- Program is an ongoing part of our enhanced target setting process
- Catalyst team includes employees with strong analytic, teamwork and project management skills
- Group leaders include heads of business units who will partner with and evaluate ideas from catalyst team
- Steering Committee reviews recommendations and makes implementation decisions

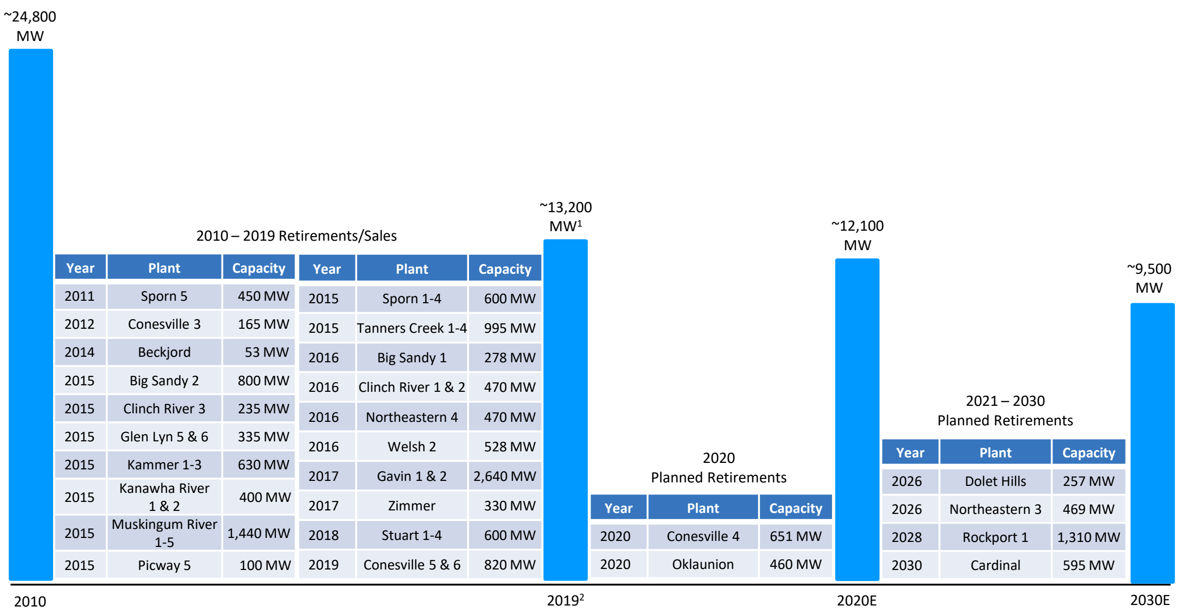
Transforming Our Generation Fleet



As of 12/31/2019. Future includes IRP forecasted additions and retirements through 2030. Energy Efficiency / Demand Response represents avoided capacity rather than physical assets.

Retirement Progress and Plans

AMERICAN ELECTRIC POWER



2010 – 2019 Retirements/Sales

Year	Plant	Capacity
2011	Sporn 5	450 MW
2012	Conesville 3	165 MW
2014	Beckjord	53 MW
2015	Big Sandy 2	800 MW
2015	Clinch River 3	235 MW
2015	Glen Lyn 5 & 6	335 MW
2015	Kammer 1-3	630 MW
2015	Kanawha River 1 & 2	400 MW
2015	Muskingum River 1-5	1,440 MW
2015	Picway 5	100 MW

Year	Plant	Capacity
2015	Sporn 1-4	600 MW
2015	Tanners Creek 1-4	995 MW
2016	Big Sandy 1	278 MW
2016	Clinch River 1 & 2	470 MW
2016	Northeastern 4	470 MW
2016	Welsh 2	528 MW
2017	Gavin 1 & 2	2,640 MW
2017	Zimmer	330 MW
2018	Stuart 1-4	600 MW
2019	Conesville 5 & 6	820 MW

2020
Planned Retirements

Year	Plant	Capacity
2020	Conesville 4	651 MW
2020	Oklaunion	460 MW

2021 – 2030
Planned Retirements

Year	Plant	Capacity
2026	Dolet Hills	257 MW
2026	Northeastern 3	469 MW
2028	Rockport 1	1,310 MW
2030	Cardinal	595 MW

[1] Includes 2012 Turk Plant addition and 40% of Conesville 4 that was acquired in conjunction with the sale of Zimmer Plant
[2] MW Capacity as of 12/31/2019

Projected Resource Additions

AMERICAN ELECTRIC POWER

Solar Additions (MW)			
Operating Co:	**2020-2022**	**2023-2027**	**2028-2030**
APCo	15	300	750
I&M	150	600	550
KPCo	20 [1]	253	-
PSO	11	600	600
SWEPCO	-	-	300
Totals	**196**	**1,753**	**2,200**

Wind Additions (MW)			
Operating Co:	**2020-2022**	**2023-2027**	**2028-2030**
APCo	-	300	-
I&M	300	150	300
KPCo	-	-	200
PSO	675 [1]	400	200
SWEPCO	810 [1]	600	-
Totals	**1,785**	**1,450**	**700**

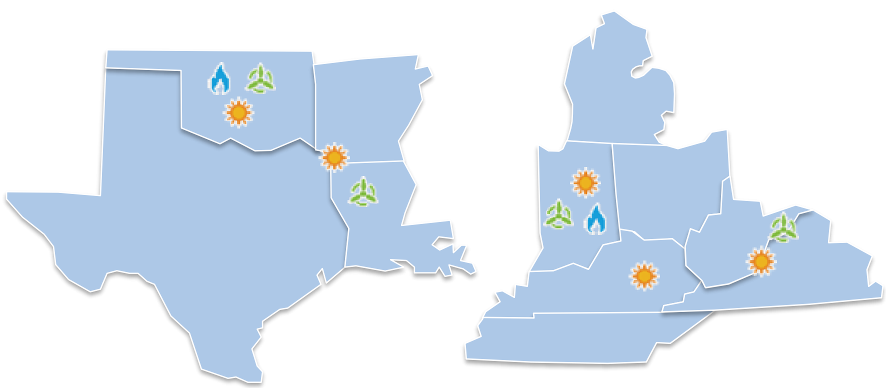
[1] Subject to regulatory filings currently underway

Natural Gas Additions (MW)			
Operating Co:	**2020-2022**	**2023-2027**	**2028-2030**
I&M	18	18	788
PSO	373 [2]	410 [2]	-
Totals	**391**	**428**	**788**

[2] To replace expiring PPA

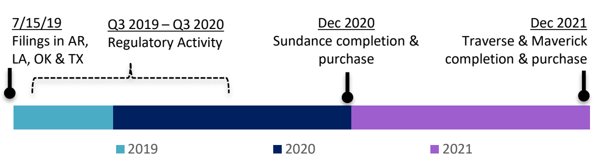
Total Projected Resource Additions (MW)	
Resource	**2020-2030**
Solar	4,149
Wind	3,935
Natural Gas	1,607
Totals	**9,691**

Updated 12/31/2019



North Central Wind Overview

Jurisdiction (Docket #)	MW	% of Project
PSO (PUD 2019-00048)	675	45.5%
SWEPCO – AR (19-035-U)	155	10.4%
SWEPCO – LA (U-35324)	268	18.1%
SWEPCO – TX (49737)	309	20.8%
SWEPCO - FERC	78	5.2%
Total:	**1,485**	**100%**



SWEPCO and PSO Regulated Wind Investment Opportunity				
Total Rate Base Investment	~$2 billion (1,485 MW)			
North Central Wind	**Name**	**MW**	**Investment**	**In-Service**
	Sundance	199	$307M	EOY 2020 (100% PTC)
	Traverse	999	$1,287M	EOY 2021 (80% PTC)
	Maverick	287	$402M	
Net Capacity Factor	44.0%			
Customer Savings	~$3 billion (30-year nominal $)			
Developer	Invenergy			
Turbine Supplier	GE			

- Regulated rate base wind investment opportunity with ability to meaningfully reduce customer rates
  - Acquiring facilities on a fixed cost, turn-key basis at completion
  - Contingent upon satisfactory regulatory approvals
- Investment not included in the Company's current capital expenditure plan
- Acquisition can be scaled, subject to commercial limitations, to align with individual state resource needs and approvals

North Central Wind Procedural Schedules

Jurisdiction (Docket #)	Intervenor Testimony	Staff Testimony	Rebuttal Testimony	Hearing	Status
PSO (PUD 2019-00048)	November 1, 2019	November 1, 2019	December 4, 2019	January 13, 2020 (Settlement Hearing)	Settlement reached December 10, 2019, commission approved on February 20, 2020
SWEPCO – AR (19-035-U)	December 13, 2019	December 13, 2019	January 17, 2020	March 10, 2020	Settlement reached January 24, 2020, awaiting commission order
SWEPCO – TX (49737)[1]	January 14, 2020	January 22, 2020	February 12, 2020	February 24, 2020	Working through procedural schedule
SWEPCO – LA (U-35324)	February 7, 2020	February 7, 2020	March 9, 2020	April 22, 2020 (Settlement Hearing)	Settlement Reached March 6, 2020, awaiting commission order

[1] Texas has a 365-day statutory timeline for issuing an order, making the requested approval date July 15, 2020 (366 days, 2020 is a leap year)

Note: In February 2020, FERC approved the wind acquisition

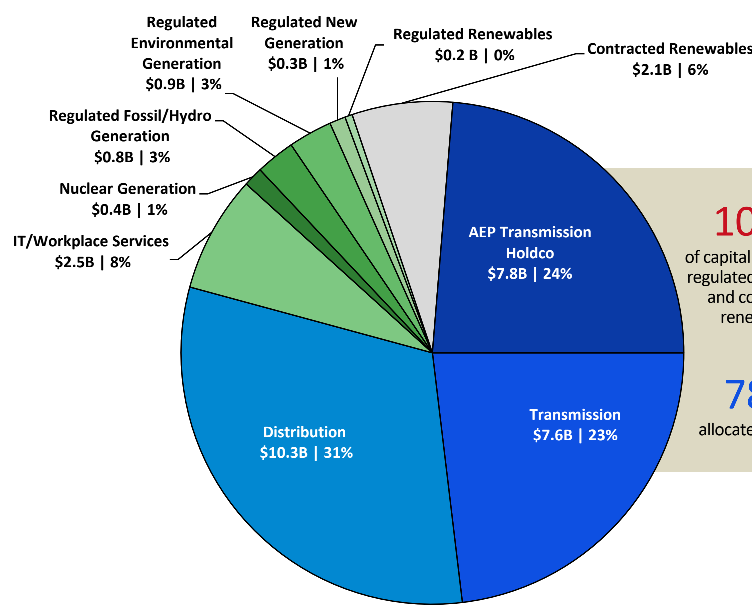

POSITIONING FOR THE FUTURE
CAPITAL INVESTMENT OPPORTUNITIES

Robust Organic Capital Opportunities

Transmission	**Grid modernization, aging infrastructure, physical/cyber security, reliability, market efficiency and economic development projects**
Distribution	**Grid modernization, reliability improvement projects and distribution station refurbishment**
Renewables	**Regulated renewables supported by integrated resource plans and contracted renewables**
Technology	**Digitization, automation, cyber security, enterprise-wide applications**

2020 - 2024 Capital Forecast of $33B and Net Plant

2020-2024 Capital Forecast[1]

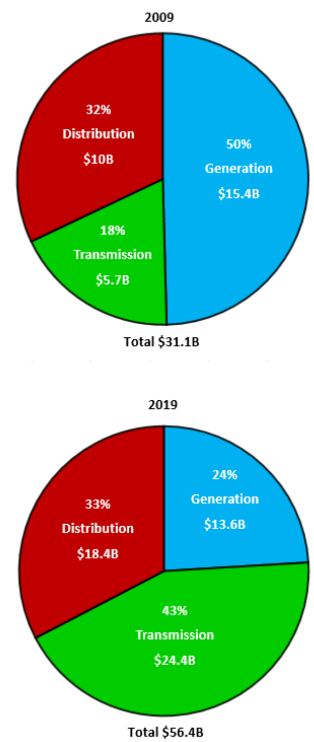


100% of capital allocated to regulated businesses and contracted renewables

78% allocated to wires

Focus on wires and renewables

Historical Net Plant Profiles



[1] Does not include North Central Wind

2020 - 2024 Capital Forecast by Subsidiary

$ in millions (excluding AFUDC)	2020E	2021E	2022E	2023E	2024E	Total
Appalachian Power Company	$ 762	$ 738	$ 1,024	$ 1,027	$ 950	$ 4,501
Wheeling Power Company	$ 21	$ 37	$ 57	$ 45	$ 39	$ 199
Kingsport Power Company	$ 15	$ 21	$ 19	$ 25	$ 19	$ 99
Indiana Michigan Power Company	$ 625	$ 568	$ 525	$ 525	$ 680	$ 2,924
Kentucky Power Company	$ 200	$ 184	$ 170	$ 170	$ 161	$ 886
AEP Ohio	$ 688	$ 716	$ 714	$ 774	$ 1,017	$ 3,909
Public Service Company of Oklahoma	$ 311	$ 326	$ 506	$ 432	$ 391	$ 1,965
Southwestern Electric Power Company	$ 375	$ 437	$ 442	$ 517	$ 592	$ 2,363
AEP Texas Company	$ 1,169	$ 1,121	$ 1,092	$ 1,092	$ 1,529	$ 6,003
AEP Generating Company	$ 42	$ 23	$ 21	$ 22	$ 16	$ 124
AEP Transmission Holdco	$ 1,505	$ 1,547	$ 1,441	$ 1,378	$ 1,938	$ 7,809
Generation and Marketing	$ 612	$ 497	$ 339	$ 339	$ 346	$ 2,133
Other	$ 12	$ 8	$ 8	$ 6	$ 3	$ 36
Total Capital and Equity Contributions	**$ 6,339**	**$ 6,223**	**$ 6,357**	**$ 6,353**	**$ 7,681**	**$ 32,952**

Capital plans are continuously optimized which may result in redeployment between functions and companies. Table may not foot due to rounding. Data does not include North Central Wind.

Cash Flows and Financial Metrics

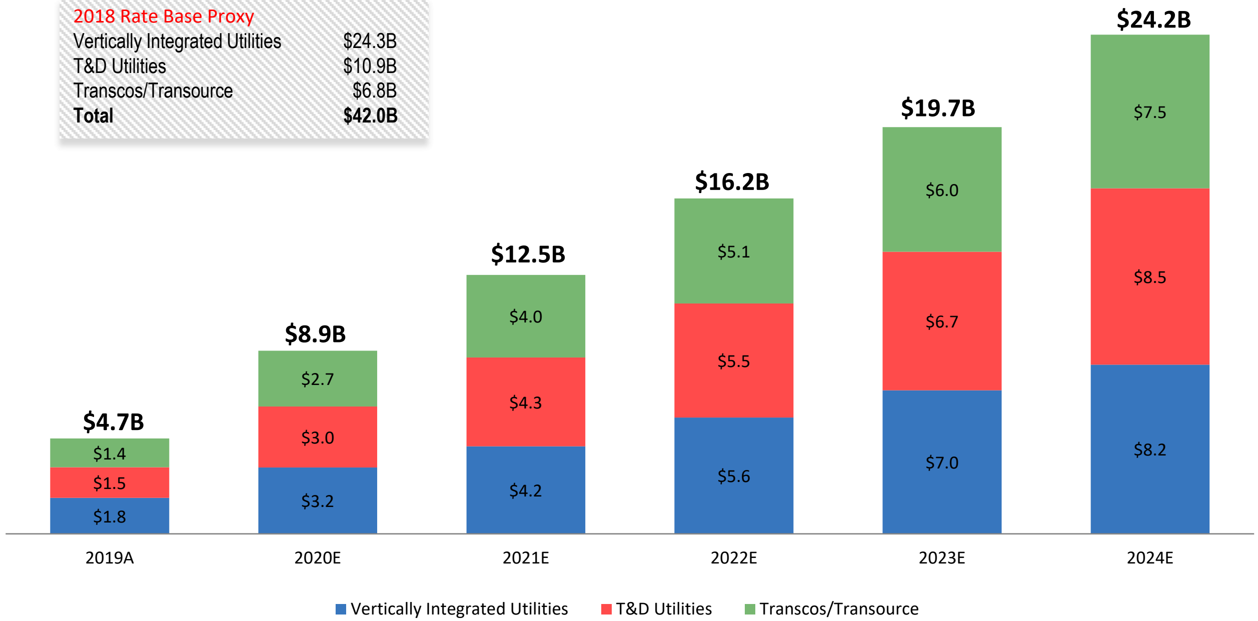
$ in millions	2020E	2021E	2022E
Cash from Operations	$ 4,900	$ 4,900	$ 5,400
Capital & JV Equity Contributions	(6,300)	(6,200)	(6,400)
Other Investing Activities	(500)	(200)	(200)
Common Dividends[1]	(1,400)	(1,400)	(1,400)
Excess (Required) Capital	$ (3,300)	$ (2,900)	$ (2,600)
Financing			
Excess (Required) Capital	$ (3,300)	$ (2,900)	$ (2,600)
Debt Maturities (Senior Notes, PCRBs)	(1,000)	(1,900)	(2,700)
Securitization Amortizations	(200)	(100)	(100)
Equity Units	-	-	-
Equity Units Conversion	-	-	805
Equity Issuances - Includes DRP	100	100	600
Debt Capital Market Needs (New)	$ (4,400)	$ (4,800)	$ (3,995)
Financial Metrics			
Debt to Capitalization (GAAP)	55-60%		
FFO/Total Debt (Moody's)	Low to Mid Teens Reflecting Accelerated Flowback of ADFIT		

[1] Common dividends increase to $0.70 per share Q4 2019 for total dividends of $2.71/share; $2.80/share 2019-2022. Dividends evaluated by Board of Directors each quarter; stated target payout ratio range is 60%-70% of operating earnings. Targeted dividend growth in line with earnings.

7.9% CAGR in Rate Base Growth

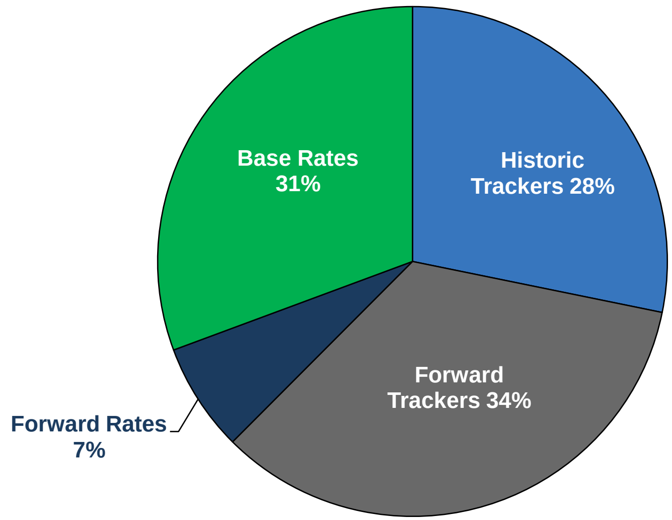
Cumulative Change from 2018 Base

2018 Rate Base Proxy	
Vertically Integrated Utilities	$24.3B
T&D Utilities	$10.9B
Transcos/Transource	$6.8B
Total	**$42.0B**



5%-7% EPS growth is predicated on regulated rate base growth

Efficient Cost Recovery Mechanisms



Nearly 70% of 2020-2024 capital plan recovered through reduced lag mechanisms


TRANSMISSION TRANSFORMATION

AEP Transmission Strategy Framework

**AEP STRATEGIC VISION:
INVEST IN TRANSMISSION NETWORK**

Diverse five-year capital investment portfolio of over $15 billion across AEP's broad footprint

Delivering significant customer benefits:
- Higher reliability
- Lower energy costs
- Economic development
- Public policy goals

Disciplined execution:
- Low cost, high value solutions
- High speed delivery
- Technological innovation

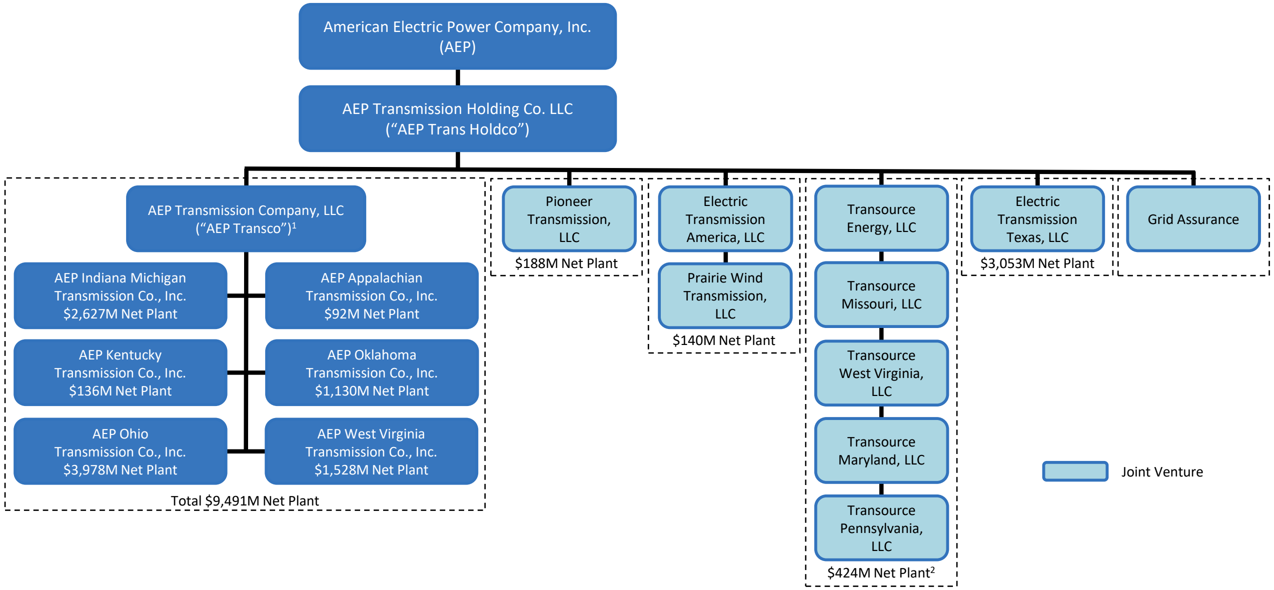
STABLE COST RECOVERY FRAMEWORK

**DELIVER VALUE TO CUSTOMERS AND
PREDICTABLE EARNINGS GROWTH**

AEP Transmission Holdco Legal Entity Structure

AEP INVESTS TRANSMISSION CAPITAL IN BOTH THE INTEGRATED OPERATING COMPANIES AND IN THE AFFILIATES HELD UNDER AEP TRANSMISSION HOLDING COMPANY

AEP PROVIDES A STAND-ALONE EARNINGS FORECAST FOR AEP TRANSMISSION HOLDING COMPANY



Joint Venture net plant balances are inclusive of non-affiliate share

Net plant totals are as of December 31, 2019

[1] Debt issued at AEP Transco level for transmission companies

[2] Does not include Independence Energy Connection Project

Five Year Transmission Capital Plan

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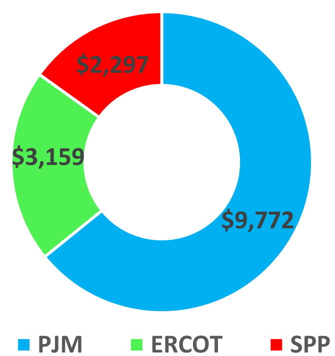
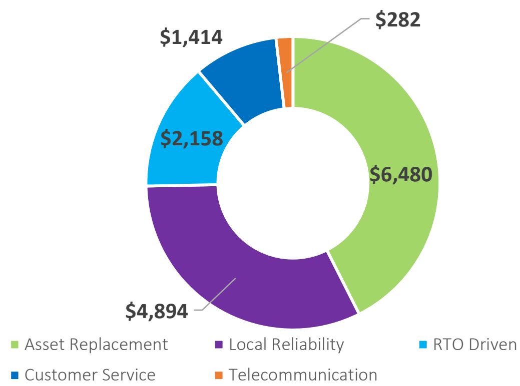
2020-2024 INVESTMENT BY RTO ($ MILLIONS)[1]



2020-2024 TRANSMISSION INVESTMENT BY CATEGORY ($ MILLIONS)[1]

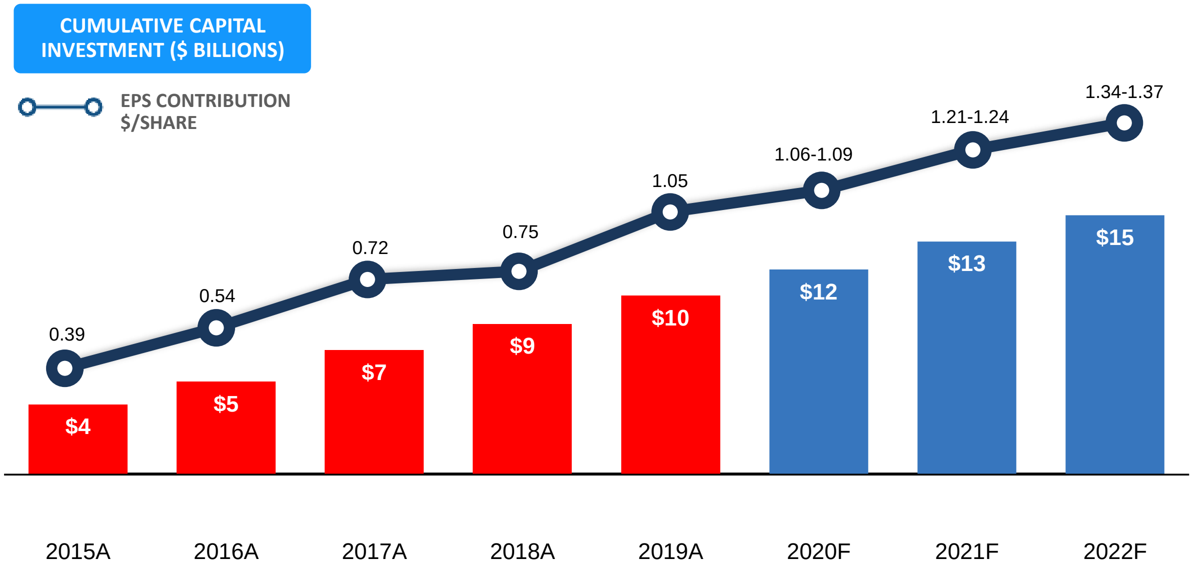


[1] Does not include $200 million of Transource capital investment

INVESTMENT CATEGORIES

	ASSET REPLACEMENT	LOCAL RELIABILITY	RTO DRIVEN	CUSTOMER SERVICE	TELECOM
DRIVERS	• Asset condition, performance history and risk of failure	• Transmission owner reliability planning criteria	• RTO reliability planning criteria • Market efficiency • Public policy needs and goals	• Connecting new and enhanced service requests • Facilitating local economic development	• Cyber-security requirements • Asset health monitoring • Efficient grid operations

AEPTHC Target Earnings 2019-2022



AEPTHC'S 2015 – 2022 EPS GROWTH PROJECTED AT A CAGR OF 19.4%

Stable Cost Recovery Framework

AMERICAN ELECTRIC POWER

STABLE AND CLEAR WHOLESALE COST RECOVERY FOR TRANSMISSION

	PJM	SPP	ERCOT [1]
ROE	10.35% (Includes RTO adder)	10.5% (Includes RTO adder)	9.4% (AEP Texas) 9.6% (ETT)
Forward Looking Rates	Yes	Yes	Allowed two updates per year
Equity Structure	Capped at 55%	No Cap	Capped at 42.5% (AEP Texas) and 40% (ETT)
Rate Effective	January 1, 2018	June 5, 2017	TBD (AEP Texas) April 4, 2008 (ETT)
Final Regulatory Approval	May, 2019	June, 2019	TBD (AEP Texas)

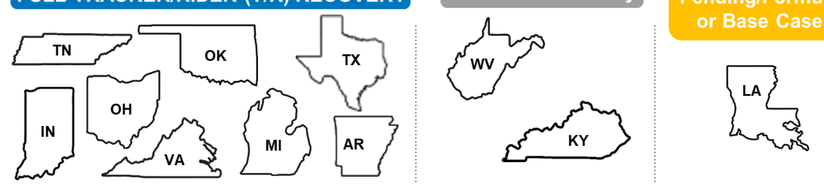
[1] The PUCT verbally approved the AEP Texas Base Rate Case settlement on 2/27/20. Final written order is pending.

AEP RECOVERS ~93% OF ITS CAPITAL INVESTMENT THROUGH STATE TRACKER/RIDER (T/R) MECHANISMS

FULL TRACKER/RIDER (T/R) RECOVERY

Partial T/R Recovery

Pending/Formula or Base Case

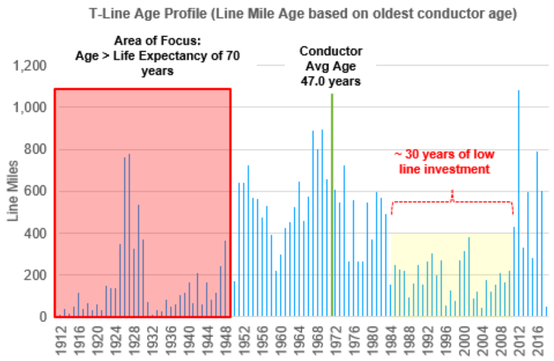


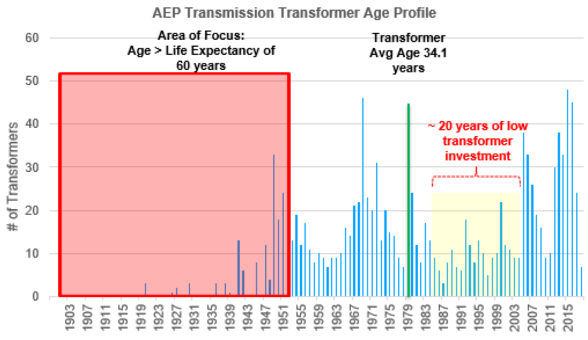
TRANSMISSION INCENTIVES NOTICES OF INQUIRY

- **Transmission Incentives** – AEP supports continuation of the current incentives, particularly the RTO-participation incentive, reflective of the tremendous customer benefits RTO participation provides and additional incentives that provide grid modernization, security and resilience

Significant Need For Asset Replacement

Type	Life Expectancy	Current Quantity over Life Expectancy	Quantity that will Exceed Life Expectancy in Next 10 Years	Total Replacement Need	Percent of AEP System Total
Line Rebuilds	70	5,915	4,931	10,846	27%
Transformers	60	223	124	347	28%
Circuit Breakers	50	882	583	1,465	16%





$2.3 billion of annual on-system capital investment is required to maintain current age profile

Asset replacement projects are prioritized based on performance, condition and risk

UTILITY TRANSFORMATION

Identified Core Business Investments

Improve Reliability → Grow and Diversify the Business → Maintaining Strong Balance Sheet

Current State of Distribution Grid
- $1.8B of annual investment
- **$2.7B** investment needed to maintain current assets

10-Year Incremental Distribution Capital Investment Potential: ~$18B[1]

AEP invests in our customers' future by focusing on reliability and the customer experience.
AEP has a strong track record in securing regulatory support and executing distribution investments.

Investment Opportunity	Capital Investment $
Grid Modernization	$2.4 billion
Line Re-conductoring – Asset Renewal	$13.0 billion
Pole Replacements – Asset Renewal	$0.5 billion
Distribution Station Transformer and Breaker Replacements – Asset Renewal	$1.4 billion

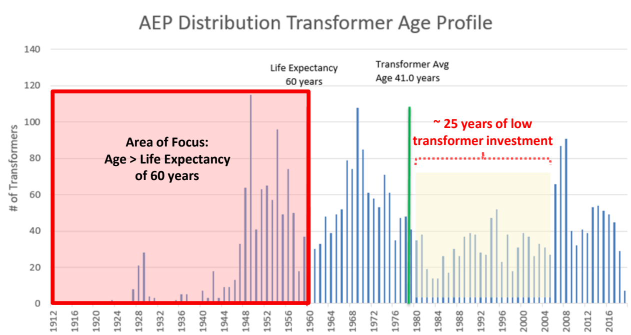
Known and identified investments that will improve reliability and operability of the grid

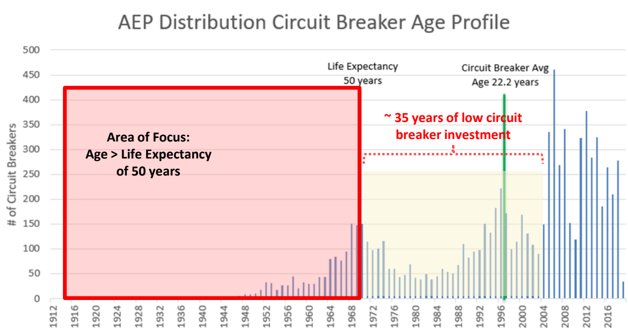
Partner with states to help spur economic development

[1] 10-year capital investment potential is above current $1.8B annual spend, 7-10% O&M required to support the capital investment

Robust Distribution Capital Expenditure Opportunities

Type	Life Expectancy	Current Quantity over Life Expectancy	Quantity that will Exceed Life Expectancy in Next 10 Years	Total Replacement Need	Percent of AEP System Total
Transformers	60	903	565	1,468	41%
Circuit Breakers	50	1,030	842	1,872	21%





$2.7 billion of annual on-system capital investment is required to maintain current age profile


INVESTING IN COMPETITIVE BUSINESS

Competitive Businesses Presence

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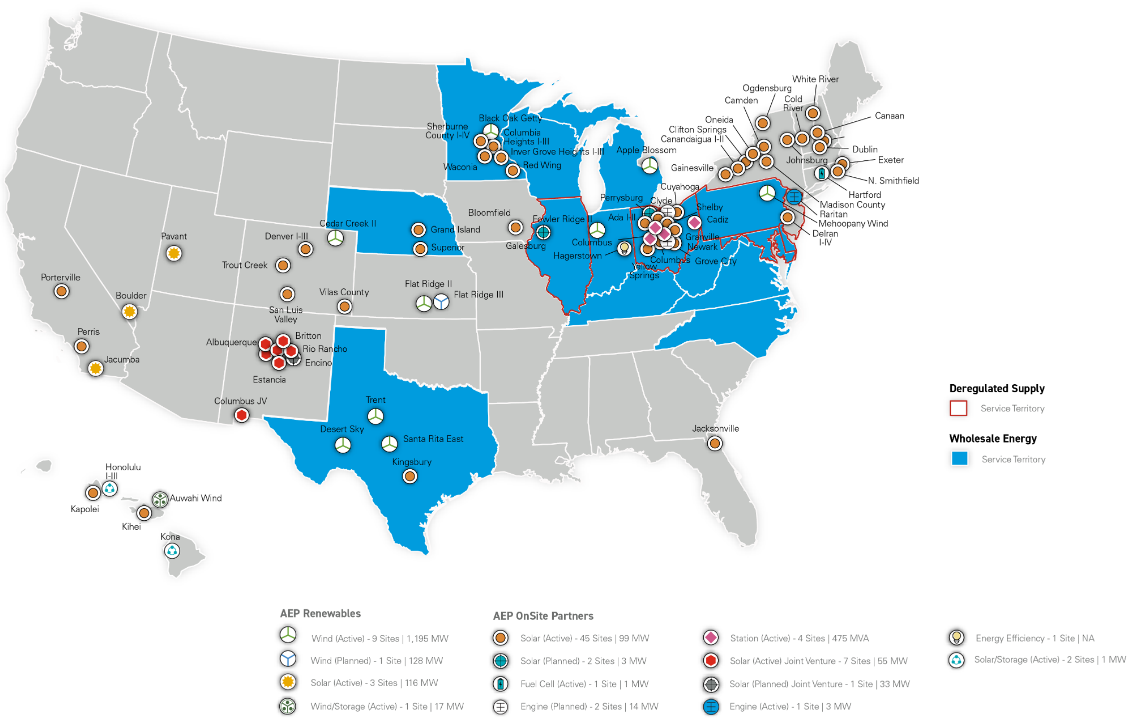
AEP Competitive Businesses
Active in 31 States (7 State overlap with AEP Utilities)



As of December 31, 2019

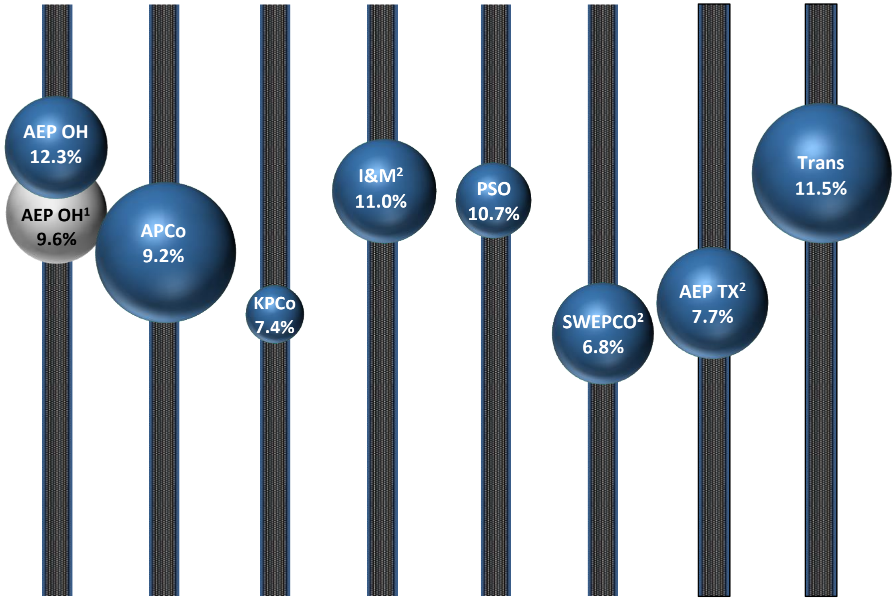
Development Pipeline and Repower Initiative

Development Pipeline	Repower Initiative
Progress continues in our development portfolio across four geographically dispersed areas	Fowler Ridge 2, Cedar Creek 2, Flat Ridge 2 and Mehoopany are all ending their PTC lives by year end 2021
In October 2019, the 128 MW Flat Ridge 3 wind project in Kansas was announced to be placed in service by the end of 2020 using all of our PTC Safe Harbor equipment (qualifying the plant for 100% PTCs). In January 2020, we signed a long-term power agreement with Evergy for the entire output of the wind project.	All 4 wind farms are being evaluated as potential repower candidates
The other mid- to late-stage opportunities in our development portfolio possess solid project and market fundamentals, and continue to attract strong interest from utilities, municipalities, cooperatives and corporates	If the repowers were to take place, it would most likely be at 80% or 60% PTC level


FINANCIAL INFORMATION

Return on Equity

Twelve Months Ended 12/31/2019 Earned ROE's (non-GAAP operating earnings, not weather normalized)



Regulated Operations ROE of 9.7%
as of December 31, 2019

[1] AEP Ohio ROE after roll-off of legacy items | [2] Base rate cases pending/settled/order recently received

Sphere size based on each company's relative equity balance

Current Rate Case Activity

AEP Texas

Docket #:	49494
Filing Date:	05/01/2019
Requested Rate Base:	$5.0B
Requested ROE:	10.5%
Cap Structure:	55%D / 45%E
Revenue Increase:	$56M ($35M Net of Tax Rider)
Test Year:	12/31/2018

Settlement Summary

Unanimous Settlement Filed:	02/13/2020
Expected Effective Date: (Awaiting Order)	Second quarter 2020
ROE:	9.4%
Cap Structure:	57.5%D / 42.5%E
Revenue Decrease:	$40M

Note: PUCT verbally approved the settlement on 2/27/20. A final written order is pending.

I&M – Indiana

Docket #:	45235
Filing Date:	05/14/2019
Requested Rate Base:	$4.9B
Requested ROE:	10.5%
Cap Structure:	53.2%D / 46.8%E
Gross Revenue Increase:	$172M (Less $84M D&A, Wholesale Rev, Nuc Decom)
Net Revenue Increase:	$88M
Test Year:	2020 Forecasted

Commission Order Summary

Order Received:	03/11/2020
Expected Effective Date:	March-April 2020
ROE:	9.7%
Cap Structure:	53.2%D / 46.8%E
Gross Revenue Increase:	$84M (Less $76M[1] D&A, Wholesale Rev)
Net Revenue Increase:	$8M

[1] Includes D&A of $30M and wholesale revenues of $46M

Current Rate Case Activity

I&M – Michigan

Docket #:	U-20359
Filing Date:	06/24/2019
Requested Rate Base:	$1.2B
Requested ROE:	10.5%
Cap Structure:	53.6%D / 46.4%E
Gross Revenue Increase:	$58M (Less $6M D&A)
Net Revenue Increase:	$52M
Test Year:	2020 Forecasted

Settlement Summary

Unanimous Settlement Filed:	01/08/2020
Commission Order:	01/23/2020
Effective Date:	02/01/2020
ROE:	9.86%
Cap Structure:	53.44%D / 46.56%E
Gross Revenue Increase:	$36M (Less $6M D&A)
Net Revenue Increase:	$30M

SWEPCO – Arkansas

Docket #:	19-008-U
Filing Date:	02/28/2019
Requested Rate Base:	$1.2B
Requested ROE:	10.5%
Cap Structure:	49.5%D / 50.5%E
Gross Revenue Increase:	$46M[1] (Less $12M D&A)
Net Revenue Increase:	$34M
Test Year:	12/31/2018

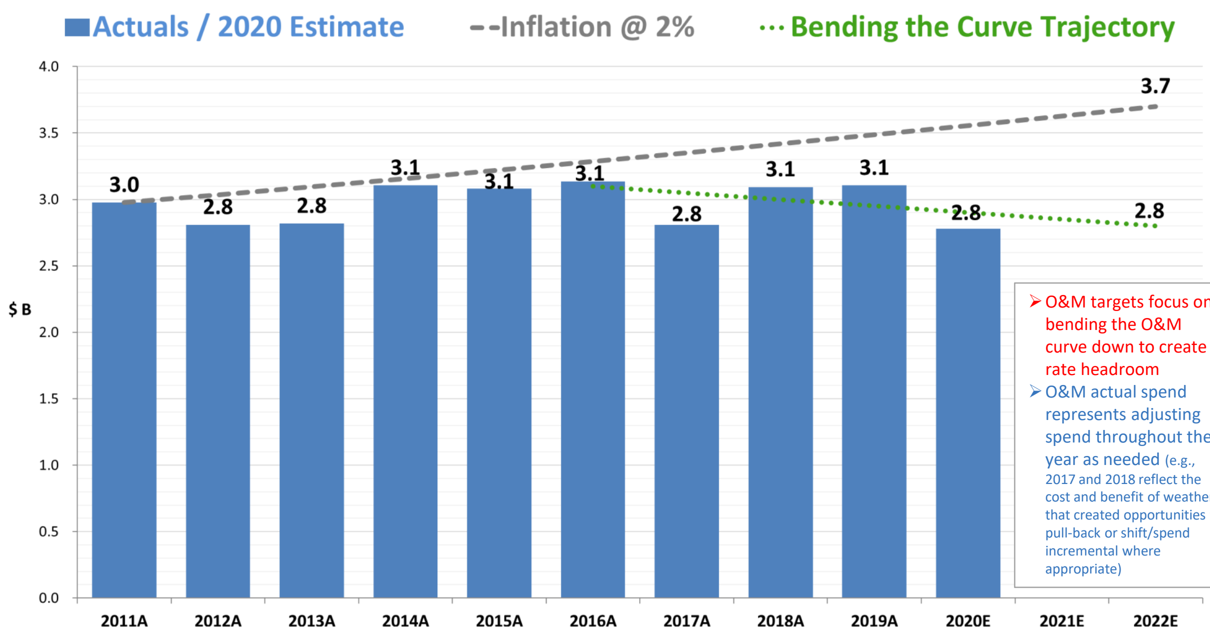
Settlement Summary

Unanimous Settlement Filed:	10/15/2019
Commission Order:	12/27/2019
Effective Date:	First Billing Cycle in January
ROE:	9.45%
Cap Structure:	52.1%D / 47.9%E
Gross Revenue Increase:	$24M[1] (Less $6M D&A)
Net Revenue Increase:	$18M

Formula Rate Plan (5 Year Term)

[1] Does not include $29M of current riders moving to base rates

Bending the O&M Curve



- O&M targets focus on bending the O&M curve down to create rate headroom
- O&M actual spend represents adjusting spend throughout the year as needed (e.g., 2017 and 2018 reflect the cost and benefit of weather that created opportunities to pull-back or shift/spend incremental where appropriate)

Bending the O&M Curve (Initiatives)

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Initiatives	Actions
Achieving Excellence Program	• **Employee based O&M prioritization and optimization effort** • **Drive down costs in 2020 and beyond** • **Program will leverage the experience of EHS Partners**
Lean Management System Implementation/Continuous Process Improvement	• **Distribution** – Drive enhanced reliability which will lead to reduced O&M cost associated with storm restoration in the long term • **Supply chain** – Optimize the material requisition process to improve material lead times, reducing stock outs and increasing crew productivity resulting in reduced O&M cost • **Fleet operations** – Focus on reducing the number of vehicle platforms/options acquired and optimizing the acquisition process to reduce acquisition and maintenance costs • **Generation (system productivity)** – Fleet wide team-based focus on the reduction of waste associated with targeted plant systems, e.g. coal handling, scrubbers
Data Analytics	• **Workforce optimization** – Employee/contractor mix • **Hot socket model** – Using AMI data to preemptively identify meters at risk • **Revenue protection** – Detecting meter tampering • **Frequency regulation** – Analysis of PJM bidding strategies
Automation	• **Scrap metal billing and management** • **Service Corp billing allocation factors** • **No-bill workflow assignment process** • **Customer workflow scheduling**
Digital Tools	• **"The Zone"** – Machine learning tool to operate fossil units at optimal level to minimize O&M and capital, while maintaining and improving performance • **Generation Monitoring and Diagnostic Center** – Predictive capabilities that save O&M and capital
Use of Drones	• **Storm damage assessment** • **Real estate and land surveys** • **Transmission facility inspections, construction monitoring and documentation** • **Telecommunication tower inspections** • **Cooling tower and boiler inspections**
Outsourcing	• **Accounting and tax initiative** • **Rapid application and information support** • **Lockbox for customer payments by check**
Workforce Planning	• **Approximately 4,000 employees will retire or leave in the next 5 years**
Strategic Sourcing	• **Reducing cost through procurement category management –** Continuing to mature our Category Management program and aggressively using strategic sourcing opportunities to optimize the value AEP receives from the $6B spent annually on goods and services

Normalized Load Trends

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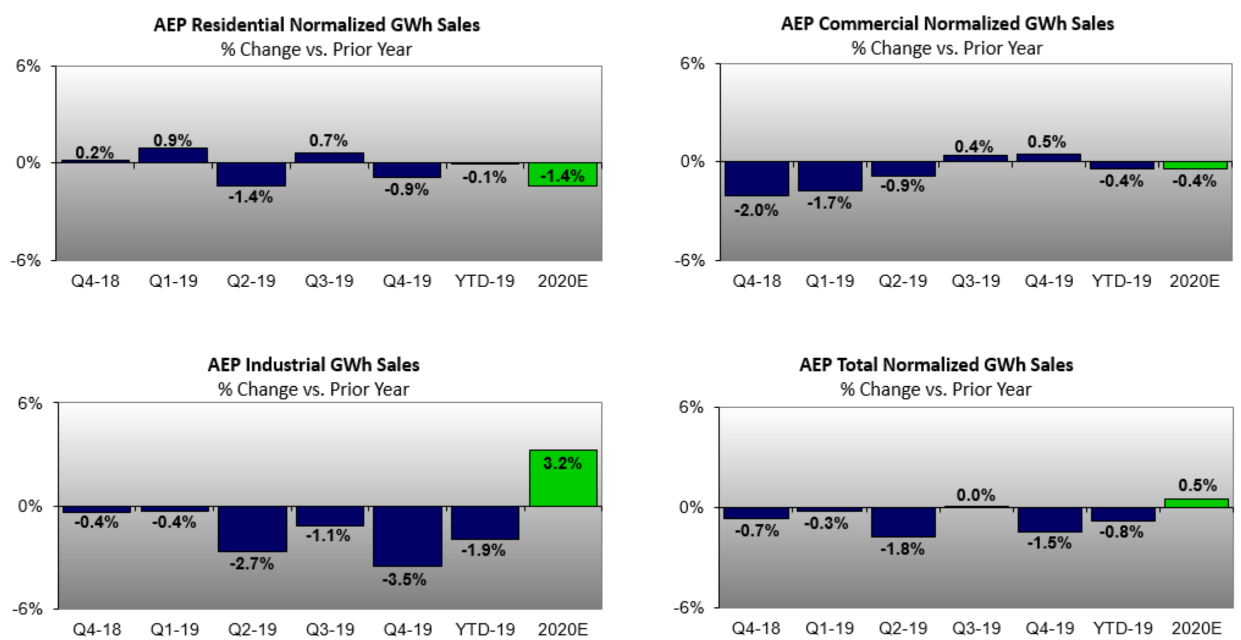
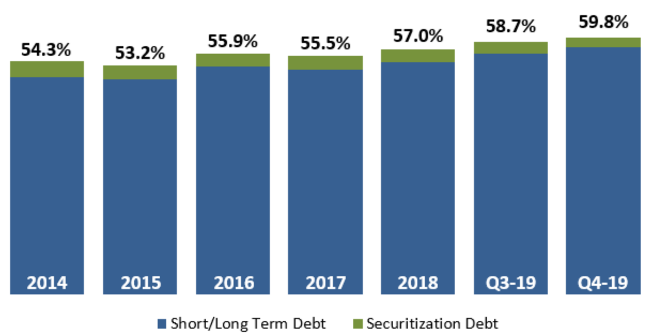


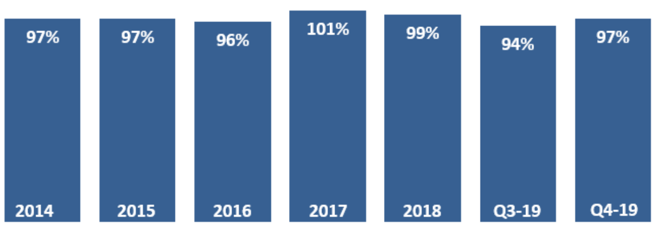
Load figures are provided on a billed basis. Charts reflect connected load and exclude firm wholesale load. Historical and 2019 data adjusted to reflect reclass of industrial and commercial industry codes for certain customers; no revenue or earnings impact. 2020 estimates based on forecast provided at 2019 EEI Financial Conference and adjusted to reflect 2019 actual results.

Capitalization and Liquidity

Total Debt / Total Capitalization



Qualified Pension Funding



Credit Statistics

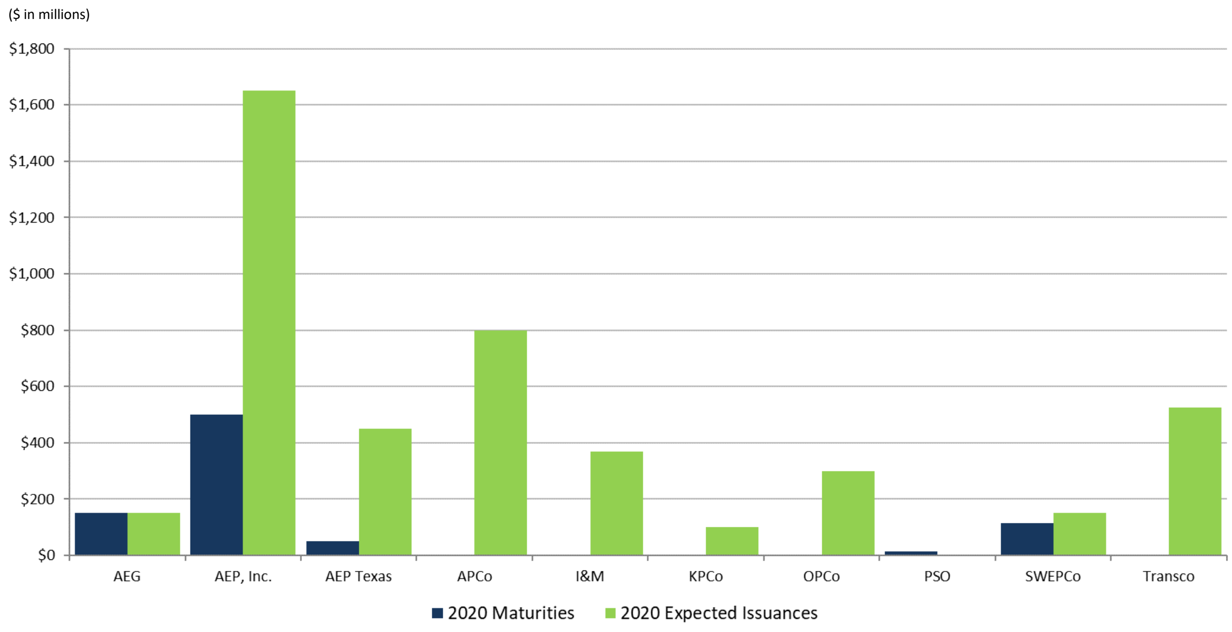
	Actual		Target
	Moody's	GAAP	
FFO to Total Debt	13.9%	13.5%	Low to Mid Teens

Represents the trailing 12 months as of 12/31/2019

Liquidity Summary

(unaudited)	12/31/2019 Actual	
$ in millions	Amount	Maturity
Revolving Credit Facility	$4,000	Jun-22
Plus		
Cash and Cash Equivalents	247	
Less		
Commercial Paper Outstanding	(2,110)	
Letters of Credit Issued	-	
Net Available Liquidity	**$2,137**	

2020 Debt Issuance and Maturities Overview



Long-Term Debt Maturity Profile

($ in millions)

Year	2020	2021	2022	2023	2024
AEP, Inc.	$ 500.0	$ 400.0	$ 1,105.0	$ -	$ 299.0
AEP Generating Company	$ 150.0	$ -	$ 45.0	$ -	$ -
AEP Texas[1]	$ 110.6	$ -	$ 625.0	$ 125.0	$ -
AEP Transmission Company	$ -	$ 50.0	$ 104.0	$ 60.0	$ 95.0
Appalachian Power[1]	$ 65.4	$ 367.5	$ 329.4	$ -	$ 86.0
Indiana Michigan Power	$ 2.6	$ 300.0	$ 48.3	$ 300.2	$ 59.5
Kentucky Power	$ 65.0	$ 40.0	$ 75.0	$ -	$ 65.0
Ohio Power	$ -	$ 500.0	$ -	$ -	$ -
Public Service of Oklahoma	$ 12.7	$ 250.0	$ 125.0	$ -	$ -
Southwestern Electric Power	$ 115.0	$ -	$ 275.0	$ -	$ 25.0
Wheeling Power Company	$ -	$ -	$ 178.0	$ -	$ -
Total	$ 1,021.3	$ 1,907.5	$ 2,909.7	$ 485.2	$ 629.5

[1] Excludes securitization bonds

Includes mandatory tenders (put bonds)
Data as of December 31, 2019

AEP Credit Ratings

Company	Moody's Senior Unsecured	Moody's Outlook	S&P Senior Unsecured	S&P Outlook
American Electric Power Company Inc.	Baa1	N	BBB+	S
AEP, Inc. Short Term Rating	P2	S	A2	S
AEP Texas Inc.	Baa1	N	A-	S
AEP Transmission Company, LLC [1]	A2	S	A-	S
Appalachian Power Company [2]	Baa1	S	A-	S
Indiana Michigan Power Company [2]	A3	S	A-	S
Kentucky Power Company	Baa3	S	A-	S
AEP Ohio	A2	N	A-	S
Public Service Company of Oklahoma	A3	S	A-	S
Southwestern Electric Power Company	Baa2	S	A-	S
Transource Energy [3]	A2	S	NR	NR

[1] AEP Transmission Co. received a senior unsecured debt rating of A- from Fitch. The rating outlook is Stable.

[2] In conjunction with the unenhanced VRDN remarketings, APCo and I&M both received short term credit ratings of A-2/P2 from S&P and Moody's, respectively.

[3] NR stands for Not Rated.

Ratings current as of March 6, 2020

ENVIRONMENTAL DATA

Delivering Clean Energy Resources

AEP's December 31, 2019 Renewable Portfolio (in MW)

Hydro, Wind, Solar and Pumped Storage	Owned MW	PPA MW	**Total MW**
AEP Ohio		209	**209**
Appalachian Power Company	785	575	**1,360**
Indiana Michigan Power Company	36	450	**486**
Public Service Company of Oklahoma		1,137	**1,137**
Southwestern Electric Power Company		469	**469**
Competitive Wind, Solar and Hydro	1,469	101	**1,570**
Total	2,290	2,941	**5,231**

APPROXIMATELY
11,900 MW of
Renewable Generation Interconnected Across the U.S. via AEP's Transmission System Today

Emission Reduction Goals

AEP's Carbon Emission Reduction Goals

70% by 2030

80% by 2050[1]

(both from a 2000 baseline)

Strategy to Achieve

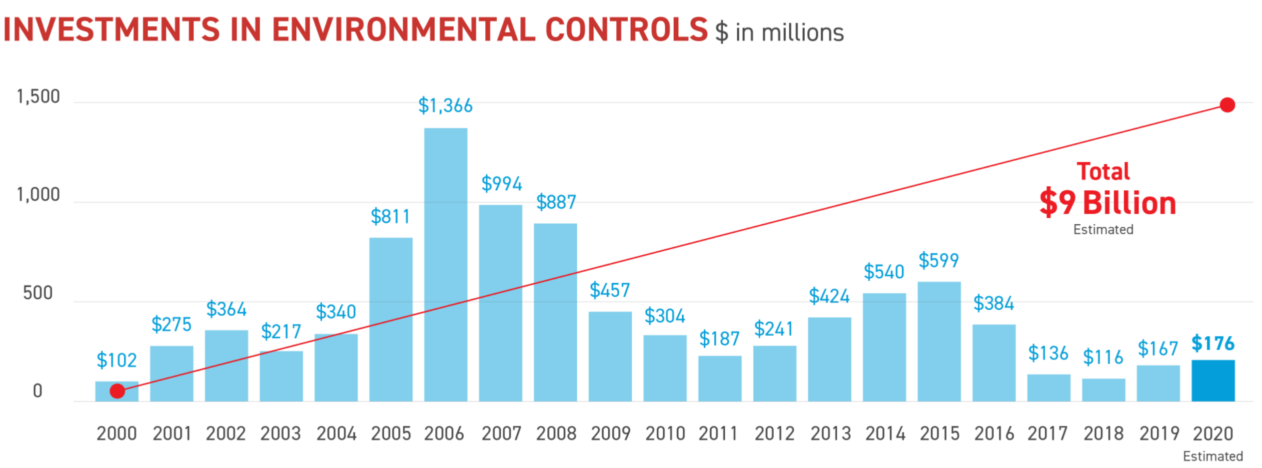
- **Investments in renewable energy within and outside of our traditional service territory**
- **Technology deployment (e.g., energy storage)**
- **Modernization of the grid with significant investments in transmission and distribution**
- **Increased use of natural gas**
- **Optimization of our existing generating fleet**

Environmental, Social and Governance (ESG) Reporting:

- AEP's Corporate Accountability Report
- Clean Energy Strategy: American Electric Power: Strategic Vision for a Clean Energy Future
- EEI ESG Sustainability Reporting: AEP's 2019 EEI ESG Report
- AEP's CDP Survey Responses
- AEP's GRI Report
- AEP also responds to investor-related surveys, including MSCI and Sustainalytics

[1] Aspiration is zero emissions

Largest Investment in Controls



Dramatic Reductions in Emissions

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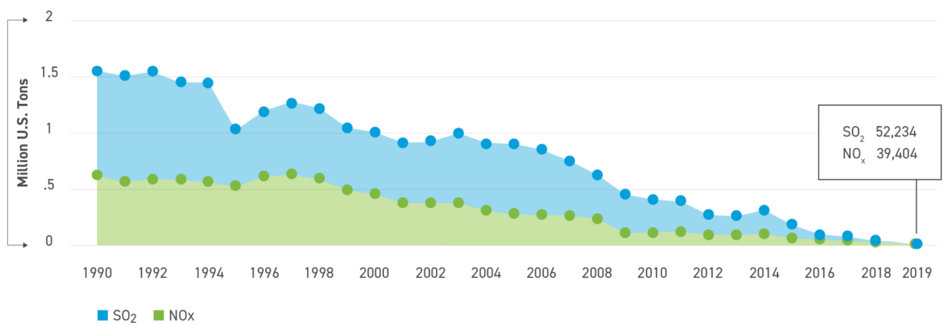
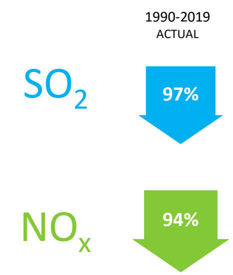
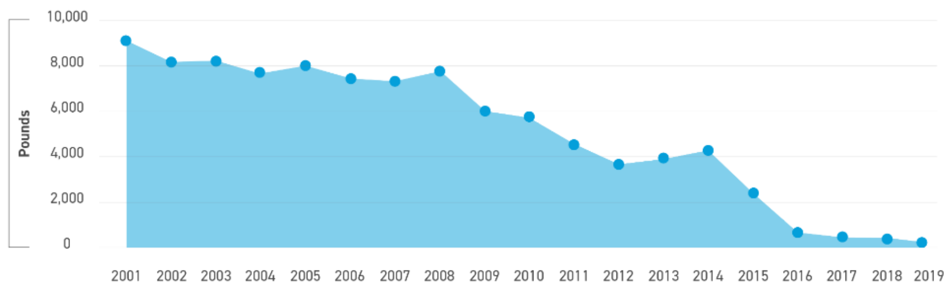
TOTAL AEP SYSTEM NOx & SO_2 EMISSIONS

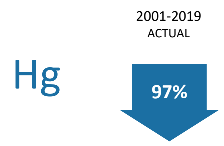




Direct annual emissions of SO_2 and NOx from AEP's ownership share of generation as reported under Title IV of the 1990 Clean Air Act.

TOTAL AEP SYSTEM MERCURY AIR EMISSIONS

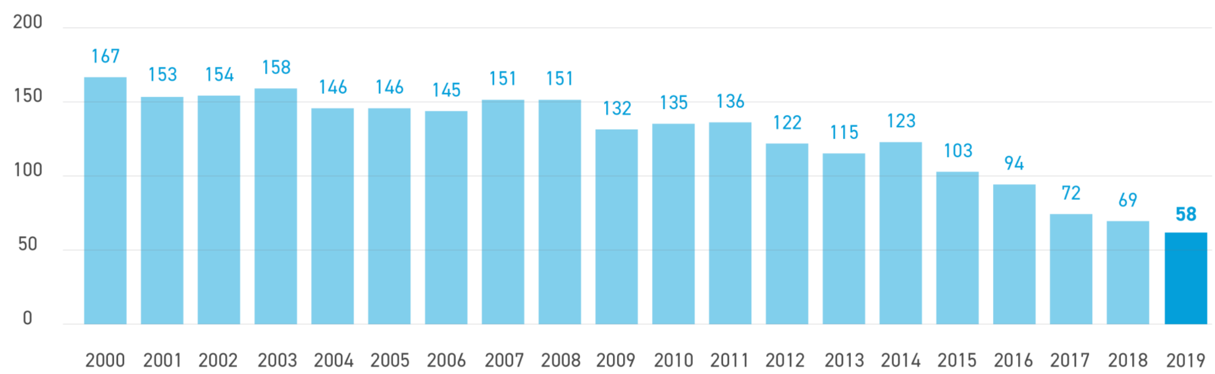




AEP equity share of mercury air emissions from Toxic Release Inventory reporting. 2019 was estimated with MATS program emission monitors.

Dramatic Reductions in Emissions

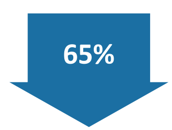
TOTAL AEP SYSTEM — ANNUAL CO_2 EMISSIONS in million metric tons



Direct CO_2 emissions from AEP's ownership share of generation as reported under Title IV of the 1990 Clean Air Act.

2000-2019
Actual

CO_2



Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Fourth Set of Data Requests
Dated August 10, 2020

DATA REQUEST

KPSC_4_051	Refer to the Direct Testimony of Franz D. Messner, (Messner Testimony), page 6, lines 1–3. Regarding the accounts receivable: a. Explain why Kentucky Power sells its receivables to AEP. b. Explain whether Kentucky Power's uncollectible accounts remain with Kentucky Power. c. Provide the cost of the accounts receivable financing charged to Kentucky Power by AEP.

RESPONSE

a. The sale of receivables program allows Kentucky Power to reduce its working capital needs by accelerating the receipt of cash flows from the collection of customer accounts receivable, and thereby reduce its dependence on more costly sources of capital. AEP Credit, as a special purpose financing entity, can borrow money more cheaply than Kentucky Power can on a stand-alone basis. Through the use of AEP Credit, Kentucky Power is also are able to consolidate their accounts receivable into a larger pool and reduce administrative costs associated with the program. As a result, Kentucky Power is able to obtain these services at a lower cost and under better terms than if it is done by Kentucky Power on a stand-alone basis.

b. Because Kentucky Power sells, without recourse, certain of its customer accounts receivable and accrued unbilled revenue balances to AEP Credit, the uncollectible accounts do not remain with Kentucky Power. Kentucky Power is charged a fee based on AEP Credit's financing costs, administrative costs and the collection experience for Kentucky Power's receivables.

c. As shown in Section V, Workpaper S-2, Page 1, the thirteen-month average annual carrying cost is 2.802%.

Witness: Franz D. Messner

DATA REQUEST

KPSC_4_052	Refer to the Messner Testimony, page 6, lines 9–11. Also refer to Kentucky Power's Application for Case No. 2019–00072. Kentucky Power requested the flexibility to issue and sell, in one or more transactions through December 31, 2020, up to $275 million for general corporate purpose the refinancing of the WVEDA, Series 2014A Pollution Control Bond due 2020 (Series 2014A Bonds). Kentucky Power requested the flexibility through December 31, 2020, stating that such a period would allow Kentucky Power the ability to assess market conditions and determine the most advantageous terms. Explain why Kentucky Power choose to refinance the Series 2014A Bonds on June 19, 2020, at a rate higher interest rate.

RESPONSE

Kentucky Power was required to refinance the Series 2014A Bonds in June 2020 due to a "firm" mandatory tender date / maturity (there was no flexibility in timing). Tumultuous market conditions due to COVID-19 and Kentucky Power's Moody's credit rating downgrade from Baa2 to Baa3 resulted in pricing that was slightly higher than when financed in 2017.

Witness: Franz D. Messner

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Fourth Set of Data Requests
Dated August 10, 2020

DATA REQUEST

KPSC_4_053 Refer to the Direct Testimony of Debra L. Osborne (Osborne Testimony), Section IV, which refers to the status of the decommissioning of Big Sandy Unit 2. Provide an update to the decommissioning and demolition activities at Big Sandy Unit 2 that remain to be completed, and the expected completion date of each activity.

RESPONSE

Demolition activities that remain to be completed at Big Sandy Unit 2 and their estimated completion dates are as follows:

- Demolish Electrostatic Precipitator- October 2020
- Demolish Selective Catalytic Reduction system - December 2020.
- Complete scrap removal - February 2021
- Evaluate PCB conduit and slab removal - April 2021
- Remove PCB conduits fill slab, and underground piping - August 2021

Witness: Debra L. Osborne

DATA REQUEST

KPSC_4_054 Refer to the Osborne Testimony, page 6, lines 1–3. Provide an update to the Big Sandy Plan Coal Ash Impoundment completion.

RESPONSE

Kentucky Power still anticipates completing the project by December 31, 2020. A copy of the Company's second quarter 2020 ash pond status report, filed August 11, 2020, is attached as KPCO_R_KPSC_4_054_Attachment1.

Witness: Debra L. Osborne

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

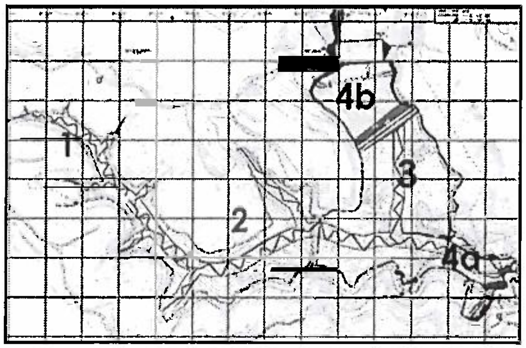
In The Matter Of:

The Application Of Kentucky Power Company For: (1) A Certificate Of Public Convenience And Necessity Authorizing The Company To Close Big Sandy Plant Coal Ash Impoundment; And (2) For All Other Required Approvals And Relief	)))))	Case No. 2015-00152

Kentucky Power Company's Quarterly Status Report
Second Quarter 2020

Kentucky Power Company submits its Second Quarter 2020 status report in compliance with Ordering Paragraph No. 3 of the Commission's Order in Case No. 2015-00152. The report provides a detailed listing of the costs incurred by the Company during the second quarter of 2020 in connection with the closure of the Big Sandy Plant Coal Ash Impoundment. Consistent with the Settlement Agreement approved by the Commission in Case No. 2014-00396, these costs were deferred as they were incurred and added to the unamortized balance of the Decommissioning Rider regulatory asset. The project remains on schedule for completion in 2020.

During the quarter ending June 2020, Kentucky Power continued ancillary site support, including focused activity to manage storm water and to comply with water discharge permitting requirements. Site support activities during the quarter included: erosion & sediment control, site haul road and parking maintenance, surface water management and engineering support of construction activity. Several vendors remain engaged to support water treatment for discharge through the permitted outfall; additional treatment technology remains in place (i.e. sand filters, filter bags, coagulant and flocculent chemical dispensing skids, and an electrocoagulation & filtration unit) to meet total suspended solids and/or constituent limits for discharge water.



Significant construction activity during the period include completing the Saddle Dam stilling basin and Blaine Creek construction access road improvements as well as starting Phase 4B subgrade development, Main Dam excavation and Main Dam Spillway installation. The costs incurred during the quarter and the aggregated costs on the project to date are outlined below. Additionally, the table below includes the amounts identified in the June 2015 "Estimate" included in Exhibit JGD-3 to the testimony of Joseph G. DeRuntz in Case No. 2015-00152, as well as the March 2019 "Revised Estimate" submitted in Kentucky Power's First Quarter 2019 status report.[1]

Item No.	Task	June 2015 "Estimate"	March 2019 "Revised Estimate"	2nd Q 2020	Project-To-Date	Description Current Quarter
01	General Conditions	$4,493,764	$27,721,805	$1,687,666	$25,396,186	Water management, water treatment and monthly project support costs
02	Clearing & Grubbing	$855,751	$904,116		$895,757	
03	Stripping Topsoil	$2,189,274	$1,845		$1,845	
04	Excavation	$11,452,453	$22,853,438	$718,587	$22,019,161	Excavate, load, haul, stockpile and place Main Dam material
05	Foundation Preparation	$252,278	$15,167		$12,786	Proof rolling subgrade
06	Fill	$5,115,613	$3,631,174	$162,877	$2,935,702	Placement of Main Dam excavated material as bridge layer
07	Erosion & Sediment Control	$4,270,174	$3,261,111	$236,690	$2,135,423	Installation and maintenance of erosion and sediment controls
08	Drainage System	$678,910	$3,222,758	$(12,301)	$2,585,795	Saddle Dam construction
09	Roads & Parking Area	$1,394,714	$1,538,027	$122,779	$788,178	Perimeter & access road improvements

[1] As explained in Kentucky Power's First Quarter 2019 status report and June 26, 2019 filing, and presented in detail at the June 11, 2019 meeting with representatives of the Staff and the Attorney General, the budget for this project was updated to reflect required changes in the project's means and methods of construction and execution strategy.

Item No.	Task	June 2015 "Estimate"	March 2019 "Revised Estimate"	2nd Q 2020	Project-To-Date	Description Current Quarter
10	Chain Link Fence	$79,722	$162,836		$40,200	
11	Piling					
12	Structural Concrete	$1,409,915				
13	Geotextiles	$89,969	$2,139,506	$239,949	$1,927,501	Installation of geogrid
22	Instrumentation	$239,859	$256,747	$15,320	$46,536	Abandonment of Main Dam piezometers
26	Geomembrane	$9,460,110	$5,877,563		$5,472,459	Installation of geomembrane liner
30	Miscellaneous Structures	$414,333	$3,191,666	$97,352	$97,352	Main Dam spillway installation
36	Demolition, Removals & Alterations	$325,912	$479,863	$6,350	$37,293	Removal of perimeter road sluice piping
	CONTRACT AMOUNTS (AS EXPENSED)	$42,722,752	$75,257,622	$3,275,269	$64,392,174	
99	Project Management, Engineering & Construction (PMEC)	$2,850,000	$7,785,647	$337,927	$7,061,680	Project team management and oversight of project (e.g. planning, engineering, permitting, procurement, site construction management and cost activities); includes plant employees assigned to execute select work scope
99	Mitigation of Stream Impacts	$4,200,000	$2,998,706	$34,057	$2,776,045	Outside engineering and inspection in support of self-mitigation of stream and wetland impacts.
99	Mitigation of Bat Impacts	$159,000	$196,608		$196,607	
99	Borrow Material Processing & Handling	$5,115,000	$48,188		$48,188	
99	Contingency for Construction	$4,100,000	$2,943,570			
99	Post Closure Care & Monitoring	$3,180,000	$3,180,000			
99	QA/QC Consultant		$1,799,205	$122,944	$1,177,615	QA/QC oversight of construction
	Owner's Direct Cost Additions	$19,604,000	$18,951,924	$494,928	$11,260,135	
	Overhead		$3,297,334	$56,393	$2,476,502	Indirect overhead costs associated with this project.
	Totals	$62,326,752	$97,506,880	$3,826,590	$78,128,811	

No projected cost changes are noted for the second quarter of 2020.

Respectfully submitted,

Mark R. Overstreet
STITES & HARBISON PLLC
421 West Main Street
P. O. Box 634
Frankfort, Kentucky 40602-0634
Telephone: (502) 223-3477

COUNSEL FOR KENTUCKY POWER COMPANY

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Fourth Set of Data Requests
Dated August 10, 2020

DATA REQUEST

KPSC_4_055 Refer to the Osborne Testimony, page 8, Table 2. Provide the information included in Table 2 for the three calendar years preceding the test year.

RESPONSE

Please see KPCO_R_KPSC_4_055_Attachment1 for the calendar years 2017, 2018, and 2019.

Witness: Debra L. Osborne

Account Group	Category	Mitchell	Big Sandy	Non-Plant	Total
2017	Steam Maintenance	$8,323,051	$3,338,183	$88,569	$11,749,803
	Steam Operations	$3,807,532	$1,591,191	$1,287,221	$6,685,944
2017 Total		**$12,130,584**	**$4,929,374**	**$1,375,790**	**$18,435,747**
2018	Steam Maintenance	$13,701,314	$5,086,820	$73,837	$18,861,970
	Steam Operations	$4,591,074	$1,626,982	$2,106,771	$8,324,827
2018 Total		**$18,292,388**	**$6,713,802**	**$2,180,608**	**$27,186,798**
2019	Steam Maintenance	$12,099,899	$3,011,061	($111,823)	$14,999,137
	Steam Operations	$6,262,069	$2,301,463	$1,576,599	$10,140,131
2019 Total		**$18,361,968**	**$5,312,524**	**$1,464,776**	**$25,139,268**

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Fourth Set of Data Requests
Dated August 10, 2020

DATA REQUEST

KPSC_4_056 Refer to the Direct Testimony of Everett G. Phillips (Phillips Testimony), page 7, line 1. Provide the annual breakdown of the individuation costs that comprise the increase in O&M from $4.839 million to $11.032 million for widening of the rights-of-way and danger tree removal.

RESPONSE

The Direct Testimony of Everett G. Phillips, page 7, line 1 refers to an increase in Capital, not O&M. These capital expenditures consist of the cost to widen previously cleared rights-of-way that were established around center-line easements and to remove structurally unsound trees that are capable of striking electrical supply lines or poles upon failure, known as danger or hazard trees. Between 2017 and 2019, SAIDI for trees from outside the rights-of-way has increased from 176.74 to 250.03, primarily due to above average rainfall and an associated increase in insects, pathogens, and root disease, which have resulted in an increase in the weakening and death of trees outside the Company's rights-of-way.

In mid-2018, the Company began its right-of-way widening efforts on targeted multiphase sections of line within the Hazard District. In 2018, the Company spent $4.839 million, which included approximately 92,000 man-hours, removed 18,392 trees, across portions of 20 circuits, for an average distance of approximately 160 miles. In 2019, the Company spent $11.032 million, which included approximately 186,000 man-hours, removed 27,596 trees, across portions of 32 circuits, for an average distance of approximately 300 miles.

Please refer to KPCO_R_KPSC_4_56_Attachment1, which provides the annual breakdown of financial expenditures.

Witness: Everett G. Phillips

2018 Widening of the Rights-of-Way and danger tree removal

Sum of Act $	Periods											
Cost Component	**(02) Feb**	**(03) Mar**	**(04) Apr**	**(05) May**	**(06) Jun**	**(07) Jul**	**(08) Aug**	**(09) Sep**	**(10) Oct**	**(11) Nov**	**(12) Dec**	**Grand Total**
11E Exempt Labor		$653.80	$1,183.25	$1,791.22	$1,800.62	$1,614.46	$2,124.17	$1,594.46	$1,230.31	$1,326.87	$1,651.70	**$14,970.86**
11S Non Exempt Salaried Labor		$407.84				$493.20	$1,644.00	$1,041.20	$1,068.60	$904.20	$493.20	**$6,052.24**
120 Labor Fringes (Straight-time)		$465.14	$514.81	$771.73	$757.92	$970.18	$1,783.37	$1,237.31	$1,052.90	$1,019.02	$1,004.89	**$9,577.27**
122 Labor Fringes (Incentv Accr)		$7.70	$14.12	$22.46	$29.89	$54.33	$40.29	$47.67	$55.99	$57.63	($114.23)	**$215.85**
125 Payroll Dist Nonproductive		$147.97	$183.71	$257.86	$211.79	$365.92	$778.94	$519.24	$479.90	$458.22	$507.09	**$3,910.64**
141 Incentive Accrual Dept Level		$68.14	$125.03	$198.80	$264.40	$480.51	$356.39	$421.67	$495.45	$509.93	($1,010.76)	**$1,909.56**
145 Stock-based Compensation		$0.93	$4.25	($7.17)	($15.29)	$19.69	$23.24	$88.61	$7.74	$17.53	$34.66	**$174.19**
153 Stock-Based Compensation Units		$8.10	$10.02	$15.92	$16.91	$21.12	$23.24	$26.23	$21.46	$21.75	$14.29	**$179.04**
154 Restricted Stock Incentives		$3.05	$6.83	$6.33	$6.58	$2.61	$10.81	$10.28	$3.39	$8.81	$10.05	**$68.74**
210 Contract Labor (General)		$340,387.46	$275,757.16	$497,668.50	$461,202.73	$546,062.99	$924,326.38	$283,683.83	$355,178.69	$92,675.83	$737,829.67	**$4,514,773.24**
293 Sales/Use Tax-Outside Services						($0.00)						**($0.00)**
324 Stores Load Fixed Percent		$0.35		$0.20	$1.38	$0.30	$3.14	$0.63	$1.48	$0.40	$2.33	**$10.21**
393 Sales/Use Tax - M & S		$1.36	$0.38	$0.95	$4.30	$0.98		$9.37	$6.31	$1.20	$6.97	**$31.82**
396 Material w/Fixed % Stores Load		$22.52	$6.26	$15.78	$84.29	$16.27	$156.00	$31.31	$73.84	$20.02	$115.93	**$542.22**
411 Vehicle Distribution - Other						$2.23						**$2.23**
413 Fleet Clearing		$73.20	($94.54)	($9.53)	$14.44	$10.57	$32.77	$83.27	($140.26)	$305.55	$3.26	**$278.73**
738 SS Fleet Prod/Svcs		$61.00	$200.47	$184.47	$370.16	$265.32	$419.78	$319.88	$262.90	($170.01)	$288.37	**$2,202.34**
935 Cell phone and Pager Expense		$5.58	$12.10	$20.32	$55.59	$32.51	$21.72	$22.58	$25.74	$32.23	$0.48	**$228.85**
9AA Accounts Payable Accruals	**$86,034.30**	**$143,270.06**	**$427,291.47**	**$473,900.78**	**$372,031.77**	**$531,669.21**	**$123,943.96**	**$428,921.19**	**$88,437.32**	**$329,129.58**	**$284,005.98**	**$3,288,635.62**
9AB Accts Payable Accrual Reversal		($86,034.30)	($143,270.06)	($427,291.47)	($473,900.78)	($372,031.77)	($531,669.21)	($123,943.96)	($428,921.19)	($88,437.32)	($329,129.58)	**($3,004,629.64)**
Grand Total	**$86,034.30**	**$399,549.90**	**$561,945.26**	**$547,547.15**	**$362,936.70**	**$710,050.63**	**$524,018.99**	**$594,114.77**	**$19,340.57**	**$337,881.44**	**$695,714.30**	**$4,839,134.01**

KPSC Case No. 2020-000174
Commission Staff's Fourth Set of Data Requests
Dated August 10th, 2020
Question Number 56
Attachment 1

2019 Widening of the Rights-of-Way and danger tree removal

Sum of Act $	Periods												
Cost Component	**(01) Jan**	**(02) Feb**	**(03) Mar**	**(04) Apr**	**(05) May**	**(06) Jun**	**(07) Jul**	**(08) Aug**	**(09) Sep**	**(10) Oct**	**(11) Nov**	**(12) Dec**	**Grand Total**
11E Exempt Labor	$6,227.84	($3,449.75)	$2,744.45	$1,502.50	$2,302.92	$2,859.45	$3,972.06	$8,986.31	$3,052.38	$4,034.87	$3,444.78	$3,722.20	**$39,400.01**
11S Non Exempt Salaried Labor	$392.73	$182.70	$411.07	$222.97	$168.38	$168.38	$168.39	$355.49	$261.94	$243.23	$252.58	$271.29	**$3,099.15**
120 Labor Fringes (Straight-time)	$2,644.11	($1,221.54)	$1,353.75	$670.29	$1,059.01	$1,286.74	$1,840.36	$4,293.30	$1,506.37	$1,991.42	$1,754.86	$1,962.19	**$19,140.86**
122 Labor Fringes (Incentv Accr)	$85.48	$23.32	$58.25	$24.11	$30.99	$36.11	$54.02	$79.05	$51.20	$238.26	$86.70	$217.59	**$985.08**
125 Payroll Dist Nonproductive	$938.44	($356.70)	$589.32	$326.73	$427.77	$494.49	$919.60	$2,462.57	$827.55	$1,143.55	$1,080.30	$1,348.78	**$10,202.40**
141 Incentive Accrual Dept Level	$591.48	$371.14	$515.47	$213.09	$274.19	$319.58	$478.02	$699.37	$453.04	$2,108.45	$767.26	$1,925.68	**$8,716.77**
145 Stock-based Compensation	$38.73	($33.42)	($0.02)										**$5.29**
153 Stock-Based Compensation Units	$34.28	($8.37)	$20.22	$18.33	$24.18	$30.11	$43.62	$63.81	$35.02	$61.98	$51.58	$94.06	**$468.82**
154 Restricted Stock Incentives	$10.19	$3.81	$4.35	$8.25	$8.18	$9.28	$13.07	$17.98	$8.80	$14.40	$11.91	$12.89	**$123.11**
210 Contract Labor (General)	$347,564.45	$371,653.34	$832,643.27	$1,267,299.18	$869,899.85	$675,472.56	$399,211.36	$671,545.72	$1,335,313.61	$763,257.29	$1,258,206.02	$856,525.51	**$9,648,592.16**
324 Stores Load Fixed Percent	$0.38	$6.48	$13.14	$16.96	$13.86	$29.66	$6.84	$9.04	$26.79	$10.43	$21.55	$5.76	**$160.89**
393 Sales/Use Tax - M & S	$1.13	$19.46	$39.44	$50.89	$41.61	$39.99	$20.54	$27.11	$80.38	$31.32	$64.67	$17.28	**$433.82**
396 Material w/Fixed % Stores Load	$18.76	$324.19	$657.40	$848.29	$693.39	$1,483.38	$342.20	$452.05	$1,339.53	$522.02	$1,077.63	$288.16	**$8,047.00**
413 Fleet Clearing	$78.55	$255.42	($103.88)	$144.54	$40.88	$184.33	$199.47	$50.11	$239.16	($140.70)	$399.78	$494.95	**$1,842.61**
738 SS Fleet Prod/Svcs	$722.53	$201.31	$480.50	$285.81	$356.08	$328.88	$631.99	$699.39	$442.83	$825.46	$469.54	$575.15	**$6,019.47**
935 Cell phone and Pager Expense	$59.26	$16.12	$29.14	$15.54	$22.74	$25.18	$42.19	$55.16	$32.97	$47.89	$38.01	$67.10	**$451.30**
9AA Accounts Payable Accruals	$641,416.58	$906,613.38	$941,701.17	$545,842.98	$496,129.07	$546,054.85	$875,360.61	$1,171,907.92	$672,416.98	$1,081,532.51	$1,063,097.82	$1,568,754.92	**$10,510,828.79**
9AB Accts Payable Accrual Reversal	($284,005.98)	($641,416.58)	($906,613.38)	($941,701.17)	($545,842.98)	($496,129.07)	($546,054.85)	($875,360.61)	($1,171,907.92)	($672,416.98)	($1,081,532.51)	($1,063,097.82)	**($9,226,079.85)**
Grand Total	**$716,818.94**	**$633,184.31**	**$874,543.66**	**$875,789.29**	**$825,650.12**	**$732,693.90**	**$737,249.49**	**$986,343.77**	**$844,180.63**	**$1,183,505.40**	**$1,249,292.48**	**$1,373,185.69**	**$11,032,437.68**

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Fourth Set of Data Requests
Dated August 10, 2020

DATA REQUEST

KPSC_4_057 Refer to the Phillips Testimony, page 7, line 19, through page 10, line 21. Explain whether Kentucky Power utilizes drones in the inspection of distribution assets, and if so, describe how the drones are used and what regulations, state or federal, impact how Kentucky Power uses drones to inspect its infrastructure.

RESPONSE

The Company does not use drones in the inspection of distribution assets.

Witness: Everett G. Phillips

DATA REQUEST

KPSC_4_058	Refer to the Phillips Testimony, pages 8–10. a. Provide the annual amount spent for each of the nine Distribution Asset Management Programs since 2017. b. For the Overhead Circuit Facilities Program, provide the annual number of problems found during inspections since 2017. c. For the Animal Mitigation Program, provide the annual number of animal-caused outages since 2017. d. For the Lightening Mitigation Program provide the annual number of lightning-caused outages. e. For the Sectionalizing program provide the annual number of cutouts that were replaced or added since 2017.

RESPONSE

a.) The information cannot be provided in the manner requested. A distribution project may be implemented as part of multiple Distribution Asset Management programs so that a single project's cost cannot be reasonably allocated among the implicated programs. Kentucky Power thus maintains its records on a per-project basis and not on a program basis. Please see KPCO_R_KPSC_4_58_Attachment1 for the requested information by project.

b.-e.) Please see KPCO_R_KPSC_4_58_Attachment1 for the requested information.

Witness: Everett G. Phillips

58.a)

O&M						
		Year				
Project Number	**Project Description**	**2017**	**2018**	**2019**	**2020**	**Total**
000004737	KPSectionalizing Program	$1,408	$2,549	$6,358	$728	**$11,043**
000006104	KPCO Inspect Poles	$188,856	$201,994	$362,683	$0	**$753,533**
000007577	KP-UG Cable Repl Failure	$0	$0	$128	$0	**$128**
000016528	KYCutout-Arrester	$0	$0	$1,095	$0	**$1,095**
EDN014680	Ds-Kp-Ai Pole Replacement	$52,512	$244,798	$166,483	$18,779	**$482,572**
EDN014720	Ds-Kp-Ai Recloser Replacement	$588	$12,400	$4,834	$1,852	**$19,674**
EDN015042	Ds-Kp-Small Wire Repl Ovhd	$14,355	$24,692	$5,588	$7,969	**$52,604**
EDN100099	Ds Inspect Reclosers	$84,965	$84,415	$94,344	$43,716	**$307,440**
EDN100101	Ds Inspect Capacitors	$23,294	$25,215	$29,985	$6,310	**$84,804**
EDN100105	Ds Inspect Overhead Lines	$74,972	$25,585	$41,840	$9,676	**$152,073**
EDN100296	Ds-Kp-Ai Small Wire Repl Urd	$4,396	$0	$0	$0	**$4,396**
EDN100577	Ds-Kp-Ai Ckt Inspections	$523,904	$392,784	$502,107	$133,339	**$1,552,134**
Total		**$969,250**	**$1,014,432**	**$1,215,445**	**$222,369**	**$3,421,496**

Capital						
		Year				
Project Number	**Project Description**	**2017**	**2018**	**2019**	**2020**	**Total**
000004737	KPSectionalizing Program	$204,287	$637,702	$879,462	$173,265	**$1,894,716**
000016528	KYCutout-Arrester	$1,052,477	$2,075,137	$1,930,869	$279,583	**$5,338,066**
EDN014680	Ds-Kp-Ai Pole Replacement	$861,700	$3,169,559	$2,228,199	$309,942	**$6,569,399**
EDN014720	Ds-Kp-Ai Recloser Replacement	$644,851	$1,254,206	$1,273,926	$240,803	**$3,413,786**
EDN015042	Ds-Kp-Small Wire Repl Ovhd	$144,671	$395,201	$272,303	$248,058	**$1,060,233**
Total		**$2,907,986**	**$7,531,805**	**$6,584,760**	**$1,251,650**	**$18,276,200**

58.b)

Overhead Circuit Facilities Program - Defects Identified

Years	2017	2018	2019	*2020
# of Defects	2916	1727	2198	1642

***2020 data compiled through August 16**

58.c)

Animal caused outages

Year	Number of Interruptions	Customers Interrupted	CMI	KPCO Customer Count	SAIDI	KPCO Overall SAIDI	% of Animal to Total SAIDI
2017	175	11,581	2,067,588	167,061	12.4	406.3	3.05%
2018	308	9,381	1,145,731	166,377	6.9	484.2	1.42%
2019	249	5,441	459,213	165,072	2.8	485.0	0.57%
*2020	256	4,441	543,026	164,022	3.3	235.4	1.41%
Total	**988**	**30,844**	**4,215,558**		**25.4**	**1,610.9**	**1.57%**

***2020 data compiled through August 16**

58.d)

Lightning caused outages

Year	Number of Interruptions	Customers Interrupted	CMI	KPCO Customer Count	SAIDI	KPCO Overall SAIDI	% of Animal to Total SAIDI
2017	137	12,907	1,797,434	167,061	10.8	406.3	2.65%
2018	81	1,757	298,095	166,377	1.8	484.2	0.37%
2019	72	2,713	557,047	165,072	3.4	485.0	0.70%
*2020	16	818	111,758	164,022	0.7	235.4	0.29%
Total	**306**	**18,195**	**2,764,334**		**16.6**	**1,610.9**	**1.03%**

***2020 data compiled through August 16**

58.e)

Sectionalizing Program - Cutouts Replaced

Years	2017	2018	2019	*2020
# of Cutouts	2688	4470	3817	931

***2020 data compiled through August 16**

DATA REQUEST

KPSC_4_059 Refer to Phillips Testimony, page 11, lines 3–8, which discuss the expansion, upgrade, or replacement of Kentucky Power's distribution system to serve new customers. Given the testimony regarding Kentucky Power's declining customer base, explain in greater detail what plans Kentucky Power has to expand, upgrade, or replace its distribution system to serve new customers.

RESPONSE

Although the Company's overall customer count has declined in recent years, the Company still has an ongoing obligation to expand, upgrade, or replace distribution facilities to serve new customers. For example, the Company expects to continue to construct line extensions to serve new homes built and modular homes relocated within its service territory, as well as to serve new commercial and industrial customers. The addition of customers to a distribution circuit can overload the circuit. Additional facilities such as a pole transformer, a section of line , a sectionalizing device, station breaker, or station transformer may need to be upgraded to a larger size to serve increased load. When this occurs, the Company performs studies to determine if surrounding facilities or the line circuit needs to be upgraded to accommodate the additional load. In 2019, Kentucky Power connected 1,967 new customers that required line segments to be added to the grid in order to serve them.

Witness: Everett G. Phillips

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DATA REQUEST

KPSC_4_060 Refer to the Phillips Testimony, page 12, lines 7–23, and page 13, lines 1–16. For each of the seven capital project categories, provide the annual investment since 2017.

RESPONSE

Please refer to KPCO_R_KPSC_4_60_Attachment1 for the requested information.

Witness: Everett G. Phillips

Annual Investment of Capital Projects

Project Category	2017	2018	2019	2020	Grand Total
Asset Improvement	$7,942,354	$15,655,720	$18,762,372	$4,051,281	$46,411,727
Customer Service	$9,723,449	$11,399,349	$11,942,225	$3,272,181	$36,337,205
Forestry	$3,648,127	$3,138,873	$6,176,370	$12,124,192	$25,087,562
Other	$3,943	$637,048	$1,649,577	($98,222)	$2,192,347
Planning Capacity	$920,988	$97,200	$146,772	$96,032	$1,260,993
Reliability	$7,599,834	$8,650,997	$19,299,501	$4,148,327	$39,698,660
System Restoration	$3,841,760	$4,675,418	$5,765,271	$1,559,539	$15,841,988
Grand Total	**$33,680,455**	**$44,254,606**	**$63,742,090**	**$25,153,332**	**$166,830,482**

Notes:
Year 2017 is 3/1/2017 through 12/31/2017.
Year 2020 is 1/1/2020 through 3/31/2020.

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DATA REQUEST

KPSC_4_061 Refer to Phillips Testimony, page 14, line 8, through page 15, line 3. Explain in greater detail the reason for the almost $6 million decrease in forestry expense from 2017 spend to Test Year spend on forestry.

RESPONSE

The lower test year forestry expenses are in accordance with the Commission-approved Distribution Vegetation Management Plan in Case No. 2017-00179. They represent the lower costs associated with the Company's implementation of a five-year Distribution Vegetation Cycle beginning January 1, 2019.

Witness: Everett G. Phillips

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DATA REQUEST

KPSC_4_062 Refer to Phillips Testimony, page 17, lines 4–12. Explain the difference between foliar spraying and cut stubble application of herbicide and the impact of each method on the period for regrowth of vegetation.

RESPONSE

Application treatment for foliar spray requires foliage to be present to allow for herbicide treatment. Foliar spray is available for roughly 21 weeks, from May through October, and adapts to a wide range of brush height and density. The Company utilizes foliar spray within one year after clearing to reduce the overall volume of brush, and to establish control of brush regrowth within its rights-of-way. The application of these treatments is performed with backpacks in remote locations, and with spray trucks in more accessible locations. The period of control for foliar spray ranges from 4 to 6 years, and is an integral component of the Company's 5 year cycle.

Application treatment for cut stubble requires treatment at the soil level to allow for herbicide treatment. Cut stubble applications more immediately follow right-of-way clearing, targeting newly cut areas where brush is in a 'stubble' condition. Cut stubble spray is applied by backpacks, but can be performed almost year round in Eastern Kentucky. This approach significantly reduces the regeneration of existing tall woody species, and drastically reduces the sprouting of new woody species within rights-of-way. The period of control for cut stubble spray also ranges from 4 to 6 years, and also incorporates into the Company's 5 year cycle.

Foliar spray and cut stubble application each provide the Company with alternate approaches to the treatment and control of brush in rights-of-way. One method does not replace the other entirely, but instead they both supplement the 5 year cycle by providing a more adaptive and integrated approach to vegetation management across eastern Kentucky.

Witness: Everett G. Phillips

DATA REQUEST

KPSC_4_063 Refer to the Phillips Testimony, page 21, lines 14–16. Provide an annual breakdown of the $28.2 million spent on capital projects related to vegetation management since 2017.

RESPONSE

Please refer to KPCO_R_KPSC_4_63_Attachment1, which provides the annual breakdown between capital expenditures on trees greater than 18 inches within the rights-of-way and the capital expenditures on widening or removing danger trees outside the rights-of-way.

Witness: Everett G. Phillips

Year	Capital $ Inside Rights-of-Way	Trees Removed	Portions of Circuits
2017	$2,944,345	18,912	91
2018	$2,610,113	16,753	84
2019	$2,976,512	13,935	77
***2020**	$813,996	5,728	35
Year	**Capital $ Outside Rights-of-Way**	**Trees Removed**	**Portions of Circuits**
2018	$4,826,731	18,392	20
2019	$10,980,631	27,596	32
***2020**	$3,079,017	10,093	17
TOTAL	**$28,231,345**	**111,409**	
***2020 is through the end of test year**			

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DATA REQUEST

KPSC_4_064 Refer to the Phillips Testimony, page 33, lines 17–23. Confirm that the distribution line project Kentucky Power is examining is not included in the proposed revenue requirement.

RESPONSE

The Company confirms that the distribution line project described on page 33, lines 17-23 of Company Witness Phillips' Direct Testimony has not been included in the proposed GMR revenue requirement.

Witness: Everett G. Phillips

DATA REQUEST

KPSC_4_065 Refer to the Direct Testimony of Lerah M. Scott, page 9, lines 15–20. Provide supporting documentation for the $511,720 increase in jurisdictional storm damage expenses.

RESPONSE

The Company's W16 (Storm Normalization) Adjustment filed June 29, 2020 within Section V, Exhibit 2 is supported by workpaper KPCO_R_KPSC_3_1_Attachment34_ScottWP3.

Subsequent to the Company's preparation of its filing, costs continued to be assigned to the 2020 Winter Storm. Accordingly the Company provides a revised W16 and KPCO_R_KPSC_3_1_Attachment34_ScottWP3 to this response as KPCO_R_KPSC_4_65_Attachment1 and KPCO_R_KPSC_4_65_Attachment2, respectively.

These revised documents show a reduction in the original adjustment to $501,927.

Witness: Lerah M. Scott

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DATA REQUEST

KPSC_4_066	Refer to the Direct Testimony of Jason M. Stegall, page 15, lines 17–18. a. Explain why Account 904, Uncollectibles, is allocated based upon customer count and not actuals. b. Provide the actual historical test-year class uncollectibles by class.

RESPONSE

a.) This account was identified in the Customer Accounts section of O&M Expense of Exhibit JMS-1. This section of Operations and Maintenance (O&M) expense is functionalized as customer service-related due to its grouping within the O&M section of JMS-1 and then it was classified as customer-related. See the Figure 1 on page 7 of Company witness Stegall's testimony for a diagram of this process. The use of the customer count allocation factor is consistent with the functionalization and classification of this account as well as the class cost-of-service studies filed in the Company's prior cases.

b.) The expense in this account reflects the expense of uncollectible accounts on the Company's Other Accounts Receivable in Account 143 and is not associated with receivables related to the provision of retail electric service. These charges in Account 904 reflect uncollectible expense associated with, for example, receivables for scrap sales or interest. As a result, this account cannot be identified by the customer classes presented in the Company's Class Cost-of-Service Study.

Witness: Jason M. Stegall

DATA REQUEST

KPSC_4_067 Refer to the Direct Testimony of Alex E. Vaughan (Vaughan Testimony), page 8, the Kentucky Power Functional Cost of Service diagram (2020 COS Diagram). Also, refer to Case No. 2017-00179, the Direct Testimony of Alex E. Vaughan, page 8, the Kentucky Power Functional Cost of Service Diagram (2017 COS Diagram).

a. Explain what has contributed to the decline in cost of generation from 65 percent in the 2017 COS Diagram to 59 percent in the 2020 COS Diagram.

b. Explain what has contributed to the increase in the cost of transmission from 12 percent in the 2017 COS Diagram to 17 percent in the 2020 COS Diagram.

RESPONSE

a. and b. Relative levels of capital investment and associated operating expenses of the generation and transmission functions of the cost service drive the percentage changes over time.

Witness: Alex E. Vaughan

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DATA REQUEST

KPSC_4_068 Refer to the Vaughan Testimony, page 9, line 9.
a. Confirm that the interclass subsidy the residential class was receiving was $30.7 million in Case No. 2017-00179.
b. Explain the reason for the increase in the interclass subsidy.

RESPONSE

a. The existing residential subsidy in Case No. 2017-00179 was roughly $30.5 million.

b. Changes in inter-class subsidies over time can be driven by numerous factors, including changes in usage characteristics and changes in the types, nature, function, and classification of costs. Given the extensive potential number of variables contributing to the calculation of subsidies, the Company has not performed an analysis to attempt to identify the reason for the change in the inter-class subsidy in this case.

Witness: Alex E. Vaughan

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DATA REQUEST

KPSC_4_069 Refer to the Vaughan Testimony, page 12, lines 11–23, and page 13, lines 1–8.

a. Explain how a winter heating block reduces the intra-class subsidy.

b. Provide a bill comparison at various levels of usage with and without the inclusion of the proposed winter declining block rate.

c. Provide the energy rate without a winter declining block rate.

d. Explain whether variable costs increase or decrease as energy demand increases in the winter.

e. Explain whether the LMP increases in the winter.

f. Provide the monthly average usage and number of customers by Census Track for the last five years.5

RESPONSE

a. Please refer to Company witness Vaughan's testimony at page 11 through page 18. To summarize, residential rates include a very large proportion of fixed costs (costs that do not vary with the level of customer usage) in the kWh charge. As a result, when electric heating customers experience higher than average kWh usage levels in winter months, they pay a disproportionate amount of fixed costs. The proposed winter heating block rate reduces this intra-class subsidy.

b. Please refer to KPCO_R_KPSC_4_69_Attachment1.

c. 0.11531 $/kWh.

d. It depends on the type of variable cost and the specific situation. For instance, Company usage could increase in a month from cold temperatures and increased heating load but the price of fuel or LMPs could be flat or decreasing due to other reasons besides the Company's load.

e. It may or may not. LMP prices are dependent upon many factors, including but not limited to PJM's hourly load demand, unit availability, and the offer price of the marginal unit of energy scheduled by PJM to run in that hour.

f. The Company does not track customer usage by census track. Therefore, the requested analysis has not been performed.

Witness: Alex E. Vaughan

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DATA REQUEST

KPSC_4_070 Refer to the Vaughan Testimony, page 14, lines 16–22.
a. Provide the cost of the basic service charge using the same methodology as was used to calculate the basic service charge in Case No. 2017–00179 in Exhibit AEV–2.

RESPONSE

a. Please refer to Company witness Vaughan's testimony from page 14 line 16, through page 15, line 8. The Company has not completed the requested study as described in testimony.

Witness: Alex E. Vaughan

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DATA REQUEST

KPSC_4_071 Refer to the Vaughan Testimony page 17, line 23 and page 18, line 1. Provide a comparative list of the number of customers per mile line between Kentucky Power and its peers.

RESPONSE

Please refer to KPCO_R_KPSC_3_71_Attachment1 for the requested information.

Witness: Alex E. Vaughan

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DATA REQUEST

KPSC_4_072 Refer to the Vaughan Testimony, page 18, line 18, through page 19, line 15, which discusses the proposed Electric Vehicle Charging Provisions.
a. Explain why the Electric Vehicle Charging Provisions are not set forth in a separate rate schedule.
b. Explain whether customers can currently charge their electric vehicles under Kentucky Power's current rate schedules.
c. Explain whether Kentucky Power is proposing to require that all electric vehicle charging load be on a separate time-of-day meter or whether it is just offering customers another option for their electric vehicle charging load.
d. Provide support that the cost of the separate second meter is being offset by the additional fixed cost contribution from the on-peak and off-peak energy charges.

RESPONSE

a. The electric vehicle (EV) charging provisions are not set forth in a separate rate schedule because the provisions fit well into established tariff rate schedules/provisions. For this reason, the Company did not need to add a separate EV charging tariff.

b. Yes, they can.

c. The Company is not requiring customers to charge EVs on time of use rates, it is simply providing an option for customers to do so if they choose. The proposed separate meter provision also allows a customer to charge its EV on time of use rates without having to switch their entire service account (the rest of their home) to a time of use rate.

d. The Company estimates that an incremental EV taking service under the proposed residential EV provision, charging solely on the off-peak rate will add approximately $152 of annual base rate fixed cost contribution (plus standard riders and surcharges) which more than compensates for additional annual costs (depreciation, return, taxes) associated with the incremental meter capital resulting from the 2nd meter. Please refer to KPCO_R_KPSC_4_72_Attachment1 for the associated calculations.

Witness: Alex E. Vaughan

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DATA REQUEST

KPSC_4_073 Refer to the Vaughan Testimony, page 18, lines 20–22. Explain whether any additional equipment, other than a separately wired time-of-use meter, will be required to be installed.

RESPONSE

The only additional piece of Company equipment needed to be installed is a separate AMI meter.

Witness: Alex E. Vaughan

DATA REQUEST

KPSC_4_074 Refer to the Vaughan Testimony, page 19, lines 2–4. Explain the reason for choosing fees based on the load management time-of-day and standard time-of-day provisions already in the residential tariff.

RESPONSE

The Company chose fees based on those existing tariff provisions because both provisions already cover loads/items that can control their time of consumption.

Witness: Alex E. Vaughan

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DATA REQUEST

KPSC_4_075 Refer to the Vaughan Testimony, page 19, lines 2–4. Explain whether other rate for electric vehicle charging were considered. If so, explain what rates were considered and why they were not chosen. If not, explain why other rates were not considered.

RESPONSE

No, other rates were not considered. Because customers can already charge an EV at standard rates, the Company’s EV charging proposals are simply an additional customer offering to help promote EV charging during off-peak hours.

Witness: Alex E. Vaughan

DATA REQUEST

KPSC_4_076 Refer to the Vaughan Testimony, page 19, lines 13–25. Explain whether non-residential customers would be charged an extra basic service charge. If so, explain why they would be treated differently from residential customers. If not, explain why not.

RESPONSE

Please refer to the Company's proposed redlined tariffs in Section II Volume 2 of the Application. The General Service electric vehicle separate meter provision was added to the existing load management time of day provision which already included a service charge. They are not being treated differently, it is simply the differences in existing rate designs. Additionally, General Service customer charging is less predictable from a timing perspective as a customer (business) could be offering charging to its employees or customers during work hours which would generally be on-peak, or it could be specifically off-peak for charging fleet vehicles.

Witness: Alex E. Vaughan

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DATA REQUEST

KPSC_4_077 Refer to the Vaughan Testimony, page 21, lines 7–8. Explain how Kentucky Power arrived at 84 months as the amount of time the conversion charge would be collected.

RESPONSE

The Company arrived at 84 months based on an informed rate design judgement intended to balance the magnitude of the charge with timely recovery.

Witness: Alex E. Vaughan

DATA REQUEST

KPSC_4_078	Refer to the Vaughan Testimony, page 21, lines 19–21. State whether customers would have the option of paying any part of the installed cost of the system up-front in order to lower the monthly lamp charge. If not, explain why not.

RESPONSE

Yes, they would have the option if they choose to do so initially before their system goes into service.

Witness: Alex E. Vaughan

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DATA REQUEST

KPSC_4_079 Refer to the Vaughan Testimony, page 21, lines 21–22. Explain why the monthly maintenance charges for the flexible lighting options are not based on an average of Kentucky Power's monthly maintenance charges for LED lights if Kentucky Power is proposing to cease new installations of non-LED lamps as of January 1, 2021.

RESPONSE

Please refer to the Company's response to Staff 4-13, they are based upon LED lamps.

Witness: Alex E. Vaughan

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DATA REQUEST

KPSC_4_080 Refer to the Vaughan Testimony, page 22, lines 19–21. Provide support of the difference between on-peak and off-peak PJM locational marginal prices for the last three years.

RESPONSE

Historic hourly PJM LMPs are publicly available at www.pjm.com.

Witness: Alex E. Vaughan

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DATA REQUEST

KPSC_4_081 Refer to the Vaughan Testimony, pages 23–29, or the Net Metering Service Tariff Changes Section.
a. Explain why Kentucky Power chose this method for the calculation of the avoided cost rate of energy in net metering.
b. Explain whether other AEP subsidiaries calculate the avoided cost of energy for net metering in the same manner.
c. Provide any studies supporting the proposed method of calculating the avoided cost of energy for net metering.
d. Explain why Kentucky Power is proposing to recover the cost of its payments for excess generation through the PPA tariff.
e. Provide the amount Kentucky Power has spent to date researching and developing the proposed net metering tariff.

RESPONSE

a. Please refer to Company witness Vaughan's direct testimony at page 29, lines 3-15.

b. Yes, other AEP operating companies calculate avoided costs in a similar fashion. Avoided cost calculations are not exclusive to net metering. The Company would be the first AEP operating company to apply this exact construct to net metering.

c. Please refer to Company witness Vaughan's direct testimony and exhibits.

d. Payment for excess generation under proposed Tariff N.M.S. II is purchased power expense. On the advice of counsel, this particular purchased power expense does not meet the statutory definition for recovery through the Company's fuel adjustment clause; therefore, actual payments for excess generation should be recovered through Tariff PPA.

e. Kentucky Power and American Electric Power Service Corporation employees' time is not tracked at that level of detail; the requested analysis has not been performed.

Witness: Alex E. Vaughan

DATA REQUEST

KPSC_4_082 Refer to the Vaughan Testimony, page 25, lines 6–11 and Exhibit AEV-3.
a. Provide the test-year average usage, the amount of billing energy and the number of kWh of excess generation produced in a billing period for the current 44 net metering customers.
b. Provide Exhibit AEV-3 in Excel spreadsheet format with all cells and formulas visible and unprotected. Explain how Kentucky Power derived the distribution of typical kWhs per month by each hour of the day, which sum to 1,240 kWh per month.
c. In Exhibit AEV-3, page 1 of 2, explain the rationale for using 5CP summer and 12 CP allocators.

d. In Exhibit AEV-3, page 1 of 2, explain how the Summer Peak 5CP weights were derived.
e. In Exhibit AEV-3, page 1 of 2, explain why there are only four observations in the Summer Peak 5CP Excess % column.
f. In Exhibit AEV-3, page 1 of 2, explain why there is a gap of three observations in the last three columns of the spreadsheet.
g. In Exhibit AEV-3, page 1 of 2, explain how the 12CP Hours weights were derived.
h. Regarding the full solar output shape value, explain whether the values can differ amongst solar plants. If the values can differ, explain why this particular solar plant example was chosen.

RESPONSE

a. Company witness Vaughan relied on information from the Company's distributed generation interconnection database regarding the number of active net metering installations at the end of the test period. The interconnection database was not up to date with the Company's billing system and Company's witness Vaughan's testimony should read: " As of the end of the test year, the Company has 46 net metering customers, all of whom are using solar generation systems. Thirty six of these are residential installations with an average installed capacity of 8.84 kW per system." The Company also had 10 active commercial accounts with solar installations.
Please refer to KPCO_R_KPSC_4_82_Attachment1 for the requested information.

b. Please refer to the Company's response to Staff 3-1, specifically KPCO_R_KPSC_3_1_Attachment17. The "Res Pivot" tab shows the distribution of the

average residential class load over a day and is based upon the residential class profile used in the Company's load research and class cost of service studies.
c. The Company's generation capacity obligation in PJM is based upon PJM's summer (June – September) 5 coincident peaks. The Company's allocation of PJM LSE OATT expense is based upon the AEP system 12 coincident peaks (the system peak each month).

d.The summer 5CP weights were derived based upon the actual PJM 5CPs over a four-year historic period.

e. The PJM 5 CPs have historically only occurred during 4 afternoon hours. It is possible for all 5 CPs in a summer to occur in the same hour on different days.

f.There is a gap of 3 hours because historic AEP system 12 CPs have not occurred during those hours.

g. The AEP system 12 CP weights were derived based upon the actual AEP system 12 CPs over a three-year historic period.

h. Yes, solar output will vary by solar generation system based on the components used; however, the shape of the output should be very similar between similar systems (fixed tilt racking, tracking, etc.) in a region because the sun's path across the sky does not vary in the immediate geographic area. Said another way, the sun will shine on solar generating systems in a geographic region in a similar way unless a system is obstructed.

The solar output shape used by the Company in valuing the excess generation for proposed Tariff N.M.S. II is from a planned 20 MW (AC) fixed tilt solar facility in the Company's service territory. The hourly solar output was developed by the solar project development company, vetted internally by the Company and by a third-party expert. Unfortunately, the Company was not able to bring this solar project to the Commission for approval due to a permitting issue with the site that ended that particular project. The Company chose to use this solar shape in valuing the excess generation for proposed Tariff N.M.S. II because it has been vetted by an industry expert and produces a conservative result as it is from a formerly planned utility scale project located in the Company's service territory on an unobstructed site.

Witness: Alex E. Vaughan

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Fourth Set of Data Requests
Dated August 10, 2020

DATA REQUEST

KPSC_4_083 Refer to the Vaughan Testimony, page 33, lines 17–21, and page 34, lines 1–9.
a. Regarding the proposed changes to the Federal Tax Cut (FTC) Tariff, for the FTC credits in 2022 and beyond, provide the time the balance of the excess ADIT will be returned.
b. During Case No. 2018-00035,6 Kentucky Power was concerned about the flow back of the excess unprotected ADIT so to protect credit metrics and pushed for a longer amortization period than the 18 years agreed to in the resulting settlement. Given the concern over the amortization period, explain why Kentucky Power is increasing the front-end refund of the excess ADIT balance

RESPONSE

a. Please refer to Company witness Vaughan's direct testimony at page 34, lines 7-8. "Beginning in 2022, a new level of the remaining unprotected excess ADFIT balance reflecting the outcome of this case could also be included in Tariff FTC." The Company proposes this being the same level of credit as the Company included in Tariff FTC during the test year until the remaining unprotected excess ADFIT is exhausted.

b. Please refer to Company witness West's direct testimony at page 6, line 18 concerning the year 1 offset being proposed in this case. Additionally, rating agencies look at periods of greater than just a single year. The Company's plan provides a cash flow impact in year one but by maintaining the same amortization level for the outer years we are protecting the credit metrics post COVID-19.

Witness: Alex E. Vaughan

DATA REQUEST

KPSC_4_084 Refer to the Vaughan Testimony, Exhibit AEV–1, page 2 of 65. Explain the fixed-cost adder of $0.0500/kWh.

RESPONSE

As its label implies, the fixed cost adder represents a level of fixed cost contribution above energy costs to account for the fact that utility delivery and generation infrastructure is used even during off-peak hours.

Witness: Alex E. Vaughan

DATA REQUEST

KPSC_4_085 Refer to the Vaughan Testimony, Exhibit AEV-5 and to Case No. 2017-00179, Post Case Files, Revised KPCO 2019 Annual Update.xlsx, Tab PPA Form 5.0.
a. Provide a complete description of each of the costs and expenses used in the calculation of the "Total PPA Base Amount", lines (1) through (13a).
b. Explain whether costs captured in Accounts 5650021 and 5650015 were previously broken out from one or more of the other accounts listed in AEV-5 and the Revised KPCO 2019 Annual Update.
c. Also, refer to KPCO_R_AG_PHDR_3_Attachment1.xlsx in Case No 2017-00179, filed December 20, 2017. In Kentucky Power's response to the Attorney General for the 12 months ending February 2017, the accounts total $70,212,659. The PJM Load Service Entity (LSE) Open Access Transmission Tariff (OATT) Base Amount in AEV-5 and the Revised KPCO 2019 Annual Update totals $74,038,517. For each account,
reconcile the differences between two account totals, and explain why the OATT base amount in the PPA is $3,825,858 greater than what was reported as actual OATT LSE charges that Kentucky Power paid to PJM for affiliate and non-affiliate transmission services.

RESPONSE

a.

- 4561005 - PJM Point to Point Trans Svc - To record the PJM point to point transmission service

- 4561002 - RTO Formation Cost Recovery - To record the RTO formation cost recovery

- 4561035 - PJM Affiliated Trans NITS Cost - Affiliated NITS costs relating to PJM that are being paid by the Generation group. Contra revenue booked on the Generation companies relating to PJM Affiliated NITS revenue.

- 4561036 - PJM Affiliated Trans TO Cost - Affiliated Transmission Ownership costs relating to PJM that are being paid by the Generation group. Contra revenue booked on the Generation companies relating to PJM Affiliated TO revenue.

- 4561060 - Affiliated PJM Transmission Enhancement Cost (RTEP) - To record Affiliated PJM Transmission Enhancement Cost (RTEP) - Regional Transmission Expansion Plan

- 5650012 - PJM Trans Enhancement Charge - Starting in June 2007, PJM began to charge network customers for transmission enhancement costs and to provide those revenues to the applicable owner.

- 5650016 - PJM NITS Expense – Affiliated - To track all affiliated expenses related to PJM Network Integration Transmission Services

- 5650019 - Affiliated PJM Transmission Enhancement Expense (RTEP) - To record Affiliated PJM Transmission Enhancement Expense (RTEP) - Regional Transmission Expansion Plan.

- 5650021 - PJM NITS Expense - Non-Affiliated - To track all non-affiliated expenses related to PJM Network Integration Transmission Services.

- 5650015 - PJM TO Serv Exp – Aff - To track all affiliated expenses related to PJM Transmission Owner Services

b. Account 5650021 is PJM NITS Expense - Non-Affiliated - To track all non-affiliated expenses related to PJM Network Integration Transmission Services. Buckeye Power collects credits pursuant to Section 30.9 of PJM’s Tariff for various transmission facilities that are integrated with the transmission system of American Electric Power (“AEP”) and operated as part of PJM’s regional transmission system. Buckeye began collecting these credits in 2018.
Account 5650015 is PJM TO Serv Exp – Aff - To track all affiliated expenses related to PJM Transmission Owner Services. This account is not new. If KPCO is in a net revenue position for Transmission Owner Services, no costs are recorded to this account.

c. The 70,212,659 is the actual 12 months ended February 2017 amount. The $74,038,517 was the adjusted test year PJM LSE OATT base amount that was approved by the Commission in 2017-00179. The difference in the figures is the known and measureable adjustment to PJM LSE OATT expense approved in Case No. 2017-00179.

Witness: Alex E. Vaughan

Kentucky Power Company
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Dated August 10, 2020

DATA REQUEST

KPSC_4_086	Refer to the Vaughan Testimony, page 26, lines 15–19. Explain why it is appropriate to base the avoided energy price amounts upon the PJM Locational Marginal Price forward pricing for the Kentucky Power load aggregate instead of basing it upon a competitive solicitation process.

RESPONSE

The Company's load settles hourly at the Kentucky Power residual load aggregate, which is the PJM hourly system energy price (system wide) plus or minus congestion and marginal loss price components, thus making it a "locational price". The next MWh of Company load will settle at this pricing point, thus making it the avoided/incremental cost of energy. The Company is not aware of any willing sellers of PJM energy that would provide energy to the Company at a price below the highly visible over the counter market price that is PJM LMP.

Witness: Alex E. Vaughan

Kentucky Power Company
KPSC Case No. 2020-00174
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Dated August 10, 2020

DATA REQUEST

KPSC_4_087 Refer to the Vaughan Testimony, page 30, line 16, which states that the Non-Utility Generator (NUG) Tariff will be closed to new customers effective January 1, 2021. Explain the reason for proposing this change.

RESPONSE

The special tariff was first introduced in 2001 at a time when Non-Utility Generators were a relatively new concept. Further, at that time the Company was not a member of a RTO. Only one customer has taken service under the tariff in the last two decades. Much has changed since 2001 and the Company's experience is that a special tariff is no longer needed.

Witness: Alex E. Vaughan

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Fourth Set of Data Requests
Dated August 10, 2020

DATA REQUEST

KPSC_4_088 Refer to the Vaughan Testimony, page 30, lines 17–18, which states that the commissioning and startup power provisions of the NUG Tariff will be eliminated. Other than the fact that the current customer taking service under the NUG Tariff is not using these provisions, explain the reason for proposing this change.

RESPONSE

In nearly 19 years since the introduction of Tariff NUG, no customer has elected service under either the commissioning power or startup power service provisions. The Commissioning Power Service provision is duplicative of the Company's Tariff T.S. and the terms and conditions of service. The Startup Power Service provision was designed to meet anticipated needs not adequately served by the Company's other tariffs and has proven to be unneeded. For those reasons, the Company proposes to eliminate the provisions. Please also see the Company's Response to Staff 4-87.

Witness: Alex E. Vaughan

DATA REQUEST

KPSC_4_089 Refer to the Vaughan Testimony, page 31, lines 1–11 and Exhibit AEV-5, lines 12-13.
a. Provide the supporting calculations for the Forced Outage Purchase Power Limitation Base Amount, including the test-year forced outage purchased power expense and the portion recovered through the Fuel Adjustment Clause on a monthly basis.
b. Provide the supporting calculations for the CS IRP Base Amount on a monthly basis.

RESPONSE

a.-b. Please refer to KPCO_R_KPSC_4_89_Attachment1 for the requested information.

Witness: Alex E. Vaughan

DATA REQUEST

KPSC_4_090 Refer to the Vaughan Testimony, page 32, lines 11–14. Explain why Kentucky Power is unable earn its allowed ROE without a full tracking mechanism in the PPA.

RESPONSE

Without a full tracking mechanism for PJM LSE OATT expense, the Company is not able to collect FERC-approved tariff expenses from its retail customers, which results in costs being trapped and does not afford the Company an opportunity to earn its allowed ROE set by the KPSC.

Witness: Alex E. Vaughan

Kentucky Power Company
KPSC Case No. 2020-00174
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DATA REQUEST

KPSC_4_091 Refer to the Vaughan Testimony, pages 32, lines 17–20. Explain how PJM's allocation methodology changed as a result of the settlement in FERC docket EL05-121 and how the new PJM allocation methodology affected each of the AEP operating companies' allocated share of costs.

RESPONSE

The settlement in EL05-121 changed the cost allocation responsibilities for PJM RTEP projects operating at or above 500 kV approved by the PJM prior to February 1, 2013. Prior to the settlement, 100% of the costs of these projects were socialized to all transmission zones in PJM. Generally, the settlement established a new cost allocation whereby 50% of the costs are socialized to all transmission zones and 50% are allocated to transmission zones using a Solution-Based Distribution Factor Analysis (DFAX). Solution-based DFAX assigns cost responsibility on each zone's reliance on the upgrades. The settlement caused a reduction of costs assigned to the AEP zone associated with these projects. Kentucky Power pays approximately 6% of the costs assigned to the AEP Zone.

Witness: Alex E. Vaughan

Kentucky Power Company
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DATA REQUEST

KPSC_4_092 Refer to the Vaughan Testimony, page 32, lines 20–22, and page 33, lines 1–5. If the Commission does not grant Kentucky Power's proposed treatment of 100 percent of PJM LSE OATT charges and credits, provide the estimated annual calculations for the next two years.

RESPONSE

The Company estimates it that it will not recover $1.1 and $3.4 million in 2021 and 2022 respectively under the current recovery treatment of PJM LSE OATT expense (80% of incremental) in Tariff PPA. Please refer to KPCO_R_KPSC_4_92_Attachment1 for the calculation of these estimated figures.

Witness: Alex E. Vaughan

DATA REQUEST

KPSC_4_093 Refer to the Vaughan Testimony, page 33, lines 6–14, and Exhibits AEV-5 and AEV-7, page 5 of 6.
a. Explain how the categories enumerated in Exhibit AEV-5 totaling $96,896,495 are captured by the three categories operating company (OPCO) ATRR, Transo ATRR, Schedule 12 Expense (RTEP) in Exhibit AEV-7, page 5 of 6.
b. After applying Kentucky Power's allocation methodology, explain the differences between the $95,808,898 (existing) and $95,811,024 (projected) allocated amounts in Exhibit AEV-7, page 5 of 6, and the $96,896,495 net PJM LSE OATT charges and credit included in base rates in Exhibit AEV-5.
c. Explain whether there are any other cost categories comprising the $96,896,495 in net PJM LSE OATT Base Amount that are in addition to the NITS and Schedule 12 Expenses listed in Exhibit AEV-7 page 5 of 6. If so, list these categories and the dollar amounts.

RESPONSE

a,b&c: Exhibit AEV-7 is a hypothetical example meant to show the value of a potential load decrement that may be achieved through peak shaving interruptible customers' load under the Company's proposed Tariff DRS, it will not tie to actuals because of the hypothetical peak shaving activity. The example avoided PJM LSE OATT charges are NITS and Schedule 12 expenses, the example avoided generation capacity costs are from a reduced FRR load obligation. While answering this discovery question, the Company noticed that the hypothetical peak shaving reduction was counted under APCo, not KPCo as it should have been. Please see KPCO_R_KPSC_4_93_Attachment1 for a corrected version of Exhibit AEV-7, the updated amounts have been highlighted in green.

Witness: Alex E. Vaughan

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DATA REQUEST

KPSC_4_094 Refer to the Vaughan Testimony, Exhibit AEV-1, page 55 of 65.
a. Explain how Kentucky Power determined that $700 per kW is the Capital Cost per kW of Capacity and provide supporting documentation for that amount.
b. Explain how Kentucky Power determined that 2 percent is the Fixed Operation and Maintenance Cost Escalation Rate and provide supporting documentation for that amount.

RESPONSE

a. $700/kW is the estimated cost of an F class combustion turbine natural gas generating plant, which is the proxy being used for the next increment of dispatchable capacity in Tariff Cogen SPP. The source of that figure is the AEP System new generation technologies key supply side resource option assumptions from the Company's most recent IRP filing and is attached as KPCO_R_KPSC_4_94_Attachment1.

b. It is the Company's experience that 2% is a reasonable approximation of the escalation in O&M costs that the Company uses for escalating future cost estimates.

Witness: Alex E. Vaughan

AEP System
New Generation Technologies
Key Supply-Side Resource Option Assumptions (a)(b)(c)

Type	Capability (MW) (d) Std. ISO	Summer	Winter	Installed Cost (c,e) ($/kW)	Full Load Heat Rate (HHV,Btu/kWh)	Fuel Cost ($/MBtu)	Variable O&M ($/MWh)	Fixed O&M ($/kW-yr)	Emission Rates SO2 (Lb/mmBtu)	NOx (Lb/mmBtu)	CO2 (Lb/mmBtu)	Capacity Factor (%)	LCOE (f) ($/MWh)
Base Load													
Nuclear	1,610	1,560	1,690	8,500	10,500	0.94	3.99	168.33	0.000	0.000	0.0	80	174.3
Pulv. Coal with Carbon Capture (PRB)	540	520	570	9,500	12,500	2.42	4.37	104.12	0.065	0.050	21.3	75	216.6
Combined Cycle (1X1 "J" Class)	610	800	820	900	6,200	3.42	1.77	12.86	0.001	0.008	117.1	75	60.2
Combined Cycle (2X1 "J" Class)	1,230	1,600	1,640	700	6,200	3.42	1.55	10.65	0.001	0.008	117.1	75	56.1
Combined Cycle (2X1 "H" Class)	1,150	1,490	1,530	700	6,300	3.42	1.51	11.07	0.001	0.008	117.1	75	56.9
Peaking													
Combustion Turbine (2 - "E" Class) (g)	180	190	190	1,200	11,700	3.42	4.05	30.46	0.001	0.008	117.1	25	148.9
Combustion Turbine (2 - "F" Class, w/evap coolers) (g)	490	500	510	700	10,000	3.42	6.27	24.55	0.001	0.008	117.1	25	117.2
Aero-Derivative (2 - Small Machines) (g)	120	120	120	1,100	9,900	3.42	2.51	32.17	0.001	0.008	117.1	25	135.7
Recip Engine Farm	220	220	230	1,300	8,300	3.42	5.36	13.91	0.001	0.042	110.0	25	126.6
Battery	10	10	10	1,900	83% (h)	0.00	0.00	38.99	0.000	0.000	0.0	25	157.1

Notes: (a) Installed cost, capability and heat rate numbers have been rounded
(b) All costs in 2019 dollars, except as noted.
(c) $/kW costs are based on summer capability
(d) All Capabilities are at 1,000 feet above sea level
(e) Total Plant Investment Cost w/AFUDC (AEP-East rate of 5.5%,site rating $/kW)
(f) Levelized cost of energy based on capacity factors shown in table
(g) Includes SCR environmental installation
(h) Denotes efficiency, (w/ power electronics)

DATA REQUEST

KPSC_4_095 Refer to the Vaughan Testimony, Exhibit AEV-7, page 5 of 6.

a. Explain the period upon which the Exhibit is based (i.e., 2019 calendar year, other calendar year, test year, etc.).

b. Explain whether PJM recalculates or updates the Non-Affiliate portion of the existing Network Service Peak Load (NSPL) allocation percentage annually, and if so, when.

c. Provide for the ten years ending in 2019, the date and system peak that forms the basis for PJM's 1CP allocation percentage of NSPL to AEP (including CRES) and non-affiliate.

d. Explain the meaning of CRES, ATRR, and PTRR.

e. Explain what entities are included in the NSPL.

f. Explain the differences between the 19,131 MW attributed to AEP (including CRES) and the 16,684 MW attributable to the Operating Company Sum.

g. Explain whether the 22,476 MW existing NSPL is the basis for the $1,989,594,977 Total Zonal ATRR.

h. Explain the different types of projects and expenses that are included in each of OPCO ATRR, Transco ATRR, and Schedule 12 Expenses (RTEP) categories.

i. Of the three categories, OPCO ATRR, Transco ATRR, and Schedule 12 Expenses (RTEP), identify the categories in which PJM and AEP include Kentucky Power's Supplemental projects. If Kentucky Power's Regional Transmission Expansion Plan (RTEP) projects are not included in the Schedule 12 Expense (RTEP) category, explain how they are categorized.

j. Explain whether there are any transmission related Kentucky Power projects that are reviewed and approved by PJM that are not included in one of the OPCO ATRR, Transco ATRR, and Schedule 12 Expenses (RTEP) expense categories. If so, identify the projects, and explain whether and how the related expenses are included in Kentucky Power's OATT.

k. For the Kentucky Power transmission related capital projects during the test year for which expenses were booked, explain whether the FERC approved 10.35 return or the Commission approved return is applied to booked capital expenditures. If there is a difference, provide an explanation of how the two different returns are applied and to which amounts for each project.

Kentucky Power Company

l. During the test year, explain how much of the total transmission related capital spending in Kentucky Power's service territory is on Kentucky Power's books and how much is on Kentucky Power Transmission's books.
m. Explain whether any of the capital spending resulting from transmission related projects for which Kentucky Power was granted a CPCN is recorded on Kentucky Power Transmission's books.
n. The KP-12CP allocation factor (5.66% rounded) does not appear to be the factor used to derive either the $95,808,898 or the $95,811,024 figures. Explain which allocation factor was used and how it was derived,

RESPONSE

a. Please refer to the Company's response to KPSC Staff 4-93. The zonal revenue requirement and existing NSPLs and 12CPs portions of Exhibit AEV-7 are based upon those applicable during calendar 2020.

b. The NSPL is updated annually.

c. Please see KPCO_R_KPSC_4_95_Attachment2 for the requested information.

d, Competitive Retail Electric Supplier (AEP Ohio wires load), Annual Transmission Revenue Requirement, Projected Transmission Revenue Requirement.

e. All zonal load is included in the NSPL (Network Service Peak Load), which is also known as the zonal 1CP.

f. They are different things, one is the NSPL, one is the 12CP. The two different peak measures occur at different times and therefore will be different.

g. No, it is not. The total NSPL represents the total peak load in the zone from which the total zonal ATRR will be collected annually.

h. Schedule 12 (RTEP) Expenses includes costs of projects that are cost allocated by PJM pursuant to the PJM OATT and which may be cost allocated to one or more zones. The Network Integration Transmission Service (NITS) expenses associated with the OPCO Actual Transmission Revenue Requirement (ATRR) and the Transco ATRR are expenses related to projects that are constructed by the respective companies that are 100% assigned to the AEP Zone.

i. Kentucky Power's Supplemental projects are included in the OPCO ATRR category in accordance with FERC-approved formula transmission rate protocols. The Company further notes that the costs associated with these projects are allocated under the PJM OATT and charged to the applicable entities as NITS. Kentucky Power has no RTEP projects that have been built with cost allocation to multiple zones, thus none of Kentucky Power's RTEP projects flow into Schedule 12 Expense. Please refer to the response to subsection H.

j. The Company is not aware of any such projects.

k. The Company applies the Commission's approved return to booked capital expenditures.

l. In responding to this data request, the Company understands "Kentucky Power Transmission" to refer to AEP Kentucky Transmission Company, Inc. Please see KPCO_R_KPSC_4_95_Attachment1 for the capital costs recorded in Kentucky Power's books for transmission projects during the test year and for the capital costs recorded in AEP Kentucky Transmission Company, Inc.'s books during the period test year. The Company is unaware of capital expenditures by other entities for projects in Kentucky Power's service territory. Note that capital expenditures are not an input into the FERC-approved formula rates of either Kentucky Power or AEP Kentucky Transmission Company, Inc.

m. In responding to this data request, the Company understands "Kentucky Power Transmission" to refer to AEP Kentucky Transmission Company, Inc. Kentucky Power and AEP Kentucky Transmission Company, Inc. are affiliated but separate entities, and each maintains separate books reflecting its own capital costs. There are no costs recorded in AEP Kentucky Transmission Company, Inc.'s books that result from Kentucky Power's capital costs for transmission projects for which Kentucky Power was granted a CPCN.

n. Please refer to the Company's response to KPSC 4-93 and KPCO_R_KPSC_4_93_Attachment1 for corrected version of Exhibit AEV-7.

Witness: Alex E. Vaughan

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DATA REQUEST

KPSC_4_096 Refer to the Vaughan Testimony Exhibit AEV-7 page 5 of 6.
a. For the ten years ending in 2019, provide the annual NSPL MW total, AEP (including CRES) MW, and non-affiliate MW and the resulting percentages in Excel spreadsheet format with all formula and cells visible and unprotected.
b. Provide the annual system 1 Coincident Peak (1CP) and the 12 monthly Coincident Peak (12CP) amounts in MW over the ten years period ending in 2019 for each of AEP's operating companies. Include percentage calculations and total annual figures.
c. For the ten years ending in 2019, provide the annual Network Integration Transmission Service (NITS) expense broken out by operating company (OPCO) ATRR, Transo ATRR, Schedule 12 Expense (RTEP), and total Zonal ATRR.
d. For the ten years ending in 2019, provide annually the amounts allocated to AEP %, AEP$ from total Zonal ATRR, and the resulting amounts allocated to each of the OPCOs, and the allocation percentages.

RESPONSE

The Company objects to this request on the grounds that it is overly broad, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, the Company states:
a. See attachment KPCO_R_KPSC_4_96_Attachment1 for the requested information.

b. See attachment KPCO_R_KPSC_4_96_Attachment2 for the requested information.

c. See attachment KPCO_R_KPSC_4_96_Attachment3 for the requested information.

d. The Company only maintains the information requested in the format requested from 2014 through 2019 and is unable to provide it prior to 2014. See attachment KPCO_R_KPSC_4_96_Attachment4 for this information.

Witness: Alex E. Vaughan

DATA REQUEST

KPSC_4_097	Refer to Case No. 2017-00179, Post Case Files, KPCO_2020_12CP_Allocation_Analysis.xlsx filed April 13, 2020, KPCO_2019_12CP_Allocation_Analysis.xlsx filed October 2, 2019, KPCO_2018_12CP_Allocation_Analysis.xlsx filed December 10, 2018, and Kentucky Power's Integrated Resource Plan Section 6, page 185 of 2268. The coincident peaks listed in each of the Allocation Analyses do not match the system peaks listed in the IRP. Reconcile the differences, and explain which the analyses contains the correct data.

RESPONSE

All of the referenced analyses contain correct data. The 12 CP under the FERC approved AEP Transmission Agreement is the monthly coincident peak hour of the AEP system, not the monthly non-coincident Kentucky Power Company peak hour. The two peak hours may not match every month.

Witness: Alex E. Vaughan

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DATA REQUEST

KPSC_4_098 Refer to the Vaughan Testimony, page 34, lines 20–21, which discuss Kentucky Power's proposal to eliminate the special coal provisions in Tariff C.S.-I.R.P. Explain what effect this proposal will have on the contracts between Kentucky Power and customers currently receiving service through the special coal provisions of Tariff C.S.I.R.P.

RESPONSE

The proposed tariff change will have no impact on existing contracts.

Witness: Alex E. Vaughan

DATA REQUEST

KPSC_4_099	Refer to the Vaughan Testimony, page 35, lines 5–9, which discusses Kentucky Power’s proposal to eliminate the special coal provisions in Tariff C.S.-I.R.P. Explain how the special coal provisions in Tariff C.S.-I.R.P. have been difficult to manage operationally.

RESPONSE

Multiple coal accounts have ceased operations while committing to provide interruptible capacity as a PJM capacity resource for the Company even under the lower, two-year contract term. This fact makes it operationally challenging from a capacity planning and management perspective.

Witness: Alex E. Vaughan

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DATA REQUEST

KPSC_4_100 Refer to the Vaughan Testimony, page 35, lines 7–9, which explains that the special coal provisions in Tariff C.S.-I.R.P. are not necessary due to Kentucky Power's proposal to add a Demand Response Tariff to its tariff. If the Commission denies the new Demand Response Tariff, indicate whether Kentucky Power would still propose to eliminate the special coal provisions in Tariff C.S.-I.R.P.

RESPONSE

Yes, it would.

Witness: Alex E. Vaughan

DATA REQUEST

KPSC_4_101 Refer to the Vaughan Testimony, Exhibit AEV-1, page 60 of 65, which provides cost support for the energy credits in Tariff COGEN/SPP I and Tariff COGEN/SPP II. Explain why the Primary Energy Loss amount of 1.35 percent was used to calculate the Loss Adjustment (Potential Loss Savings) instead of the Compound Loss Factor of 6.7 percent.

RESPONSE

Only primary losses are considered in the calculation because the PJM LMP price includes financial transmission losses.

Witness: Alex E. Vaughan

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DATA REQUEST

KPSC_4_102 Refer to the Vaughan Testimony, Exhibit AEV-1, page 60 of 65, which provides cost support for the energy credits in Tariff COGEN/SPP I and Tariff COGEN/SPP II. Provide supporting documentation for the On-Peak and Off-Peak Avoided Energy Costs (2020-2022 Average) of $3.04 and $2.27, respectively.

RESPONSE

The Company used a four year average of forward pricing for the Kentucky Power Company residual load aggregate to determine the avoided energy payments under Tariff Cogen SPP and Tariff N.M.S. II. Please see Confidential attachment KPCO_R_KPSC_4_102_ConfidentialAttachment1 for the requested information.

Witness: Alex E. Vaughan

DATA REQUEST

KPSC_4_103 Refer to the Direct Testimony of Brian K. West (West Testimony), page 8, lines 4–7. If Kentucky Power is granted the proposed use of the unprotected excess ADIT balance to offset the increase in base rates for 2021, explain whether Kentucky Power anticipates a cash shortfall or increased need for financing. If so, state what amount and type of financing Kentucky Power anticipates.

RESPONSE

Reducing a portion of the excess ADFIT balance in lieu of a $65M revenue increase in 2021 will create a cash shortfall compared to implementing the increase on January 1, 2021. The amount and type of financing will likely be a combination of Kentucky Power's permanent capital which includes long term debt and equity.

Witness: Brian K. West

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Dated August 10, 2020

DATA REQUEST

KPSC_4_104 Refer to the West Testimony, page 21, lines 11–12, which explains that Flex Pay daily fixed charges will be based on the number of days in the billing cycle. Also, refer to the application, Exhibit E, page 62 of 216, Kentucky Power's proposed Flex Pay Program Tariff, Terms and Conditions number 1, which states that Flex Pay daily fixed charges will be based on 1/30 of the total fixed charges. Explain whether all billing cycles under the Flex Pay Tariff will be 30 days long. If not, explain why the Flex Pay daily fixed charges should be based on 1/30 of the total fixed charges and not based on the number of days in the billing cycle.

RESPONSE

All Flex pay billing cycles will not be 30 days in length. Instead, they will be identical to post-pay billing cycles and will vary in length. KPCO_R_KPSC_4_104_Attachment1 provides a supplemented red-line and clean Tariff F.P. revising the language pertaining to the fixed charge to conform to the testimony of Company Witness West at page 21.

Witness: Brian K. West

TARIFF F.P.
(Flex Pay Program)

TN

AVAILABILITY OF SERVICE.

This tariff is available on a voluntary basis to all residential customers who have an Advanced Metering Infrastructure (AMI) meter rated up to 200 amps installed at their residence, except those residential customers taking metered service under the Company's Tariff R.S.D.

This tariff is not available to residential customers taking metered service under Tariff R.S.D. or customers with medical, life threatening, or life support conditions; customers having on-site generation operated in parallel with the Company's system; or customers on the Average Monthly Payment (AMP) plan or Equal Payment Plan (Budget). This tariff also is not available to customers without a valid and operable electronic communication method (*i.e.*, text messaging or electronic mail). This tariff also is not available to any customer scheduled for a disconnection of service for nonpayment and who has initiated the process for enrollment in this tariff two or more times within a thirty (30) day period without completing all of the requirements for enrollment.

PROGRAM DESCRIPTION.

Kentucky Power's Flex Pay Program, is a voluntary payment option that allows customers to prepay for electric service.

TERMS AND CONDITIONS.

1. Service under the Flex Pay Program will be offered to customers under the customer's otherwise applicable standard residential rate schedule. Billing will be based on a customer's actual daily usage, the effective base rate, the tax rate, and all applicable riders and fees. Fixed charges will be applied to the account on a daily basis. The daily fixed charges are equal to the percentage of total fixed charges calculated by dividing one by the number of days in the applicable billing cycle ((1/days in billing cycle) x total fixed charges) and will be subtracted daily from the customer's Flex Pay account balance. ~~based on 1/30 of the total fixed charges and will be subtracted daily from the customer's Flex Pay account balance.~~

2. To enroll in the Flex Pay Program, a customer must make an initial payment of at least $40.00. Any deposit that an existing customer has previously paid to the Company will be applied to the customer's current account balance, with the remaining credit/debit balance from the customer's existing account, if any, transferred to the customer's Flex Pay account balance. A customer with an outstanding current balance or final account balance from a previous account must pay at least 50 percent of the account balance and, upon doing so, may carry-over up to $1,500 of the account balance to their Flex Pay account balance to be paid off through the Flex Pay Program. Any payments to the Flex Pay account will first have a 20% portion of the payment applied to the arrears balance, with the remaining portion of the payment credited to the customer's Flex Pay account until the arrears balance is fully paid.

(Cont'd on Sheet 8-2)

DATE OF ISSUE: August 26, 2020
DATE EFFECTIVE: Service Rendered On And After January 14, 2021
ISSUED BY: /s/ Brian K. West
TITLE: Director, Regulatory Services
By Authority Of an Order of the Public Service Commission
In Case No. 2020-00174 Dated XXXXXX

TARIFF F.P.
(Flex Pay Program) N

3. The customer is responsible for monitoring usage under this program and ensuring that the account balance is sufficient to continue electric service. The customer must maintain an account balance greater than zero, not including any arrears amount carried over from another account, to continue electric service under this program. The customer will be notified when the account reaches the customer-selected low balance amount or the amount of $25.00, whichever is greater. Notification will occur through the customer's selected form of communication, including email, and/or text message. A customer web portal will be available to view the customer's usage information.

4. Should a customer's balance reach zero, the customer will be notified via the customer's chosen communication method. The customer will have until the beginning of the next business day to reestablish a positive balance or the customer's meter will automatically be disconnected during normal business hours regardless of weather or temperature as the customer is responsible for ensuring that the Flex Pay account is adequately funded. Normal business hours are 8:00 a.m. to 5:00 p.m. ET, Monday through Friday, excluding Company-observed holidays and moratoriums. Customers will be required to pay in full any accrued balance for usage during weekends, holidays and moratoriums before service will be restored. Once the customer's payment is received and accepted, and the customer's Flex Pay account balance is greater than zero, service will be restored by the Company in a timely manner.

5. Financial assistance received for a Flex Pay account will be credited to the balance of the Flex Pay account upon receipt of the funds.

6. Customers presenting a Winter Hardship Reconnect, Certificate of Need, or Medical Certificate as provided in 807 KAR 5:006, Sections 14, 15, and 16 will be removed from the Flex Pay Program and placed on the tariff that is otherwise applicable to the customer's service.

7. No deposit, reconnect, or late fee charges shall be assessed to customers enrolled in the Flex Pay Program.

(Cont'd on Sheet 8-3)

TARIFF F.P.
(Flex Pay Program) N

8. When the Company receives a dishonored negotiable instrument (i.e. returned check), any account credits associated with that instrument will be removed from the customer's account. If the removal of the credits results in the customer's balance reaching zero, the customer will be notified and will have until the beginning of the next business day to reestablish a positive balance or the customer's meter will automatically be disconnected during normal business hours.

9. Actual billing will continue to be based upon the applicable rate and meter readings obtained to determine consumption. Flex Pay customers are required to participate in and receive their information through the Company's paperless billing program. Customers will continue to receive an online monthly statement summary containing all of the charges, usage and payments applied during their normal 30-day billing cycle.

10. Customer accounts must be funded through a Company authorized payment channel, including immediate payment via telephone or website using electronic check, debit or credit cards, or any in-person pay station. Each authorized payment method is subject to Company guidelines. Timing of payments to accounts cannot be guaranteed if payment is made through an unauthorized pay agent or by mail.

11. The customer may cancel service under this tariff at any time and will be returned to the applicable traditional post-pay billing option in accordance with Kentucky Power's Commission approved tariffs.

12. Account settlement shall occur when participation in the plan is terminated. Termination occurs when an account is final billed or if the customer requests termination. If the account terminates off-cycle during the billing period, the remaining monthly fixed charges and fees that have not yet been collected will be applied to the final bill. After settlement of the Flex Pay account, any remaining unused balance will be transferred to the customer's other active account(s), if any. If the customer does not have any other active accounts the Company shall refund the remaining unused balance by one of the following means: a prepaid card, a check or electronic funds transfer (EFT).

TARIFF F.P.
(Flex Pay Program) TN

AVAILABILITY OF SERVICE.

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2. To enroll in the Flex Pay Program, a customer must make an initial payment of at least $40.00. Any deposit that an existing customer has previously paid to the Company will be applied to the customer's current account balance, with the remaining credit/debit balance from the customer's existing account, if any, transferred to the customer's Flex Pay account balance. A customer with an outstanding current balance or final account balance from a previous account must pay at least 50 percent of the account balance and, upon doing so, may carry-over up to $1,500 of the account balance to their Flex Pay account balance to be paid off through the Flex Pay Program. Any payments to the Flex Pay account will first have a 20% portion of the payment applied to the arrears balance, with the remaining portion of the payment credited to the customer's Flex Pay account until the arrears balance is fully paid.

(Cont'd on Sheet 8-2)

N

TARIFF F.P.
(Flex Pay Program)

3. The customer is responsible for monitoring usage under this program and ensuring that the account balance is sufficient to continue electric service. The customer must maintain an account balance greater than zero, not including any arrears amount carried over from another account, to continue electric service under this program. The customer will be notified when the account reaches the customer-selected low balance amount or the amount of $25.00, whichever is greater. Notification will occur through the customer's selected form of communication, including email, and/or text message. A customer web portal will be available to view the customer's usage information.

4. Should a customer's balance reach zero, the customer will be notified via the customer's chosen communication method. The customer will have until the beginning of the next business day to reestablish a positive balance or the customer's meter will automatically be disconnected during normal business hours regardless of weather or temperature as the customer is responsible for ensuring that the Flex Pay account is adequately funded. Normal business hours are 8:00 a.m. to 5:00 p.m. ET, Monday through Friday, excluding Company-observed holidays and moratoriums. Customers will be required to pay in full any accrued balance for usage during weekends, holidays and moratoriums before service will be restored. Once the customer's payment is received and accepted, and the customer's Flex Pay account balance is greater than zero, service will be restored by the Company in a timely manner.

5. Financial assistance received for a Flex Pay account will be credited to the balance of the Flex Pay account upon receipt of the funds.

6. Customers presenting a Winter Hardship Reconnect, Certificate of Need, or Medical Certificate as provided in 807 KAR 5:006, Sections 14, 15, and 16 will be removed from the Flex Pay Program and placed on the tariff that is otherwise applicable to the customer's service.

7. No deposit, reconnect, or late fee charges shall be assessed to customers enrolled in the Flex Pay Program.

(Cont'd on Sheet 8-3)

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TARIFF F.P.
(Flex Pay Program) N

8. When the Company receives a dishonored negotiable instrument (i.e. returned check), any account credits associated with that instrument will be removed from the customer's account. If the removal of the credits results in the customer's balance reaching zero, the customer will be notified and will have until the beginning of the next business day to reestablish a positive balance or the customer's meter will automatically be disconnected during normal business hours.

9. Actual billing will continue to be based upon the applicable rate and meter readings obtained to determine consumption. Flex Pay customers are required to participate in and receive their information through the Company's paperless billing program. Customers will continue to receive an online monthly statement summary containing all of the charges, usage and payments applied during their normal 30-day billing cycle.

10. Customer accounts must be funded through a Company authorized payment channel, including immediate payment via telephone or website using electronic check, debit or credit cards, or any in-person pay station. Each authorized payment method is subject to Company guidelines. Timing of payments to accounts cannot be guaranteed if payment is made through an unauthorized pay agent or by mail.

11. The customer may cancel service under this tariff at any time and will be returned to the applicable traditional post-pay billing option in accordance with Kentucky Power's Commission approved tariffs.

12. Account settlement shall occur when participation in the plan is terminated. Termination occurs when an account is final billed or if the customer requests termination. If the account terminates off-cycle during the billing period, the remaining monthly fixed charges and fees that have not yet been collected will be applied to the final bill. After settlement of the Flex Pay account, any remaining unused balance will be transferred to the customer's other active account(s), if any. If the customer does not have any other active accounts the Company shall refund the remaining unused balance by one of the following means: a prepaid card, a check or electronic funds transfer (EFT).

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DATA REQUEST

KPSC_4_105 Refer to the West Testimony, page 23, lines 18–20, which states that as a condition of receiving service under the Flex Pay Tariff, customers with a past-due amount who want to enroll in the Flex Pay Program have to pay at least 50 percent of the entire account balance. Also, refer to the application, Exhibit E, page 62 of 216, Kentucky Power's proposed Flex Pay Program Tariff, Terms and Conditions number 2, which states that as a condition of receiving service under the Flex Pay Tariff, customers with a past due amount who want to enroll in the Flex Pay Program can carry up to $1,500 of the account balance to the Flex Pay account, but does not seem to indicate that such customers must pay at least 50 percent of the entire account balance. Explain which one of these conditions is correct. If both are correct, explain why the 50 percent requirement is not included in the proposed tariff.

RESPONSE

Both conditions apply.
KPCO_R_KPSC_4_104_Attachment1 provides a supplemented red-line and clean Tariff F.P. incorporating the condition that a customer must pay at least 50 percent of the entire account balance to participate in the program.

Witness: Brian K. West

DATA REQUEST

KPSC_4_106 Refer to the Direct Testimony of Heather M. Whitney, page 16, lines 5–18. Explain whether Kentucky Power provides a retirement and security plan in tandem with the 401(k) plan.

RESPONSE

Yes, Kentucky Power provides both a pension and 401(k) plan, which were designed to provide a market competitive level of post-retirement income benefits as a package. The Company chose to provide both a pension and a 401(k) savings plan because each type of plan has different advantages and disadvantages. However, the provision of two different types of retirement income benefits does not imply that the total value of the retirement income benefits that the Company provides is in excess of market practices. Rather, these plans were designed together to provide in combination the market level of retirement income benefits.

Witness: Andrew R. Carlin

Witness: Kimberly K. Kaiser

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DATA REQUEST

KPSC_4_107 Refer to the Direct Testimony of Cynthia G. Wiseman (Wiseman Testimony), page 9, lines 5–19.
a. Provide an explanation of the Customer Relationship Management (CRM) project detailing how a 360-degree view is achieved.
b. Provide all marketing materials associated with Customer Relationship Management project.

RESPONSE

a. The CRM project began in 2018 with a simple vision: to build an integrated, modern Customer Relationship Management platform that allows employees to share quality customer information. The CRM project will enable a more complete and accurate flow of information that will allow the Company to better serve our existing customers, while improving our ability to attract new customers into our service territory. The CRM platform will be available to customer-facing personnel and used by them to maximize business development opportunities in the Company's service territory.
There is a set of CRM tools that lay the foundation for a 360-degree view of the customer. These tools include:

- A customer database tool used to store all external communications so employees can see what communications were sent to specific customers. This will allow the Company to send more targeted and efficient communications to specific segments of Kentucky Power customers.
- An engagement system tool that allows multiple business units within AEP to collaborate while working with commercial and industrial (C&I) customers rather than working in silos. For example, our economic and business development team (E&BD), customer account managers, customer service representatives, and C&I call center employees can all be on the same "team" for a customer (account) and, through the engagement system tool, have visibility into all activities with that specific customer. By doing so, when E&BD contacts a customer, the account manager will have access to information provided by other members of that customer's "team" and be able to speak to it when they follow up with the customer about a different subject later.

b. There are no external marketing materials associated with the CRM project as it is an internal system for employee use only.

Witness: Cynthia G. Wiseman

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DATA REQUEST

KPSC_4_108 Provide an update to the Home Energy Management system. Also provide all associated marketing materials.

RESPONSE

The Company remains on track to deploy the Home Energy Management (HEM) platform in 2020. The only update to the project scope is the deferral of the HEM release in the mobile app until 2021. Kentucky Power customers will still be able to access the HEM platform through smartphones and tablets via our mobile responsive website.
As detailed in the Direct Testimony of Cynthia Wiseman, pg. 16-17, the Company plans a multi-channel marketing campaign to bring awareness of the new HEM platform features. There are no specific marketing materials currently available. Specific marketing materials will be finalized as the Company approaches the HEM platform launch, which could be around the fourth quarter 2020.

Witness: Cynthia G. Wiseman

Kentucky Power Company
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DATA REQUEST

KPSC_4_109 Refer to the Wiseman testimony, page 23, lines 5–7.
a. Provide the all grants and the economic impact associated with these grants since Case No. 2017-00179.
b. Provide any economic development opportunities Kentucky Power is evaluating that will increase energy sales over the next five years.

RESPONSE

a. Please see KPCO_R_KPSC_4_109_Attachment1.

b. Kentucky Power routinely assists regional economic development partners in their marketing and recruitment efforts and evaluates potential economic development opportunities. The Company recognizes that increased economic development within the Company's service territory, and with it the associated increased load across which fixed costs may be spread, is the best opportunity the Company and its customers have to address the impact of the Company's increasing cost of service on customer rates. That being said, since Case No. 2017-00179, Kentucky Power has participated in 8 recruitment trips and met with 152 companies to discuss their relocation and/or expansion opportunities within the Company's service territory. Kentucky Power has also participated in 37 site visits with prospective entities that may relocate in the Company's service territory. These visits represent the possibility of 5,085 jobs and an overall investment of $1.2 billion in Kentucky Power's service territory. Each of these engagements have the potential to increase energy sales over the next five years. This information is provided through the Company's collaboration with One East Kentucky and Ashland Alliance.

Witness: Cynthia G. Wiseman

DATE	RECIPIENT	PROJECT DESCR.	PROJECT TYPE	AMT	JOB CREATION
5/5/2017	One East Kentucky	Organizational Support	Marketing and Promotion	$50,000	
5/5/2017	SOAR	Organizational Support	Marketing and Promotion	$25,000	
5/5/2017	Hazard-Perry County Economic Development Alliance	Coalfields Industrial park marketing	Marketing and Promotion	$25,000	300
5/5/2017	Southeast Kentucky Economic Development Corporation	ISO 9100 and ASO 9100 (Aerospace quality management system) training program	Marketing and Promotion	$60,000	35
5/5/2017	Pike County Fiscal Court	Marketing for Pike Teleworks program	Marketing and Promotion	$18,700	300
8/29/2017	Coal Fields Regional Industrial Authority, Inc.	Landscaping and sign maintenance at Coalfields Industrial park	Sites and Buildings/Product Improvement	$15,000	
8/29/2017	Ashland Alliance / One East Kentucky	Aerospace Alliance of East Kentucky direct marketing at Paris Air Show and follow-up meetings	Marketing and Promotion	$60,000	
8/29/2017	Ashland Alliance	Due diligence for Braidy project	Sites and Buildings/Product Improvement	$50,000	1,000
8/29/2017	Ashland Alliance	Closing fund—Wright Mix Materials expansion to Wurtland	Sites and Buildings/Product Improvement	$23,334	130
8/30/2017	Appalachian Industrial Authority	UAV marketing	Marketing and Promotion	$6,000	
9/19/2017	City of Pikeville	Geotechnical study Kentucky Enterprise park	Sites and Buildings/Product Improvement	$100,000	
9/19/2017	Lawrence County Fiscal Court	Big Sandy site sewer feasibility study	Sites and Buildings/Product Improvement	$19,836	

3/12/2018	City of Hazard	Coalfields Industrial Park gas line extension	Sites and Buildings/Product Improvement	$50,000	
3/16/2018	One East Kentucky	Organizational Support	Marketing and Promotion	$50,000	
3/16/2018	City of Wayland	Broadband feasibility study	Professional Consultants	$19,500	
3/16/2018	Aerospace Alliance of East Kentucky	Direct Marketing Farnborough Air Show and MRO Orlando	Marketing and Promotion	$50,000	
3/16/2018	One East Kentucky	International Landing Zone feasibility	Professional Consultants	$55,375	
4/19/2018	Pike County Fiscal Court	Broadband study	Professional Consultants	$25,500	
6/4/2018	SOAR	Organizational Support	Marketing and Promotion	$25,000	
6/4/2018	Appalachian Industrial Authority	Industrial Park Gas Line Extension	Sites and Buildings/Product Improvement	$35,000	7
6/5/2018	Ashland Alliance	Ashland Alliance Strategic Plan, Board education/direct marketing meetings, gap analysis and consultant fees	All	$72,000	
6/5/2018	Hazard-Perry County Economic Development Alliance	Coalfields Industrial Park marketing	Marketing and Promotion	$25,000	
7/31/2018	KAED	Product Improvement Program consultants	Professional Consultants	$20,000 per year for 3 years	
8/17/2018	One East Kentucky	Customer Relationship Management programming	Marketing and Promotion	$40,000	
10/8/2018	Big Sandy Regional Airport Board	Airport feasibility study	Sites and Buildings/Product Improvement	$64,481	
10/8/2018	Johnson Co Pathway to	Support to high school program for career path	Economic Development Education	$45,000	45

	Economic Development	to economic development			
12/13/2018	eKAMI	Apprenticeship program with HAAS automation	Sites and Buildings/Product Improvement	$125,000	200
2/1/2019	One East Kentucky	Organizational Support	Marketing and Promotion	$50,000	
3/12/2019	One East Kentucky	Elected official training, site preparation, advertising	All except Professional consultants	$30,000	
3/12/2019	SOAR	Organizational Support	Marketing and Promotion	$25,000	
3/28/2019	Ashland Alliance	EastPark Master Plan	Sites and Buildings/Product Improvement	$105,000	
4/10/2019	One East Kentucky	Closing Fund—Dajcor	Sites and Buildings/Product Improvement	$35,000	265
4/21/2019	Kentucky Chamber of Commerce	Kentucky Institute for Economic Development Scholarships (6)	Economic Development Education	$6,000	
6/13/2019	JCPED	Support for high school program career pathway to economic development	Economic Development Education	$45,000	
6/13/2019	Ashland Alliance	Aerospace Alliance of East Kentucky Marketing, booth at Paris Air Show, and lead generation	Marketing and Promotion	$46,250	
7/22/2019	City of Pikeville	Master Plan update with emphasis to included industrial park	Sites and Buildings/Product Improvement	$75,000	
7/24/2019	Perry County Fiscal Court	Woodmark building improvements/upgrades for Dajcor project	Sites and Buildings/Product Improvement	$300,000	
8/20/2019	Perry County Fiscal Court	Galen School of Nursing upgrades to expand program	Sites and Buildings/Product Improvement	$175,000	14
10/8/2019	City of Ashland	Downtown re-development plan addition to master plan	Professional Consultants	$22,500	

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DATA REQUEST

KPSC_4_110 Refer to Kentucky Power's Response to Commission Staff's Third Request for Information (Response to Staff's Third Request), Item 1, KPCO_R_KPSC_3_1_Attachment_15_VaughanWP1.xlsx, Cogen tab, rows
306 through 354. Provide updated information for the Calculation of Cost Escalation Rates and Calculation of Meter O&M Expense as % of Original Cost (Per Books Total Company Values).

RESPONSE

Please refer to KPCO_R_KPSC_4_110_Attachment1. The update does not change the proposed Cogen/SPP meter rates.

Witness: Alex E. Vaughan

DATA REQUEST

KPSC_4_111 Refer to Kentucky Power's Response to Staff's Third Request, Item 1, KPCO_R_KPSC_3_1_Attachment_15_VaughanWP1.xlsx, Cogen tab. Also, refer to Kentucky Power's Response to Commission Staff's First Request for Information in Case No. 2017-00179, Item 73, KPCO_R_KPSC_1_73_Attachment_73_AEVWP3_ Rate_Design.xlsx, Cogen tab. Explain any changes in assumptions and methods of calculation in the
Cogen tab between Case No. 2017-00179 and the instant proceeding.

RESPONSE

The SPP/Cogen rate design remains the same in that it provides avoided cost rates based upon a hypothetical incremental dispatchable generation addition. The inputs and associated calculations have been appropriately updated since Case No. 2017-00179 with more recent cost information but the rate design functions in the same manner to produce avoided cost estimates for tariff Cogen/SPP as it did in Case No. 2017-00179.

Witness: Alex E. Vaughan

<u>DATA REQUEST</u>

KPSC_4_112 If the Commission were to approve the Grid Modernization Rider, explain whether Kentucky Power would request either a Certificate of Public Convenience and Necessity (CPCN) or a declaratory order that the a CPCN is not required prior to constructing projects for which costs would be recovered in the Grid Modernization Rider.

<u>RESPONSE</u>

Kentucky Power will request Commission approval of all projects whose costs the Company seeks to include in the Grid Modernization Rider. See Direct Testimony of Company Witness West at page 10. The Company will request certificates of public convenience and necessity in accordance with KRS 278.020 and seek a declaratory order where the lack of need for the certificate is not clear.

Witness: Brian K. West

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DATA REQUEST

KPSC_4_113 If Kentucky Power currently has a mobile app, provide the number of customers who are enrolled in it.

RESPONSE

As of July 31, 2020, there are nearly 26,000 customers enrolled in Kentucky Power's mobile app.

Witness: Cynthia G. Wiseman

DATA REQUEST

KPSC_4_114 Provide the monthly class peak demands and usage for the last seven years.

RESPONSE

The Company only conducts the demand and energy study used to support the allocation factors used in the Class Cost-of-Service study when it files a base rate case. Over the last seven years, a study was prepared in support of the Company's Class Cost-of-Service studies filed in Docket Nos. 2014-00396 and 2017-00179. The loss-adjusted peak and energy values used in support of the class cost-of-service studies in those cases and in the current case are included in the attachment KPCO_R_KPSC_4_114_Attachment1.

Witness: Jason M. Stegall

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DATA REQUEST

KPSC_4_115 Refer to Case No. 2014-00396,7 Vaughan Testimony, Exhibit AEV-2. Provide a similar analysis using the zero intercept method for determining the customer and demand portions.

RESPONSE

The Company has not performed the requested analysis.

Witness: Alex E. Vaughan

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KPSC Case No. 2020-00174
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DATA REQUEST

KPSC_4_116 Provide the number of the all complaints by category (e.g., rates, service, and outage) annually since 2017.

RESPONSE

Kentucky Power tracks complaints by customers received through the Kentucky Public Service Commission, Office of the Attorney General, Better Business Bureau, Legislative Research Commission and elected officials. Please see KPCO_R_KPSC_4_116_Attachment1 for a listing of complaints that were received by category for 2017, 2018, 2019, and 2020.

Witness: Cynthia G. Wiseman

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DATA REQUEST

KPSC_4_117 Identify the number of rebuilt poles, reconductored poles, and replacement poles installed since December 31, 2017.

RESPONSE

Please refer to KPCO_R_KPSC_4_117_Attachment1 for the requested information. The report upon which KPCO_R_KPSC_4_117_Attachment1 is based, reports a pole count when stores charges the pole to the specific work order even though the work may not be fully in service. Thus, the attachment may also reflect pole rebuilding, reconductoring, and replacement activities that are in process and not yet complete.

Witness: Everett G. Phillips

Sum of Act Units	Years			
Project	2018	2019	2020	Grand Total
000001818 KY/Svc Restoration NonMjr Evt	137	159	130	426
000002241 KP-Damage Claims-Reimburse	43	53	29	125
000004737 KPSectionalizing Program	16	27	13	56
000007558 KP-PQ-QOS Mitigation	4	6	2	12
000007599 KP-Failed Equip No Outage	210	256	182	648
000007615 KP-Cust Req Relocate	41	21	12	74
000007818 KP/Small Local Asset Improv	374	707	271	1352
000014717 KY/DOP/Copper Theft			1	1
000025514 Mayking Milstone SH	26			26
000025515 Long Span Rehab 2018		3		3
000025516 Lilly Cornett Woods SH	10			10
000025521 Bishop Knobb SH	6			6
000025522 Lovely\Lovely Sectionalizing	25	7	-1	31
000025524 Feds Cr. Exit Relocation	7	2		9
000025570 BlueGrass\Walker Town Tie	11			11
000025595 Fords Br. Shelby Circuit.	22			22
DMS18KK01 KY/ME/Snow Storm 3/12/18	7			7
DMS18KK02 KY/Pre Valid Major Event	12			12
DMS18KK03 KY/ME/Wind Storm 04/04/18	32			32
DMS18KK04 KY/Pre Valid Major Event	3			3
DMS18KK05 KY/ME/Wind Storm 7/20/18	19			19
DMS18KK06 KP/Pre Valid Major Event 6	2			2
DMS18KK08 KP/Pre Valid Major Event 8	7			7
DMS18KK09 KP/Pre Valid Major Event 9	6			6
DMS19KK01 KP/ME/Wind Storm 02/24/19		37		37
DMS19KK02 KY Pre/Valid Major Storm 2		5		5
DMS19KK03 KY Pre/Valid Major Storm 3		1		1
DMS19KK05 KY Pre/Valid Major Storm 5		18		18
DMS19KK06 KY Pre/Valid Major Storm 6		11		11
DMS20KK01 KY/ME/Wind Storm 01/11/2020			19	19
DMS20KK02 KY Pre\Valid Major Storm 02			4	4
DMS20KK03 KY/ME/Thunderstorm 04/09/2020			15	15
DMS20KK04 KY/ME/ Wind Storm 04/12/2020			288	288
DP16K02A0 Add Two D circuits-Cedar Ck		12	6	18
DR15K02A0 KP/Princess Station D Line	57	32	8	97
DR18K02A0 Hazard 2018 DA Plan		9		9
DR19K02A0 Ashland DA 2019 - D line		14	-3	11
DR19K04A0 Pikeville DA 2019 - D line			1	1
DR19K05A0 Hazard DA 2019 - D line		1	19	20
EDN012370 Ds/Kp/Public Relocation	72	37	33	142
EDN014651 Ds/Kp/Cs-New Customers	583	536	325	1444
EDN014658 Ds/Kp/Cs-Upgrades	13	20	6	39
EDN014680 Ds-Kp-Ai Pole Replacement	948	381	168	1497
EDN014687 Ds-Kp-Ai Aepc Make Ready	27	13	2	42

EDN014694 Ds-Kp-Ai Other Make Ready	408	199	130	737
EDN014701 Ds Kp Ai Support Cs Res	5	4		9
EDN014720 Ds-Kp-Ai Recloser Replacement	6	3	5	14
EDN015042 Ds-Kp-Small Wire Repl Ovhd	10	70	44	124
EDN100033 Ds/Kp/C&I New	502	447	271	1220
EDN100044 Ds/Kp/C&I Upgrades	12	13	7	32
EDN100577 Ds-Kp-Ai Ckt Inspections	187	182	95	464
EDN101114 Ds Kp Ai Support Cs C I			1	1
P11161021 Stanville DLINE Components	35	1		36
P13064028 D Line Work		1	2	3
Grand Total	3885	3288	2085	9258

VERIFICATION

The undersigned, D. Brett Mattison, being duly sworn, deposes and says he is President & COO of Kentucky Power Company that he has personal knowledge of the matters set forth in the forgoing responses and the information contained therein is true and correct to the best of his information, knowledge and belief after reasonable inquiry.

D. Brett Mattison

D. Brett Mattison

COMMONWEALTH OF KENTUCKY)
) Case No. 2020-00174
COUNTY OF BOYD)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by D. Brett Mattison, this 24th day of August 2020.

Trisha Nance

Notary Public

Notary ID Number: 632421

My Commission Expires: 9-26-2023

OFFICIAL SEAL
TRISHA NANCE
NOTARY PUBLIC - KENTUCKY
STATE-AT-LARGE
My Comm. Expires September 26, 2023
ID # 632421

VERIFICATION

The undersigned, Brian K. West, being duly sworn, deposes and says he is Director Regulatory Services for Kentucky Power Company that he has personal knowledge of the matters set forth in the forgoing responses and the information contained therein is true and correct to the best of his information, knowledge and belief after reasonable inquiry.

Brian K. West

COMMONWEALTH OF KENTUCKY	)
	) Case No. 2020-00174
COUNTY OF BOYD	)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Brian K. West, this 24th day of August 2020.

Notary Public

Notary ID Number: 632421

My Commission Expires: 9-26-2023

OFFICIAL SEAL
TRISHA NANCE
NOTARY PUBLIC - KENTUCKY
STATE-AT-LARGE
My Comm. Expires September 26, 2023
ID # 632421

VERIFICATION

The undersigned, Scott E. Bishop, being duly sworn, deposes and says he is a Regulatory Consultant Senior for Kentucky Power Company, that he has personal knowledge of the matters set forth in the forgoing responses and the information contained therein is true and correct to the best of his information, knowledge and belief after reasonable inquiry.

Scott E. Bishop

Scott E. Bishop

COMMONWEALTH OF KENTUCKY)
) Case No. 2020-00174
COUNTY OF BOYD)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Scott E. Bishop, this 24th day of August 2020.

Trisha Nance

Notary Public

Notary ID Number: 632421

My Commission Expires: 9-26-2023

OFFICIAL SEAL
TRISHA NANCE
NOTARY PUBLIC - KENTUCKY
STATE-AT-LARGE
My Comm. Expires September 26, 2023
ID # 632421

VERIFICATION

The undersigned, Cynthia G. Wiseman, being duly sworn, deposes and says she is the Vice President of External Affairs and Customer Service for Kentucky Power Company that she has personal knowledge of the matters set forth in the forgoing responses and the information contained therein is true and correct to the best of her information, knowledge and belief after reasonable inquiry.

Cynthia G. Wiseman

Cynthia G. Wiseman

COMMONWEALTH OF KENTUCKY)
) Case No. 2020-00174
COUNTY OF BOYD)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Cynthia G. Wiseman, this 25 day of August 2020.

Trisha Nance

Notary Public

Notary ID Number: 632421

My Commission Expires: 9-26-2023

OFFICIAL SEAL
TRISHA NANCE
NOTARY PUBLIC - KENTUCKY
STATE-AT-LARGE
My Comm. Expires September 26, 2023
ID # 632421

VERIFICATION

The undersigned, Adrien M. McKenzie, being duly sworn, deposes and says he is the President of FINCAP, Inc., that he has personal knowledge of the matters set forth in the forgoing responses and the information contained therein is true and correct to the best of his information, knowledge and belief after reasonable inquiry.

Adrien M. McKenzie

STATE OF TEXAS)
) Case No. 2020-00174
COUNTY OF TRAVIS)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by ADRIEN M. McKENZIE, this 25th day of August 2020.

BRUCE H FAIRCHILD
Notary ID #131906507
My Commission Expires
February 25, 2023

Notary Public

Notary ID Number: 131906507

My Commission Expires: 2/25/2023

VERIFICATION

The undersigned, Everett G. Phillips, being duly sworn, deposes and says he is Vice President of Distribution Region Operations for Kentucky Power Company that he has personal knowledge of the matters set forth in the forgoing responses and the information contained therein is true and correct to the best of his information, knowledge and belief after reasonable inquiry.

Everett G. Phillips

Everett G. Phillips

COMMONWEALTH OF KENTUCKY	)	
	)	Case No. 2020-00174
COUNTY OF BOYD	)	

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Everett G. Phillips, this 21st day of August 2020.

Trisha Nance

Notary Public

Notary ID Number: 632421

My Commission Expires: 9-26-2023

OFFICIAL SEAL
TRISHA NANCE
NOTARY PUBLIC - KENTUCKY
STATE-AT-LARGE
My Comm. Expires September 26, 2023
ID # 632421

VERIFICATION

The undersigned, Lerah M. Scott, being duly sworn, deposes and says she is a Regulatory Consultant for Kentucky Power Company that she has personal knowledge of the matters set forth in the forgoing responses and the information contained therein is true and correct to the best of her information, knowledge and belief after reasonable inquiry.

Lerah M. Scott

Lerah M. Scott

COMMONWEALTH OF KENTUCKY	)	
	)	Case No. 2020-00174
COUNTY OF BOYD	)	

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Lerah M. Scott, this 24th day of August 2020.

Trisha Nance

Notary Public

Notary ID Number: 632421

My Commission Expires: 9-26-2023

OFFICIAL SEAL
TRISHA NANCE
NOTARY PUBLIC - KENTUCKY
STATE-AT-LARGE
My Comm. Expires September 26, 2023
ID # 632421

KY Discovery Verification - Vaughan.docx

DocVerify ID:	01578F12-659D-4D47-A2FD-4CF638DF546B
Created:	August 20, 2020 15:06:10 -8:00
Pages:	1
Remote Notary:	Yes / State: OH

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E-Signature Summary

E-Signature 1: Alex E Vaughan (AEV)
August 24, 2020 08:19:44 -8:00 [B694FB97B8BA] [167.239.221.80]
aevaughan@aep.com (Principal) (Personally Known)

E-Signature Notary: Sarah Smithhisler (SRS)
August 24, 2020 08:19:44 -8:00 [534F5390061F] [167.239.2.87]
srsmithhisler@aep.com
I, Sarah Smithhisler, did witness the participants named above electronically sign this document.

VERIFICATION

The undersigned, Alex E. Vaughan, being duly sworn, deposes and says he is a Director-Regulatory Pricing & Renewables for American Electric Power Service Corporation that he has personal knowledge of the matters set forth in the forgoing responses and the information contained therein is true and correct to the best of his information, knowledge and belief after reasonable inquiry.

Alex E Vaughan
Signed on 2020/08/24 08:19:44 -8:00

Alex E. Vaughan

STATE OF OHIO)
) Case No. 2020-00174
COUNTY OF FRANKLIN)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Alex E. Vaughan this 24th day of August 2020.

S Smithhisler
Signed on 2020/08/24 08:19:44 -8:00

Notary Public

Notary ID Number: 2019-RE-775042

My Commission Expires: April 29, 2024

KY Discovery Verification - Osborne.docx

DocVerify ID:	18A7C8F9-4889-48CE-9022-2A7302B09C29
Created:	August 20, 2020 14:59:23 -8:00
Pages:	1
Remote Notary:	Yes / State: OH

E-Signature Summary

E-Signature 1: Debra L Osborne (DLO)
August 21, 2020 08:01:57 -8:00 [AA5081A8F4D7] [161.235.2.88]
dlosborne@aep.com (Principal) (Personally Known)

E-Signature Notary: Sarah Smithhisler (SRS)
August 21, 2020 08:01:57 -8:00 [CDBC054FA64E] [167.239.221.85]
srsmithhisler@aep.com
I, Sarah Smithhisler, did witness the participants named above electronically sign this document.

VERIFICATION

The undersigned, Debra Osborne, being duly sworn, deposes and says she is Vice President of Generating Assets for Kentucky Power Company that she has personal knowledge of the matters set forth in the forgoing responses and the information contained therein is true and correct to the best of her information, knowledge and belief after reasonable inquiry.

Debra L Osborne
Signed on 2020/08/21 08:01:57 -8:00

Debra Osborne

STATE OF OHIO)
) Case No. 2020-00174
COUNTY OF FRANKLIN)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Debra Osborne, this 21st day of August 2020.

S Smithhisler
Signed on 2020/08/21 08:01:57 -8:00

Notary Public

NOTARY PUBLIC
STATE OF OHIO
Sarah Smithhisler
Commission # 2019-RE-775042
Electronic Notary Public
State of Ohio
My Comm Exp. Apr 29, 2024
Notary Stamp 2020/08/21 08:01:57 PST CDBC054FA64E

Notary ID Number: 2019-RE-775042

My Commission Expires: April 29, 2024

KY Discovery Verification - Keaton.docx

DocVerify ID:	5D648AB0-F237-4D24-A7CA-65FD192171AA
Created:	August 20, 2020 15:01:27 -8:00
Pages:	1
Remote Notary:	Yes / State: OH

E-Signature Summary

E-Signature 1: Allyson M Keaton (AMK)
August 21, 2020 10:28:36 -8:00 [59AA2D9B044D] [161.235.2.87]
alkeaton@aep.com (Principal) (Personally Known)

E-Signature Notary: Sarah Smithhisler (SRS)
August 21, 2020 10:28:36 -8:00 [2B6A69B13314] [167.239.221.85]
srsmithhisler@aep.com
I, Sarah Smithhisler, did witness the participants named above electronically sign this document.

VERIFICATION

The undersigned, Allyson M. Keaton, being duly sworn, deposes and says she is a Tax Analyst Principle for American Electric Power Service Corporation that she has personal knowledge of the matters set forth in the forgoing responses and the information contained therein is true and correct to the best of her information, knowledge and belief after reasonable inquiry.

Signed on 2020/08/21 10:28:36 -8:00

____

Allyson M. Keaton

STATE OF OHIO)
) Case No. 2020-00174
COUNTY OF FRANKLIN)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Allyson M. Keaton this 21st day of August 2020.

NOTARY PUBLIC
STATE OF OHIO
Sarah Smithhisler
Commission # 2019-RE-775042
Electronic Notary Public
State of Ohio
My Comm Exp. Apr 29, 2024
Notary Stamp 2020/08/21 10:28:36 PST 2B6A69B13314

Signed on 2020/08/21 10:28:36 -8:00

____

Notary Public

Notary ID Number: 2019-RE-775042

My Commission Expires: April 29, 2024

KY Discovery Verification - Stegall.docx

DocVerify ID:	AA56209F-7221-4A9F-9824-F538DF67E0FF
Created:	August 20, 2020 15:00:44 -8:00
Pages:	1
Remote Notary:	Yes / State: OH

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E-Signature Summary

E-Signature 1: Jason M. Stegall (JMS)
August 21, 2020 08:08:44 -8:00 [CB6EA5D4359F] [161.235.221.80]
jmstegall@aep.com (Principal) (Personally Known)

E-Signature Notary: Sarah Smithhisler (SRS)
August 21, 2020 08:08:44 -8:00 [6A784B1242DD] [167.239.221.85]
srsmithhisler@aep.com
I, Sarah Smithhisler, did witness the participants named above electronically sign this document.

VERIFICATION

The undersigned, Jason M. Stegall, being duly sworn, deposes and says he is a Manager-Regulatory Pricing & Analysis for American Electric Power Service Corporation that he has personal knowledge of the matters set forth in the forgoing responses and the information contained therein is true and correct to the best of his information, knowledge and belief after reasonable inquiry.

Signed on 2020/08/21 08:08:44 -8:00

Jason M. Stegall

STATE OF OHIO)
) Case No. 2020-00174
COUNTY OF FRANKLIN)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Jason M. Stegall this 21st day of August 2020.

NOTARY PUBLIC
STATE OF OHIO
Sarah Smithhisler
Commission # 2019-RE-775042
Electronic Notary Public
State of Ohio
My Comm Exp. Apr 29, 2024
Notary Stamp 2020/08/21 08:08:44 PST 6A784B1242DD

Signed on 2020/08/21 08:08:44 -8:00

Notary Public

Notary ID Number: 2019-RE-775042

My Commission Expires: April 29, 2024

KY Discovery Verification - Messner.docx

DocVerify ID: BA00C313-82AE-46B9-8D28-70985D68A219
Created: August 20, 2020 14:58:28 -8:00
Pages: 1
Remote Notary: Yes / State: OH

E-Signature Summary

E-Signature 1: Franz Messner (FDM)
August 21, 2020 07:34:24 -8:00 [959235C31A19] [167.239.221.83]
fdmessner@aep.com (Principal) (Personally Known)

E-Signature Notary: Sarah Smithhisler (SRS)
August 21, 2020 07:34:24 -8:00 [9427FE98D163] [167.239.221.85]
srsmithhisler@aep.com
I, Sarah Smithhisler, did witness the participants named above electronically sign this document.

VERIFICATION

The undersigned, Franz D. Messner, being duly sworn, deposes and says he is a Managing Director of Corporate Finance for American Electric Power Service Corporation that he has personal knowledge of the matters set forth in the forgoing responses and the information contained therein is true and correct to the best of his information, knowledge and belief after reasonable inquiry.

959235C31A19
Signed on 2020/08/21 07:34:24 -8:00

Franz D. Messner

STATE OF OHIO	)	
	)	Case No. 2020-00174
COUNTY OF FRANKLIN	)	

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Franz D. Messner, this 21st day of August 2020.

9427FE98D163
Signed on 2020/08/21 07:34:24 -8:00

Notary Public

Notary ID Number: 2019-RE-775042

My Commission Expires: April 29, 2024

KY Discovery Verification - Kaiser.docx

DocVerify ID:	15C6488C-A731-44FE-B91F-0B80387A0F4B
Created:	August 20, 2020 14:55:27 -8:00
Pages:	1
Remote Notary:	Yes / State: OH

E-Signature Summary

E-Signature 1: Kimberly K Kaiser (KKK)
August 21, 2020 07:10:12 -8:00 [F7A2B1556D19] [161.235.221.81]
kkkaiser@aep.com (Principal) (Personally Known)

E-Signature Notary: Sarah Smithhisler (SRS)
August 21, 2020 07:10:12 -8:00 [5FD8008CB6FB] [167.239.221.85]
srsmithhisler@aep.com
I, Sarah Smithhisler, did witness the participants named above electronically sign this document.

VERIFICATION

The undersigned, Kimberly K. Kaiser, being duly sworn, deposes and says she is a Director of Compensation for American Electric Power Service Corporation that she has personal knowledge of the matters set forth in the forgoing responses and the information contained therein is true and correct to the best of her information, knowledge and belief after reasonable inquiry.

Kimberly K Kaiser
Signed on 2020/08/21 07:10:12 -8:00

Kimberly K. Kaiser

STATE OF OHIO)
) Case No. 2020-00174
COUNTY OF FRANKLIN)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Kimberly K. Kaiser, this 21st day of August 2020.

S Smithhisler
Signed on 2020/08/21 07:10:12 -8:00

Notary Public

Notary ID Number: 2019-RE-775042

My Commission Expires: April 29, 2024

KY Discovery Verification - Cost.docx

DocVerify ID:	EC2D7233-7DAA-4A4E-B6FF-44EC5451CC84
Created:	August 20, 2020 14:56:14 -8:00
Pages:	1
Remote Notary:	Yes / State: OH

E-Signature Summary

E-Signature 1: Jaclyn Cost (JC)
August 21, 2020 07:18:28 -8:00 [B71E32381406] [161.235.221.83]
jncost1@aep.com (Principal) (Personally Known)

E-Signature Notary: Sarah Smithhisler (SRS)
August 21, 2020 07:18:28 -8:00 [284A991A1031] [167.239.221.85]
srsmithhisler@aep.com
I, Sarah Smithhisler, did witness the participants named above electronically sign this document.

VERIFICATION

The undersigned, Jaclyn N. Cost, being duly sworn, deposes and says she is a Regulatory Consultant Sr. for American Electric Power Service Corporation that she has personal knowledge of the matters set forth in the forgoing responses and the information contained therein is true and correct to the best of her information, knowledge and belief after reasonable inquiry.

B71E32381406
Jaclyn Cost
Signed on 2020/08/21 07:18:28 -8:00

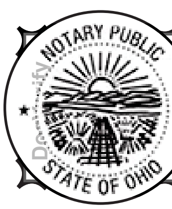
Jaclyn N. Cost

STATE OF OHIO)
) Case No. 2020-00174
COUNTY OF FRANKLIN)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Jaclyn N. Cost, this 21st day of August 2020.

284A991A1031
S Smithhisler
Signed on 2020/08/21 07:18:28 -8:00

Notary Public



Sarah Smithhisler
Commission # 2019-RE-775042
Electronic Notary Public
State of Ohio
My Comm Exp. Apr 29, 2024
Notary Stamp 2020/08/21 07:18:28 PST 284A991A1031

Notary ID Number: 2019-RE-775042

My Commission Expires: April 29, 2024

KY Discovery Verification - Carlin.docx

DocVerify ID:	8A729210-0383-4C2D-AC49-048C3E6CFE36
Created:	August 20, 2020 15:03:16 -8:00
Pages:	1
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E-Signature Summary

E-Signature 1: Andrew R.Carlin (ARC)
August 21, 2020 08:46:09 -8:00 [1B9964E2A919] [216.10.65.111]
arcarlin@aep.com (Principal) (Personally Known)

E-Signature Notary: Sarah Smithhisler (SRS)
August 21, 2020 08:46:09 -8:00 [23A15DB0B70B] [167.239.221.85]
srsmithhisler@aep.com
I, Sarah Smithhisler, did witness the participants named above electronically sign this document.

VERIFICATION

The undersigned, Andrew R. Carlin, being duly sworn, deposes and says he is a Director of Compensation and Executive Benefits for American Electric Power Service Corporation that he has personal knowledge of the matters set forth in the forgoing responses and the information contained therein is true and correct to the best of his information, knowledge and belief after reasonable inquiry.

Signed on 2020/08/21 08:46:09 -8:00

____

Andrew R. Carlin

STATE OF OHIO	)
	) Case No. 2020-00174
COUNTY OF FRANKLIN	)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Andrew R. Carlin this 21st day of August 2020.

Signed on 2020/08/21 08:46:09 -8:00

____

Notary Public

NOTARY PUBLIC
STATE OF OHIO

Sarah Smithhisler
Commission # 2019-RE-775042
Electronic Notary Public
State of Ohio
My Comm Exp. Apr 29, 2024

Notary Stamp 2020/08/21 08:46:09 PST 23A15DB0B70B

Notary ID Number: 2019-RE-775042

My Commission Expires: April 29, 2024

KY Discovery Verification - Whitney.docx

DocVerify ID:	EB80736F-178B-4C36-856C-DDC1023CD325
Created:	August 20, 2020 15:05:07 -8:00
Pages:	1
Remote Notary:	Yes / State: OH

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E-Signature Summary

E-Signature 1: Heather M. Whitney (HMW)
August 24, 2020 07:11:29 -8:00 [9141C1865874] [161.235.2.86]
hmwhitney@aep.com (Principal) (Personally Known)

E-Signature Notary: Sarah Smithhisler (SRS)
August 24, 2020 07:11:29 -8:00 [38E51008D86D] [167.239.2.87]
srsmithhisler@aep.com
I, Sarah Smithhisler, did witness the participants named above electronically sign this document.

VERIFICATION

The undersigned, Heather M. Whitney, being duly sworn, deposes and says she is the Director in Regulatory Accounting Services for American Electric Power Service Corporation that she has personal knowledge of the matters set forth in the forgoing responses and the information contained therein is true and correct to the best of her information, knowledge and belief after reasonable inquiry.

Heather M. Whitney
Signed on 2020/08/24 07:11:29 -8:00

Heather M. Whitney

STATE OF OHIO)
) Case No. 2020-00174
COUNTY OF FRANKLIN)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Heather M. Whitney this 24th day of August 2020.

NOTARY PUBLIC STATE OF OHIO
Sarah Smithhisler
Commission # 2019-RE-775042
Electronic Notary Public
State of Ohio
My Comm Exp. Apr 29, 2024
Notary Stamp 2020/08/24 07:11:29 PST 38E51008D86D

S Smithhisler
Signed on 2020/08/24 07:11:29 -8:00

Notary Public

Notary ID Number: 2019-RE-775042

My Commission Expires: April 29, 2024