DATA REQUEST

KPSC PHDR 1 Provide a schedule with the amount Kentucky Power has invested in its distribution system since February 1, 2021, due to ice and snow storms in Kentucky Power's service territory. The schedule should include the total amount expended on distribution system repairs and upgrades due to storm damage, costs broken out by type of expense, and the number and type of distribution assets replaced.

RESPONSE

Please see KPCO_R_KPSC_PHDR_1_Attachment1 for the requested information. The information provided shows the estimated internal labor and material cost charged to the ice and snow storms that started on February 10, 2021. The invested amount does not reflect other charges such as, contract labor, meals, hotels, etc. Please see Exhibit 3 to the Company's application in Case No. 2021-00129 for these amounts.

DATA REQUEST

KPSC

PHDR 2

Refer to the April 6, 2021 hearing testimony of Everett G. Phillips (Phillips Hearing Testimony) regarding replacing distribution and substation transformers to address potential circuit and substation overload.

- a. Provide the cost differential for replacing or upgrading a 15 kVA distribution transformer with a 25 kVA distribution transformer, broken out by the cost for the facility and for the capitalized cost for the removal and installation of the distribution transformer.
- b. Provide the cost differential for replacing or upgrading a 20 MVA substation transformer to the next size up, broken out by the cost for the facility and for the capitalized cost for the removal and installation of the substation transformer.

RESPONSE

- a. Please refer to KPCO_R_KPSC_PHDR_2_Attachment1 tab "2a" for the requested information. The total cost differential for replacing or upgrading a 15kVA distribution transformer with a 25 kVA distribution transformer is \$196.
- b. Please refer to KPCO_R_KPSC_PHDR_2_Attachment1 tab "2b" for the requested information about the cost differential for replacing or upgrading a 20 MVA substation transformer to a 25 MVA substation transformer. The total cost differential for replacing or upgrading the substation transformer is \$33,321.

DATA REQUEST

KPSC Refer to Phillips Hearing Testimony regarding five projects to transfer **PHDR_3** load by installing tie lines.

- a. Provide the project cost for each of the five projects.
- b. Provide the number of poles and length of conductor installed for each of the five projects.
- c. Provide the drivers for the project, identifying whether the project was due to reliability, loading, or another issue. If the project driver was not due to reliability or loading, provide a detailed explanation of the project driver.

RESPONSE

- a. Please refer to KPCO_R_KPSC_PHDR_3_Attachment1 for the requested information about the cost of the five tie line projects.
- b. Please refer to KPCO_R_KPSC_PHDR_3_Attachment1 for the requested information about number of poles and length of conductor installed for the five tie line projects. The Company defined length of conductor as distance between tie points.
- c. Please refer to KPCO_R_KPSC_PHDR_3_Attachment1 for the identified drivers for the five tie line projects.

DATA REQUEST

KPSC PHDR 4

Refer to Kentucky Power's response to Commission Staff's Eighth Request for Information, Item 1, Attachment 1, and Kentucky Power's response to Commission Staff's Ninth Request for Information, Item 9(a), which state that Kentucky Power conducted only one impact study for a net metering Level 2 application since 2016, labeled Project 1, and that the customer was charged \$1,000.

- a. Provide the date the impact study was conducted and the total costs incurred for the impact study conducted for Project 1, broken out by type of cost.
- b. If Kentucky Power cannot provide the total costs incurred for the Project 1 impact study, explain the basis for Kentucky Power charging the customer a \$1,000 fee for the impact study.

RESPONSE

- a. The Distribution Impact study for Project 1 was conducted between February 14, 2018 and July 26, 2018. Costs incurred for this study were not independently tracked and are not available. Please see Kentucky Power's Response to KPSC 10-1.
- b. The Impact Study performed for Project 1 was conducted over a five-month period in 2018. During those intervening months, numerous Kentucky Power and American Electric Power Service Corporation ("AEPSC") employees contributed to, developed, and delivered the distribution impact study to the applicant. The required work included multiple meetings between the applicant and Kentucky Power/AEPSC employees, such as Distribution Engineers, Customer Service, and Distributed Generation Coordinators to determine the scope of the project. In addition, Distribution Engineers worked during that five-month period in conjunction with Transmission Engineers, Design Engineers, Substation Engineers, and Protection and Control Engineers to determine impacts to the area Electric Power System ("EPS"), design system enhancements to mitigate issues, estimate the cost of those enhancements, and draft a technical report detailing those findings. Customer Service, Distributed Generation Coordinators, and Legal & Regulatory staff worked with the customer to review the impact of this generator on existing service agreements, draft interconnection agreements, and resolve conflicts between the different agreements in coordination with the technical study.

Each of these components for every distribution impact study performed. The charges related to the work performed by AEPSC on behalf of Kentucky Power would be incurred by the Company but for the impact study. Kentucky Power estimates a total cost \$15,000 to perform these activities based on current labor costs. Labor costs are anticipated to increase over time. The incremental impact study cost billed to Kentucky Power by AEPSC is estimated to be almost the entirety of the \$15,000.

Because the applicant for Project 1 was applying for interconnection under COGEN/SPP II, Kentucky Power could charge no more than \$1,000 for the five months of coordinated effort of Kentucky Power and AEPSC to study the interconnection of the applicant's generator on the area EPS.

Witness: Jacob H. Crocker

DATA REQUEST

| KPSC | Refer to Kentucky Power's response to Commission Staff's Tenth |
|--------|---|
| PHDR 5 | Request for Information, Item 2. Provide the number of customers that use |
| _ | each of the three types of service lines used to provide residential service. |

RESPONSE

The Company does not maintain in the information in the manner requested.

The data provided below was pulled from Kentucky Power's GIS mapping system and differs from the corresponding customer count in the Company's billing system. The variance is in part due to service types not being entered in the billing system at the time of installation. In addition, a single service line may serve multiple customers, as in the case of an apartment complex or a pole mounted transformer serving multiple customers.

| Service Type | Description | Number of Customers Served |
|--------------|--|-------------------------------|
| # 2 Overhead | #2 Triplex, All Aluminum, Residential | 99,641 |
| 1/0 Overhead | 1/0 Triplex, All Aluminum, Residential | 5,846 |
| 4/0 Overhead | 4/0 Triplex, Aluminum Alloy, Residential | 21,495 |

DATA REQUEST

KPSC PHDR 6 Refer to the April 6, 2021 hearing testimony of Brian K. West. State the basis for Kentucky Power's assertion that any material change, such as adding additional solar panels or battery storage, to an eligible electric generating facility in service prior to the effective date of an initial net metering Order by the Commission would result in that customer losing its legacy status established in KRS 278.466(6).

RESPONSE

If a material change was made prior to the effective date of the initial net metering Order by the Commission, the customer <u>would retain</u> its legacy status established in KRS 278.466(6).

The 25 year grandfathering period will begin once a customer's generator begins service under NMS prior to the Commission issuing the net metering Order. At this time the existing grandfathered facilities will remain on tariff NMS, which will be closed for new entrants. The Company will verify grandfathered systems by their premise identity and in service date in the Company's billing system.

Witness: Brian K. West

Witness: Jacob H. Crocker

DATA REQUEST

KPSC PHDR_7 Refer to the April 6, 2021 hearing testimony of Stephen D. Blankenship regarding meters in Kentucky Power inventory. Provide the number of meters in Kentucky Power's inventory for the following types of meters:

- a. Bi-directional AMR meters;
- b. Probe meters; and
- c. Cellular meters.

RESPONSE

As of April 8, 2021, Kentucky Power had the following number of meters in inventory:

- a. Bi-directional AMR meters (G3008): 177 meters;
- b. Probe meters (GS008): 30 meters; and
- c. Cellular meters (PS008): 102 meters.

Witness: Stephen D. Blankenship

DATA REQUEST

KPSC Refer to the April 6, 2021 hearing testimony of Jacob H. Crocker. Provide a schedule of costs to support the estimated \$15,000 cost for an initial impact study with costs broken out by expense category.

RESPONSE

The estimated cost to perform a Distribution Impact Study is shown below. As with all estimates, the rate and amount of labor will depend on the individuals involved in the study and the complexity of the study.

| Category | Rate | Quantity | <u>Total</u> |
|-----------------------------------|-------|----------|--------------|
| Engineering – Modeling & Planning | \$165 | 75 | \$12,375 |
| Engineering – Report Creation | \$165 | 5 | \$825 |
| Project Management | \$100 | 3 | \$300 |
| Customer Service | \$75 | 20 | \$1,500 |
| ESIMATED TOTAL | | | \$15,000 |

Witness: Jacob H. Crocker





Blankenship Veri.docx

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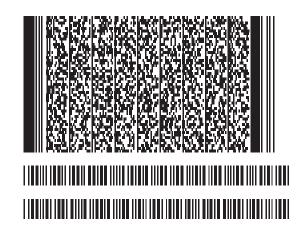
E-Signature 1: Stephen D. Blankenship (SDB)

April 08, 2021 11:02:01 -8:00 [77039EF3E3F4] [167.239.221.80] sdblank1@aep.com (Principal) (Personally Known)

E-Signature Notary: Brenda Williamson (BW)

April 08, 2021 11:02:01 -8:00 [B52EFA8846CC] [167.239.221.85] bgwilliamson@aep.com

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VERIFICATION

The undersigned, Stephen D. Blankenship, being duly sworn, deposes and says he is a Region Support Manager 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.

Stephen D. Blankenship

Stephen D. Blankenship

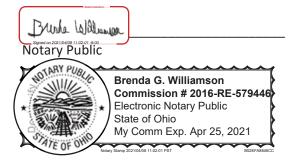
Stephen D. Blankenship

Stephen D. Blankenship

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Subscribed and sworn to before me, a Notary Public in and before said County and State, by Stephen D. Blankenship this _____ day of April 2021.

04/08/2021







Crocker Veri.docx

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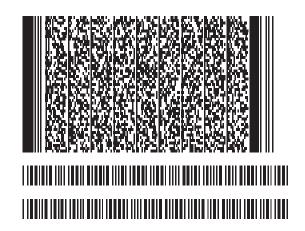
E-Signature 1: Jacob H Crocker (JHC)

April 08, 2021 12:39:13 -8:00 [E74EBCC08D48] [167.239.221.80] jhcrocker@aep.com (Principal) (Personally Known)

E-Signature Notary: Brenda Williamson (BW)

April 08, 2021 12:39:13 -8:00 [9847C46CE5A1] [167.239.221.85] bgwilliamson@aep.com

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VERIFICATION

The undersigned, Jacob H. Crocker, 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 forgoing responses and the information contained therein is true and correct to the best of his information, knowledge and belief after reasonable inquiry.

Jacob H Crocker
Signed on 20x 104080 12 20x 13 4000

Jacob H. Crocker

)
Case No. 2020-00174

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Jacob H. Crocker, this _____ day of April 2021.

04/08/2021

Burla Walanda Signed on 2021,0408 12:39:13-8:00

Notary Public



STATE OF OHIO

COUNTY OF FRANKLIN





Phillips Veri.docx

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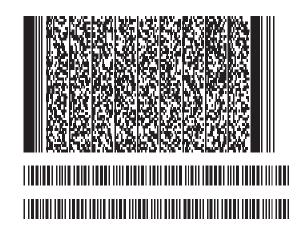
E-Signature 1: Everett G. Phillips (EGP)

April 08, 2021 08:35:23 -8:00 [CDBC4B427C9C] [167.239.221.83] egphillips@aep.com (Principal) (Personally Known)

E-Signature Notary: Brenda Williamson (BW)

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I, Brenda Williamson, did witness the participants named above electronically sign this document.



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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 Case No. 2020-00174

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Everett G. Phillips, this _____ day of April 2021. 04/08/2021



STATE OF OHIO

COUNTY OF FRANKLIN

1CEA840F0FA30

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 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

| 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 8th day of April, 2021.

Regiana M.

Digitally signed by Regiana M.

Sistevaris

Sistevaris

Date: 2021.04.08 11:02:16

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Regiana M. Sistevaris, Notary Public

My Commission Expires: January 7, 2023