COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

| ELECTRONIC APPLICATION OF DUKE ENERGY KENTUCKY, INC. FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONVERT ITS WET FLUE GAS DESULFURIZATION SYSTEM FROM A QUICKLIME REAGENT PROCESS TO A LIMESTONE REAGENT HANDLING SYSTEM AT ITS EAST BEND GENERATING STATION AND FOR APPROVAL TO AMEND ITS ENVIRONMENTAL COMPLIANCE PLAN FOR RECOVERY BY ENVIRONMENTAL SURCHARGE MECHANISM |)))))))))))))) |
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DIRECT TESTIMONY OF RANAJIT SAHU

ON BEHALF OF SIERRA CLUB

March 28, 2025

Case No. 2025-00002 Direct Testimony of Ranajit Sahu

1 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

2 A. My name is Dr. Ranajit Sahu, and my business address is 311 North Story Place,

3 Alhambra, California 91801.

4 Q. ON WHOSE BEHALF ARE YOU SUBMITTING THIS TESTIMONY?

5 A. I am submitting this testimony on behalf of Sierra Club.

6 Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN THIS MATTER?

7 A. Yes. I previously submitted testimony in Kentucky Public Service Commission docket
8 number 2024-00152 on October 16, 2024 and December 6, 2024.

9 Q. PLEASE DESCRIBE THE PURPOSE OF THIS TESTIMONY.

A. The documents filed in this docket, and in the predecessor docket, PSC docket number
2024-00152, have not altered the opinions I expressed in my prior testimonies noted above. I am
submitting this testimony to explain recent announcements by the U.S. Environmental Protection
Agency (EPA) that further call into question the Company's continued reliance on compliance
with EPA's mercury and air toxics standards (MATS) as a justification for its proposed \$125.8
million limestone conversion project.

16 Q. PLEASE BRIEFLY DESCRIBE WHAT IS REQUIRED UNDER EPA'S MATS 17 RULE.

A. In May 2024, EPA updated its mercury and air toxics standards (MATS), which establish
technology-based limits on the emission of particulate matter (PM), mercury, and other
hazardous air pollutants such as arsenic and lead from electric generating units greater than 25
megawatts. The May 2024 MATS rule reduces allowable PM limits from these plants from 0.03
lb/MMBtu to 0.01 lb/MMBtu beginning in July 2027. As I previously testified, EPA prepared a

list of electric generating units that it expected would need to upgrade emissions controls in order
 to meet the May 2024 MATS limits. East Bend was not on that list.

3 Q. DOES THE COMPANY RELY, IN PART, ON MATS COMPLIANCE TO 4 JUSTIFY THE NEED FOR THE LIMESTONE CONVERSION PROJECT?

5 A. Yes, in the Testimony of Witness John Verderame, Duke states: "This project cost also 6 includes upgrades to East Bend's WFGD that would also allow the Company to respond to and 7 comply with recently effective updates to the Mercury Air Toxics Standards (MATS) that 8 became effective in April 2024." Direct Testimony of John Verderame at 14:7-10 (Jan. 28, 9 2025). Mr. Verderame also states, "The MATS compliance deadline of July 2027 is the key 10 driver for the in-service date for this project." Verderame Testimony at 25:2-3. See also Direct 11 Testimony of Michael Geers at 15-19 (Jan. 28, 2025), and Direct Testimony of Chad Donner at 12 5:19-22 (Jan. 28, 2025).

Q. SUBSEQUENT TO THAT TESTIMONY, HAS EPA MADE ANY RECENT ANNOUNCEMENTS WITH RESPECT TO THE MERCURY AND AIR TOXICS STANDARDS AND OTHER FEDERAL ENVIRONMENTAL PROTECTION STANDARDS?

A. Yes. On March 12, 2025 EPA announced that it would "undertake 31 historic actions" as
part of what EPA called "the greatest day of deregulation our nation has seen." U.S.
Environmental Protection Agency, "EPA Launches Biggest Deregulatory Action in U.S.
History," (March 12, 2025), available at <u>https://www.epa.gov/newsreleases/epa-launches-</u>
<u>biggest-deregulatory-action-us-history</u>. Among the 22 specific actions EPA identified as part of
its announcement, the third item listed is "Reconsideration of Mercury and Air Toxics Standards

| 1 | that improperly targeted coal-fired power plants (MATS)." Id. In its press release announcing |
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| 2 | these actions, EPA asserted that "The Biden and Obama era regulations being reconsidered have |
| 3 | suffocated nearly every single sector of the American economy." Id. |
| 4 | The same day, on March 12, 2025, EPA also issued a MATS-specific press release that |
| 5 | assailed the MATS rule and promised to formally reconsider it. U.S. EPA, "Trump EPA to |
| 6 | Reconsider Biden-Harris MATS Regulation That Targeted Coal-Fired Power Plants to be Shut |
| 7 | Down," (March 12, 2025), available at https://www.epa.gov/newsreleases/trump-epa-reconsider- |
| 8 | biden-harris-mats-regulation-targeted-coal-fired-power-plants-be. As part of that announcement, |
| 9 | EPA stated it "will reconsider" the May 2024 MATS rule and that it "is considering a 2-year |
| 10 | compliance exemption via Section 112(i)(4) of the Clean Air Act for affected power plants while |
| 11 | EPA goes through the rulemaking process." Id. EPA stated in its press release that "The current |
| 12 | MATS rule has caused significant regulatory uncertainty, especially for coal plants Cost |
| 13 | estimates for this rule total over \$790 million over the next decade starting in 2028, with at least |
| 14 | \$92 million per year for the power sector. These costs are large, especially given the success the |
| 15 | industry has already achieved in reducing emissions of mercury and other hazardous pollutants." |
| 16 | Id. |
| 17 | Q. ARE THERE ANY OTHER DEVELOPMENTS, SUBSEQUENT TO EPA'S |
| 18 | ANNOUNCEMENT THAT IT WOULD RECONSIDER THE MATS RULE, THAT |

19 ADDRESS ISSUES YOU RAISED IN PRIOR TESTIMONY?

A. Yes. It appears that on March 13, 2025, one day after EPA's announcement that it would
formally reconsider the MATS rule and extend compliance for a two-year period during
reconsideration, the Company's current MEL provider offered new contract terms that would
both lower the cost and extend the duration of the contact for the MEL reagent. On March 19,

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2025, the Company filed responses to Staff's second set of data requests. In its public response
 to Staff-DR-02-003, Duke stated, "On March 13, 2025, the MEL supplier provided a new
 proposal to Duke Energy Kentucky to potentially extend the term and lower the price. The
 Company is currently evaluating the proposal."

5 Q.

WHAT ARE YOU RECOMMENDATIONS TO THE COMMISSION?

6 The Commission should deny Duke's request for a CPCN. Certainly it is not appropriate A. 7 to use MATS compliance as a reason to saddle ratepayers with a \$125.8 million project based on 8 environmental standards that the current EPA has demonstrated open hostility toward and has 9 announced it will formally reconsider. Additionally, the new MEL contract offer from the 10 Company's existing MEL supplier appears to be timed as a direct response to EPA's 11 announcement that it will reconsider MATS and extend compliance timelines while it does so. 12 This new information further reinforces my opinion that the Commission should require Duke to 13 fully evaluate reasonable alternatives to the limestone conversion project before ahead. An 14 extended MEL contract, with improvements to both the length of the contract and the price for 15 MEL, would allow Duke time to fully evaluate reasonable alternatives such as full gas 16 conversion at East Bend, construction of a new combined cycle gas plant, or other resources 17 options, including renewable energy resources once the extended MEL contract has run its 18 course.

Case No. 2025-00002 Direct Testimony of Ranajit Sahu

EXHIBIT A

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

J

In the Matter of:

ELECTRONIC APPLICATION OF DUKE ENERGY KENTUCKY, INC. FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONVERT ITS WET FLUE GAS DESULFURIZATION SYSTEM FROM A QUICKLIME REAGENT PROCESS TO A LIMESTONE REAGENT HANDLING SYSTEM AT ITS EAST BEND GENERATING STATION AND FOR APPROVAL TO AMEND ITS ENVIRONMENTAL COMPLIANCE PLAN FOR RECOVERY BY ENVIRONMENTAL SURCHARGE MECHANISM

Case No. 2025-00002

AFFIDAVIT OF RANAJIT SAHU IN SUPPORT OF DIRECT TESTIMONY ON BEHALF OF SIERRA CLUB

Ranaiit Sahu

State of

SUBSCRIBED AND SWORN before me by Ranajit Sahu on this the _____ day of March, 2025.

My commission expires:

SEE ATTACHED NOTARY 0.0. 3/29/25

NOTARY PUBLIC

| | ting this certificate verifies only the identity of the individual who signed the |
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| document to which this certificate is at | tached, and not the truthfulness, accuracy, or validity of that document. |
| itate of California County of Los Angeles | Subscribed and sworn to (or affirmed) before me |
| ounty of Los Angeles | on this 27^{m} day of <u>MARCH</u> , 2025, by |
| | BANAJIT SAHU |
| DAVID PARK COMM. #2410834 Notary Public - California Los Angeles County My Comm. Expires July 16, 2026 | proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me. |
| My Comm. Expires July 16, 2026 | Signature Jam Color |
| | Signature of Notary Public |
| Place Notary Seal Above | |
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