**VERIFICATION**

The undersigned, Amy J. Elliott, being duly sworn, deposes and says she is a Regulatory Consultant Sr. in Regulatory Services for Kentucky Power, that she has personal knowledge of the matters set forth in the forgoing responses for which she is the identified witness and that the information contained therein is true and correct to the best of her information, knowledge, and belief

Amy J. Elliott

Amy J. Elliott

| | | |
|---|---|---|
| COMMONWEALTH OF KENTUCKY | ) | |
| | ) | Case No. 2016-00336 |
| COUNTY OF FRANKLIN | ) | |

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Amy J. Elliott, this 12th day of January 2017.

Judy K Rasquist 481393

Notary Public

My Commission Expires: January 23, 2019

## VERIFICATION

The undersigned, Daniel L. Moyer, being duly sworn, deposes and says he is the Plant Manager-Kammer/Mitchell for Kentucky Power Company, that he has personal knowledge of the matters set forth in the forgoing responses for which he is the identified witness and that the information contained therein is true and correct to the best of his information, knowledge and belief

Daniel L. Moyer

STATE OF WEST VIRGINIA )
) Case No. 2016-00336
COUNTY OF MARSHALL )

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Daniel L. Moyer this the 10th day of January 2017.

Notary Public

My Commission Expires: Feb 10, 2021

OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
Rita Kramer
AEP Kammer Mitchell Plant
P.O. Box K
Moundsville, WV 26041
My Commission Expires Feb. 10, 2021

# Kentucky Power Company

**REQUEST**

Refer to the Direct Testimony of Amy J. Elliott (" Elliott Testimony"), pages 4 and 5, and Kentucky Power's response to Commission Staff's First Request for Information ("Staff's First Request"), Item 1, Attachment 2. The Elliott Testimony states that beginning July 1, 2015, Kentucky Power changed from an annual to monthly basis for updating its environmental compliance rate base for additions and retirements, but that the monthly retirements were not reflected on a monthly basis in determining its environmental surcharge factor.

a. When Kentucky Power refers to July 2015, explain whether July 2015 is the revenue or expense month for environmental surcharge purposes.

b. If July 2015 is the first month affected by the change from an annual to monthly basis, explain why Attachment 2 includes the expense month of June 2015.

**RESPONSE**

a. July 2015 refers to the expense month.

b. The inclusion of a portion of June 2015 reflects the June 22, 2015 effective date for revised Tariff E.S. in accordance with the Commission Order in Case No. 2014-00396. The reference to July 1, 2015 on Line 13 on Page 4 of the testimony refers to filings made prior to July 1, 2015. The June 2015 expense month filing was made after July 1, 2015.

**WITNESS:** Amy J Elliott

## Kentucky Power Company

**REQUEST**

Refer to the Elliott Testimony, page 6, lines 3 to 5, and Kentucky Power's response to Staffs First Request, Item 1, Attachment 2. Confirm that the refund amount that will be included in Kentucky Power's monthly environmental surcharge filing in the first month after an Order is issued in this case will be $118,185, and not $120,356. If this cannot be confirmed, provide a detailed explanation.

**RESPONSE**

Confirmed. The proposed refund amount of $120,356 reflects the total of the $118,185 to be refunded through the environmental surcharge and the amount of $2,171 to be refunded through Tariff S.S.C.

**WITNESS:** Amy J Elliott

# Kentucky Power Company

**REQUEST**

Refer to the Elliott Testimony, pages 6-10, and Kentucky Power's response to Staff's First Request, Item 1, Attachment 3.

a. Provide an expanded version of Attachment 3 that includes the calculation of the proposed adjustment for the entire period in which the formulaic error occurred similar to Kentucky Power's response to Staff's First Request, Item 1, Attachment 2.

b. Provide supporting schedules for the amounts listed in the column labeled "Non-Residential Revenues Subject to ES Factor (Two Month Lag)."

c. Explain why the amounts determined in the column labeled "Difference in Recovery" are multiplied by the Residential Allocation Factor to determine the proposed adjustment.

d. Explain whether the amounts determined in the column labeled "Difference in Recovery" would have been included in the Over/(Under) Recovery Adjustment reported on ES Form 3.30. If not, explain why.

e. Explain why Kentucky Power is proposing equal, corresponding increases to the non-residential environmental revenue requirement and decreases to the residential revenue requirement.

**RESPONSE**

a. Please refer to KPCO_KPSC_2_3_Attachment1.xls. A correction in cell J10 is included, revising the total misallocation for the review period from $898,635 to $877,392.

b. Please refer to KPCO_KPSC_2_3_Attachment2.xls. A separate tab is provided for each month.

c. The non-residential under-recovery amount caused by the formulaic error multiplied by the residential allocation factor determines the amount of the non-residential under-recovery that was paid by the residential customer class.

d. Yes, it was included in the Over/Under recovery adjustment, but doing so does not correct the misallocation.

e. To correct the misallocation between residential and non-residential customer classes, the Company proposes to decrease the residential revenue requirement and increase the non-residential revenue requirement by the offsetting amounts.

In accordance with the Elliott testimony at page 10, an adjustment (the first of four) in the amount of $134,403 was made to the November 2016 expense month filing. The offsetting adjustments decrease the residential revenue requirement and increase the non-residential revenue requirement by the amount of $134,403. The offsetting adjustments are the first of four such adjustments needed to correct the misallocation between residential and non-residential customer classes for the period from May 2016 - August 2016.

**WITNESS:** Amy J Elliott

## Kentucky Power Company

**REQUEST**

Refer to the Elliott Testimony, pages 6-10, Kentucky Power's response to Staff's First Request, Item 1, Attachment 3. Refer also to Case No. 2016-00109, [1]Kentucky Power's response to Commission Staff's First Request for lnformation,[2] Item 12, and Commission Staff's Second Request for lnformation [3] Item 5. The error addressed in these responses also caused a misstatement of Non-Residential Retail Revenues, which Kentucky Power asserted was reflected on ES Form 3.30 and resolved in the ordinary operation of the over-/under-recovery adjustment.

a. Explain whether the formulaic error in the instant case was also resolved in the ordinary operation of the over-/under-recovery adjustment. If not, explain why.

b. Explain whether the formulaic error addressed in Case No. 2016-00109 also resulted in a misallocation between residential and non-residential customers that should be corrected. If not, explain why.

**RESPONSE**

a. The ordinary operation of the over-/under-recovery adjustment resolved the under-collection produced by the formulaic error. The ordinary operation of the over-/under-recovery adjustment ***did not*** resolve the resulting misallocation of the non-residential under-recovery. It is this resulting misallocation the Company proposes to resolve by refunding $877,392 (for the review period) to residential customers and collecting $877,392 from non-residential customers.

The formulaic error described on pages 6-10 of the testimony of Company Witness Elliott resulted in an environmental surcharge factor that was less than it should have been for non-residential customers. This incorrect surcharge factor in turn led to the collection of revenues from non-residential customers that were insufficient to fully recover the monthly environmental costs allocated to non-residential customers (Line 10 of ES Form 1.00).

[1] Case No. 2016-00109, An Examination by the Public Service Commission of the Environmental Surcharge Mechanism of Kentucky Power Company for the Six-Month Billing Period Ending December 31, 2015 (Ky. PSG Nov. 4, 2016).

[2] Case No. 2016-00109, Kentucky Power , (filed Apr. 5, 2016)
[3] Case No. 2016-00109, Kentucky Power, (filed May 20, 2016).

The under-recovery of monthly environmental costs from non-residential customers was included in the calculation of total over/under recovery of monthly environmental costs calculated on ES Form 3.30 the following month. This total over/under recovery amount (including the amount of under recovery resulting from the incorrect surcharge factor for non-residential customers as well as any over or under recovery from variations in collected revenue during the month from all classes) became part of the next month's calculation of the total environmental costs to be recovered through the surcharge (Lines 6-8 of ES Form 1.00).

The over/under recovery amount is incorporated into the total environmental costs prior to the allocation between residential and non-residential customer classes. As a result, a portion of the under-recovery from non-residential customers was allocated to residential customers as part of the monthly environmental costs allocated to residential customers (Line 10 of ES Form 1.00). That portion totaled $877,392 for the review period.

b. A different formulaic error was at issue in Case No. 2016-00109. The effect of that formulaic error was the same in Case No. 2016-00109 and the instant case: a portion of the under-recovery from non-residential customers resulting from the formulaic error was misallocated to residential customers. The amount of the over-recovery from the residential customer class in Case No. 2016-00109 totaled only $2,681 (41.1% of the $6,522 in under-recovery from non-residential customers) over two months. Accordingly, the impact of this error on the surcharge factor was immaterial.

Because of the immaterial impact it would have had on customers' bills, the Company did not propose in Case No. 2016-00109 to recover the $2,681 from non-residential customers or to refund a like amount to the residential class. Instead, the Company treated the initial under recovery as part of the normal operation of the over-under recovery process (similar to the impacts that would be seen on non-residential customers if residential revenues were insufficient to recover the full amount allocated to residential customers in a given month). By contrast, the Company proposes in this case to refund the $8977,392 to the residential class and recover a like amount from the nonresidential class because of the magnitude of the amount at issue.

Due to the immaterial nature of the impact, the Company treated this as part of the normal operation of the over-under recovery process (similar to the impacts that would be seen on non-residential customers if residential revenues were insufficient to recover the full amount allocated to residential customers in a given month). The Company is seeking the adjustment described on pages 6-10 of Company Witness Elliott's testimony in this case because of the magnitude of the impact.

**WITNESS:** Amy J Elliott

## Kentucky Power Company

**REQUEST**

Refer to Kentucky Power's response to Staff's First Request, Items 4.b. and 4.d. Explain the term "derating."

**RESPONSE**

The North American Electric Reliability Corporation defines derating as existing "whenever a unit is limited to a power level that is less than the unit's net maximum capacity." Because deratings impact the level of plant operation, they would affect consumable usage.

**WITNESS**: Daniel L Moyer

# Kentucky Power Company

## REQUEST

Refer to Kentucky Power's response to Staff's First Request, Items 4.h. and 4.i.

a. Describe in detail, by month, the maintenance projects undertaken at the Mitchell plant.

b. Explain why the replacement of the chloride purge stream tank liner was deemed to be a maintenance expense item and not capitalized. Describe in detail what the project entailed and the cost incurred by Kentucky Power.

## RESPONSE

a. **Chloride Purge Stream Tank Liner –** To maintain the required operating conditions of the FGD (scrubber), a purge stream is discharged from the system, primarily for chloride control, which allows the FGD to achieve removal of sulfur dioxide. This purge stream contains pollutants from coal, limestone, and make-up water. The purge stream is acidic, supersaturated with gypsum, and contains dissolved/suspended solids such as heavy metals, chlorides, magnesium, and organic compounds. The purge stream flows into an equalization tank, which provides a means to attenuate the flow and chemistry of the purge. The tank is coated with a solvent-resistant lining to prevent corrosion. Portions of this lining need to be replaced periodically. During the Nov 2015 to April 2016 period, the costs were $247 (Nov), $35,922 (Dec), $43,766 (Jan), a credit of $3,930 for returned material (Feb), $7,659 (Mar), and $1,679 (Apr).

**Mitchell Unit 2 ID Fan –** Induced Draft (ID) Fans are used to pull air from the boiler after combustion so that the FGD system can remove pollutants. They also remove very hot and corrosive flue gas from the superheaters, preheaters, and economizer. The ID fans are also used to create a negative pressure in the boiler to bring in fresh air, by working with forced draft (FD) and other booster fans. There are two ID Fans for Mitchell Unit 2. During this time period, there were forced outages on both ID Fans, with total O&M costs of $17,814 and $47,621, respectively. For ID Fan #2, the monthly costs were a credit of $9 (Nov), $2,683 (Dec), $12,032 (Jan), $23,740 (Feb), $0 (Mar), and $9,175 (Apr). For ID Fan #1, the monthly costs were $152 (Nov), 804 (Dec), $12,860 (Jan), $914 (Feb), $855 (Mar), and $2,230 (Apr).

**Mitchell Unit 1 Precipitator –** an Electrostatic Precipitator (ESP) is a filtration device that removes fine particles from the flue gas stream after combustion in the boiler. The long-term efficiency of the ESP depends upon inspection, startup, shutdown, operation, and maintenance procedures. Such O&M costs vary each month. For this time period, the monthly costs were $94,924 (Nov), a credit of $664 (Dec), $41,801 (Jan), $1,942 (Feb), $4,196 (Mar), and a credit of $5,399 (Apr).

**SCR Cable Tray –** the SCR has a number of electrical power and communication cables running between pieces of equipment. Cable trays are used to support, organize, and protect this cabling. A single cable tray is not a retirement unit, so its replacement is an O&M expense. OSHA and National Electric Code regulations and procedures required periodic inspection for damage, overloading, grounding and other unsafe conditions. The monthly costs were $0 (Nov), $2,874 (Dec), $348 (Jan), $10,029 (Feb), $20,523 (Mar), and $2,357 (Apr).

b. The work done was to replace a portion of the chloride purge stream tank liner. In accordance with the FERC Uniform System of Accounts, the cost of replacing a portion of a retirement unit is charged to operations or maintenance.

**WITNESS:** Amy J Elliott

# Kentucky Power Company

**REQUEST**

Refer to Kentucky Power's response to Staff's First Request, Item 5.d.

a. Is the heavy machinery referred to in the response included in Kentucky Power's environmental compliance plan? Describe in detail what is meant by heavy machinery and the maintenance work that was performed on the heavy machinery.

b. Explain how the cost of the heavy machinery is charged to Rockport's on-site ash landfill.

c. Is the heavy machinery used in other locations at the Rockport plant? If so, describe the other uses of the heavy machinery.

d. If the heavy machinery is used in other locations, explain why all of the cost of maintenance of heavy machinery should be recovered through the environmental surcharge.

**RESPONSE**

a-d. Kentucky Power's response to KPSC 1-5(d) should not have stated that the elevated February maintenance expense resulted in part from work done on heavy machinery at the Rockport station. The response should have provided that the elevated February maintenance expense resulted principally from maintenance work performed on the Rockport precipitator to repair internal plates and rappers and at the Rockport Unit 1 fly ash silo to clear a plugged pin mixer.

There were O&M charges for maintenance of heavy equipment used at the plant's on-site landfill during the review period. The O&M expenses were not included in or recovered through Kentucky Power's environmental surcharge. Maintenance expenses related to such work are not part of the Company's Environmental Compliance Plan.

**WITNESS:** Amy J Elliott

# Kentucky Power Company

**REQUEST**

Refer to Kentucky Power's monthly environmental surcharge report for the December 2015 expense month, ES Form 3.31 and ES Form 1.00. Explain why the calendar year 2015 allocation factor was used for the December 2015 expense month.

**RESPONSE**

Kentucky Power used the residential/non-residential allocation factors based on 2015 revenues for the December 2015 expense month filing with the Commission because the information was available at the time of filing. It was not available for the prior 2015 expense month filings.

To avoid confusion going forward, the Company proposes to use the residential/non-residential allocation factors based on the prior year's revenues for each of the 12 expense months of the following year. For example, for the December 2016 expense month, the Company will use the residential/non-residential allocation factors based on 2015 revenues even if the factors based on 2016 revenues are available. The Company will use the residential/non-residential allocation factors based on 2016 revenues for all 2017 expense months.

Please note that KPCO_KPSC_1_1Attachment3.xls uses the residential/non-residential allocation factors based on 2014 revenues for the December 2015 expense month.

For consistency, Kentucky Power revised KPCO_KPSC_1_1_Attachment1.xls to use the residential/non-residential allocation factors based on 2014 revenues for the December 2015 expense month. The revision is attached as KPCO_KPSC_2_8_Attachment1.xls

**WITNESS:** Amy J Elliott

# Kentucky Power Company

## REQUEST

Refer to Kentucky Power's monthly environmental surcharge reports for the review period, ES Form 3.30 and ES Form 3.32. Explain the difference between "Kentucky Retail Revenues" as reported on line 1 of ES Form 3.30 and "Total Retail Revenues" as reported on line 8 of ES Form 3.32.

## RESPONSE

Kentucky Retail Revenues as reported on Line 1 of ES Form 3.30 are derived from the general ledger and include the total billed and accrued revenue for the month. Total Retail Revenues reported on Line 8 of ES Form 3.32 are derived from the Company's revenue accounting system and include only billed (not billed and accrued) revenue amounts.

The Company's general ledger does not record retail revenue amounts by surcharge type. For example, GL account 4420001 records commercial revenues but does not reflect how much of the commercial revenue amount is comprised of environmental surcharge revenues.

The Company's revenue accounting system, by contrast, records revenues by surcharge type but on a billed basis only. Because of the need to break out retail revenues by surcharge type for allocating environmental surcharge revenues, the Company uses the billed revenue values from its revenue accounting system on ES Form 3.32 to allocate the environmental surcharge.

**WITNESS:** Amy J Elliott

# Kentucky Power Company

**REQUEST**

Explain whether the environmental surcharge factor calculated for non-residential customers is applied only to non-fuel revenues.

**RESPONSE**

Yes. The non-residential environmental surcharge factor is applied only to non-fuel revenues.

**WITNESS:** Amy J Elliott