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 |) | Case No. 2024-00152 |
| 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 |) | |

SIERRA CLUB'S RESPONSE TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION TO SIERRA CLUB

Comes now Sierra Club, responding to Commission Staff's first request for information to Sierra Club.

1. Refer to Chelsea Hotaling's Direct Testimony page 7, lines 19-21. Provide specific reference to indicate that Duke Energy Kentucky, Inc. included the \$125.8 million in the 2024 Integrated Resources Plan base case scenario.

Response

In her referenced testimony, Ms. Hotaling stated, "For the modeling conducted as part of the 2024 IRP, Duke included the Limestone Conversion Project as part of the base case, which means it was included in all modeling runs conducted." This response was based on Duke Energy Kentucky's response to Sierra Club discovery question DR-01-015, as indicated in footnote 9 of Ms. Hotaling's testimony.

In that discovery question, DR-01-015, Sierra Club asked Duke Energy Kentucky to "Please confirm that Duke's 2024 IRP modeling did not include the capital costs of the proposed conversion project. If anything but confirmed, please explain."

In response to that question, Duke Energy Kentucky stated, "Deny. The 2024 IRP assumed the limestone conversion as part of its base case."

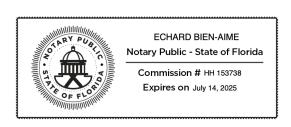
This response is confirmed by information Duke Energy Kentucky included in its proposed 2024 IRP, which has been incorporated by reference here. Within the 2024 IRP that Duke Energy Kentucky filed, Table H.2 on page 151 indicates a cost for the "EB2 Limestone Conv" in years 2025 and 2026. In addition, Duke Energy Kentucky provided several EnCompass modeling output files in response to Sierra Club DR-01-009 (filed as Attachments 1 - 20) in Case No. 2024-00197 that provide cost information related to East Bend. In each of the attachments to Sierra Club DR-01-009, information on the variable operations and maintenance costs for East Bend can be calculated from the costs and generation included in the output reports. Within worksheet "Resource Annual" and filtering for "East Bend 2", dividing the reported costs in "Non_Fuel Variable Cost (\$000)" in column Y, by the reported generation in column L, derives a \$/MWh variable cost for East Bend. The costs found in these attachments show a change in variable costs in 2027 that align with the projected costs decreases Duke Energy Kentucky has reported will happen with the conversion project.

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 SURCHARGEMECHANISM |) Case No. 2024-00152)))))) | |
| AFFIDAVIT OF CHELSEA HOT | | |
| IN SUPPORT OF SIERRA CLUB'S RESPONSES TO CO REQUEST FOR INFORMATION TO SE | | |
| COMMONWEALTH OF KENTUCKY) | | |
| 8, | Rhelsea Marie Hotaling | |
| Ch | Chelsea Hotaling | |
| SUBSCRIBED, ACKNOWLEDGED, AND SWORN to before | e me by Chelsea Hotaling this | |

SUBS 13th day of November, 2024.

Notarized remotely online using communication technology via Proof.



Echard bien - aime Notary Public Notary ID no.: _____

My Commission expires: 07/14/2025