DATA REQUEST

PH_1 For each month of the review period, provide the total amount of fuel related cost that occurred during a forced outage that was disallowed pursuant to 807 KAR 5:056 or was unable to be collected via any other means.

RESPONSE

Please see KPCO_R_KPSC_PH_1_Attachment1. The amounts labeled "Identifiable Fuel Cost (substitute for Forced Outage)" are located on Page 5 of each monthly Fuel Adjustment Clause (FAC) filing in sub-part B. These amounts are not recovered through the FAC. The difference between the "Identifiable Fuel Cost (substitute for Forced Outages)" and the allowed "Fuel (Assigned cost during Forced Outage)" is recovered in the Purchase Power Agreement rider.

The amount labeled "Purchase Adjustment for Peaking Unit Equivalent" is subject to base rate recovery.

KPSC Case No. 2022-00036 Commission Staff's Post Hearing Data Requests Dated August 8, 2022 Item No. 1 Attachment 1 Page 1 of 1

| | May-21 | Jun-21 | Jul-21 | Aug-21 | Sep-21 | Oct-21 | Total |
|-------------------------------------------------------|-----------------|------------|------------|-------------|--------------|--------------|--------------|
| Identifiable Fuel Cost (substitute for Forced Outage) | \$ 4,175,182 | \$ 198,905 | \$ 299,096 | \$ - | \$ 1,579,375 | \$ 1,664,340 | \$ 7,916,898 |
| Purchase Adjustment for Peaking Unit Equivalent | \$ 2,924 | \$ 27,541 | \$ - | \$ 1,355 | \$ 322,570 | \$ 32,806 | \$ 387,196 |

DATA REQUEST

PH_2 Regarding the peaking unit equivalent and start-up cost calculation. For each month in the review period, explain how many times each month the hypothetical combustion turbine was run, the length of time the hypothetical turbine was run after each start, the basis of variable operation and maintenance start-up costs, and how the start-up cost is calculated.

RESPONSE

The peaking unit equivalent value is a formula derived amount sanctioned by the Commission to limit purchased power recovery through the FAC. It is not intended to simulate the dispatch of a combustion turbine unit. Rather, as the Commission explained in its October 3, 2002 Order in Case No. 2000-00495-B it is a "proxy" used by Kentucky Power under certain circumstances "to calculate the level of non-economy [and non-forced outage] purchased power costs to flow through its FAC"^{1[1]} The proxy nature of the calculation is underscored by the 75 percent threshold for consideration of the peaking unit equivalent in connection with the Company's purchased power costs:

When a power purchase occurs during an expense month, AEP will determine the average daily market price for that month. It will then determine the lowest daily market price for gas for the hypothetical turbine during that month and compare that price to its actual average purchased energy cost for internal uses for the same month. If the actual average purchased energy cost for internal use for the month is 75 percent or less of the lowest daily market price for gas for the hypothetical gas turbine during the same month, AEP will consider this cost as the fuel cost for these purchases. If the actual average purchased energy cost for internal use is greater than 75 percent of the lowest daily market price for gas for the hypothetical gas turbine, then AEP will compare its average purchased energy cost for internal uses with the market price for gas for the hypothetical turbine for each day of the month and exclude for FAC purposes any of the actual purchased energy costs that exceed the daily gas market price. ^{2[2]}

This 75 percent threshold renders any effort to characterize the application of the peaking unit equivalent as a simulation of the actual operation of the hypothetical turbine both inapposite and inaccurate. In addition, any simulation of the dispatch of the hypothetical turbine would need to consider other factors such as, but not limited to, the availability of gas for the unit, pipeline capability, as well as the engineering and operational characteristics and requisites for the unit. Among the engineering and operational characteristics and requisites for the unit include those real world times the unit would dispatch and for how long. For example, during the review period, the peaking unit equivalent calculation capped costs for the 9 AM hour on May 4 and then again from 3 PM through 7 PM. In a real-world simulation would the unit shut down during the period between 10 AM and 3 PM? What actions affecting dispatch would be required to avoid deleterious effects of multiple starts of the unit?

As a result, there is no analysis to simulate how many times a unit was run or the length of time it was run after each start. In an effort to be responsive to the data request please see the table below and KPCO_R_KPSC_PH_2_Attachment2 for the supporting calculations made on data provided in the Company's response to Staff 1-16.

| | May | June | July | August | September | October |
|-------------------------------------------------------------------------------------------------------------------|-----|------|------|--------|-----------|---------|
| Total Number of Hours when the PUE Calculation Resulted in a Reduction in Purchased Power Costs | 10 | 0 | 2 | 58 | 10 | 11 |
| Greatest Number of Consecutive Hours when the PUE Calculation Resulted in a Reduction in Purchased Power Costs | 4 | 0 | 2 | 5 | 5 | 3 |

Please also see KPCO_R_KPSC_PH_2_Attachment1 for the basis of the variable operation and maintenance cost and the startup cost. It previously was filed as Exhibit AEV-8 to Company Witness Vaughan's Direct Testimony in Case No. 2017-00179.

Witness: Jason M. Stegall

^[1] Order, In the Matter Of: An Examination By The Public Service Commission Of The Application Of The Fuel Adjustment Clause Of American Electric Power Company From May 1, 2001 to October 1, 2001 at 3 (Ky. P.S.C. October 3, 2002).

^[2] *Id.* at 2-3 (emphasis supplied).

DATA REQUEST

PH_3 Explain whether Kentucky Power encountered any COVID related fuel procurement or operational difficulties that affected the operation of its generation units in any way including but not limited to shutting down or derates and, if so, Kentucky Power's response.

RESPONSE

Kentucky Power encountered the following COVID related fuel procurement and operational difficulties:

Procurement

Kentucky Power issued force majeure notices to all its suppliers in April 2020 due to COVID-19. Kentucky Power did not claim any volume impact from the event. Coal suppliers informed Kentucky Power during the pandemic that COVID-related staffing issues were affecting production. No fuel volumes were quantified. Suppliers continued to perform during the pandemic and Kentucky Power worked with suppliers to make-up any tonnage missed due to pandemic events.

Generation

There were no COVID related outages or curtailments at any of the Kentucky Power generating facilities.

Witness: Timothy C. Kerns

DATA REQUEST

PH_4 For the monthly Fuel Adjustment Clause (FAC) rate, explain how KentuckyPower determines the estimated fuel costs related to company generation. This includes coal, oil and gas burned, fuel (assigned cost during forced outage), and fuel (substitute for forced outage).

RESPONSE

The Company understands this question to refer to page 2 of 5 sub-part A of the monthly FAC filing. These amounts reflect the two-month lag used in calculating the FAC factor. For example, the October 2021 amounts that are the subject of this review period were used to calculate the FAC factor applied to customers' December 2021 bills. For purposes of clarity, the remainder of this response is based on the October 2021 amounts that are the subject of this review and that were used in the calculation of the FAC factor to be applied to customers' December 2021 bills.

The fuel costs related to coal and oil burned are the actual fuel costs for October 2021. The gas burned cost are preliminary October 2021 gas costs that are subject to change after the FAC is calculated and submitted to the Commission. The amounts reported on the "Gas Burned" line of sub-part A of page 2 of 5 of the October 2021 filing for calculation to be applied to December 2021 bills is equal to the preliminary October 2021 gas costs as adjusted for any true-up between the preliminary September 2021 gas costs and actual September 2021 gas costs.

On page 2 of 5 (Estimated Fuel Cost Schedule) sub-part A of the monthly FAC Filing, the Fuel (assigned cost during Forced Outage) and Fuel (substitute for Forced Outage) are set to zero in the calculation. Kentucky Power accounts for the Fuel (assigned cost during Forced Outage) and Fuel (substitute for Forced Outage) costs on page 5 of 5 (Final Fuel Cost Schedule) of the monthly FAC filing and they are part of the adjustment on page 2 of 5 sub-part E.

DATA REQUEST

PH_5 For the monthly FAC rate, explain how Kentucky Power determines the actual fuel costs related to company generation and why the actual cost cannot be determined until a two-month period has passed.

RESPONSE

See response to PH_4 for the determination of actual fuel costs. The fuel costs identified on page 2 of 5 sub-section A of the monthly FAC filing typically do not change when calculating the Final Cost Schedule on page 5 of 5 of the subsequent month FAC filing.

The two-month lag results from the lack of availability of inter-system sales amounts, and not the availability of internal fuel costs. It is the Company's understanding that the use of the two-month lag is long standing and applicable to other utilities.

DATA REQUEST

PH_6 Explain whether the peaking unit equivalent disallowance is recovered through the tariff Purchased Power Agreement and if not, how it is recovered.

RESPONSE

The PUE, when applicable, limits the amount of non-economy, non-forced outage purchased power costs that may be recovered through the FAC. Any purchased power costs not recovered through the FAC because of application of the PUE calculated proxy amount are not recovered through the PPA. Test year amounts of these costs are subject to base rate recovery.

VERIFICATION

The undersigned, Scott E. Bishop, being duly sworn, deposes and says he is a Regulatory Consultant Sr. 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 after reasonable inquiry.

| | Scott F. Bishop Scott E. Bishop |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Commonwealth of Kentucky) County of Boyd) | Case No. 2022-00036 |
| Subscribed and sworn before me, a N August, 2022. | Notary Public, by Scott E. Bishop this 18th day of |
| Notary Public | JENNIFER A. YOUNG Notary Public Commonwealth of Kentucky Commission Number KYNP31964 My Commission Expires Jun 21, 2025 |
| My Commission Expires6/2 | 1/2025 |
| Notary ID Number:KYNP319 | 964 |





Stegall Verification Case No 2022 00036 - DR Responses.doc

DocVerify ID: E973ACC9-01D2-4390-B582-2F614D3D0001

Created: August 18, 2022 06:04:49 -8:00

Pages:

Remote Notary: Yes / State: KY

This document is a DocVerify VeriVaulted protected version of the document named above. It was created by a notary or on the behalf of a notary, and it is also a DocVerify E-Sign document, which means this document was created for the purposes of Electronic Signatures and/or Electronic Notary. Tampered or altered documents can be easily verified and validated with the DocVerify veriCheck system. This remote online notarization involved the use of communication technology.

Go to www.docverify.com at any time to verify or validate the authenticity and integrity of this or any other DocVerify VeriVaulted document.

E-Signature Summary

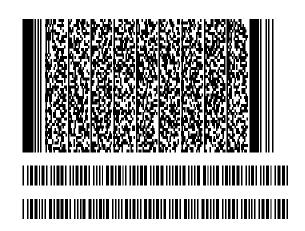
E-Signature 1: Jason Stegall (JMS)

August 18, 2022 07:46:41 -8:00 [11C0AF3E69C1] [167.239.221.105] jmstegall@aep.com (Principal) (Personally Known)

E-Signature Notary: Jennifer Young (JAY)

August 18, 2022 07:46:41 -8:00 [4C6E40E50287] [167.239.221.102] jayoung1@aep.com

I, Jennifer Young, did witness the participants named above electronically sign this document.



DocVerify documents cannot be altered or tampered with in any way once they are protected by the DocVerify VeriVault System. Best viewed with Adobe Reader or Adobe Acrobat. All visible electronic signatures contained in this document are symbolic representations of the persons signature, and not intended to be an accurate depiction of the persons actual signature as defined by various Acts and/or Laws.



E973ACC9-01D2-4390-B582-2F614D3D0001 --- 2022/08/18 06:04:49 -8:00 --- Remote Notary

VERIFICATION

The undersigned, Jason M. Stegall, being duly sworn, deposes and says he is the Regulated Pricing & Analysis Manager 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.

| | | Jason Stegall Signed on 2022/08/18 07-46-41-8-00 | 1 COMPRESSOR |
|-----------------------------------------------|------------|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| | | Jason M. Steg | gall |
| Commonwealth |) | G N 2022 | 00000 |
| County of Boyd |) | Case No. 2022 | 00036 |
| Subscribed and sworn August, 2022. | before me, | a Notary Public, | by Jason M. Stegall this 18th day of |
| -2.02.00.0000 — — — — — — — — — — — — — — — — | | | JENNIFER A. YOUNG ONLINE NOTARY PUBLIC STATE AT LARGE KENTUCKY Commission # KYNP31964 My Commission Expires Jun 21, 2025 |
| Notary Public | | | Notery Stamp 2022/08/18 07-46:41 PST |
| | | Notarial act | performed by audio-visual communication |
| My Commission Expir | res6/2 | 21/2025 | |
| Notary ID Number: | KYNP31 | 1964 | |

VERIFICATION

The undersigned, Timothy C. Kerns, being duly sworn, deposes and says he is Vice President of Generating Assets 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 after reasonable inquiry.

SCOTT E. BISHOP

Notary Public
Commonwealth of Kentucky
Commission Number KYNP32110
My Commission Expires Jun 24, 2025

Commonwealth of Kentucky)

Case No. 2022-00036

County of Boyd

Subscribed and sworn before me, a Notary Public, by Timothy C. Kerns this 17th day of August, 2022.

Scott E. Bishup Notary Public

My Commission Expires June 24, 2025

Notary ID Number: KYNP 32110