

D. 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

REBUTTAL TESTIMONY OF
JOSHUA D. SNODGRASS
ON BEHALF OF KENTUCKY POWER COMPANY

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EXHIBITS

<u>EXHIBIT</u>	<u>DESCRIPTION</u>
Confidential Exhibit JDS-R1	Mitchell Plant 10 Year Capital Forecast

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I. INTRODUCTION

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

2 A. My name is Joshua D. Snodgrass. My business address is 8999 Energy Road, Moundsville,
3 West Virginia 26041. I am the Plant Manager of the Mitchell Generating Station
4 (“Mitchell,” “Mitchell Plant,” or the “Plant”).

II. BACKGROUND

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

7 A. I received a Bachelor’s degree in Accounting from Marshall University. I have been
8 employed by American Electric Power Service Corporation (“AEPSC”) for 20 years,
9 working at several generating plants including Kanawha River, Big Sandy, John Amos,
10 and Mitchell. I have held positions of increasing responsibility within AEP including
11 Administrative Supervisor, Frontline Crew Supervisor, System Owner, and Operations
12 Superintendent. I started at the Mitchell Plant as an Operations Superintendent and was
13 promoted to Plant Manager in 2024.

14 **Q. WHAT ARE YOUR PRINCIPAL AREAS OF RESPONSIBILITY WITH**
15 **KENTUCKY POWER?**

16 A. I am responsible for the safe, reliable, environmentally compliant, and economic operation
17 of the Mitchell Plant. Specifically, I oversee and coordinate Plant activities, including
18 operations, maintenance, engineering, and construction. I ensure the Mitchell Plant is

1 operating within all environmental requirements and am also responsible for the Plant
2 budgets. I am the key interface between AEPSC, Kentucky Power Company (“Kentucky
3 Power” or the “Company”) and Wheeling Power Company (“Wheeling Power”) to ensure
4 the needs of the Mitchell Plant and the customers we serve are met.

5 **Q. HAVE YOU PREVIOUSLY TESTIFIED IN ANY REGULATORY**
6 **PROCEEDINGS?**

7 A. Yes. I have submitted testimony before the Public Service Commission of Kentucky (the
8 “Commission”) in Case No. 2025-00175 (Application for approval to make the capital
9 investments necessary to continue receiving capacity and energy from the Mitchell
10 Generating Station) and in Case No. 2025-00338 (most recent two-year review of the
11 application of the Company’s fuel adjustment clause).

III. PURPOSE OF REBUTTAL TESTIMONY

12 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS**
13 **PROCEEDING?**

14 A. The purpose of my Rebuttal Testimony is to address certain positions taken by Lucy Metz,
15 witness for the Sierra Club. Specifically, I:

- 16 • Demonstrate that the capital expenditures anticipated in the Company’s Application for
17 the Mitchell Cooling Tower Project are accurate, and have not been underestimated;
18 and
- 19 • Demonstrate that Mitchell Unit 2 is operational and has undergone substantial upgrades
20 to ensure its longevity.

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

2 A. Yes, I am sponsoring Confidential Exhibit JDS-R1, Mitchell Plant 10 Year Capital
3 Forecast.

4 **Q. WERE THESE EXHIBITS PREPARED BY YOU OR UNDER YOUR**
5 **DIRECTION?**

6 A. Yes.

IV. CAPITAL FORECAST

7 **Q. DO YOU AGREE WITH SIERRA CLUB WITNESS LUCY METZ'S ASSERTION**
8 **THAT MITCHELL UNIT 2 LIKELY REQUIRES ANNUAL CAPITAL**
9 **EXPENDITURES TOTALING APPROXIMATELY \$30 MILLION?**

10 A. No. As shown in Confidential Exhibit JDS-R1, the Company's ten-year forecast shows
11 that the average annual capital expenditure for Mitchell Unit 2 is anticipated to be
12 approximately \$12.3 million, exclusive of any additional costs associated with the
13 mechanical draft cooling tower. The same forecast shows that the overall average total
14 plant expenditure is approximately \$30.1 million, including shared fixed costs, such as
15 costs associated with the ELG improvements.

16 **Q. DO YOU ANTICIPATE THAT COSTS ASSOCIATED WITH MAINTAINING**
17 **MITCHELL UNIT 2 WILL INCREASE GOING FORWARD DUE TO THE**
18 **INCREASING COSTS OF REPLACEMENT PARTS?**

19 A. Although original replacement parts for Mitchell Unit 2 are increasingly difficult to find as
20 they become obsolete or are no longer manufactured, the Unit consistently undergoes
21 equipment upgrades with modern hardware so that costs of capital investments are not
22 inflated due to supply chain issues. Conducting these upgrades reduces costs and allows
23 for more technological efficiencies.

V. MITCHELL UPGRADES

1 **Q. HAS THE MITCHELL PLANT OPERATED IN A SAFE, RELIABLE, AND**
2 **ENVIRONMENTALLY COMPLIANT MANNER?**

3 A. Yes. Kentucky Power and Wheeling Power have made the required environmental
4 upgrades, constantly maintaining the Plant and its individual systems, while making the
5 necessary non-environmental capital upgrades. This allows the Mitchell Plant to run
6 safely, reliably, and efficiently.

7 **Q. CAN YOU PROVIDE ANY METRICS BY WHICH THE MITCHELL PLANT'S**
8 **EFFICIENCY, RELIABILITY, AND SAFETY CAN BE OBJECTIVELY**
9 **MEASURED?**

10 A. Yes. As an example, the Company tracks each Mitchell unit's equivalent forced outage
11 rate ("EFOR") and safety metrics like the days, away, restricted, or transferred rate, and
12 recordable injuries. EFOR is a metric that measures the reliability of a power generation
13 unit. EFOR specifically accounts for the percentage of time a unit is unavailable due to
14 unplanned outages, considering only the time it is needed to meet load demands. The lower
15 the EFOR, the better.

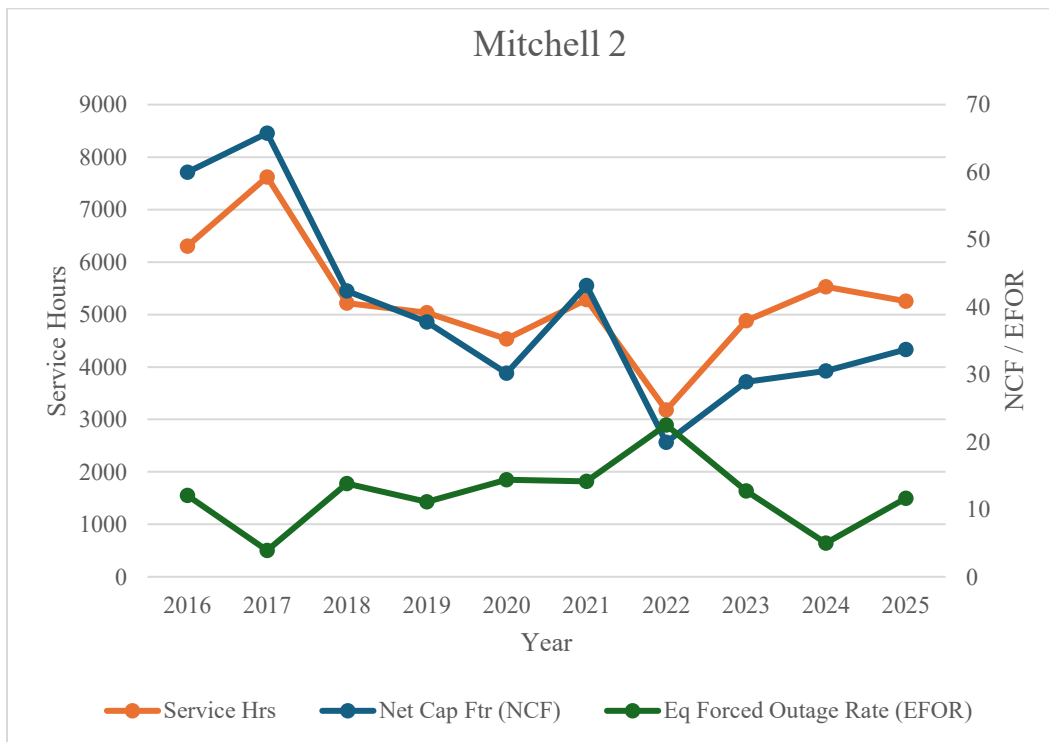
16 The Company has implemented multiple process improvements and made various
17 capital investments designed to improve unit availability and reduce the costs to operate
18 the units.

19 **Q. HAS THE MITCHELL PLANT'S EFOR IMPROVED IN RECENT YEARS?**

20 A. Yes, both Mitchell Unit 1 and 2 have operated well, and the EFOR for each unit has
21 decreased in recent years, with an outlier uptick in 2025. Mitchell Unit 2 finished 2024
22 with one of its best EFOR results to date at 4.5%, and 2025 with 11.66%, as shown in
23 Figure JDS-R1.

1 The long-term improvement in EFOR is directly related to capital investments that
 2 have been made at the Plant. These improvements demonstrate the utility of the Plant and
 3 its ability to continue functioning efficiently despite its increased age.

Figure JDS-R1



4 **Q. WHAT CAUSED MITCHELL UNIT 2’S EFOR TO INCREASE IN 2025, AND ARE**
 5 **THOSE CAUSES LIKELY TO RECUR?**

6 A. There are three major causes for Mitchell Unit 2’s increase in EFOR, none of which are
 7 likely to recur.

8 First, Electro-Hydraulic Control (“EHC”) piping failures in 2025 resulted in an
 9 extended outage. The EHC piping was redesigned to eliminate stress points so that such
 10 failures would not recur. Second, the 21 ID Fan Drive End Hub failed, which was repaired
 11 and the rebuild associated with this improvement was reduced from six to five years to
 12 reduce the likelihood of failure. Third, there were circulating water pump failures, caused

1 by cavitation. When the pumps were repaired, the wear ring clearances were reduced to
2 eliminate the cavitation issue.

3 **Q. HAVE THERE BEEN ANY OPERATIONS AND MAINTENANCE CHANGES**
4 **THAT HAVE ALSO CONTRIBUTED TO THE IMPROVED EFOR FOR**
5 **MITCHELL UNIT 2?**

6 A. Yes. Mitchell Unit 2 improvements include precipitator internal repairs, steam generator
7 internal repairs, and an ID Fan hub replacement. These repairs, along with a capital
8 investment for absorber recycle pump upgrades, have all contributed to the reduction of
9 EFOR on Mitchell Unit 2 by decreasing unplanned outages and generation loss.

10 **Q. HAVE OTHER IMPROVEMENTS BEEN MADE TO INCREASE PLANT**
11 **EFFICIENCY?**

12 A. Yes. For example, Mitchell Units 1 and 2 recently switched from using trona to hydrated
13 lime as an additive for dry sorbent injection controls for SO₃, which has improved
14 operational efficiency and reduced acid dew points in the flue gas. This change allowed
15 the units to decrease their minimum generation level by approximately 30 megawatts
16 (“MW”) which means, when the units are designated as must-run, the costs to must-run the
17 units are reduced as the units are operating at a lower minimum MW level as compared to
18 when the units were in must-run prior to the change. This reduction in minimum MWs
19 also makes the units more economic when energy prices are low as the units are generally
20 cheaper to run.

1 **Q. DO YOU HAVE ANY REASON TO BELIEVE THAT WITH THE**
2 **INSTALLATION OF THE NEW MECHANICAL DRAFT COOLING TOWER**
3 **UNIT 2 THE PLANT CANNOT OPERATE PAST 2040?**

4 A. No, I do not.

5 **VI. CONCLUSION**

6 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

7 A. Yes, it does.

Confidential Exhibit JDS-R1 is redacted in its entirety.

