VERIFICATION

STATE OF NORTH CAROLINA)
) **SS:**
COUNTY OF MECKLENBURG)

The undersigned, Huyen C. Dang, Director of Accounting, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

Huyen C. Dang Affiant

Subscribed and sworn to before me by Huyen C. Dang on this 19 day of 2023, 2023.

VIRGINIA M. ADAMS
My Comm. Expires
NOTARY PUBLIC
October 2, 2026
MECKLENBURG COUNTY, NC

NOTARY PUBLIC

My Commission Expires: 10/2/26

VERIFICATION

STATE OF NORTH CAROLINA)
) **SS:**
COUNTY OF MECKLENBURG)

The undersigned, Grady S. Carpenter III, Director Regional Financial Forecasting, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

Grady S. Carpenter III Affiant

Subscribed and sworn to before me by Grady S. Carpenter III on this 20th day of Jan, 2023.

Paula Walton
NOTARY PUBLIC
Mecklenburg County, NC
My Commission Expires August 29, 2024

NOTARY PUBLIC

My Commission Expires: 8.29.24

VERIFICATION

STATE OF INDIANA)
) **SS:**
COUNTY OF HENDRICKS)

The undersigned, William C. Luke, VP Midwest Generation, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

William C. Luke, Affiant

Subscribed and sworn to before me by William C. Luke on this 19th day of January, 2023.

NOTARY PUBLIC

TAMMY SUE ROBERTS
Hendricks County
NOTARY PUBLIC
Commission Number
NP0659013
NOTARY SEAL
My Commission Expires
OCTOBER 7, 2030
STATE OF INDIANA

My Commission Expires: 10/7/2030

VERIFICATION

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF CUMBERLAND)

The undersigned, John J. Spanos, President of Gannett Fleming Valuation and Rate Consultants, LLC, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

John J. Spanos

John J. Spanos, Affiant

Subscribed and sworn to before me by John J. Spanos on this 17th day of January, 2023.

NOTARY PUBLIC

My Commission Expires: February 20, 2023

Commonwealth of Pennsylvania - Notary Seal
Cheryl Ann Rutter, Notary Public
Cumberland County
My commission expires February 20, 2023
Commission number 1143028
Member, Pennsylvania Association of Notaries

KyPSC Case No. 2022-00372
TABLE OF CONTENTS

Duke Energy Kentucky
Case No. 2022-00372
KROGER First Set Data Requests
Date Received: January 11, 2023

PUBLIC KROGER-DR-01-001

REQUEST:

Please provide all public and confidential responses to Requests for Information issued by Duke or any other party to this proceeding.

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET (As to Attachments only)

The confidential attachments to this response will be provided upon the execution of a mutually acceptable confidentiality agreement.

PERSON RESPONSIBLE: Legal

CONFIDENTIAL PROPRIETARY TRADE SECRET

KROGER-DR-01-001
CONFIDENTIAL ATTACHMENT 1

FILED UNDER SEAL

CONFIDENTIAL PROPRIETARY TRADE SECRET

KROGER-DR-01-001
CONFIDENTIAL ATTACHMENT 2

FILED UNDER SEAL

Duke Energy Kentucky
Case No. 2022-00372
KROGER First Set Data Requests
Date Received: January 11, 2023

PUBLIC KROGER-DR-01-002

REQUEST:

Refer to the direct testimony of William Luke, p. 4, lines 3-9. *"Although East Bend is approaching the end of its service life and the Company plans to replace the asset with other resources, it is important to keep the remaining unit in efficient working order to support the energy needs of our customers. Therefore, costs for this asset will continue to be incurred and investments made as appropriate and prudent to ensure that the same reliable cost-effective electricity that customers have counted on for decades remains available while the replacement of those units is developed and implemented."*

a. Please provide the most recent 5 years of historical maintenance expense for East Bend. Please provide all supporting workpapers in Microsoft Excel format.

b. Please provide a narrative explaining the maintenance that occurred for the 5 years of historical data provided in (a).

c. Please provide a forecast of maintenance expense for East Bend through the expected retirement in 2032. If a forecast is not available through 2032, please provide all available forecasted information. Please provide all supporting workpapers in Microsoft Excel format.

d. Please provide a narrative explaining the maintenance that is expected to occur for the forecasted data provided in (c).

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET (As to Attachment only)

a. Please see KROGER-DR-01-002(a) Attachment.

b. During 2018 through 2022 maintenance activities occurred at East Bend Station to support reliable and safe operations. Maintenance occurred during outages and throughout each year to support running generation and unit availability. Non-outage activities included daily operations, landfill management, and maintenance of the following systems: boiler, turbine, material handling, flue gas desulphurization, waste stabilization and balance of plant equipment. Outage maintenance was performed on an annual basis on plant systems to support reliability. Duration and scope of the outages are based on required predictive and corrective maintenance for critical prime mover equipment. This equipment includes maintenance of, boiler, turbine, generator, coal pulverizers, Flue Gas Desulphurization equipment and critical balance of plant equipment.

c. Please see KROGER-DR-01-002(c) Confidential Attachment.

d. Based on the Company's 5-year planning cycle, East Bend Generating Station maintenance will continue to occur during outages and non-outage time periods to support reliable and safe operations. Non-outage activities include daily operations, landfill management, and maintenance of the following systems: boiler, turbine, material handling, flue gas desulphurization, waste stabilization and balance of plant equipment. Outage schedules and work scopes will be developed based on plant preventive and corrective work for critical prime mover equipment. This equipment includes maintenance of boiler, turbine, generator, coal pulverizers, Flue Gas Desulphurization equipment and critical balance of plant equipment.

Outage schedules and work scoped will be developed based on plant preventive and corrective needs to meet reliability and event free goals.

PERSON RESPONSIBLE: William C. Luke

East Bend 5 Years Historical Maintenance Expense

2018	2019	2020	2021	YTD Sep 2022
$ 35,730,969	$ 28,514,674	$ 22,449,388	$ 26,084,036	$ 13,207,180

REQUEST:

Refer to the direct testimony of William Luke, p. 5-6.

a. Please provide the most recent 5 years of historical capital investments in East Bend. Please provide all supporting workpapers in Microsoft Excel format.

b. Please provide a narrative explaining the capital investments that occurred for the 5 years of historical data provided in (a).

c. Please provide a forecast of capital investments for East Bend through the expected retirement in 2032. If a forecast is not available through 2032, please provide all available forecasted information. Please provide all supporting workpapers in Microsoft Excel format.

d. Please provide a narrative explaining the capital investment that is expected to occur for the forecasted data provided in (c).

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET (As to Attachment only)

a. Please see KROGER-DR-01-003(a) Attachment.

b. During the time period of 2018 through 2022 capital work was completed at East Bend Generating Station to support reliable generation and regulatory compliance. The significant project scopes for East Bend included replacement of boiler components (secondary superheat outlet header, secondary superheat intermediate pendants, and economizer), precipitator rebuild, condenser retube, high pressure turbine rotor, low

pressure turbine blade replacement and inspection, generator rewind, conversion to a dry bottom system, coal combustion residual projects and distributed control system upgrade.

c. Please see KROGER-DR-01-003(c) Confidential Attachment for forecasted capital expenditures from 2023-2026. Please see SIERRA-DR-01-003 Confidential Attachment for a copy of the IRP that would contain estimated capital expenditures past 2026.

d. Based on the Company's 5-year planning cycle, East Bend Generating Station maintenance will continue to make capital investments during both outage and non-outage time periods to support reliable and safe operations. Significant upcoming projects include boiler component replacement, waste stabilization stacker conveyor replacement, FGD ductwork replacement, boiler feed pump controls upgrade, and replacement of main turbine controls.

PERSON RESPONSIBLE: Huyen C. Dang – a.
William C. Luke – b., d.
Grady "Tripp" S. Carpenter/Scott Park – c.

East Bend 5 Years Historical Capital Expenditures

2018	2019	2020	2021	2022
102,635,266	53,039,545	28,064,006	28,743,991	18,628,080

CONFIDENTIAL PROPRIETARY TRADE SECRET

KROGER-DR-01-003 (c)
CONFIDENTIAL ATTACHMENT

FILED UNDER SEAL

Duke Energy Kentucky
Case No. 2022-00372
KROGER First Set Data Requests
Date Received: January 11, 2023

PUBLIC KROGER-DR-01-004

REQUEST:

Refer to the direct testimony of William Luke, p. 9, lines 4-10. *"Duke Energy Kentucky follows similar periodic maintenance cycles for the Woodsdale units to those of East Bend that I mentioned above. The dual fuel capabilities installed in 2019 provide another option for safe, reliable power from the Woodsdale facility. Since the time of the Company's last rate case, the Company has also made necessary investments to ensure the reliability of the plant some of which include generator field rewinds, a turbine section replacement, and a generator rotor rewind."*

a. Please provide the most recent 5 years of historical maintenance expense for Woodsdale. Please provide all supporting workpapers in Microsoft Excel format.

b. Please provide a narrative explaining the maintenance that occurred for the 5 years of historical data provided in (a).

c. Please provide a forecast of maintenance expense for Woodsdale through the expected retirement in 2032. If a forecast is not available through 2032, please provide all available forecasted information. Please provide all supporting workpapers in Microsoft Excel format.

d. Please provide a narrative explaining the maintenance that is expected to occur for the forecasted data provided in (c).

e. Please provide the most recent 5 years of historical capital investments in Woodsdale. Please provide all supporting workpapers in Microsoft Excel format.

f. Please provide a narrative explaining the capital investments that occurred for the 5 years of historical data provided in (e).

g. Please provide a forecast of capital investments for Woodsdale through the expected retirement in 2032. If a forecast is not available through 2032, please provide all available forecasted information. Please provide all supporting workpapers in Microsoft Excel format.

h. Please provide a narrative explaining the capital investment that is expected to occur for the forecasted data provided in (g).

RESPONSE:

CONFIDENTIAL PROPRIETARY TRADE SECRET
(As to Attachments (c) and (g) only)

a. Please see KROGER-DR-01-004(a) Attachment.

b. From 2018 through 2022 maintenance activities occurred at Woodsdale Station to support reliable and safe operations. Maintenance occurred during outages and throughout each year to support unit availability. Non-outage activities included daily operations, maintenance of the following systems: balance of plant equipment, gas turbines, compliance equipment and facilities maintenance. Outage maintenance was performed based on the 5-year outage schedule to support reliability. Duration and scope of the outages are based on required preventive and corrective maintenance for critical prime mover equipment. This equipment includes maintenance of gas turbine, generator, electrical breakers, and critical balance of plant equipment.

c. Please see KROGER-DR-01-004(c) Confidential Attachment for forecasted maintenance expense from 2023-2026. Please see SIERRA-DR-01-003 Confidential Attachment for a copy of the IRP that would include estimated maintenance expense past 2026.

d. Based on the Company's 5-year planning cycle, Woodsdale Generating Station maintenance will continue to occur during both outage and non-outage time periods to support reliable and safe operations. Non-outage activities include daily operations and maintenance of the following systems: balance of plant equipment, gas turbines, compliance equipment and facilities maintenance. Outage schedule and work scopes will be developed based on plant preventive and corrective needs for critical prime mover equipment. This equipment includes maintenance of gas turbine, generator, electrical breakers, and critical balance of plant equipment.

e. Please see KROGER-DR-01-004(e) Attachment.

f. During the time period of 2018 through 2022 capital work was completed at Woodsdale Generating Station to support reliable generation and fuel diversification. The significant project scopes for Woodsdale included installation of the Fuel oil system to provide dual fuel capability, generator rewinds and gas turbine blade replacement.

g. Please see KROGER-DR-01-004(g) Confidential Attachment. Please see SIERRA-DR-01-003 Confidential Attachment for a copy of the IRP that would include estimated capital expenditures past 2026.

h. Based on the Company's 5-year planning cycle, Woodsdale Generating Station will continue to make capital investments during both outage and non-outage time periods to support reliable and safe operations. Significant upcoming projects include electrical distribution system breaker replacement, battery charger system replacement, unit vibration monitoring upgrade, gas turbine blade replacement and U3 generator rewind.

PERSON RESPONSIBLE: William C. Luke – a., b., c., d., f., h.
Huyen C. Dang – e.
Grady "Tripp" S. Carpenter – g.
Scott Park – c., g.

Woodsdale 5 Years Historical Maintenance Expense

2018	2019	2020	2021	YTD Sep 2022
1,137,499	2,833,896	1,946,805	1,779,744	1,096,905

CONFIDENTIAL PROPRIETARY TRADE SECRET

KROGER-DR-01-004 (c)
CONFIDENTIAL ATTACHMENT

FILED UNDER SEAL

Woodsdale 5 Years Historical Capital Expenditures

2018	2019	2020	2021	2022
37,823,275	22,217,963	1,149,314	3,577,436	2,680,097

CONFIDENTIAL PROPRIETARY TRADE SECRET

KROGER-DR-01-004 (g)
CONFIDENTIAL ATTACHMENT

FILED UNDER SEAL

Duke Energy Kentucky
Case No. 2022-00372
KROGER First Set Data Requests
Date Received: January 11, 2023

KROGER-DR-01-005

REQUEST:

Refer to the direct testimony of Sarah E. Lawler, pp. 5-6. *"East Bend is now currently projected to retire in 2035, six years earlier than its originally planned retirement date of 2041. In order to align the depreciation rates with this new estimated retirement date, depreciation expense has to increase. This is driving approximately $11 million of the total $35 million increase in depreciation expense. Partially mitigating this increase is the fact that the estimated retirement date of Woodsdale is now projected to be 2040, eight years later than its originally planned retirement date. Included in the $35 million increase in depreciation expense is an approximately $7 million decrease associated with this extension of useful life."*

a. Please provide all workpapers in Excel format documenting the change in depreciation expense that would result from the Company's filed case.

RESPONSE:

Please see KROGER-DR-01-005 Attachment which contains depreciation calculations for East Bend (Steam Production accounts) and Woodsdale (Other Production accounts) which sets forth the result of changing the proposed retirement dates from the Depreciation Study (2035 for East Bend and 2040 for Woodsdale) with the previous retirement dates (2041 and 2032, respectively). These new calculations compared to the Depreciation Study result in a decrease of annual depreciation expense for East Bend and an increase for Woodsdale.

It should be noted that changing the retirement dates can create changes in weighted net salvage, distribution of the book reserve, and forecasted interim and terminal retirements. The comparison provided in this response reflects changes to some of these factors.

PERSON RESPONSIBLE: John J. Spanos

DUKE ENERGY KENTUCKY

SUMMARY OF ESTIMATED SURVIVOR CURVE, NET SALVAGE PERCENT, ORIGINAL COST, BOOK DEPRECIATION RESERVE AND CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO ELECTRIC PLANT AS OF DECEMBER 31, 2021

	ACCOUNT	PROBABLE RETIREMENT DATE	SURVIVOR CURVE		NET SALVAGE PERCENT	ORIGINAL COST AS OF DECEMBER 31, 2021	BOOK DEPRECIATION RESERVE	FUTURE ACCRUALS	CALCULATED ANNUAL ACCRUAL AMOUNT	CALCULATED ANNUAL ACCRUAL RATE	COMPOSITE REMAINING LIFE
	(1)	(2)	(3)		(4)	(5)	(6)	(7)	(8)	(9)=(8)/(5)	(10)=(7)/(8)
	STEAM PRODUCTION PLANT										
3110	STRUCTURES AND IMPROVEMENTS	06-2041	85-S1	*	(12)	183,717,638.42	46,934,083	158,829,672	8,244,218	4.49	19.3
3120	BOILER PLANT EQUIPMENT	06-2041	45-S0.5	*	(12)	545,368,156.24	298,832,215	311,980,120	17,461,319	3.20	17.9
3123	BOILER PLANT EQUIPMENT - SCR CATALYST	06-2041	10-S2.5	*	0	7,984,157.58	5,266,747	2,717,411	471,763	5.91	5.8
3140	TURBOGENERATOR UNITS	06-2041	40-S0.5	*	(12)	109,285,792.05	59,323,750	63,076,337	3,736,806	3.42	16.9
3150	ACCESSORY ELECTRIC EQUIPMENT	06-2041	65-R2.5	*	(12)	48,173,349.90	33,908,388	20,045,764	1,058,205	2.20	18.9
3160	MISCELLANEOUS POWER PLANT EQUIPMENT	06-2041	55-S0	*	(12)	23,997,105.75	11,357,282	15,519,476	859,968	3.58	18.0
	TOTAL STEAM PRODUCTION PLANT					**918,526,199.94**	**455,622,465**	**572,168,780**	**31,832,279**		
	OTHER PRODUCTION PLANT										
3410	STRUCTURES AND IMPROVEMENTS	06-2032	60-R4	*	(5)	36,379,260.23	27,885,105	10,313,118	1,000,447	2.75	10.3
3420	FUEL HOLDERS, PRODUCERS AND ACCESSORIES	06-2032	45-S1.5	*	(5)	61,310,889.91	6,744,645	57,631,789	5,577,093	9.10	10.3
3430	PRIME MOVERS	06-2032	25-S0	*	(5)	10,340,709.70	1,522,502	9,335,243	973,278	9.41	9.6
3440	GENERATORS	06-2032	40-S0.5	*	(5)	211,248,425.04	137,426,306	87,384,540	8,903,824	4.21	9.5
3450	ACCESSORY ELECTRIC EQUIPMENT	06-2032	35-S1	*	(5)	19,858,901.69	12,312,595	8,539,252	928,405	4.68	9.2
3460	MISCELLANEOUS POWER PLANT EQUIPMENT	06-2032	45-R1.5	*	(5)	5,152,109.78	3,329,034	2,080,681	209,824	4.07	9.9
	TOTAL OTHER PRODUCTION PLANT					**344,290,296.35**	**189,220,187**	**175,284,623**	**17,592,871**		

* CURVE SHOWN IS INTERIM SURVIVOR CURVE. EACH FACILITY IN THE ACCOUNT IS ASSIGNED AN INDIVIDUAL PROBABLE RETIREMENT YEAR.