COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY POWER COMPANY FOR APPROVAL OF (1) A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO MAKE THE CAPITAL INVESTMENTS NECESSARY TO CONTINUE TAKING CAPACITY AND ENERGY FROM THE MITCHELL GENERATING STATION AFTER DECEMBER 31, 2028, (2) AN AMENDED ENVIRONMENTAL COMPLIANCE PLAN, (3) REVISED ENVIRONMENTAL SURCHARGE TARIFF SHEETS, AND (4) ALL OTHER REQUIRED APPROVALS AND RELIEF	)	**Case No. 2025-00175**

SIERRA CLUB'S PUBLIC POST-HEARING BRIEF

I. Introduction

The Mitchell plant is a two-unit, 1,560 megawatt (MW) coal plant located approximately 12 miles south of Moundsville, West Virginia on the Ohio River that went into service in 1971.[1] Kentucky Power (or, "the Company") owns a 50% interest in the plant, which is operated by its affiliate the West Virginia utility Wheeling Power Company, and, absent an Order from this Commission, Kentucky Power must stop taking energy and capacity from the plant by the end of 2028.[2] In this proceeding Kentucky Power is requesting authorization to invest $138 million to

[1] *Electronic Application of Kentucky Power Company for Approval of (1) a Certificate of Public Convenience and Necessity to Make the Capital Investments Necessary to Continue Taking Capacity and Energy from the Mitchell Generating Station After December 31, 2028, (2) an Amended Environmental Compliance Plan, (3) Revised Environmental Surcharge Tariff Sheets, and (4) All Other Required Approvals and Relief*, Case No. 2025-00175, Application at 2-3 (June 30, 2025) (hereafter "Application").

[2] Application at 3 (citing the Commission's Orders in Case Nos. 2021-00004 and 2021-00421).

keep taking power from the 54 year-old plant beyond 2028, despite the fact that the plant operates at only a 25% capacity factor, and does not burn Kentucky coal, employ Kentucky workers, or pay Kentucky property taxes.[3] Specifically, Kentucky Power is requesting a certificate of public convenience and necessity ("CPCN") to allow it to continue to take 50% of the capacity and energy from the Mitchell Plant after December 31, 2028, along with related approvals of an Environmental Compliance Plan, a tariff, and deferral accounting for environmental costs borne by Wheeling Power on the assumption Kentucky Power would not take power from the plant after 2028.[4]

During this proceeding, Kentucky Power discovered that a cooling tower at Mitchell Unit 2 would require considerably more extensive repairs than previously thought. Although the initial repair estimate was $43 million,[5] the repair option ultimately selected by Wheeling and Kentucky Power in November 2025 is expected to cost approximately [redacted][6] Before the hearing in this matter, Kentucky Power, the Attorney General's Office, and Kentucky Industrial Utility Customers reached a Settlement Agreement, not joined by Sierra Club, that, if approved, would modify the Company's requested relief in two ways.[7] First, under the Settlement Agreement, the Company would amortize approximately $20.1 million for 50% of the capital

[3] Case No. 2025-00175, Hearing Transcript at 86:1-19 (Nov. 18, 2025) (hereafter "Hearing Transcript").

[4] Application at 1.

[5] Supplemental Direct Testimony of Alex Vaughan at 5 (Oct. 10, 2025).

[6] Response to Sierra Club PHDR 3, Confidential Attachment 1 at 2 (selecting [redacted]), 6, 8 (identifying [redacted] in capital costs); Vaughan Supplemental Direct Testimony at 4, Table AEV-SD1 (identifying an additional [redacted]). The Company will file a subsequent CPCN request for the selected cooling tower repair option. Vaughan Supplemental Direct Testimony at 5:16 to 6:2.

[7] Settlement Agreement at 3 (Nov. 12, 2025).

costs of complying with the 2020 Effluent Limitation Guidelines ("2020 ELG Rule") through 2040 instead of 2031 as requested in the application. Second, it would recover remaining coal combustion residual ("CCR") wastes, roughly $15.5 million, through 2040 rather than through 2028 as previously approved by the Commission in Case No. 2021-00004.[8] The Company estimates that the Settlement Agreement's terms would increase the average Kentucky Power residential customer's electric bill by $2.33 per month.[9] The parties to the Settlement agreed it benefits ratepayers in the near term, concluding it "represents the least cost, reasonable alternative for the Company to meet its load requirements *in the 2028-2031 time-period*."[10]

The Sierra Club's expert, Devi Glick, submitted Direct Testimony and live testimony at the November 18, 2025 hearing emphasizing:

1. The need for a thorough evaluation of all alternatives before investing ratepayer dollars, emphasizing the Company's failure to consider a scenario where the Company could have entered into a short-term power purchase agreement ("PPA") with Wheeling Power to continue to take power from the Mitchell Plant only through the end of 2031, without a long-term obligation to cover operation and maintenance on an aging, inefficient coal plant;
2. The cost of compliance with EPA's recently-updated, more-stringent 2024 Effluent Limitation Guidelines ("2024 ELG Rule") differs significantly based on whether a plant operates on coal versus gas, and those costs can impact the economic calculus

[8] Testimony of Tanner S. Wolffram on Behalf of Kentucky Power Company in Support of the Settlement Agreement at 5 (Nov. 13, 2025) (hereafter "Wolffram Settlement Testimony").

[9] Wolffram Settlement Testimony at 6:8-11.

[10] Wolffram Settlement Testimony at 7:10-11 (emphasis added); *accord* Hearing Transcript at 17:19-24 (noting the parties to the Settlement agree it represents the least cost option "specifically for the 2028 through . . . 2031 period.") (Wolffram Direct).

of whether to convert Mitchell to operate fully or partially on gas or remain reliant on coal; and

3. The economic interests of ratepayers diverge with regard to ownership of the Mitchell plant in the near term (2029-2031) versus the long-term (post-2031).[11]

Based on the record created in this case, and the Company's demonstrated need to secure near-term power beginning in 2029, Sierra Club recommends the Commission extend the Kentucky Power's ability to take energy and capacity from the Mitchell Plant only for a period of three years, through the end of 2031.[12] Doing so would be consistent with the Commission's prior Orders time-limiting the Company's reliance on Mitchell based on what is supported in the record and would have numerous benefits for Kentucky Power ratepayers: it would fill a demonstrated short-term need; avoid a long-term commitment to covering its 50% share of operation and maintenance costs at an aging coal plant that will be 60 years old at the end of 2031; and it provides the Company and the Commission with six years to evaluate its electricity demand and new generation options, which is well timed with the anticipated filing of the Company's next Integrated Resource Plan and at least one anticipated CPCN for a new generating unit in 2026.[13]

Moreover, the Company has already confirmed that the long-term plan for the Mitchell plant, whether to convert 100% to gas, co-fire with gas and coal, or something else, "will be

[11] Direct Testimony of Devi Glick on Behalf of Sierra Club at 5:13-20 (Nov. 6, 2025); Hearing Transcript at 249:8-25.

[12] Sierra Club does not object to the related aspects of the Application, such as the Compliance Plan, or the amortization for ELP capital costs and CCR costs outlined in the Settlement Agreement.

[13] Hearing Transcript at 59:17-19; *see also* Commission Orders in Case Nos. 2021-00004 and 2021-00421.

brought back to this Commission in a future proceeding."[14] Ensuring that such a future docket occurs, and does so without a weight on the scale in favor of continued reliance on coal beyond 2031, is in the best interests of ratepayers. The Commission should ensure that the Company's options remain open as it more carefully evaluates its generation alternatives in these upcoming proceedings. As the record demonstrates, repairs and environmental compliance costs which are large capital investments at aging coal plants can present a heavy burden for ratepayers and can increase dramatically over time. Here the cooling tower repair estimate at Mitchell Unit 2 increased roughly [redacted] from the time of the Company's Application to the November 18, 2025 hearing in this docket,[15] and the Company has pegged 2024 ELG compliance costs at [redacted] EPA's estimate.[16]

II. Standard of Review

K.R.S. § 278.020 requires that a utility obtain a CPCN for "the construction of any plant, equipment, property, or facility" with limited exceptions.[17] To receive a CPCN, a utility must show (1) a need for the construction and (2) an absence of wasteful duplication.[18]

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[14] Rebuttal Testimony of Alex Vaughan at 4:10-14 (Nov. 13, 2025).

[15] *Compare* Vaughan Supplemental Direct Testimony at 5:12-15 *with* Kentucky Power Response to Sierra Club PHDR 3, Confidential Attachment 1 at 6.

[16] *Compare* Glick Direct Testimony at 15:10-11 *with* Kentucky Power Response to Sierra Club PHDR 4, Confidential Attachment 1.

[17] K.R.S. § 278.020(1)(a) ("No person, partnership, public or private corporation, or combination thereof shall commence providing utility service to or for the public or begin the construction of any plant, equipment, property, or facility for furnishing to the public any of the services enumerated in KRS 278.010 … until that person has obtained from the Public Service Commission a certificate that public convenience and necessity require the service or construction.")

[18] *Ky. Utils. Co. v. Pub. Serv. Comm'n*, 252 S.W. 2d 885, 890 (Ky. 1952); *In re: Elec. Application of Kentucky Power Co. for a CPCN to Rebuild the Wooton-Stinnett Portion of the Hazard-Pineville 161 KV Line in Leslie County*, Case No. 2022-00118, Final Order at 16-17

In addition to establishing a need for a new facility, a utility must establish "an absence of wasteful duplication resulting from the construction of the new system or facility."[19] Wasteful duplication entails "an excessive investment in relation to productivity or efficiency."[20] In order to "demonstrate that a proposed facility does not result in wasteful duplication," a utility must show that it has undertaken a "*thorough review of all alternatives*."[21]

Kentucky statute and regulations proscribe a series of requirements from transactions among affiliated utilities. Among the most important is the law that prohibits a utility from paying above market prices for any good or service from an affiliated company.[22] It is axiomatic that the Commission cannot enforce this prohibition if the utility has not thoroughly evaluated available options for purchasing goods or services from non-affiliated sources.

III. Kentucky Power Failed to Consider and Present to the Commission a Thorough Review of All Near-Term Alternatives.

Company Witness Vaughan makes clear in his Direct Testimony that Kentucky Power considered three alternatives to meet its short-term demand, beginning in 2029. "Q: "What alternatives did the Company evaluate to address the upcoming capacity shortfall? A: Kentucky Power evaluated the following alternatives:" (1) making necessary investments to continue its 50% interest in the Mitchell plant beyond the end of 2028; (2) entering into a power purchase

(Sept. 22, 2022), *available at* https://psc.ky.gov/pscscf/2022%20Cases/2022-00118//20220922_PSC_ORDER.pdf.

[19] *Id.*

[20] *Id.*

[21] *In re Application of Big Rivers Electric Corporation for Approval of its 2012 Environmental Compliance Plan*, Case No. 2012-00063, Final Order at 14-15 (Oct. 1, 2012) (emphasis added).

[22] *See, e.g.*, K.R.S. 278.2207.

agreement for thermal resources bases on the 2023 request for proposals (RFP); and (3) making market purchases.[23]

Sierra Club Witness Devi Glick put forward a different alternative: that the Company enter into a power purchase agreement with Wheeling Power in order to receive power and capacity from Mitchell only for the 2029-2031 period, without retaining its ownership interest or committing to share in long-term plant operations and maintenance costs.[24] The Company, however, dismissed that proposed alternative as being "on its face redundant" and "the same" as its Alternative 1, continuing its ownership interest in Mitchell.[25] On that point, the Company is mistaken, and the record demonstrates that the Company failed to "thoroughly evaluate[]" the alternative as required to meet the standard for a CPCN,[26] as there is no record of any analysis of such an alternative being conducted for the Commission to review.

Although Company Witness Vaughan asserted at the hearing that the Company "discuss[ed]" that option with Wheeling Power,[27] that testimony is contradicted by Mr. Vaughan's Direct Testimony cited above and Company Witness Tanner Wolffram's live testimony at the November 18, 2025 hearing. When asked in Post-Hearing Data Requests to provide any "notes, minutes, or other documentation" of such an analysis or discussions, the Company stated that the discussions were "verbal," that it had no documentation of any kind, could not identify the date the purported conversation took place, and that Mr. Vaughan's

[23] Vaughan Direct Testimony at 4:10-17. *Accord* Application at 9.

[24] Glick Direct Testimony at 16:1-12.

[25] Vaughan Rebuttal Testimony at 9:7-8.

[26] *In re Application of Big Rivers Electric Corporation for Approval of its 2012 Environmental Compliance Plan*, Case No. 2012-00063, Final Order at 14-15 (Oct. 1, 2012).

[27] Hearing Transcript at 153:24.

Rebuttal testimony at p. 9, lines 3-19 was "formed from the results of those discussions."[28] But the cited portion of Mr. Vaughan's Rebuttal Testimony makes no mention of any discussion of the matter with representatives from Wheeling Power, and neither does any other part of the record. And, more damning, in response to a question from Chair Hatton at the hearing, Company Witness Wolffram flatly denied that such a discussion took place:

> "Q: Okay. Was the possibility of short term PPAs from Wheeling discussed?
>
> A: No, not—not specifically within the context of this and—and Company Witness Vaughn can walk you through why that—that's ultimately not the right option for—for our customers."[29]

IV. The Company's Analysis Does Not Justify Its Continued Ownership of Mitchell Beyond 2031.

The Commission should not extend the Company's ability to take power and capacity from the Mitchell Plant beyond 2031 because the Company's analysis does not support a long-term investment in Mitchell as the least-cost option for ratepayers. The Company's Application states that the proposed near-term investments "will not result in wasteful duplication" for "the evaluated period of 2029-2031."[30] Similarly, the Company's Settlement Testimony,[31] Settlement Agreement,[32] and in-person testimony,[33] all reflect an analysis that, at best, supports Kentucky Power continuing to take power from the Mitchell Plant only through the end of 2031. As

[28] Kentucky Power Response to Sierra Club PHDR 2.

[29] Hearing Transcript at 80:6-11.

[30] Application at 9.

[31] Wolffram Settlement Testimony at 7:10-12 (settlement supports the "least cost, reasonable alternative for the Company to meet its load requirements in the 2028-2031 time-period.").

[32] Settlement Agreement at 3 ("receiving energy and capacity from the Mitchell Plant is the least cost, reasonable alternative to meet the Company's load requirements for at least the 2028-2031 time period.").

[33] Hearing Transcript at 17:21-24 (continuing to take power from Mitchell is least cost "specifically for the 2028 through . . . 2031 period.").

confirmed by Company Witness Vaughan in Rebuttal Testimony, "[t]he Company is not seeking approval in this case to make further investments . . . necessary to operate the Mitchell Plant beyond 2031."[34] Mr. Vaughan explains that the Company included the post-2031 analysis only to show that there are "multiple viable and reasonable cost options for the post-2031 period."[35] The evaluation of those long-term plant options, whether to convert to gas, co-fire, build new replacement generation, or remain reliant on coal, "will be brought back to the Commission in a future proceeding."[36]

Thus, although Company Witness Vaughan rejects Ms. Glick's proposed alternative of entering into a PPA with Wheeling Power through the end of 2031 because in that scenario "the Company would not have access to the energy and capacity from the Plant after 2031,"[37] the record does not support extending Kentucky Power's interest in the plant beyond that time. As explained below, avoiding just a single category of environmental compliance obligations could save the Mitchell Plant [redacted] in long-term costs by converting to operate on 100% gas. The Commission should not extend Kentucky Power's ability to take power and capacity from the plant beyond 2031 without first knowing what path the plant's operators will take with respect to this and other environmental compliance options.

V. Converting Mitchell to Burn Gas Would Save Kentucky Power Ratepayers [redacted] Million Dollars in Avoided Environmental Compliance Costs.

Burning coal to generate electricity produces significant water pollution. According to the U.S. Environmental Protection Agency ("EPA"), coal-burning power plants are among the

[34] Vaughan Rebuttal Testimony at 4:2-5.

[35] Vaughan Rebuttal Testimony at 4:5-10.

[36] Vaughan Rebuttal Testimony at 4:10-14.

[37] Vaughan Rebuttal Testimony at 9:11-15.

largest sources of toxic water and heavy metal pollution in the country.[38] The Mitchell power plant is no exception. Indeed, by itself, Mitchell discharges hundreds of thousands of pounds of toxic pollution like mercury, arsenic, lead, and selenium every year into the Ohio River.[39]

To address and ultimately eliminate coal plant water pollution, the Clean Water Act requires EPA to issue and periodically update increasingly stringent, technology-based pollution limits, known as Effluent Limitations Guidelines or ELGs. For some power plants, including Mitchell, EPA's most recent pollution limits require the installation and operation of zero-liquid discharge technology for bottom ash, flue gas desulfurization, and leachate water pollution.[40] But for aging and increasingly expensive coal plants like Mitchell, the 2024 ELG Rule also includes an important compliance option that would avoid the need for significant retrofits to eliminate those discharges. Specifically, coal-burning power plants that commit to cease burning coal by 2034—either through retirement or conversion to burn only gas—need *not* eliminate bottom ash, flue gas desulfurization, and leachate discharges. Instead, such facilities would only be required to treat any continuing discharges with "less stringent" chemical precipitation technology.[41]

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[38] *See, e.g.*, *Supplemental Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category*, 89 Fed. Reg. 40198, 40203 (May 9, 2024) ("2024 ELG Rule").

[39] *See generally* Ex. DG-2 to Direct Testimony of Devi Glick, Generating Unit-level Costs and Loadings Estimates by Regulatory Option for the 2024 Final Rule ("Unit-Level Loadings" tabs).

[40] Leachate is composed of liquid, including coal ash residual in the liquid, that has percolated through a coal ash waste landfill or impoundment and collected and discharged to a water of the United States. 40 C.F.R. § 423.11(r). Leachate contains the same harmful heavy metals and other pollutants, like lead, mercury, selenium, and arsenic, that are found in coal ash. 89 Fed. Reg. 40198, 40226 (May 9, 2024).

[41] 89 Fed. Reg. 40198, 40227, 40245.

As part of its evaluation of alternatives to continuing to invest in the Mitchell Plant, Kentucky Power analyzed the environmental compliance costs associated with continuing to burn coal against the costs associated with converting to gas. Although Kentucky Power witness Vaughn's Direct Testimony asserted that the conversion to burn 100% gas would still require Mitchell to "[redacted]" to comply with the updated 2024 ELG Rule,[42] that is incorrect. As Mr. Vaughn admitted on cross-examination, coal plants that cease burning coal by 2034 would *not* need to install zero liquid discharge technology, but would only need to treat continuing discharges at a "much lower" cost.[43] Kentucky Power's post-hearing discovery responses make clear that the Company has, in fact, done the analysis and that the Company and its ratepayers would save approximately [redacted] million dollars in ELG compliance costs by converting to fully burn gas or to co-fire with gas and retire before 2034.[44] Due, in part, to those savings, the Company's own analysis indicates that converting Mitchell to burn 100% gas is [redacted].[45]

VI. Conclusion

For the reasons set out above, Sierra Club respectfully asks that the Commission issue an order extending Kentucky Power's ability to take power and capacity from the Mitchell Plant only through the end of 2031. Doing so would be consistent with the Commission's prior Orders with respect to the plant, provide the Company with six years to analyze its energy and capacity

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[42] Vaughan Errata Direct Testimony at 10:6-8.

[43] Kentucky Power Response to SC PHDR5; *see also* Hearing Transcript at 160:6 to 161:18.

[44] Kentucky Power Response to SC PHDR 4, Confidential Attachment 1 (showing 2024 ELG capital compliance costs of [redacted] in 100% gas conversion and co-fire with retirement by January 1, 2034 scenarios, compared to [redacted] for a scenario where the plant co-fires with gas but remains open until 2039).

[45] Vaughan Errata Direct Testimony at 13, Confidential Table AEV-2.

needs and thoroughly evaluate potential generation resources to meet those needs, including those that do not involve an inter-affiliate transaction, and protect ratepayers from being saddled with long-term operation and maintenance costs on an aging, coal-fired power plant that will be 60 years old by 2031.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

This is to certify that the foregoing copy of Sierra Club's Public Post Hearing Brief is being electronically transmitted to the Commission on December 10, 2025, and that there are currently no parties that the Commission has excused from participation by electronic means in this proceeding.

/s/ Joe F. Childers
JOE F. CHILDERS