VERIFICATION

The undersigned, John A. Rogness III, being duly sworn, deposes and says he is the Director Regulatory Services for Kentucky Power, 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/her information, knowledge and belief.

John A. Rogness III

COMMONWEALTH OF KENTUCKY

COUNTY OF FRANKLIN

) Case No. 2016-00230

Subscribed and sworn to before me, a Notary Public in and before said County and State, by John A. Rogness III, this the 24^{44} day of October 2016.

Notary Public Stary 517001

My Commission Expires: 8-11-18

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Kentucky Power Company

REQUEST

Refer to Kentucky Power's response to the Commission Staff's Second Request for Information ("Staffs Second Request"), Item 2.a.

a. Confirm that Kentucky Power understands that Administrative Regulation 807 KAR 5:056 contains specific instructions related to the recovery of fuel costs during forced outages and that those instructions are contained in Section 1 (3) (a) and (b) and in Section 1 (4). If this cannot be confirmed, explain why Kentucky Power believes other sections of the regulation apply to forced outage situations.

b. Because American Electric Power (n/k/a Kentucky Power) was unique in that it did not own a combustion turbine, in 2002 it was granted authority to use the "Peaking Unit Equivalent" approach to calculate the level of non-economy purchase power costs to recover through the fuel adjustment clause ("FAC") (See footnote below) of that Order stated as follows:

Our interpretation of Administrative Regulation 807 KAR

5:056, as set forth in our Order of May 2, 2002, permits AEP to recover a lesser portion of the cost of purchased power than other utilities that operate higher cost gas-fired peaking generators. This result could occur even if the supplier and source of supply are the same. This anomaly requires us to consider the use of AEP's proposed proxy mechanism. Based upon our review of the record and being otherwise sufficiently advised, we find that AEP's proposed Peaking Unit Equivalent approach to calculate the level of non economy purchased power costs to flow through its FAC is reasonable and should be approved.

¹Case No. 2000-00495-B, An Examination by the Public Service Commission of the Fuel Adjustment Clause of American Electric Power Company from May 1, 2001 to October 31, 2001 (Ky. PSC Oct. 3, 2002). The Peaking Unit Equivalent was based on the operating characteristics of a General Electric simple-cycle gas turbine.

(1) Assuming that all jurisdictional electric utilities calculate the amount to be excluded from recovery through the FAC in forced outage situations by recovering the lesser of the assigned cost of the unit forced out of service or the substitute cost of the replacement power without consideration of the highest-cost unit (unless the highest-cost unit happens to be the unit forced out of service), explain how Kentucky Power would be harmed compared to other jurisdictional utilities if it were not allowed to use the Peaking Unit Equivalent in its forced outage calculation.

(2) Explain how Kentucky Power does not have an advantage over the other electric jurisdictional utilities because it uses the Peaking Unit Equivalent in its forced outage calculation.

RESPONSE

a. Confirmed. Kentucky Power further confirms that it understands the Commission's May 2, 2002 and October 3, 2002 Orders in Case No. 2000-00495-B to require it to use the peaking unit equivalent methodology in calculating the fuel cost exclusion associated with the non-economic power purchases, including those associated with forced outages. *See* Kentucky Power's October 5, 2016 Response 2-2(a).

b1. There would be no harm "compared to other jurisdictional utilities" so long as Kentucky Power is permitted to recover all of its fuel costs associated with purchased power in the case of a forced outage.

b2. So long as Kentucky Power is permitted to recover all of its fuel costs associated with purchased power in the case of a forced outage, the Company would be neither advantaged or disadvantaged.

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Kentucky Power Company

REQUEST

- a. Refer to Kentucky Power's response to the Staffs Second Request, Item 2.b.(1). For the outage discussed in the response, confirm that Mitchell unit 2 had cleared the market to operate in that hour.
- b. Confirm that, had Mitchell unit 2 not suffered a forced outage, the dispatched amount of power would have been 803 megawatts ("MW") (408 MW plus 395 MW of Mitchell unit 2 capacity). If this cannot be confirmed, explain.
- The last paragraph on page 4 of 6 states that, [t]he Company also confirms that 385 MW c. 3) were purchased make the difference. (Column to up of which 287 MW (Column 9) were purchased to satisfy internal demand due to the forced Explain why only 287 MW were considered as being purchased to satisfy outage." internal demand due to forced outage when the Mitchell unit forced out was 395 MW and 385 MW was purchased to make up the difference.
- d. State the use of the remaining 98 MW (385 MW purchased minus 287 MW).

RESPONSE

a. The Company cannot confirm. Mitchell Unit 2 was forced out and thus was not offered into nor did it clear the market for the identified hour.

2b. The Company cannot confirm. Implicit in the question is that in the absence of a forced outage Unit 2's nameplate capacity of 395 MW would and could be dispatched into the market. In fact, in any given hour the extent to which Mitchell Unit 2's capacity is dispatched into the market is a function of the unit's energy cost relative to the market clearing price of energy for that hour. For the hour represented by KPCO_R_PSC_1_26_Attachment1_Redacted.xls, tab 01-2016, row 29, the net generation available was 520 MW but PJM dispatched only 408 MW into the market as economic. Moreover, the net generation available from an individual unit may be less than its nameplate capacity in a given hour because of operational limitations.

2c. Please refer to Commission Staff' second data request Item 2 attachment KPCO_R_PSC_2_2_Attachment1.xls tab 01-2016 and the Company's response to KPSC 2-2.

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The 395 MW (Column 1) represents the unit nameplate capacity of the unit that is offered into the PJM day ahead market. When that unit is forced out, then the Company is required to make up the difference by purchasing power. In any given hour, the amount of power that must be purchased to make up the shortfall resulting from the forced outage is a function of the level of internal demand and the amount of other Company generation available. The quantity of power that the Company was required to purchase (287 MW) to cover the forced outage is the difference between the level of internal demand in that hour (Column 7) (807 MW) and the level of Company net available generation being offered into the market (Column 6) (520 MW): 807 MW – 520 MW = 287 MW.

2d. Please refer to the 01-2016 Hourly Purch Alloc tab, column I (Purchases Assigned to Internal Load Not Due to Forced Outage. The 98 MW represents the purchases that would have been required to satisfy internal load even in the absence of a forced outage.

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Kentucky Power Company

REQUEST

a. Refer to Kentucky Power's response to the Staffs Second Request, Item 2.b.(2).

Confirm that, based on Kentucky Power's calculation of the \$456.55 to be excluded from recovery through the FAC, Kentucky Power compared the substitute cost of generation (\$/MWh) to the higher of the generation cost of the unit forced out (\$/MWh) versus the peaking unit equivalent (\$/MWh) and then excluded the difference between the two \$/MWh numbers multiplied by the MW (i.e., rather than including the replacement purchase power cost for recovery through the FAC, Kentucky Power included fuel costs based on the higher of the peaking unit equivalent versus the generation cost of the unit forced out).

- b. Confirm that the \$456.55 referenced in the response was recovered through Kentucky Power's Purchase Power Adjustment ("PPA") tariff. If this cannot be confirmed, explain why it was not recovered through the PPA tariff.
- c. Supposing that Kentucky Power had used the methodology requested by Commission Staff for the response and had calculated an excluded amount of \$1,326.17, confirm that it would have recovered that amount through Kentucky Power's PPA tariff. If this cannot be confirmed, explain why it would not be recovered through the PPA tariff.

RESPONSE

3a. The Company cannot confirm. The Company used the difference between the cost of its highest cost generation unit (including the hypothetical peaking unit equivalent) and the purchase power cost multiplied by the MW associated with the forced outage to calculate the amount to be excluded from recovery through the FAC. Although the hypothetical peaking unit equivalent or the cost of the unit forced out may be the Company's highest cost generation in a given hour, in which case the higher of the two would be used, in the example the Company's highest cost generation was Rockport Unit 1 (\$26.563) and it was used. The calculation thus is: [\$28.15/MWH (cost of purchase power) - \$26.563/MWh (cost of Rockport Unit 1)] x 287MW = \$456.55.

Please refer to Commission Staff' second data request Item 2 attachment KPCO_R_PSC_2_2_Attachment1.xls tab 01-16 Hourly Purch Alloc tab. Column L shows the results of the hypothetical natural gas CT generation cost calculation. Columns M - Q show the unit generation costs of the Big Sandy Unit 1, Mitchell Units 1 and 2 and the Rockport Units 1 and 2. Comparing Columns L - Q, the unit cost of Rockport Unit 1 (\$26.563) is the highest cost generation for that hour, which is in Column R. The results from Column R are also present in the 01-2016 tab Column 14a (Highest of PUE or Generation Cost).

3b. Confirmed.

3c. Confirmed.

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Kentucky Power Company

REQUEST

Confirm that all fuel costs related to forced outages that are excluded for recovery through the FAC are recovered through Kentucky Power's PPA tariff. If this cannot be confirmed, explain why they would not be recovered through the PPA tariff.

RESPONSE

Confirmed.