

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

Electronic Application Of Kentucky Power Company)
For 1) A Certificate Of Public Convenience And)
Necessity To Construct A Mechanical Draft Cooling)
Tower At The Mitchell Plant 2) Approval Of Certain)
Regulatory And Accounting Treatments, And 3) All)
Other Required Approvals And Relief)

Case No. 2026-00001

DIRECT TESTIMONY OF
TANNER S. WOLFFRAM
ON BEHALF OF KENTUCKY POWER COMPANY

**DIRECT TESTIMONY OF
TANNER S. WOLFFRAM ON BEHALF OF
KENTUCKY POWER COMPANY
BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY**

CASE NO. 2026-00001

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EXHIBITS

<u>Exhibit</u>	<u>Description</u>
Confidential Exhibit TSW-1	November 6, 2025 Mitchell Operating Committee Meeting Minutes

**DIRECT TESTIMONY OF
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CASE NO. 2026-00001

I. INTRODUCTION

1 **Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.**

2 A. My name is Tanner S. Wolfram and I am Director of Regulatory Services for Kentucky
3 Power Company (“Kentucky Power” or the “Company”). My business address is 1645
4 Winchester Avenue, Ashland, Kentucky 41101.

II. BACKGROUND

5 **Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND**
6 **BUSINESS EXPERIENCES.**

7 A. I received a Bachelor of Arts degree in Political Science from Miami University in
8 Oxford, Ohio in 2015 and my Juris Doctor from The Ohio State University in
9 Columbus, Ohio in 2018. I began my utility industry career with American Electric
10 Power Service Corporation (“AEPSC”) in September 2018 as a Legal Fellow, where I
11 worked on a variety of matters across AEP’s various jurisdictions. In September 2019,
12 I was hired as Counsel – Regulatory East, where I was responsible for providing legal
13 support and guidance on various complaint, fuel cost recovery, tracker/rider, and base
14 rate proceedings in AEP’s East jurisdictions, primarily for Kentucky Power Company,
15 Indiana Michigan Power Company, and Ohio Power Company. In June 2021, I
16 transferred to AEPSC’s central regulatory function as a Regulatory Case Manager,

1 where I coordinated state regulatory filings across AEP's footprint. My primary
2 responsibilities were related to filings made in Kentucky, Ohio, and Indiana. In July
3 2024, I accepted my current position as Director, Regulatory Services for Kentucky
4 Power.

5 **Q. WHAT ARE YOUR RESPONSIBILITIES AS DIRECTOR OF REGULATORY**
6 **SERVICES FOR KENTUCKY POWER?**

7 A. I am responsible for managing the regulatory strategy for Kentucky Power. This
8 includes planning and executing rate filings, as well as filings for certificates of public
9 convenience and necessity and for other approvals before the Public Service
10 Commission of Kentucky ("Commission").

11 **Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN ANY**
12 **REGULATORY PROCEEDINGS?**

13 A. Yes. I adopted the Direct Testimony of Scott E. Bishop and submitted rebuttal
14 testimony in the Company's most recent Demand-Side Management proceeding, Case
15 No. 2024-00115. I provided testimony in the Company's requests for approval of a
16 Renewable Energy Purchase Agreement for the Bright Mountain Solar Facility in Case
17 No. 2024-00243, approval of a certificate of public convenience and necessity
18 ("CPCN") for the Bellefonte Station Upgrade Project in Case No. 2024-00343, and
19 approval of a CPCN to extend the Company's interest in the energy and capacity from
20 Mitchell Generating Station ("Mitchell" or "Mitchell Plant") in Case No. 2025-00175.
21 Finally, I provided testimony in support the Company's most recent base rate case,
22 Case No. 2025-00257.

III. PURPOSE OF TESTIMONY

1 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

2 A. The purpose of my testimony is to support the Company's application for a certificate
3 of public convenience and necessity ("CPCN") to (1) construct a new mechanical draft
4 cooling tower for Unit 2 at the Mitchell Generation Station ("Mitchell" or "Plant") and
5 (2) partially demolish and then fully demolish (when the Mitchell Plant is retired) the
6 existing cooling tower at Mitchell Unit 2 (together, the "Mitchell Cooling Tower
7 Project"). Specifically, my testimony will provide:

- 8 • An introduction to the witnesses who support the Company's Application;
- 9 • An overview of Kentucky Power's existing generation resources and need for
10 the Mitchell Cooling Tower Project;
- 11 • Financial aspects of the Mitchell Cooling Tower Project; and,
- 12 • Proposed cost recovery for the Mitchell Cooling Tower Project.

13 **Q. ARE YOU SPONSORING ANY EXHIBITS?**

14 A. Yes, I am sponsoring the following exhibits:

- 15 • Confidential Exhibit TSW-1 – November 6, 2025 Mitchell Operating
16 Committee Meeting Minutes

17 **Q. WERE THESE EXHIBITS PREPARED BY YOU OR UNDER YOUR**
18 **DIRECTION?**

19 A. Yes.

IV. INTRODUCTION OF WITNESSES

1 **Q. WHAT ADDITIONAL WITNESSES WILL BE OFFERING TESTIMONY IN**
2 **SUPPORT OF KENTUCKY POWER'S APPLICATION?**

3 A. Three additional witnesses provide testimony in support of the Application.

4 Company Witness Malone describes the Mitchell Cooling Tower Project,
5 identifies the estimated schedule for the Mitchell Cooling Tower Project, and presents
6 the estimated total cost for the Project.

7 Company Witness Pizzino describes the Mitchell Unit 2 Cooling Tower, the
8 history of repairs to date, the options for further repairs to the cooling tower, and the
9 engineering bases for selecting the Mitchell Cooling Tower Project.

10 Company Witness Coon presents the economic evaluation of alternatives to the
11 Mitchell Cooling Tower Project and the revenue requirement and resultant bill impacts
12 for the Mitchell Cooling Tower Project.

**V. OVERVIEW OF KENTUCKY POWER'S EXISTING GENERATION
RESOURCES AND NEED FOR THE MITCHELL COOLING TOWER PROJECT**

13 **Q. PLEASE DESCRIBE KENTUCKY POWER'S GENERATION PORTFOLIO?**

14 A. Kentucky Power owns and operates the Big Sandy Plant located near Louisa,
15 Kentucky. The plant currently has a single operating unit with a generating capacity
16 of 295 MW. Big Sandy Unit 1 was originally placed in service in 1963 and operated
17 as a 278 MW sub-critical coal-fired generating unit through mid-November 2015. As
18 approved by the Commission in Case No. 2013-00430, Big Sandy Unit 1 was converted
19 to a natural gas-fired unit and returned to service May 31, 2016.

1 The Mitchell Plant is located approximately 12 miles south of Moundsville,
2 West Virginia on the Ohio River. Kentucky Power owns an undivided 50% interest in
3 the Mitchell Plant; the other 50% interest is owned by Wheeling Power. The Mitchell
4 Plant is operated by Wheeling Power. The Plant is comprised of two super-critical
5 pulverized coal-fired baseload generating units. Mitchell Unit 1 has a nameplate
6 capacity of 770 MW and Mitchell Unit 2 has a nameplate capacity of 790 MW, for a
7 total nameplate capacity of 1,560 MW. Both units were placed in service in 1971.

8 **Q. PLEASE DESCRIBE THE MITCHELL COOLING TOWER PROJECT?**

9 A. As further discussed by Company Witness Pizzino, cooling towers are used to aid in
10 the transfer of steam back into condensate for the steam generator system, and the
11 existing cooling towers at the Plant have been in service for over 50 years. In 2024, the
12 Company initiated a capital project to address several areas of surface irregularities and
13 deformations in the concrete shell of the Unit 2 Cooling Tower (the “Initial Repair
14 Project”). The intent of the Initial Repair Project was to restore the structural integrity
15 of the Unit 2 Cooling Tower. The Initial Repair Project included work to repair
16 damaged concrete, seal cracks, and apply fiber-reinforced cementitious matrix
17 (“FRCM”) to the surface of the Unit 2 Cooling Tower.

18 Inspections during the construction phase of the Initial Repair Project, which
19 were not possible until work commenced, revealed more cracking and deterioration
20 than originally anticipated and that would require further repair work. Additionally,
21 the application of the FRCM material proved more difficult to apply for the contractor
22 than anticipated.

1 In late July 2025, the AEP Generation Projects team determined that additional
2 engineering solutions and repairs would be necessary to fully address the cooling
3 tower's structural needs so that Unit 2 could remain operational and paused work on
4 the Initial Repair Project. Additional information about the Initial Repair Project is
5 provided in the testimony of Company Witness Pizzino.

6 The engineering evaluation identified four options for fully addressing the
7 structural needs of the Mitchell Unit 2 Cooling Tower:

- 8 • Option 1: Expand and extend the exterior shell reinforcement project;
- 9 • Option 2: Retire Unit 2 and partially demolish the existing cooling tower;
- 10 • Option 3: Construct a new mechanical draft cooling tower and partially
11 demolish the existing cooling tower; and
- 12 • Option 4: Reduce the height of the existing cooling tower and continue with a
13 reduced scope of exterior shell reinforcement.

14 Company Witness Malone provides additional details regarding each of these options.

15 **Q. WHICH OPTION DID THE COMPANY SELECT?**

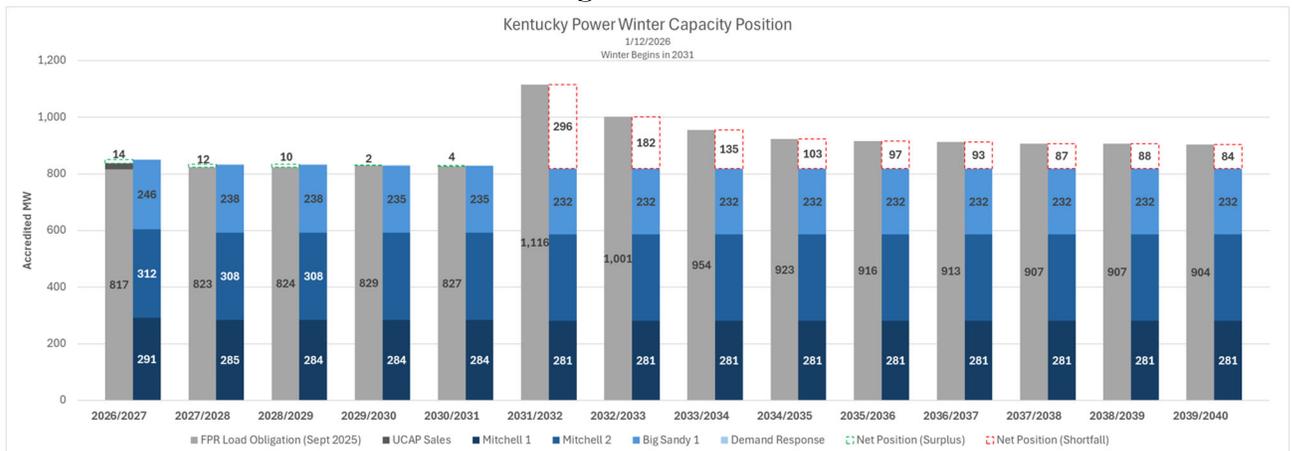
16 A. Based on the economic analysis presented by Company Witness Coon, the Company
17 selected Option 3 and proposes to construct the Mitchell Cooling Tower Project. The
18 decision to move forward with the Mitchell Cooling Tower Project is discussed in more
19 detail later in my testimony. The scope of work, schedule and estimated costs for the
20 Mitchell Cooling Tower Project is described in detail in the testimony of Company
21 Witness Malone. The Mitchell Cooling Tower Project is currently scheduled for
22 completion in 2029 with the new mechanical draft cooling tower expected to go into
23 service in the second quarter of 2028.

1 **Q. WHY IS THE MITCHELL COOLING TOWER PROJECT NEEDED?**

2 A. As described in the testimony of Company Witness Pizzino, the continued use of the
 3 Unit 2 Cooling Tower is not an option and the tower is below industry standard safety
 4 factors. Without repair or replacement, the cooling tower will continue to deteriorate
 5 to a point where it will no longer be safe to use.

6 The Mitchell Cooling Tower Project is therefore necessary to ensure continued
 7 operation of the Plant, preventing a potential loss of generation capacity from Mitchell
 8 Unit 2. Figure TSW-1 shows the Company’s capacity needs,¹ based on an assumed
 9 winter capacity requirement beginning in PJM planning year 2031/32, if the cooling
 10 tower is repaired or replaced and the approximately 308 MW of accredited capacity
 11 from Mitchell Unit 2 remains part of the Company’s portfolio.

Figure TSW-1



¹ The Company understands that the Commission expects electric utilities to plan to meet their maximum customer demand, which for Kentucky Power as a winter peaking utility, means planning for its winter capacity needs. The Company is also aware that PJM has initiated a process to review and potentially revise how winter capacity is accounted for in its accreditation methodology, including adding a winter capacity requirement, beginning in planning year 2029/2030.

1 Figure TSW-2 shows the Company’s future needs, using the same winter
 2 capacity assumption as Figure TSW-1, should the repairs or replacement of the Unit 2
 3 Cooling Tower not occur and the approximately 308 MW of accredited capacity from
 4 Mitchell Unit 2 is lost.



5 As demonstrated above, the approximately 308 MW of accredited capacity associated
 6 with Unit 2 is needed to serve the Company’s customers. Without the roughly 308
 7 MWs from Mitchell Unit 2, the Company would need to add between 305 MW and
 8 601 MW of accredited capacity depending on the PJM planning year to meet its
 9 requirements, assuming a winter capacity requirement beginning in PJM planning
 10 years 2031/32. Given that and the current market conditions around potential
 11 replacement options, losing the capacity from Mitchell Unit 2 is not in customers’
 12 interest, as explained further below.

**VI. THE DECISION TO PROCEED WITH
THE MITCHELL COOLING TOWER PROJECT**

1 **Q. HOW DID KENTUCKY POWER SELECT THE MITCHELL COOLING**
2 **TOWER PROJECT?**

3 A. Company President Wiseman and Appalachian Power Company President Walker
4 were notified immediately upon AEP Generation Projects team determination that the
5 Initial Repair Project demonstrated that additional engineering solutions and repairs
6 would be required. In quick succession, Company experts were engaged to present the
7 possible paths forward to Ms. Wiseman and Mr. Walker. Each of these options resulted
8 in unique costs, risks, benefits, and implementation timelines and were provided to Ms.
9 Wiseman and Mr. Walker. The information presented to Ms. Wiseman and Mr. Walker
10 included the engineering need and the long-term operational impacts are described in
11 the testimony of Company Witness Pizzino, the scope of work and costs for the
12 Mitchell Cooling Tower Project are described in the testimony of Company Witness
13 Malone, and the economic evaluation of the alternatives presented is provided by
14 Company Witness Coon.

15 The Mitchell Operating Committee² convened a meeting on November 6, 2025
16 where it was unanimously determined to move forward with the Mitchell Cooling
17 Tower Project Option 3. The November 6, 2025 Mitchell Operating Committee
18 meeting minutes are attached as Confidential Exhibit TSW-1.

² The Mitchell Operating Committee consists of three members, including the two respective Presidents of each of the participating operating companies (Ms. Wiseman and Mr. Walker).

1 **Q. IS THE MITCHELL COOLING TOWER PROJECT THE LOWEST COST**
 2 **REASONABLE OPTION?**

3 A. Yes, Company Witness Coon's economic evaluation calculated the revenue
 4 requirements for each of the reasonable alternatives to address the structural needs of
 5 the Mitchell Unit 2 Cooling Tower. The table below, Table NMC-1 from her testimony
 6 showing the present value ("PV") and average revenue requirements, demonstrates that
 7 the Mitchell Cooling Tower Project, Option 3, is the lowest cost reasonable alternative.

Table NMC-1

	Description	PV Rev Req't (TOTAL)	Avg Rev Req't (Total)	Avg Rev Req't (KPCO)
Option 1	Expanded Reinforcement	\$142,480,378	\$19,828,849	\$9,914,424.50
Option 2	Retire Unit 2	\$836,300,299	\$106,317,503	\$53,158,751.50
Option 3	Mitchell Cooling Tower Project	\$147,235,844	\$19,255,642	\$9,627,821.00
Option 4	Shorten Tower	\$189,471,586	\$20,406,521	\$10,203,260.50

8 **Q. WHAT ADDITIONAL BENEFITS ARE ASSOCIATED WITH THE**
 9 **MITCHELL COOLING TOWER PROJECT.**

10 A. The Mitchell Cooling Tower Project allows the Mitchell Plant to operate to its current
 11 projected retirement date of 2040. Importantly, the Mitchell Cooling Tower Project
 12 also provides optionality for post-2040 operations. Additionally, the Mitchell Cooling
 13 Tower Project minimizes the impact of the derate on Unit 2 and a lower risk, shorter-
 14 duration outage to tie-in the new cooling tower when the new mechanical draft cooling
 15 tower is commissioned. While Options 1 and 4 have similar average annual revenue
 16 requirements to the Mitchell Cooling Tower Project, they are far more risky. First, the
 17 10-year useful lives of both Option 1 and Option 4 mean that at the end of the 10-year

1 period, the Company would be required to incur additional, unknown costs to address
2 the potential loss of Mitchell Unit 2. Moreover, Options 1 and 4 reflect just expanding
3 the Initial Repair Project and spending more money on that program that has
4 experienced considerable implementation challenges already, increasing the risk of
5 cost overruns and schedule delays as explained throughout this proceeding.

**VII. THE MITCHELL COOLING TOWER PROJECT IS REQUIRED FOR THE
PUBLIC CONVENIENCE AND NECESSITY, IS FOR A PROPER PURPOSE,
AND WILL NOT RESULT IN WASTEFUL DUPLICATION**

6 **Q. IS THE MITCHELL COOLING TOWER PROJECT REQUIRED FOR THE
7 PUBLIC CONVENIENCE AND NECESSITY?**

8 A. Yes. As discussed above and further described by Company Witness Pizzino, without
9 addressing the structural needs at the Mitchell Unit 2 Cooling Tower, the tower will
10 eventually no longer be safe to operate and the Company will need to replace its share
11 of the capacity and energy from Mitchell Unit 2. Company Witness Coon, utilizing
12 information from Company Witness Malone and others within the Company, evaluated
13 all of the reasonable options for addressing the structural needs at the Mitchell Unit 2
14 Cooling Tower. This evaluation demonstrated the Mitchell Cooling Tower Project is
15 the lowest cost reasonable option.

16 The evidence provided in the Company's Application demonstrates that
17 without addressing the structural needs of the Mitchell Unit 2 Cooling Tower the
18 Company will face an approximately 305- 610 MW capacity deficit, depending on the
19 PJM planning year, and that the Mitchell Cooling Tower Project is the least-cost,
20 reasonable alternative for addressing the structural needs of the Mitchell Unit 2 Cooling
21 Tower.

1 **Q. IS THE MITCHELL COOLING TOWER PROJECT FOR PROPER**
2 **PURPOSE?**

3 A. Yes. Kentucky Power is a corporation organized under the laws of the Commonwealth
4 of Kentucky. It is regulated by the Commission and, pursuant to Kentucky's Certified
5 Territory Statutes, KRS 278.016-278.018, possesses the exclusive right and obligation
6 to provide retail electric service within its certified territory in parts of 20 counties in
7 Kentucky. The Company is requesting to construct the Mitchell Cooling Tower Project
8 in order to meet its obligations as an electric utility providing service within its certified
9 territory within the Commonwealth of Kentucky. Specifically, the Mitchell Cooling
10 Tower Project is required to provide adequate, efficient, and reasonable service to its
11 customers. This Application is for a proper purpose because it ensures that Kentucky
12 Power is able to provide generation necessary to meet a significant portion of its
13 customers' capacity and energy needs.

14 **Q WILL THE MITCHELL COOLING TOWER PROJECT RESULT IN**
15 **WASTEFUL DUPLICATION?**

16 A. No. Constructing the Mitchell Cooling Tower Project to address the structural needs of
17 the Mitchell Unit 2 Cooling Tower does not duplicate any existing facilities and does
18 not result in an excess of capacity beyond need, or excess investment in relation to the
19 productivity and efficiency to be gained. In fact, as explained above, there is a clear
20 need to address the structural needs of the Mitchell Unit 2 Cooling Tower to allow that
21 unit to continue to serve the Company's customers, and the Mitchell Cooling Tower
22 Project was identified as the lowest-cost reasonable alternative following a thorough
23 review of all reasonable alternatives for doing so.

VIII. FINANCIAL ASPECTS

1 **Q. WHAT IS KENTUCKY POWER'S SHARE OF THE MITCHELL COOLING**
2 **TOWER PROJECT?**

3 A. The current estimated capital cost for the Mitchell Cooling Tower Project is
4 approximately \$191,000,000. Kentucky Power's share of that investment will be
5 roughly \$95.5 million.

6 **Q. ARE THERE ANY ON-GOING COSTS ASSOCIATED WITH THE**
7 **MITCHELL COOLING TOWER PROJECT?**

8 A. The Company does not expect there to be an incremental increase in O&M expense
9 associated with the Mitchell Cooling Tower Project.

10 **Q. HOW WILL THE COMPANY FUND THE MITCHELL COOLING TOWER**
11 **PROJECT?**

12 A. Kentucky Power anticipates funding the cost of the Mitchell Cooling Tower Project
13 through its operating cash flow and other internally generated funds.

14 **Q. WILL THE COST OF THE MITCHELL COOLING TOWER PROJECT**
15 **MATERIALLY AFFECT THE COMPANY'S FINANCIAL CONDITION?**

16 A. No. Kentucky Power will finance the Mitchell Cooling Tower Project in a manner
17 consistent with Kentucky Power's current sources of capital, which include short-term
18 debt, long-term debt, and equity. Additionally, the Company does not anticipate any
19 impact to its credit ratings as a result of the Mitchell Cooling Tower Project. The
20 Mitchell Cooling Tower Project will not require the issuance of new debt. The Mitchell
21 Cooling Tower Project will not affect the completion of any other current capital
22 project.

1 **Q. DID KENTUCKY POWER SEEK TO MITIGATE THE COSTS OF THE**
2 **MITCHELL COOLING TOWER PROJECT?**

3 A. Yes, on November 24, 2025 the Company submitted its grant application to the
4 Department of Energy for “investment to expand and reinvigorate America’s coal
5 industry, aiming to boost energy production and support coal communities
6 nationwide.”³ However, the Company was notified that it did not receive an award on
7 February 11, 2026 when the Department of Energy announced the grant recipients.
8 Importantly, the Mitchell Cooling Tower Project, with or without grant funds,
9 represents the lowest reasonable cost for customers.

IX. COST RECOVERY

10 **Q. HOW DOES THE COMPANY PROPOSE TO RECOVER THE COSTS**
11 **ASSOCIATED WITH THE MITCHELL COOLING TOWER PROJECT?**

12 A. The Company is proposing to recover a) a return on rate base and construction work in
13 progress and b) a return of depreciation expense associated with the Mitchell Cooling
14 Tower Project within the Generation Rider. The Generation Rider is subject to
15 Commission approval within the Company’s currently pending base rate case
16 proceeding (Case No. 2025-00257); accordingly, should it be declined, an alternative
17 cost recovery method is discussed below.

18 Operations and maintenance and property expense associated with the Mitchell
19 Plant will remain in base rates.

³ *Energy Department Announces \$625 Million Investment to Reinvigorate and Expand America’s Coal Industry*, U.S. Dep’t Energy (Sept. 29, 2025), <https://www.energy.gov/articles/energy-department-announces-625-million-investment-reinvigorate-and-expand-americas-coal>.

1 **Q. UNDER THE GENERATION RIDER APPROACH, IS THE COMPANY**
2 **REQUESTING DEFERRAL AUTHORITY?**

3 A. Yes, the Company is requesting deferral authority for all costs related to the Mitchell
4 Cooling Tower Project until such time that those costs can be incorporated into either
5 the Generation Rider or base rates. This regulatory asset would correspond to those
6 costs associated with the Mitchell Cooling Tower Project, including engineering and
7 related work required to investigate potential alternatives, depreciation expense and a
8 pre-tax WACC return on rate base/construction work in progress, incremental property
9 tax expense and incremental O&M expense.

10 **Q. GIVEN THAT THE GENERATION RIDER IS UNCERTAIN, IS THE**
11 **COMPANY PROPOSING AN ALTERNATIVE APPROACH FOR COST**
12 **RECOVERY?**

13 A. Yes, should the Generation Rider be denied, the Company proposes to defer the costs
14 of the Mitchell Cooling Tower Project until the costs can be included within the test
15 year of a subsequent base rate proceeding. This regulatory asset would correspond to
16 those costs associated with the Mitchell Cooling Tower Project, including engineering
17 and related work required to investigate potential alternatives, depreciation expense
18 and a pre-tax WACC return on rate base/construction work in progress, incremental
19 property tax expense and incremental O&M expense.

1 **Q. WHAT RETURN ON EQUITY (“ROE”) IS THE COMPANY PROPOSING TO**
2 **USE FOR PURPOSE OF DEFERRING AND RECOVERING THE MITCHELL**
3 **COOLING TOWER PROJECT?**

4 A. The Company proposes to use the currently approved 9.75% ROE from Case No. 2023-
5 00159 for the Mitchell Cooling Tower Project. In the Company’s currently pending
6 base rate case, the Company proposed in its as-filed case a ROE of 10.00%. The
7 Settlement Agreement in that case included a lower ROE of 9.8% for base rates and
8 9.7% for the Generation Rider. The Company will ensure that any new ROE
9 established by the Commission is appropriately incorporated.

10 **Q. WHAT DEPRECIATION RATE WAS USED IN THE REVENUE**
11 **REQUIREMENT?**

12 A. As discussed by Company Witness Coon, the Company is proposing to depreciate the
13 Mitchell Cooling Tower Project through 2040, or the expected retirement date of the
14 Plant. Accordingly, a basic 8.33% depreciation rate (or 1/12 years) is reflected in
15 Exhibit NMC-1.

16 **Q. ARE REVISIONS NECESSARY TO TARIFF G.R. (GENERATION RIDER)**
17 **TO REFLECT INCLUSION OF THE MITCHELL COOLING TOWER**
18 **PROJECT?**

19 A. No. Tariff G.R., as proposed or as updated in the proposed Settlement Agreement,
20 sufficiently allows for the cost recovery discussed above.

1 **Q. WHEN WOULD CUSTOMERS BEGIN SEEING THE COSTS REFLECTED**
 2 **IN THE GENERATION RIDER?**

3 A. Should the Generation Rider be approved, costs recoverable through this mechanism
 4 would begin with the Company's February 2027 Generation Rider update with rates to
 5 begin with the April 2027 billing period. The Company would reflect CWIP and other
 6 initial costs for the Project in the Generation Rider until the new cooling tower is placed
 7 in service.

8 **Q. HAS THE COMPANY ESTIMATED THE MONTHLY BILL IMPACTS OF**
 9 **THE MITCHELL COOLING TOWER PROJECT DURING**
 10 **CONSTRUCTION?**

11 A. Yes. As described in more detail in the testimony of Company Witness Coon, the
 12 estimated monthly increase by year for the average residential customer using 1,206
 13 kWh per month is:

	Estimated \$ Impact	Estimated % Increase
2026	\$0.33	0.2%
2027	\$1.65	0.8%
2028	\$1.99	1.0%

14 The chart above is generally representative of the rate impacts customers would
 15 experience under the Generation Rider recovery scenario.

16 **Q. WHAT IS THE ESTIMATED MONTHLY IMPACT OF THE MITCHELL**
 17 **COOLING TOWER PROJECT ON THE AVERAGE RESIDENTIAL**
 18 **CUSTOMER BILL ONCE THE PROJECT IS PLACED IN SERVICE?**

19 A. For the average residential customer using 1,206 kWh per month, the monthly increase
 20 in the customer's total bill is expected to be \$4.59 (or 2.3%) once the Mitchell Cooling

1 Tower Project is fully in service. Exhibit NMC-2 provides detailed calculations of the
2 estimated monthly impact of the Project for both residential and all other rate classes.

X. CONCLUSION

3 **Q. PLEASE SUMMARIZE YOUR TESTIMONY?**

4 A. In order for Mitchell Unit 2 to continue to operate safely and provide capacity and
5 energy to Kentucky Power 's customers, the structural needs of the Unit 2 Cooling
6 Tower must be addressed. Following a thorough engineering and economic evaluation
7 of all reasonable options for addressing the structural needs of the Unit 2 Cooling
8 Tower, the Company determined that the Mitchell Cooling Tower Project, replacing
9 the current hyperbolic cooling tower at Unit 2 with a mechanical draft cooling tower
10 and partially removing the existing tower, represented the lowest-cost, reasonable
11 alternative.

12 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

13 A. Yes.

MITCHELL OPERATING COMMITTEE

MINUTES

November 6, 2025

Pursuant to notice, a videoconference meeting of the Operating Committee (the “Committee”) of the Mitchell Plant Operating Agreement (the “Agreement”) was held on November 6, 2025, at 9:30 a.m. (Eastern).

Operating Representatives Present:

- Aaron Walker, President and Chief Operating Officer, Wheeling Power Company (“Wheeling Power”),
- Cynthia Wiseman, President and Chief Operating Officer, Kentucky Power Company (“Kentucky Power”), and
- Alex Vaughan, Managing Director, Regulated Pricing – Generation and Fuel Strategy, American Electric Power Service Corporation (“AEPSC”),

constituting all the Operating Representatives. Also present were:

- John Scalzo, Vice President, Regulatory and Finance, Wheeling Power
- Tanner Wolfram, Director, Regulatory Services, Kentucky Power
- Bob Jessee, Vice President, Generating Assets – East, Appalachian Power
- Brian Sherrick, Sen. Vice Pres., Shared Services
- John Crespo, Dep. Gen. Counsel, Regulatory & Nuclear, AEPSC
- Mike Schuler, Assistant General Counsel, AEPSC

1. Call to Order

Mr. Crespo acted as Secretary of the Committee. Mr. Crespo presented and on motion duly seconded the Operating Representatives of the Owners, comprising the voting members of the Committee, unanimously approved the agenda for the meeting, attached.

2. Mitchell Plant Unit 2 Cooling Tower

At the request of the Committee, Mr. Vaughan made a presentation, attached, regarding the options for addressing the structural issues impacting the Unit 2 Cooling Tower. The presentation provides an analysis of the best option for customers from the four alternatives identified by AEPSC based on a financial, technical, and engineering review of each option, summarized as:

- Option 1: Exterior Shell Remediation
- Option 2: Unit Retirement
- Option 3: New Mechanical Draft Cooling Tower
- Option 4: Shorten Tower

The Operating Representatives and others present engaged in general discussion regarding the options. Mr. Sherrick provided additional engineering and technical information regarding the four options in support of the Committee's deliberations.

After discussion of the four options, the Committee determined that **Option 3**, the construction of a new Mechanical Draft Cooling Tower, is the most economical option for customers and superior to other options. Option 3 offers a 25-year life, allowing the Mitchell Plant to operate to its current projected retirement date of 2040 and providing options for post-2040 operations. Option 3 also minimizes the impact of the derate on Unit 2 () and a lower risk, shorter-duration outage to tie-in the new cooling tower when the new mechanical draft cooling tower is commissioned.

WHEREFORE, upon motion duly made and seconded, it was unanimously,

RESOLVED, that the Committee hereby elects to proceed with **Option 3**, the construction of a new Mechanical Draft Cooling Tower for Unit 2 at the Mitchell Plant, and authorizes all necessary actions to implement this decision.

There being no further business, the Committee meeting was adjourned.

MITCHELL OPERATING COMMITTEE

AGENDA

November 6, 2025

Pursuant to notice, a videoconference meeting of the Operating Committee (the “Committee”) of the Mitchell Operating Agreement (the “Agreement”) will be held on November 6, 2025, at 9:30 a.m. (Eastern).

Invitees: Operating Representatives: Cynthia Wiseman (Kentucky Power), Aaron Walker (Wheeling Power), Alex Vaughan (Agent)

Other Invitees: John Crespo (Secretary), Tanner Wolffram, John Scalzo, Bob Jessee, Keith Fisher, Mike Schuler, Brian Sherrick

1. **Call to Order**

- A. Roll Call for Quorum
- B. Review of Agenda

2. **Kentucky Power Interest in Mitchell Plant**

- A. Mitchell Unit 2 Cooling Tower Shell Repair Project History and Status
- B. Review Options to Repair Project
 - Option 1: Exterior Shell Remediation
 - Option 2: Unit Retirement
 - Option 3: New Mechanical Draft Cooling Tower
 - Option 4: Shorten Tower
- C. Review Economic Analysis of Options 1-4.
- D. Discussion and Adoption of Recommended Option

3. **Other Business**

4. **Adjournment**

Mitchell Unit 2 Cooling Tower Economic Analysis

November 2025



AEP CONFIDENTIAL

Economic Analysis Methodology



- **Options 1, 3, and 4**
 - Costs associated with these options were used in a cost-of-service model to isolate their impacts on Revenue Requirement
 - Assumptions on costs, life spans, and in service dates were provided by the Generation team
 - For options that result in a derate of capacity (Option 3 and 4) lost energy margins were considered in the Revenue Requirement
 - Option 4 requires a longer duration outage, and as such, replacement capacity and lost energy margins are included for that duration
- **Option 2**
 - Assumption that replacement capacity and lost energy margins make up the Revenue Requirement for years 2027-2031
 - 2031 and beyond, assumed a new combined cycle would be built to accommodate the loss of 800 MW
- **Comparison of all Options**
 - Evaluated the yearly revenue requirements and calculated the present value of those through 2038 (the shortest expected life span)
 - Another comparison was done on the average revenue requirement, which is ultimately seen in rates by the customers



Comparison of Options by the Numbers

- Yearly Revenue Requirements

	Initial Capital	Revenue Requirement											
		2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Option 1	\$136,000,000			\$ 23,907,455	\$ 22,852,930	\$ 21,813,732	\$ 20,788,673	\$ 19,776,736	\$ 18,776,901	\$ 17,788,293	\$ 16,810,035	\$ 15,833,474	\$19,940,263
Option 2		\$46,210,783	\$101,674,565	\$107,773,195	\$110,126,830	\$183,828,706	\$106,440,179	\$101,523,708	\$101,693,923	\$104,923,763	\$111,073,954	\$102,068,738	\$98,471,688
Option 3	\$164,217,000		\$ 19,589,756	\$ 22,284,791	\$ 21,528,485	\$ 20,959,873	\$ 20,056,601	\$ 19,593,424	\$ 18,895,663	\$ 18,164,364	\$ 17,575,247	\$ 16,913,043	\$16,250,811
Option 4	\$108,917,000	\$93,567,351	\$ 18,505,877	\$ 17,296,479	\$ 16,847,856	\$ 16,398,783	\$ 15,230,661	\$ 14,474,489	\$ 13,839,471	\$ 13,178,685	\$ 12,680,401	\$ 11,898,334	\$ 959,870

- Present Value of yearly Revenue Requirements

PV Rev Requirement	
Option 1	\$142,480,378
Option 2	\$836,300,299
Option 3	\$147,235,844
Option 4	\$189,471,586

Key Takeaway: Option 3 is the most economical for customers in addition to its favorable qualitative factors

- Average of yearly Revenue Requirements

Average Rev Requirement	
Option 1	\$19,828,849
Option 2	\$106,317,503
Option 3	\$19,255,642
Option 4	\$20,406,521

Questions?





Facts Snapshot

Option 1: Exterior Shell Remediation

- \$136M upfront capital
- 10-year life
- Highest Risk
- Work completed while in service

Option 2: Retire Unit

- \$27M demo
- Unit retires; lose 800 MW
- High Replacement Capacity Costs

Option 3: Construct New Mechanical Draft CT

- \$164M upfront capital (some demo)
- 25-year life
- Lower risk, shorter outage
- [REDACTED] derate

Option 4: Shorten Tower

- \$109M upfront capital (includes demo)
- 10-year life
- Challenging Demo; requires a long outage
- [REDACTED] derate

MITCHELL OPERATING COMMITTEE

AGENDA

November 6, 2025

Pursuant to notice, a videoconference meeting of the Operating Committee (the “Committee”) of the Mitchell Operating Agreement (the “Agreement”) will be held on November 6, 2025, at 9:30 a.m. (Eastern).

Invitees: Operating Representatives: Cynthia Wiseman (Kentucky Power), Aaron Walker (Wheeling Power), Alex Vaughan (Agent)

Other Invitees: John Crespo (Secretary), Tanner Wolfram, John Scalzo, Bob Jessee, Keith Fisher, Mike Schuler, Brian Sherrick

1. **Call to Order**

- A. Roll Call for Quorum
- B. Review of Agenda

2. **Kentucky Power Interest in Mitchell Plant**

- A. Mitchell Unit 2 Cooling Tower Shell Repair Project History and Status
- B. Review Options to Repair Project
 - Option 1: Exterior Shell Remediation
 - Option 2: Unit Retirement
 - Option 3: New Mechanical Draft Cooling Tower
 - Option 4: Shorten Tower
- C. Review Economic Analysis of Options 1-4.
- D. Discussion and Adoption of Recommended Option

3. **Other Business**

4. **Adjournment**

Mitchell Unit 2 Cooling Tower Economic Analysis

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