VERIFICATION

The undersigned, G. Scott Fisher being duly sworn, deposes and says he is the Manager for Resource Planning for American Electric 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 information, knowledge and belief

____
G. Scott Fisher

STATE OF OHIO)
) Case No. 2016-00413
COUNTY OF FRANKLIN)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by (Insert Name), this the 3 day of March 2017.

____
Notary Public

NOTARIAL SEAL
STATE OF OHIO

Princess M. Brown
Notary Public, State of Ohio
My Commission Expires 04-19-2020

My Commission Expires: 4/19/2020

VERIFICATION

The undersigned, Brad N Hall being duly sworn, deposes and says he is the External Affairs Manager, 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 information, knowledge and belief

Brad N Hall

COMMONWEALTH OF KENTUCKY)
) Case No. 2016-00413
COUNTY OF BOYD)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Brad N Hall, this the 8th day of March, 2017.

Judy K Kosquist 481393
Notary Public

My Commission Expires: January 23, 2021

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)
) Case No. 2016-00413
COUNTY OF FRANKLIN)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by John A. Rogness III, this the 10th day of March 2017.

Judy K Rosquist 481393
Notary Public

My Commission Expires: January 23, 2021

VERIFICATION

The undersigned, John F. Torpey, being duly sworn, deposes and says he is the Director Integrated Resource Planning for American Electric 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 information, knowledge and belief

John Torpey

John F. Torpey

STATE OF OHIO)
) Case No. 2016-00413
COUNTY OF FRANKLIN)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by John F. Torpey, this the 3 day of March 2017.

Princess Brown

Notary Public

NOTARIAL SEAL STATE OF OHIO

Princess M. Brown
Notary Public, State of Ohio
My Commission Expires 04-19-2020

My Commission Expires: 4/19/2020

VERIFICATION

The undersigned, Ranie K. Wohnhas, being duly sworn, deposes and says he is the Managing Director Regulatory and Finance 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 information, knowledge, and belief

Ranie K. Wohnhas

Ranie K. Wohnhas

COMMONWEALTH OF KENTUCKY)
) Case No. 2016-00413
COUNTY OF BOYD)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Ranie K. Wohnhas, this the 8th day of March 2017.

Judy K Rosquist 481393

Notary Public

My Commission Expires: January 23, 2021

Q - 1 Reference Kentucky Power's Integrated Resource Plan ("IRP"), Executive Summary, page 12. Provide a detailed explanation as to how Kentucky Power plans to "aggressively pursue economic development throughout its service territory."

A - 1 Since at least 2012, Kentucky Power has been assisting local officials and economic development groups through its expanded economic development efforts. In the course of doing so, the Company invested over $1.25 million of its own money in economic development efforts in eastern Kentucky. Kentucky Power's plans to pursue economic development throughout its service territory will build on this past work.

The foundation of Kentucky Power's continuing economic development efforts is the 2012 "gap analysis" commissioned by Kentucky Power. The gap analysis evaluated the required economic development framework against the current state of the Company's service territory's economic development efforts and identified gaps between the two. Kentucky Power invested over $175,000 in shareholder funds for the gap analysis. The gap analysis identified the following key gaps in economic development efforts in the Company's service territory:

- A lack of functional and properly trained local or regional economic development organizations;
- Limited competitive and marketable industrial parks and buildings;
- Insufficient marketing infrastructure for available opportunities; and
- Insufficient workforce development and training.

Kentucky Power's economic development efforts have and will continue to focus on assisting local officials in closing these gaps.

Kentucky Power's economic development administers its economic development efforts principally through three programs. The first two programs are funded entirely by Kentucky Power shareholder funds. The third program is funded by matching customer and shareholder funds.

Every year Kentucky Power is allocated funds from AEP's Economic and Business Development group for use within the service territory. These funds are wholly shareholder provided funds. Between 2012 and 2016, the Company has distributed over $300,000 in AEP funds for economic development activities. These funds have been used for economic development training for local economic development agencies, marketing of economic development opportunities in the region, and memberships in statewide economic development agencies allowing the Company to leverage its economic development efforts. The funding for the gap analysis report described above was provided through AEP's Economic and Business Development Group. AEP's Economic and Business Development Group has allocated $54,000 to Kentucky Power for 2017. Kentucky Power will use this money to continue its efforts in closing the gaps identified in the 2012 gap analysis report.

The second program funded entirely by Company shareholder funds is the Kentucky Economic Advancement Program (KEAP). It began in 2014 in connection with the Stipulation and Settlement Agreement in Case No. 2012-00578. Through KEAP, Kentucky Power provides $200,000 in grants annually for economic development efforts in Lawrence County and the six Kentucky counties contiguous to Lawrence County – Boyd, Carter, Elliott, Johnson, Martin, and Morgan Counties (the "KEAP Counties"). The Company also makes annual contributions of $16,500 each to Ashland Community and Technical College and to Big Sandy Community and Technical College, the two community and technical colleges that serve the KEAP program area, for job training. Since inception, the KEAP program has provided a total of $667,150 in shareholder funding for economic development efforts in the KEAP Counties. The KEAP program is scheduled to end in 2018.

The third program is the Kentucky Power Economic Growth Grant (K-PEGG) program. K-PEGG is a joint effort between Kentucky Power and its customers. In Case No. 2014-00396, the Commission approved the Company's Kentucky Economic Development Surcharge ("KEDS") Tariff. Under Tariff KEDS, the Company collects $0.15 monthly from each of its customers to support economic development activities within the service territory. The Company matches, on a dollar-for-dollar basis, the amounts collected through Tariff KEDS. Unlike the KEAP program, which is limited to the KEAP counties, Kentucky Power issued K-PEGG grants to economic development entities throughout its service territory. Since 2016, when the program began, Kentucky Power has approved 12 K-PEGG Program grants totaling $652,500.

Kentucky Power is also redeveloping a portion of the Big Sandy plant property for economic development purposes. The Company retired Big Sandy Unit 2 in 2015 and converted Big Sandy Unit 1 to natural gas in 2016. As a result of the retirement and conversion, Kentucky Power no longer requires the same amount of space to operate the Big Sandy Plant. Because the property is flat, served by utilities, served by rail, and is well-located along US-23, the property is attractive as an economic development location. To facilitate this redevelopment, the Company has advanced the timeline for demolition of Big Sandy Unit 2 and reconditioning of the coal storage yard. A copy of the promotional materials for the Big Sandy economic development property is included as KPCO_R_AG_1_1_Attachment1.pdf.

In addition to the efforts described above, Kentucky Power anticipates continuing to partner with regional economic development organizations operating in its service territory to assist them in fulfilling their missions. Organizations such as Shaping our Economic Region ("SOAR"), One East Kentucky, and Ashland Alliance provide strategic economic development support for the region and will continue to be a critical part of economic development efforts in the service territory.

Kentucky Power also filed a request for interim tariffs focused on jump starting the opening or expansion of coal operations in Eastern Kentucky. Please see Case No. 2017-00099 for the details. In short, Kentucky Power is seeking permission to decrease barriers to entry for coal operations. The goal is to be a productive partner in revitalizing the coal industry and creating jobs to keep families in Eastern Kentucky.

Kentucky Power is focused on economic development every day and is pursuing new innovative options every day. Additional information about Kentucky Power's economic development efforts is included on the economic development pages of the Company's website: www.Aeped.com/kentucky.

Witness: Gordon S. Fisher
Witness: John A. Rogness

Q - 2 Reference Kentucky Power's "Preferred Plan" to answer the following questions:

a. Explain in full detail why Kentucky Power plans to continue to invest $6 million per year in demand side management ("DSM") through 2024, instead of taking steps to reduce the large DSM charge that its customers are currently forced to pay.

b. Provide a detailed explanation as to why Kentucky Power plans to add 75 MW of wind resources beginning in 2018 for a total of 300 MW through 2021, and include whether it would represent the least-cost energy option.

c. With regard to any potential wind power purchase agreement ("PPA"), state the type(s) of back-up power PPAs which Kentucky Power is prepared to enter into when wind power is unavailable, together with projected prices for any such back -up power PP A.

d. With regard to any potential PP As, does Kentucky Power agree that Kentucky is a least-cost state, requiring the company to provide the least-cost generation resources for its retail ratepayers? If Kentucky Power does not agree, explain fully why not.

e. Provide a detailed explanation as to why Kentucky Power plans to add utility scale solar, beginning with 10 MW in 2019, for a total of130 MW by 2031, and include whether it would be the least-cost option.

f. Provide a detailed explanation of the proposed Combined Heat and Power project to be implemented by 2022.

g. Explain in full detail why Kentucky Power only plans to operate Big Sandy Unit 1 through 2030.

A - 2 a. Kentucky Power is required by the Commission's October 7, 2013 Order in Case No. 2012-00578 to invest $6 million a year in DSM/EE programs through 2018. It may reduce that annual amount after 2018 only upon obtaining Commission authorization to do so. Under the preferred plan, Kentucky Power adds renewable resources and energy efficiency programs to permit it to provide service at a lower cost than would be the case if the status quo is maintained. *See* Sections 5.3 to 5.3.3.

b. Wind energy was selected as an optimal resource under all pricing scenarios as shown on Table 19 (page 136 of 1497) of the 2016 IRP. The model selected wind energy because it lowers customers' costs over the wind project lifecycle; that is, the cost of wind energy is projected to be less than the cost of energy from the PJM market. As such, it is the least cost option.

c. Wind projects are selected primarily as an energy resource, not a capacity resource. As a result of the pending PJM Capacity Performance rule, the Company estimated the capacity value of potential wind projects to be five percent of the project nameplate rating. Please refer to KPSC 1-35 for additional information on the impact of the PJM Capacity Performance rule. Because the capacity value of the wind projects is accounted for in the modeling, there is no need for backup power to be separately similarly accounted for in the model. The additional resources in the portfolio serve as backup power.

d. The Company objects to this request in that it calls for a legal conclusion. Without waiving this object, the Company responds that there are no statutes or regulations that specifically require that the Commission utilize a least cost standard in evaluating resource planning decisions. KRS 278.030 authorizes utilities to recover fair, just, and reasonable rates. While the Commission has often used a least-cost analysis as part of its determination if rates are fair, just, and reasonable, there is no mandate that the Commission utilize that approach exclusively.

e. As stated on page 137 of 1497 of the Company's IRP, Kentucky Power's Preferred Plan included early adoption of solar resources in 2019 to increase fleet diversification and to take advantage of the Investment Tax Credit. In 2026, solar becomes a least cost resource based on the assumptions within this IRP.

f. Please refer to the Company's response to KPSC 1-39.

g. For planning purposes in this IRP, Kentucky Power assumed that Big Sandy Unit 1 will retire in May 2031. The actual retirement date will be determined based on the operating conditions of the unit over time and may be sooner or later than the planning date in the IRP.

Q - 3 Refer to the IRP filing generally, which states that Kentucky Power's residential customer count has decreased by 6%, and further, that from 2017-2031 :

• population and non-farm employment in Kentucky Power's service territory is expected to decline by 0.1 %, per year, year-over-year;
• customer count will decline 0.2% per year, year-over-year;
• residential class will decline 0.5% per year, year-over-year;
• retail sales will decline by 0.2%, per year, year-over-year;

a. Given these factors, explain fully why Kentucky Power foresees any need for additional supply-side resources at all.

A - 3 Please refer to Section 5.3.2 beginning on page 139 of 1497 and Figure 30 on page 141 of 1497 of the IRP. Adding the resources identified in the Preferred Plan would result in lower cost to customers compared to a plan where no resources were added. In a plan where no resources were added, the Company would be required to meet any energy shortfall through purchases from the market. The modeling results showed that the added resources would be a lower cost alternative than relying on market purchases.

Q - 4 State the Return on Equity ("ROE") percentage that Kentucky Power pays under the purchase power agreement (also known as the Unit Power Agreement, or "UPA") for all power purchased from the Rockport Units.

A - 4 The ROE included in the UPA is 12.16%.

Q - 5 Provide a copy of the Rockport UPA, and any amendments of the same.

A - 5 Please refer to KPCO_R_AG_1_5_Attachment1.pdf.

Q - 6 Provide the name of the entity that owns the Rockport Units.

A - 6 Indiana Michigan Power Company (I&M) and AEP Generating Company (AEG) each own an undivided fifty percent share of Rockport Unit 1. Rockport Unit 2 is owned by the Wilmington Trust Company (Lessor), a non-affiliated, non-utility entity. I&M and AEG each lease an undivided fifty percent share of Unit 2 from the Lessor. Kentucky Power is entitled to 30% of the output of AEG's share in the Rockport Units under the UPA.

Q - 7 Provide the case number(s) under which the Commission approved the ROE for the Kentucky Power purchases from the Rockport Units. If the case(s) are not provided on the Commission's website, provide hard copies of the final order(s) approving the ROE percentage.

A - 7 Kentucky Power objects to this data request on the ground that the information sought is irrelevant and is not reasonably calculated to lead to the discovery of admissible evidence. Neither the extension of the UPA, nor the FERC-approved return on equity provided for by the agreement, is before the Commission for decision in this proceeding. Kentucky Power is contractually obligated under the UPA through December 2022. At this time, Kentucky Power anticipates making the determination of whether to extend the UPA beyond 2022 coincident with the filing of the Company's 2019 Integrated Resource Plan.

Without waiving its objection, Kentucky Power states that the Commission by Order dated December 13, 2004 in Case No. 2004-00420[1] approved, *inter alia*, the "Stipulation and Settlement Agreement Among Kentucky Power Company, Kentucky Industrial Utility Customers, Inc., and Office Of Attorney General, Office of Rate Intervention. Paragraphs I and II of that stipulation and settlement agreement provided for the extension of the UPA through December 7, 2022.

The UPA is a FERC-approved agreement and, as Attorney General's witness indicated in Case No. 2014-00396, the Kentucky Commission does not approve the ROE used in the UPA.[2] In its June 22, 2015 Order in that proceeding, the Kentucky Commission indicated "[w]hile the Commission may not agree with the manner in which FERC establishes ROE, we take note that the terms of a FERC-approved contract have been found to legally constitute a fair, just, and reasonable rate. We also note that FERC's methods of setting an ROE have withstood prior challenges."[3]

The referenced orders and testimony were available on the Commission's website as of 10:07 a.m. on March 6, 2017.

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[1] *In the Matter of: Application of Kentucky Power Company For Approval Of A Stipulation And Settlement Agreement Resolving State Regulatory Matters*, Case No. 2004-00420 (Ky. P.S.C. December 13, 2004).

[2] *See* Direct Testimony of Ralph C. Smith, *In the Matter of: The Application of Kentucky Power Company for: (1) A General Adjustment of Its Rates for Electric Service; (2) An Order Approving Its 2014 Environmental Compliance Plan; (3) An Order Approving Its Tariffs and Riders; and (4) An Order Granting All Other Required Approvals and Relief*, Case No. 2014-00396 (Filed March 23, 2015).

[3] Order, *In the Matter of: The Application of Kentucky Power Company for: (1) A General Adjustment of Its Rates for Electric Service; (2) An Order Approving Its 2014 Environmental Compliance Plan; (3) An Order Approving Its Tariffs and Riders; and (4) An Order Granting All Other Required Approvals and Relief*, Case No. 2014-00396 (Ky. P.S.C. June 22, 2015).

Q - 8 Provide the docket number(s) of any and all FERC dockets in which the ROE governing the Rockport PPA/UPA was decided or otherwise at issue.

A - 8 The Unit Power Agreement was originally approved in 1984 in FERC Docket No. ER84-579. It has been supplemented or amended several times since, and was most recently accepted by FERC on January 31, 2013 in Docket No. ER13-286.

Witness: Ranie K. Wohnhas
Witness: John F. Torpey

Q - 9 Reference Kentucky Power's IRP, page 63 where the Company states that the, "Rockport Plant UPA expires at the end of 2022. While KPCo is assuming for purposes of this IRP, that the UPA will be renewed and continue through the planning period, the actual decision to extend the UPA will be made in the future. KPCo is currently committed to this purchase through 2022 ... "

a. Provide a detailed explanation of the criteria that Kentucky Power will utilize to determine if the Rockport Plant UPA should be extended past 2022.

b. Provide a detailed explanation as to whether Kentucky Power has made any attempt to amend/modify the Rockport UPA in order to reduce the ROE. Explain why or why not.

A - 9 a. The criteria Kentucky Power will utilize to determine if the Rockport UPA should be extended past 2022 will be whether an extension is in the best interest of KPCO and its customers.

b. Please see the Company's response to KIUC 1-1.

Q - 10 Provide the following:

a. A copy of the most recent power purchase agreement (possibly also referred to as a UPA) that any American Electric Power ("AEP") operating company entered into with any other utility, load serving entity ("LSE"), or merchant generator.

b. If the ROE is not provided in the PPA/UPA described in subpart (a) above, provide that figure separately.

A - 10 Kentucky Power objects to the request to the extent it seeks information regarding any American Electric Power ("AEP") operating company other than Kentucky Power. This proceeding is limited to the Kentucky Power 2016 Integrated Resource Plan and the other AEP operating companies are not parties to this proceeding, and are not subject to the jurisdiction of the Public Service Commission of Kentucky. Kentucky Power further objects on the grounds that the other AEP operating companies are not obligated to inform Kentucky Power of power purchase agreements such entities may enter into. Additionally, the request is unreasonable, overbroad, and unduly burdensome to the extent it purports to impose an obligation on Kentucky Power to seek information from entities not obligated to provide such information to Kentucky Power, or to update its response each time any such entity enters into an agreement.

Kentucky Power further objects to the request on the grounds that the information sought is irrelevant and is not reasonably calculated to lead to the discovery of admissible evidence. The ROE that may be applicable to the most recent power purchase agreement entered into by any AEP operating company other than Kentucky Power with any other utility, load serving entity, or merchant generator is irrelevant to the issues presented by Kentucky Power's Integrated Resource Plan.

Without waiving these objections, Kentucky Power states that it is not a party to the most recent purchase power agreement entered into by an AEP operating company.

Q - 11 Has Kentucky Power considered becoming a Reliability Pricing Model ("RPM") member of PJM Interconnection ("PJM"), thus enabling it to participate in the PJM capacity markets?
a. Provide copies of any and all studies that Kentucky Power and/or its affiliates have prepared in this regard.
b. If Kentucky Power can be eligible to become an RPM member of PJM, state whether Kentucky Power would agree to return any and all proceeds earned under participation in the PJM capacity markets to its ratepayers. If not, explain why not.

A - 11 Kentucky Power annually assesses its options to comply with the PJM capacity market, either through participation in RPM or self-supplying under FRR.

a. Kentucky Power objects to this data request to the extent it requires the production of attorney-client privileged communications or documents protected by the attorney work product doctrine. Kentucky Power is filing a privilege log identifying the documents with respect to which the privilege and doctrine are being asserted.

Without waiving the privilege or doctrine, please see attachment KPCO_R_AG_1_11_Attachment1_Confidential.pdf for the non-privileged study pertaining to Kentucky Power's 2020/2021 PJM capacity market election. Kentucky Power is seeking confidential treatment for a portion of this attachment.

b. While eligible for RPM market payments, the Company has traditionally self-supplied which still provides the opportunity to sell surplus capacity. Regardless of the election, proceeds are appropriately credited to customers.

Q - 12 Provide copies of any and all demand response tariffs Kentucky Power has in place, including but not limited to any air conditioning load control devices.

A - 12 The Company does not offer any demand response programs within its DSM programs. Please see KPCO_R_AG_12_Attachment1.pdf for the Company's time of day and interruptible tariff offerings.

Q - 13 Does Kentucky Power have any plans to introduce Advanced Metering Infrastructure in its service territory? Discuss in full detail.

A - 13 Please refer to the Company's response to KPSC 1-49.

Q - 14 Reference Kentucky Power's IRP, page 155 to answer the following questions:

a. Provide a detailed explanation as to what "green power tariff alternatives" Kentucky Power has reviewed.

b. Kentucky Power states that it will seek green power tariff alternatives for the "growing number of customers who seek green power." Provide the specific number of customers that are seeking green power, explain how Kentucky Power obtained this information, and provide copies of any surveys/studies that have been performed.

c. Kentucky Power states that it will monitor renewable resource costs, and based on consumer demand for green energy and or other economic/strategic factors determine the appropriate schedule to pursue cost-effective solicitations that would include self-build or acquisition options.

1. Provide any and all studies or analyses that have been performed in regards to the renewable resources described above.

ii. Provide a detailed explanation of the economic/strategic factors that Kentucky Power is referencing.

iii. Would the green energy tariff customers be allocated 100% of the costs for the renewable resource option? Explain the answer in full detail.

A - 14 a. The Company is currently evaluating possible changes to its Green Pricing Option Rider tariff. No final decisions have been made.

b. The Company has not conducted surveys or studies regarding green energy. However, when prospective customers seek to locate facilities in the Company's service territory, they may indicate whether they are interested in green energy. The Company has had one potential customer indicate that it had green energy requirements for its new facilities.

c. The Company, working with the AEPSC Renewable Energy group, will determine if and when it is appropriate to issue a renewable RFP.

1) This IRP is the most recent and relevant study/analysis reviewing the cost and performance characteristics of renewable resources (wind & solar) and the impact on Kentucky Power's cost.

ii) The economic and strategic factors the Company may consider include: customer preferences in generation technology source; cost of the new resource; characteristics of the resource and ownership structure.

iii) The customer would be allocated 100% of the incremental cost of a renewable resource if a customer were to contract with the Company bilaterally for a specific renewable resource. If the customer were to purchase a REC through a green tariff the customer would be allocated 100% of the cost of the REC. Neither the Company nor the customer would bear the cost of the associated incremental renewable resource in connection with the purchase of a REC.