**COMMONWEALTH OF KENTUCKY**

**BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

| | | |
|---|---|---|
| **ELECTRONIC APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR APPROVAL TO AMEND ITS ENVIRONMENTAL COMPLIANCE PLAN, AND RECOVER COSTS PURSUANT TO ITS ENVIRONMENTAL SURCHARGE, AND OTHER GENERAL RELIEF** | **)** | **CASE NO. 2025-00053** |

**RESPONSES TO STAFF'S SECOND INFORMATION REQUEST**

**TO EAST KENTUCKY POWER COOPERATIVE, INC.**

**DATED SEPTEMBER 8, 2025**

**COMMONWEALTH OF KENTUCKY**

**BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

| | | |
|---|---|---|
| **ELECTRONIC APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR APPROVAL TO AMEND ITS ENVIRONMENTAL COMPLIANCE PLAN, AND RECOVER COSTS PURSUANT TO ITS ENVIRONMENTAL SURCHARGE, AND OTHER GENERAL RELIEF** | ) ) ) ) ) ) | **CASE NO. 2025-00053** |

**CERTIFICATE**

**STATE OF KENTUCKY** )
)
**COUNTY OF CLARK** )

Jerry Purvis, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Commission Staff's Second Request for Information in the above-referenced case dated September 8, 2025, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

Jerry Purvis

Subscribed and sworn before me on this 22nd day of September, 2025.

JOHN CHRISTIAN EVERLY
Notary Public
Commonwealth of Kentucky
Commission Number KYNP104251
My Commission Expires Aug 27, 2029

Notary Public

**COMMONWEALTH OF KENTUCKY**

**BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

| | | |
|---|---|---|
| **ELECTRONIC APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR APPROVAL TO AMEND ITS ENVIRONMENTAL COMPLIANCE PLAN, AND RECOVER COSTS PURSUANT TO ITS ENVIRONMENTAL SURCHARGE, AND OTHER GENERAL RELIEF** | ) ) ) ) ) ) | **CASE NO. 2025-00053** |

**CERTIFICATE**

**STATE OF KENTUCKY** )
)
**COUNTY OF CLARK** )

Thomas J. Stachnik, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Commission Staff's Second Request for Information in the above-referenced case dated September 8, 2025, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

Thomas J. Stachnik

Subscribed and sworn before me on this 23rd day of September, 2025.

JOHN CHRISTIAN EVERLY
Notary Public
Commonwealth of Kentucky
Commission Number KYNP104251
My Commission Expires Aug 27, 2029

Notary Public

**COMMONWEALTH OF KENTUCKY**

**BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

| | | |
|---|---|---|
| **ELECTRONIC APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR APPROVAL TO AMEND ITS ENVIRONMENTAL COMPLIANCE PLAN, AND RECOVER COSTS PURSUANT TO ITS ENVIRONMENTAL SURCHARGE, AND OTHER GENERAL RELIEF** | ) ) ) ) ) ) | **CASE NO. 2025-00053** |

**CERTIFICATE**

**STATE OF KENTUCKY** )
)
**COUNTY OF CLARK** )

Joseph VonDerHaar, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Commission Staff's Second Request for Information in the above-referenced case dated September 8, 2025, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

Joseph VonDerHaar

Subscribed and sworn before me on this 2nd day of September, 2025.

Notary Public

Sheila McDaniel Mineer
Notary Public, Commonwealth of Kentucky
Commission # KYNP26838
Expiration date. 5/13/2029

**COMMONWEALTH OF KENTUCKY**

**BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

| | | |
|---|---|---|
| **ELECTRONIC APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR APPROVAL TO AMEND ITS ENVIRONMENTAL COMPLIANCE PLAN, AND RECOVER COSTS PURSUANT TO ITS ENVIRONMENTAL SURCHARGE, AND OTHER GENERAL RELIEF** | ) ) ) ) ) ) | **CASE NO. 2025-00053** |

**CERTIFICATE**

**STATE OF KENTUCKY** )
)
**COUNTY OF CLARK** )

Jacob R. Watson, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Commission Staff's Second Request for Information in the above-referenced case dated September 8, 2025, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

Jacob R. Watson

Subscribed and sworn before me on this 22nd day of September, 2025.

JOHN CHRISTIAN EVERLY
Notary Public
Commonwealth of Kentucky
Commission Number KYNP104251
My Commission Expires Aug 27, 2029

Notary Public

**EAST KENTUCKY POWER COOPERATIVE, INC.**
**CASE NO. 2025-00053**
**SECOND REQUEST FOR INFORMATION RESPONSE**

**STAFF'S REQUEST DATED SEPTEMBER 8, 2025**
**REQUEST 1**
**RESPONSIBLE PARTY: Joe VonDerHaar**

**Request 1.** Refer to EKPC's response to Commission Staff's First Request for Information (Staff's First Request), Item 5. Provide a table that matches the project number to each described project in the same order as the response.

**Response 1.** See attachment *Staff DR2 Response 1 – JV1 Projects.xslx* that includes project numbers with associated projects.

**EAST KENTUCKY POWER COOPERATIVE, INC.**
**CASE NO. 2025-00053**
**SECOND REQUEST FOR INFORMATION RESPONSE**

**STAFF'S REQUEST DATED SEPTEMBER 8, 2025**
**REQUEST 2**
**RESPONSIBLE PARTY: Joe VonDerHaar**

**Request 2.** Refer to EKPC's response to Staff's First Request, Item 5, and the Application, Exhibit JV-1, page 1. Explain whether the amendment to Project 38 is a 5-year rehabilitation or expansion.

**Response 2.** The amendment to Project 38 is an expansion of approximately 5,000 feet of new blacktop.

**EAST KENTUCKY POWER COOPERATIVE, INC.**
**CASE NO. 2025-00053**
**SECOND REQUEST FOR INFORMATION RESPONSE**

**STAFF'S REQUEST DATED SEPTEMBER 8, 2025**
**REQUEST 3**
**RESPONSIBLE PARTIES: (a, d) Joe VonDerHaar; (b, c) Jacob R. Watson**

**Request 3.** Refer to EKPC's response to Staff's First Request, Item 6.

a. Provide the useful lives of the generating units.

b. Confirm that the useful lives of the proposed compliance projects are longer than the useful lives of the attached generating units. If this cannot be confirmed, explain.

c. Confirm that EKPC cannot retire a generating unit without approval, which may extend the life of a generating unit beyond its useful life for depreciation rates. If this cannot be confirmed, explain.

d. Provide the useful lives of all proposed capital projects.

**Response 3.**

a. The current financial end life for each generating unit is as follows;

| | |
|---|---|
| Cooper 1 | 2030 |
| Cooper 2 | 2030 |
| Spurlock 1 | 2042 |
| Spurlock 2 | 2042 |
| Spurlock 3 | 2049 |
| Spurlock 4 | 2049 |

b. Confirmed. EKPC notes that generating units can run past the end of their financial useful life or investments could extend their financial useful lives.

c. Confirmed. EKPC is required to comply with KRS 278.264.

d. Please refer to EKPC's response to Commission Staff's First Request for Information, Item 1 which includes proposed useful life of the specific projects.

**EAST KENTUCKY POWER COOPERATIVE, INC.**
**CASE NO. 2025-00053**
**SECOND REQUEST FOR INFORMATION RESPONSE**

**STAFF'S REQUEST DATED SEPTEMBER 8, 2025**
**REQUEST 4**
**RESPONSIBLE PARTY: Joe VonDerHaar**

**Request 4.** Refer to EKPC's response to Staff's First Request, Item 7. Explain the approximately 63 percent increase in costs between Phase 1 and Phase 2 of Project 38.

**Response 4.** There are three components that resulting in the estimated 63% increase in costs from Phase 1 to Phase 2:

- Inflation since Phase 1 was completed in 2020;
- An increased distance of blacktop from 3,800 feet in Phase 1 to 5,000 feet for Phase 2; and
- Phase 2 costs are based on engineering estimates with contingency dollars included. Phase 1 costs were submitted as actual costs. Phase 2 will also only seek recovery for actual costs, not estimates.

**EAST KENTUCKY POWER COOPERATIVE, INC.**
**CASE NO. 2025-00053**
**SECOND REQUEST FOR INFORMATION RESPONSE**

**STAFF'S REQUEST DATED SEPTEMBER 8, 2025**
**REQUEST 5**
**RESPONSIBLE PARTY: Thomas J. Stachnik**

**Request 5.** Refer to EKPC's response to Staff's First Request, Item 15.

a. Confirm that the net book value is higher than the current liability for debt issuances. If confirmed, explain why the weighted average cost of debt (WACD) should not be weighted based on the current liability.

b. Provide the WACD weighted by the current liability of debt issuances in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible

**Response 5.**

a. The net book value is **not** higher than the current liability for debt issuances. The total current liability as of April, 30, 2025 for FFB loans for environmental surcharge compliance projects is $1,106,589,914. The total net book value for the associated environmental surcharge compliance projects is $711,742,926. The current liability is $394,846,988 greater than the net book value. It is not appropriate to base the WACD on current liability since the rate base that the return is based on is the net book value.

Note that this difference results from financing with debt with constant payments while the depreciation is straight line. Constant payment amortization (like a home mortgage) results in less reduction of the current liability since there is a greater interest component than principal earlier in the life of the debt.

b. See attachment *Staff DR2 Response 5b – WACD.xlsx*. EKPC believes this value is not relevant, since the rate base is the much lower net book value.

**EAST KENTUCKY POWER COOPERATIVE, INC.**
**CASE NO. 2025-00053**
**SECOND REQUEST FOR INFORMATION RESPONSE**

**STAFF'S REQUEST DATED SEPTEMBER 8, 2025**
**REQUEST 6**
**RESPONSIBLE PARTY: Joe VonDerHaar**

**Request 6.** Refer to the Application, Exhibit JV-1.

a. For each alternative considered, provide a cost estimate.

b. Provide this exhibit with the addition of project numbers.

**Response 6.** Please refer to EKPC's response to Item 1, which includes project numbers, project description, alternatives considered (if any), and their associated cost estimates.

**EAST KENTUCKY POWER COOPERATIVE, INC.**
**CASE NO. 2025-00053**
**SECOND REQUEST FOR INFORMATION RESPONSE**

**STAFF'S REQUEST DATED SEPTEMBER 8, 2025**
**REQUEST 7**
**RESPONSIBLE PARTIES: (a) Joe VonDerHaar; Jerry Purvis, (b) Jacob R. Watson**

**Request 7.** Refer to the direct testimony of Jacob R. Watson, under the Schedule of Current Environmental Compliance Plan (ECP) and Project Amendments/Additions, Attachment JRW-1. Refer also to the direct testimony of Jerry Purvis, Attachment JV-1, pages 1 through 8.

a. Provide a cross-reference that correlates a Referenced Project in the ECP spreadsheet, Attachment JRW-1, to each Project as listed in the Environmental Surcharge Fact Sheet, as provided under the direct testimony of Jerry Purvis, Attachment JV-1, pages 1 through 8.

b. Confirm that the estimated cost for the referenced project is $4.0 million rather than $4.0. If not confirmed, provide the cost.

**Response 7.**

a. EKPC notes that Attachment JV-1 was sponsored by Joe VonDerHaar, not Jerry Purvis. EKPC's response to Item 1 above, correlates project numbers and the project description as outlined in JV-1 and JRW-1.

b. Confirmed.

**EAST KENTUCKY POWER COOPERATIVE, INC.**

**CASE NO. 2025-00053**

**SECOND REQUEST FOR INFORMATION RESPONSE**

**STAFF'S REQUEST DATED SEPTEMBER 8, 2025**

**REQUEST 8**

**RESPONSIBLE PARTY: Jerry Purvis**

**Request 8.** Refer to the Direct Testimony of Jerry Purvis, Environmental Surcharge Fact Sheet, Attachment JV-1, page 8.

a. Provide a rationale for including the Cooper Unit 2 Air Heater Basket/Seal Replacement Project in the Environmental Compliance Plan.

b. Confirm whether the Air Heater is an environmentally mandated component. If not confirmed, explain the reason for its inclusion in this application.

**Response 8.** a-b. EKPC notes that Attachment JV-1 was sponsored by Joe VonDerHaar, not Jerry Purvis. The exhibits were developed in-house with cooperation of Production, Engineering and Construction, Finance, Regulatory, Environmental Affairs teams and outside legal counsel. The Cooper Unit 2 air heater baskets/seal replacement Project included a new Ljunstrom tri-sector Air Preheater (APH) that was installed with the Cooper Air Quality Control System (AQCS) (CS100) dry scrubber project that was previously approved for inclusion in the Environmental Surcharge. This project to replace baskets and seals is required as those APH components have reached their end-of-life. Since the original project was included in the

environmental surcharge, EKPC believes it is appropriate to include the subsequent projects that extend the life of the AQCS. Not all projects EKPC needs reside on the list of projects, only the ones that are required to meet state and federal EPA regulations are included.

**EAST KENTUCKY POWER COOPERATIVE, INC.**
**CASE NO. 2025-00053**
**SECOND REQUEST FOR INFORMATION RESPONSE**

**STAFF'S REQUEST DATED SEPTEMBER 8, 2025**
**REQUEST 9**
**RESPONSIBLE PARTY: Joe VonDerHaar**

**Request 9.** For the years 2022 through 2024 and 2025 year-to-date, provide a performance profile for each of the Cooper Generating Units outlining the following:

a. Equivalent Availability Factor;

b. Equivalent Forced Outage Rate;

c. Heat Rate; and

d. List of the top ten major availability detractors.

**Response 9.**

a. Equivalent Availability Factor

| Year | CP1 | CP2 |
|---|---|---|
| 2022 | 87.15% | 61.42%* |
| 2023 | 77.00% | 81.91% |
| 2024 | 84.53% | 84.65% |
| 2025 | 82.21% | 76.56% |

*10-year major overhaul years (8-10 week duration)

b. Equivalent Forced Outage Rate

| Year | CP1 | CP2 |
|---|---|---|
| 2022 | 2.15% | 1.22% |
| 2023 | 4.55% | .77% |
| 2024 | .53% | 1.20% |
| 2025 | .11% | 4.10% |

c. Heat Rate:

| Year | CP1 | CP2 |
|---|---|---|
| 2022 | 11,208 | 10,842 |
| 2023 | 11,574 | 10,477 |
| 2024 | 10,590 | 11,092 |
| 2025 | 10,882 | 10,762 |

d. With Cooper Station's average EFOR at .91% over the requested period and knowing the current US coal fleet EFOR average is in the 10% range, EKPC does not believe Cooper Station has ten major detractors. Cooper has one (1) primary detractor which is boiler tube leaks. Any other detractors are various and have minimal impact on availability.

**EAST KENTUCKY POWER COOPERATIVE, INC.**
**CASE NO. 2025-00053**
**SECOND REQUEST FOR INFORMATION RESPONSE**

**STAFF'S REQUEST DATED SEPTEMBER 8, 2025**
**REQUEST 10**
**RESPONSIBLE PARTY: Joe VonDerHaar**

**Request 10.** For the years 2022 through 2024 and 2025 year-to-date, provide a summary of any major forced outages or major derates at the Cooper Generating facility and the associated root cause analysis for each.

**Response 10.** Cooper Station has experienced two (2) major forced outages and zero (0) major derates for the requested period. They are as follows;

Cooper 1 experienced a 298-hour forced outage occurring on October 1, 2023 and ending on 10/14/2023. The cause was a tube leak in the lower furnace. The root cause was determined to be tube under deposit corrosion. The extended outage time was a result of additional area repairs as a proactive measure to mitigate future failures.

Cooper 2 experienced a 95-hour forced outage occurring on August 1, 2025 and ending on August 5, 2025. The cause was a water wall tube leak. The root cause was determined to be fireside erosion. This was a known area of need and on EKPC's radar for area tube replacement. The failure occurred earlier than expected and before planned maintenance could be completed.

**EAST KENTUCKY POWER COOPERATIVE, INC.**
**CASE NO. 2025-00053**
**SECOND REQUEST FOR INFORMATION RESPONSE**

**STAFF'S REQUEST DATED SEPTEMBER 8, 2025**
**REQUEST 11**
**RESPONSIBLE PARTY: Joe VonDerHaar**

**Request 11.** For the years 2022 through 2024 and 2025 year-to-date, provide a performance profile for each of the Spurlock Generating Units outlining the following:

a. Equivalent Availability Factor;

b. Equivalent Forced Outage Rate;

c. Heat Rate; and

d. List of the top ten major availability detractors.

**Response 11.**

a. Equivalent Availability Factor:

| Year | SP1 | SP2 | SP3 | SP4 |
|---|---|---|---|---|
| 2022 | 85.10% | 92.19% | 90.28% | 88.49% |
| 2023 | 68.55%* | 82.72% | 87.29% | 84.98% |
| 2024 | 84.65% | 77.12% | 89.18% | 78.45% |
| 2025 | 90.74% | 81.28% | 69.77%* | 95.60% |

*10-year major overhaul years (8-10 week duration)

b. Equivalent Forced Outage Rate:

| Year | SP1 | SP2 | SP3 | SP4 |
|---|---|---|---|---|
| 2022 | .98% | 1.35% | 1.17% | .28% |
| 2023 | .57% | 2.65% | .72% | .24% |
| 2024 | .67% | 4.33% | .80% | 3.37% |
| 2025 | 0% | 1.65% | 2.30% | .38% |

c. Heat Rate:

| Year | SP1 | SP2 | SP3 | SP4 |
|---|---|---|---|---|
| 2022 | 10,880 | 10,416 | 9,754 | 10,543 |
| 2023 | 10,810 | 10,547 | 9,620 | 9,892 |
| 2024 | 10,423 | 10,398 | 10,024 | 10,132 |
| 2025 | 10,304 | 10,399 | 10,117 | 10,047 |

d. With Spurlock Station's average EFOR at 1.34% over the requested period and knowing the current US coal fleet EFOR average is in the 10% range, EKPC does not believe Spurlock Station has ten major detractors. Spurlock has five (5) detractors which have been:

1. Reoccurring derates related to suppling steam to neighboring paper mill;
2. Pulverizer/Mill Issues;
3. Induced Draft Fan Issues;
4. Boiler Tube Issues; and

5. Wet Coal.

Any other detractors are various and have minimal impact on availability.

**EAST KENTUCKY POWER COOPERATIVE, INC.**
**CASE NO. 2025-00053**
**SECOND REQUEST FOR INFORMATION RESPONSE**

**STAFF'S REQUEST DATED SEPTEMBER 8, 2025**
**REQUEST 12**
**RESPONSIBLE PARTY: Joe VonDerHaar**

**Request 12.** For the years 2022 through 2024 and 2025 year-to-date, provide a summary of any major forced outages or major derates at the Spurlock Generating facility and the associated root cause analysis for each.

**Response 12.** Spurlock Station had two (2) major forced outages and one (1) major reoccurring derate for the requested period. They are as follows:

Spurlock 2 experienced a 130-hour forced outage occurring on September 5, 2024 and ended on September 10, 2024. The cause was a tube leak in the Reheat Inlet section of the boiler. The root cause was determined to be excessive tube wall loss related to a soot blower erosion over time. Failed tubes were repaired during the forced outage. Additional tube repair/replacements were completed during the fall 2024 maintenance outage and spring 2025 planned outage to mitigate additional tube leaks in this area.

Spurlock 4 experienced a forced outage event that was comprised of two forced outages in succession that in its entirety was considered major.

A 148-hour forced outage occurred between October 21, 2024 and October 27, 2024. The cause of the outage was a furnace pressure trip. This outage occurred as the unit was returning from a 4-week planned outage (PO). As part of startup after that PO, a black furnace calibration of the flame scanner system was needed. The root cause of the outage was determined to be excessive start up fuel oil saturating the circulating fluidizing boiler (CFB) bed material. Once ignited in the boiler, it resulted in a furnace pressure trip. To mitigate the issue a full shutdown, that included vacuuming out of the fuel impregnated bed material, was required and new bed material injected before restarting. A 67-hour forced outage occurred between October 30, 2024 and November 1, 2024. The cause was an external water wall tube leak. The root cause was determined to be Thermal-Mechanical Fatigue. It is believed the furnace pressure trip just prior to this failure assisted in accelerating this condition to full failure.

Spurlock 1 experienced a reoccurring derate. Spurlock station provides steam to a neighboring paper mill. Steam can be provided from either Spurlock 1 or Spurlock 2. The preferred unit is Spurlock 2 as it can provide steam without being derated. If Spurlock 2 is unavailable and Spurlock 1 is required to supply steam it results in a 30-50 mw derate. PJM currently considers these situations forced events. In previous years these Spurlock 1 derates were, in many cases, allowed to be Planned derates during Spurlock 2 Planned Outages. Spurlock 1 forced derates related to supplying steam to the neighboring paper mill has an accrued impact 2303 derate hours for the 2022 through 2025 (ytd) period.