Kentucky Power Company
KPSC Case No. 2025-00175
Sierra Club's First Set of Data Requests
Dated August 11, 2025

**DATA REQUEST**

**SC 1_1** Provide all workpapers and analyses prepared by or relied upon by Company Witness Alex E. Vaughan in preparation for their testimony regarding the Company's continued reliance on the Mitchell plant for power generation post-2028 and the availability and cost of alternatives.

**RESPONSE**

Please see the Company's response to AG 1_1.

Witness: Alex E. Vaughan

Kentucky Power Company
KPSC Case No. 2025-00175
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**DATA REQUEST**

**SC 1_2** Please provide all workpapers and analyses prepared by or relied on by Company Witness Lerah M. Kahn in preparation for their testimony regarding the residential rate impacts of the Company's proposal and all available alternatives.

**RESPONSE**

Please see the Company's response to KPSC 1_11.

Witness: Lerah M. Kahn

Kentucky Power Company
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**DATA REQUEST**

**SC 1_3** Please refer to the Testimony of Company Witness Kahn at p. 9, lines 3-5 regarding the residential rate impact of the Company's proposal. Provide the residential rate impact of all considered alternatives.

**RESPONSE**

The Company objects to this request because it seeks information not in the possession of the Company as it has not performed the requested analysis, is vague and ambiguous, and would be unduly burdensome to provide.

Subject to and without waiving these objections, Table AEV-1 (pp. 8) provides a summary comparing the total cost for each alternative. The table below identifies the difference in total cost (as well as a percent change from the total cost of Alternative 1) for Alternative 2 and 3 compared to Alternative 1 (Mitchell). The relative residential rate impacts of Alternatives 2 and 3 compared to Alternative 1 would be directionally the same as the difference in total cost.

| Alternative | Total Cost | % Increase from Alternative 1 |
|---|---|---|
| 1 - Mitchell | $ 335,405,979 | --- |
| 2 - PPAs | $ 471,440,143 | 41% |
| 3 - Market | $ 895,305,244 | 90% |

Respondent: Counsel for objections.

Witness: Alex E. Vaughan

Witness: Lerah M. Kahn

Kentucky Power Company
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**DATA REQUEST**

**SC 1_4** Please refer to the Company's Application in this matter at p. 7, paragraphs 17-20. Provide all workpapers and analyses relied on by the Company is estimating the rate impact of the approximately $77.8 million investment in the ELG project.

**RESPONSE**

Please see the Company's response to KPSC 1_11.

Witness: Tanner S. Wolffram

Kentucky Power Company
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**DATA REQUEST**

**SC 1_5** Please refer to the Application in this matter at p. 7, paragraph 20.
a. Please provide the Company's evaluation of the rate impact of the proposed $60.4 million investment in non-ELG projects that the Company intends to request recovery of as part of the Company's next rate base case.
b. Please explain why the Company's are proposing to treat ELG and non-ELG project costs differently regarding the customer ratepayer impacts of continuing to rely on the Mitchell plant beyond the end of 2028.

**RESPONSE**

a. The Company objects to this request because it seeks information not in the possession of the Company as it has not performed the requested analysis. Further, the Company objects to this request on the basis that it is not reasonably calculated to lead to the discovery of admissible evidence in this proceeding. Subject to and without waiving these objections, the Company is not seeking recovery of the non-ELG projects within the context of this proceeding. On July 29, 2025, the Company filed its Notice of Intent to file a base rate case by August 29, 2025. The Company will address the proposed recovery of the non-ELG portion of these costs in that proceeding.

b. The Company is treating the non-ELG projects differently because, unlike the ELG projects, the non-ELG projects are not eligible for recovery through the environmental surcharge under KRS 283.183.

Respondent: Counsel for objections.

Witness: Tanner S. Wolffram

Kentucky Power Company
KPSC Case No. 2025-00175
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**DATA REQUEST**

**SC 1_6** Please refer to the Testimony of Company Witness Vaughan, p. 4, lines 15-16.

a. Provide a copy of the "2023 All-Source Request for Proposals ("RFP")".
b. Provide a copy of any other RFPs issued by the Company for generation capacity since January 2, 2021.

**RESPONSE**

a. Please see KPCO_R_SC_1_6_Attachment1 for the RFP.

b. The Company objects to this request on the basis that it is not reasonably calculated to lead to the discovery of admissible evidence in this proceeding. Subject to and without waiving these objections, please see KPCO_R_SC_1_6_Attachment2, KPCO_R_SC_1_6_Attachment3, and KPCO_R_SC_1_6_Attachment4 for capacity RFPs, in addition to the 2023 All-Source RFP referenced in subpart (a), issued on the Company's behalf since January 2, 2021.

Respondent: Counsel for objections.

Witness: Alex E. Vaughan

American Electric Power Service Corporation
as agent for
Kentucky Power Company

# Request for Proposals
# Power Purchase Agreements (PPAs)

from Qualified Bidders

for

**Battery Storage Resources**

Kentucky Power Company is seeking resources (e.g. wind, solar, thermal, battery storage) via Power Purchase Agreements (PPAs) totaling up to:

Approximately 875 MW of Accredited Summer Capacity, and
Approximately 1,300 MW of Accredited Winter Capacity

**This RFP is associated with Battery Storage Resources only.**
Other RFPs may be found at the Web Address noted below.

RFP Issued: September 22, 2023

Proposals Due: November 8, 2023

Web Address: https://www.kentuckypower.com/rfp

## Table of Contents



## Attachments

KENTUCKY POWER
An AEP Company

## BACKGROUND

Kentucky Power Company ("KPCO" or the "Company") is pursuing additional generation resources via three Request for Proposals ("RFPs") to satisfy the need for additional capacity resources consistent with their 2022 Integrated Resource Plan as follows:

~875 MW of Accredited Summer Capacity, *and*

~1,300 MW of Accredited Winter Capacity

Resources contracted for as the result of the RFPs will be used to satisfy both the needs of the Summer and Winter Capacity volumes outlined above.

**The Company will evaluate each of the RFPs, individually and collectively, to determine the portfolio of projects that it elects to move forward with.**

| | |
|---|---|
| PPA | Wind and Solar RFP seeking one or more power purchase agreements (PPAs). |
| Thermal | Thermal RFP seeking one or more Power Purchase Agreements (PPAs) |
| **Standalone Storage (PPA)** | **Standalone Storage RFP seeking energy, capacity, and ancillary services via one or more PPAs with a Battery Storage Resource.** |

**This RFP is associated with Standalone Storage RFP only.**

The wind and solar PPA RFP and Thermal RFP may be found at www.kentuckypower.com/rfp.

## 1. Introduction

American Electric Power Service Corporation (AEPSC) and Kentucky Power Company (KPCO, Company or Kentucky Power) are subsidiaries of American Electric Power Company, Inc. (AEP).

AEPSC is administering this Request for Proposals (RFP) on behalf of KPCO. Affiliates of AEP and KPCO (Affiliate) will not participate in this RFP.

American Electric Power is one of the largest electric utilities in the United States, delivering electricity and custom energy solutions to approximately 5.6 million customers in 11 states. AEP owns the nation's largest electricity transmission system, a more than 40,000-mile network that includes more 765-kilovolt extra-high voltage transmission lines than all other U.S. transmission systems combined. AEP also operates 225,000 miles of distribution lines. AEP ranks among the nation's largest generators of electricity, owning approximately 25,000 megawatts of generating capacity in the U.S. AEP also supplies over 5,300 megawatts of renewable energy to customers. AEP's utility units operate as AEP Ohio, AEP Texas, Appalachian Power (in Virginia and West Virginia), AEP Appalachian Power (in Tennessee), Indiana Michigan Power, Kentucky Power, Public Service Company of Oklahoma, and Southwestern Electric Power Company (in Arkansas, Louisiana and east Texas). AEP's

headquarters are in Columbus, Ohio. More information about AEP can be accessed by visiting www.aep.com.

Kentucky Power Company, headquartered in Ashland, KY, encompasses the AEP service territory in Eastern Kentucky. KPCO serves approximately 163,000 customers. KPCO has 1,263 miles of transmission and 10,074 miles of distribution lines. Additional information regarding KPCO can be accessed by visiting www.kentuckypower.com.

## 2. RFP Overview

2.1 KPCO is requesting Proposals which will result in obtaining approximately: 875 MW of PJM Accredited Summer Capacity and 1,300 MW of PJM Accredited Winter Capacity from generation resources to meet overall capacity need. The Projects sought through this RFP are to satisfy the requirements identified in the 2022 IRP. Depending on the results of the RFP, the Company may pursue different quantities or types of resources from those specified in the IRP.

2.2 This RFP seeks PPAs for the purchase of Energy Storage Products (Energy, Capacity, and Ancillary Services) from the Battery Storage Resources. KPCO will not consider proposals in this RFP that do not meet these criteria. Proposals for Thermal, and PPAs other than Standalone Storage products should be submitted separately into the Company's Thermal and Wind and Solar PPA RFPs (see "Background," page 1.)

2.3 The minimum nameplate rated bid size for this RFP is 1) 20 MWac for PJM Interconnected Projects, and 2) 4 MWac for KPCO Distribution Connected Projects.

2.4. Affiliates of AEP and KPCO will not participate in this RFP.

2.5. KPCO may execute one or more Energy Storage Project PPAs as a result of this RFP.

2.6. Any Project(s) with which KPCO moves forward as a result of this RFP will be subject to receipt of the necessary regulatory approval, including regulatory approval from the Kentucky Public Service Commission (KPSC).

2.7. All questions regarding this RFP should be emailed to:

KPCO2023RFP@aep.com

On a weekly basis following the issuance of the RFP until the Proposal Due Date, KPCO will post a list of the non-confidential "Questions and Answers" on its RFP website:

https://www.kentuckypower.com/rfp

2.8. This RFP is not a commitment by the Company to purchase the Energy Storage Products from any Project and it does not bind the Company or its Affiliates in any manner. The Company in its sole discretion will determine which Bidders, if any, it wishes to engage in negotiations with that may lead to PPAs with one or more selected Projects.

KENTUCKY POWER
An AEP Company

## 3. Product Description and Requirements

3.1. Product: The Company is seeking to purchase the Energy Storage Products from a Project to deliver energy into PJM (PJM Interconnection L.L.C.) or KPCO's distribution electrical system via a PPA. Energy Storage Products shall include:

3.1.1. Energy
3.1.2. Capacity
3.1.3. Ancillary Services (if available)

3.2. Delivery Period: The Delivery Period for both new and existing Projects shall commence on January 1, 2027, or January 1, 2028, and continue for the length of the Term.

3.3. Expected Commercial Operation Date (COD): If not already operational, the Company is pursuing Projects that can achieve an Expected Commercial Operation Date (COD) by December 31, 2026, or December 31, 2027 for the respective Delivery Periods.

3.4. Term: The maximum Term of the PPA shall be no more than ten (10) years. Bidder may offer Alternate Term proposals, provided the Term is no more than ten (10) years.

3.5. Size: The minimum acceptable Project size is 20 MWac for PJM interconnected Projects and 4 MWac for KPCO distribution interconnected Projects.

3.6. The Battery Storage Resource shall have the following Technical and Operational Requirements:

3.6.1. A minimum of 4-hour energy storage system.

3.6.2. Minimum size 4MW/4MWh; 1 MW for 4 Hours or 4 MWs for 1 Hour.

3.6.3. Capability to operate at least 100 cycles per year with a maximum of 350 cycles per year. One cycle is the charge and discharge of a battery's total useable energy storage capability once a day.

3.6.4. Must maintain at least a 98% availability for dispatch in each calendar year.

3.6.5. Existing Projects must demonstrate a minimum roundtrip efficiency of 80%. New Projects must provide documentation to support the proposed technology can achieve a roundtrip efficiency of at least 80%.

3.6.6. Must demonstrate an ability to comply with all PJM generator requirements including but not limited to metering, telemetry, voltage and reactive control, data specifications and capacity accreditation testing as defined in PJM's governing documents and manuals.

3.6.7. Must meet PJM's Generation Capacity Resource Minimum Unit Specific Operating Parameters for Capacity Storage Resources.

3.8. Location: Projects must be physically located in the PJM Interconnection, LLC Region. The interconnection point with the PJM transmission system or KPCO's distribution electrical system will be the Point of Delivery.

3.9. Local Goods & Services: KPCO encourages the use of local goods or services sourced, in whole or in part, from one or more Kentucky businesses in the construction and/or operation of the Project or United States-based manufacturers using materials or product components made in Kentucky.

3.10. Project Development:

3.10.1. Bidder must have established site control of the proposed Project. Site control must be in the form of direct ownership, land lease, land lease option or easement. A letter of intent will not be an acceptable form of demonstrated site control.

3.10.2. Construction Labor: KPCO prefers that Bidders use union labor with an affiliation to the Building and Construction Trade Unions for the site preparation and construction of the Project. Proposals for non-union labor will be accepted.

3.10.3. Bidder shall use reasonable efforts to utilize and adopt a subcontracting plan to use small and diverse suppliers as subcontractors for work.

3.11. Interconnection:

3.11.1. Projects must be interconnected to PJM and have a completed PJM System Impact Study that remains active in the PJM queue.

OR

3.11.2. Projects must be interconnected to KPCO's distribution electrical system and must have a completed Distribution Impact Study from the KPCO Distribution Planning Group prior to the Proposal Due Date. In addition, the application for the Distribution Impact Study shall have a utility date and time stamp no later than September 22, 2023.

3.11.3. Bidders are responsible for following the established policies and procedures that are in effect regarding facility interconnection and operation with the interconnecting utility and PJM.

3.11.4. The Bidder is responsible for all costs associated with transmission interconnections and system upgrades as required by the interconnecting utility and PJM.

**4. Bid Price and Structure:**

4.1. Pricing provided should be fixed (no escalation) for the proposed monthly capacity, energy, and ancillary services payment. Additional bids may also be submitted if Bidder elects to propose alternate pricing structures.

4.2. Pricing must include all capital costs, fixed and variable O&M costs, taxes, augmentation costs due to degradation, and any other costs, as well as any Federal Tax Credit benefits, associated with delivering the full contracted output of the facility to the bid-specified Point of Delivery. Pricing must include the Company's exclusive use of the storage resource and the right to dispatch the storage resource at its discretion (within operating limitations) and for its benefit.

4.3. Optional Project size(s) provided cannot be contingent on Bidder selling the remaining portion of the Project to another party via a sale of a portion of the project company or a power purchase agreement.

4.4. Proposals must include a Bid Price for a Term of no more than 10-years.

4.5. All costs associated with distribution and/or transmission interconnection (as applicable) and interconnection facilities required for the Project, including any system upgrades, as required by the interconnecting utility or PJM up to the Point of Delivery, shall be included in the Bidder's pricing where appropriate under current FERC orders and rulings.

4.6. The Bid Price shall include any costs associated with meeting the credit requirements stated in the Form Term Sheet.

4.7. Associated Attributes. For purposes of this RFP, the sale of Energy Storage Products to KPCO under the long-term PPA includes the transfer of all capacity, energy, and ancillary services (if any), and technology attributes.

4.8. Prices must be firm, representing best and final bid. Proposals and bid pricing must be valid for at least 180 days after the Proposal Due Date.

4.9. Bidder must acknowledge and accept all responsibilities for PJM capacity performance requirements and penalties.

## 5. RFP Schedule

The schedule and deadlines set out in this section apply to this RFP. KPCO reserves the right to revise this schedule at any time and at its sole discretion.

| | |
|---|---|
| RFP Issued | September 22, 2023 |
| Proposal Due Date | November 8, 2023 |
| Bidder(s) Selected for Final Contract Negotiations | January 31, 2024 |
| Contract Execution | June 1, 2024 |
| State Regulatory Filings | July 1, 2024 |
| Receipt of Regulatory Approval Order(s) | December 15, 2024 |
| Seller Conditions to NTP achieved | March 31, 2025 |
| Notice to Proceed (NTP) | April 15, 2025 |
| Commercial Operation for new Projects by | December 15, 2026 or<br>December 15, 2027 |
| PPA Delivery Period Start Date | January 1, 2027 or<br>January 1, 2028 |

## 6. Proposal Submission

6.1. Bidders will be required to sign a Confidentiality Agreement (CA) prior to receiving detailed instructions on how to access the RFP Proposal documents and submit Proposals.

6.2. Bidder should request KPCO's Form CA by emailing (KPCO2023RFP@aep.com) and including the following documentation:

- Supporting documentation of Bidder's experience in developing, engineering, procuring equipment, construction, and commissioning battery storage facilities (> Project bid size) in the United States or any portion of Canada and/or otherwise have demonstrated appropriate experience.
- Verification of Site Control as required by Section 3.10.
- PJM Projects: Completed PJM System Impact Study as required by Section 3.11.1.
- KPCO Distribution Projects: Verification that the 1) Bidder expects to have a completed KPCO Distribution Impact Study as required by Section 3.11.2 prior to the Proposal Due Date, and 2) the application for the Distribution Impact Study had been submitted with a utility date-stamp and time-stamp of no later than September 15, 2023.

6.3. A complete Proposal shall be submitted electronically by the Proposal Due Date via a Box site.

6.4. Proposals must be complete in all material respects and received in the above-reference Box site no later than 3 p.m. EST on the Proposal Due Date as defined in Section 5.

6.5. The Company will send an email to the Bidder acknowledging its receipt of the Bidder's Proposal.

6.6. KPCO reserves the right to solicit additional proposals, if it deems necessary to do so, and the right to submit additional information requests to Bidders during the evaluation process.

6.7. Proposals and Bid Pricing must be valid for at least 180 days after the Proposal Due Date at which time Proposals shall expire unless the Bidder has been notified that its Proposal has been included in the Final Project Selection.

6.8. A Proposal should be as complete and comprehensive as possible to enable the Company to make a definitive and final evaluation of the Proposal's benefits to its customers without further contact with the Bidder.

## 7. Proposal Content

Bidders must submit the following information for each Proposal. All electronic versions of the Appendices must be uploaded to the designated Appendix folders in the Box site.

7.1. A completed Proposal Content Check Sheet (Appendix A).

7.2. An executive summary of the Project's characteristics and timeline, including any unique aspects and benefits.

7.3. A Completed Project Summary for Battery Storage Resource Projects, including the electronic Project Summary Form (link to form in Box), with the following attachments (Appendix B):

- A completed Battery Storage Design Criteria Data Sheet
- Interconnection Studies: Include a copy of ALL completed interconnection studies (i.e. System Impact Study, Distribution Impact Study, Facilities Study, etc.)
- Site Layout: Include a diagram or map identifying anticipated placement of major equipment and other project facilities, including transmission layouts and Point of Delivery.
- Site Control Documents: Include a copy of all leases, easements, or other ownership documentation (§3.10.1).
- Permit Matrix: Attach a comprehensive permit matrix and status of all required permits, including, but not limited to Federal (USFWS, FAA), State, County, City, etc.
- Environmental Report Summary: Summary of all environmental and other reports associated with the site.
- Bidder must provide documentation showing they have substantial experience in operating and maintaining Battery Storage facilities of an equal or greater MW size in the United States or any portion of Canada within the jurisdiction of NERC, and (ii) meet all applicable requirements under applicable law for operating and maintaining the Battery Storage facility, including the requirements of an RTO / ISO. A Person will be deemed to have such substantial experience if it is a Person that has at least three (3) years of experience in operating and maintaining Battery Storage facilities of a similar MW size or greater in the United States or any portion of Canada within the jurisdiction of NERC.

7.4. A completed Appendix C (Proposal Bid Pricing).

7.5. A completed Appendix D (Bidder's Credit-Related Information and Bidder Profile) which shall include:

- The identity of all persons and entities that have a direct or indirect ownership interest in the Project.
- Copies of the Annual Reports for the three most recent fiscal years and quarterly reports for the most recent quarter ended, if available.
- At least three third-party references.

7.6. Provide (i) an affirmative statement that Bidder's taking no exception to the Form Term

Sheet provided pursuant to this RFP; or (ii) a comprehensive list of exceptions to the terms and conditions contained in the applicable Form Term Sheet (Appendix E).

7.7. Bidder shall submit a Finance Plan on a separate form. Bidders must provide a proposed financing plan, including any letters of support, previous correspondence with banks / lenders intending to provide financing for the project. Also provide the proposed on-going debt-equity ratio to be carried by the project during construction and operation (Appendix F).

7.8. Completed (Appendix G) including:

- Use of Local Goods & Services: Plan for use of local goods or services sourced, in whole or in part, from one or more Kentucky businesses in the construction and/or operation of the Project. The bidder should identify these Kentucky resources in its proposal. (§3.9)
- Use of Small and Diverse Suppliers: Plan to use reasonable efforts to utilize and adopt a subcontracting plan to use small and diverse suppliers as subcontractors for work (§3.10.3)

## 8. Proposal Evaluation

Proposals must include ALL applicable content requirements as described in Section 7 – Proposal Content. KPCO will consider bids that are reliable, feasible and represent the reasonable cost means of satisfying the requirements of this RFP. The Evaluation Process, which includes three main steps, is central to the success of KPCO's RFP process.

Section 8.1: Eligibility and Threshold Requirements
Section 8.2: Detailed Analysis
Section 8.3: Final Project Selection

8.1 Eligibility and Threshold Requirements: If the Proposal does not qualify under any one of the Sections 8.1.1 – 8.1.10, the Bidder's Proposal will not qualify for this RFP and Bidder will be notified accordingly.

8.1.1 Proposal must be for a PPA and include the Energy Storage Products from a Battery Storage Resource (§3.1).

8.1.2 If not already operational, Projects must be able to achieve an Expected Commercial Operation Date (COD) by December 31, 2026, or December 31, 2027. (§3.3).

8.1.3 PJM interconnected Projects must have a minimum size of 20 MWac and KPCO Distribution interconnected projects must have a minimum size of 4 MWac. (§3.5).

8.1.4 Projects must be 1) physically located in the PJM Region (interconnected to the PJM Transmission system) or 2) interconnected to the KPCO distribution system. (§3.8).

8.1.5 Bidder must have established Site Control (§3.10.1).

8.1.6 Bidder must have 1) a completed PJM System Impact Study (§3.11.1) which remains active in the PJM queue, or 2) a completed KPCO Distribution Impact Study prior to the Proposal Due Date and the application for the Distribution Impact Study had been submitted no later than September 15, 2023 (§3.11.2).

8.1.7 Bidder must provide a Bid Price for up to a 10-year Term (§4.4).

8.1.8 Bidder or its affiliates must have completed the development, engineering, equipment procurement, and construction of a project, within the United States or Canada, of the same technology type, and of a size comparable to that of the Bidder's proposed Project and/or have demonstrated appropriate experience (§7.3).

8.1.9 Bidder's exceptions to the Form Term Sheet, considered individually or in the aggregate, are minimally acceptable to the Company as a basis for further discussions (§7.6).

8.1.10 Bidder is required to include requested financial information (Appendix D) so that AEP's credit department can conduct a financial wherewithal assessment. The Proposal price shall include any costs associated with meeting the Term Sheet credit requirements (§4.6).

8.2 Detailed Analysis: Proposals meeting the Eligibility and Threshold Requirements in Section 8.1 will move to the Detailed Analysis phase which is comprised of the Economic Analysis and the Non-Price Factor Analysis set forth below. The Economic Analysis will constitute 60% and the Non-Price Factor Analysis 40% of the overall evaluated value of each Proposal.

8.2.1 Economic Analysis: The Economic Analysis will include the calculation of three financial metrics which will provide multiple perspectives on cost and value. These will include Levelized Adjusted Net Cost of Energy (LANCOE), Levelized Adjusted Net Cost of Capacity (LANCOC), and a Value to Cost (V/C) Ratio.

V/C Ratio will be the primary ranking metric, which will constitute 60% of the overall evaluated value of the Proposal in its Final Project Selection. Additional details of the three financial metrics described above are as follows:

$$\text{LANCOE (\$/MWh)} = \frac{\text{Total Cost* (Present value of all Project costs, net of Total Value*)}}{\text{Present Value of Projected Energy Production (MWh)}}$$

$$\text{LANCOC (\$/MW-Day)} = \frac{\text{Total Cost* (Present value of all Project costs, net of Total Value*)}}{\text{Present Value of Projected PJM Accredited Capacity in MW}}$$

$$\text{V/C Ratio} = \frac{\text{Total Value*}}{\text{Total Cost* (Present value of all Project costs*)}}$$

* Defined below

***Total Cost:*** The Company will determine the present value of the costs of each qualifying Proposal. This Total Cost calculation is based on a PSA Proposal's Bid Price ($M) plus projected operations and maintenance costs (including land lease costs), fuel expense, Transmission and Congestion costs, tax expenses, decommissioning costs (including expected salvage), and applicable federal tax credits. For PPA bids, Total Costs will be evaluated based on the contract's demand charges, energy charges, and any other applicable charges. Other costs may be included based on the Company's discretion to appropriately evaluate each Proposal to ensure the Company is comparing all qualifying Proposals on an equivalent basis.

***Total Value:*** The Company will determine the present value of all the value streams of each qualifying Proposal. The value streams include the expected PJM revenues for the Proposal's energy, ancillary services and capacity, and the expected value of renewable energy certificates (RECs), and any applicable terminal value. Additionally, other value streams and financial metrics may be included based on the Company's discretion to appropriately evaluate each Proposal to ensure the Company is comparing all qualifying Proposals on an equivalent basis.

***Transmission and Congestion Costs:*** Transmission and Congestion Costs will be determined by the Company's transmission screening analysis. The transmission screening analysis will evaluate (i) transmission facilities cost and the network upgrade cost allocated to the Proposal, (ii) expected cost of transmission congestion and losses to the AEP KY's PJM load zone and (iii) cost of deliverability / curtailment risk mitigation that the Company calculates to ensure that the resources can be designated as firm resources to meet Company's capacity obligations. Transmission and Congestion Costs will be included in Total Cost calculations.

***Accredited Capacity:*** Accredited Capacity shall be computed by adjusting a qualifying Proposal's applicable nameplate or contracted capacity by the expected adjustments that are used- or are expected to be used by the PJM RTO to determine the number of MW that the Company will be credited for use in meeting applicable capacity obligations. These adjustments will include, but are not limited to, summer and winter Effective Load Carrying Capability (ELCC) adjustments and forced outage rate adjustments.

8.2.2 Non-Price Factor Analysis: The Non-Price Factor Analysis will be comprised of the following:

8.2.2.1 Project Location.

8.2.2.2 Local economic impacts & benefits, Community relations, and use

of local and diverse suppliers. Please refer to https://www.aep.com/b2b/suppliers for guidelines.

8.2.2.3 The Project's Dispatch Flexibility including: Dispatch Range, Ramp Rates, Max Operational Hours, Minimum up & down times, and Ancillary Service potential.

8.2.2.4 Cost & technology risk including: Natural gas pricing, Firm fuel cost requirements, Storage Charging costs, & PJM Performance Assessment Interval (PAI) Risk.

8.2.2.5 Bidder's experience in developing similar projects as included in the Proposal as well as Bidder's operating history of similar generation facilities.

8.2.2.6 Status of interconnection process with PJM or KPCO distribution, as applicable.

8.2.2.7 The development status of Bidder's generation facility including, but not limited to, permitting status.

8.2.2.8 Bidder's exceptions to the Form Term Sheet. The Company will review the exceptions the Bidder proposed to the Company's form agreement with a focus on risks or additional costs to the Company. Prior agreement by AEP in previous negotiations does not constitute acceptance of an exception.

8.3 Final Project Selection: KPCO will consider bids that are reliable, feasible and represent a reasonable cost means of satisfying the requirements of this RFP. Based on the results of the Detailed Analysis described above, the Company will determine which Projects will be included in the Final Project Selection. The Company will notify Bidders whether or not their Proposal has been selected and negotiation of definitive agreements will commence with Bidders whose Proposals have been selected.

## 9. Reservation of Rights

A Proposal will be deemed accepted only when the Company and the selected Bidder have executed definitive agreements for the Company's purchase of Energy Storage Products from the Project. The Company has no obligation to accept any Proposal, whether the stated price in such Proposal is the lowest price offered. The Company may reject any Proposal in its sole discretion and without any obligation to disclose the reason or reasons for rejection.

By participating in the RFP process, each Bidder agrees that any and all information furnished by or on behalf of the Company in connection with the RFP is provided without any representation or warranty, express or implied, as to the usefulness, accuracy, or completeness of such information, and neither the Company nor its Affiliates nor any of their personnel or representatives shall have any liability to any bidder or its personnel or representatives relating to or arising from the use of or reliance upon any such information or any errors or omissions therein.

The Company reserves the right to modify or withdraw this RFP, to negotiate with any and all qualified Bidders to resolve any and all technical or contractual issues, or to reject any or all Proposals and to terminate negotiations with any Bidder at any time in its sole discretion. The Company reserves the right, at any time and from time to time, without prior notice and without specifying any reason and, in its sole discretion, to (a) cancel, modify or withdraw this RFP, reject any and all Proposals, and terminate negotiations at any time during the RFP process; (b) discuss with a Bidder and its advisors the terms of any Proposal and obtain clarification from the Bidder and its advisors concerning the Proposal; (c) consider all Proposals to be the property of the Company, subject to the provisions of this RFP relating to confidentiality and any confidentiality agreement executed in connection with this RFP, and destroy or archive any information or materials developed by or submitted to the Company in this RFP; (d) request from a Bidder information that is not explicitly detailed in this RFP, but which may be useful for evaluation of that Bidder's Proposal; (e) determine which Proposals to accept, favor, pursue or reject; (f) reject any Proposals that are not complete or contain irregularities, or waive irregularities in any Proposal that is submitted; (g) accept Proposals that do not provide the lowest evaluated cost; (h) determine which Bidders are allowed to participate in the RFP, including disqualifying a Bidder due to a change in the qualifications of the Bidder or in the event that the Company determines that the Bidder's participation in the RFP has failed to conform to the requirements of the RFP; (i) conduct negotiations with any or all Bidders or other persons or with no Bidders or other persons; (j) execute one or more definitive agreements with any Bidder, and (k) utilize a Bidder's completed Appendices and any supplemental information submitted by the Bidder in any its regulatory filings.

**10. Confidentiality**

KPCO will take reasonable precautions and use reasonable efforts to maintain the confidentiality of all bids submitted. Bidders should clearly identify each page of information considered to be confidential or proprietary. KPCO reserves the right to release any proposals to agents or consultants for purposes of proposal evaluation. KPCO's disclosure policies and standards will automatically bind such agents or consultants. Regardless of the confidentiality, all such information may be subject to review by or in proceedings before the appropriate state authority, or any other governmental authority or judicial body with jurisdiction relating to these matters and may be subject to legal discovery. Under such circumstances, KPCO and AEPSC will make reasonable efforts to protect Bidder's confidential information.

**11. Bidder's Responsibilities**

11.1 It is the Bidder's responsibility to submit all requested material by the deadlines specified in this RFP.

11.2 Bidder should make its proposal as complete and comprehensive as possible so that KPCO may make a definitive and final evaluation of the proposal's benefits to its customers without further contact with the Bidder.

11.3 Bidders are responsible for the timely completion of the project and are required to

submit proof of their financial and technical wherewithal to ensure the successful completion of the project.

11.4 The Bidder will be responsible for any expenses Bidder incurs in connection with the preparation and submission of a Proposal and/or any subsequent negotiations regarding a Proposal in response this RFP. KPCO will not reimburse Bidders for their expenses under any circumstances, regardless of whether the RFP process proceeds to a successful conclusion or is abandoned by KPCO at its sole discretion.

**12. Contacts**

General RFP Questions: All correspondence and questions, with the exception of interconnection related questions, regarding this RFP should be directed to:

*KPCO2023RFP@aep.com*

PJM Interconnection: All correspondence and questions regarding the PJM Interconnection process can be found at:

*PJM Interconnection*

KPCO Interconnection: All correspondence and questions regarding the KPCO Interconnection process can be found at:

*KPCO Interconnection*

# Appendix A
## Proposal Content Check Sheet

| Section | Item | Completed |
|---|---|---|
| 7.2 | Executive Summary | |
| 7.3 | Appendix B (Project Summary) | |
| | - Completed electronic Project Summary Form (link to form in Box site) | |
| | - Company & General Project Information | |
| | - Energy Storage Project Information | |
| | - Interconnection | |
| | - Site Information | |
| | - Permits | |
| | - Preliminary Site Questions | |
| | - Bidder Projects Completed | |
| | **Attachments Required:** | |
| | - Battery Storage Design Criteria Data Sheet | |
| | - Interconnection Studies | |
| | - Site Layout (Map) | |
| | - Site Control Documents | |
| | - Permit Matrix | |
| | - Environmental Report Summary | |
| 7.4 | Appendix C (Proposal Bid Pricing) | |
| 7.5 | Appendix D (Bidder's Credit Related Information & Bidder's Profile) | |
| 7.6 | Appendix E (Exceptions to Form Term Sheet) | |
| 7.7 | Appendix F (Finance Plan) | |
| 7.8 | Appendix G (Local Goods & Services/Supplier Diversity/Community Support) | |

# Appendix B
**Project Summary**

## *Company Information*

| | | |
|---|---|---|
| Bidder (Company): | | |
| Contact Name: | | |
| Contact Title: | | |
| Address: | | |
| City: | State: | Zip Code: |
| Work Phone: | Cell Phone: | |
| Email Address: | | |
| Is the Proposal being submitted through a partnership, joint venture, consortium, or other association?_____If so, please identify all partners, joint ventures, members, or other entities or persons comprising same. | | |

## *General Project Information*

| | | |
|---|---|---|
| Project Name: | | |
| Project site located (County, State): | | |
| Will Project comply with the Prevailing Wage and Apprenticeship Requirements (PWAR) (Y/N): | | |
| Interconnection Path (select all that apply) | KPCO (Y/N): | PJM (Y/N): |
| Expected Commercial Operation Date: | Availability %: | |
| Bidder confirms it has substantial Project site control including to the Point of Interconnection: | (Y/N) | |

## *Energy Storage Project Information*

| | | | | |
|---|---|---|---|---|
| Storage Resource Description: | | | | |
| Duration (Hours): | | | | |
| Economic Life Assumption (Years): | | | | |
| Project Capacity Values, MWac | Nameplate Rating | Winter Rating | Summer Rating | PJM Capacity Value |
| | | | | |
| *Additional Storage Project information to be provided in the Battery Storage Design Criteria Data Sheet (BatteryStorageDesignCriteriaDataSheet.xls)* | | | | |

## *Interconnection – PJM (if applicable)*

| | |
|---|---|
| PJM Queue #: | Substation Name / Voltage: |
| Feasibility Study Complete (Y/N): | Feasibility Study Report Date: |
| System Impact Study Complete (Y/N): | System Impact Study Report Date: |
| Facilities Study Complete (Y/N): | Anticipated Facilities Study Completion Date: |
| Total Network Upgrade Costs (including Affected System Network Upgrade Costs) Allocated to Project from System Impact Study or Facilities Study if completed: | $ |
| Total Direct Interconnection costs from System Impact Study or Facilities Study if completed: | $ |
| Point of Interconnection with : | |
| Types of transmission service (NRIS, ERIS) | |
| PJM Interconnection Status, including description of any communication with PJM specifically indicating project status related to recently proposed PJM Queue Reform (i.e. "Fast Lane") (describe): | |
| *Please attach a copy of all interconnection studies and/or the expected completion date(s).* | |

## *Interconnection - KPCO Distribution (if applicable)*

| | |
|---|---|
| Application Date: | |
| Distribution Impact Study Completion Date: | |
| Application #: | Substation Name / Voltage: |
| Status (describe): | |

## *Site Information*

| | | |
|---|---|---|
| Site Legal Description: | | |
| Address: | | |
| City: | State: | Zip Code: |
| County: | Latitude: | Longitude: |
| Site Control (lease, easement, own, site purchase pending, etc.): | | |
| Site Acres Required: | Site Acres Secured: | |
| Is there potential for expansion (Y / N): | If Yes; acres available: | |
| *Refer to Appendix B (Attachments Required) for Site Layout and Site Control Documents requested.* | | |

## *Permits*

| |
|---|
| Has Bidder contacted all required permitting agencies and identified all permits for project? |
| Local (City/County) (Y / N): |
| State (Y / N): |
| Federal (Y / N): |
| Wildlife Resources (Federal, State, etc.) (Y / N): |
| Other (Y / N): |
| *Refer to Appendix B (Attachments Required) for the Permit Matrix requested.* |

## *Preliminary Site Questions (Y/N)*

| | |
|---|---|
| Has the site been assessed for any environmental contamination? Describe any known environmental issues. If necessary, please describe on a separate attachment | |
| Are there any Tribal Lands or Tribal mineral ownership rights within Project boundary or vicinity? | |
| Are there any Federally or State owned or controlled lands within Project boundary or vicinity? | |
| Has The Nature Conservancy or any other non-governmental organizations been engaged? | |
| Are there Conservation Reserve Program, Wetland Reserve Program or other conservation easements within the Project boundary or vicinity? | |
| Are there any pollinator vegetation requirements associated with the Project? | |
| Is the Project located on a brownfield site (e.g. former coal mine)? | |
| *Refer to Appendix B (Attachments Required) for the Environmental Report Summary requested.* | |

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## *Attachments Required*

- **ITC Strategy:** Summary of how the Project will qualify for Federal Tax Credits (e.g. ITCs).
- **Interconnection Studies:** Attach a copy of ALL completed interconnection studies (i.e. System Impact Study, Distribution Impact Study, Facilities Study, etc.).
- **Site Layout:** Include a diagram or map identifying anticipated placement of major equipment and other project facilities, including transmission layouts and Point of Delivery.
- **Site Control Documents:** Attach a copy of all leases, easements or other ownership documentation, including to point of interconnect.
- **Permit Matrix:** Attach a comprehensive permit matrix and status of all required permits, including, but not limited to Federal (USFWS, FAA), State, County, City, etc.
- **Environmental Report Summary:** The initial Proposals shall include a summary of all environmental and other reports associated with the site. (See **Note 1** for reports to summarize)

***Note 1:*** *As applicable, the following reports are requested: Tier I / II Site Characterization Report, Environmental Work / Survey Plan, Bat Acoustic Survey Report, Avian Use Survey Report, Raptor Nest Survey Report, Prey-base Survey Report, Wetland, Waters and Playa Survey / Assessment Report, Whooping Crane Habitat Assessment Report, Lesser Prairie Chicken Survey / Assessment Report, Phase I Environmental Site Assessment Report, Historical and Cultural Resource Survey / Assessment Report, All Other Species and Environmental Resource Survey and Study Reports, Record and Notes of all Federal or State Resource Agency Correspondence and Meetings, Turbine and Environmental Resource Shapefiles (.kmz format), and Bird and Bat Conservation Strategy and Eagle Conservation Plan (if available).*

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## *Bidder Completed Projects*

Provide a summary of all Energy Storage Projects >4 MW that Bidder has successfully developed and completed in the United States or Canada. For each project, describe the Bidder's specific role in the project.

| Project | Resource Type (Wind/Solar/Battery) | Location | MW | Commercial Operation Date | Bidder's Role |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
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| | | | | | |
| | | | | | |
| | | Total MW = | | | |

# Appendix C

## *Base Proposal Bid Pricing*[1]

| Expected COD by | PPA Term[2] | Maximum Annual Cycles | Capacity Payment ($/kW-month) | Alternative Proposed PPA Price Structure |
|---|---|---|---|---|
| | | | $ | |

*Note 1: Optional size(s) provided cannot be contingent on Bidder selling the remaining portion of the Project to another party via a sale of a portion of the project company or a power purchase agreement.*

*Note 2: Proposal must be no longer than a 10-year Term. In addition, alternate terms (<10 years) may be submitted.*

***Please answer the following questions related to the bid price above:***

| | |
|---|---|
| Does Bid Price include the use of union labor? | (Y/N): |

## *Alternate Bid Pricing (not required)*

| Expected COD by | PPA Term[2] | Maximum Annual Cycles | Capacity Payment ($/kW-month) | Alternative Proposed PPA Price Structure |
|---|---|---|---|---|
| | | | $ | |
| Does Bid Price include the use of union labor? | | | | (Y/N): |
| **Expected COD by** | **PPA Term[2]** | **Maximum Annual Cycles** | **Capacity Payment ($/kW-month)** | **Alternative Proposed PPA Price Structure** |
| | | | $ | |
| Does Bid Price include the use of union labor? | | | | (Y/N): |

# Appendix D

**Bidder's Credit-Related Information**

| |
|---|
| Full Legal Name of the Bidder: |
| Type of Organization (Corporation, Partnership, etc.): |
| Bidder's % Ownership in Proposed Project (as of proposal submittal date): |
| If Bidder's Ownership is <100%, identity of all persons and entities that have a direct or indirect ownership interest in the Project: |
| Full Legal Name(s) of Parent Corporation:<br>1.<br>2.<br>3. |
| Entity Providing Credit Support on Behalf of Bidder (if applicable):<br>Name:<br>Address:<br>City:<br>Zip Code: |
| Type of Relationship of Credit Support Provider: |
| Current Senior Unsecured Debt Rating:<br>1. S&P:<br>2. Moody's: |
| Bank References & Name of Institution: |
| Bank Contact:<br>Name:<br>Title:<br>Address:<br>City:<br>Zip Code:<br>Phone Number: |
| Legal Proceedings: As a separate attachment, please list all lawsuits, regulatory proceedings, or arbitration in which the Bidder or its affiliates or predecessors have been or are engaged that could affect the Bidder's performance of its bid. Identify the parties involved in such lawsuits, proceedings, or arbitration, and the final resolution or present status of such matters. |
| Financial Statements: Please provide copies of the Annual Reports for the three most recent fiscal years and quarterly reports for the most recent quarter ended, if available. If available electronically, please provide link. |

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**Bidder's Profile**

Please list Bidder's Affiliate companies:

1.
2.
3.
4.

**References**

1. Company
   a. Contact Name:
   b. Contact Number:
   c. Project:

2. Company
   a. Contact Name:
   b. Contact Number:
   c. Project:

3. Company
   a. Contact Name:
   b. Contact Number:
   c. Project:

4. Company
   a. Contact Name:
   b. Contact Number:
   c. Project:

# Appendix E

## Exceptions to Form Term Sheet

*See Section 6.1 for instructions to obtain the applicable Form Power Purchase Agreement.*

*Bidder shall include a mark up to the Form Power Purchase Agreement as part of its Proposal.*

# Appendix F
## Financing Plan

*Bidder to include a description of its financing plan.*

# Appendix G

## *Local Goods & Services*

| Describe how the Bidder will be using local goods or services sourced whole or in part from one or more Kentucky businesses, as applicable, to the extent practical in the purchase of equipment and material, or services for the Project: |
|---|

## *Use of Small and Diverse Suppliers*

| Describe plan to use reasonable efforts to utilize and adopt a subcontracting plan to use small and diverse suppliers as subcontractors for work (https://www.aep.com/b2b/suppliers): |
|---|

## *Community Support*

| Please provide a description of any economic benefits to local governments and businesses as well as local property and sales tax benefits. Include any executed agreements with the municipality, if available: |
|---|

American Electric Power Service Corporation
as agent for
Kentucky Power Company

# Request for Proposals
# Power Purchase Agreements (PPAs)

from Qualified Bidders

for

## New and Existing
## Thermal Energy Resources

Kentucky Power Company is seeking resources (e.g. wind, solar, thermal, battery storage) via Power Purchase Agreements (PPAs) totaling up to:

Approximately 875 MW of Accredited Summer Capacity, and
Approximately 1,300 MW of Accredited Winter Capacity

**This RFP is associated with Thermal Energy Resources only.**
Other RFPs may be found at the Web Address noted below.

RFP Issued: September 22, 2023
Proposals Due: November 8, 2023

Web Address:
https://www.kentuckypower.com/rfp

# Table of Contents

# Attachments

**BACKGROUND**

Kentucky Power Company ("KPCO" or the "Company") is pursuing additional generation resources via three Request for Proposals ("RFPs") to satisfy the need for additional capacity resources consistent with their 2022 Integrated Resource Plan as follows:

~875 MW of Accredited Summer Capacity, *and*

~1,300 MW of Accredited Winter Capacity

Resources contracted for as the result of the RFPs will be used to satisfy both the needs of the Summer and Winter Capacity volumes outlined above.

**The Company will evaluate each of the RFPs, individually and collectively, to determine the portfolio of projects that it elects to move forward with.**

| | |
|---|---|
| PPA | Wind and Solar RFP seeking energy, capacity, environmental attributes, and ancillary services via one or more PPAs. |
| **Thermal** | **Thermal RFP seeking energy, capacity, and ancillary services via one or more PPAs.** |
| Standalone Storage (PPA) | Standalone Storage RFP seeking energy, capacity, and ancillary services via one or more PPAs with a Battery Storage Resource. |

**This RFP is associated with the Thermal RFP only.**

The PPA RFP and Standalone Storage RFPs may be found at www.kentuckypower.com/rfp.

## 1. Introduction

American Electric Power Service Corporation (AEPSC) and Kentucky Power Company (KPCO, Company or Kentucky Power) are subsidiaries of American Electric Power Company, Inc. (AEP).

AEPSC is administering this Request for Proposals (RFP) on behalf of KPCO. Affiliates of AEP and/or KPCO are not permitted to participate in this RFP.

American Electric Power is one of the largest electric utilities in the United States, delivering electricity and custom energy solutions to approximately 5.6 million customers in 11 states. AEP owns the nation's largest electricity transmission system, a more than 40,000-mile network that includes more 765-kilovolt extra-high voltage transmission lines than all other U.S. transmission systems combined. AEP also operates 225,000 miles of distribution lines. AEP ranks among the nation's largest generators of electricity, owning approximately 25,000 megawatts of generating capacity in the U.S. AEP also supplies over 5,300 megawatts of renewable energy to customers. AEP's utility units operate as AEP Ohio, AEP Texas, Appalachian Power (in Virginia and West Virginia), AEP Appalachian Power (in Tennessee), Indiana Michigan Power, Kentucky Power, Public Service Company of Oklahoma, and Southwestern Electric Power Company (in Arkansas, Louisiana, and east Texas). AEP's headquarters are in Columbus, Ohio. More information about AEP can be accessed by visiting www.aep.com.

Kentucky Power Company, headquartered in Ashland, KY, encompasses the AEP service territory in Eastern Kentucky. KPCO serves approximately 163,000 customers. KPCO has 1,263 miles of transmission and 10,074 miles of distribution lines. Additional information regarding KPCO can be accessed by visiting www.kentuckypower.com.

## 2. RFP Overview

2.1 KPCO is requesting Proposals which will result in obtaining approximately: 875 MW of PJM Accredited Summer Capacity and 1,300 MW of PJM Accredited Winter Capacity from generation resources to meet overall capacity need. The Projects sought through this RFP are to satisfy the requirements identified in the 2022 IRP. Depending on the results of the RFP, the Company may pursue different quantities or types of resources from those specified in the IRP. The minimum nameplate rated bid size for this RFP is 20 MWac.

2.2 The Resources requested via this RFP will be acquired via a power purchase agreement (PPA) for purchase of the Energy Products (Energy, Capacity, and Ancillary Services) produced by a Natural Gas or Coal resource. Proposals for existing operational projects are eligible to be submitted into the RFP.

2.3 Affiliates of AEP and/or KPCO may not participate in this RFP.

2.4 KPCO may execute one or more PPAs for Coal or Gas as a result of this RFP.

2.5 Any Project(s) which KPCO selects as a result of this RFP will be subject to KPCO's receipt of the necessary regulatory approvals, including regulatory approvals from the Kentucky Public Service Commission (KPSC).

2.6 All questions regarding this RFP should be emailed to:

*KPCO2023RFP@aep.com*

The Company will post a list of the non-confidential "Questions and Answers" on its website on a weekly basis following the issuance of the RFP until the Proposal Due Date.

https://www.kentuckypower.com/rfp

2.7 This RFP is not a commitment by the Company to contract with any Project and it does not bind the Company or its Affiliates in any manner. The Company in its sole discretion will determine which Bidders, if any, it wishes to engage in negotiations with that may lead to PPAs with one or more selected Projects.

## 3. Product Description and Requirements

3.1 Product: The Company is seeking to purchase Energy Products from a Thermal Energy (Coal or Gas) resource for delivery into PJM (PJM Interconnection L.L.C.) via a PPA. Bidder must acknowledge and accept all responsibilities for PJM capacity performance

requirements and penalties. For guidance on individual Resources refer to Section 4. Energy Products shall include:

3.1.1 Energy
3.1.2 Capacity
3.1.3 Ancillary Services (if available)

3.2 Expected Commercial Operation Date (COD): The Company is pursuing both operational Projects and Projects that can achieve an Expected Commercial Operation Date (COD) December 15, 2027.

3.3 Term: The minimum Term for Coal and Gas PPAs shall be seven (7) years and the maximum Term shall be no more than ten (10) years. Bidder may offer Alternate Term proposals provided the Term is between seven (7) and (10) years.

3.4 Delivery Period: The Delivery Period shall commence as early as May 1, 2025, and no later than June 1, 2028.

| | **PPA Delivery Period Commencement** |
|---|---|
| **Existing Projects** | as early as 5/1/2025 and no later than 6/1/2028 |
| **New Projects with COD in 2026** | as early as 5/1/2026 and no later than 6/1/2028 |
| **New Projects with COD in 2027** | as early as 5/1/2027 and no later than 6/1/2028 |

3.5 Target Size: This RFP is seeking approximately: 875 MW of Accredited Summer Capacity and 1,300 MW of Accredited Winter Capacity from Thermal resources to meet overall capacity need. The ultimate amount of any one type of resource selected from all RFPs will depend on AEP's bid selection process.

3.6 Minimum Acceptable Project Size: The minimum acceptable Project size is 20 MWac for PJM interconnected Projects.

3.7 Location: Projects must be physically located in the PJM Interconnection, LLC Region and interconnected to the PJM Transmission system. The interconnection point with the PJM transmission system will be the Point of Delivery.

3.8 Local Content: KPCO encourages Bidders to use local goods or services sourced, in whole or in part, from one or more Kentucky businesses where feasible. The bidder should identify these resources in their proposal.

3.9 Project Development:

3.9.1 Bidder must have established site control of the proposed Project. Site control must be in the form of direct ownership, land lease, land lease option or easement. A letter of intent will not be an acceptable form of demonstrated site control.

3.9.2 Construction Labor: KPCO prefers that Bidders use union labor with an affiliation to the Building and Construction Trade Unions for the site preparation and construction of the Project. Proposals for non-union labor will be accepted.

3.9.3 Bidder shall use reasonable efforts to utilize and adopt a subcontracting plan to use small and diverse suppliers as subcontractors for work.

3.10 Interconnection:

3.10.1 Project must be interconnected to PJM.

3.10.1.1 Bidder must have a completed PJM System Impact Study which remains active in the PJM Queue

3.10.1.2 Bidders are required to provide the current status of the Project's interconnection queue position in submitted bid materials. KPCO requires further updates on the status of the Project's interconnection queue position if new information arises during the RFP process that may impact the delivery timeline or costs of the project (through either direct coordination with the RTO or as a result of new regulation, guidance, or policy changes).

3.10.1.3 The interconnection point with the PJM transmission system will be the Point of Delivery.

3.10.1.4 Bidders are responsible for following the established policies and procedures that are in effect regarding facility interconnection and operation with the interconnecting utility and PJM, as applicable.

3.10.1.5 The Bidder is responsible for all costs associated with transmission interconnections and system upgrades, including affected system upgrades (if any), as required by the interconnecting utility or PJM, as applicable.

3.10.1.6 Bidders seeking to propose a technology that is not currently reflected in their interconnection agreement or interconnection study documentation must clearly describe the timing and process (including reference to the applicable RTO tariff and/or manual) needed to make such a change in fuel type.

## 4. Bid Price and Structure

4.1. Gas & Coal Resources: Bidders shall specify in detail the pricing associated with each Energy Product it wishes to include in its proposal.

4.1.1. Pricing provided should be fixed (no escalation) for the proposed monthly capacity payment, while pricing for variable O&M should clearly state the assumed annual escalation.

For start charges, Bidders must clearly state the proposed pricing structure (e.g., cost for each charge; a certain minimum threshold of charges included in base pricing, with a cost for each charge above the threshold, etc.).

For gas charges, Bidders must clearly state its assumption regarding gas supply as well as the various cost components of gas charges, including: transportation

fee, management fee, fuel index, and total delivered price formula capturing each of the aforementioned elements (e.g., *HR x [(FI + Transportation + Mgmt)/(1-loss factor)]).*

4.1.2. Pricing must include all capital costs, fixed and variable O&M costs, taxes and any other costs associated with delivering the full contracted energy output of the facility to the bid-specified Point of Delivery.

4.2. The Company will pay for Energy Products prior to the Delivery Period at the Real-Time Locational Marginal Price ($/MWh) at the Point of Delivery minus any associated PJM charges.

4.3. All costs associated with transmission interconnection (as applicable) and interconnection facilities required for the Project, including any system upgrades, and affected system upgrades, as required by KPCO or PJM shall be included in the Bidder's pricing where appropriate under current FERC orders and rulings.

4.4. Prices must be firm, representing best and final bid. Proposals and bid pricing must be valid for acceptance at least 180 days after the Proposal Due Date.

4.5. Bidder must acknowledge and accept all responsibilities for PJM capacity performance requirements and penalties.

## 5. RFP Schedule

The schedule and deadlines set out in this section apply to this RFP. KPCO reserves the right to revise this schedule at any time and at its sole discretion.

| | |
|---|---|
| RFP Issued | September 22, 2023 |
| Proposal Due Date | November 8, 2023 |
| Bidder(s) Selected for Final Contract Negotiations | January 31, 2024 |
| Contract Execution | June 1, 2024 |
| State Regulatory Filings | July 1, 2024 |
| Receipt of Full Regulatory Approval Order(s) | December 15, 2024 |
| Seller Conditions to NTP achieved | March 31, 2025 |
| Notice to Proceed (NTP) | April 15, 2025 |
| Commercial Operation for new Projects by | December 15, 2027 |
| PPA Delivery Period Start Date | as early as May 1, 2025 and no later than June 1, 2028 |

## 6. Proposal Submission

6.1. Bidders will be required to sign a Confidentiality Agreement (CA) prior to receiving detailed instructions on how to access the RFP Proposal documents and submit Proposals.

6.2. Bidder should request KPCO's Form CA by emailing

KENTUCKY POWER
An AEP Company

KPCO2023RFP@aep.com and including the following documentation:

- Supporting documentation of Bidder's experience in developing, engineering, procuring equipment, construction, and commissioning Thermal electric generation facilities (> Project bid size) in the United States or any portion of Canada and/or otherwise have demonstrated appropriate experience.
- Verification of Site Control as required by Section 3.9.1.
- Completed PJM System Impact Study as required by Section 3.10.1.1

6.3. A completed Proposal shall be submitted electronically by the Proposal Due Date via a Box site. **More detailed information on how to submit the proposals will be provided upon a completed Confidentiality Agreement.**

6.4. Proposals must be complete in all material respects and received in the above-reference Box site no later than 3 p.m. EST on the Proposal Due Date as defined in Section 5.

6.5. The Company will send an email to the Bidder acknowledging its receipt of the Bidder's Proposal.

6.6. KPCO reserves the right to solicit additional proposals, if it deems necessary to do so, and the right to submit additional information requests to Bidders during the evaluation process.

6.7. Proposals and bid pricing must be valid for at least 180 days after the Proposal Due Date at which time Proposals shall expire unless the Bidder has been notified that its Proposal has been included in the Final Project Selection.

6.8. A Proposal should be as complete as possible to enable the Company to make a definitive and final evaluation of the Proposal's benefits to its customers without further contact with the Bidder.

## 7. Proposal Content

Bidders must submit the following information for each Proposal. All electronic versions of the Appendices must be uploaded to the designated Appendix folders in the Box site.

7.1. A completed Proposal Content Check Sheet (Appendix A).
7.2. An executive summary of the Project's characteristics and timeline, including any unique aspects and benefits.
7.3. A Completed Project Summary including the electronic Project Summary Form (link to form in Box), which must include the following attachments (Appendix B):

- Interconnection Studies: Include a copy of all completed interconnection studies (i.e., System Impact Study, Facilities Study, etc.).

- Site Layout: Include a diagram or map identifying anticipated placement of major equipment and other project facilities, including transmission layouts and point of interconnection.
- Site Control Documents: Attach a copy of all leases, easements or other ownership documentation including to the point of interconnection.
- Permit Matrix: Attach a comprehensive permit matrix that lists and describes all required permits, including, but not limited to, Federal (USFWS, FAA), State, County, City, etc. For each permit, include the status, duration, planned steps, any known mitigation requirements, critical milestones and timelines.
- Environmental Report Summary: Attach a summary of all environmental studies, reports and agency meetings associated with the Project.
- Bidder must provide documentation showing they have substantial experience in operating and maintaining electric generation facilities of an equal or greater MW size in the United States or any portion of Canada within the jurisdiction of NERC, and (ii) meet all applicable requirements under applicable law for operating and maintaining the wind or solar (as applicable) facilities, including the requirements of an RTO / ISO. A Person will be deemed to have such substantial experience if it is a Person that has at least three (3) years of experience in operating and maintaining electric generation facilities of a similar MW size or greater in the United States or any portion of Canada within the jurisdiction of NERC.

7.4. A completed Proposal Bid Pricing (Appendix C).

7.5. A completed Bidder's Credit-Related Information and Bidder Profile (Appendix D) which shall include:

- The identity of all persons and entities that have a direct or indirect ownership interest in the Project.
- Copies of the Annual Reports for the three most recent fiscal years and quarterly reports for the most recent quarter ended, if available.
- At least three third-party references.

7.6. Provide (i) an affirmative statement that Bidder's taking no exception to the Form of Power Purchase Agreement provided pursuant to this RFP; or (ii) a comprehensive list of exceptions to the terms and conditions contained in the applicable Form Term Sheet (Appendix E).

7.7. All required Thermal Resource Analysis / Study Information. (Appendix F).

7.8. A completed Appendix G, which must include:

- Use of Local Goods & Services: Plan for use of local goods or services sourced, in whole or in part, from one or more Kentucky businesses in the construction and/or operation of the Project. The bidder should identify these Kentucky resources in its proposal. (§3.8)
- Use of Small and Diverse Suppliers: Plan to use reasonable efforts to utilize

and adopt a subcontracting plan to use small and diverse suppliers as subcontractors for work (§3.9.3)

7.9. Bidder shall submit a Finance Plan on a separate form. Bidders must provide a proposed financing plan, including any letters of support, previous correspondence with banks / lenders intending to provide financing for the project. Also provide the proposed on-going debt-equity ratio to be carried by the project during construction and operation (Appendix H).

7.10. Bidder shall provide basic Environmental, Wildlife, and Site Information material (Appendix I).

7.11. Bidders must ensure that proposals for operational projects contain historical operational information over the last five years (or less if commercial operation date was more recent), including (Appendix J):

- Commercial operation date
- Production availability as well as downtime issues and outlook
- Congestion and curtailment
- Environmental issues and violations
- Safety issues
- NERC violations and resolution
- Major scheduled and unscheduled maintenance matters as well as resolution
- Community relations and external affairs issues
- Environmental and permitting summary
- List and description of any outstanding legal matters
- Confirmation of whether the project holds firm transmission service

## 8. Proposal Evaluation

Proposals must include ALL applicable content requirements as described in Section 7 – Proposal Content. KPCO will consider bids that are reliable, feasible and represent the reasonable cost means of satisfying the requirements of this RFP. The Evaluation Process, which includes three main steps, is central to the success of KPCO's RFP process.

Section 8.1: Eligibility and Threshold Requirements

Section 8.2: Detailed Analysis

Section 8.3: Final Project Selection

8.1 Eligibility and Threshold Requirements: If the Proposal does not qualify under any one of the Sections 8.1.1 – 8.1.11, the Bidder will not qualify for this RFP and will be notified accordingly.

8.1.1 Proposal must be for a Power Purchase Agreement and include the

Energy Products from a Coal or Gas energy resource (§3.1).

8.1.2 Existing Assets: The PPA Term commencement can be as early as 5/1/2025 but no later than 6/1/2028 (§3.4).

New Projects with 2026 COD: The PPA Term commencement can be as early as 5/1/2026 but no later than 6/1/2028 (§3.4).

New Projects with 2027 COD: The PPA Term commencement can be as early as 5/1/2027 but no later than 6/1/2028 (§3.4).

8.1.3 Projects must have a minimum size of 20 MWac (§3.6).

8.1.4 Projects must interconnect to PJM. (§3.10.1)

8.1.5 Bidder must have established Site Control (§3.9.1).

8.1.6 Bidder must have a completed PJM System Impact Study which remains active in the PJM queue(§3.10.1.1).

8.1.7 Bidder must provide a Bid Price (Tolling Agreement with Firm Transportation Agreement) (§4.1.1, §4.1.2).

8.1.8 Bidder must provide a Bid Price for at least a 7-year Term, but no more than a 10-year Term (§3.3).

8.1.9 Bidder shall have completed the development, engineering, equipment procurement and construction of a thermal project within the United States or Canada of size equal to or greater than the Bidder's proposed Project and have demonstrated appropriate operating experience (§6.2).

8.1.10 Bidder's exceptions to the applicable Form Term Sheet, considered individually or in the aggregate, are minimally acceptable to the Company as a basis for further discussions (§7.6).

8.1.11 Bidder is required to include requested financial information (Appendix D) so that AEP's credit department can conduct a financial wherewithal assessment. The Proposal price shall include any costs associated with meeting the Term Sheet credit requirements (§7.5).

8.2 Detailed Analysis: Proposals meeting the Eligibility and Threshold Requirements in §8.1 will move to the Detailed Analysis phase, which is comprised of the Economic Analysis and the Non-Price Factor Analysis set forth below.

8.2.1 Economic Analysis: The Economic Analysis will include the calculation of three financial metrics which will provide multiple perspectives on cost and value. These will include Levelized

Adjusted Net Cost of Energy (LANCOE), Levelized Adjusted Net Cost of Capacity (LANCOC), and a Value to Cost (V/C) Ratio.

V/C Ratio will be the primary ranking metric, which will constitute 60% of the overall evaluated value of the Proposal in its Final Project Selection. Additional details of the three financial metrics described above are as follows:

$$\text{LANCOE (\$/MWh)} = \frac{\text{Total Cost* (Present value of all Project costs, net of Total Value*)}}{\text{Present Value of Projected Energy Production (MWh)}}$$

$$\text{LANCOC (\$/MW-Day)} = \frac{\text{Total Cost* (Present value of all Project costs, net of Total Value*)}}{\text{Present Value of Projected PJM Accredited Capacity in MW}}$$

$$\text{V/C Ratio} = \frac{\text{Total Value*}}{\text{Total Cost* (Present value of all Project costs*)}}$$

* Defined below

***Total Cost:*** The Company will determine the present value of the costs of each qualifying Proposal. This Total Cost calculation is based on a PSA Proposal's Bid Price ($M) plus projected operations and maintenance costs (including land lease costs), fuel expense, Transmission and Congestion costs, tax expenses, decommissioning costs (including expected salvage), and applicable federal tax credits. For PPA bids, Total Costs will be evaluated based on the contract's demand charges, energy charges, and any other applicable charges. Other costs may be included based on the Company's discretion to appropriately evaluate each Proposal to ensure the Company is comparing all qualifying Proposals on an equivalent basis.

***Total Value:*** The Company will determine the present value of all the value streams of each qualifying Proposal. The value streams include the expected PJM revenues for the Proposal's energy, ancillary services and capacity, and the expected value of renewable energy certificates (RECs)(If applicable), and any applicable terminal value. Additionally, other value streams and financial metrics may be included based on the Company's discretion to appropriately evaluate each Proposal to ensure the Company is comparing all qualifying Proposals on an equivalent basis.

***Transmission and Congestion Costs:*** Transmission and Congestion Costs will be determined by the Company's transmission screening analysis. The transmission screening analysis will evaluate (i) transmission facilities cost and the network upgrade cost allocated to the Proposal, (ii) expected cost of transmission congestion and losses to the AEP KY's PJM load zone and (iii) cost of deliverability / curtailment risk mitigation that the Company calculates to ensure that the resources can be designated as firm resources to meet Company's capacity obligations. Transmission and Congestion Costs will be included in Total Cost calculations.

***Accredited Capacity:*** Accredited Capacity shall be computed by adjusting a qualifying Proposal's applicable nameplate or contracted capacity by the expected adjustments that are used- or are expected to be used by the PJM RTO to determine the number of MW that the Company will be credited for use in meeting applicable capacity obligations. These adjustments will include, but are not limited to, summer and winter Effective Load Carrying Capability (ELCC) adjustments and forced outage rate adjustments.

8.2.2 Non-Price Factor Analysis: The Non-Price Factor Analysis will be comprised of the following:

8.2.2.1 Project Location

8.2.2.2 Local economic impacts & benefits, Community relations, and use of local and diverse suppliers. Please refer to https://www.aep.com/b2b/suppliers for guidelines.

8.2.2.3 The Projects' Dispatch Flexibility including: Dispatch Range, Ramp Rates, Max Operational Hours, Minimum up & down times, and Ancillary service potential

8.2.2.4 Cost & Technology Risk including: Natural gas pricing, Firm fuel cost requirements, O&M, Storage Charging costs, & PJM Performance Assessment Interval (PAI) Risk

8.2.2.5 Bidder's experience in developing similar projects as included in the Proposal as well as Bidder's operating history of similar generation facilities

8.2.2.6 Status of interconnection process with PJM

8.2.2.7 The development status of Bidder's generation facility including, but not limited to, permitting status

8.2.2.8 Bidder's exceptions to the Form Term Sheet. The Company will review the exceptions the Bidder proposed to the Company's form agreement with a focus on risks or additional costs to the Company. Prior agreement by AEP in previous negotiations does not constitute acceptance of an exception

8.3 Final Project Selection: KPCO will consider bids that are reliable, feasible, and represent a reasonable cost means of satisfying the requirements of this RFP. Based on the results of the Detailed Analysis described above in Section 8.2, the Company will determine which Projects will be included in the Final Project Selection. The Company will notify Bidders whether or not their Proposal has been selected and negotiation of definitive agreements will commence with Bidders whose Proposals have been selected.

## 9. Reservation of Rights

A Proposal will be deemed accepted only when the Company and the selected Bidder have executed a Power Purchase Agreement. The Company has no obligation to accept any Proposal, whether or not the stated price in such Proposal is the lowest price offered, and the Company may reject any Proposal in its sole discretion and without any obligation to disclose the reason or reasons for rejection.

By participating in the RFP process, each bidder agrees that any and all information furnished by or on behalf of the Company in connection with the RFP is provided without any representation or warranty, express or implied, as to the usefulness, accuracy, or completeness of such information, and neither the Company nor its Affiliates nor any of their personnel or representatives shall have any liability to any bidder or its personnel or representatives relating to or arising from the use of or reliance upon any such information or any errors or omissions therein.

The Company reserves the right to modify or withdraw this RFP, to negotiate with any and all qualified Bidders to resolve any and all technical or contractual issues, or to reject any or all Proposals and to terminate negotiations with any Bidder at any time in its sole discretion. The Company reserves the right, at any time and from time to time, without prior notice and without specifying any reason and, in its sole discretion, to (a) cancel, modify or withdraw this RFP, reject any and all Proposals, and terminate negotiations at any time during the RFP process; (b) discuss with a Bidder and its advisors the terms of any Proposal and obtain clarification from the Bidder and its advisors concerning the Proposal; (c) consider all Proposals to be the property of the Company, subject to the provisions of this RFP relating to confidentiality and any confidentiality agreement executed in connection with this RFP, and destroy or archive any information or materials developed by or submitted to the Company in this RFP; (d) request from a Bidder information that is not explicitly detailed in this RFP, but which may be useful for evaluation of that Bidder's Proposal; (e) determine which Proposals to accept, favor, pursue or reject; (f) reject any Proposals that are not complete or contain irregularities, or waive irregularities in any Proposal that is submitted; (g) accept Proposals that do not provide the lowest evaluated cost; (h) determine which Bidders are allowed to participate in the RFP, including disqualifying a Bidder due to a change in the qualifications of the Bidder or in the event that the Company determines that the Bidder's participation in the RFP has failed to conform to the requirements of the RFP; (i) conduct negotiations with any or all Bidders or other persons or with no Bidders or other persons; (j) execute one or more definitive agreements with any Bidder, and (k) utilize a Bidder's completed Appendices and any supplemental information submitted by the Bidder in any of its regulatory filings.

## 10. Confidentiality

KPCO will take reasonable precautions and use reasonable efforts to maintain the confidentiality of all bids submitted. Bidders should clearly identify each page of information considered to be confidential or proprietary. KPCO reserves the right to release any proposals to agents or consultants for purposes of proposal evaluation. KPCO's disclosure policies and standards will automatically bind such agents or consultants. Regardless of the confidentiality, all such information may be subject to review by or in proceedings before the appropriate state authority, or any other governmental authority or judicial body with jurisdiction relating to these matters and may be subject to legal discovery. Under such circumstances, KPCO and AEPSC will make reasonable efforts to protect Bidder's confidential information.

## 11. Bidder's Responsibilities

11.1. It is the Bidder's responsibility to submit all requested material by the deadlines specified in this RFP.

11.2. Bidder should make its proposal as complete and comprehensive as possible so that KPCO may make a definitive and final evaluation of the proposal's benefits to its customers without further contact with the Bidder.

11.3. Bidders are responsible for the timely completion of the project and are required to submit proof of their financial and technical wherewithal to ensure the successful completion of the project.

11.4. The Bidder will be responsible for any expenses Bidder incurs in connection with the preparation and submission of a Proposal and/or any subsequent negotiations regarding a Proposal in response to this RFP. KPCO will not reimburse Bidders for their expenses under any circumstances, regardless of whether the RFP process proceeds to a successful conclusion or is abandoned by KPCO at its sole discretion.

## 12. Contacts

General RFP Questions: All correspondence and questions, with the exception of interconnection related questions, regarding this RFP should be directed to:

*KPCO2023RFP@aep.com*

PJM Interconnection: All correspondence and questions regarding the PJM Interconnection process can be found at:

*PJM Interconnection*

# Appendix A
## Proposal Content Check Sheet

| Section | Item | Completed |
|---|---|---|
| 7.2 | Executive Summary | |
| 7.3 | Appendix B (Project Summary) | |
| | - Completed Electronic Project Summary Form (Link in Box Site) | |
| | - Company & Project Information | |
| | - Interconnection (PJM) | |
| | - Site Information | |
| | - Permits | |
| | - Preliminary Site Questions | |
| | - Projects Completed of the Same Technology Type | |
| | Attachments Required: | |
| | - Interconnection Studies | |
| | - Site Layout | |
| | - Site Control Documents | |
| | - Permit Matrix | |
| | - Environmental Report Summary | |
| 7.4 | Appendix C (Proposal Bid Pricing) | |
| 7.5 | Appendix D (Bidder's Credit Related Information) | |
| 7.6 | Appendix E (Exceptions to Form Term Sheet) | |
| 7.7 | Appendix F (Thermal Resource Information) | |
| 7.8 | Appendix G (Local Goods & Services / Small & Diverse Suppliers / Community Support) | |
| 7.9 | Appendix H (Financing Plan) | |
| 7.10 | Appendix I (Environmental / Wildlife / Site Information) | |
| 7.11 | Appendix J (Operational Project Information) | |

# Appendix B
**Project Summary**

## *Company Information*

| | | |
|---|---|---|
| Bidder (Company): | | |
| Contact Name: | | |
| Contact Title: | | |
| Address: | | |
| City: | State: | Zip Code: |
| Work Phone: | Cell Phone: | |
| Email Address: | | |
| Is the Proposal being submitted through a partnership, joint venture, consortium, or other association? _____ If so, please identify all partners, joint ventures, members, or other entities or persons comprising same. | | |
| *Additional company information to be provided in Appendix D – Bidder's Credit-Related Information and Bidder's Profile* | | |

## *General Project Information*

| | |
|---|---|
| Project Name: | |
| Resource Type:<br>*(e.g. Coal, NG Simple Cycle, Combined Cycle, etc.):* | |
| Project site located (County, State): | |
| PJM Queue #: | PJM Study Status: |
| Expected Commercial Operation Date: | |
| Design Life (Years); if Operational Project, also include estimated remaining useful life: | |
| Bidder confirms that it has substantial Project site control (including to the Point of Interconnection: | (Y/N): |

## *Thermal Project Information*

| Fuel Type (Primary / Secondary): | | | | |
|---|---|---|---|---|
| Project Capacity Values, MWac | Nameplate Rating | Winter Rating | Summer Rating | PJM Capacity Value |
| | | | | |
| *Additional Thermal Project information to be provided in Appendix F – Thermal Resource Information* | | | | |

## *Interconnection (PJM)*

| PJM Queue #: | Substation Name / Voltage: |
|---|---|
| Feasibility Study Complete (Y/N): | Feasibility Study Report Date: |
| System Impact Study Complete (Y/N): | System Impact Study Report Date: |
| Facilities Study Complete (Y/N): | Anticipated Facilities Study Completion Date: |
| Total Network Upgrade Costs (including Affected System Network Upgrade Costs) Allocated to Project from System Impact Study or Facilities Study if completed: | $ |
| Total Direct Interconnection costs from System Impact Study or Facilities Study if completed: | $ |
| Point of Interconnection with: | |
| Types of transmission service (NRIS, ERIS) | |
| PJM Interconnection Status, including description of any communication with PJM specifically indicating project status related to recently proposed PJM Queue Reform (i.e. “Fast Lane”) (describe): | |
| *Please attach a copy of all interconnection studies and/or the expected completion date(s).* | |

## Site Information

| | | |
|---|---|---|
| Site Legal Description: | | |
| Address: | | |
| City: | State: | Zip Code: |
| County: | Latitude: | Longitude: |
| Site Control (lease, easement, own, site purchase pending, etc.): | | |
| Site Acres Required: | Site Acres Secured: | |
| Is there potential for expansion (Y / N): | If yes, acres available: | |
| *Refer to Appendix B (Attachments Required) for Site Layout and Site Control Documents requested.* | | |

## Permits

| |
|---|
| Has Bidder contacted all required permitting agencies and identified all permits for project? |
| Local (City/County) (Y / N): |
| State (Y / N): |
| Federal (Y / N): |
| Wildlife Resources (Federal, State, etc.) (Y / N): |
| Other (Y / N): |
| *Refer to Appendix B (Attachments Required) for the Permit Matrix requested.* |

## Preliminary Site Questions

| | |
|---|---|
| Are there any Federal, State, or Tribal lands in the vicinity? | |
| What is the current status of Bidder's FAA permitting process? Has the project been issued Determination of NO Hazard? (For the entire project? For a portion of the project? If so, when is the expiration date?) | |
| Has habitat for any rare, threatened, or endangered species been identified within the vicinity (within 1 mile) of the project? If so, for what species? | |
| If habitat has been identified in the project vicinity, what is the current status of consultations with the U.S. Fish and Wildlife Service or applicable state agency? | |
| *Additional Site Information provided in Appendix I – Environmental, Wildlife, Land Use and Site Information* | |

## *Projects Completed of the Same Technology Type*

Provide a summary of all projects (≥ 20 MWac) that Bidder has successfully developed and completed in the United States or Canada. For each project, describe the Bidder's specific role in the project.

| Project | Location | MWac | Bidder's Role |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | Total MWac = | | |

Please provide a summary of the operating history of previously built projects (≥20 MWac), if necessary, provide in a separate attachment

# Appendix C

## *PPA Proposal Bid Pricing*

| Coal / Gas Base Proposal | | | | | |
|---|---|---|---|---|---|
| **Expected Commence Date** | **Delivery Period** | **PPA Term and Expected Annual Energy** | **Capacity Payment ($/kW-month)** | **Variable O&M Charge** | **Start Charges** |
| | | | | | $ |

## *Alternate Bid Pricing (not required)*

| Coal / Gas Base Proposal | | | | | |
|---|---|---|---|---|---|
| **Expected Commence Date** | **Delivery Period** | **PPA Term and Expected Annual Energy** | **Capacity Payment ($/kW-month)** | **Variable O&M Charge** | **Start Charges** |
| | | | | | $ |

***** Bidder may offer Alternate Term proposals provided the Term is between seven (7) and (10) years.

# Appendix D

**Bidder's Credit-Related Information**

| |
|---|
| Full Legal Name of the Bidder: |
| Type of Organization (Corporation, Partnership, etc.): |
| Bidder's % Ownership in Proposed Project (as of proposal submittal date): |
| If Bidder's Ownership is <100%, identity of all persons and entities that have a direct or indirect ownership interest in the Project: |
| Full Legal Name(s) of Parent Corporation:<br>1.<br>2.<br>3. |
| Entity Providing Credit Support on Behalf of Bidder (if applicable):<br>Name:<br>Address:<br>City:<br>Zip Code: |
| Type of Relationship of Credit Support Provider: |
| Current Senior Unsecured Debt Rating:<br>1. S&P:<br>2. Moody's: |
| Bank References & Name of Institution: |
| Bank Contact:<br>Name:<br>Title:<br>Address:<br>City:<br>Zip Code:<br>Phone Number: |
| Legal Proceedings: As a separate attachment, please list all lawsuits, regulatory proceedings, or arbitration in which the Bidder or its affiliates or predecessors have been or are engaged that could affect the Bidder's performance of its bid. Identify the parties involved in such lawsuits, proceedings, or arbitration, and the final resolution or present status of such matters. |
| Financial Statements: Please provide copies of the Annual Reports for the three most recent fiscal years and quarterly reports for the most recent quarter ended, if available. If available electronically, please provide link. |

**Bidder's Profile**

Please list Bidder's Affiliate companies:

1.
2.
3.
4.

**References**

1. Company
   a. Contact Name:
   b. Contact Number:
   c. Project:

2. Company
   a. Contact Name:
   b. Contact Number:
   c. Project:

3. Company
   a. Contact Name:
   b. Contact Number:
   c. Project:

4. Company
   a. Contact Name:
   b. Contact Number:
   c. Project:

# Appendix E

## Exceptions to Form Term Sheet

*See Section 6.2 for instructions to obtain the applicable Form Term Sheet.*

*Bidder shall include a mark up to the Form Term Sheet as part of its Proposal.*

# Appendix F

**Thermal Resource Information**

*See Section 6.2 for instructions to obtain any of the documents identified below:*

1. Bidder must populate the data required in the Company's following document:

    - Thermal Data Review Form_2023

# Appendix G

**Kentucky Economic Stimulus Benefits / Community Support / Supplier/Contractor Diversity**

## *Local Goods & Services*

| Describe how the Bidder will be using local goods or services sourced in whole or in part from one or more Kentucky businesses, as applicable, to the extent practical in the purchase of equipment and material, or services for the Project: |
|---|

## *Use of Small and Diverse Suppliers*

| Describe plan to use reasonable efforts to utilize and adopt a subcontracting plan to use small and diverse suppliers as subcontractors for work (https://www.aep.com/b2b/suppliers): |
|---|

## *Community Support*

| Please provide a description of any economic benefits to local governments and businesses as well as local property and sales tax benefits. Include any executed agreements with the municipality, if available: |
|---|

# Appendix H

## Financing Plan

*Bidder to include a description of its financing plan.*

# Appendix I

**Environmental / Wildlife / Site Information**

1. Bidder must populate the data required in the Company's "Environmental Wildlife Site Review Form" document (*See Section 6.2 for instructions to obtain*).

2. Bidder must include the following attachments
   a. Site Layout: Attach a diagram identifying anticipated placement of major equipment and other project facilities, including transmission layouts and Point of Delivery.
   b. Site Control: Verify site control and reference documentation
   c. Permit Matrix: List and describe all city, county, state and federal permits required for this project. Include: status, duration, planned steps, any known mitigation requirements, critical milestones, and timelines.
   d. Environmental Report Summary: The initial Proposals shall include a summary of all environmental studies, reports and agency meetings associated with the Project. (See below for potential reports to summarize, include data summaries, results and findings)

3. Please attach any applicable reports providing environmental information specific to the project, including but not limited to, the following reports as available:
   a. Critical Issues Analysis
   b. Site Characterization Assessment and Reports
   c. Environmental Work / Survey Plan
   d. Federal / State Rare, Threatened, or Endangered Species Assessments and Surveys
   e. Bat Acoustic Survey Report
   f. Avian Use Survey Report
   g. Raptor Nest Survey Report
   h. Prey-base Survey Report
   i. Wetland and Waters Delineation / Assessment Report
   j. Phase I Environmental Site Assessment Report
   k. Historical and Cultural Resource Survey / Assessment Report
   l. All Other Environmental Resource Surveys, Assessments, and Study Reports
   m. Record and Notes of all Federal and/or State Resource Agency Correspondence and Meetings
   n. Environmental Justice Analyses
   o. Aviation / FAA and Glare Studies
   p. Radar Study
   q. Noise and Shadow Flicker Study
   r. Associated Project Infrastructure and Environmental Resource Shapefiles (.kmz format)
      Bird and Bat Conservation Strategy and Eagle Conservation Plan (if available)

# Appendix J

**Operational Project Information**

*Refer to Section 7.11 for Requested Operational Project Information*

American Electric Power Service Corporation
as agent for
Kentucky Power Company

# Request for Proposals
# Power Purchase Agreements (PPAs)

from Qualified Bidders

for
**Solar Energy Resources,**
and / or
**Wind Energy Resources**

Kentucky Power Company is seeking resources (e.g. wind, solar, thermal, battery storage) via Power Purchase Agreements (PPAs) totaling up to:

Approximately 875 MW of Accredited Summer Capacity, and
Approximately 1,300 MW of Accredited Winter Capacity

**This RFP is associated with Wind & Solar Resources only.**
Other RFPs may be found at the Web Address noted below.

RFP Issued: September 22, 2023
Proposals Due: November 8, 2023

Web Address: https://www.kentuckypower.com/rfp

## Table of Contents



## Attachments

## BACKGROUND

Kentucky Power Company ("KPCO" or the "Company") is pursuing additional generation resources via three Request for Proposals ("RFPs") to satisfy the need for additional capacity resources consistent with their 2022 Integrated Resource Plan as follows:

~875 MW of Accredited Summer Capacity, *and*

~1,300 MW of Accredited Winter Capacity

Resources purchased or contracted for as the result of the RFPs will be used to satisfy both the needs of the Summer and Winter Capacity volumes outlined above.

**The Company will evaluate each of the RFPs, individually and collectively, to determine the portfolio of projects that it elects to move forward with.**

| **PPA** | **Wind and Solar RFP seeking energy, capacity, environmental attributes, and ancillary services via one or more PPAs.** |
|---|---|
| Thermal | Thermal RFP seeking energy, capacity, and ancillary services via one or more PPAs. |
| Standalone Storage (PPA) | Standalone Storage RFP seeking energy, capacity, and ancillary services via one or more PPAs with a Battery Storage Resource. |

**This RFP is associated with the Wind and Solar PPA RFP only.**

The Thermal and Standalone Storage RFPs may be found at www.kentuckypower.com/rfp.

## 1. Introduction

American Electric Power Service Corporation (AEPSC) and Kentucky Power Company (KPCO, Company or Kentucky Power) are subsidiaries of American Electric Power Company, Inc. (AEP).

AEPSC is administering this Request for Proposals (RFP) on behalf of KPCO. Affiliates of AEP and/or KPCO are not permitted to participate in this RFP.

American Electric Power is one of the largest electric utilities in the United States, delivering electricity and custom energy solutions to approximately 5.6 million customers in 11 states. AEP owns the nation's largest electricity transmission system, a more than 40,000-mile network that includes more 765-kilovolt extra-high voltage transmission lines than all other U.S. transmission systems combined. AEP also operates 225,000 miles of distribution lines. AEP ranks among the nation's largest generators of electricity, owning approximately 25,000 megawatts of generating capacity in the U.S. AEP also supplies over 5,300 megawatts of renewable energy to customers. AEP's utility units operate as AEP Ohio, AEP Texas, Appalachian Power (in Virginia and West Virginia), AEP Appalachian Power (in Tennessee), Indiana Michigan Power, Kentucky Power,

Public Service Company of Oklahoma, and Southwestern Electric Power Company (in Arkansas, Louisiana and east Texas). AEP's headquarters are in Columbus, Ohio. More information about AEP can be accessed by visiting www.aep.com.

Kentucky Power Company, headquartered in Ashland, KY, encompasses the AEP service territory in Eastern Kentucky. KPCO serves approximately 163,000 customers. KPCO has 1,263 miles of transmission and 10,074 miles of distribution lines. Additional information regarding KPCO can be accessed by visiting www.kentuckypower.com.

## 2. RFP Overview

2.1 KPCO is requesting Proposals which will result in obtaining approximately: 875 MW of PJM Accredited Summer Capacity and 1,300 MW of PJM Accredited Winter Capacity from generation resources to meet overall capacity need. The Projects sought through this RFP are to satisfy the requirements identified in the 2022 IRP. Depending on the results of the RFP, the Company may pursue different quantities or types of resources from those specified in the IRP.

The minimum nameplate rated bid size for this RFP is 20 MWac for PJM Interconnected Projects and 5 MWac for Kentucky Power Distribution interconnected Projects.

2.2. This RFP seeks PPAs for purchase of Renewable Energy Products (Energy, Capacity, Environmental Attributes (including Renewable Energy Certificates) and ancillary services) from Solar and/or Wind Energy Resources. KPCO will not consider proposals in this RFP that do not meet these criteria. Proposals for PSA and Capacity only products will not be accepted (see “Background,” page 1.)

2.3. Affiliates of AEP and/or KPCO may not participate in this RFP.

2.4. KPCO may execute one or more Solar and/or Wind Project PPAs as a result of this RFP.

2.5. Any Project(s) with which KPCO moves forward as a result of this RFP will be subject to KPCO’s receipt of the necessary regulatory approvals, including regulatory approvals from the Kentucky Public Service Commission (KPSC).

2.6. All questions regarding this RFP should be emailed to:

KPCO2023RFP@aep.com

KPCO will post a list of the non-confidential “Questions and Answers” on its RFP website www.kentuckypower.com/rfp on a weekly basis following the issuance of the RFP until the Proposal Due Date.

2.7. This RFP is not a commitment by the Company to contract with any Project and it does

not bind the Company or its Affiliates in any manner. The Company in its sole discretion will determine which Bidders, if any, it wishes to engage in negotiations with that may lead to PPAs with one or more selected Projects.

## 3. Product Description and Requirements

3.1. Product: The Company is seeking to purchase the Renewable Energy Products from a Project to deliver energy into PJM (PJM Interconnection L.L.C.) or KPCO's distribution electrical system via a Power Purchase Agreement (PPA). Renewable Energy Products shall include:

3.1.1. Energy
3.1.2. Capacity
3.1.3. Environmental Attributes (including RECs)
3.1.4. Ancillary Services (if available)

3.2. Expected Commercial Operation Date (COD): The Company is pursuing both operational Projects and Projects that can achieve an Expected Commercial Operation Date (COD) by December 31, 2026 or December 31, 2027.

3.3. Term: The base Term of the PPA shall be 20-years. In addition to a 20-year Term, Bidder may offer Alternate Term proposals.

3.5. Delivery Period: The Delivery Period shall commence on January 1, 2027, or January 1, 2028, and continue for the length of the Term.

3.6. Size: This PPA RFP is seeking approximately: 875 MW of Accredited Summer Capacity and 1,300 MW of Accredited Winter Capacity from Wind and Solar resources to meet overall capacity need. The ultimate amount of any one type of resource selected from all RFPs will depend on AEP's bid selection process. The minimum acceptable Project size is 20 MWac for PJM interconnected Projects and 5 MWac for KPCO distribution interconnected Projects.

3.7. Location: Projects must be 1) physically located in the PJM Interconnection, LLC Region and interconnected to the PJM Transmission system, or 2) interconnected to the KPCO distribution system. The interconnection point with the PJM transmission system or KPCO's distribution electrical system will be the Point of Delivery.

3.8. Local Goods & Services: KPCO encourages the use of local goods or services sourced, in whole or in part, from one or more Kentucky businesses in the construction and/or operation of the Project or United States-based manufacturers using materials or product components made in Kentucky.

3.9. Project Development:

3.9.1. Bidder must have established site control of the proposed Project. Site control must be in the form of direct ownership, land lease, land lease option or easement. A letter of intent will not be an acceptable form of demonstrated site control.

3.9.2. Construction Labor: KPCO prefers that Bidders use union labor with an affiliation to the Building and Construction Trade Unions for the site preparation and construction of the Project. Proposals for non-union labor will be accepted.

3.9.3. Bidder shall use reasonable efforts to utilize and adopt a subcontracting plan to use small and diverse suppliers as subcontractors for work.

3.10. Interconnection:

3.10.1. Projects must be interconnected to PJM and have a completed PJM System Impact Study which remains active in the PJM Queue.

OR

3.10.2. Projects must be interconnected to KPCO's distribution electrical system and must have a completed Distribution Impact Study from the KPCO Distribution Planning Group prior to the Proposal Due Date. In addition, the application for the Distribution Impact Study shall have a utility date and time-stamp no later than September 22, 2023.

3.10.3. Bidders are responsible for following the established policies and procedures that are in effect regarding facility interconnection and operation with the interconnecting utility and PJM.

3.10.4. The Bidder is responsible for all costs associated with transmission interconnections and system upgrades as required by the interconnecting utility and PJM.

**4. Bid Price and Structure:**

4.1. The Bid Price must be for a bundled Renewable Energy Product as described in §3.1.

4.2. The Bid Price shall be on an "as-available" per MWh basis with no separate capacity payment.

4.3. All-in Price. Pricing must include all capital costs, fixed and variable O&M costs, taxes and any other costs associated with delivering the full contracted energy output of the facility to the bid-specified Point of Delivery. All costs associated with distribution and/or transmission interconnection (as applicable) and interconnection facilities required for the Project, including any system upgrades, as required by PJM up to the Point of Delivery, shall be included in the Bidder's pricing where appropriate under current FERC orders and rulings.

4.4. Bid Price must be an "all-in" around-the-clock Price ($/MWh) for the entire term of the agreement commencing on January 1, 2027 or January 1, 2028.

4.5. The Bid Price must be a fixed, non-escalating price for the term of the PPA.

4.6. Proposals must include a Bid Price for a 20-year Term. Additionally, Bidders may include proposals with Alternate Terms.

4.7. The Company will pay for Renewable Energy Products prior to the Delivery Period (§3.5) at the Real-Time Locational Marginal Price ($/MWh) at the Point of Delivery less any associated PJM charges.

4.8. The Bid Price shall include any costs associated with meeting the credit requirements stated in the Form PPA Agreement.

4.9. Associated Attributes. For purposes of this solicitation, the sale of Renewable Energy Products to KPCO under the long term PPA includes the transfer of all capacity, energy ancillary services (if any), and environmental attributes including associated renewable energy certificates (RECs) and any other current or future environmental attributes, including any greenhouse gas emission reductions associated with the quantity contracted from the facility from the project for the term of the PPA.

4.10. Prices must be firm, representing best and final bid. Proposals and bid pricing must be valid for at least 180 days after the Proposal Due Date.

## 5. RFP Schedule

The schedule and deadlines set out in this section apply to this RFP. KPCO reserves the right to revise this schedule at any time and at its sole discretion.

| | |
|---|---|
| RFP Issued | September 22, 2023 |
| Proposal Due Date | November 8, 2023 |
| Bidder(s) Selected for Final Contract Negotiations | January 31, 2024 |
| Contract Execution | June 1, 2024 |
| State Regulatory Filings | July 1, 2024 |
| Receipt of Regulatory Approval Order(s) | December 15, 2024 |
| Seller Conditions to NTP achieved | March 31, 2025 |
| Notice to Proceed (NTP) | April 15, 2025 |
| Commercial Operation (COD) | December 31, 2026 or<br>December 31, 2027 |
| PPA Delivery Period Start Date | January 1, 2027 or<br>January 1, 2028 |

## 6. Proposal Submission

6.1. Bidders will be required to sign a Confidentiality Agreement (CA) prior to receiving detailed instructions on how to access the RFP Proposal documents and submit Proposals.

6.2. Bidder should request KPCO's Form CA by emailing (KPCO2023RFP@aep.com) and including the following documentation:

- Supporting documentation of Bidder's experience in developing, engineering, procuring equipment, construction, and commissioning wind or solar powered electric generation facilities (> Project bid size) in the United States or any portion of Canada and/or otherwise have demonstrated appropriate experience.
- Verification of Site Control as required by Section 3.9.1.
- PJM Projects: Completed PJM System Impact Study as required by Section 3.10.1.
- KPCO Distribution Projects: Verification that the 1) Bidder expects to have a completed KPCO Distribution Impact Study as required by Section 3.10.2 prior to the Proposal Due Date, and 2) the application for the Distribution Impact Study had been submitted with a utility date-stamp and time-stamp of no later than September 22, 2023.

6.3. A completed Proposal shall be submitted electronically by the Proposal Due Date via a Box site. **More detailed information on how to submit the proposals will be provided upon a completed Confidentiality Agreement.**

6.4. Proposals must be complete in all material respects and received in the above-reference Box site no later than 3 p.m. EST on the Proposal Due Date as defined in Section 5.

6.5. The Company will provide an email to the Bidder acknowledging its receipt of the Bidder's Proposal.

6.6. KPCO reserves the right to solicit additional proposals, if it deems necessary to do so, and the right to submit additional information requests to Bidders during the evaluation process.

6.7. Proposals and bid pricing must be valid for at least 180 days after the Proposal Due Date at which time Proposals shall expire unless the Bidder has been notified that its Proposal has been included in the Final Project Selection.

6.8. A Proposal should be as comprehensive as possible to enable the Company to make a definitive and final evaluation of the Proposal's benefits to its customers without further contact with the Bidder.

## 7. Proposal Content

Bidders are encouraged to provide as much information as possible to aid in the evaluation of the proposal. The Bidder should also provide any additional information the Bidder deems necessary or useful to the Company in making a definitive and final evaluation of the benefits of the Bidder's proposal without further interaction between the Company and the Bidder.

Bidders must submit the following information for each Proposal. All electronic versions of the Appendices shall be uploaded to the designated folders in the Box site.

7.1. A completed Proposal Content Check Sheet (Appendix A).

7.2. An executive summary of the Project's characteristics and timeline, including any unique aspects and benefits.

7.3. Completed Project Summary (Appendix B) for Solar and/or Wind Projects, including the electronic Project Summary Form (link to form in Box), with the following attachments:

- PTC/ITC Strategy: Summary of how the Project will qualify for Federal Tax Credits (e.g. PTCs or ITCs).
- Interconnection Studies: Include a copy of ALL completed interconnection studies (i.e. System Impact Study, Distribution Impact Study, Facilities Study, etc.)
- Site Layout: Include a diagram or map identifying anticipated placement of major equipment and other project facilities, including transmission layouts and Point of Delivery.
- Site Control Documents: Include a copy of all leases, easements or other ownership documentation (§3.9.1).
- Permit Matrix: Attach a comprehensive permit matrix and status of all required permits, including, but not limited to Federal (USFWS, FAA), State, County, City, etc.
- Environmental Report Summary: Summary of all environmental and other reports associated with the site.
- Bidder must provide documentation showing they have substantial experience in operating and maintaining wind or solar (as applicable) powered electric generation facilities of an equal or greater MW size in the United States or any portion of Canada within the jurisdiction of NERC, and (ii) meet all applicable requirements under applicable law for operating and maintaining the wind or solar (as applicable) facilities, including the requirements of an RTO / ISO. A Person will be deemed to have such substantial experience if it is a Person that has at least three (3) years of experience in operating and maintaining wind or solar powered electric generation facilities of a similar MW size or greater in the United States or any portion of Canada within the jurisdiction of NERC.

7.4. A completed Proposal Bid Pricing (Appendix C).

7.5. A completed Bidder's Credit-Related Information and Bidder Profile (Appendix D) which shall include:

- The identity of all persons and entities that have a direct or indirect ownership

interest in the Project.

- Copies of the Annual Reports for the three most recent fiscal years and quarterly reports for the most recent quarter ended, if available.
- At least three third-party references.

7.6. Provide (i) an affirmative statement that Bidder's taking no exception to the Form PPA provided pursuant to this RFP; or (ii) a comprehensive list of exceptions to the terms and conditions contained in the applicable Form PPA (Appendix E).

7.7. Bidder shall submit a Finance Plan on a separate form. Bidders must provide a proposed financing plan, including any letters of support, previous correspondence with banks / lenders intending to provide financing for the project. Also provide the proposed on-going debt-equity ratio to be carried by the project during construction and operation (Appendix F).

7.8. A completed Production Profile (Appendix G).

7.9. A Completed (Appendix H) including:

- Use of Local Goods & Services: Plan for use of local goods or services sourced, in whole or in part, from one or more Kentucky businesses in the construction and/or operation of the Project. The bidder should identify these Kentucky resources in its proposal. (§3.8)
- Use of Small and Diverse Suppliers: Plan to use reasonable efforts to utilize and adopt a subcontracting plan to use small and diverse suppliers as subcontractors for work (§3.9.3)

## 8. Proposal Evaluation

Proposals must include ALL applicable content requirements as described in Section 7 – Proposal Content. KPCO will consider bids that are reliable, feasible and represent the reasonable cost means of satisfying the requirements of this RFP. The Proposal Evaluation Process, which includes three main steps, is central to the success of KPCO's RFP process.

Section 8.1: Eligibility and Threshold Requirements
Section 8.2: Detailed Analysis
Section 8.3: Final Project Selection

8.1 Eligibility and Threshold Requirements: If the Proposal does not qualify under any one of the Sections 8.1.1 – 8.1.11, the Bidder will not qualify for this RFP and will be notified accordingly.

8.1.1 Proposal must be for a PPA and include the Renewable Energy Products from a solar or wind energy resource (§3.1).

8.1.2 Projects must have an expected COD by December 31, 2026 or December 31, 2027 (§3.2).

8.1.3 PJM interconnected Projects must have a minimum size of 20 MWac and KPCO Distribution interconnected projects must have a minimum size of 5 MWac. (§3.6).

8.1.4 Projects must be physically located in the PJM Region (e.g. interconnected to the PJM Transmission system) or interconnected to the KPCO distribution system. (§3.7).

8.1.5 Bidder must have established Site Control (§3.9.1).

8.1.6 Bidder must have 1) a completed PJM System Impact Study (§3.10.1) which remains active in the PJM queue, or 2) a completed KPCO Distribution Impact Study prior to the Proposal Due Date and the application for the Distribution Impact Study had been submitted no later than September 22, 2023 (§3.10.2).

8.1.7 The Bid Price must be a fixed, non-escalating price for the term of the PPA (§4.5).

8.1.8 Bidder must provide a Bid Price for a 20-year Term (§4.6).

8.1.9 Bidder shall have completed the development, engineering, equipment procurement and construction of a wind or solar project within the United States or Canada of an equal or greater than the Bidder's proposed Project and have demonstrated appropriate operating experience (§7.3).

8.1.10 Bidder's exceptions to the Form PPA, considered individually or in the aggregate, are minimally acceptable to the Company as a basis for further discussions (§7.6).

8.1.11 Bidder is required to include requested financial information (Appendix D) so that AEP's credit department can conduct a financial wherewithal assessment. The Proposal price shall include any costs associated with meeting the PPA credit requirements (§7.5).

8.2 Detailed Analysis: Proposals meeting the Eligibility and Threshold Requirements in Section 8.1 will move to the Detailed Analysis phase which is comprised of the Economic Analysis and the Non-Price Factor Analysis set forth below. The Economic Analysis will constitute 60% and the Non-Price Factor Analysis will constitute 40% of the overall evaluated value of each Proposal.

8.2.1 Economic Analysis: The Economic Analysis will include the calculation of three financial metrics which will provide multiple perspectives on cost and value. These will include Levelized Adjusted Net Cost of Energy (LANCOE), Levelized Adjusted Net Cost of Capacity (LANCOC), and a Value to Cost (V/C) Ratio.

V/C Ratio will be the primary ranking metric, which will constitute 60% of the overall evaluated value of the Proposal in its Final Project Selection. Additional details of the three financial metrics described above are as follows:

$$\text{LANCOE (\$/MWh)} = \frac{\text{Total Cost* (Present value of all Project costs, net of Total Value*)}}{\text{Present Value of Projected Energy Production (MWh)}}$$

$$\text{LANCOC (\$/MW-Day)} = \frac{\text{Total Cost* (Present value of all Project costs, net of Total Value*)}}{\text{Present Value of Projected PJM Accredited Capacity in MW}}$$

$$\text{V/C Ratio} = \frac{\text{Total Value*}}{\text{Total Cost* (Present value of all Project costs*)}}$$

* Defined below

***Total Cost:*** The Company will determine the present value of the costs of each qualifying Proposal. This Total Cost calculation is based on a PSA Proposal's Bid Price ($M) plus projected operations and maintenance costs (including land lease costs), fuel expense, Transmission and Congestion costs, tax expenses, decommissioning costs (including expected salvage), and applicable federal tax credits. For PPA bids, Total Costs will be evaluated based on the contract's demand charges, energy charges, and any other applicable charges. Other costs may be included based on the Company's discretion to appropriately evaluate each Proposal to ensure the Company is comparing all qualifying Proposals on an equivalent basis.

***Total Value:*** The Company will determine the present value of all the value streams of each qualifying Proposal. The value streams include the expected PJM revenues for the Proposal's energy, ancillary services and capacity, and the expected value of renewable energy certificates (RECs), and any applicable terminal value. Additionally, other value streams and financial metrics may be included based on the Company's discretion to appropriately evaluate each Proposal to ensure the Company is comparing all qualifying Proposals on an equivalent basis.

***Transmission and Congestion Costs:*** Transmission and Congestion Costs will be determined by the Company's transmission screening analysis. The transmission screening analysis will evaluate (i) transmission facilities cost and the network upgrade cost allocated to the Proposal, (ii) expected cost of transmission congestion and losses to the AEP KY's PJM load zone and (iii) cost of deliverability / curtailment risk mitigation that the Company calculates to ensure that the resources can be designated as firm resources to meet Company's capacity obligations. Transmission and Congestion Costs will be included in Total Cost calculations.

***Accredited Capacity:*** Accredited Capacity shall be computed by adjusting a qualifying Proposal's applicable nameplate or contracted capacity by the expected adjustments that are

used- or are expected to be used by the PJM RTO to determine the number of MW that the Company will be credited for use in meeting applicable capacity obligations. These adjustments will include, but are not limited to, summer and winter Effective Load Carrying Capability (ELCC) adjustments and forced outage rate adjustments.

8.2.2 Non-Price Factor Analysis: The Non-Price Factor Analysis will be comprised of the following:

8.2.2.1 Project Location.

8.2.2.2 Local economic impacts & benefits, Community relations, and use of local and diverse suppliers. Please refer to https://www.aep.com/b2b/suppliers for guidelines.

8.2.2.3 The Project's Dispatch Flexibility including: Dispatch Range, Ramp Rates, Max Operational Hours, Minimum up & down times, and Ancillary Service potential.

8.2.2.4 Cost & technology risk including: Natural gas pricing, Firm fuel cost requirements, O&M, Storage Charging costs, & PJM Performance Assessment Interval (PAI) Risk.

8.2.2.5 Bidder's experience in developing similar projects as included in the Proposal as well as Bidder's operating history of similar generation facilities.

8.2.2.6 Status of interconnection process with PJM or KPCO distribution, as applicable.

8.2.2.7 The development status of Bidder's generation facility including, but not limited to, permitting status.

8.2.2.8 Bidder's exceptions to the Form PPA. The Company will review the exceptions the Bidder proposed to the Company's form agreement with a focus on risks or additional costs to the Company. Prior agreement by AEP in previous negotiations does not constitute acceptance of an exception.

8.3 Final Project Selection: KPCO will consider bids that are reliable, feasible and represent a reasonable cost means of satisfying the requirements of this RFP. Based on the results of the Detailed Analysis described above, the Company will determine which Projects will be included in the Final Project Selection. The Company will notify Bidders whether or not their Proposal has been selected and negotiation of definitive agreements will commence with Bidders whose Proposals have been selected.

## 9. Reservation of Rights

A Proposal will be deemed accepted only when the Company and the successful Bidder have

executed definitive agreements for the Company's purchase of Renewable Energy Products from the Project. The Company has no obligation to accept any Proposal, whether the stated price in such Proposal is the lowest price offered. The Company may reject any Proposal in its sole discretion and without any obligation to disclose the reason or reasons for rejection.

By participating in the RFP process, each Bidder agrees that any and all information furnished by or on behalf of the Company in connection with the RFP is provided without any representation or warranty, express or implied, as to the usefulness, accuracy, or completeness of such information, and neither the Company nor its Affiliates nor any of their personnel or representatives shall have any liability to any bidder or its personnel or representatives relating to or arising from the use of or reliance upon any such information or any errors or omissions therein.

The Company reserves the right to modify or withdraw this RFP, to negotiate with any and all qualified Bidders to resolve any and all technical or contractual issues, or to reject any or all Proposals and to terminate negotiations with any Bidder at any time in its sole discretion. The Company reserves the right, at any time and from time to time, without prior notice and without specifying any reason and, in its sole discretion, to (a) cancel, modify or withdraw this RFP, reject any and all Proposals, and terminate negotiations at any time during the RFP process; (b) discuss with a Bidder and its advisors the terms of any Proposal and obtain clarification from the Bidder and its advisors concerning the Proposal; (c) consider all Proposals to be the property of the Company, subject to the provisions of this RFP relating to confidentiality and any confidentiality agreement executed in connection with this RFP, and destroy or archive any information or materials developed by or submitted to the Company in this RFP; (d) request from a Bidder information that is not explicitly detailed in this RFP, but which may be useful for evaluation of that Bidder's Proposal; (e) determine which Proposals to accept, favor, pursue or reject; (f) reject any Proposals that are not complete or contain irregularities, or waive irregularities in any Proposal that is submitted; (g) accept Proposals that do not provide the lowest evaluated cost; (h) determine which Bidders are allowed to participate in the RFP, including disqualifying a Bidder due to a change in the qualifications of the Bidder or in the event that the Company determines that the Bidder's participation in the RFP has failed to conform to the requirements of the RFP; (i) conduct negotiations with any or all Bidders or other persons or with no Bidders or other persons; (j) execute one or more definitive agreements with any Bidder, and (k) utilize a Bidder's completed Appendices and any supplemental information submitted by the Bidder in any its regulatory filings.

## 10. Confidentiality

KPCO will take reasonable precautions and use reasonable efforts to maintain the confidentiality of all bids submitted. Bidders should clearly identify each page of information considered to be confidential or proprietary. KPCO reserves the right to release any proposals

to agents or consultants for purposes of proposal evaluation. KPCO's disclosure policies and standards will automatically bind such agents or consultants. Regardless of the confidentiality, all such information may be subject to review by or in proceedings before the appropriate state authority, or any other governmental authority or judicial body with jurisdiction relating to these matters and may be subject to legal discovery. Under such circumstances, KPCO and AEPSC will make reasonable efforts to protect Bidder's confidential information.

**11. Bidder's Responsibilities**

11.1 It is the Bidder's responsibility to submit all requested material by the deadlines specified in this RFP.

11.2 The Bidder should make its proposal as complete and comprehensive as possible so that KPCO may make a definitive and final evaluation of the proposal's benefits to its customers without further contact with the Bidder.

11.3 Bidders are responsible for the timely completion of the project and are required to submit proof of their financial and technical wherewithal to ensure the successful completion of the project.

11.4 The Bidder will be responsible for any expenses Bidder incurs in connection with the preparation and submission of a Proposal and/or any subsequent negotiations regarding a Proposal in response this RFP. KPCO will not reimburse Bidders for their expenses under any circumstances, regardless of whether the RFP process proceeds to a successful conclusion or is abandoned by KPCO at its sole discretion.

**12. Contacts**

General RFP Questions: All correspondence and questions, with the exception of interconnection related questions, regarding this RFP should be directed to:

*KPCO2023RFP@aep.com*

PJM Interconnection: All correspondence and questions regarding the PJM Interconnection process can be found at:

*PJM Interconnection*

KPCO Interconnection: All correspondence and questions regarding the KPCO process can be found at:

*KPCO Interconnection*

# Appendix A
## Proposal Content Check Sheet

| Section | Item | Completed |
|---|---|---|
| 7.2 | Executive Summary | |
| 7.3 | Appendix B (Project Summary) | |
| | - Completed electronic Project Summary Form (link to form in Box site) | |
| | - Company & General Project Information | |
| | - Solar and/or Wind Project Information | |
| | - Interconnection | |
| | - Site Information | |
| | - Permits | |
| | - Preliminary Site Questions | |
| | - Bidder Completed Projects | |
| | **Attachments Required:** | |
| | - PTC/ITC Strategy | |
| | - Interconnection Studies | |
| | - Site Layout (Map) | |
| | - Site Control Documents | |
| | - Permit Matrix | |
| | - Environmental Report Summary | |
| 7.4 | Appendix C (Proposal Bid Pricing) | |
| 7.5 | Appendix D (Bidder's Credit Related Information & Bidder's Profile) | |
| 7.6 | Appendix E (Exceptions to Form Power Purchase Agreement) | |
| 7.7 | Appendix F (Finance Plan) | |
| 7.8 | Appendix G (Production Profile) | |
| 7.9 | Appendix H (Local Goods & Services/Supplier Diversity/Community Support) | |

# Appendix B
**Project Summary**

## *Company Information*

| | | |
|---|---|---|
| Bidder (Company): | | |
| Contact Name: | | |
| Contact Title: | | |
| Address: | | |
| City: | State: | Zip Code: |
| Work Phone: | Cell Phone: | |
| Email Address: | | |
| Is the Proposal being submitted through a partnership, joint venture, consortium, or other association?_____If so, please identify all partners, joint ventures, members, or other entities or persons comprising same. | | |

## *General Project Information*

| | | |
|---|---|---|
| Project Name: | | |
| Project site located (County, State): | | |
| Indicate if Project will qualify for the Federal Production Tax Credit or Investment Tax Credit and the applicable percentage (%): | | |
| Will Project comply with the Prevailing Wage and Apprenticeship Requirements (PWAR) (Y/N): | | |
| Interconnection Path (select all that apply) | KPCO (Y/N): | PJM (Y/N): |
| Expected Commercial Operation Date: | | |
| Bidder confirms it has substantial Project site control including to the Point of Interconnection: | (Y/N) | |

## *Solar Project Information (if applicable)*

| | |
|---|---|
| Module Manufacturer / Model: | Annual Degradation (%): |
| Configuration (Fixed Tilt / Single Axis): | Design Life (years): |
| Inverter Manufacturer / Model: | Capacity Factor (%): |
| Expected Annual Energy (MWh): | Expected Annual Availability (%): |
| Solar Project Nameplate (MWdc): | Solar Project Nameplate (MWac): |

## *Wind Project Information (if applicable)*

| | | |
|---|---|---|
| Wind Turbine Manufacturer: | Model: | |
| Wind Project Size (MW): | Expected Annual Availability (%): | |
| Independent wind report / analysis completed and included in proposal? | | (Y/N): |
| Source of wind energy forecast: | Design Life (years): | |
| Expected Annual Energy (MWh): | Capacity Factor (%): | |

## *Interconnection – PJM (if applicable)*

| | |
|---|---|
| PJM Queue #: | Substation Name / Voltage: |
| Transmission Provider: | |
| ***PJM Study*** | ***Completion or Expected Completion Date*** |
| Feasibility Study Complete (Y/N): | Report Date: |
| System Impact Study Complete (Y/N): | Report Date: |
| Facilities Study Complete (Y/N): | Report Date: |

## *Interconnection - KPCO Distribution (if applicable)*

| | |
|---|---|
| Application Date: | |
| Distribution Impact Study Completion Date: | |
| Application #: | Substation Name / Voltage: |
| Status (describe): | |

## *Site Information*

| | | |
|---|---|---|
| Site Legal Description: | | |
| Address: | | |
| City: | State: | Zip Code: |
| County: | Latitude: | Longitude: |
| Site Control (lease, easement, own, site purchase pending, etc.): | | |
| Site Acres Required: | Site Acres Secured: | |
| Is there potential for expansion (Y / N): | If Yes; acres available: | |
| *Refer to Appendix B (Attachments Required) for Site Layout and Site Control Documents requested.* | | |

## *Permits*

| |
|---|
| Has Bidder contacted all required permitting agencies and identified all permits for project? |
| Local (City/County) (Y / N): |
| State (Y / N): |
| Federal (Y / N): |
| Wildlife Resources (Federal, State, etc.) (Y / N): |
| Other (Y / N): |
| *Refer to Appendix B (Attachments Required) for the Permit Matrix requested.* |

## *Preliminary Site Questions (Y/N)*

| | |
|---|---|
| Has the site been assessed for any environmental contamination? Describe any known environmental issues. If necessary, please describe on a separate attachment | |
| Are there any Tribal Lands or Tribal mineral ownership rights within Project boundary or vicinity? | |
| Are there any Federally or State owned or controlled lands within Project boundary or vicinity? | |
| Has The Nature Conservancy or any other non-governmental organizations been engaged? | |
| Are there Conservation Reserve Program, Wetland Reserve Program or other conservation easements within the Project boundary or vicinity? | |
| Are there any pollinator vegetation requirements associated with the Project? | |
| Is the Project located on a brownfield site (e.g. former coal mine)? | |
| *Refer to Appendix B (Attachments Required) for the Environmental Report Summary requested.* | |

## *Attachments Required*

- **PTC/ITC Strategy:** Summary of how the Project will qualify for Federal Tax Credits (e.g. PTCs or ITCs).
- **Interconnection Studies:** Attach a copy of ALL completed interconnection studies (i.e. System Impact Study, Distribution Impact Study, Facilities Study, etc.).
- **Site Layout:** Include a diagram or map identifying anticipated placement of major equipment and other project facilities, including transmission layouts and Point of Delivery.
- **Site Control Documents:** Attach a copy of all leases, easements or other ownership documentation, including to point of interconnect.
- **Permit Matrix:** Attach a comprehensive permit matrix and status of all required permits, including, but not limited to Federal (USFWS, FAA), State, County, City, etc.
- **Environmental Report Summary:** The initial Proposals shall include a summary of all environmental and other reports associated with the site. (See **Note 1** for reports to summarize)

***Note 1:*** *As applicable, the following reports are requested: Tier I / II Site Characterization Report, Environmental Work / Survey Plan, Bat Acoustic Survey Report, Avian Use Survey Report, Raptor Nest Survey Report, Prey-base Survey Report, Wetland, Waters and Playa Survey / Assessment Report, Whooping Crane Habitat Assessment Report, Lesser Prairie Chicken Survey / Assessment Report, Phase I Environmental Site Assessment Report, Historical and Cultural Resource Survey / Assessment Report, All Other Species and Environmental Resource Survey and Study Reports, Record and Notes of all Federal or State Resource Agency Correspondence and Meetings, Turbine and Environmental Resource Shapefiles (.kmz format), and Bird and Bat Conservation Strategy and Eagle Conservation Plan (if available).*

## *Bidder Completed Projects*

Provide a summary of all wind/solar projects >5 MWac that Bidder has successfully developed and completed in the United States or Canada. For each project, describe the Bidder's specific role in the project.

| Project | Resource Type (Wind/Solar) | Location | MW | Commercial Operation Date | Bidder's Role |
|---|---|---|---|---|---|
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| | | | | | |
| | | Total MW = | | | |

# Appendix C

***Proposal Bid Pricing***

| Expected COD by | PPA Term | Expected Annual Energy | Capacity Factor | Bid Price, $/MWh |
|---|---|---|---|---|
| | | | | $ |
| Does Bid Price include the use of union labor? | | | | (Y/N): |

***Alternate Bid Pricing (not required)***

| Expected COD by | PPA Term | Expected Annual Energy | Capacity Factor[3] | Bid Price, $/MWh |
|---|---|---|---|---|
| | | | | $ |
| Does Bid Price include the use of union labor? | | | | (Y/N): |
| **Expected COD by** | **PPA Term** | **Expected Annual Energy** | **Capacity Factor[3]** | **Bid Price, $/MWh** |
| | | | | $ |
| Does Bid Price include the use of union labor? | | | | (Y/N): |

# Appendix D

**Bidder's Credit-Related Information**

| |
|---|
| Full Legal Name of the Bidder: |
| Type of Organization (Corporation, Partnership, etc.): |
| Bidder's % Ownership in Proposed Project (as of proposal submittal date): |
| If Bidder's Ownership is <100%, identity of all persons and entities that have a direct or indirect ownership interest in the Project: |
| Full Legal Name(s) of Parent Corporation:<br>1.<br>2.<br>3. |
| Entity Providing Credit Support on Behalf of Bidder (if applicable):<br>Name:<br>Address:<br>City:<br>Zip Code: |
| Type of Relationship of Credit Support Provider: |
| Current Senior Unsecured Debt Rating:<br>1. S&P:<br>2. Moody's: |
| Bank References & Name of Institution: |
| Bank Contact:<br>Name:<br>Title:<br>Address:<br>City:<br>Zip Code:<br>Phone Number: |
| Legal Proceedings: As a separate attachment, please list all lawsuits, regulatory proceedings, or arbitration in which the Bidder or its affiliates or predecessors have been or are engaged that could affect the Bidder's performance of its bid. Identify the parties involved in such lawsuits, proceedings, or arbitration, and the final resolution or present status of such matters. |
| Financial Statements: Please provide copies of the Annual Reports for the three most recent fiscal years and quarterly reports for the most recent quarter ended, if available. If available electronically, please provide link. |

**Bidder's Profile**

Please list Bidder's Affiliate companies:

1.
2.
3.
4.

**References**

1. Company
   a. Contact Name:
   b. Contact Number:
   c. Project:

2. Company
   a. Contact Name:
   b. Contact Number:
   c. Project:

3. Company
   a. Contact Name:
   b. Contact Number:
   c. Project:

4. Company
   a. Contact Name:
   b. Contact Number:
   c. Project:

# Appendix E

## Exceptions to Form Power Purchase Agreement

*See Section 6.1 for instructions to obtain the applicable Form Power Purchase Agreement.*

*Bidder shall include a mark up to the Form Power Purchase Agreement as part of its Proposal.*

# Appendix F
## Financing Plan

*Bidder to include a description of its financing plan.*

# Appendix G

***Production Profile***

*Bidder must include an 8760 calendar year hourly energy forecast, net of all losses using the Company's form spreadsheet (See Section 6.1 for instructions to obtain the EnergyInputSheet_2023.xls)*

# Appendix H

## *Local Goods & Services*

| Describe how the Bidder will be using local goods or services sourced in whole or in part from one or more Kentucky businesses, as applicable, to the extent practical in the purchase of equipment and material, or services for the Project: |
|---|
| |

## *Use of Small and Diverse Suppliers*

| Describe plan to use reasonable efforts to utilize and adopt a subcontracting plan to use small and diverse suppliers as subcontractors for work (https://www.aep.com/b2b/suppliers): |
|---|
| |

## *Community Support*

| Please provide a description of any economic benefits to local governments and businesses as well as local property and sales tax benefits. Include any executed agreements with the municipality, if available: |
|---|
| |

# 2022 Kentucky Power Company PJM Capacity Solicitation

American Electric Power Service Corporation (AEPSC) as agent for Kentucky Power Company (KPCO) is seeking indicative pricing for PJM Capacity for the 2024/2025 Planning Year (PY).

Specifically, AEPSC is seeking the following requirements for PJM Capacity:

- Volume: 80MWs (the full amount or blocks of 10MWs or greater will be considered)
- Term: 24/25 PY
- Type: Unit-specific only
- Location: RTO LDA
- Transaction to be completed in Capacity Exchange prior to October 7th,2022
- Pricing sent to hsturner@aep.com and abmichael@aep.com by noon on August 8th, 2022

A confidentiality agreement (CA) between our companies is required to participate in this solicitation. The following link provides a standard CA.

# 2023 Kentucky Power Company PJM Capacity Solicitation

American Electric Power Service Corporation (AEPSC) as agent for Kentucky Power Company (KPCO) is seeking indicative pricing for PJM Capacity for the 2025/2026 Planning Year (PY).

Specifically, AEPSC is seeking the following requirements for PJM Capacity:

- Volume: 85MWs (the full amount or blocks of 10MWs or greater will be considered)
- Term: 25/26 PY
- Type: Unit-specific only
- Location: RTO LDA
- Transaction to be completed in Capacity Exchange prior to March 31st, 2023
- Pricing sent to hsturner@aep.com and abmichael@aep.com by noon on February 8, 2023

American Electric Power Service Corporation (AEPSC) as agent for its operating companies is seeking pricing for PJM Capacity Planning Year 2025/2026 and Planning Year 2026/2027. Counterparties are welcome to bid on one or both Planning Years.

Specifically, AEPSC is seeking the following requirements for PJM Capacity:

- **Volume:** Planning Year (PY) 2025/2026 up to 500MWs and/or PY 2026/2027 up to 1,000 MWs (the full amount or blocks of 10 MWs or greater will be considered)
- **Term:** 25/26 PY and/or 26/27 PY
- **Price:** Pricing will be based on the greater of a submitted offer price and the Base Residual Auction Price plus 10%
- **Type:** Unit-specific only
- **Location:** RTO LDA
- **Security Considerations:** To address potential PAI events, Payment and Collateral requirements to be negotiated by the parties.
- **Potential Forms of Security:**
  - Parent Guarantee from an Investment Grade Guarantor (BBB- and Baa3) and in a form acceptable to AEP Credit Risk Management
  - Letter of Credit issued by a U.S. bank or the U.S. Branch of a foreign bank, who is not affiliated with the Bidder or its Guarantor with a Credit Rating of at least “A-” in the case of S&P and “A3” in the case of Moody’s, and in a form acceptable to AEP Credit Risk Management
  - Cash (U.S. Dollars)
- Transaction to be completed in Capacity Exchange prior to June 7th, 2023
- Pricing sent to hsturner@aep.com and abmichael@aep.com by noon on April 7th, 2023

Kentucky Power Company
KPSC Case No. 2025-00175
Sierra Club's First Set of Data Requests
Dated August 11, 2025

**DATA REQUEST**

**SC 1_7** Please refer to the Company's Application in this matter, p. 5, paragraph 11. Provide a copy of the September 1, 2022 "Written Consent Action" entered into by Wheeling Power and the Company.

**RESPONSE**

Please see Exhibit TSW-1 to Company Witness Wolffram's Direct Testimony starting on page 28 of 32 of that exhibit.

Witness: Tanner S. Wolffram

Kentucky Power Company
KPSC Case No. 2025-00175
Sierra Club's First Set of Data Requests
Dated August 11, 2025

**DATA REQUEST**

**SC 1_8** Please refer to the Company's Application in this matter, p. 5, paragraph 11. Please provide any written agreement between the Company and Wheeling Power addressing the financial terms of the Company's proposal to extend its ownership interest in the Mitchell plant beyond the end of 2028.

**RESPONSE**

There are no documents responsive to this request. Please see the Direct Testimony of Company Witness Wolffram beginning on page 22 which explains that, if this Application is approved, the Mitchell Operating Committee will meet as soon as practicable to create a new Written Consent Action that would address the terms for Kentucky Power to reflect a full 50% interest in the energy and capacity from Mitchell beyond 2028.

Witness: Tanner S. Wolffram

Kentucky Power Company
KPSC Case No. 2025-00175
Sierra Club's First Set of Data Requests
Dated August 11, 2025

**DATA REQUEST**

**SC 1_9** For the Mitchell plant, please identify the amount of money that Kentucky Power has included in the Company's Test Year spending as proposed in this case, by the following types:

a. Operations & Maintenance
b. Capital expenditures
c. Fuel
d. Other (please specify)

**RESPONSE**

There is no test year associated with this filing.

Witness: Tanner S. Wolffram

Kentucky Power Company
KPSC Case No. 2025-00175
Sierra Club's First Set of Data Requests
Dated August 11, 2025

**DATA REQUEST**

**SC 1_10** For each Test Year capital expenditure of more than $100,000 at the Mitchell plant, please:

a. Describe the reason for the expenditure.
b. State whether the Company studied if the expenditure would be necessary if the plant were to retire before December 31, 2028. If the expenditure would still be necessary, explain why.

**RESPONSE**

There is no test year associated with this proceeding. See KPCO_R_SC_1_10_Attachment1 for a list of expenditures at the Mitchell Plant exceeding $100,000 from September 2022 through April 2025.

a. Mitchell Plant management maintains the Mitchell units to provide safe, environmentally friendly, efficient, reliable, and economic operation. The reasons for each expenditure vary depending on equipment life expectancy, failure rates, various predictive and preventative maintenance, and operation methods. Each system and component are evaluated to keep the Plant operating in this manner regardless of the retirement date.

b. The Company performed no analysis of whether any investment in the Mitchell Plant would be necessary to operate the plant after December 31, 2028 because Wheeling Power was authorized by the West Virginia Public Service Commission to make, and subsequently made, the necessary investments in the ELG Project. These investments allow the Mitchell Plant to operate beyond December 31, 2028. Notably, pursuant to the September 1, 2022 Written Consent Action to the Mitchell Operating Agreement, the costs of non-ELG projects at the Mitchell Plant with useful lives beyond December 31, 2028 have been asymmetrically allocated between the Company and Wheeling Power, with a higher ratable share going to Wheeling Power.

Witness: Joshua D. Snodgrass

Witness: Tanner S. Wolffram

Kentucky Power Company
KPSC Case No. 2025-00175
Sierra Club's First Set of Data Requests
Dated August 11, 2025

**DATA REQUEST**

**SC 1_11** Please produce any analysis or assessment conducted of the economics of continued operation, i.e., a retirement study or unit disposition analysis, of the Mitchell plant prepared by or for the Company, including, but not limited to, any studies conducted to determine how to comply with the coal combustion residuals ("CCR Rule") or the 2020 and/or 2024 effluent limitation guidelines ("ELG Rule") regulations.

**RESPONSE**

The Company objects to this request as irrelevant because the Mitchell Plant is currently compliant with both the CCR Rule and the 2020 ELG Rule. Subject to and without waiving this objection, please see Case No. 2021-00004 for the 2020 analysis. Please see the Direct Testimony of Alex Vaughan describing various alternative analysis regarding compliance with the 2024 ELG regulations. These analyses evaluate the relative cost of compliance with the rules in question and compare annual revenue requirements of each alternative evaluated. Please also see AG 1-1 for the associated workpapers.

Respondent: Counsel for objections.

Witness: Alex E. Vaughan

**DATA REQUEST**

**SC 1_12** For each retirement/retrofit study or unit disposition analysis produced in response to Sierra Club 1.11:

a. State which modeling software was used to conduct the analysis.
b. State the date that the analysis was performed.
c. State whether the units were modeled with an economic (market) or self- commitment (must run) status for each year of the analysis.
d. State the date of each forecast or projection used in the analysis.
e. State the regulation or rational behind each unit's retirement date(s) studied.
f. Provide all underlying workbooks with formulas intact that were used to develop model input assumptions.
g. Identify all transmission grid updates or changes that would be needed to allow for the retirement of each unit.
h. Produce all analyses or assessments of the impact that retirement of each unit would have on capacity adequacy, transmission grid stability, transmission grid support, voltage support, or transmission system reliability.
i. Provide each of the following inputs by unit for each modeled scenario:
    i. Heat rate for each fossil unit (Btu)
    ii. Projected Ongoing Capital expenditures by unit ($)
    iii. Variable Operation and Maintenance by unit ($/MWh)
    iv. Fixed Operation and Maintenance by unit($/MW)
j. Provide the following inputs by scenario:
    i. A list of all capital expenditures associated with CCR and ELG compliance included in each modeled scenario and provide the cost of each; ii. All transmission upgrade costs assumed, if any ($);
    iii. SPP energy price forecasts (with and without CO2 price);
    iv. SPP capacity price forecasts (with and without CO2 price);
    v. CO2 price forecasts
    vi. Coal price ($/MMBtu)
    vii. Gas price ($/MMBtu)

k. For each replacement resource available to the model, provide each of the following inputs for each resource at the highest level of granularity used in conducting the unit disposition analysis:
- i. Replacement resource options
- ii. Replacement resource size (MW)
- iii. Year replacement resource is available (year)
- iv. Cost of replacement resource option ($/MW)
- v. Annual capacity factor

l. Provide all model outputs by unit, including:
- i. Annual generation (MWh)
- ii. Fuel Costs ($)
- iii. VOM Costs ($)
- iv. FOM Costs ($)
- v. Capital expenditures for ELG and CCR environmental compliance ($)
- vi. Other capital expenditures ($)
- vii. Energy and ancillary market revenues ($)

m.: Provide all post-processing workbooks with formulas intact that were used to analyze study results outside the model.

**RESPONSE**

The Company objects because SC 1_11 is irrelevant as the Mitchell Plant is currently compliant with both the CCR Rule and the 2020 ELG Rule. The Company further objects that the phrases "unit" or "each unit" are vague and overbroad, but assumes for purposes of this discovery response these terms are referring to Mitchell Units 1 and 2. Subject to and without waiving this objection, with respect to the various alternative analyses set forth in the Direct Testimony of Company Witness Vaughan:

a. Plexos was used for the unit energy market dispatch portion of the analyses. Microsoft Excel was utilized for the remainder of the analyses.

b. The analyses were performed from January through May 2025.

c. In the unit energy market dispatch analyses, the units were committed on an economic basis.

d. The analyses used the AEPSC 2025 fundamentals forecast completed on December 1, 2024 and February 7, 2025.

e. Please refer to the Direct Testimony of Company Witness Vaughan and also see Company Witness Vaughan's workpapers provided in response to AG 1-1.

f. Please refer to Company Witness Vaughan's workpapers provided in response to AG 1-1.

g. The Company did not include the cost of transmission upgrades in its compliance options analyses.

h. The Company's has no responsive documents as the analyses were developed to meet EPA's 2024 finalized Clean Air Act and Clean Water Act rules, not retirement of any particular unit.

i. Please refer to KPCO_R_SC_1_12_ConfidentialAttachment1 for the requested heat rate and variable O&M information. The other requested items can be found in Company witness Vaughan's workpapers provided in response to AG 1-1.

j. Please refer to KPCO_R_SC_1_12_Attachment2 and KPCO_R_SC_1_12_Attachment3 for the requested information from the two fundamental forecasts used in the various analyses.

k. and l. The Company did not undertake the requested analysis, please refer to Company witness Vaughan's Direct Testimony.

m. For the analyses conducted by the Company, please refer to the Company's response to AG 1-1.

Respondent: Counsel for objections.

Witness: Alex E. Vaughan

KPCO_R_SC_1_12_ConfidentialAttachment1 is redacted in its entirety.

Kentucky Power Company
KPSC Case No. 2025-00175
Sierra Club's First Set of Data Requests
Dated August 11, 2025

**DATA REQUEST**

**SC 1_13** Please identify and produce the most recent depreciation study for the Mitchell plant.

**RESPONSE**

Please see KPCO_R_SC_1_13_Attachment1 for the Company's most recently filed depreciation study related to the Mitchell Plant. Additionally, as noted above, the Company has noticed its intent to file a new base rate case in Case No. 2025-00257. The Company will be submitting a new depreciation study as part of that proceeding.

Witness: Tanner S. Wolffram

# KENTUCKY POWER COMPANY

# DEPRECIATION STUDY REPORT

# OF

# ELECTRIC PLANT IN SERVICE

# AT

# DECEMBER 31, 2013

# DEPRECIATION STUDY REPORT

## Table of Contents

## I. INTRODUCTION

This report presents the results of a depreciation study of Kentucky Power Company's (KPCo) depreciable electric utility plant in service at December 31, 2013. The study was prepared by David A. Davis, Manager – Property Accounting Policy and Research at American Electric Power Service Corporation (AEPSC). The purpose of the depreciation study was to develop appropriate annual depreciation accrual rates for each of the primary plant accounts that comprise the functional groups for which KPCo computes its annual depreciation expense.

The recommended depreciation rates are based on the Average Remaining Life Method of computing depreciation. Further explanation of this method is contained in Section II of this report.

The definition of depreciation used in my Study is the same as that used by the Federal Energy Regulatory Commission (FERC) and the National Association of Regulatory Utility Commissioners:

> "Depreciation, as applied to depreciable electric plant, means the loss in service value not restored by current maintenance, incurred in connection with the consumption or prospective retirement of electric plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand and requirements of public authorities."
>
> "Service value means the difference between original cost and the

net salvage value (net salvage value means the salvage value of the property retired less the cost of removal) of the electric plant." (FERC Accounting and Reporting Requirements for Public Utilities and Licensees, ¶15.001.)

Schedule I of this report shows the recommended depreciation accrual rates by primary plant accounts and composited to functional plant classifications. Schedule II compares depreciation expense using rates approved by the Commission and rates recommended by the depreciation study. Schedule III shows a comparison of the current mortality characteristics that were used to compute the recommended depreciation rates and the mortality characteristics used to determine the existing depreciation rates and accruals for Transmission, Distribution and General Plant Functions. A comparison of KPCo's current functional group composite depreciation rates and accruals to recommended functional group rates and accruals based on December 31, 2013 depreciable plant balances follows:

**Table 1** - Depreciation Rates and Accruals
Based on Depreciable Plant In Service at December 31, 2013

| | Existing | | Study | | |
|---|---|---|---|---|---|
| Functional Plant Group | Rates | Accruals | Rates | Accruals | Difference |
| Steam Production (1) | 3.80% | 54,851,796 | 3.36% | 48,418,617 | (6,433,179) |
| Transmission | 1.71% | 8,478,288 | 2.66% | 13,169,805 | 4,691,517 |
| Distribution | 3.52% | 24,312,736 | 4.48% | 30,971,933 | 6,659,197 |
| General | 2.54% | 858,462 | 4.42% | 1,492,241 | 633,779 |
| Total Depreciable Plant | 3.32% | 88,501,282 | 3.50% | 94,052,596 | 5,551,314 |

Note: (1) Includes Big Sandy and Mitchell plants. The Company is not recommending a change in depreciation rates for Big Sandy Plant due to the planned retirement of Unit 2 in 2015 and the coal related portions of Unit 1 in 2016.

Based on Total Company Depreciable Plant In-Service as of December 31, 2013, I am recommending an increase in depreciation rates that result in an increase in annual depreciation expense of $5,551,314. The depreciation rate changes are necessary because of changes in average service lives and net salvage estimates used to calculate KPCo's recommended depreciation rates that takes into account the December 31, 2013 transfer of a 50% undivided interest in the Mitchell generating station from AEP affiliate Ohio Power Company as approved by the Kentucky Public Service Commission (or Commission) in Case No. 2012-00578. KPCo's current approved depreciation rates with the exception of Mitchell Plant rates are based on a 1991 settlement agreement in Case No. 91-066 and were made effective on April 1, 1991. The Stipulation and Settlement Agreement in Case No. 2012-00578 ordered Kentucky Power to use the current Ohio Power Company depreciation rates for Mitchell Plant until such rates are changed in a base rate case.

## II. DISCUSSION OF METHODS AND PROCEDURES USED IN THE STUDY

1. Group Method

All of the depreciable property included in this report was considered on a group plan. Under the group plan, depreciation expense is accrued upon the basis of the original cost of all property included in each depreciable plant account. Upon retirement of any depreciable property, its full cost, less any net salvage realized, is charged to the accrued depreciation reserve regardless of the age of the particular item retired. Also, under this plan, the dollars in each primary plant account are considered as a separate group for depreciation accounting purposes and an annual depreciation rate for each account is determined. The annual accruals by primary account were then summed, to arrive at the total accrual for each functional group. The total accrual divided by the original cost yields the functional group accrual rate.

2. Annual Depreciation Rates Using the Average Remaining Life Method

KPCo's current depreciation rates are based on the Average Remaining Life Method. The Average Remaining Life Method recovers the original cost of the plant, adjusted for net salvage, less accumulated depreciation, over the average remaining life of the plant. By this method, the annual depreciation rate for each account is determined on the following basis:

$$\text{Annual Depreciation Expense} = \frac{(\text{Orig. Cost})\ (\text{Net Salvage Ratio}) - \text{Accumulated Depreciation}}{\text{Average Remaining Life}}$$

$$\text{Annual Depreciation Rate} = \frac{\text{Annual Depreciation Expense}}{\text{Original Cost}}$$

3. Methods of Life Analysis

Depending upon the type of property and the nature of the data available from the property accounting records, one of three life analyses was used to arrive at the historically realized mortality characteristics and service lives of the depreciable plant investments. These methods are identified and described as follows:

Life Span Analysis

The life span analysis was employed for Mitchell Plant. The life-span method of analysis is particularly suited to specific location property, such as generating plants, where all of the surviving investments are likely to be retired in total at a future date. The key elements in the life span

analysis are the age of the surviving investments, the projected retirement date of the facility and the expected interim retirements. Interim retirements are those retirements that are expected to occur between the date of the depreciation study and the expected final retirement date of the generating plant. Examples of interim retirements include fans, pumps, motors, a set of boiler tubes, a turbine rotor, etc. The interim retirement history for each primary production plant account was analyzed and the results of those analyses were used to project future interim retirements. The age of Mitchell Plant's surviving investments at December 31, 2013 was obtained from the accounting records of affiliate Ohio Power Company (OPCo). American Electric Power Service Corporation (AEPSC) provided the retirement date used in the life-span analysis for Mitchell Plant.

The Company is not recommending any revision to Big Sandy Plant's depreciation rates in this filing since Unit 2 is planned for retirement at the end of May 2015 and the coal related portions of Unit 1 are planned for retirement in April 2016. KPCo expects to repower Big Sandy Unit 1 to use natural gas in 2016.

The order in the Mitchell transfer Case No. 2012-00578 allows Kentucky Power to recover the coal-related retirement costs of Big Sandy Unit 1, the retirement costs of Big Sandy Unit 2 and other site related retirement costs that will not continue in use. New depreciation rates will be required for Big Sandy Unit 1 after it is repowered to use natural gas in 2016.

Steam Production Plant

At December 31st, 2013, KPCo's depreciable investment in Steam

Production Plant includes the Big Sandy Generating plant and a 50% undivided interest in Mitchell Generation Plant. The Big Sandy plant is located highway 23 near Louisa, Kentucky and includes two generating units. The Mitchell Plant is located on the Ohio River near Moundsville, West Virginia and also consists of two generating units. All generating units at the Big Sandy and Mitchell plants are currently coal fired.

The generating units and their capacities are as follows (also shown on Schedule IV – Estimated Generation Plant Retirement Dates):

| Plant | Unit | Rating | Commercial Operating Date |
|---|---|---|---|
| Big Sandy | 1 | 260 MW | 1963 |
| Big Sandy | 2 | 800 MW | 1969 |
| Mitchell | 1 | 770 MW | 1971 |
| Mitchell | 2 | 790 MW | 1971 |

AEPSC evaluated each of the generating units and determined the following retirement dates for the units:

| Plant | Unit | Retirement Date |
|---|---|---|
| Big Sandy | 2 | 2015 |
| Big Sandy | 1 | 2016 coal related portion |
| Big Sandy | 1 | 2031 repowered to use natural gas |
| Mitchell Plant | 1,2 | 2040 |

Since KPCo's last depreciation study (property investment dated December 31, 2008), AEP has reevaluated the expected retirement dates for its generation plant including Big Sandy Units 1-2. The reevaluation for these two Big Sandy units indicated that their current estimated retirement

dates should be 2015 for Big Sandy Unit 2, 2016 for the coal related portion of Big Sandy Unit 1 and 2031 for Big Sandy Unit 1 after it is repowered to use natural gas. AEP previously estimated individual unit retirement dates of 2023 for Unit 1 and 2029 for Unit 2. According to AEP, the earlier Big Sandy Unit 2 and the coal related portion of Unit 1 retirement dates are because it is not economically feasible to equip the units with necessary environmental controls, not because they have reached the end of their service lives.

Current plans are for the Mitchell Plant to operate for a total life of 69 years or until 2040.

Actuarial Analysis – Transmission, Distribution and General Plant

This method of analyzing past experience represents the application to industrial property of statistical procedures developed in the life insurance field for investigating human mortality. It is distinguished from other methods of life estimation by the requirement that it is necessary to know the age of the property at the time of its retirement and the age of survivors, or plant remaining in service; that is, the installation date must be known for each particular retirement and for each particular survivor.

The application of this method involves the statistical procedure known as the "annual rate method" of analysis. This procedure relates the retirements during each age interval to the exposures at the beginning of that interval, the ratio of these being the annual retirement ratio. Subtracting each retirement ratio from unity yields a sequence of annual survival ratios from which a survivor curve can be determined. This is

accomplished by the consecutive multiplication of the survivor ratios. The length of this curve depends primarily upon the age of the oldest property. Normally, if the period of years from the inception of the account to the time of the study is short in relation to the expected maximum life of the property, an incomplete or stub survivor curve results.

While there are a number of acceptable methods of smoothing and extending this stub survivor curve in order to compute the area under it from which the average life is determined, the well-known Iowa Type Curve Method was used in this study.

By this procedure, instead of mathematically smoothing and projecting the stub survivor curve to determine the average life of the group, it was assumed that the stub curve would have the same mortality characteristics as the type curve selected. The selection of the appropriate type curve and average life is accomplished by plotting the stub curve, superimposing on it Iowa curves of the various types and average lives drawn to the same scale, and then determining which Iowa type curve and average life best matches the stub.

The Actuarial Method of Life Analysis was used for the following accounts:

352.0 Transmission Structures & Improvements

353.0 Transmission Station Equipment

361.0 Distribution Structures & Improvements

362.0 Distribution Station Equipment

390.0 General Structures & Improvements

The result of the actuarial analysis for the above accounts is detailed in the depreciation study work papers.

Simulated Plant Record Analysis – Transmission and Distribution Plant

The "Simulated Plant Record" (SPR) method designates a class of statistical techniques that provide an estimate of the age distribution, mortality dispersion and average service life of property accounts whose recorded history provides no indication of the age of the property units when retired from service. For each such account, the available property records usually reveal only the annual gross additions, annual retirements and balances with no indication of the age of either plant retirements or annual plant balances. For this study, the "Balances method" of analysis was used.

The SPR Balances Method is a trial and error procedure that attempts to duplicate the annual balance of a plant account by distributing the actual annual gross additions over time according to an assumed mortality distribution. Specifically, the dollars remaining in service at any date are estimated by multiplying each year's additions by the successive proportion surviving at each age as given by the assumed survivor characteristics. For a given year, the balance indicated is the accumulation of survivors from all vintages and this is compared with the actual book balance. This process is repeated for a different survivor curves and average life combinations until a pattern is discovered which produces a series of "simulated balances" most nearly equaling the actual balances shown in a company's books.

This determination is based on the distribution producing the minimum sum of squared differences between the simulated balance and the actual balances over a test period of years.

The iterative nature of the simulated methods makes them ideally suited for computerized analysis. For each analysis of a given property account, the computer program provides a single page summary containing the results of each analysis indicating the “best fit” based on criteria selected by the user.

The results of my analysis using the Balance Method is shown in the depreciation study work papers. The analysis also shows the value of the Index of Variation of the difference that is calculated according to the the Balances Method where a lower value for the Index of Variation indicates better agreement with the actual data.

The SPR Method of Life Analysis was utilized for the following accounts:

354.0 Transmission Towers & Fixtures

355.0 Transmission Poles & Fixtures

356.0 Transmission Overhead Conductor & Devices

364.0 Distribution Poles, Towers & Fixtures

365.0 Distribution OH Conductor & Devices

366.0 Distribution Underground Conduit

367.0 Distribution Underground Conductor & Devices

368.0 Distribution Line Transformers

369.0 Distribution Services

370.0 Distribution Meters

371.0 Installation on Customers Premises

373.0 Street Lighting & Signal Systems

Vintage Year Accounting – General Equipment

In 1998, the Company began using a vintage year accounting method for general plant accounts 391 to 398 in accordance with Federal Energy Regulatory Commission Accounting Release Number 15 (AR-15). This accounting method requires the amortization of vintage groups of property over their useful lives. AR-15 also requires that property be retired when it meets its average service life.

As a result, my recommendation for these accounts is that the current useful life approved by the Commission be retained and used to continue amortization of the account balances.

4. Final Selection of Average Life and Curve Type

The final selection of average life and curve type for each depreciable plant account analyzed by the Actuarial and SPR Methods was primarily based on the results of the mortality analyses of past retirement history.

## III. NET SALVAGE

1. Net Salvage - Steam Production Plant

The net salvage analysis for steam production plant included a review of the plant's experienced functional interim retirement, salvage and removal history for the period 2001-2013. No interim retirements were estimated for Big Sandy Plant in this depreciation study since Unit 2 is estimated to retire in 2015, the coal

related portions of Unit 1 are estimated to retire in 2016 and the repowered Unit 1 (to use natural gas) is expected to retire in 2031.

While a standard type of analysis was used by the depreciation study to determine the net salvage characteristics applicable to interim retirements for the plants, the most significant net salvage amounts for generating plants occurs at the end of their life. Therefore, to assist in establishing total net salvage applicable to Big Sandy and Mitchell plants, the Company contracted with Sargent & Lundy (S&L) to prepare conceptual demolition cost estimates. The S&L cost estimates to demolish the plants are based on current (2013) price levels which were inflated to retirement dates in the depreciation study. These estimates were incorporated into the calculation of a net salvage ratio for Steam Production Plant. S&L's demolition costs do not include Asset Retirement Obligation (ARO) amounts associated with the removal of asbestos or any cost associated with the final disposition of Big Sandy or Mitchell Plant landfills and ash ponds. The costs to remove asbestos and cover ash ponds are included separately in the cost of service through the accounting for asset retirement obligations.

2. Net Salvage – Transmission, Distribution and General Plant

The net salvage percentages used in this report for Transmission, Distribution and General Plant are expressed as percent of original cost and are based on the Company's experience combined with the judgment of the analyst. KPCo maintains salvage and removal costs in its depreciation ledger at the functional plant level, rather than by primary plant accounts. To determine gross salvage, gross removal and net salvage percentages for individual plant accounts, original cost retirements, salvage and removal were taken from the Company's account history in its PowerPlant software which detailed these

amounts by account for the period 2000 to 2013. Gross salvage and cost of removal percentages were calculated using the data from this fourteen year time period for each account. The salvage and removal percentages for each account were then netted to determine a net salvage percentage for each account.

The net salvage percents were converted to net salvage ratios (1 minus the net salvage percentage) and appear in Column IV on Schedule I and were used to determine the total amount to be recovered through depreciation. The same net salvage was also reflected in the determination of the calculated depreciation requirement, which was used to allocate accumulated depreciation at the functional group to the accounts comprising each group.

5. Net Salvage – Ratios

The net salvage ratios shown on Schedule I of this report may be explained as follows:

a. Where the ratio is shown as unity (1.00), it was assumed that the net salvage in that particular account would be zero.

b. Where the ratio is less than unity, it was assumed that the salvage exceeded the removal costs. For example, if the net salvage were 20%, the net salvage ratio would be expressed as .80.

c. Where the ratio is greater than unity, it was assumed that the salvage was less than the cost of removal. For example, if the net salvage were minus 5%, the net salvage ratio would be expressed as 1.05.

## IV. CALCULATION OF DEPRECIATION REQUIREMENT AT DECEMBER 31, 2013

The accumulated depreciation by functional group was allocated to individual plant accounts based on the calculation of a depreciation requirement (theoretical reserve) for each plant account using the average service life, curve type and net salvage amount recommended in this study.

## V. STUDY RESULTS

Production, Transmission, Distribution and General plant results are discussed below. In addition, Transmission, Distribution and General Plant average service life, retirement dispersion pattern and net salvage percentages used to calculate each primary plant account depreciation rate are shown on Schedule III where the mortality characteristics and net salvage values for the current rates are also shown. The changes to the mortality characteristics follow trends shown by historical retirement experience. Gross salvage and gross cost of removal percentages were largely based on the history of each account for the period 2000-2013.

### Steam Production Plant

Depreciation rates for Mitchell Plant were calculated by plant account with the expectation that the total cost including net salvage would be recovered by 2040 which is the estimated retirement date for Mitchell Plant. New depreciation rates for Big Sandy Plant were not recommended by the depreciation study. The comparison of steam production depreciation accruals on Schedule II using the currently approved depreciation rates and the study depreciation rates includes

Mitchell Plant. The original cost and accumulated depreciation amounts used for Mitchell Plant are 50% of the plant's original cost and accumulated depreciation on KPCo's books at December 31, 2013.

The decrease in steam production depreciation expense due to a change in depreciation rates was primarily due to the longer life estimate for Mitchell Plant in this proceeding (2040 retirement date) versus a previously estimated 2031 retirement date. The depreciation study doesn't recommend any changes to the Big Sandy Plant's depreciation rates.

Terminal demolition costs are included in the steam production depreciation rates. The estimates of demolition costs were developed by Sargent & Lundy. S&L estimated demolition cost in 2013 dollars for Big Sandy Plant and Mitchell Plant (KPCo's 50% share) was $28,831,786 and $21,185,697, respectively.

Transmission Plant

The depreciation rates for Transmission plant increased from 1.71% to 2.66% due to increases in the net salvage ratio for five accounts (accounts 352, 353, 354, 355 and 356) and decreases in the average service life for two accounts (accounts 354, and 355). The increase was partially offset by an increase in the average service life for account 352.

Distribution Plant

The depreciation rates for Distribution plant increased from 3.52% to 4.48% due to increases in the net salvage ratio for nine accounts (accounts 361, 362, 364, 365, 367, 368, 369, 371 and 373) and a decrease in the average service life for one account (account 370). The increase was partially offset by a decrease in the net salvage ratio for account 370 and by increases in the

average service life for five accounts (accounts 361, 362, 366, 369 and 373).

General Plant

The depreciation rates for General plant increased from 2.54% to 4.42% due to increases in the net salvage ratio for three accounts (accounts 391, 394 and 398) and a reduction in the average service life for account 390. The increase was partially offset by a decrease in the net salvage ratio for account 397.

## SCHEDULE I – EXPLANATION OF COLUMN HEADINGS

Schedule I shows the determination of the recommended annual depreciation accrual rate by primary plant accounts by the straight line remaining life method. An explanation of the schedule follows:

| | | |
|---|---|---|
| Column I | - | Account number. |
| Column II | - | Account title. |
| Column III | - | Original Cost at December 31, 2013 |
| Column IV | - | Net Salvage Ratio. |
| Column V | - | Total to be Recovered (Column III) * (Column IV). |
| Column VI | - | Calculated Depreciation Requirement. |
| Column VII | - | Allocated Accumulated Depreciation – accumulated depreciation (book reserve) spread to each account on the basis of the Calculated Depreciation Requirement shown in Column VI. |
| Column VIII | - | Remaining to be Recovered (Column V - Column VII). |
| Column IX | - | Average Remaining Life. |
| Column X | - | Recommended Annual Accrual Amount. |
| Column XI | - | Recommended Annual Accrual Percent or Depreciation Rate (Column X/Column III). |

**KENTUCKY POWER COMPANY**
**SCHEDULE I - CALCULATION OF DEPRECIATION RATES BY THE REMAINNG LIFE METHOD**
**BASED ON PLANT IN SERVICE AT DECEMBER 31, 2013**
**AVERAGE LIFE GROUP (ALG) METHOD ACCRUAL RATES**

| Acct. No. | Account Title | Original Cost | Net Salvg. Ratio | Total to be Recovered | Calculated Depreciation Requirement | Accumulated Depreciation | Remaining to Be Recovered | Avg. Remain Life | Annual Accrual Amount | Annual Accrual Percent |
|---|---|---|---|---|---|---|---|---|---|---|
| (I) | (II) | (III) | (IV) | (V) | (VI) | (VII) | (VIII) | (IX) | (X) | (XI) |
| **STEAM PRODUCTION PLANT** | | | | | | | | | | |
| **Big Sandy Plant (1)** | | | | | | | | | | |
| 311 | Structures & Improvements | 43,291,665 | **(1)** | **(1)** | **(1)** | 30,726,379 | **(1)** | **(1)** | 1,636,425 | 3.78% |
| 312 | Boiler Plant Equipment | 362,456,070 | **(1)** | **(1)** | **(1)** | 177,325,748 | **(1)** | **(1)** | 13,700,839 | 3.78% |
| 312 | Boiler Plant Equip SCR Catalyst **(2)** | 8,147,622 | **(1)** | **(1)** | **(1)** | 5,742,300 | **(1)** | **(1)** | 389,456 | 4.78% |
| 314 | Turbogenerator Units | 109,522,949 | **(1)** | **(1)** | **(1)** | 61,149,688 | **(1)** | **(1)** | 4,139,967 | 3.78% |
| 315 | Accessory Electrical Equip. | 16,513,202 | **(1)** | **(1)** | **(1)** | 12,896,303 | **(1)** | **(1)** | 624,199 | 3.78% |
| 316 | Misc. Power Plant Equip. | 8,709,178 | **(1)** | **(1)** | **(1)** | 5,351,493 | **(1)** | **(1)** | 329,207 | 3.78% |
| | Total | 548,640,686 | | | | 293,191,911 | | | 20,820,093 | 3.79% |
| **Mitchell Plant (3)** | | | | | | | | | | |
| 311 | Structures & Improvements | 42,000,197 | 1.07 | 44,940,211 | 18,282,178 | 16,183,402 | 28,756,809 | 25.01 | 1,149,812 | 2.74% |
| 312 | Boiler Plant Equipment | 765,644,984 | 1.07 | 819,240,133 | 245,324,500 | 238,518,432 | 580,721,701 | 24.25 | 23,947,287 | 3.13% |
| 312 | Boiler Plant Equip SCR Catalyst **(2)** | 8,190,115 | 1.00 | 8,190,115 | 4,023,394 | 2,378,493 | 5,811,622 | 4.07 | 1,023,764 | 12.50% |
| 314 | Turbogenerator Units | 53,295,697 | 1.07 | 57,026,396 | 29,106,660 | 33,613,523 | 23,412,873 | 23.84 | 982,084 | 1.84% |
| 315 | Accessory Electrical Equip. | 17,080,672 | 1.07 | 18,276,319 | 9,466,086 | 11,043,285 | 7,233,034 | 25.81 | 280,242 | 1.64% |
| 316 | Misc. Power Plant Equip. | 7,693,412 | 1.07 | 8,231,951 | 3,289,590 | 3,072,520 | 5,159,431 | 23.96 | 215,335 | 2.80% |
| | Total | 893,905,077 | 1.07 | 955,905,125 | 309,492,408 | 304,809,655 | 651,095,470 | 23.59 | 27,598,524 | 3.09% |
| | **Total Steam Prod. Plant** | **1,442,545,763** | **0.66** | **955,905,125** | **309,492,408** | **598,001,566** | **651,095,470** | **13.45** | **48,418,617** | **3.36%** |
| **TRANSMISSION PLANT** | | | | | | | | | | |
| 350.1 | Land Rights | 26,456,147 | 1.00 | 26,456,147 | 8,498,622 | 7,016,166 | 19,439,981 | 50.91 | 381,850 | 1.44% |
| 352 | Structures & Improvements | 6,636,668 | 1.10 | 7,300,335 | 3,172,075 | 2,618,754 | 4,681,581 | 33.93 | 137,978 | 2.08% |
| 353 | Station Equipment | 170,843,671 | 1.03 | 175,968,981 | 34,476,675 | 28,462,741 | 147,506,240 | 40.20 | 3,669,309 | 2.15% |
| 354 | Towers & Fixtures | 94,517,543 | 1.10 | 103,969,297 | 56,679,229 | 46,792,396 | 57,176,901 | 23.20 | 2,464,522 | 2.61% |
| 355 | Poles & Fixtures | 74,696,720 | 1.61 | 120,261,719 | 28,658,583 | 23,659,527 | 96,602,192 | 32.75 | 2,949,685 | 3.95% |
| 356 | OH Conductor & Devices | 122,537,908 | 1.27 | 155,623,143 | 70,585,347 | 58,272,803 | 97,350,340 | 27.32 | 3,563,336 | 2.91% |
| 357 | Undergrnd Conduit | 11,590 | 1.00 | 11,590 | 4,345 | 3,587 | 8,003 | 23.13 | 346 | 2.99% |
| 358 | Undergrnd Conductor | 106,066 | 1.00 | 106,066 | 49,568 | 40,922 | 65,144 | 23.44 | 2,779 | 2.62% |
| | **Total Transmission Plant** | 495,806,313 | **1.19** | 589,697,279 | 202,124,444 | 166,866,896 | 422,830,383 | 32.11 | 13,169,805 | 2.66% |
| **DISTRIBUTION PLANT** | | | | | | | | | | |
| 360.1 | Land Rights | 5,343,520 | 1.00 | 5,343,520 | 1,411,791 | 1,371,633 | 3,971,887 | 55.18 | 71,981 | 1.35% |
| 361 | Structures & Improvements | 4,372,006 | 1.12 | 4,896,647 | 1,354,850 | 1,316,312 | 3,580,335 | 50.63 | 70,716 | 1.62% |
| 362 | Station Equipment | 83,664,562 | 1.07 | 89,521,081 | 18,549,279 | 18,021,648 | 71,499,433 | 26.16 | 2,733,159 | 3.27% |
| 364 | Poles, Towers, & Fixtures | 180,551,331 | 1.30 | 234,716,730 | 68,606,654 | 66,655,150 | 168,061,580 | 19.82 | 8,479,394 | 4.70% |
| 365 | OH Conductor & Devices | 179,538,721 | 0.94 | 168,766,398 | 33,083,601 | 32,142,543 | 136,623,855 | 20.90 | 6,537,027 | 3.64% |
| 366 | Underground Conduit | 6,377,091 | 1.00 | 6,377,091 | 1,464,955 | 1,423,285 | 4,953,806 | 34.66 | 142,926 | 2.24% |
| 367 | Underground Conductor | 9,812,956 | 1.13 | 11,088,640 | 1,655,544 | 1,608,452 | 9,480,188 | 37.43 | 253,278 | 2.58% |
| 368 | Line Transformers | 119,012,919 | 1.01 | 120,203,048 | 28,150,578 | 27,349,840 | 92,853,208 | 19.15 | 4,848,731 | 4.07% |
| 369 | Services | 53,900,363 | 1.38 | 74,382,501 | 17,054,558 | 16,569,444 | 57,813,057 | 15.41 | 3,751,658 | 6.96% |
| 370 | Meters | 24,723,287 | 0.97 | 23,981,588 | 10,273,269 | 9,981,048 | 14,000,540 | 9.72 | 1,440,385 | 5.83% |
| 371 | Installations on Custs. Prem. | 20,056,550 | 1.32 | 26,474,646 | 7,344,863 | 7,135,939 | 19,338,707 | 7.95 | 2,432,542 | 12.13% |
| 373 | Street Lighting & Signal Sys. | 3,349,341 | 1.24 | 4,153,183 | 1,231,600 | 1,196,567 | 2,956,616 | 14.07 | 210,136 | 6.27% |
| | **Total Distribution Plant** | 690,702,647 | **1.11** | 769,905,074 | 190,181,542 | 184,771,861 | 585,133,213 | 18.89 | 30,971,931 | 4.48% |

**KENTUCKY POWER COMPANY**
**SCHEDULE I - CALCULATION OF DEPRECIATION RATES BY THE REMAINNG LIFE METHOD**
**BASED ON PLANT IN SERVICE AT DECEMBER 31, 2013**
**AVERAGE LIFE GROUP (ALG) METHOD ACCRUAL RATES**

| Acct. No. | Account Title | Original Cost | Net Salvg. Ratio | Total to be Recovered | Calculated Depreciation Requirement | Accumulated Depreciation | Remaining to Be Recovered | Avg. Remain Life | Annual Accrual Amount | Annual Accrual Percent |
|---|---|---|---|---|---|---|---|---|---|---|
| (I) | (II) | (III) | (IV) | (V) | (VI) | (VII) | (VIII) | (IX) | (X) | (XI) |
| **GENERAL PLANT** | | | | | | | | | | |
| 389.1 | Land Rights | 37,384 | 1.00 | 37,384 | 11,898 | 6,909 | 30,475 | 51.13 | 596 | 1.59% |
| 390 | Structures & Improvements | 19,811,669 | 1.00 | 19,811,669 | 9,535,669 | 5,537,254 | 14,274,415 | 18.15 | 786,469 | 3.97% |
| 391 | Office Furniture & Equipment | 1,683,333 | 1.00 | 1,683,333 | 377,310 | 219,100 | 1,464,233 | 27.15 | 53,931 | 3.20% |
| 392 | Transportation Equipment | 14,768 | 1.00 | 14,768 | 1,742 | 1,012 | 13,756 | 26.46 | 520 | 3.52% |
| 393 | Stores Equipment | 164,548 | 1.00 | 164,548 | 60,496 | 35,129 | 129,419 | 18.97 | 6,822 | 4.15% |
| 394 | Tools Shop & Garage Equip. | 3,553,696 | 1.09 | 3,873,529 | 1,042,908 | 605,604 | 3,267,925 | 21.92 | 149,084 | 4.20% |
| 395 | Laboratory Equipment | 141,765 | 1.00 | 141,765 | 89,929 | 52,221 | 89,544 | 10.97 | 8,163 | 5.76% |
| 396 | Power Operated Equipment | 5,931 | 1.00 | 5,931 | 2,728 | 1,584 | 4,347 | 13.50 | 322 | 5.43% |
| 397 | Communication Equipment | 7,318,955 | 0.97 | 7,099,386 | 2,872,871 | 1,668,243 | 5,431,143 | 13.10 | 414,591 | 5.66% |
| 398 | Miscellaneous Equipment | 1,065,616 | 1.03 | 1,097,584 | 464,407 | 269,676 | 827,908 | 11.54 | 71,743 | 6.73% |
| **Total General Plant** | | 33,797,665 | **1.00** | 33,929,897 | 14,459,958 | 8,396,732 | 25,533,165 | 17.11 | 1,492,241 | 4.42% |
| **Total Depreciable Plant** | | 2,662,852,388 | | 2,349,437,375 | 716,258,352 | 958,037,055 | 1,684,592,231 | | 94,052,594 | 3.53% |

N/A = Not Applicable

Notes:

(1) The Company plans to retire Big Sandy Unit 2 at the end of May 2015 and the coal related portions of Unit 1 in 2016. Since the Commission authorized (Case No. 2012-00578) the Company to recover the coal-related portion of Big Sandy Unit 1, the retirement costs of Big Sandy Unit 2 and any other site related retirement costs, this depreciation recommends that the existing approved depreciation rates for Big Sandy Plant be retained until a future proceeding that includes the remaining portion of Big Sandy Unit 1 and the cost to re-power this unit to use natural gas.

(2) An annualized depreciation rate for Big Sandy Plant's SCR Catalyst was calculated using currently approved rates and included in the above analysis. A separate depreciation rate was calculated for Mitchell Plant's SCR Catalyst using AEP Air Emmissions Control estimated average life for the catalyst.

(3) Mitchell Plant cost at December 31, 2013. At December 31, 2013 the Mitchell Plant was jointly owned 50% by Kentucky Power Company and 50% by AEP Generating Resources and therefore the cost shown above is 50% of the total Mitchell Plant depreciable plant in service. The Mitchell Plant cost includes 50% of the investment in the gypsum plant underloader located at the Mountaineer Generating Station.

**KENTUCKY POWER COMPANY**
**SCHEDULE II - COMPARE DEPRECIATION EXPENSE USING CURRENT AND STUDY RATES**
**ANNUAL DEPRECIATION RATES AND ACCRUALS BY THE REMAINNG LIFE METHOD**
**BASED ON PLANT IN SERVICE AT DECEMBER 31, 2013**

| ACCT. NO. (1) | ACCOUNT TITLE (2) | ORIGINAL COST (3) | CURRENT APPROVED RATE (4) | ANNUAL ACCRUAL (5) | STUDY RATE (6) | STUDY ACCRUAL (7) | DIFFERENCE (DECREASE) (8) |
|---|---|---|---|---|---|---|---|
| **STEAM PRODUCTION PLANT** | | | | | | | |
| **BIG SANDY PLANT (a)** | | | | | | | |
| 311 | Structures & Improvements | 43,291,665 | 3.78% | 1,636,425 | 3.78% | 1,636,425 | 0 |
| 312 | Boiler Plant Equipment | 362,456,070 | 3.78% | 13,700,839 | 3.78% | 13,700,839 | 0 |
| 312 | Boiler Plant Equip SCR Catalyst | 8,147,622 | 4.78% | 389,456 | 4.78% | 389,456 | 0 |
| 314 | Turbogenerator Units | 109,522,949 | 3.78% | 4,139,967 | 3.78% | 4,139,967 | 0 |
| 315 | Accessory Electrical Equipment | 16,513,202 | 3.78% | 624,199 | 3.78% | 624,199 | 0 |
| 316 | Misc. Power Plant Equip. | 8,709,178 | 3.78% | 329,207 | 3.78% | 329,207 | 0 |
| | Total | 548,640,686 | 3.79% | 20,820,093 | 3.79% | 20,820,093 | 0 |
| **MITCHELL PLANT - (b)** | | | | | | | |
| 311 | Structures & Improvements | 42,000,197 | 2.87% | 1,205,406 | 2.74% | 1,149,812 | (55,594) |
| 312 | Boiler Plant Equipment | 765,644,984 | 3.90% | 29,860,154 | 3.13% | 23,947,287 | (5,912,867) |
| 312 | Boiler Plant Equip SCR Catalyst **(c)** | 8,190,115 | 10.00% | 819,012 | 12.50% | 1,023,764 | 204,752 |
| 314 | Turbogenerator Units | 53,295,697 | 2.86% | 1,524,257 | 1.84% | 982,084 | (542,173) |
| 315 | Accessory Electrical Equipment | 17,080,672 | 2.39% | 408,228 | 1.64% | 280,242 | (127,986) |
| 316 | Misc. Power Plant Equip. | 7,693,412 | 2.79% | 214,646 | 2.80% | 215,335 | 689 |
| | Total | 893,905,077 | 3.81% | 34,031,703 | 3.09% | 27,598,524 | (6,433,179) |
| | **Total Steam Production Plant** | **1,442,545,763** | **3.80%** | **54,851,796** | **3.36%** | **48,418,617** | **(6,433,179)** |
| **TRANSMISSION PLANT** | | | | | | | |
| 350.1 | Land Rights | 26,456,147 | 1.71% | 452,400 | 1.44% | 381,850 | (70,550) |
| 352 | Structures & Improvements | 6,636,668 | 1.71% | 113,487 | 2.08% | 137,978 | 24,491 |
| 353 | Station Equipment | 170,843,671 | 1.71% | 2,921,427 | 2.15% | 3,669,309 | 747,882 |
| 354 | Towers & Fixtures | 94,517,543 | 1.71% | 1,616,250 | 2.61% | 2,464,522 | 848,272 |
| 355 | Poles & Fixtures | 74,696,720 | 1.71% | 1,277,314 | 3.95% | 2,949,685 | 1,672,371 |
| 356 | OH Conductor & Devices | 122,537,908 | 1.71% | 2,095,398 | 2.91% | 3,563,336 | 1,467,938 |
| 357 | Underground Conduit | 11,590 | 1.71% | 198 | 2.99% | 346 | 148 |
| 358 | Underground Conductor & Devices | 106,066 | 1.71% | 1,814 | 2.62% | 2,779 | 965 |
| | **Total Transmission Plant** | **495,806,313** | **1.71%** | **8,478,288** | **2.66%** | **13,169,805** | **4,691,517** |
| **DISTRIBUTION PLANT** | | | | | | | |
| 360.1 | Land Rights | 5,343,520 | 3.52% | 188,092 | 1.35% | 71,981 | (116,111) |
| 361 | Structures & Improvements | 4,372,006 | 3.52% | 153,895 | 1.62% | 70,716 | (83,179) |
| 362 | Station Equipment | 83,664,562 | 3.52% | 2,944,993 | 3.27% | 2,733,159 | (211,834) |
| 364 | Poles, Towers, & Fixtures | 180,551,331 | 3.52% | 6,355,407 | 4.70% | 8,479,394 | 2,123,987 |
| 365 | Overhead Conductor & Devices | 179,538,721 | 3.52% | 6,319,763 | 3.64% | 6,537,027 | 217,264 |
| 366 | Underground Conduit | 6,377,091 | 3.52% | 224,474 | 2.24% | 142,926 | (81,548) |
| 367 | Underground Conductor | 9,812,956 | 3.52% | 345,416 | 2.58% | 253,278 | (92,138) |
| 368 | Line Transformers | 119,012,919 | 3.52% | 4,189,255 | 4.07% | 4,848,731 | 659,476 |
| 369 | Services | 53,900,363 | 3.52% | 1,897,293 | 6.96% | 3,751,658 | 1,854,365 |
| 370 | Meters | 24,723,287 | 3.52% | 870,260 | 5.83% | 1,440,385 | 570,125 |
| 371 | Installations on Custs. Prem. | 20,056,550 | 3.52% | 705,991 | 12.13% | 2,432,542 | 1,726,551 |
| 373 | Street Lighting & Signal Sys. | 3,349,341 | 3.52% | 117,897 | 6.27% | 210,136 | 92,239 |
| | **Total Distribution Plant** | **690,702,647** | **3.52%** | **24,312,736** | **4.48%** | **30,971,933** | **6,659,197** |

**KENTUCKY POWER COMPANY**
**SCHEDULE II - COMPARE DEPRECIATION EXPENSE USING CURRENT AND STUDY RATES**
**ANNUAL DEPRECIATION RATES AND ACCRUALS BY THE REMAINNG LIFE METHOD**
**BASED ON PLANT IN SERVICE AT DECEMBER 31, 2013**

| ACCT. NO. (1) | ACCOUNT TITLE (2) | ORIGINAL COST (3) | CURRENT APPROVED RATE (4) | ANNUAL ACCRUAL (5) | STUDY RATE (6) | STUDY ACCRUAL (7) | DIFFERENCE (DECREASE) (8) |
|---|---|---|---|---|---|---|---|
| **GENERAL PLANT** | | | | | | | |
| 389.1 | Land Rights | 37,384 | 2.54% | 950 | 1.59% | 596 | (354) |
| 390 | Structures & Improvements | 19,811,669 | 2.54% | 503,216 | 3.97% | 786,469 | 283,253 |
| 391 | Office Furniture & Equipment | 1,683,333 | 2.54% | 42,757 | 3.20% | 53,931 | 11,174 |
| 392 | Transportation Equipment | 14,768 | 2.54% | 375 | 3.52% | 520 | 145 |
| 393 | Stores Equipment | 164,548 | 2.54% | 4,180 | 4.15% | 6,822 | 2,642 |
| 394 | Tools Shop & Garage Equipment | 3,553,696 | 2.54% | 90,264 | 4.20% | 149,084 | 58,820 |
| 395 | Laboratory Equipment | 141,765 | 2.54% | 3,601 | 5.76% | 8,163 | 4,562 |
| 396 | Power Operated Equipment | 5,931 | 2.54% | 151 | 5.43% | 322 | 171 |
| 397 | Communication Equipment | 7,318,955 | 2.54% | 185,901 | 5.66% | 414,591 | 228,690 |
| 398 | Miscellaneous Equipment | 1,065,616 | 2.54% | 27,067 | 6.73% | 71,743 | 44,676 |
| | **Total General Plant** | **33,797,665** | **2.54%** | **858,462** | **4.42%** | **1,492,241** | **633,779** |
| | **Total Depreciable Plant** | **2,662,852,388** | **3.32%** | **88,501,282** | **3.53%** | **94,052,596** | **5,551,314** |

**Notes:**

**(a) The depreciation study recommends that the current approved depreciation rates for Big Sandy Plant remain in effect until the next base case which will reflect the retirement of Big Sandy Unit 2 in 2015, the coal related portions of Unit 1 in 2016 and the cost to re-power Unit 1 to burn natural gas. Therefore there is no change in depreciation expense due to a change in depreciation rates for Big Sandy Plant.**

**(b) The current approved rates for Mitchell Generating Plant are from AEP affiliated company, Ohio Power Company as per the Order in Case No. 2012-00578.**

**(c) The depreciation rate was revised for the SCR catalyst at Mitchell Generating Station using AEP Generation's estimated average life for the catalyst of 8 years.**

**KENTUCKY POWER COMPANY**
**SCHEDULE III - COMPARISON OF MORTALITY CHARACTERISTICS**
**DEPRECIATION STUDY AS OF DECEMBER 31, 2013**

| (1) | | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Existing Rates (See note, below) | | | | | Current Study Rates | | | | |
| | | Average Service Life (Years) | Iowa Curve | Salvage Factor | Cost of Removal Factor | Net Salvage Factor | Average Service Life (Years) | Iowa Curve | Salvage Factor | Cost of Removal Factor | Net Salvage Factor |
| **TRANSMISSION PLANT** | | | | | | | | | | | |
| 350.1 | Rights of Way | 75 | R4.0 | N/A | N/A | 0% | 75 | R4.0 | 0% | 0% | 0% |
| 352.0 | Structures & Improvements | 55 | S1.5 | N/A | N/A | 0% | 60 | S3.0 | 0% | 10% | -10% |
| 353.0 | Station Equipment | 50 | R0.5 | N/A | N/A | 25% | 50 | L0.5 | 8% | 11% | -3% |
| 354.0 | Towers & Fixtures | 55 | R4.0 | N/A | N/A | 0% | 51 | S6.0 | 3% | 13% | -10% |
| 355.0 | Poles & Fixtures | 45 | R3.0 | N/A | N/A | 0% | 43 | L3.0 | 2% | 63% | -61% |
| 356.0 | Overhead Conductor & Devices | 50 | R3.0 | N/A | N/A | 10% | 50 | S6.0 | 6% | 33% | -27% |
| 357.0 | Underground Conduit | 37 | R2.0 | N/A | N/A | 0% | 37 | R2.0 | 0% | 0% | 0% |
| 358.0 | Underground Conductor and Devices | 44 | R1.0 | N/A | N/A | 0% | 44 | R1.0 | 0% | 0% | 0% |
| **DISTRIBUTION PLANT** | | | | | | | | | | | |
| 360.1 | Rights of Way | 75 | R4.0 | N/A | N/A | 0% | 75 | R4.0 | 0% | 0% | 0% |
| 361.0 | Structures & Improvements | 65 | L0.5 | N/A | N/A | 0% | 70 | R2.0 | 4% | 16% | -12% |
| 362.0 | Station Equipment | 25 | L0.0 | N/A | N/A | 25% | 33 | R0.5 | 10% | 17% | -7% |
| 364.0 | Poles, Towers, & Fixtures | 28 | L0.0 | N/A | N/A | 25% | 28 | R0.5 | 18% | 48% | -30% |
| 365.0 | Overhead Conductor & Devices | 26 | R1.5 | N/A | N/A | 25% | 26 | L0.0 | 30% | 24% | 6% |
| 366.0 | Underground Conduit | 37 | R2.0 | N/A | N/A | 0% | 45 | R3.0 | 0% | 0% | 0% |
| 367.0 | Underground Conductor | 44 | R1.0 | N/A | N/A | 0% | 44 | R0.5 | 1% | 14% | -13% |
| 368.0 | Line Transformers | 25 | R1.5 | N/A | N/A | 15% | 25 | L0.0 | 29% | 30% | -1% |
| 369.0 | Services | 18 | R2.0 | N/A | N/A | 0% | 20 | L0.0 | 1% | 39% | -38% |
| 370.0 | Meters | 27 | R0.5 | N/A | N/A | 0% | 17 | R4.0 | 22% | 19% | 3% |
| 371.0 | Installations on Custs. Prem. | 11 | L0.0 | N/A | N/A | 30% | 11 | L0.0 | 1% | 33% | -32% |
| 373.0 | Street Lighting & Signal Sys. | 15 | L0.0 | N/A | N/A | 15% | 20 | L0.0 | 1% | 25% | -24% |
| **GENERAL PLANT** | | | | | | | | | | | |
| 389.1 | Rights of Way | 75 | R4.0 | N/A | N/A | 0% | 75 | R4.0 | 0% | 0% | 0% |
| 390.0 | Structures & Improvements | 45 | L3.0 | N/A | N/A | 0% | 35 | L2.0 | 1% | 1% | 0% |
| 391.0 | Office Furniture & Equipment | 35 | R0.5 | N/A | N/A | 10% | 35 | SQ | 0% | 0% | 0% |
| 392.0 | Transportation Equipment | 30 | R3.0 | N/A | N/A | 0% | 30 | SQ | 0% | 0% | 0% |
| 393.0 | Stores Equipment | 30 | R1.0 | N/A | N/A | 0% | 30 | SQ | 0% | 0% | 0% |
| 394.0 | Tools Shop & Garage Equipment | 30 | R0.5 | N/A | N/A | 0% | 30 | SQ | 0% | 9% | -9% |
| 395.0 | Laboratory Equipment | 30 | L5.0 | N/A | N/A | 0% | 30 | SQ | 0% | 0% | 0% |
| 396.0 | Power Operated Equipment | N/A | N/A | N/A | N/A | N/A | 25 | SQ | 0% | 0% | 0% |
| 397.0 | Communication Equipment | 22 | L3.0 | N/A | N/A | 0% | 22 | SQ | 6% | 3% | 3% |
| 398.0 | Miscellaneous Equipment | 20 | S5.0 | N/A | N/A | 0% | 20 | SQ | 0% | 3% | -3% |

Note: Kentucky Power Company's existing depreciation rates are from Case No. 91-066. No detail of Cost of Removal % and Salvage Factor % is available from the order from that Case.

Kentucky Power Company
KPSC Case No. 2025-00175
Sierra Club's First Set of Data Requests
Dated August 11, 2025

**DATA REQUEST**

**SC 1_14** For the Mitchell Plant, please provide the following information, on an annual basis, beginning with 2021:

a. Installed Capacity
b. Unforced Capacity
c. Capacity Factor
d. Equivalent Availability Factor (EAF)
e. Heat Rate
f. Forced or random outage rate
g. Effective forced outage rate (EFORd)
h. Fixed O&M costs
i. Non-Fuel Variable O&M costs
j. Fuel Costs (by fuel type)

**RESPONSE**

See KPCO_R_SC_1_14_Attachment1 for the requested information.

Witness: Joshua D. Snodgrass

**VERIFICATION**

The undersigned, Lerah M. Kahn, being duly sworn, deposes and says she is the Regulatory Services Manager for Kentucky Power, that she 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 her information, knowledge, and belief.

Lerah M. Kahn

Commonwealth of Kentucky )
) Case No. 2025-00175
County of Boyd )

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Lerah M. Kahn, on August 22, 2025.

Notary Public

MARILYN MICHELLE CALDWELL
Notary Public
Commonwealth of Kentucky
Commission Number KYNP71841
My Commission Expires May 5, 2027

My Commission Expires May 5, 2027

Notary ID Number KYNP71841

**VERIFICATION**

The undersigned, Joshua D. Snodgrass, being duly sworn, deposes and says he is the Mitchell Plant Manager, 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.

Signed by:
Joshua D. Snodgrass
0ED246E054924C3...
Joshua D. Snodgrass

Commonwealth of Kentucky )
) Case No. 2025-00175
County of Boyd )

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Joshua D. Snodgrass, on 8/13/2025 | 2:12 PM EDT.

Signed by:
Michelle Caldwell
E9B1BC7AC31F421...
Notary Public

MARILYN MICHELLE CALDWELL
ONLINE NOTARY PUBLIC
COMMONWEALTH OF KENTUCKY
Commission #KYNP71841
My Commission Expires 5/5/2027

My Commission Expires May 5, 2027

Notary ID Number KYNP71841

## Certificate Of Completion

Envelope Id: 14D25F92-4064-4629-91D9-23CAB187EBE0
Status: Completed
Subject: Complete with Docusign: Snodgrass Verification Form.doc
Source Envelope:
Document Pages: 1
Signatures: 2
Envelope Originator:
Certificate Pages: 5
Initials: 0
Michelle Caldwell
AutoNav: Enabled
mmcaldwell@aep.com
EnvelopeId Stamping: Disabled
IP Address: 167.239.221.105
Time Zone: (UTC-08:00) Pacific Time (US & Canada)

## Record Tracking

Status: Original
8/13/2025 1:52:41 PM
Holder: Michelle Caldwell
mmcaldwell@aep.com
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| Signer Events | Signature | Timestamp |
|---|---|---|
| Joshua D. Snodgrass<br>jdsnodgrass@aep.com<br>Security Level: Notarized Signing (Notary: Michelle Caldwell) | Signed by:<br>Joshua D. Snodgrass<br>0FD246E054924C3...<br><br>Signature Adoption: Pre-selected Style<br>Using IP Address: 167.239.221.104 | Sent: 8/13/2025 1:53:53 PM<br>Viewed: 8/13/2025 2:12:28 PM<br>Signed: 8/13/2025 2:12:48 PM |

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| In Person Signer Events | Signature | Timestamp |
|---|---|---|

| Editor Delivery Events | Status | Timestamp |
|---|---|---|

| Agent Delivery Events | Status | Timestamp |
|---|---|---|

| Intermediary Delivery Events | Status | Timestamp |
|---|---|---|

| Certified Delivery Events | Status | Timestamp |
|---|---|---|

| Carbon Copy Events | Status | Timestamp |
|---|---|---|

| Witness Events | Signature | Timestamp |
|---|---|---|

| Notary Events | Signature | Timestamp |
|---|---|---|
| Michelle Caldwell<br>mmcaldwell@aep.com<br>Regulatory Case Coordinator<br>AEP Kentucky Power<br>Notary for Joshua D. Snodgrass<br>(jdsnodgrass@aep.com)<br>Security Level: Email, Account Authentication (Required), Digital Certificate<br>**Signature Provider Details:**<br>Signature Type: DS Authority IDV (Client ID: c171dfd7-d7e5-4793-b1bf-4d660787eaa0)<br>Signature Issuer: DocuSign Cloud Signing CA-Identity<br>**Electronic Record and Signature Disclosure:**<br>Not Offered via Docusign | MARILYN MICHELLE CALDWELL<br>ONLINE NOTARY PUBLIC<br>COMMONWEALTH OF KENTUCKY<br>Commission #KYNP71841<br>My Commission Expires 5/5/2027<br><br>Using IP Address: 167.239.221.105<br><br>Signature Provider Location:<br>https://ssasign.docusign.net/sca/1940 | Sent: 8/13/2025 1:53:54 PM<br>Viewed: 8/13/2025 2:12:21 PM<br>Signed: 8/13/2025 2:13:04 PM |

**VERIFICATION**

The undersigned, Alex E. Vaughan, being duly sworn, deposes and says he is the Managing Director Regulated Pricing – Generation and Fuel Strategy 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.

Alex E. Vaughan

State of Ohio )
)
County of Franklin ) Case No. 2025-00175

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Alex E. Vaughan, on 08-21-2025.

Notary Public

BRETT E. SCHMIED, Attorney At Law
NOTARY PUBLIC - STATE OF OHIO
My commission has no expiration date
Sec. 147.03 R.C.

My Commission Expires N/A

Notary ID Number _____

**VERIFICATION**

The undersigned, Tanner S. Wolffram, being duly sworn, deposes and says he is the Director of Regulatory Services for Kentucky Power, 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.

Tanner S. Wolffram

Commonwealth of Kentucky )
)
County of Boyd )

Case No. 2025-00175

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Tanner S. Wolffram, on August 22, 2025.

Notary Public

My Commission Expires May 5, 2027

Notary ID Number KYNP71841

MARILYN MICHELLE CALDWELL
Notary Public
Commonwealth of Kentucky
Commission Number KYNP71841
My Commission Expires May 5, 2027