

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Tenth Set of Data Requests
Dated March 24, 2021

DATA REQUEST

- 10-1** Refer to Kentucky Power's response to Commission Staff's Eighth Request for Information, Item 1, Attachment 1, which lists the customer invoiced costs of distribution impact studies performed between 2016 to present. Provide the total cost for the Project 1 Distribution Impact Study.

RESPONSE

Costs incurred for this study were not independently tracked and cannot be provided. The Interconnection rules limit reimbursement of costs associated with Distribution Impact Studies for state jurisdictional interconnection requests. Individual costs were not tracked because the reimbursable allowance of \$1,000 was less than 1/10th of the estimated cost to perform the study. The additional administrative and project management labor that would have been incurred to track costs above the reimbursable allowance would have only increased the costs borne by all other customers.

Witness: Jacob H. Crocker

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

10-2 Refer to Kentucky Power's response to Commission Staff's Ninth Request for Information (Staff's Ninth Request), Item 12. Provide the inventory unit cost for each size service line that is used to provide residential service.

RESPONSE

Below and attached as KPCO_R_KPSC_10_2_Attachment1 are the cost estimates for material and labor cost associated with the installation of Overhead Residential Services. These estimates are for the installation of the 3 basic sizes KPC installs for residential services which are #2 – Triplex All Aluminum, 1/0 Triplex All Aluminum and 4/0 Triplex, Aluminum Alloy conductor.

Service Type	Description	Cost
# 2 Overhead	#2 Triplex, All Aluminum, Residential	\$302.47
1/0 Overhead	1/0 Triplex, All Aluminum, Residential	\$526.71
4/0 Overhead	4/0 Triplex, Aluminum Alloy, Residential	\$530.60

Witness: Everett G. Phillips

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Tenth Set of Data Requests
Dated March 24, 2021

DATA REQUEST

- 10-3** Refer to Kentucky Power's response to Staff's Ninth Request, Item 15. For each type of distribution equipment that can be either installed overhead or underground, provide the installed unit cost for both types over the last five years. If annual data is not available, provide installed unit cost averages for each type of overhead and underground distribution equipment.
Provide the response in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible.

RESPONSE

See attachments KPC_R_KPSC_10_3_Attachment2, Kentucky Power Company Tariff U.D.D Underground Differential Cost Schedule and KPC_R_KPSC_10_3_Attachment1, Kentucky Power Company Underground Service Plan for Residential Subdivisions and Residential Service Laterals. Included in the attachments are the CIAC cost schedule and estimates associated labor and equipment cost required to install both overhead and underground services. The estimates are based on the average overhead and underground service type installed. The estimates are generated from Kentucky Power Company's Work Management System and are not available in excel spread sheet format.

Witness: Everett G. Phillips

KENTUCKY POWER COMPANY

P.S.C. KY. NO. 12 ORIGINAL SHEET NO. 40-1
CANCELLING P.S.C. KY. NO. 11 ORIGINAL SHEET NO. 40-1

**TARIFF U.D.C.
(UNDERGROUND DIFFERENTIAL COST SCHEDULE)**

**UNDERGROUND SERVICE PLAN FOR RESIDENTIAL SUBDIVISIONS
AND RESIDENTIAL SERVICE LATERALS**

APPLICABLE.

To Tariffs R.S., R.S.-L.M.-T.O.D., R.S.-T.O.D., R.S.-T.O.D. 2, and R.S.D.

RATE.

PRIMARY AND SECONDARY DISTRIBUTION SYSTEM

Charge: \$ 61.39 per foot of lot width (average x number of lots) when Company performs trenching, conduit installation, and backfilling to Company specifications.

Charge: \$ 31.67 per foot of lot width (average x number of lots) when Customer performs trenching, conduit installation, and backfilling to Company specifications.

SERVICE LATERALS

FROM OVERHEAD FACILITIES

Charge: \$ 24.88 per foot of trench length from Overhead Facilities when Company performs trenching, conduit installation, and backfilling to Company specifications.

Charge: \$ 8.38 per foot of trench length from Overhead Facilities when Customer performs trenching, conduit installation, and backfilling to Company specifications.

FROM UNDERGROUND FACILITIES

Charge: \$ 20.42 per foot of trench length from Underground Facilities when Company performs trenching, conduit installation, and backfilling to Company specifications.

Charge: \$ 4.27 per foot of trench length from Underground Facilities when Customer performs trenching, conduit installation, and backfilling to Company specifications.

REPLACEMENT OF USEFUL OVERHEAD SERVICE DROP

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

DATE OF ISSUE: March 12, 2021
DATE EFFECTIVE: Service Rendered On And After January 14, 2021
ISSUED BY: /s/ Brian K. West
TITLE: Vice President, Regulatory & Finance
By Authority Of an Order of the Public Service Commission
In Case No. 2020-00174 Dated January 13, 2021

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Tenth Set of Data Requests
Dated March 24, 2021

DATA REQUEST

- 10-4** Refer to Kentucky Power's response to Staff's Ninth Request, Item 19(a). Provide the date, time, costs allocated to the AEP transmission zone, and peak MWs for each ICP over the most recent ten years for the AEP transmission zone for PJM LSE OATT charges. Provide the response in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible.

RESPONSE

Kentucky Power does not possess the requested information prior to 2014 and is only able to provide seven years of information. The Company is reaching out to PJM to determine if PJM possesses the information prior to 2014. Kentucky Power will provide the additional three years of data if it is available from PJM.

Please see attachment KPCO_R_KPSC_10_4_Attachment1 for the requested information from 2014 through 2020.

Witness: Alex E. Vaughan

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Tenth Set of Data Requests
Dated March 24, 2021

DATA REQUEST

- 10-5** Refer to Kentucky Power's response to Staff's Ninth Request, Item 19(a). Provide the date, time, costs allocated to Kentucky Power and to all other AEP operating companies in accordance with the AEP Transmission Agreement, and peak MWs for each month (i.e., 12CP) over the most recent ten years. Provide the response in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible.

RESPONSE

Please refer to the Company's response to KPSC 10-4.

Witness: Alex E. Vaughan

Kentucky Power Company
KPSC Case No. 2020-00174
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Dated March 24, 2021

DATA REQUEST

- 10-6** Refer to Kentucky Power's response to Staff's Ninth Request, Item 19, generally. Explain whether Kentucky Power has an incentive to lower AEP's 1CP. In addition, explain all the programs, investments, and other approaches Kentucky Power has invested in over the last five years to lower the 1CP. Provide any performance metrics that Kentucky Power uses to evaluate its own performance for lowering the 1CP.

RESPONSE

Yes. Under the FERC-approved AEP Transmission agreement the Company would only receive its 12CP share of any 1CP related allocated cost reductions. The larger incentive is to lower the 12CP for cost allocation purposes. The Company has no targeted programs to do so besides its recently approved rider DRS. Rider DRS was approved on January 13, 2021 and currently has no participants. There is no performance to evaluate as of yet.

Witness: Alex E. Vaughan

Kentucky Power Company
KPSC Case No. 2020-00174
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Dated March 24, 2021

DATA REQUEST

- 10-7** Refer to Kentucky Power's response to Staff's Ninth Request, Item 19, generally. Explain whether Kentucky Power has an incentive to lower its monthly transmission peaks. In addition, explain all the programs, investments, and other approaches that Kentucky Power has invested in over the last five years to lower the 12CP. Provide any performance metrics that Kentucky Power uses to evaluate its own performance to lower the 12CP.

RESPONSE

Please refer to the Company's response to KPSC 10-6.

Witness: Alex E. Vaughan

Kentucky Power Company
KPSC Case No. 2020-00174
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Dated March 24, 2021

DATA REQUEST

- 10-8** Refer to the Direct Testimony of Alex E. Vaughan (Vaughan Direct Testimony), generally, and Kentucky Power's response to Kentucky Solar Industries Association, Inc.'s (KYSEIA) First Request for Information (KYSEIA's First Request), Item 2(c). Explain whether Kentucky Power determined if and how the implementation of IEEE 1547-2018 will impact: (a) the cost of reviewing interconnection applications, and (b) other distributed energy resource integration costs. If yes, please provide the study conducted and all associated workpapers.

RESPONSE

Kentucky Power has not performed an analysis regarding the impact of whole or partial adoption of IEEE 1547-2018 on interconnection costs for a) distributed generation interconnection applications, or b) any other Distributed Energy Resource (DER) interconnections. As the current interconnection guidelines cover only distributed generation interconnections, the cost allocation and reimbursement from the interconnection of all other DER types are not defined. Without clear rules and guidelines to establish a present state, it is difficult to confidently determine what impacts to costs would occur from any changes, including whole or partial adoption of standards such as IEEE 1547-2018.

Witness: Jacob H. Crocker

Kentucky Power Company
KPSC Case No. 2020-00174
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Dated March 24, 2021

DATA REQUEST

10-9 Refer to the January 13, 2021 Order, page 101. Provide the ordered, revised Tariff Cogen/SPP "avoided capacity cost rate based on the zonal net CONE for the delivery years that have an established CONE at the time of the contract and the last known net CONE for the remainder of the term." Also provide the generation resource, plant type, and capital cost per kW of capacity upon which each net CONE is based. Provide all supporting workpapers and exhibits in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible.

RESPONSE

Please see KPCO_R_KPSC_10_9_Attachment1 for the requested tariffs.

Please refer to PJM Manual 18, section 3.3.1 (KPCO_R_KPSC_10_9_Attachment 2) and its FERC approved open access transmission tariff (OATT) (<https://www.ferc.gov/industries-data/electric/power-sales-and-markets/open-access-transmission-tariff-oatt-reform>), both of which are publicly available.

The Reference Resource is a combustion turbine (CT) generating station, configured with a single General Electric Frame 7HA turbine as defined in the OATT.

Witness: Alex E. Vaughan

KENTUCKY POWER COMPANY

P.S.C. KY. NO. 12 ORIGINAL SHEET NO. 17-1 T
CANCELLING P.S.C. KY. NO. 11 ORIGINAL SHEET NO. 17-1 T

TARIFF COGEN/SPP I
(Cogeneration and/or Small Power Production--100 KW or Less)

AVAILABILITY OF SERVICE.

This tariff is available to customers with cogeneration and/or small power production (COGEN/SPP) facilities which qualify under Section 210 of the Public Utility Regulatory Policies Act of 1978, and which have a total design capacity of 100 KW or less. Such facilities shall be designed to operate properly in parallel with the Company's system without adversely affecting the operation of equipment and services of the Company and its customers, and without presenting safety hazards to the Company and customer personnel.

The customer has the following options under this tariff, which will affect the determination of energy and capacity and the monthly metering charges:

- Option 1 - The customer does not sell any energy or capacity to the Company, and purchases from the Company its net load requirements, as determined by appropriate meters located at one delivery point.
- Option 2 - The customer sells to the Company the energy and average on-peak capacity produced by the customer's qualifying COGEN/SPP facilities in excess of the customer's total load, and purchases from the Company its net load requirements, as determined by appropriate meters located at one delivery point.
- Option 3 - The customer sells to the Company the total energy and average on-peak capacity produced by the customer's qualifying COGEN/SPP facilities, while simultaneously purchasing from the Company its total load requirements, as determined by appropriate meters located at one delivery point.

MONTHLY CHARGES FOR DELIVERY FROM THE COMPANY TO THE CUSTOMER.

Such charges for energy, and demand where applicable, to serve the customer's net or total load shall be determined according to the tariff appropriate for the customer, except that Option 1 and Option 2 customers with cogeneration and/or small power production facilities having a total design capacity of more than 10 KW shall be served under demand-metered tariffs, and except that the monthly billing demand under such tariffs shall be the highest determined for the current and previous two billing periods. The above three-month billing demand provision shall not apply under Option 3.

ADDITIONAL CHARGES.

There shall be additional charges to cover the cost of special metering, safety equipment and other local facilities installed by the Company due to COGEN/SPP facilities, as follows:

Monthly Metering Charge

The additional monthly charge for special metering facilities shall be as follows:

- Option 1 - Not Applicable.

(Cont'd on Sheet No. 17-2)

KENTUCKY POWER COMPANY

P.S.C. KY. NO. 12 ORIGINAL SHEET NO. 17-2 T
 CANCELLING P.S.C. KY. NO. 11 ORIGINAL SHEET NO. 17-2 T

**TARIFF COGEN/SPP I (Cont'd.)
 (Cogeneration and/or Small Power Production--100 KW or Less)**

ADDITIONAL CHARGES. (Cont'd.)

Monthly Metering Charge (Cont'd.)

Options 2 & 3 - Where meters are used to measure the excess or total energy and average on-peak capacity purchased by the Company:

	<u>Single Phase</u>	<u>Polyphase</u>
Standard Measurement	\$9.25	\$12.10
T.O.D. Measurement	\$9.85	\$12.40

Under Option 3, when metering voltage for COGEN/SPP facilities is the same as the Company's delivery voltage, the customer shall, at his option, either route the COGEN/SPP totalized output leads through the metering point, or make available at the metering point for the use of the Company and, as specified by the Company, metering current leads which will enable the Company to measure adequately the total electrical energy and average capacity produced by the qualifying COGEN/SPP facilities, as well as to measure the electrical energy consumption and capacity requirements of the customer's total load. When metering voltage for COGEN/SPP facilities is different from the Company's delivery voltage, metering requirements and charges shall be determined specifically for each use.

Local Facilities Charge

Additional charges to cover "interconnection costs" incurred by the Company shall be determined by the Company for each case and collected from the customer. For Options 2 and 3, the cost of metering facilities shall be covered by the Monthly Metering Charge and shall not be included in the Local Facilities Charge. The customer shall make a one-time payment for the Local Facilities Charge at the time of installation of the required additional facilities, or, at his option, up to 12 consecutive equal monthly payments reflecting an annual interest charge as determined by the Company, but not to exceed the cost of the Company's most recent issue of long-term debt. If the customer elects the installment payment option, the Company may require a reasonable security deposit.

MONTHLY CREDITS OR PAYMENTS FOR ENERGY AND CAPACITY DELIVERIES.

Energy Credit

The following credits or payments from the Company to the customer shall apply for the electrical energy delivered to the Company:

Standard Meter - All KWH	Variable LMP at time of delivery ¢ KWH	T
T.O.D. Meter		
On-Peak KWH	Variable LMP at time of delivery ¢ KWH	T
Off-Peak KWH	Variable LMP at time of delivery ¢ KWH	T

Capacity Credit

If the customer contracts to deliver or produce a specified excess or total average capacity during the monthly billing period (monthly contract capacity), or a specified excess or total average capacity during the on-peak monthly billing period (on-peak contract capacity), then the following capacity credits or payment from the Company to the customer shall apply:

(Cont'd on Sheet No. 17-3)

KENTUCKY POWER COMPANY

P.S.C. KY. NO. 12 ORIGINAL SHEET NO. 17-3 T
CANCELLING P.S.C. KY. NO. 11 ORIGINAL SHEET NO. 17-3 T

TARIFF COGEN/SPP I (Cont'd.)
(Cogeneration and/or Small Power Production--100 KW or Less)

MONTHLY CREDITS OR PAYMENTS FOR ENERGY AND CAPACITY DELIVERIES. (Cont'd.)

Capacity Credit (Cont'd.)

If standard energy meters are used,

- A. 2020/2021 \$2.81 kW/month R
2021/2022 \$3.37 kW/month I
2022/2023 \$3.29 kW/month, times the lowest of: I
- (1) monthly contract capacity, or
 - (2) current month metered average capacity, i.e., KWH delivered to the Company or produced by COGEN/SPP facilities divided by 730, or
 - (3) lowest average capacity metered during the previous two months if less than monthly contract capacity.

If T.O.D. energy meters are used,

- B. 2020/2021 \$6.74 kW/month R
2021/2022 \$8.09 kW/month I
2022/2023 \$7.89 kW/month, times the lowest of: I
- (1) on-peak contract capacity, or
 - (2) current month on-peak metered average capacity, i.e., on-peak KWH delivered to the Company or produced by COGEN/SPP facilities divided by 305 or
 - (3) lowest on-peak average capacity metered during the previous two months, if less than on-peak contract capacity.

The above energy and capacity credit rates are subject to revisions from time to time as approved by the Commission.

ON-PEAK AND OFF-PEAK PERIODS.

The on-peak period shall be defined as starting at 7:00A.M. and ending at 9:00 P.M., local time, Monday through Friday.

The off-peak period shall be defined as starting at 9:00 P.M. and ending at 7:00A.M. local time, Monday through Friday, and all hours of Saturday and Sunday.

CHARGES FOR CANCELLATION OR NON PERFORMANCE CONTRACT.

If the customer should, for a period in excess of six months, discontinue or substantially reduce for any reason the operation of cogeneration and/or small power production facilities which were the basis for the monthly contract capacity or the on-peak contract capacity, the customer shall be liable to the Company for an amount equal to the total difference between the actual payments for capacity paid to the customer and the payments for capacity that would have been paid to the customer pursuant to this Tariff COGEN/SPP I or any successor tariff. The Company shall be entitled to interest on such amount at the rate of the Company's most recent issue of long-term debt at the effective date of the contract.

TERM OF CONTRACT.

Contracts under this tariff shall be made for a period not less than five (5) years. A Qualifying Facility can request that avoided cost rates be set on an "as available" basis or when a legally enforceable obligation is established. TN

DATE OF ISSUE: February 2, 2021
DATE EFFECTIVE: Service Rendered On And After January 14, 2021
ISSUED BY: /s/ Brian K. West
TITLE: Vice President, Regulatory & Finance
By Authority Of an Order of the Public Service Commission
In Case No. 2020-00174 Dated January 13, 2021

KENTUCKY POWER COMPANY

P.S.C. KY. NO. 12 ORIGINAL SHEET NO. 18-1 T
CANCELLING P.S.C. KY. NO. 11 ORIGINAL SHEET NO. 18-1 T

**TARIFF COGEN/SPP II
(Cogeneration and/or Small Power Production--Over 100 KW)**

AVAILABILITY OF SERVICE.

This tariff is available to customers with cogeneration and/or small power production (COGEN/SPP) facilities which qualify under Section 210 of the Public Utility Regulatory Policies Act of 1978, and which have a total design capacity of over 100 KW but less than 20,000 KW. Such facilities shall be designed to operate properly in parallel with the Company's system without adversely affecting the operation of equipment and services of the Company and its customers, and without presenting safety hazards to the Company and customer personnel.

The customer has the following options under this tariff, which will affect the determination of energy and capacity and the monthly metering charges:

- Option 1 - The customer does not sell any energy or capacity to the Company, and purchases from the Company its net load requirements, as determined by appropriate meters located at one delivery point.
- Option 2 - The customer sells to the Company the energy and average on-peak capacity produced by the customer's qualifying COGEN/SPP facilities in excess of the customer's total load, and purchases from the Company its net load requirements, as determined by appropriate meters located at one delivery point.
- Option 3 - The customer sells to the Company the total energy and average on-peak capacity produced by the customer's qualifying COGEN/SPP facilities, while simultaneously purchasing from the Company its total load requirements, as determined by appropriate meters located at one delivery point.

MONTHLY CHARGES FOR DELIVERY FROM THE COMPANY TO THE CUSTOMER.

Such charges for energy, and demand where applicable, to serve the customer's net or total load shall be determined according to the tariff appropriate for the customer, except that Option 1 and Option 2 customers shall be served under demand-metered tariffs, and except that the monthly billing demand under such tariffs shall be the highest determined for the current and previous two billing periods. The above three-month billing demand provision shall not apply under Option 3.

ADDITIONAL CHARGES.

There shall be additional charges to cover the cost of special metering, safety equipment and other local facilities installed by the Company due to COGEN/SPP facilities, as follows:

Monthly Metering Charge

The additional monthly charge for special metering facilities shall be as follows:

- Option 1 - Not Applicable.

(Cont'd on Sheet No. 18-2)

KENTUCKY POWER COMPANY

P.S.C. KY. NO. 12 ORIGINAL SHEET NO. 18-2 T
 CANCELLING P.S.C. KY. NO. 11 ORIGINAL SHEET NO. 18-2 T

TARIFF COGEN/SPP II (Cont'd.)
(Cogeneration and/or Small Power Production--Over 100 KW)

ADDITIONAL CHARGES. (Cont'd.)

Monthly Metering Charge (Cont'd)

Options 2 & 3-	Where meters are used to measure the excess or total energy and average on peak capacity purchased by the Company:		
		<u>Single Phase</u>	<u>Polyphase</u>
	Standard Measurement	\$9.25	\$12.10
	T.O.D. Measurement	\$9.85	\$12.40

Under Option 3, when metering voltage for COGEN/SPP facilities is the same as the Company's delivery voltage, the customer shall, at his option, either route the COGEN/SPP totalized output leads through the metering point, or make available at the metering point for the use of the Company and, as specified by the Company, metering current leads which will enable the Company to measure adequately the total electrical energy and average capacity produced by the qualifying COGEN/SPP facilities, as well as to measure the electrical energy consumption and capacity requirements of the customer's total load. When metering voltage for COGEN/SPP facilities is different from the Company's delivery voltage, metering requirements and charges shall be determined specifically for each case.

Local Facilities Charge

Additional charges to cover "interconnection costs" incurred by the Company shall be determined by the Company for each case and collected from the customer. For Options 2 and 3, the cost of metering facilities shall be covered by the Monthly Metering Charge and shall not be included in the Local Facilities Charge. The customer shall make a one-time payment for the Local Facilities Charge at the time of installation of the required additional facilities, or, at his option, up to 12 consecutive equal monthly payments reflecting an annual interest charge as determined by the Company, but not to exceed the cost of the Company's most recent issue of long-term debt. If the customer elects the installment payment option, the Company may require a reasonable security deposit.

MONTHLY CREDITS OR PAYMENTS FOR ENERGY AND CAPACITY DELIVERIES.

Energy Credit

The following credits or payments from the Company to the customer shall apply for the electrical energy delivered to the Company:

Standard Meter - All KWH	Variable LMP at time of delivery ¢ KWH	T
T.O.D. Meter		
On-Peak KWH	Variable LMP at time of delivery ¢ KWH	T
Off-Peak KWH	Variable LMP at time of delivery ¢ KWH	T

(Cont'd on Sheet No. 18-3)

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KENTUCKY POWER COMPANY

P.S.C. KY. NO. 12 ORIGINAL SHEET NO. 18-3 T
CANCELLING P.S.C. KY. NO. 11 ORIGINAL SHEET NO. 18-3 T

TARIFF COGEN/SPP II (Cont'd.)
(Cogeneration and/or Small Power Production--Over 100 KW)

MONTHLY CREDITS OR PAYMENTS FOR ENERGY AND CAPACITY DELIVERIES. (Cont'd.)

Capacity Credit

If the customer contracts to deliver or produce a specified excess or total average capacity during the monthly billing period (monthly contract capacity), or a specified excess or total average capacity during the on-peak monthly billing period (on-peak contract capacity), then the following capacity credits or payment from the Company to the customer shall apply:

If standard energy meters are used,

- A. 2020/2021 \$2.81 kW/month R
2021/2022 \$3.37 kW/month I
2022/2023 \$3.29 kW/month, times the lowest of: I
- (1) monthly contract capacity, or
 - (2) current month metered average capacity, i.e., KWH delivered to the Company or produced by COGEN/SPP facilities divided by 730, or
 - (3) lowest average capacity metered during the previous two months if less than monthly contract capacity.

If T.O.D. energy meters are used,

- B. 2020/2021 \$6.74 kW/month R
2021/2022 \$8.09 kW/month I
2022/2023 \$7.89 kW/month, times the lowest of: I
- (1) on-peak contract capacity, or
 - (2) current month on-peak metered average capacity, i.e., on-peak KWH delivered to the Company or produced by COGEN/SPP facilities divided by 305, or
 - (3) lowest on-peak average capacity metered during the previous two months, if less than on-peak contract capacity.

The above energy and capacity credit rates are subject to revisions from time to time as approved by the Commission.

ON-PEAK AND OFF-PEAK PERIODS.

The on-peak period shall be defined as starting at 7:00 A.M. and ending at 9:00 P.M., local time, Monday through Friday.

The off-peak period shall be defined as starting at 9:00 P.M. and ending at 7:00 A.M., local time, Monday through Friday, and all hours of Saturday and Sunday.

(Cont'd on Sheet No. 18-4)

KENTUCKY POWER COMPANY

P.S.C. KY. NO. 12 ORIGINAL SHEET NO. 18-4 T
CANCELLING P.S.C. KY. NO. XX _____ SHEET NO. 18-4 T

CHARGES FOR CANCELLATION OR NON PERFORMANCE CONTRACT.

If the customer should, for a period in excess of six months, discontinue or substantially reduce for any reason the operation of cogeneration and/or small power production facilities which were the basis for the monthly contract capacity or the on-peak contract capacity, the customer shall be liable to the Company for an amount equal to the total difference between the actual payments for capacity paid to the customer and the payments for capacity that would have been paid to the customer pursuant to this Tariff COGEN/SPP II or any successor tariff. The Company shall be entitled to interest on such amount at the rate of the Company's most recent issue of long-term debt at the effective date of the contract.

TERM OF CONTRACT.

Contracts under this tariff shall be made for a period not less than five (5) years. A Qualifying Facility can request that avoided cost rates be set on an "as available" basis or when a legally enforceable obligation is established. TN |

DATE OF ISSUE: February 2, 2021
DATE EFFECTIVE: Service Rendered On And After January 14, 2021
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TITLE: Vice President, Regulatory & Finance
By Authority Of an Order of the Public Service Commission
In Case No. 2020-00174 Dated January 13, 2021



resource procurement for the PJM Region or LDA is lower at the higher level of reliability than it would be at the target level and the associated Variable Resource Requirement Curve price.

3.3.1 Cost of New Entry

The value for Cost of New Entry (CONE) (in ICAP terms) is determined in accordance with Attachment DD of the Open Access Transmission Tariff (OATT), Section 5.10 (a) (iv). The Reference Resource is a combustion turbine (CT) generating station, configured with a single General Electric Frame 7HA turbine as defined in the OATT.

For the Incremental Auctions for the 2019/2020, 2020/2021, and 2021/2022 Delivery Years, the Cost of New Entry for the PJM Region and each modeled LDA shall be the respective value used in the Base Residual Auction for such Delivery Year and LDA.

The gross Cost of New Entry values for the following four CONE Areas for the 2022/2023 Delivery Year are specified in the OATT, Attachment DD, Section 5.10 (a) (iv)(A). :

1. AE, DPL, JCPL, PECO, PSEG, RECO ("CONE Area 1");
2. BGE, PEPCO ("CONE Area 2");
3. AEP, APS, COMED, DAYTON, DLCo, ATSI, DEOK, EKPC, Dominion ("CONE Area 3");
and
4. METED, PENELEC, PPL ("CONE Area 4").

The gross Cost of New Entry value for the PJM Region shall be the average of the gross CONE values for the four CONE Areas.

For the 2023/2024 Delivery Year, the gross CONE values specified in the OATT for the 2022/2023 Delivery Year shall be adjusted to reflect changes in generating plant construction costs based on changes in the applicable United States Bureau of Labor Statistics (BLS) Composite Index, and then adjusted further by a factor of 1.022 to reflect the annual decline in bonus appreciation scheduled under federal tax law, to establish the CONE values used in the development of the Variable Resource Requirement Curves for the PJM Region and the modeled LDAs for all RPM Auctions for the 2023/2024 Delivery Year.

The applicable BLS Composite Index for a Delivery Year and CONE Area shall be the most recently published twelve-month change, at the time CONE values are required to be posted for the Base Residual Auction for such Delivery Year, in a composite of the BLS Quarterly Census of Employment and Wages for Utility System Construction (weighted 20%), the BLS Producer Index for Construction Materials and Components (weighted 55%), and the BLS Producer Price Index for Turbines and Turbine Generator Sets (weighted 25%). The Quarterly Census of Employment and Wages for Utility System Construction will be based on the state of New Jersey for CONE Area 1, Maryland for CONE Area 2, Ohio for CONE Area 3, and Pennsylvania for CONE Area 4. For subsequent Delivery Years, the Benchmark CONE values will be the CONE values used in the development of the Variable Resource Requirement Curves for the prior Delivery Year. The applicable BLS Composite Index for the Delivery Year will be applied to the Benchmark CONE values, and then multiplying the result by 1.022, to establish the CONE values used in the development of the Variable Resource Requirement Curves for the PJM Region and the modeled LDAs for all RPM Auctions for such Delivery Year.

Kentucky Power Company
KPSC Case No. 2020-00174
Commission Staff's Tenth Set of Data Requests
Dated March 24, 2021

DATA REQUEST

10-10 Refer to Vaughan Direct Testimony, generally. Provide all analysis that Kentucky Power conducted on seasonal differentiation in developing Tariff NMS II rates.

RESPONSE

The applicable loads and generation profiles and their impacts on avoided costs and class cost allocations have been evaluated at the hourly level. For this information please refer to the Company's response to Staff 3-1 (specifically KPCO_R_KPSC_3_1_Attachment17), The Company's response to KYSEIA 1-3, the Company's original class cost of service study and its associated workpapers, and the Company's March 25, 2021 supplemental class cost of service and associated workpapers.

Witness: Alex E. Vaughan

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DATA REQUEST

- 10-11** Refer to Kentucky Power's response to Commission Staff's Fourth Request for Information (Staff's Fourth Request), Item 102, including KPCO_R_KPSC_4_102_ConfidentialAttachment1.
- a. Define Kentucky Power's residual aggregate forward pricing and provide the source/reference in its entirety.
 - b. Provide both the underlying data and all workpapers for the confidential attachment in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible.
 - c. Explain in detail how Kentucky Power translated the underlying data into the values in the Peak, Off Peak, and ATC categories. Provide the workpapers with a narrative explaining your methodology.
 - d. Describe the steps detailed in the Rebuttal Testimony of Alex E. Vaughan (Vaughan Rebuttal Testimony), page 28, including whether the "value of locational transmission losses are included" in the residual load aggregate forward pricing data and how "the energy value is then grossed up for avoided primary distribution level losses." Provide the citation(s) where "the energy value is then grossed up" occurs in the workpapers.
 - e. Provide the most recent update of the residual aggregate forward pricing data available looking forward five years in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible.
 - f. Explain whether the data in KPCO_R_KPSC_5_18_Attachment1 represent Kentucky Power's residual load aggregate? If so, update that spreadsheet to include 2020 actual values for Kentucky Power's residual load aggregate.
 - g. For each of the above sub-questions, provide all associated workpapers in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible. For each workpaper, provide references for all inputs and, for cells that contain hardcoded numbers, provide the subsequent workpaper for the calculation. If no subsequent workpaper exists for an input or hardcoded cell, provide the origin of the number with a detailed explanation of its derivation.

RESPONSE

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- a. The Kentucky Power residual load aggregate is a pricing point in PJM's locational marginal price (LMP) model at which they Company's load settles in PJM's energy market. Quoted "Forward Pricing" is when one counterparty quotes to another counterparty a price at which they are willing to buy or sell energy for some period of time into the future. Please reference www.PJM.com for more information on PJM's LMP model.
- b. There is no underlying data or workpaper, it is a quoted price from a counterparty or counterparties, please refer to the Company's response to part A.
- c. The underlying data was quoted in that way. In PJM, on-peak power pricing is quoted as weekdays between the hour beginning 7AM through the hour beginning 11PM. All other weekday hours, all weekend hours and NERC holidays are off-peak. ATC is the mathematical weighted average of those on-peak and off-peak hours.
- d. LMPs include 3 components:
1. The PJM hourly system energy price
 2. The locational financial value of marginal transmission losses
 3. The locational financial value of transmission congestion
- All three components are accounted for in a LMP price, thus the value of components is included in a price for a specific pricing point, that is by definition what makes it a "Locational Price".
- Regarding the gross up for distribution losses, please refer to the Company's response to KPSC Staff 3-1, specifically [KPCO_R_KPSC_3_1_Attachment15](#), Cogen tab, excel rows 132-148; and [KPCO_R_KPSC_3_1_Attachment17](#), Excess Gen Price tab, excel rows 14-17.
- e. Please refer to [KPCO_R_KPSC_10_11_ConfidentialAttachment1](#) for the requested information.
- f. Yes, the historic pricing included in [KPCO_R_KPSC_5_18_Attachment1](#) is for the Company's residual load aggregate beginning on June 1, 2015 as evidenced by the Node reference of "AEPKYRESIDAGG.RESIDUALMETEREDEDC" in column C.
- The requested information is publicly available at https://dataminer2.pjm.com/feed/da_hrl_lmps. The Company's residual load aggregate is pricing node ID 1269364671.
- g. The Company has no further responsive documents.

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Witness: Alex E. Vaughan

This attachment is redacted in its entirety.

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DATA REQUEST

10-12 Refer to Kentucky Power's response to the Joint Intervenors' Second Request for Information, Item 20, and to Case No. 2019-00443,2 Kentucky Power's 2019 Integrated Resource Plan (IRP), generally. Provide all variable and fixed cost data that were used to calculate the cost of emission allowances in the IRP planning process, including associated workpapers and calculations, in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible. Clearly indicate which emission product each cost represents, what generating source it pertains to, and what units it is measured in.

RESPONSE

Below is Kentucky Power's effort to respond fully to the data request. Although the data request appears to seek information regarding the Company's emissions allowances, the referenced Joint Intervenors' (JI) 2-20 relates to the sale and leaseback arrangement for Rockport Unit 2 and appears to be unrelated to emission allowances. In addition, the reference to "Kentucky Power's 2019 Integrated Resource Plan (IRP), generally" and "emission allowances in the IRP planning process" made it difficult to determine the information being sought. In particular, the description leaves undefined the type of allowances in question, the time period over which the request is applicable, or whether the information sought relates to the market price of emission allowances themselves, or the total dollars over a period that would be incurred as a result of the operation of emitting resources.

With the above explanation, Kentucky Power responds as follows:
As the Company described in response to KIUC 2-07 in Case No. 2019-00443 before this Commission, "[e]missions (\$/ton)... are direct inputs to the Aurora model." Those emission allowance prices, in nominal and real dollars, were provided in KIUC 1-09 Attachments 3 and 4, respectively. Those attachments are included as KPCO_R_KPSC_10_12_Attachment1 and KPCO_R_KPSC_10_12_Attachment2, respectively to this response... Each emission cost in the files represents the cost of emitting one ton of a particular emission, and represent solely variable costs associated with emissions that are included in the Company's modeling within the IRP. There are no modeled fixed costs associated with emission allowances.

Various environmental regulations, and their associated emissions incorporated into the Company's IRP planning, are included in Section 3.3 of the Company's filed IRP

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in Case No. 2019-00443. The emission rates of new technologies are included in Exhibit D to the Company's IRP.

Witness: Brian K. West

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DATA REQUEST

- 10-13** Refer to Kentucky Power's response to KYSEIA's First Request, Item 28, Confidential Attachment 1.
- a. Provide the underlying workpapers and data for this summary table in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible. Provide links or copies of all references used to support the workpapers.
 - b. Describe the source and purpose for each of these costs including the regulation to which each is responsive. Explain how each cost category was calculated (ex: what portion of the total is based on fixed vs variable compliance costs and how those individual components are calculated). List all assumptions made in projecting these costs.
 - c. Provide Kentucky Power's environmental compliance costs for the past five years in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible, including all the detail requested in parts a and b of this question.

RESPONSE

- a. See KPCO_R_KPSC_10_13_CONFIDENTIAL_Attachment1, for the requested information. This file includes the data that underlies the summary table provided in response to KYSEIA 1-28 Confidential Attachment 1 (and previously in response to AG 1-10 in the Company's 2019 IRP before this Commission, Case No. 2019-00443). Note that the data included therein has no underlying calculations as its source is the Company's accounting system. The Pivot Table function was used in Excel to organize the data, which was then pasted as values into the summary table. The 151 rows of data were manually tagged as associated with either Air, Solid Waste, or Water regulations.
- b. Because of the all encompassing nature of the requested information, Kentucky Power cannot provide "all assumptions" related to these forecasted capital and O&M expenses or, the "source and purpose of each of these costs including the regulation wo which each is responsive."

The projections have been separated into costs associated with air programs, water programs, and solid waste management programs. It is not possible to assign costs based on a specific regulation since capital investments and operation and maintenance (O&M) expenses are often incurred to satisfy multiple regulatory requirements. In addition, project descriptions are included consistent with information used by the Company to make its designations for this data. The regulatory requirements and the related capital and O&M costs addressed in each of the three major categories are briefly addressed below:

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Air Program Requirements and Costs: These requirements include the Mercury and Air Toxics Standards, state and federal requirements necessary to achieve and maintain the current NAAQS, the existing CSAPR, and other known requirements of state and federal law. It also includes costs associated with air program enforcement actions that have been resolved, such as the implementation of the NSR Consent Decree. The states in which Kentucky Power's units are located have not yet finalized any performance standards for carbon dioxide emissions from power plants, and the Clean Power Plan has been repealed. The costs included in these projections generally pertain to the completion, operation and maintenance of the major controls installed at the plants, including Electrostatic Precipitators (ESPs), Selective Catalytic Reduction (SCR) systems, Flue Gas Desulfurization (FGD) systems, Dry Sorbent Injection (DSI) systems, Activated Carbon Injection (ACI) systems, and associated equipment.

Water Program Requirements and Costs: These requirements would include the implementation of the final ELGs, expenses associated with the §316(b) cooling water intake requirements, and other known state and federal requirements implementing the Clean Water Act. These costs generally reflect upgrades to and operation of wastewater treatment systems and known requirements of state and federal law addressing the quality of wastewaters discharged from our facilities. Kentucky Power does not anticipate significant expenditures associated with the §316(b) program, but may incur expenses for FGD wastewater and other ELG standards. These costs do not include costs required to close surface impoundments or other remedial measures associated with coal ash management units.

Solid Waste Management Programs: These programs include state and federal programs specifying requirements for surface impoundments and landfills used to manage coal ash and FGD by-products, including the CCR rules. Costs to close unlined surface impoundments, ongoing operations and monitoring, post-closure care, remediation, and planned expansions of landfills at coal-fired units are typical costs included for these programs.

c. See KPCO_R_KPSC_10_13_Attachment2 for the requested information. The worksheet labeled '2016-2020 Environ Costs' contains the output from the Company's accounting system for items tagged as environmental spend for the period in question. The worksheets labeled 'Staff 10-13 Worksheet 1' and 'Staff 10-13 Worksheet 2' contain data formatted similar to that provided in KPCO_R_KPSC_10_13_CONFIDENTIAL_Attachment1.

Witness: Alex E. Vaughan

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DATA REQUEST

- 10-14** Refer to proposed TARIFF R.S. - T.O.D.2 (Experimental Residential Service Time-of-Day 2). Explain how Kentucky Power selected the on and off peak and seasonal time periods, and provide all underlying analysis and workpapers in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible.

RESPONSE

Please see KPCO_R_KPSC_10_14_Attachment1 and KPCO_R_KPSC_10_14_Attachment2 which provide the rationale for how the seasonal time periods were chosen in Case No. 2009-00459. KPCO_R_KPSC_10_14_Attachment3 and KPCO_R_KPSC_10_14_attachment4 are the relevant workpapers.

Witness: Alex E. Vaughan

ROUSH - 13

1 **Time-of-Day Service Offerings**

2 **Q. PLEASE EXPLAIN THE COMPANY'S NEW TIME-OF-DAY SERVICE**
3 **OFFERINGS.**

4 A. KPCo is proposing experimental Time-of-Day service tariffs for Residential and
5 Small General Service customers and a Time-of-Day service for Large General
6 Service customers. Each of these tariffs is an additional option for customers.

7 The experimental tariffs for Residential and Small General Service
8 customers include three distinct energy charges for three time periods, winter on-
9 peak, summer on-peak and all other hours. The winter on-peak period includes
10 the weekday hours of 7 A.M. to 11 A.M. and 6 P.M to 10 P.M. during the months
11 of November through March. The summer on-peak period includes the weekday
12 hours of Noon to 6 P.M from May 15 through September 15. All other weekday
13 hours, all weekend hours and the entire period from April 1 to May 14 and
14 September 16 to October 31 are off-peak hours.

15 The time periods were selected based upon an evaluation of KPCo's load
16 and also hourly market prices. The intent was to provide customers with a simple
17 schedule (i.e. one that could be put on a refrigerator magnet) that would guide
18 their energy usage decisions based upon the most important hours from an
19 operations and cost perspective.

20 The tariffs were designed to be revenue neutral on an annual basis. In
21 other words, KPCo customers, on average, would not pay any more or less by
22 selecting the experimental tariff, except for \$3.55 per month for the additional
23 cost of a more sophisticated meter to measure the time-of-day usage.

ROUSH - 14

1 KPCo's proposed Large General Service Time-of-Day tariff is an
2 extension of KPCo's existing Medium General Service Time-of-Day tariff to
3 larger customers. The Large General Service Time-of-Day tariff is available to
4 customers of up to 1,000 kW and includes a demand charge which primarily
5 reflects the cost of local facilities that are necessary regardless of the time that a
6 customer is using electricity. As with the experimental tariffs, the Large General
7 Service Time-of-Day tariff was designed to be revenue neutral on an annual basis.

Changes in Quantity Power Tariff Q.P.

- 8
- 9 **Q. PLEASE EXPLAIN THE CHANGES TO THE CURRENT TARIFF Q.P.**
- 10 A. Tariff Q.P. applies to commercial and industrial customer with demand less than
11 7,500 kW and requires customer to contract for no less than 1,000 kW. Currently,
12 Tariff Q.P. includes a monthly service charge, an on-peak demand charge, an off-
13 peak excess demand charge, a reactive demand charge and an energy charge. The
14 current structure of Tariff Q.P. is similar to Tariff C.I.P.-T.O.D. in that customer
15 costs are predominantly collected in the monthly service charge, demand costs are
16 predominantly collected in the demand charges and energy costs are
17 predominantly collected in the energy charge, a D-E-C rate. Tariff C.I.P.-T.O.D.
18 has historically been established as a full cost D-E-C rate, whereas Tariff Q.P. has
19 historically been a nearly full cost D-E-C rate with some demand costs collected
20 through the energy charge. This D-E-C rate structure makes the transition from
21 Tariff Q.P. to Tariff C.I.P.-T.O.D. relatively easy for customers when their
22 demands exceed 7,500 kW. However, the transition from Tariff L.G.S. to Tariff
23 Q.P. is much more difficult. Under Tariff L.G.S., a significant portion of demand

Kentucky Power Company

REQUEST

Refer to pages 13 and 14 of the Roush Testimony.

In discussing the proposed experimental time-of-day service tariffs for residential, small general service, and large general service customers, Mr. Roush states that the tariffs were designed to be revenue neutral and that on average, customers would not pay more or less by selecting the experimental tariff.

- a. Given that statement, provide the incentive customers would have to choose the time-of-day rate.
- b. Given that Kentucky Power does not know where current customer usage falls within the three time periods included in the proposed tariffs, explain how Kentucky Power was able to design the tariffs to be revenue neutral.

RESPONSE

- a. The objective of the time-of-day tariff offerings is that they provide an incentive to customers to manage their usage by consuming less during high price periods and/or shifting usage to lower cost periods. Thus customers do not simply save money by selecting the tariff, they save money by responding to the price signals provided by the tariff.
- b. The Company utilized its load research information to develop class kWh usage by pricing period. This allowed the Company to design the rates on a revenue neutral basis for each class.

WITNESS: David M Roush

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Dated March 24, 2021

DATA REQUEST

10-15 Refer to Vaughan Rebuttal Testimony, Exhibits AEV-R5 and AEV-R6. Provide all supporting workpapers in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible. For each workpaper, provide references for all inputs and, where cells contain numbers that are hardcoded, provide the subsequent workpaper for the calculation. If no subsequent workpaper exists for an input or hardcoded cell, provide the origin of the number with a detailed explanation of its derivation.

RESPONSE

Please refer to KPCO_R_KPSC_10_15_Attachments 1&2 for the Excel versions of AEV-R5 and AEV-R6. Please also refer to the Company's response to KPSC Staff 4-82, KYSEIA 1-3 and KYSEIA 1-4, KYSEIA 1-6 for all of the workpapers and explanations of the inputs included in AEV-R5 and AEV-R6. Please also refer to Company's witness Vaughan's rebuttal testimony where these exhibits are discussed.

Witness: Alex E. Vaughan

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DATA REQUEST

10-16 Refer to Vaughan Rebuttal Testimony, Exhibits AEV-R5 and AEV-R6 tab "Ancillaries." Provide the references for each data input and explain what time period each input was calculated over.

RESPONSE

The avoided ancillary service charge items are load based PJM ancillary services. The avoided cost amounts were based upon AEP billed amounts for the 12 months ended August of 2020, as they were updated for and included in Company witness Vaughan's rebuttal testimony.

Witness: Alex E. Vaughan

Kentucky Power Company
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DATA REQUEST

- 10-17** Refer to the Testimony of Joint Intervenors' Witness Karl R. Rábago, pages 17–18. Explain in detail why Kentucky Power did not conduct a forward-looking, long-term, incremental analysis in developing Tariff NMS II rates.

RESPONSE

The Company did not conduct a forward looking long term incremental analysis as described by Mr. Rábago to value the avoided costs of excess generation from net metering systems because it is not required under SB 100, avoided costs for the test period in question and the near future are more realistic indicators of the excess generation's impact on actual avoided electric utility cost of service costs, and forward looking long term incremental analysis is not used to determine any of the Company's other just and reasonable Commission approved tariff rates. Furthermore, all net metering customers have the option of taking service under COGEN SPP which is a Commission approved tariff that reflects the long term avoided costs of incremental distribution level generation for the Company.

Witness: Alex E. Vaughan



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E-Signature 1: Everett G. Phillips (EGP)

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egphillips@aep.com (Principal) (Personally Known)

E-Signature Notary: S. Smithhisler (SRS)

March 31, 2021 07:07:30 -8:00 [1BE605248175] [167.239.221.83]
srsmithhisler@aep.com
I, S. Smithhisler, did witness the participants named above electronically sign this document.



VERIFICATION

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

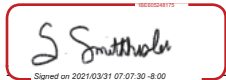
Everett G. Phillips
Signed on 2021/03/31 07:07:30 -8:00

Everett G. Phillips

State of Ohio)
)
County of Franklin)

Case No. 2021-00174

Subscribed and sworn before me, a Notary Public, by Everett G. Phillips this 31st day of March, 2021.


Signed on 2021/03/31 07:07:30 -8:00

Notary Public

My Commission Expires April 29, 2024



FCAF5C53-73B7-46B2-B20A-2F4430D1679A --- 2021/03/31 06:57:40 -8:00 --- Remote Notary



VERIFICATION

The undersigned, Brian K. West, being duly sworn, deposes and says he is Vice President, Regulatory & Finance for Kentucky Power Company, that he has personal knowledge of the matters set forth in the foregoing responses and the information contained therein is true and correct to the best of his information, knowledge, and belief.



Brian K. West

State of Indiana)
) ss Case No. 2020-00174
County of Allen)

Subscribed and sworn to before me, a Notary Public, in and for said County and State, Brian K. West this 29th day of March, 2021.

Regiana M.
Sistevaris

 Digitally signed by Regiana M. Sistevaris
Date: 2021.03.29 08:04:33 -04'00'

Regiana M. Sistevaris, Notary Public

My Commission Expires: January 7, 2023



Vaughan ML CPCN DR.docx

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E-Signature 1: Alex E Vaughan (AEV)

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 aevaughan@aep.com (Principal) (Personally Known)

E-Signature Notary: Brenda Williamson (BW)

March 25, 2021 11:34:11 -8:00 [96BF72DF2474] [167.239.2.88]
 bgwilliamson@aep.com
 I, Brenda Williamson, 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 2021/03/25 11:34:11 -8:00

Alex E. Vaughan

STATE OF OHIO

)

) Case No. 2020-00174

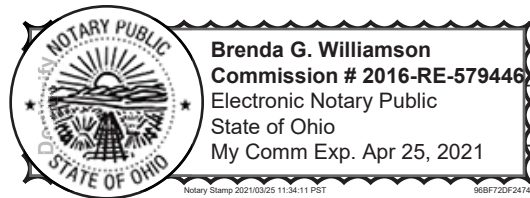
COUNTY OF FRANKLIN

)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Alex E. Vaughan this ____ day of March 2021.
03/25/2021

Brenda Williamson
Signed on 2021/03/25 11:34:11 -8:00

Notary Public



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E-Signature Summary

E-Signature 1: Jacob Herbert Crocker (JHC)

March 29, 2021 09:18:22 -8:00 [94F0657A8A8E] [161.235.2.86]
jhcrocker@aep.com (Principal) (Personally Known)

E-Signature Notary: Brenda Williamson (BW)

March 29, 2021 09:18:22 -8:00 [FDDBFF71485A] [167.239.221.82]
bgwilliamson@aep.com
I, Brenda Williamson, did witness the participants named above electronically sign this document.



VERIFICATION

The undersigned, Jacob H. Crocker, being duly sworn, deposes and says he is a Customer Program Service Analyst for American Electric Power Service Corporation, that he has personal knowledge of the matters set forth in the foregoing responses and the information contained therein is true and correct to the best of his information, knowledge, and belief.

Jacob Herbert Crocker
Signed on 2021/03/29 09:18:22 -8:00

Jacob H. Crocker

State of Ohio)
)
County of Franklin)

Case No. 2021-00174

Subscribed and sworn before me, a Notary Public, by Jacob H. Crocker this
03/29/2021 _____ day of March, 2021.

Brenda Williamson
Signed on 2021/03/29 09:18:22 -8:00



Brenda G. Williamson
Commission # 2016-RE-579446
Electronic Notary Public
State of Ohio
My Comm Exp. Apr 25, 2021

Notary Stamp 2021/03/29 09:18:22 PST

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