The undersigned, 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

COUNTY OF FRANKLIN

Case No. 2016-00413

Subscribed and sworn to before me, a Notary Public in and before said County and State, by G. Scott Fisher this the $\underline{\exists e \triangleleft}$ day of April 2017.

en Dawn Clark

Notary Public

Notary ID: 15RE55375



ANN DAWN CLARK Notary Public, State of Otxio My Commission Expires 12-03-2020 My Commission Expires: $\sqrt{2}/3/20$

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

1 Old

Brad N Hall

COMMONWEALTH OF KENTUCKY

COUNTY OF BOYD

) Case No. 2016-00413

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Brad N Hall, this the <u>sec</u> day of April, 2017.

Judy & Rosquist Notary Public

Notary ID: <u>571144</u>

My Commission Expires: January 23, 2021

The undersigned, John A. Rogness III being duly sworn, deposes and says he is the Director Regulatory Services 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

John A Rogness III

COMMONWEALTH OF KENTUCKY

COUNTY OF FRANKLIN

) Case No. 2016-000413

Subscribed and sworn to before me, a Notary Public in and before said County and State, by John A Rogness III, this the <u>2</u> day of April, 2017.

Notary Public Judy K Rasquist Notary ID: 571144

My Commission Expires: January 23, 2021

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 Forpey

STATE OF OHIO

COUNTY OF FRANKLIN

Case No. 2016-00413)

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



Notary ID: 15RE55

ANN DAWN CLARK Notary Public, State of Ohio My Commission Expires 12-03-2020

My Commission Expires: 10

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

COMMONWEALTH OF KENTUCKY

COUNTY OF BOYD

) Case No. 2016-00413

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

Kazques

Notary ID: <u>571144</u>

My Commission Expires: January 23, 2021

KPSC Case No. 2016-00413 Attorney General's Supplemental Set of Data Requests Item No. 1 Page 1 of 2 Witness: Brad N. Hall

Q - 1 Reference Kentucky Power's response to the Attorney General's Initial Request for Information, Question Number 1 to answer the following questions: a. Kentucky Power states that between 2012 and 2016 the AEP Economic and Business Development group has allocated over \$300,000 in shareholder funds for economic and development activities. Provide a detailed list of each recipient of the funds, monetary amount provided to each recipient, the goal that the recipient planned to achieve with the funds, and any and all economic development goals that have been achieved. b. Kentucky Power asserts that beginning in 2014, in connection to the Stipulation and Settlement Agreement in Case No. 2012-00578, the Company has provided \$200,000 in grants annually through the Kentucky Economic Advancement Program for economic development efforts in Lawrence, Boyd, Carter, Elliott, Johnson, Martin, and Morgan Counties. Provide a detailed list of each recipient of the funds, monetary amount provided to each recipient, the goal that the recipient planned to achieve with the funds, and any and all economic development goals that have been achieved. c. Kentucky Power states that the Kentucky Economic Advancement Program is scheduled to end in 2018. Has the Company considered extending this program due to the ongoing economic decline of its service territory? Explain the answer in full detail. d. Kentucky Power asserts that the Kentucky Power Economic Growth Grant program, that is a joint effort between the Company and its ratepayers, has approved twelve program grants totaling \$652,500. i. Provide a detailed list of each recipient of the funds, monetary amount provided to each recipient, the goal that the recipient planned to achieve with the funds, and any and all economic development goals that have been achieved. ii. Provide the total monetary amount that has been collected through the Kentucky Economic Development Surcharge since its inception. iii. Provide the total monetary amount that has been collected in the above referenced surcharge from the ratepayers. Further, provide the total monetary amount that has been collected in the above referenced surcharge from the shareholders.

KPSC Case No. 2016-00413 Attorney General's Supplemental Set of Data Requests Item No. 1 Page 2 of 2

a. Please see the Company's response to KPSC 2-12

b. Please see the Company's response to KPSC 2-12

c. The Company plans to eliminate the KEAP after 2018 and to focus its economic development efforts on the K-PEGG program. The K-PEGG program is available to all economic development organizations throughout the Company's service territory and not the seven KEAP counties. Combining the Company's economic development efforts into a single program serving the entire region will allow the Company to more efficiently utilize its economic development resources throughout its entire service territory and to ensure the funds address the most urgent needs. Economic development organizations in the KEAP counties will participate in the K-PEGG program, as they are able to participate now.

d. (i - iii). Please see the Company's response to KPSC 2-12

KPSC Case No. 2016-00413 Attorney General's Supplemental Set of Data Requests Item No. 2 Page 1 of 1 Witness: Brad N. Hall

- Q-2 Reference Kentucky Power's response to the Attorney General's Initial Request for Information, Question Number 1. Kentucky Power provided promotional materials for the portin of the Big Sandy plant property that it is being redeveloped for economic development purposes in KPCO_R_AG_1_1_Attachmentl.pdf. On page 3 of 9 of the promotional material, it appears that the Company designated the Bert T. Combs Mountain Parkway as a four-lane highway running between US 23 and Interstate 64. Since the Mountain Parkway is not currently a four-lane highway, and any expansions are still under construction, does the Company intend to correct this information?
- A 2 The materials provided in Attachment 1 to the Company's response were prepared by One East Kentucky and any decision to update or alter the materials would be theirs. It is the Company's understanding that construction work on the Mountain Parkway is continuing and on schedule to be completed in 2020. Because companies looking to relocate major portions of their business to the region will necessarily base those decisions on the potential long-term success of their business, it is appropriate to provide those companies with information on the results of infrastructure improvements to be completed in the near-term.

KPSC Case No. 2016-00413 Attorney General's Supplemental Set of Data Requests Item No. 3 Page 1 of 1 Witness: Ranie K. Wohnhas

- Q-3 Reference Kentucky Power's response to the Attorney General's Initial Request for Information, Question Number 2(c). a. Confirm that Kentucky Power participates in the P JM Interconnection ("PJM") as a Fixed Resource Request ("FRR") entity. b. State whether Kentucky Power participates in the PJM capacity market auctions, and if so, discuss the types of auctions that the Company participates in and basis on which it participates.
- A 3
 a. The Company assumes the reference is to the Fixed Resource <u>Requirement</u> (not "Request"). Under this assumption, it is confirmed that Kentucky Power historically and currently participates in the PJM market under FRR.

b. Kentucky Power participates in PJM Reliability Pricing Model (RPM) capacity market auctions to the extent the Company has surplus capacity above the amount needed to meet its FRR obligation plus a margin. When Kentucky Power elects a joint FRR plan with other AEP East Operating Companies under the terms of the Power Coordination Agreement (PCA), the combined surplus will be offered into the auction(s) and any cleared capacity sales will be allocated in accordance with the terms of the PCA. Kentucky Power generally makes this sale in the Base Residual Auction (BRA) that occurs annually approximately 3 years prior to the start of the actual delivery year. Kentucky Power, along with the other Companies in the joint plan, also have the opportunity to participate in other PJM RPM capacity auctions, such as the incremental auctions, that PJM holds from time-to-time between the BRA and the beginning of the delivery year to acquire additional capacity.

KPSC Case No. 2016-00413 Attorney General's Supplemental Set of Data Requests Item No. 4 Page 1 of 1 Witness: Gordon S. Fisher

- Q-4 Reference Kentucky Power's response to the Attorney General's Initial Request for Information, Question Number 2(e), wherein Kentucky Power states that "[i]n 2026, solar becomes a least cost resource based on the assumptions within this IRP." Explain in full detail whether the assumptions in Kentucky Power's IRP filing are premised upon the continuation of the Investment Tax Credit.
- A 4 The cost of large-scale solar resourcesreflected the Investment Tax Credit (ITC). The ITC was incorporated into prices through the 2030 installation year. At that point the impact of the 10% ITC becomes indiscernible from potential variations in projected prices.

KPSC Case No. 2016-00413 Attorney General's Supplemental Set of Data Requests Item No. 5 Page 1 of 1 Witness: Gordon S. Fisher

- Q-5 Reference Kentucky Power's response to the Attorney General's Initial Request for Information, Question Number 3. If the United States Environmental Protection Agency's Clean Power Plan is not implemented, will the additional resources that the Company plans to add, such as wind and solar, still be the lowest cost resource? Explain the answer in full detail.
- A 5 The least cost resources, or plan, in a scenario in which the Clean Power Plan is not implemented are not specifically defined within this IRP. However, the Company's IRP did evaluate a "No Carbon" scenario, in which there is no cost associated with the emission of carbon dioxide. The results of the "No Carbon" scenario are described in Table 19 of the 2016 IRP.

KPSC Case No. 2016-00413 Attorney General's Supplemental Set of Data Requests Item No. 6 Page 1 of 1 Witness: John F. Torpey

- Q-6 Reference Kentucky Power's response to the Attorney General's Initial Request for Information, Question Number 4. Confirm that in 2013, the Indiana Regulatory Commission authorized Indiana Michigan Power Company to earn a Return on Equity ("ROE") of 10.2%, and considered a reasonable range for the cost of equity to be 9.5% to 10.50%. (Foot note Indiana Utility Regulatory Commission, Cause No. 44075, Order dated Feb. 13, 2013, page 43: http://www.in.gov/iurc/files/Order in Cause No. 44075(1).pdf
- A 6 Confirmed.

KPSC Case No. 2016-00413 Attorney General's Supplemental Set of Data Requests Item No. 7 Page 1 of 1 Witness: Ranie K. Wohnhas

- Q-7 Reference Kentucky Power's response to the Attorney General's Initial Request for Information, Question Number 6. Kentucky Power states that American Electric Power's ("AEP") subsidiaries, Indiana Michigan Power Company and AEP Generating Company, own an undivided fifty percent share of Rockport Unit I, and each lease an undivided fifty percent share of Unit 2 that is owned by the Wilmington Trust Company. Explain in full detail how Kentucky Power, an AEP subsidiaries.
- A 7 Please see the Company's response to KIUC 1-1(b).

KPSC Case No. 2016-00413 **Attorney General's Supplemental Set of Data Requests** Item No. 8 Page 1 of 1 Witness: Ranie K. Wohnhas

- Q 8 Reference Kentucky Power's response to the Attorney General's Initial Request for Information, Question Number 8. Kentucky Power asserts that the Rockport Unit Power Agreement ("UP A") has been supplemented or amended several times and was most recently accepted by the Federal Energy Regulatory Commission ("FERC") in 2013. Explain in full detail why Kentucky Power did not negotiate to reduce the 12.16% ROE included in the UP A during the prior supplements and/or amendments of the contract.
 - 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. The purpose of this proceeding is for staff and intervenors to review the Company's integrated resource plan, to conduct discovery concerning the plan, and to offer comments on the plan. 807 KAR 5:058, Section 11. Staff will then issue a report summarizing its review of the plan and related information, including discovery and comments, and offering suggestions and recommendations to Kentucky Power for subsequent filings. *Id.* The FERC-approved return on equity provided for by the agreement is not 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 objections, please refer to the Company's response to Sierra Club 2-10. Kentucky Power further states that the Company evaluates the ROE associated with a contract in the context of the entire contract. A decision by Kentucky Power to renegotiate the ROE in the contract raises the risk that other provisions of the contract would be subject to change, including the 40% cap on the equity content of the capital structure. Further, the ROE included in the contract is reasonable relative to other ROEs in FERC-approved cost-based wholesale power supply agreements to which Kentucky Power is a party.

A - 8

KPSC Case No. 2016-00413 Attorney General's Supplemental Set of Data Requests Item No. 9 Page 1 of 4 Witness: John F. Torpey Witness: John A. Rogness

Q-9 Reference Kentucky Power's response to Commission Staff's First Request for Information, Question Number 4. Under the UPA, will the Rockport Plant turbine upgrades not also require Kentucky Power to incur an increased energy charge in addition to an increased demand charge? a. Identify all charges that could potentially be impacted by the Rockport Plant turbine upgrades. b. To what extent have the increased charges that Kentucky Power will incur from the Rockport Plant turbine upgrades been factored into the IRP? c. Once the upgrades are completed, will the increased efficiency improvements not inure solely to the benefit of the owners of the Rockport Plant Units (Indiana Michigan Power Company, AEP Generating Company, and Wilmington Trust Company), with the exception of potentially reduced fuel prices? If not, provide a complete explanation together with any quantifications that Kentucky Power and/or any of its affiliates have prepared. d. Explain whether Kentucky Power has requested any of its affiliates, including Indiana Michigan Power Company, to provide information necessary to the completion of the pending IRP filing. e. If Indiana Michigan Power Company and/or any other affiliate refuses to provide infimmation pertaining to the Rockport UP A, explain why the Commission should not institute an investigation as to the propriety of continuing the Rockport UPA.

A - 9
 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. The purpose of this proceeding is for staff and intervenors to review the Company's integrated resource plan, to conduct discovery concerning the plan, and to offer comments on the plan. 807 KAR 5:058, Section 11. Staff will then issue a report summarizing its review of the plan and related information, including discovery and comments, and offering suggestions and recommendations to Kentucky Power for subsequent filings. *Id.* The Company's Integrated Resource Plan is neither a concrete plan nor a request for approval of specific projects or resources, and does not bind either the Commission or the Company to approve or pursue any of the resources described in the

KPSC Case No. 2016-00413 Attorney General's Supplemental Set of Data Requests Item No. 9 Page 2 of 4

Integrated Resource Plan.

Kentucky Power further objects to subsection (c) of the request to the extent it seeks information not in the possession of Kentucky Power but in the possession of an affiliate of Kentucky Power, on the grounds that the request is overly broad and not reasonably calculated to lead to the discovery of admissible evidence. This proceeding is limited to Kentucky Power's 2016 Integrated Resource Plan. Affiliates of Kentucky Power are not parties to this proceeding, and are not subject to the jurisdiction of the Public Service Commission of Kentucky.

Without waving these objections, Kentucky Power states as follows:

The Company's Integrated Resource Plan assumes the renewal of the Rockport UPA, and therefore specifics about possible terms of renewal or other characteristics of the present or a future UPA do not affect the resource analysis submitted in the Integrated Resource Plan. For purposes of the Integrated Resource Plan, the costs to Kentucky Power associated with the Rockport UPA include energy and demand charges that are affected by multiple factors. For purposes of the Integrated Resource Plan, costs associated with a turbine upgrade at the Rockport Plant may be incurred by Kentucky Power in demand charges and/or energy charges, or as other types of costs.

a. For purposes of the IRP, costs associated with a turbine upgrade at the Rockport Plant are modeled as on-going capital costs. Recognizing that the alternative modeling scenarios considered each assumed that the Rockport UPA would be extended, the costs associated with the Rockport UPA do not affect the relative ranking of such alternatives.

b. The capital costs associated with the turbine upgrade projects on Rockport Unit1 and Unit 2 have been incorporated into the IRP. These costs are modeled as on-going capital costs that are allocated to the years in which the money is forecasted to be spent for the projects.

KPSC Case No. 2016-00413 Attorney General's Supplemental Set of Data Requests Item No. 9 Page 3 of 4

c. For purposes of the IRP, any efficiency improvement resulting from turbine upgrades at the Rockport Plant would not affect the relative ranking of resources included in the IRP. Benefits to the owners of the Rockport Plant, or the lack thereof, resulting from these upgrades are not relevant to the IRP.

d. Kentucky Power obtained all the information necessary for the completion of the IRP from American Electric Power Service Corp. No direct request was made to Indiana Michigan Power for information related to this IRP.

e. Not applicable. See response to subsection (d) and AG 2-(8).

Without waiving these objections, Kentucky Power states the prior extension of the Rockport UPA was approved by the Commission on December 13, 2004 in Case No. 2004-00420, *In the Matter of: Application of Kentucky Power Company For Approval Of A Stipulation And Settlement Agreement Resolving State Regulatory Matters*. In approving the stipulation and settlement agreement the Commission found:

> The Commission previously expressed serious concern about what had been for some time Kentucky Power's intent to meet its native load requirements by purchasing power at market-based prices rather than extending the Rockport unit power contract.... Consistent with these Commission findings, Kentucky Power is now proposing a long-term extension of the Rockport unit power contract at a price that is not subject to market volatility.

KPSC Case No. 2016-00413 Attorney General's Supplemental Set of Data Requests Item No. 9 Page 4 of 4

Based on the evidence of record and being otherwise sufficient advised, the Commission finds that the 18-year extension of the Rockport unit power contract under the terms and conditions set forth in the Stipulation is reasonable and should be approved. Extending the purchase of 390 MW of power from Rockport, when combined with the 1,060 MW from Big Sandy, will provide Kentucky Power sufficient capacity, at reasonable and fixed prices, to meet its native load during most of the hours throughout this decade, with any shortfalls in capacity being met by purchases from affiliates through the AEP-East Power Pool.

The current UPA's term expires in 2022, before which date an application may be presented to the Commission for approval of a renewal term or other disposition.

KPSC Case No. 2016-00413 Attorney General's Supplemental Set of Data Requests Item No. 10 Page 1 of 1 Witness: Gordon S. Fisher Witness: Ranie K. Wohnhas

- Q-10 Reference Kentucky Power's response to Commission Staff's First Request for Information, Question Number 5. Describe the process Kentucky Power would follow in making the determination of whether to seek a wind energy Asset Purchase Agreement as opposed to a Purchase Power Agreement. Additionally, provide the criteria that Kentucky Power would analyze in making this decision.
- A 10 For purposes of the Company's Integrated Resource Plan, and as stated in the response to Commission Staff's First Request for Information, Question 29, Kentucky Power would issue a Request for Proposals (RFP) for wind energy. The RFP would allow for both Purchase Power Agreement or Asset Purchase Agreement bids. Kentucky Power would review the bids and analyze them to determine the least cost option. The criteria for determining the least cost option would likely be the Levelized Net Cost of Energy.

KPSC Case No. 2016-00413 Attorney General's Supplemental Set of Data Requests Item No. 11 Page 1 of 1 Witness: John F. Torpey

- Q-11 Reference Kentucky Power's response to Commission Staff's First Request for Information, Question Number 29. Provide a total dollar amount of the estimated cost that the Coal Combustion Residuals Rule will have on Kentucky Power ratepayers, as was provided in the response to Commission Staff's First Request for Information, Question Number 30(a) regarding costs for complying with the Effluent Limitations Guidelines.
- A 11 Kentucky Power is still evaluating technologies for compliance with the CCR rule. However, for planning purposes, the Company estimated that its share of the CCR capital cost included in the IRP totals approximately at Mitchell Plant and at Rockport Plant.

KPSC Case No. 2016-00413 Attorney General's Supplemental Set of Data Requests Item No. 12 Page 1 of 1 Witness: Gordon S. Fisher

- Q-12 Reference Kentucky Power's response to the Commission Staff's First Request for Information, Question Number 32. With regard to the 24 circuits on which VVO/CVR is enabled, provide the proportion of the 89 MW in total demand side conservation for which the use of VVO/CVR is responsible in achieving.
- A 12 The VVO/CVR resources referenced in the question are not part of the 89 MWs of incremental demand-side resources identified in the IRP.

KPSC Case No. 2016-00413 Attorney General's Supplemental Set of Data Requests Item No. 13 Page 1 of 1 Witness: John F. Torpey

- Q-13 Reference Kentucky Power's response to the Commission Staff's First Request for Information, Question Number 35. Is Kentucky Power's position based in part on the potential future possibility of switching from the Company's current status as an FRR participant to a Reliability Pricing Model ("RPM") participant?
- A 13 No. FRR resources are exempt from PJM's new Capacity Performance requirements only through the 2018/19 Planning Year. Beginning on June 1, 2019, with the start of the 2019/20 planning year, FRR capacity resources will be subject to the same Capacity Performance rules as RPM resources.

KPSC Case No. 2016-00413 Attorney General's Supplemental Set of Data Requests Item No. 14 Page 1 of 1 Witness: John A. Rogness

- Q-14 Reference Kentucky Power's response to the Commission Staffs First Request for Information, Question Number 49. State whether Kentucky Power's existing meters are Automated Meter Reading, Advanced Metering Infrastructure, or a mixture of both. Explain the answer in full detail.
- A 14 Kentucky Power's existing meters utilize Automated Meter Reading technology.