COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY)	
UTILITIES COMPANY AND LOUISVILLE GAS)	CASE NO.
AND ELECTRIC COMPANY FOR CERTIFICATES)	2025-00045
OF PUBLIC CONVENIENCE AND NECESSITY)	
AND SITE COMPATIBILITY CERTIFICATES)	

ORDER

On February 28, 2025, Kentucky Utilities Company (KU) and Louisville Gas and Electric Company (LG&E) (jointly, LG&E/KU) filed a joint application requesting Commission approval of (1) Certificates of Public Convenience and Necessity (CPCN) to construct two natural gas combined cycle (NGCC) units (Brown 12 and Mill Creek 6) and a battery energy storage facility (BESS) (Cane Run BESS) pursuant to KRS 278.020; (2) site compatibility certificates for the NGCC units and the BESS unit; (3) a CPCN to install a selective catalytic reduction (SCR) emission control system at Ghent 2 (Ghent 2 SCR); and (4) approval of regulatory assets.

PROCEDURAL HISTORY

The following parties sought and were granted Intervention in this proceeding: (1) the Attorney General of the Commonwealth of Kentucky, by and through the Office of Rate Intervention (Attorney General);¹ (2) Kentucky Industrial Utility Customers, Inc.

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¹ Order (Ky. PSC Mar. 7, 2025).

(KIUC);² (3) Sierra Club;³ (5) Metropolitan Housing Coalition, Kentuckians for the Commonwealth, Kentucky Solar Energy Society, and Mountain Association (collectively, Joint Intervenors);⁴ (6) Louisville/Jefferson County Metropolitan Government and Lexington-Fayette County Urban County Government (jointly, Louisville Metro/LFUCG);⁵ (7) Kentucky Coal Association, Inc. (KCA);⁶ and (8) Southern Renewable Energy Association (SREA).⁷

On April 30, 2025, in Case No. 2025-00105,⁸ KU filed an application to amend its environmental compliance plan and recover the costs related to selective catalytic reduction (SCR) at Ghent 2 through its environmental surcharge. In addition, KU requested to recover its notice expenses for that case as well as all future environmental compliance cases through its environmental surcharge. On May 14, 2025, the Commission issued Orders in both this matter and in Case No. 2025-00105, consolidating Case No. 2025-00105 with this matter as well as specifically addressing intervention as it related to the consolidation. As part of the Order in this matter, the Commission amended the original procedural schedule issued on March 13, 2025.⁹ The Commission

² Order (Ky. PSC Mar. 28, 2025).

³ Order (Ky. PSC Mar. 31, 2025).

⁴ Order (Ky. PSC Mar. 28, 2025).

⁵ Order (Ky. PSC Mar. 31, 2025).

⁶ Order (Ky. PSC Apr. 10, 2025). The Commission granted KCA's late motion to intervene for good cause.

⁷ Order (Ky. PSC Mar. 31, 2025).

⁸ Case No. 2025-00105, Electronic Application of Kentucky Utilities Company for Approval of Its 2025 Compliance Plan for Recovery by Environmental Surcharge Plan.

⁹ Order (Ky. PSC Mar. 13, 2025).

subsequently amended the procedural schedule one final time on May 29, 2025.¹⁰ A request for intervention in Case No. 2025-00105 was made by an individual customer, which was denied by the Commission by Order issued in this case.¹¹

LG&E/KU responded to six requests for information from Commission Staff.¹²
LG&E/KU responded to four requests for information issued jointly from the Attorney
General and KIUC.¹³ LG&E/KU responded to four requests for information from Sierra
Club.¹⁴ LG&E/KU responded to two requests for information from SREA.¹⁵ LG&E/KU responded to four requests for information from Joint Intervenors.¹⁶ LG&E/KU responded

¹⁰ Order (Ky. PSC May 29, 2025).

¹¹ Order (Ky. PSC June 4, 2025).

¹² LG&E/KU's Response Commission Staff's First Request for Information (Staff's First Request) (filed Apr. 17, 2025); LG&E/KU's Response to Commission Staff's Second Request for Information (Staff's Second Request) (filed May 16, 2025); LG&E/KU's response to Commission Staff's Third Request for Information (Staff's Third Request) (filed June 6, 2025); LG&E/KU's Response to Commission Staff's Fourth Request for Information (Staff's Fourth Request) (filed June 27, 2025); LG&E/KU's Response to Commission Staff's Fifth Request for Information (Staff's Fifth Request) (Jul. 15, 2025); LG&E/KU's response to Commission Staff's Post-Hearing Request for Information (Staff's Post-Hearing Request) (filed Aug. 22, 2025).

¹³ LG&E/KU's Response to Attorney General/KIUC's First Request for Information (Attorney General/KIUC's First Request) (filed Apr. 17, 2025); LG&E/KU's Response to Attorney General/KIUC's Second Request for Information (Attorney General/KIUC's Second Request) (filed May 16, 2025); LG&E/KU's Response to Attorney General/KIUC's Third Request for Information (Attorney General/KIUC's Third Request) (filed Jun. 6, 2025); LG&E/KU's Response to Attorney General/KIUC's Post-Hearing Request for Information (Attorney General/KIUC's Post-Hearing Request) (filed Aug. 22, 2025).

¹⁴ LG&E/KU's Response to Sierra Club's First Request for Information (Sierra Club's First Request) (filed Apr. 17, 2025); LG&E/KU's response to Sierra Club's Second Request for Information (Sierra Club's Second Request) (filed May 16, 2025); LG&E/KU's Response to Sierra Club's Third Request for Information (Sierra Club's Third Request) (filed June 6, 2025); LG&E/KU's Response to Sierra Club's Post-Hearing Request for Information (Sierra Club's Post-Hearing Request) (filed Aug. 22, 2025).

¹⁵ LG&E/KU's Response to SREA's First Request for Information (SREA's First Request) (filed Apr. 17, 2025); LG&E/KU's Response to SREA's Second Request for Information (SREA's Second Request) (filed May 16, 2025).

¹⁶ LG&E/KU's Response to Joint Intervenors' First Request for Information (Joint Intervenors' First Request) (filed Apr. 17, 2025); LG&E/KU's Response to Joint Intervenors' Second Request for Information (Joint Intervenors' Second Request) (filed May 16, 2025); LG&E/KU's Response to Joint Intervenors' Third Request for Information (Joint Intervenors' Third Request) (filed June 6, 2025); LG&E/KU's Response to

to two requests for information from KCA.¹⁷ LG&E/KU responded to two requests for information from Louisville Metro/LFUCG.¹⁸ LG&E/KU responses were supplemented, as necessary, throughout the processing of this case.

On June 16, 2025, SREA, Sierra Club, KCA, Joint Intervenors, and the Attorney General/KIUC each filed expert testimony. ¹⁹ KCA, SREA, Sierra Club, Joint Intervenors, and the Attorney General/KIUC responded to one request for information from LG&E/KU. ²⁰ KCA and the Attorney General/KIUC also responded to one request for information from Commission Staff. ²¹ Sierra Club also responded to one round of requests for information from Commission Staff, although outside of the procedural schedule. ²² LG&E/KU filed rebuttal testimony on July 18, 2025. On July 29, 2025, LG&E/KU filed a Stipulation and Stipulation testimony. Both of which will be discussed in further detail below.

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Joint Intervenors' Post-Hearing Request for Information (Joint Intervenors' Post-Hearing Request) (filed Aug. 22, 2025).

¹⁷ LG&E/KU's Response to KCA's First Request for Information (KCA's First Request) (filed Apr. 17, 2025); LG&E/KU's response to KCA's Second Request for Information (KCA's Second Request) (filed May 16, 2025).

¹⁸ LG&E/KU's Response to LFUCG/Louisville Metro's First Request for Information (LFUCG/Louisville Metro's First Request) (filed Apr. 17, 2025); LG&E/KU's Response to LFUCG/Louisville Metro's Second Request for Information (LFUCG/Louisville Metro's Second Request) (filed May 16, 2025).

¹⁹ On March 19, 2025, the Attorney General and KIUC filed an expert witness sharing agreement.

²⁰ Sierra Club's Responses to LG&E/KU's First Request for Information (filed July 3, 2025); Attorney General/KIUC's Responses to LG&E/KU's First Request for Information (filed July 3, 2025); SREA's responses to LG&E/KU's responses to LG&E/KU's First Request for Information (filed July 3, 2025).

²¹ KCA's Responses to Commission Staff's First Request for Information (filed July 3, 2025); Attorney General/KIUC's Responses to Commission Staff's First Request for Information (filed July 3, 2025).

²² Sierra Club's Response to Commission Staff's First Request for Information (filed July 30, 2025).

Public comment meetings were held on July 7, 2025, in Lexington, Kentucky and July 14, 2025, in Louisville, Kentucky. Numerous public comments have been filed.²³ The vast majority of these comments were opposed to the application for a variety of reasons but included both financial and environmental concerns.

A formal hearing was held on August 4, 2025, August 6, 2025, and August 7, 2025. At the beginning of the hearing, several persons made public comment, many against the project. LG&E/KU responded to post-hearing discovery requests from Commission Staff, Sierra Club, Joint Intervenors, and Attorney General/KIU.²⁴ LG&E/KU, LFUCG/Louisville Metro, the Attorney General, KIUC, KCA, Sierra Club, SREA and Joint Intervenors filed their respective initial briefs on September 5, 2025. All parties except LFUCG/Louisville Metro filed their respective response briefs on September 17, 2025.

The matter now stands submitted to the Commission for a decision.

<u>BACKGROUND</u>

LG&E is an investor-owned utility that generates and purchases electricity.²⁵ LG&E distributes and sells electricity at retail in Jefferson County and portions of Bullitt, Hardin, Henry, Meade, Oldham, Shelby, Spencer, and Trimble Counties.²⁶ LG&E also purchases, stores, and transports natural gas; it distributes and sells natural gas at retail in Jefferson County and portions of Barren, Bullitt, Green, Hardin, Hart, Henry, Larue,

²³ View Public Comments for: 2025-00045.

²⁴ Responses were cited in full earlier in the procedural history.

²⁵ Application at 3.

²⁶ Application at 3.

Marion, Meade, Metcalfe, Nelson, Oldham, Shelby, Spencer, Trimble, and Washington Counties.²⁷

KU is an investor-owned utility that generates and purchases electricity.²⁸ It distributes and sells electricity at retail in Adair, Anderson, Ballard, Barren, Bath, Bell, Bourbon, Boyle, Bracken, Bullitt, Caldwell Campbell, Carlisle, Carroll, Casey, Christian, Clark, Clay, Crittenden, Daviess, Edmonson, Estill, Fayette, Fleming, Franklin, Fulton, Gallatin, Garrard, Grant, Grayson, Green, Hardin, Harlan, Harrison, Hart, Henderson, Henry, Hickman, Hopkins, Jessamine, Knox, Larue, Laurel, Lee, Lincoln, Livingston, Lyon, Madison, Marion, Mason, McCracken, McCreary, McLean, Mercer, Montgomery, Muhlenberg, Nelson, Nicholas, Ohio, Oldham, Owen, Pendleton, Pulaski, Robertson, Rockcastle, Rowan, Russell, Scott, Shelby, Spencer, Taylor, Trimble, Union, Washington, Webster, Whitley, and Woodford counties, Kentucky.²⁹

LG&E/KU currently operate the following generation resources:30

Category	Resource Type	Resource Name	Net Max Summer Capacity (MW)	Net Max Winter Capacity (MW)
Fully Dispatchable	Coal	Brown 3	412	416
		Ghent 1	475	479
		Ghent 2	485	486
		Ghent 3	481	476
		Ghent 4	478	478
		Mill Creek 3	391	394
		Mill Creek 4	477	486
		Trimble County 1 (75%)	370	370
		Trimble County 2 (75%)	549	570
	Coal PPA	OVEC	152	158
	NGCC	Can Run 7	697	759

²⁷ Application at 3.

²⁸ Application at 3.

²⁹ Application at 3-4.

³⁰ The Direct Testimony of Stuart Wilson (Wilson Direct Testimony), Exhibit SAW-1 at 39.

		Mill Creek 5	645	660
	SCCT	Brown 5	130	130
		Brown 6	146	171
		Brown 7	146	171
		Brown 8	121	128
		Brown 9	121	138
		Brown 10	121	138
		Brown 11	121	128
		Paddy's Run 13	147	175
		Trimble County 5	159	179
		Trimble County 6	159	179
		Trimble County 7	159	179
		Trimble County 8	159	179
		Trimble County 9	159	179
		Trimble County 10	159	179
Renewable	Solar	Brown Solar	10	10
		Business Solar	0.34	0.34
		Solar Share	3.4	3.4
		Mercer County Solar	120	120
		Marion County Solar	120	120
	Wind	Brown Wind	0.09	0.09
	Hydro	Dix Dam 1-3	33.6	33.6
		Ohio Falls 1-8	100.6	100.6
Limited-Duration	Bess	Brown Bess	125	125
	Interruptible	CSR	110	115
	Dispatchable DSM	DCP	190	145

PROPOSED PROJECTS

In its application, LG&E/KU requested approval of four separate CPCNs, which included: constructing a Natural Gas Combined Cycle (NGCC) at the E.W. Brown Generating Station (Brown 12); constructing a NGCC at Mill Creek Station (Mill Creek 6); installing a BESS at the Cane Run Generating Station(Cane Run); and adding an SCR on Ghent 2 generating unit (Ghent SCR 2) at the Ghent Generating Station. In addition to the CPCN requests, LG&E/KU requested a site compatibility certificate Brown 12, Mill Creek 6, and the Cane Run BESS. The Commission also incorporated KU's request to amend its environmental compliance plan as well as to recover expenses related to the

Ghent 2 SCR pursuant to KRS 278.183.³¹ LG&E/KU's requested accounting treatment for each project will be discussed in greater detail below.

Brown 12

Brown Generation Station (Brown Station) is currently operated by KU.³² Trinity Consultants, the company completing the required Site Assessment Report, stated that the current Brown Station consists of a coal boiler (Brown Unit 3); seven natural gas-fired combustion turbines; coal, limestone, fly ash, powered activated carbon (PAC), and gypsum handling and storage operations; emergency equipment; miscellaneous organic liquids tanks; parts washers; cooling towers; general plant fugitive emissions; and numerous insignificant activities.³³ The site also includes hydroelectric generation at the Dix Dam; an adjacent photovoltaic electrical generation installation; an existing small scale battery electric storage test system; and a small wind-power generating plant.³⁴ Two pipelines, Tennessee Gas and Texas Eastern, currently serve Brown Station's simple-cycle combustion turbines.³⁵

For Brown 12, LG&E/KU requested approval to construct a 645 MW net summer rating NGCC unit at Brown Station located in Mercer County, Kentucky, to be in service by 2030.³⁶ Brown 12 has a gross maximum power design rating of approximately 681

³¹ Order (Ky. PSC May 14, 2025).

³² Brown 12 NGCC Site Assessment Report at 1-1.

³³ Brown 12 NGCC Site Assessment Report at 1-1.

³⁴ Brown 12 NGCC Site Assessment Report at 1-1.

³⁵ Direct Testimony of Charles Schram (Schram Direct Testimony) at 21.

³⁶ Application at 10.

MW-g.³⁷ The proposed Brown 12 unit is planned to be located within the central eastern portion of the existing Brown Station.³⁸ LG&E/KU proposed to utilize the existing pipeline infrastructure for the proposed Brown 12 unit.³⁹

Trinity Consultants stated that the proposed Brown 12 unit will consist of the following:

one natural gas-fired gas combustion turbine (GT), a steam turbine (ST), and one heat recovery steam generator (HRSG) with natural gas-fired duct burners (DB) arranged in a one on-one configuration. Ancillary support equipment will also be installed to support the NGCC operations, including one natural gas-fired boiler (Auxiliary Boiler) rated at 95.52 million British thermal units per hour (MMBtu/hr) or less, one pipeline fuel gas (dewpoint) heater rated at 15.65 MMBtu/hr or less, one 2 megawatts (MW) emergency generator with a diesel-fired engine, one 422 horsepower (HP) emergency diesel driven fire pump, one 10-cell mechanical draft cooling tower, lube oil system demister vents, raw and demineralized water storage tanks, aqueous ammonia storage and handling equipment, and other miscellaneous infrastructure.40

Prior to the construction of Brown 12, LG&E/KU stated that KU plans to demolish retired generating Units Brown 1 and Brown 2 to provide adequate safety clearance for the construction of Brown 12 and to avoid demolition risk in the future from demolishing Units Brown 1 and Brown 2 after Brown 12 becomes operational.⁴¹ Before construction can begin, LG&E/KU stated that it will need to finalize power island purchases with

³⁷ Brown 12 NGCC Site Assessment Report at 2-1.

³⁸ Brown 12 NGCC Site Assessment Report at 1-1.

³⁹ Brown 12 NGCC Site Assessment Report at 1-1.

⁴⁰ Brown 12 NGCC Site Assessment Report at 2-1.

⁴¹ The Direct Testimony of David Tummonds (Tummonds Direct Testimony) at 6.

General Electric (GE) and issue a request for proposal (RFP) for the engineering, procurement, and construction (EPC) contractor. LG&E/KU have executed a Unit Reservation Agreement (URA) with GE. LG&E/KU explained that, under this agreement, LG&E/KU agreed to pay \$25 million to GE to reserve a "manufacturing slot" in GE's manufacturing process so that the Brown 12 equipment will be manufactured and delivered in time for commercial operation in 2030 and to lock in firm pricing for the equipment. In total, LG&E/KU estimated that it will take approximately 48 months from execution of the EPC contract until commercial operation, not considering time required for permitting and regulatory approvals.

LG&E/KU have begun work on developing the EPC contract bid package for Brown 12, the Title V air permit applications, and submitted a generation interconnection request to TranServ International (LG&E/KU's Independent Transmission Organization or ITO) to interconnect Brown 12 to the LG&E/KU transmission system.⁴⁶ The build process will include an owner's engineer (OE), which will support the Project Engineering and Power Production staffing.⁴⁷ LG&E/KU have contracted with the engineering firm HDR to serve as the OE.⁴⁸

⁴² Tummonds Direct Testimony at 8.

⁴³ Direct Testimony of Lonnie Bellar (Bellar Direct Testimony) at 11.

⁴⁴ Bellar Direct Testimony at 11.

⁴⁵ Tummonds Direct Testimony at 8.

⁴⁶ Tummonds Direct Testimony at 7.

⁴⁷ Tummonds Direct Testimony at 7.

⁴⁸ Tummonds Direct Testimony at 8.

LG&E/KU stated that they currently anticipate that LG&E will own 100 percent of Brown 12.⁴⁹

Mill Creek 6

The Mill Creek Generating Station, located in Jefferson County, is currently operated by LG&E.⁵⁰ Trinity Consultants stated that the current Mill Creek Station consists of three coal boilers (Units Mill Creek 2, Mill Creek 3, and Mill Creek 4); coal, limestone, fly ash, PAC, and gypsum handling and storage operations; emergency equipment; miscellaneous organic liquids tanks; parts washers; cooling towers; general plant fugitive emissions; and numerous insignificant activities.⁵¹ The construction of a fifth generating unit, a new NGCC electric generating plant with a maximum power rating of approximately 680 gross megawatts (MW-g) within the central portion of the existing Mill Creek Station (Mill Creek 5), is underway, proceeding according to plan, and is on track for commercial operation in the summer of 2027.⁵² A CPCN was previously granted for Mill Creek 5 in Case No. 2022-00402.⁵³

LG&E/KU will utilize and optimize the existing onsite electrical transmission system in conjunction with completing Mill Creek 6 to the extent feasible.⁵⁴ Trinity Consultants noted that the proposed unit will be located adjacent to Mill Creek 5 and its co-location

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⁴⁹ Application at 12.

⁵⁰ Mill Creek 6 Site Assessment Report at 1-1.

⁵¹ Mill Creek 6 Site Assessment Report at 1-1.

⁵² Tummonds Direct Testimony at 3 and Mill Creek 6 Site Assessment Report at 1-1.

⁵³ Case No. 2022-00402, Electronic Joint Application of Kentucky Utilities Company and Louisville Gas and Electric Company for Certificates of Public Convenience and Necessity and Site Compatibility Certificates and Approval of a Demand Side Management Plan and Approval of Fossil Fuel-Fired Generating Unit Retirements (Ky. PSC Nov. 6, 2023), Order at 178.

⁵⁴ Mill Creek 6 Site Assessment Report at 1-1.

with the existing Mill Creek Station assets will allow for considerable utilization of existing site infrastructure including transmission connectivity. For example, the gas line constructed for Mill Creek 5 will also serve Mill Creek 6 simultaneously, with minimal additional construction or maintenance costs. LG&E/KU also stated that the Mill Creek 5 site layout design incorporated a footprint for a possible Mill Creek 6, which will be utilized if this project is approved. This incorporation included civil designs, such as roadways, stormwater flow paths, and building and structural layout, included high-level thought to accommodate a future unit. LG&E/KU explained that much of the Mill Creek 5 work can be replicated for Mill Creek 6, including mechanical and instrumentation electrical routing designs. Laydown yards and temporary facilities used at Mill Creek 5 can also be reused for Mill Creek 6.

Trinity Consultants stated that the proposed unit would consist of the following⁶¹:

one natural gas-fired gas combustion turbine (GT), a steam turbine (ST), and one heat recovery steam generator (HRSG) with natural gas-fired duct burners (DB) arranged in a one-on-one configuration. Ancillary support equipment will also be installed to support the NGCC operations, including one natural gas-fired boiler (Auxiliary Boiler) rated at 95.52 million British thermal units per hour (MMBtu/hr) or less, one pipeline fuel gas (dewpoint) heater rated at 15.66 MMBtu/hr or less, one 2.18 MW emergency generator with diesel-fired engine, one 422 horsepower (HP) emergency diesel driven fire pump, one 10-cell mechanical draft cooling tower, lube oil system

⁵⁵ Mill Creek 6 Site Assessment Report at 1-1.

⁵⁶ Tummonds Direct Testimony at 3.

⁵⁷ Tummonds Direct Testimony at 3.

⁵⁸ Tummonds Direct Testimony at 3.

⁵⁹ Tummonds Direct Testimony at 3.

⁶⁰ Tummonds Direct Testimony at 3.

⁶¹ Mill Creek 6 Site Assessment Report at 2-1.

demister vents, raw and demineralized water storage tanks, aqueous ammonia storage and handling equipment, and other miscellaneous infrastructure.

Minor demolition is needed for siting of Mill Creek 6, but LG&E/KU averred it could be done in connection with the existing construction work for Mill Creek 5.⁶² LG&E/KU plans for Mill Creek 6 to be operational in 2031.⁶³ In total, LG&E/KU estimated that that it will take approximately 48 months from execution of the EPC contract until commercial operation, not considering time required for permitting and regulatory approvals.⁶⁴

LG&E/KU begun work on developing the EPC contract bid package for Mill Creek 6, have also begun developing the Title V air permit applications, and have plans to submit a generation interconnection request to TransServ International in November 2025 to interconnect Mill Creek 6 the LG&E/KU transmission system. The build process will include an OE, which will support the Project Engineering and Power Production staffing. LG&E/KU have contracted with the engineering firm HDR to serve as the OE. LG&E/KU entered into an RA with GE Vernova on August 27, 2025, for Mill Creek 6.68

The pipeline that will serve the approved Mill Creek 5 NGCC and the proposed Mill Creek 6 NGCC is Texas Gas Transmission.⁶⁹

⁶² Tummonds Direct Testimony at 6.

⁶³ Tummonds Direct Testimony at 7.

⁶⁴ Tummonds Direct Testimony at 8.

⁶⁵ Tummonds Direct Testimony at 7.

⁶⁶ Tummonds Direct Testimony at 7.

⁶⁷ Tummonds Direct Testimony at 8.

⁶⁸ LG&E/KU's supplemental response to Staff's Post-Hearing Request, Item 18 (filed September 8, 2025).

⁶⁹ Schram Direct Testimony at 21.

LG&E/KU stated that they currently anticipate that LG&E will own 100 percent of Mill Creek 6.70

Cane Run BESS

Cane Run is an existing 500 acre fossil fuel-fired electric generating station with a net generating capacity of 691 MW located at 5252 Cane Run Road, approximately 10 miles southwest of downtown Louisville, Kentucky, in the Pleasure Ridge Park neighborhood of Jefferson County.⁷¹ Cane Run consists of a 52-acre coal combustion residuals (CCR) unit impoundment, a closed/capped 110-acre special waste landfill, stormwater retention basins, electric transmission assets/infrastructure, and an electric utility natural gas-fired generation unit (Cane Run Unit 7).72 Cane Run Unit 7 consists of two F-class NGCC turbines equipped with heat recovery steam generators (HRSG), mechanical draft cooling towers, one natural gas-fired auxiliary steam generating unit diesel-fired emergency engines/emergency electric (boiler), five generators, miscellaneous organic liquids storage tanks, raw water intake pumps (located in the screen house on the Ohio River), a wastewater treatment system, and other ancillary/miscellaneous operations that support the primary Site operations of electric power generation.⁷³ The Cane Run BESS facility will occupy approximately 14 acres within the north-northwest portion of Cane Run.⁷⁴

⁷⁰ Application at 12.

⁷¹ Cane Run Site Assessment Report at 1-1.

⁷² Cane Run Site Assessment Report at 1-5.

⁷³ Cane Run Site Assessment Report at 1-5.

⁷⁴ Cane Run Site Assessment Report at 2-1.

The proposed project consists of three separate secured areas.⁷⁵ The first is the South Battery Energy Storage Unit Area, an approximately 6.30-acre asphalt pad with surrounding security fence that includes: battery energy storage unit (BESU) enclosures sitting atop concrete pads; medium voltage transformers (MVTs) sitting atop concrete pads; original equipment manufacturer (OEM) Operations and Maintenance(O&M) area; waste disposal building; BESS Facility office trailer; and personnel parking area.⁷⁶ The second area is the North Battery Energy Storage Unit Area, which is an approximately 5.4-acre asphalt pad with surrounding security fence that includes BESU enclosures sitting atop concrete pads and MVTs sitting atop concrete pads.⁷⁷ The third area, the BESS Collector Substation, is an approximately 2.35-acre asphalt pad with surrounding security fence that includes two Main Power Transformers (MPTs); medium voltage circuit breakers; high voltage circuit breakers; medium voltage disconnect switches; high voltage disconnect switches; voltage transformers; surge arrestors; station service transformer; and a control enclosure.⁷⁸

LG&E/KU plans to use lithium-ion battery technology similar to what will be used for the Brown BESS⁷⁹ absent a shift in technology in the battery industry.⁸⁰ LG&E/KU's Project Engineering team will lead LG&E/KU's efforts to develop, permit, and construct

⁷⁵ Cane Run Site Assessment Report at 2-1.

⁷⁶ Cane Run Site Assessment Report at 2-1.

⁷⁷ Cane Run Site Assessment Report at 2-1.

⁷⁸ Cane Run Site Assessment Report at 2-1.

⁷⁹ The Brown BESS was approved in Case No. 2022-00402, Nov 6. 2023, Order at 178.

⁸⁰ Tummonds Direct Testimony at 12.

the Cane Run BESS using an EPC.⁸¹ The power required to charge the Cane Run BESS and the subsequently delivered power will be transmitted via the existing electric transmission infrastructure at Cane Run.⁸² LG&E/KU stated that they do not anticipate any significant system modifications or upgrades will be necessary to charge or transmit power stored in the batteries other than the electric transmission system upgrades onsite to connect the BESS to the existing electrical substation.⁸³

No existing structures will be demolished or removed to accommodate the Cane Run BESS.⁸⁴ LG&E/KU stated that they may elect to relocate existing overhead lines to accommodate construction and to optimize the site layout.⁸⁵

The original timeline for the construction of the Cane Run BESS was as follows: (1) interconnection processes would begin on August 3, 2025, and finish on November 25, 2026, (2) procurement of high voltage equipment, battery modules, and EPC contracting would begin on July 1, 2025, and finish on August 19, 2027; and (3) EPC construction would begin on February 26, 2026, and finish by September 27, 2028. However, following the stipulation and recommendation, LG&E/KU updated its project schedule as follows: (1) interconnection processes would begin on August 3, 2025, and finish on November 25, 2026, (2) procurement of high voltage equipment, battery modules, and EPC contracting would begin on January 26, 2026, and finish on May 21,

⁸¹ Tummonds Direct Testimony at 12.

⁸² Tummonds Direct Testimony at 12.

⁸³ Tummonds Direct Testimony at 13.

⁸⁴ LG&E/KU's response to Staff's First Request, Item 52.

⁸⁵ LG&E/KU's response to Staff's First Request, Item 52.

⁸⁶ LG&E/KU's response to the Attorney General/KIUC's First Request, Item 29(a), Attachment.

2029; and (3) EPC construction would begin on February 16, 2028, and finish by September 27, 2030.⁸⁷

Financing and Accounting Treatment for Brown 12, Mill Creek 6 and Cane Run BESS

LG&E/KU estimated that the construction cost, including related gas and electric transmission work, of Brown 12 and Mill Creek 6 will be \$1.383 billion and \$1.415 billion, respectively.⁸⁸ LG&E/KU stated that the annual operating cost in 2030 dollars for Brown 12 is \$5.1 million in fixed costs and \$1.80/MWh in variable costs.⁸⁹ The annual operating cost in 2031 dollars for Mill Creek 6 is \$4.7 million in fixed costs and \$1.86/MWh in variable costs.⁹⁰ The total projected capital cost for the Cane Run BESS is approximately \$775 million.⁹¹ The annual fixed operating cost in 2028 dollars for the Cane Run BESS is \$25.11/kW-year or approximately \$10 million per year.⁹² The total projected capital cost for the Ghent 2 SCR is approximately \$152 million.⁹³ The annual operating cost in 2028 dollars for the Ghent 2 SCR is \$1.3 million in fixed costs and \$0.41/MWh in variable costs.⁹⁴

⁸⁷ LG&E/KU's response to Staff's Post-Hearing Request, Item 14, Attachment.

⁸⁸ Tummonds Direct Testimony at 10.

⁸⁹ Tummonds Direct Testimony at 10.

⁹⁰ Tummonds Direct Testimony at 10.

⁹¹ Application at 12.

⁹² Tummonds Direct Testimony at 13.

⁹³ Application at 12.

⁹⁴ Tummonds Direct Testimony at 14.

LG&E/KU expects to finance the cost of the proposed facilities with a combination of cash flow and new debt and equity. LG&E/KU stated that the debt is expected to be a combination of short- and long-term debt, in the form of commercial paper notes, loans from affiliates via the money pool, bank loans, first mortgage bonds, or combinations thereof. LG&E/KU explained that the mix of debt and equity used to finance the projects will be determined such that the companies will maintain their strong investment-grade credit ratings. LG&E/KU explained that they will finance these projects with their balanced capital structure both during the construction period and beyond. LG&E/KU stated that they do not seek financing by a specific project, and use all forms of capital to finance the entirety of their ongoing construction projects.

LG&E/KU proposed, during the construction periods of Brown 12, Mill Creek 6, and the Cane Run BESS of approximately five, five, and three years, respectively, to record their investment in these facilities as Construction Work in Progress (CWIP) and accrue an AFUDC using the methodology approved by the Federal Energy Regulatory Commission (FERC). In addition, LG&E/KU requested the approval of regulatory asset treatment for the difference between AFUDC accrued at their weighted average cost of capital (WACC) and AFUDC accrued using the methodology approved by FERC during the construction periods of Brown 12, Mill Creek 6, and the Cane Run BESS, so LG&E/KU

⁹⁵ Direct Testimony of Robert Conroy (Conroy Direct Testimony) at 14.

⁹⁶ Conroy Direct Testimony at 14.

⁹⁷ Conroy Direct Testimony at 14.

⁹⁸ Conroy Direct Testimony at 14.

⁹⁹ Conroy Direct Testimony at 14.

¹⁰⁰ Conroy Direct Testimony at 14.

could recover their actual cost of capital.¹⁰¹ LG&E/KU explained that the AFUDC and related pre-in-service regulatory asset accruals would cease as each asset was placed into service.¹⁰²

Regarding Brown 12, Mill Creek 6, and the Cane Run BESS, LG&E/KU requested regulatory asset treatment for post-in-service carrying costs, operating and maintenance expense, property taxes, investment tax credit amortization, and depreciation expense until such costs are fully reflected in LG&E/KU's retail base rates or an applicable cost recovery mechanism.¹⁰³ LG&E/KU also requested that post-in-service carrying costs be accrued using LG&E/KU's WACC.¹⁰⁴

Ghent 2 SCR, the Environmental Compliance Plan Amendment and Recovery

KU owns Ghent 2 as part of the Ghent Generation Station and KU proposed to add an SCR to the unit. According to the application, the proposal was made to ensure KU's ongoing compliance with ozone National Ambient Air Quality Standards (NAAQS) and the year-round availability of Ghent 2.¹⁰⁵ KU also stated that there are six pollutants addressed by NAAQS, including ozone, and nitrogen oxides (NOx) are a precursor to ozone.¹⁰⁶ According to KU, reductions in permissible ozone levels under Ozone NAAQS require reduced NOx emissions, including from coal-fired electric generating units.¹⁰⁷ KU

¹⁰¹ Application at 2 and Conroy Direct Testimony at 15.

¹⁰² Conroy Direct Testimony at 15.

¹⁰³ Application at 2.

¹⁰⁴ Application at 2.

¹⁰⁵ Direct Testimony of Philip Imber (Imber Direct Testimony) at 1–2.

¹⁰⁶ Imber Direct Testimony at 2–3.

¹⁰⁷ Imber Direct Testimony at 2–3.

alleged that the EPA's 2023 Good Neighbor Plan emissions budgets initially assumed the consistent operation of emissions controls already installed, not the installation of any additional controls.¹⁰⁸

KU argued that beginning in 2026, emissions budgets would assume installation of SCR controls at all coal-fired generating units, regardless of whether units actually have SCRs. 109 Without access to additional NOx emissions allocations, KU's position was the Good Neighbor Plan effectively would have required non-SCR-equipped coal units to cease operating or operate only at very minimal levels during each year's ozone season (currently the months of May through September) beginning in 2026. 110 Although KU had assumed that trading for NOx allowances would allow Ghent 2 to operate as needed through the 2028 ozone season, eventually NOx allocations would likely have become rare because of the Good Neighbor Plan's trading program restrictions (for instance, bank recalibration, dynamic budgeting, variability limits, and backstop limits). 111 KU's position in the application was, without an SCR, Ghent 2 would have to have ceased ozone-season operations no later than 2030 under the Good Neighbor Plan's backstop provision. 112

For construction of the SCR, KU proposed to self-build the system using standard technology to reduce NOx emissions.¹¹³ According to the application, the Project

¹⁰⁸ Imber Direct Testimony at 4.

¹⁰⁹ Imber Direct Testimony at 4.

¹¹⁰ Imber Direct Testimony at 4.

¹¹¹ Imber Direct Testimony at 4–5.

¹¹² Imber Direct Testimony at 4–5.

¹¹³ Tummonds Direct Testimony at 13.

Engineering for KU has constructed SCRs on eight coal-fired generation units.¹¹⁴ KU plan to issue an EPC contract by the end of 2025 with the commencement of construction in August 2026, and commercial operation planned to begin in May 2028.¹¹⁵ According to KU, because the Ghent Generating Station has SCR systems installed on other units, the only physical infrastructure required to build the Ghent 2 SCR will be direct modifications to Ghent 2, and no existing physical infrastructure will be retired or replaced as a result of the Ghent 2 SCR.¹¹⁶

As part of the application consolidated into this matter, KU requested to amend its Environmental Compliance Plan (Compliance Plan). On July 19, 1994, the Commission issued an Order approving a surcharge to allow KU to recover environmental compliance costs.¹¹⁷ The plan has been subsequently amended several times.¹¹⁸

¹¹⁴ Tummonds Direct Testimony at 13.

¹¹⁵ Tummonds Direct Testimony at 13–14.

¹¹⁶ Case No. 2025-00105, Tummonds Direct Testimony at 3.

¹¹⁷ Case No. 93-465, *The Application of Kentucky Utilities Company to Assess a Surcharge Under KRS 278.183 to Recover Costs of Compliance with Environmental Requirements for Coal Combustion Wastes and By-Products* (Ky. PSC July 19, 1994), Order.

¹¹⁸ Case No. 2000-00439, The Application of Kentucky Utilities Company for Approval of an Amended Compliance Plan for Purposes of Recovering the Costs of New and Additional Pollution Control Facilities and to Amend Its Environmental Surcharge Tariff (Ky. PSC Apr. 21, 2001); Case No. 2004-00426, The Application of Kentucky Utilities Company for a Certificate of Public Convenience and Necessity to Construct Flue Gas Desulfurization Systems and Approval of Its 2004 Compliance Plan and Recovery by Environmental Surcharge (Ky. PSC June 20, 2005); Case No. 2006-00206, The Application of Kentucky Utilities Company for a Certificate of Public Convenience and Necessity to Construct a Selective Catalytic Reduction System and Approval of Its 2006 Compliance Plan for Recovery by Environmental Surcharge (Ky. PSC Dec. 21, 2006); Case No. 2007-00178, Application of Kentucky Utilities Company for an Order Authorizing Inclusion of Investment Tax Credits in Calculation of Environmental Surcharge and Declaring Appropriate Ratemaking Methods for Base Rates (Ky. PSC Sept. 10, 2007) (calculation only addressed); Case No. 2009-00197, Application of Kentucky Utilities Company for Certificates of Public Convenience and Necessity and Approval of Its 2009 Compliance Plan for Recovery by Environmental Surcharge (Ky. PSC Dec. 23, 2009); Case No. 2011-00161, Application of Kentucky Utilities Company for Certificates of Public Convenience and Necessity and Approval of Its 2011 Compliance Plan for Recovery by Environmental Surcharge (Ky. PSC Dec. 15, 2011); Case No. 2016-00026, Application of Kentucky Utilities Company for Certificates of Public Convenience and Necessity and Approval of Its 2016 Compliance Plan for Recovery by Environmental Surcharge (Ky. PSC Aug. 8, 2016); Case No. 2017-00483, Electronic

KU requested to amend its Compliance Plan to include Project 45, an SCR system for Ghent 2, and cost recovery for its construction, operate and maintain of the SCR through its Environmental Cost Recovery Surcharge (ECR). 119 According to the application, adding the Ghent 2 SCR will help ensure KU's ongoing compliance with the federal Clean Air Act as amended (CAAA), particularly the U.S. Environmental Protection Agency's (EPA) 2015 National Ambient Air Quality Standards for Ozone (2015 Ozone NAAQS), which the EPA promulgated under its CAAA authority. 120 In addition, KU requested authority to establish a regulatory asset for the customer notice in this matter and then to amortize that asset and recover the cost over twelve months through its ECR Surcharge. 121 KU requested to recover all future administrative costs including notice expenses for the ECR in a similar manner and submitted revised tariff sheets and tariff reporting forms reflecting this change. 122 KU also asked for approval to use its current rate of return as well as the current approved depreciation rates in the ECR calculation. 123 As discussed above, KU requested to amend its Compliance Plan in order to recover the SCR costs through its ECR, as the need for the SCR relates to environmental compliance regulations.

Application of Kentucky Utilities Company for a Certificate of Public Convenience and Necessity and Approval of Amendment to Its 2016 Compliance Plan for Recovery by Environmental Surcharge (Ky. PSC July 9, 2018); and Case No. 2020-00060, Electronic Application of Kentucky Utilities Company for Approval of Its 2020 Compliance Plan for Recovery by Environmental Surcharge (Ky. PSC Sept. 29, 2020).

¹¹⁹ Case No. 2025-00105, Application at 1.

¹²⁰ Case No. 2025-00105, Application at 1.

¹²¹ Case No. 2025-00105, Application at 1.

¹²² Case No. 2025-00105, Application at 1–2, Exhibit AMF-1 and Exhibit AMF 3.

¹²³ Case No. 2025-00105, Application at 1.

LEGAL STANDARD

Under KRS 278.262 "reliability" is defined as "having adequate electric generation capacity to safely deliver electric energy in the quantity, with the quality, and at the time that the utility customer demand." Furthermore, KRS 278.262 defines "resilience" as "having the ability to quickly and effectively respond to and recover from events that compromise grid reliability."

Under KRS 278.030(2) every utility is required to furnish adequate, efficient and reasonable services to its customers. KRS 278.010(14) provides the definition of "adequate service" as follows:

"Adequate service" means having sufficient capacity to meet the maximum estimated requirements of the customer to be served during the year following the commencement of permanent service and to meet the maximum estimated requirements of other actual customers to be supplied from the same lines or facilities during such year and to assure such customers of reasonable continuity of service.¹²⁴

The Commission's standard of review of a request for a CPCN is well settled. Pursuant to KRS 278.020(1), no utility may construct or acquire any facility to be used in providing utility service to the public until it has obtained a CPCN from this Commission. To obtain a CPCN, the utility must demonstrate a need for such facilities and an absence of wasteful duplication. ¹²⁵

"Need" requires

[A] showing of a substantial inadequacy of existing service, involving a consumer market sufficiently large to make it economically feasible for the new system or facility to be constructed or operated.

¹²⁴ KRS 278.010(14).

¹²⁵ Kentucky Utilities Co. v. Pub. Serv. Comm'n, 252 S.W.2d 885 (Ky. 1952).

[T]he inadequacy must be due either to a substantial deficiency of service facilities, beyond what could be supplied by normal improvements in the ordinary course of business; or to indifference, poor management or disregard of the rights of consumers, persisting over such a period of time as to establish an inability or unwillingness to render adequate service. 126

"Wasteful duplication" is defined as "an excess of capacity over need" and "an excessive investment in relation to productivity or efficiency, and an unnecessary multiplicity of physical properties." To demonstrate that a proposed facility does not result in wasteful duplication, the Commission has held that the applicant must demonstrate that a thorough review of all reasonable alternatives has been performed. The selection of a proposal that ultimately costs more than an alternative does not necessarily result in wasteful duplication. Pall relevant factors must be balanced. In *Kentucky Utilities Co. v. Public Service Commission* (Ky. 1952), the Court noted that "a determination of public convenience and necessity requires both a finding of the need for a new service system or facility from the standpoint of service requirements, and an absence of wasteful duplication resulting from the construction of the new system or facility."

¹²⁶ Kentucky Utilities Co. v. Public Service Commission, 252 S.W.2d 885, 890 (Ky. 1952).

¹²⁷ Kentucky Utilities Co. v. Public Service Commission, 252 S.W.2d 885, 890 (Ky. 1952).

¹²⁸ Case No. 2005-00142, *Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for the Construction of Transmission Facilities in Jefferson, Bullitt, Meade, and Hardin Counties, Kentucky* (Ky. PSC Sept. 8, 2005).

¹²⁹ See Kentucky Utilities Co. v. Pub. Sew. Comm'n, 390 S.W.2d 168, 175 (Ky. 1965). See also Case No. 2005-00089, Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity for the Construction of a 138 kV Electric Transmission Line in Rowan County, Kentucky (Ky. PSC Aug. 19, 2005)

¹³⁰ Case No. 2005-00089, August 19, 2005 Order at 6.

¹³¹ Kentucky Utilities Co. v. Public Service Commission, 252 S.W.2d 885, 890 (Ky. 1952).

In *Kentucky Utilities Co. v. Pub. Serv. Comm'n* (Ky. 1965),¹³² the Court of Appeals noted that "the question of whether the consumer market in the immediately foreseeable future will be sufficiently large to make it economically feasible for a proposed system or facility to be constructed. . . . is not one which must be answered with absolute certainty; it is sufficient that there is a reasonable basis of anticipation."¹³³

Pursuant to KRS 278.020(1)(e), unless a CPCN is exercised within one year from the date the CPCN is granted by order, the authority conferred by the issuance of a CPCN, is void. Additionally, KRS 278.020(1)(e) further provides that the beginning of any new construction in good faith within the time prescribed by the Commission and the "prosecution" of the construction with "reasonable diligence" constitutes an exercise of authority under the CPCN.

The site compatibility certificate is governed, in part, by KRS 278.216. KRS 278.216(1) states that "no utility shall begin the construction of a facility for the generation of electricity capable of generating in aggregate more than ten megawatts (10 MW) without having first obtained a site compatibility certificate from the Commission." KRS 278.216(3) states that the Commission may deny an application for a site compatibility certificate or require reasonable mitigation of impacts disclosed in the site assessment report, but the Commission shall, in no event, order relocation of the facility.

KRS 278.216(2) states that:

An application for a site compatibility certificate shall include the submission of a site assessment report as prescribed in

¹³² Kentucky Utilities Co. v. Pub. Serv. Comm'n, 390 S.W.2d 168, 172 (Ky. 1965)

¹³³ Kentucky Utilities Co. v. Public Service Commission, 252 S.W.2d 885, 890 (Ky. 1952).

KRS 278.708(3) and (4), except that a utility which proposes to construct a facility on a site that already contains facilities capable of generating ten megawatts (10MW) or more of electricity shall not be required to comply with setback requirements established pursuant to KRS 278.704(3).

The requirement that a utility file a site assessment report (SAR), like those filed before the siting board when a merchant generator seeks to obtain a construction certificate, indicates that the legislature intended for the Commission to consider the factors discussed in the SAR when determining whether to approve a site compatibility certificate or impose mitigation measures. However, KRS 278.216(2) also states that "[a] utility may submit and the commission may accept documentation of compliance with the National Environmental Policy Act (NEPA) rather than a site assessment report," which indicates that the Commission is able to consider other factors, at least compliance with NEPA, in lieu of at least certain factors in the SAR.

KRS 278.708(3) and (4), which are written in reference to merchant generating facilities as opposed to utility owned facilities, state that the SAR shall include (1) a detailed description of the proposed site, including surrounding land uses, legal boundaries of the proposed site, proposed access control to the site, the location of facility buildings, transmission lines, and other structures, the location of use of access ways, internal roads, and railways, compliance with applicable setback requirements as provided under KRS 278.704(2), (3), (4), or (5), and evaluation of the noise levels expected to be produced by the facility; (2) an evaluation of the compatibility of the facility

¹³⁴ See Case No. 2014-00133, Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for Site Compatibility Certificates for the Construction of a Combined Cycle Combustion Turbine at the Green River Generating Station and a Solar Photovoltaic Facility at the E.W. Brown Generating Station (Ky. PSC Dec. 19, 2014), Order at 2–3 (applying factors required to be discussed in the SAR when granting the site compatibility certificate for a solar facility).

with scenic surroundings; (3) potential changes in property values and land use resulting from the siting, construction, and operation of the proposed facility for property owners adjacent to the site; (4) evaluation of anticipated peak and average noise levels associated with the facility's construction and operation at the property boundary; (5) the impact of the facility's operation on road and rail traffic to and within the facility, including anticipated levels of fugitive dust created by the traffic and any anticipated degradation of roads and lands in the vicinity of the facility; and (6) any mitigating measures to be suggested by LG&E/KU to minimize or avoid adverse effects identified in the SAR.

In relevant part, KRS 278.704(2) states that:

For purposes of applications for site compatibility certificates pursuant to KRS 278.216, only the exhaust stack of the proposed facility to be actually used for coal or gas-fired generation ... shall be required to be at least one thousand (1,000) feet from the property boundary of any adjoining property owner and two thousand (2,000) feet from any residential neighborhood, school, hospital, or nursing home facility.

Notably, the reference to site compatibility certificates required pursuant to KRS 278.216, which are only required for utilities as defined by KRS 278.010, indicates that the legislature intended for KRS 278.704(2) to establish explicit setback requirements for utilities that must be met in order to obtain a site compatibility certificate. However, KRS 278.216(4) allows the Commission to:

[g]rant a deviation from any applicable setback requirements on a finding that the proposed facility is designed and located to meet the goals of this section and KRS 224.10-280 [cumulative environmental assessment], 278.010 [definitions statute], 278.212 [cost of transmission upgrades for interconnection by merchant generators], 278.214 [governing interruption of service], 278.218 [ownership change statute], and 278.700 to 278.716 [siting board statutes] at a distance

closer than those provided by the applicable setback requirements.

Thus, while KRS 278.216 generally allows other factors included in the SAR to be weighed to determine whether to grant a site compatibility certificate, KRS 278.704(2) establishes explicit setback requirements that must be met for a utility to obtain a site compatibility certificate, unless the utility can establish that it is entitled to a deviation pursuant KRS 278.216(4).

KRS 278.704(3) states that local planning and zoning commissions may establish setback requirements from a property boundary, residential neighborhood, school, hospital, or nursing home facility, which shall have primacy over statutory setback requirements, "[i]f the merchant electric generating facility is proposed to be located in a county or a municipality with a planning and zoning commission."

In addition, KRS 278.183 states:

a utility shall be entitled to the current recovery of its costs of complying with the Federal Clean Air Act as amended and those federal, state, or local environmental requirements which apply to coal combustion wastes and by-products from facilities utilized for production of energy from coal in accordance with the utility's compliance plan as designated in subsection (2) of this section.

KRS 278.220 provides that the Commission may establish a uniform system of accounts (USoA) for utilities and in LG&E/KU's case, that the system of accounts shall conform as nearly as practicable to the system adopted or approved by the Federal Energy Regulatory Commission (FERC). The FERC USoA provides for regulatory assets, or the capitalization of costs that would otherwise be expensed but for the actions of a rate regulator. It must be probable that the utility will recover approximately equal

revenue through the inclusion of these costs for ratemaking purposes, with the intent to recover the previously incurred cost not a similar future cost.

The Commission has previously considered and ruled upon expenses that qualify for regulatory asset treatment; the Commission has approved regulatory assets when a utility has incurred (1) an extraordinary, nonrecurring expense which could not have reasonably been anticipated or included in the utility's planning; (2) an expense resulting from a statutory or administrative directive; (3) an expense in relation to an industry sponsored initiative; or (4) an extraordinary or nonrecurring expense that over time will result in a saving that fully offsets the cost. Additionally, the Commission has directed utilities to seek Commission approval before recording regulatory assets, including the appropriate timing for applications seeking such approval. Outside of the prescribed categories of expenses that qualify for regulatory asset treatment, utilities have established regulatory assets for certain timing and accounting differences, such as over or under-recoveries for riders.

STIPULATION AND RECOMMENDATION

On July 29, 2025, LG&E/KU, the Attorney General, KIUC, SREA, and KCA (Signing Parties) entered into a stipulation and recommendation, attached to this Order as

¹³⁵ Case No. 2008-00436, Application of East Kentucky Power Cooperative, Inc. for an Order Approving Accounting Practices to Establish a Regulatory Asset Related to Certain Replacement Power Costs Resulting from Generation Forced Outages (Ky. PSC Dec. 23, 2008), Order at 3–4.

¹³⁶ Case No. 2016-00180, Application of Kentucky Power Company for an Order Approving Accounting Practices to Establish Regulatory Assets and Liabilities Related to the Extraordinary Expenses Incurred by Kentucky Power Company in Connection with the Two 2015 Major Storm Events (Ky. PSC Nov. 3, 2016), Order at 9.

¹³⁷ Case No. 2016-00180, Order (Ky. PSC Dec. 12, 2016) at 5.

Appendix A (Stipulation).¹³⁸ All Signing Parties stated entering into the Stipulation would not be deemed in any respect to constitute an admission that any computation, formula, allegation, assertion or contention made by any other party in this case is true or valid.¹³⁹ The Signing Parties also agreed that the Stipulation represented a fair, just and reasonable resolution of the issues addressed therein and requested that the Commission approve the Stipulation in full.¹⁴⁰ Louisville Metro and LFUCG¹⁴¹ took no position on the Stipulation and did not oppose it at the hearing.¹⁴² The Joint Intervenors¹⁴³ and Sierra Club¹⁴⁴ did not join the Stipulation.¹⁴⁵ Along with the Stipulation, LG&E/KU submitted supporting testimony.¹⁴⁶ A summary of the provisions contained in the Stipulation are as follows:

- Section 1.1. The Commission should issue an order granting LG&E/KU Certificates of Public Convenience and Necessity (CPCNs) and site compatibility certificates pursuant to KRS 278.216 as requested in LG&E/KU's application in Case No. 2025-00045, i.e., without condition or modification, for the following:
 - An approximately 645 MW net summer rating natural gas combined cycle combustion turbine at KU's E.W. Brown Generating Station (Brown 12), including related gas and electric transmission construction at the station;
 - An approximately 645 MW net summer rating natural gas combined cycle combustion turbine at LG&E's Mill Creek Generating Station (Mill Creek 6),

¹³⁸ Stipulation Testimony, Exhibit 1 at 1.

¹³⁹ Stipulation Testimony, Exhibit 1 at 10.

¹⁴⁰ Stipulation Testimony, Exhibit 1 at 10.

¹⁴¹ Louisville Metro and LFUCG Post-Hearing brief at 5–6.

¹⁴² Stipulation Testimony, Exhibit 1 at 2.

¹⁴³ Joint Intervenors' Post-Hearing Brief at 56.

¹⁴⁴ Sierra Club's Post-Hearing Brief at 2.

¹⁴⁵ Stipulation Testimony, Exhibit 1 at 2.

¹⁴⁶ Joint Stipulation Testimony of Lonnie Bellar and Robert Conroy (filed July 29, 2025).

including related gas and electric transmission construction at the station; and

- A SCR system at KU's Ghent Generating Station for Ghent 2 (Ghent 2 SCR).
- Section 1.2. LG&E/KU will withdraw their request for the Cane Run BESS without prejudice in this case, but they may re-file a CPCN Application for Cane Run BESS, or a substitute for it, at any time, which would be supported by a competitive procurement process.
- Section 1.3. The Parties agree that one sufficient Mill Creek 6 cost recovery review metric (not a precondition) is having a total of at least 500 MW of executed electric service agreements under LG&E/KU's proposed Rate Extremely High Load Factor (EHLF) (entered into by the in-service date for Mill Creek 6 in 2031. Support for Mill Creek 6 cost recovery could also be shown in other ways, including, but not limited to, non-Rate EHLF load growth, an increase in off-system sales, the acquisition of municipal or other load, replacing lost capacity if the Ohio Valley Electric Corporation's coal plants close, selling to other utilities or data centers in Kentucky, or selling part of Mill Creek 6 capacity.
- Section 1.4. LG&E/KU agree to seek Commission approval for any long-term (i.e., longer than one year) sale of capacity, energy, or both to another Kentucky utility for the purpose of serving one or more Kentucky data centers not in LG&E/KU's service territories.
- Section 1.5. The Commission should approve the following deferral accounting treatment for LG&E/KU:
 - As requested in the LG&E/KU's application in Case No. 2025-00045 and without condition or modification, LG&E/KU will establish regulatory asset(s) for the difference between allowance for funds used during construction (AFUDC) accrued at LG&E/KU's weighted average cost of capital and AFUDC accrued using the methodology approved by the Federal Energy Regulatory Commission during the construction periods of Brown 12 and Mill Creek 6.
 - LG&E/KU will withdraw their request for a regulatory asset for post-in service carrying costs (PISCC), operating and maintenance expense, property taxes, investment tax credit amortization, and depreciation expense as requested in their Application.
- Section 1.6. LG&E/KU will provide semi-annual in-person construction, economic development, and load forecast updates to the Commission beginning in the second quarter of 2026 and ending in the second quarter of 2032. All Case No. 2025-00045 intervenors may attend such update meetings.

- Section 2.1. The Commission should authorize LG&E to recover all non-fuel costs of Mill Creek 6 through a new Adjustment Clause Mill Creek 6.
 - o Costs recovered through Adjustment Clause MC6 will be all non-fuel costs of Mill Creek 6 from its in-service date through its retirement date, including without limitation depreciation, a weighted average cost of capital carrying cost using the most recently approved base rate return on equity appropriately grossed up for income taxes, and all Mill Creek 6 non-fuel operating expenses (including without limitation property taxes). Property taxes for the first year shall be based on the CWIP balance at the first of the year, not the in-service cost. Depreciation shall be based on the same service life and treatment of interim retirements, interim net salvage, and terminal net salvage approved by the Commission for Brown 12 in a comprehensive base rate proceeding. During each expense month, the weighted average cost of capital will apply to the undepreciated capital cost of Mill Creek 6 (including any future plant additions) and regulatory asset balance for AFUDC, adjusted for accumulated deferred income taxes without any reduction for asset net operating loss accumulated deferred income taxes.
 - The first expense month for Mill Creek 6 cost recovery through Adjustment Clause MC6 will be the month in which Mill Creek 6 goes in service, and the last expense month will be the month in which Mill Creek 6 retires. Cost recovery for any expense month will be billed in the second month thereafter (the billing month), e.g., for a January expense month, the following March will be the billing month.
 - Cost recovery through Adjustment Clause MC6 will be partially and temporarily offset by certain revenues LG&E collects beginning with the inservice date of Mill Creek 6 and ending with the first date on which new electric base rates take effect for LG&E following the in-service date of Mill Creek 6. Such offsetting revenues will consist only of Maximum Load Charge revenues (i.e., all demand charge revenues, including all base, intermediate, and peak demand charge revenues for rate schedules that include such demand charge components) incremental to those then embedded in base rates from (1) customers taking service under Rate EHLF and (2) all Eligible Data Center customers as defined in Section 2.2 (all such revenues are "Offsetting Revenues"). As with cost recovery under Adjustment Clause MC6, Offsetting Revenues collected in an expense month will be credited against costs to be recovered under Adjustment Clause MC6 in the corresponding Billing Month.
 - The Commission should approve all necessary regulatory deferral accounting required for the operation of Adjustment Clause MC6, including all regulatory asset and liability accounting required to address the delay between each expense month and billing month.

- Adjustment Clause MC6 will use the Group 1 and Group 2 methodology for revenue allocation used in LG&E's Environmental Cost Recovery Surcharge.
- Section 2.2. For purposes of the Mill Creek 6 Cost Recovery Mechanism, an "Eligible Data Center" is:
 - Any centralized facility that is used primarily or exclusively for electronic information services such as the management, storage, processing, and dissemination of electronic data and information (including mining of cryptocurrency) through the use of computer systems, servers, networking equipment, and related components (each, an "Eligible Data Center") where such Eligible Data Center meets the following requirements:
 - The expected or actual peak of the real-time energy demand of the Eligible Data Center is between 50 MVA and 100 MVA; and
 - The expected or actual monthly load factor for the Eligible Data Center is seventy-five percent (75 percent) or greater.
- Section 3.1. Regarding Rate EHLF, which LG&E/KU proposed in their pending rate proceedings in Case Nos. 2025-00113 and 2025-00114, the Parties agree to the following:
 - In Case Nos. 2025-00113 and 2025-00114, LG&E/KU will seek approval to apply Rate EHLF only to new customers, and all Parties will support that proposal; and
 - LG&E/KU will file all Rate EHLF electric service agreements with the Commission.
- Section 4.1. LG&E/KU will seek necessary environmental approvals to allow Mill Creek 2 to continue to operate until Mill Creek 6 goes in service.
- Section 4.2. The Parties agree, and ask and recommend the Commission's final order in this proceeding to explicitly state, that LG&E/KU's existing authority to retire Mill Creek 2 suffices for a later retirement. For avoidance of doubt, LG&E/KU are not withdrawing their existing Mill Creek 2 retirement authority.
- Section 4.3. If LG&E/KU receive the necessary environmental approvals and the Commission's final order in this case affirms LG&E/KU's existing authority to delay Mill Creek 2's retirement until Mill Creek 6's in-service date, LG&E/KU will extend Mill Creek 2's life and continue to seek to maximize its value to customers as it does today, for instance, through economic dispatch and off-system sales.

- Section 4.4. The Commission should approve Adjustment Clause MC2 (attached hereto as Stipulation Exhibit 2), which is similar to LG&E's Adjustment Clause Environmental Cost Recovery Surcharge (ECR) and will provide recovery of the incremental Mill Creek 2 stay-open costs LG&E incurs that are not recovered through base rates, including incremental capital expenditures and other costs incurred specifically for this purpose after the date of this Stipulation. The Parties agree the Commission should approve all necessary regulatory deferral accounting required for the operation of Adjustment Clause MC2, including all regulatory asset and liability accounting required to address the delay between each expense month and billing month.
- Section 4.5. As part of their 2027 Integrated Resource Plan filing, LG&E/KU will provide an analysis of the continued operation of Mill Creek 2 beyond 2031. If the analysis determines continued operation of Mill Creek 2 is economical, LG&E/KU will take the necessary steps to obtain the required approvals to allow Mill Creek 2 to operate beyond 2031. One of the required approvals would be obtaining Commission affirmation that LG&E/KU's existing Mill Creek 2 retirement authority would extend beyond the in-service date of Mill Creek 6. If such additional life extension would be economical and LG&E/KU were able to obtain all required approvals, all such life extension costs would be recovered through Adjustment Clause MC2.
- Section 4.6. Notwithstanding anything contained herein to the contrary, the Parties agree that the Stipulation and Recommendation does not impair, limit, or otherwise interfere with the jurisdiction of the Louisville Metro Air Pollution Control District (LMAPCD).
- Section 5.1. LG&E/KU commit to issue a request for proposals (RFP) for renewable energy and energy storage by mid-2026 seeking to procure energy and capacity of utility scale solar, wind, storage, and/or hybrid resources.
- Section 5.2. Prior to issuing the RFP, LG&E/KU agree to give intervenors to this proceeding the opportunity to provide feedback on the RFP.
- Section 5.3. For any cost-effective resources or those needed to serve customer requests (for instance, Green Tariff Option 3) identified in the RFP responses, LG&E/KU will complete contracting (with appropriate regulatory-out provisions) by mid-2028, and apply for Commission approval by December 31, 2028, seeking approval for cost-effective resources.
- Section 6.1. Beginning in the first quarter of 2026 and ending in the first quarter of 2031, LG&E/KU will file annual reports on their participation in the Southeast Energy Exchange Market (SEEM), including company-specific cost and benefit assessments and underlying data.

 Section 7.1. Except as modified in this Stipulation and the exhibits attached hereto, all other relief requested in LG&E/KU's filings in Case Nos. 2025-00045 and 2025-00105 should be approved as filed.

STIPULATION DISCUSSION AND FINDINGS

As the Commission has noted on numerous occasions over the course of the last several years, demand for electricity is currently in a state of flux, with high-projected demand coupled with significant uncertainty about whether, or when, that demand will materialize. Nationally, projections from regional transmission organizations (RTOs) such as PJM Interconnection LLC (PJM) and the Midcontinent Independent System Operator, Inc. (MISO) project significant, perhaps unprecedented, growth in electrical demand for capacity and energy driven largely by Al infrastructure associated with data centers. For example, PJM's 2025 long-term load forecast projects nearly 30 GW of new load will enter its territory by 2030.¹⁴⁷ Likewise, MISO expects load growth in every local resource zone (LRZ) in its territory, but cautioned that there is a "wide range of potential outcomes" possible. 148 The resulting high level of uncertainty complicates the already often arduous long-term planning process that utilities rely on to make costly generation and transmission decisions. This planning process requires utilities to balance their mandate to serve current ratepayers who will be impacted by decisions to construct new generation and transmission infrastructure against their need to have sufficient headroom to reliably serve new load as it materializes on the grid for decades to come.

https://insidelines.pjm.com/2025-long-term-load-forecast-report-predicts-significant-increase-in-electricity-demand/; https://www.pjm.com/-/media/DotCom/library/reports-notices/load-forecast/2025-load-report.pdf.

¹⁴⁸ https://cdn.misoenergy.org/MISO%20Long-Term%20Load%20Forecast%20Whitepaper December%202024667166.pdf

Because a single data center, especially one qualifying as a hyper-scaler, has the potential to materially impact a utility's load forecast, and the reliability of its resources, data centers have garnered significant public attention. Of course, the risks associated with data centers must be weighed against potential benefits; and the Stipulating Parties certainly recognized the benefits to Kentucky cities and counties if they are able to secure a data center customer. In fact, In HB 775, the General Assembly expanded its tax incentives for qualifying data centers significantly, providing a clear signal of its intent to compete with other states for data center infrastructure. While Kentucky is certainly not unique among states in creating favorable business environments for data center customers. The legislation cannot be ignored or disregarded.

With this background in mind, the Commission turns to the proposed Stipulation agreement in this case to which LG&E/KU, the Attorney General, KIUC, KCA, and SREA, have joined; not opposed by LFUGC/Louisville Metro; but not joined by the four entities coordinating as Joint Intervenors nor Sierra Club.

When viewing the proposed stipulation holistically against both the national electric demand environment, and the economic growth Kentucky is currently experiencing, the Commission finds the proposed stipulation compelling. As the record in this case shows, LG&E/KU, and the Commonwealth more broadly, have experienced rapid growth in a

¹⁴⁹ And indeed, as recent news makes clear, public sentiment regarding data centers appears divided and corporations attempting to locate data center facilities in the Commonwealth have experienced meaningful pushback. For example, the Oldham County data center project, originally identified in this case by LG&E/KU under its *nom de guerre* "Project Lincoln," was recently withdrawn following significant public pushback. See, https://www.wlky.com/article/data-center-oldham-county-scrapped/65291482.

¹⁵⁰ See the Direct Testimony of Elizabeth Stanton (Stanton Direct Testimony) at 15, FN. 22.

¹⁵¹ Additionally, the Commission notes with pride that Kentucky has experienced historic levels of investment across broad ranges of industries in the Commonwealth.

number of industries. The Commission agrees with the signors of the proposed stipulation that ensuring sufficient capacity to serve this influx of growth will be an integral part of the Commonwealth's success in that endeavor. This is especially true when considering the increasing strain on neighboring systems such as PJM and MISO. Moreover, because the Commission finds it reasonable that meaningful economic growth will continue, approving both NGCCs and the SCR system on Ghent 2 at this time ensures that ratepayers will not be faced with inflated construction prices for baseload generation down the road.

The Commission remains a creature of statute, and its authority is limited to the powers granted it by the General Assembly. As part of that mandate, the Commission must ensure that all applications for CPCNs meets the requirements of KRS 278.020. And while the Commission generally finds the proposed stipulation appropriate, it is unable to approve the stipulation without modification. In doing so, the Commission recognizes the good faith efforts of all parties involved in the stipulation, as well as the dissenting views of non-joining intervening parties, in providing a fulsome record of all material issues in this case. Therefore, as will be explained in detail below, the Commission approves the proposed stipulation with modifications.

BRIEF ARGUMENTS

LG&E/KU's Arguments

LG&E/KU argued that by approving the proposed Stipulation, the Commission will satisfy its statutory responsibilities, support reliable and lowest reasonable cost service for existing and new customers, and help power Kentucky's vital economic growth. 152

¹⁵² LG&E/KU's Post-Hearing Brief (filed Sept. 5, 2025) at 1–2.

LG&E/KU argued that the stipulation-recommended resources more than satisfy the need and lack of wasteful duplication standards for CPCNS and the Commission has full authority in this proceeding to consider and approve the proposed adjustment clauses as well as consider and confirm LG&E/KU's authority to delay the previously approved retirement of Mill Creek 2 without additional Commission approval.¹⁵³

LG&E/KU highlighted that the two new NGCC units will provide low-cost power to help meet the needs of all customers and power Kentucky's economic growth. LG&E/KU argued that the SCR on Ghent 2 is necessary to reduce NOx emissions and thereby ensure ongoing compliance with the applicable ozone NAAQs promulgated under the federal Clean Air act, keeping Ghent 2 available year-round to help meet all customers' needs. 155

LG&E/KU highlighted the legislation from 2024 seeking to attract data centers to Kentucky through sales incentives.¹⁵⁶ LG&E/KU stated that this enormous and growing data center interest is a key reason why LG&E/KU believe there is abundant evidence to satisfy the CPCN need standard regarding the Stipulation-recommended resources.¹⁵⁷

LG&E/KU also argued that another compelling reason there is a clear need for the Stipulation-recommended resources is the recent explosion in non-data-center economic development load growth and cited to examples of announced projects throughout the

¹⁵³ LG&E/KU's Post-Hearing Brief at 3.

¹⁵⁴ LG&E/KU's Post-Hearing Brief at 6.

¹⁵⁵ LG&E/KU's Post-Hearing Brief at 7.

¹⁵⁶ LG&E/KU's Post-Hearing Brief at 14.

¹⁵⁷ LG&E/KU's Post-Hearing Brief at 14.

Commonwealth.¹⁵⁸ LG&E/KU also cited to the Commission's final order approving a CPCN for Trimble County 2, stating it provides a useful guide for the Commission in this case for granting the CPCN and then monitoring the utilities' progress and use of the authority to construct and provides another reason the Commission should approve the stipulated CPCNs and site compatibility certificates.¹⁵⁹

LG&E/KU also stated that one of the many reasons the Commission may confidently grant the Stipulation recommended CPCNs is that receiving a CPCN does not constitute Commission approval for cost recovery; it does not require the Commission to find all CPCN-related expenditures to be reasonable or prudent. LG&E/KU argued that the Commission can confidently grant the stipulated CPCNs and site compatibility certificates because for at least two decades LG&E/KU have proven their prudence by not building CPCN-approved facilities when it was not least-cost to do so. LG&E/KU highlighted that this case is not about the merits of data centers; it is about serving all customers and powering Kentucky's bright economic future.

On September 17, 2025, LG&E/KU filed their post-hearing reply brief, in which they rebutted the arguments of Sierra Club and Joint Intervenors. 163

¹⁵⁸ LG&E/KU's Post-Hearing Brief at 13–15.

¹⁵⁹ LG&E/KU's Post-Hearing Brief at 27. See also Case No. 2004-00507, Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity and a Site Compatibility Certificate for the Expansion of the Trimble County Generating Station (Ky. PSC Nov. 1, 2005).

¹⁶⁰ LG&E/KU's Post-Hearing Brief at 29.

¹⁶¹ LG&E/KU's Post-Hearing Brief at 30.

¹⁶² LG&E/KU's Post-Hearing Brief at 40.

¹⁶³ LG&E/KU's Reply Brief (filed Sept. 17, 2025).

Attorney General's Arguments

The Attorney General argued that the stipulation is a good deal for ratepayers because it allows for new economic development load to be served on reasonable terms while protecting existing ratepayers from the potential harms caused by that new load. 164 The Attorney General argued that the Stipulation contains several provisions that benefit existing ratepayers; a few key ones are the addition of a cost recovery metric, Adjustment Clause recovery with an offset for data center revenues, and new tariffs for certain data center load. 165 The Attorney General stated that LG&E/KU have demonstrated a need for new resources with Brown 12, Mill Creek 6, and the Ghent 2 SCR. 166 The Attorney General argued that states with sufficient generation will be at an advantage over those states without it and that this Stipulation ensures that Kentucky will not be left behind. 167

On September 17, 2025, the Attorney General filed a post hearing reply brief, in which he rebutted the arguments of Sierra Club and Joint Intervenors. 168

KIUC's Arguments

KIUC argued that the Stipulation sets forth a fair, just, and reasonable resolution of this matter and should be approved without modification. KIUC stated that the generation resource portfolio recommended within the Stipulation addresses LG&E/KU's

¹⁶⁴ Attorney General's Post-Hearing Brief (filed Sept. 5, 2025) at 2.

¹⁶⁵ Attorney General's Post-Hearing Brief at 2.

¹⁶⁶ Attorney General's Post-Hearing Brief at 6.

¹⁶⁷ Attorney General's Post-Hearing Brief at 6.

¹⁶⁸ Attorney General's Reply Brief (filed Sept. 17, 2025).

¹⁶⁹ KIUC's Initial Brief (filed Sept. 5, 2025) at 4.

anticipated capacity needs through 2032 without resulting in wasteful duplication.¹⁷⁰ Additionally, KIUC averred the Stipulation aligns with the Commission's stated preference for Kentucky utilities having "steel in the ground," and Kentucky's legislative objectives of supporting future economic development and encouraging the location of data centers within the Commonwealth.¹⁷¹

KIUC argued that CPCNs recommended in the Stipulation are necessary to address the significant and unprecedented load growth expected in the LG&E/KU service territories from 2025 to 2032 and highlighted the load analysis.¹⁷²

KIUC supported the Stipulation's recommendations relating to regulatory asset treatment noting that this approach is a reasonable compromise that benefits customers since AFUDC is a lower cost to customers than CWIP in rate base on both a nominal basis and a present value basis.¹⁷³ KIUC also supported the EHLF tariff provisions.¹⁷⁴

On September 17, 2025, KIUC filed a post-hearing reply brief in which it rebutted the arguments of Sierra Club and Joint Intervenors.¹⁷⁵

KCA's Arguments

KCA argued that extending the life of Mill Creek 2 benefits LG&E/KU's ratepayers and the Commission, LG&E/KU, and the intervenors to see how load develops in the near

¹⁷⁰ KIUC's Initial Brief at 4.

¹⁷¹ KIUC's Initial Brief at 4.

¹⁷² KIUC's Initial Brief at 6.

¹⁷³ KIUC's Initial Brief at 18.

¹⁷⁴ KIUC's Initial Brief at 18.

¹⁷⁵ KIUC's Reply Brief (filed Sept 17, 2025).

term, and also provides flexibility.¹⁷⁶ KCA argued that KRS 278.264, as well as the Commission's final Order in Case No. 2022-00402, provide authority for LG&E/KU to delay the retirement of Mill Creek 2 which is prudent in light of potential load growth.¹⁷⁷

KCA argued that the Stipulation-recommended resources are reasonable lowest cost options and the CPCN analyses have shown Brown 12, Mill Creek 6, and the Ghent 2 SCR are least-cost across a wide range of fuel-price, load, and environmental regulatory scenarios.¹⁷⁸ KCA stated that those analyses also considered all reasonable alternatives, fully satisfying the CPCN lack-of-wasteful-duplication standard.¹⁷⁹

On September 17, 2025, KCA filed a post hearing reply brief, in which it rebutted the arguments of Sierra Club and Joint Intervenors. 180

SREA's Arguments

SREA highlighted that the withdrawal of the Cane Run BESS CPCN request, without prejudice is lawful and reasonable. SREA highlighted the testimony of its expert, Benjamin Smith, and his position that "that the Commission require LG&E/KU to study and consider competitively procured resources as LG&E/KU contend with increases in demand and to further diversify the generation portfolio." SREA also

¹⁷⁶ KCA's Initial Brief at 3.

¹⁷⁷ KCA's Initial Brief at 4.

¹⁷⁸ KCA's Initial Brief at 7.

¹⁷⁹ KCA's Initial Brief at 7.

¹⁸⁰ KCA's Reply Brief (filed Sept 17, 2025).

¹⁸¹ SREA's Initial Brief (filed Sept. 5, 2025) at 6.

¹⁸² SREA's Initial Brief at 7 (citing the Direct Testimony of Benjamin Smith (Simth Direct Testimony) at 3 and 4).

argued that LG&E/KU's commitment to increased transparency and shareholder communication, as well as the SEEM reporting requirement is lawful and reasonable. 183

SREA believed that the proposed Stipulation and Recommendation is based upon credible evidence in the record and supports the issuance of CPCNs for these facilities.¹⁸⁴ SREA also argued the life extension for Mill Creek 2 and the Mill Creek 2 and 6 Adjustment Clauses are properly before the Commission and ripe for decision.¹⁸⁵

On September 17, 2025, SREA filed a post-hearing reply brief, responding to party arguments, including the arguments of Sierra Club and Joint Intervenors. 186

Louisville Metro/LFUCG Arguments

Louisville Metro/LFUCG stated that they support the Stipulation's recognition that no agreement proposed by the parties would "impair, limit, or otherwise interfere with the jurisdiction of the Louisville Metro Air Pollution Control District (LMAPCD). Louisville Metro/LFUCG explained that the Stipulation's acknowledgment of the LMAPCD recognizes both the risk of pollution that fossil-fuel electric generation poses, and formally affirms the jurisdiction of the body tasked with enforcing regulations to reduce that risk. All electric generating facilities that emit air pollutants in Jefferson County must receive a permit from the LMAPCD. LG&E will need to revise its Mill Creek 6 construction permit

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¹⁸³ SREA's Initial Brief at 7–9.

¹⁸⁴ SREA's Initial Brief at 17.

¹⁸⁵ SREA's Initial Brief at 17–18.

¹⁸⁶ SREA's Reply Brief (filed Sept. 17, 2025).

¹⁸⁷ Louisville Metro/LFUCG's Initial Brief at 2.

¹⁸⁸ Louisville Metro/LFUCG's Initial Brief at 2.

¹⁸⁹ Louisville Metro/LFUCG's Initial Brief at 2.

application should Mill Creek 2 continue to operate after Mill Creek 6 comes online. The LMAPCD is an independent body, and Louisville Metro and LFUCG stated they do not have authority to make any assertions on its behalf. However, Louisville Metro/LFUCG believe it would be difficult for Mill Creek 2, with its current environmental control systems, to continue operation after Mill Creek 6 comes online.

Louisville Metro/LFUCG argued that the Commission ultimately has plenary authority to approve all parts of the Application—those included in the initial Application and those contained in the Stipulation.¹⁹³ Louisville Metro/LFUCG reiterated that they take no stance in support or opposition to the Application or the proposed Stipulation.¹⁹⁴ Should the Commission approve the Stipulation or LG&E/KU's application, as filed, Louisville Metro/LFUCG encouraged the Commission to expressly recognize the permitting authority of the LMAPCD and ensure cost-recovery safeguards for ratepayers in its decision.¹⁹⁵

Louisville Metro/LFUCG did not file a reply brief.

Joint Intervenors' Arguments

Joint Intervenors argued that the Commission should reject LG&E/KU's invitation to go all-in on speculative data center load growth and instead take a more reasoned

¹⁹⁰ Louisville Metro/LFUCG's Initial Brief at 3.

¹⁹¹ Louisville Metro/LFUCG's Initial Brief at 3.

¹⁹² Louisville Metro/LFUCG's Initial Brief at 2.

¹⁹³ Louisville Metro/LFUCG's Initial Brief at 5.

¹⁹⁴ Louisville Metro/LFUCG's Initial Brief at 5–6.

¹⁹⁵ Louisville Metro/LFUCG's Initial Brief at 6.

approach that relies on actual, demonstrable, and verifiable need prior to approval of new resources. 196

Joint Intervenors first argued that LG&E/KU's evidence in support of the Mill Creek 6 unit is insufficient, and the Commission should deny the requested CPCN. Joint Intervenors averred that LG&E/KU have not presented clear and satisfactory evidence that Mill Creek 6 is needed, that constructing three NGCC units would not result in wasteful duplication, or that another combined cycle gas plant is a necessary part of a least-cost, reliable portfolio going forward.

Joint Intervenors also averred that LG&E/KU have also failed to fully assess reasonable alternatives to their proposed resources, a necessary component of avoiding wasteful duplication. Specifically, Joint Intervenors argued that LG&E/KU did not adequately assess the potential of BESS agreements procured through an RFP process, and LG&E/KU did not sufficiently assess the value of several existing solar power purchase agreements (PPAs). Joint Intervenors also argued that LG&E/KU cannot show an absence of wasteful duplication as a result of failing to reasonably evaluate demand-side resource potential and instead treating the resource as an input to resource modeling. Page 1971

¹⁹⁶ Joint Intervenors' Initial Brief (filed Sept. 5, 2025) at 3.

¹⁹⁷ Joint Intervenors' Initial Brief at 3.

¹⁹⁸ Joint Intervenors' Initial Brief at 3.

¹⁹⁹ Joint Intervenors' Initial Brief at 43.

²⁰⁰ Joint Intervenors' Initial Brief at 43.

²⁰¹ Joint Intervenors' Initial Brief at 46.

Joint Intervenors stated that the Commission should reject the proposed stipulation in its entirety.²⁰² Joint Intervenors argued that the settlement is not in the public interest, is unreasonable, and should be denied.²⁰³ Joint Intervenors stated that in the event the Commission does approve any of the requested CPCNs, the Commission should Order LG&E/KU to adopt ratepayer-protective provisions beyond what is offered in the Stipulation to ensure the immense financial risk associated with building the requested resources for uncertain load does not fall on the shoulders and wallets of ratepayers, but is instead shared by utility shareholders who are more than eager to gamble billions of dollars on data center load materializing within the Commonwealth.²⁰⁴

On September 17, 2025, Joint Intervenors filed a post hearing reply brief, responding to the stipulating party arguments and highlighting some of the arguments made by Sierra Club.²⁰⁵

Sierra Club's Arguments

Sierra Club urged the Commission to reject the proposed Stipulation and deny the requested CPCNs for the Brown 12 and Mill Creek 6 gas plants, the Ghent 2 SCR, and the Cane Run BESS because LG&E/KU have failed to meet their burden of establishing a need for the projects and avoidance of wasteful duplication.²⁰⁶ In the alternative, if the Commission is inclined to approve portions of the stipulation, Sierra Club argued that it should deny the CPCN for at least one of the two proposed gas plants and the

²⁰² Joint Intervenors' Initial Brief at 56.

²⁰³ Joint Intervenors' Initial Brief at 56.

²⁰⁴ Joint Intervenors' Initial Brief at 58.

²⁰⁵ Joint Intervenors' Reply Brief (filed Sept. 17, 2025).

²⁰⁶ Sierra Club's Post-Hearing Brief (filed Sept. 5, 2025) at 6.

unnecessary Ghent 2 SCR, while approving the CPCN for the Cane Run BESS, which will at least provide multiple grid services beyond adding near-term capacity.²⁰⁷

Sierra Club argued that if accepted without modification, the Stipulation harms the public interest by authorizing LG&E/KU to spend \$152 million to install an SCR on Ghent unit 2 that is not legally required; forcing the rejection of a battery storage project that would offer many grid benefits; approving both gas generators that are proposed here without any requirement that LG&E/KU secure large load customers before investing in that new generation; and by extending the life of Mill Creek 2 until 2031 and possibly even later still without any analysis that it is in the public interest. Sierra Club argued that there is no downside for customers if the Commission were to reject the stipulation. Sierra Club argued that rejecting the Stipulation furthermore allows the Commission to serve its role as the regulator, with responsibility to protect LG&E/KU's existing customers from the risk of higher rates posed by this proceeding.

Sierra Club argued that the Commission should reject the CPCNs for the proposed gas generators because any speculative benefits to customers are outweighed by the costs and risks.²¹¹ Sierra Club highlighted that LG&E/KU's data center load growth forecast is untested and unreliable.²¹² Sierra Club stated that while it appreciates that LG&E/KU are working toward approval of an extremely high load factor tariff and moving

²⁰⁷ Sierra Club's Post-Hearing Brief at 6.

²⁰⁸ Sierra Club's Post-Hearing Brief at 8.

²⁰⁹ Sierra Club's Post-Hearing Brief at 8.

²¹⁰ Sierra Club's Post-Hearing Brief at 9.

²¹¹ Sierra Club's Post-Hearing Brief at 10.

²¹² Sierra Club's Post-Hearing Brief at 11.

toward electric service agreements, requesting roughly \$3 billion in investment authorization before those things are in place has the operation in the wrong order.²¹³

On September 17, 2025, Sierra Club filed a post-hearing reply brief, responding to the stipulating parties' brief arguments.²¹⁴

DISCUSSION AND FINDINGS FOR LOAD GROWTH

As stated above, for a utility to obtain a CPCN, the utility must demonstrate a need for such facilities and an absence of wasteful duplication.²¹⁵ The requests for Brown 12, Mill Creek 6, and the Cane Run BESS are based on the projection of load growth and a corresponding capacity shortfall, leading to both a need to maintain current generation capacity in addition to building new generation. As the basis for the CPCN for Mill Creek 6, Brown 12, and the Cane Run BESS, LG&E/KU alleged that their load forecast supported the need for additional generation resources. As such, the Commission begins its discussion with this fundamental issue.

LG&E/KU stated that economic development load, which includes the BlueOval SK (BOSK) load²¹⁶, is by far the largest driver of load growth in the 2025 CPCN Load Forecast, just as it is in LG&E/KU's 2024 IRP load forecasts and was in the 2022 CPCN-DSM Load Forecast.²¹⁷ LG&E/KU explained that the projected economic development load, particularly BOSK and data center load, is unlike nearly all other customer loads because it has a high load factor (assumed to be 95 percent for data centers and 90

²¹³ Sierra Club's Post-Hearing Brief at 20.

²¹⁴ Sierra Club's Reply Brief (filed Sept.17, 2025).

²¹⁵ Kentucky Utilities Co. v. Pub. Serv. Comm'n, 252 S.W.2d 885 (Ky. 1952).

²¹⁶ BlueOval SK is Ford's joint venture with SK to produce batteries in Hardin County, KY.

²¹⁷ The Direct Testimony of Tim Jones (Jones Direct Testimony) at 10.

percent for BOSK), much higher than LG&E/KU's average system load factor (about 56 percent in 2024).²¹⁸ LG&E/KU explained that these projected loads, therefore, have a large impact on energy requirements and demands in all hours, including system seasonal peak demands.²¹⁹

LG&E/KU's 2025 CPCN Load Forecast was derived from the 2024 IRP Mid forecast adjusted to include the 2024 IRP High load forecast's economic development load. In the 2024 IRP, LG&E/KU forecasted a combined base case total energy requirements after DSM range from 32,808 GWh (6,146 MW winter and 6,228 MW summer) in 2025, increasing to 41,199 GWh (7,135 MW winter and 7,201 MW summer) in 2032, and then slowly decreasing to 40,943 GWh (7,117 MW winter and 7,149 MW summer) in 2039. This Mid Load Forecast included 1,050 MW of data center load. To arrive at 1,050 MW, LG&E/KU stated that it modeled generic data center load rather than customer-specific loads. LG&E/KU stated they used total size and ramping schedule assumptions that were based on information provided by higher-probability prospective data-center customers while also ensuring that this information was aligned with the most recent national information available. However, under the High Load scenario, which assumed increased economic development load with 700 MW of additional data center

²¹⁸ Jones Direct Testimony at 12.

²¹⁹ Jones Direct Testimony at 12.

²²⁰ Wilson Direct Testimony at 12.

²²¹ Case No. 2024-00326, *Electronic 2024 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company*, 2024 IRP, Vol. I, Section 7 Table 7-19 at 8, Table 7-20 at 9, Section 8 Table 8-2 at 2 and Table 8-3 at 3. Note that total energy requirements (GWh) includes KU's Virginia affiliate energy requirements of 649 GWh, 618 GWh, and 589 GWh respectively.

²²² Case No. 2024-00326, Commission Staff's First Request for Information, Item 21.

²²³ Case No. 2024-00326, Commission Staff's First Request for Information, Item 21.

load as compared to the Mid Load forecast's economic development projection (1,750 MW total), LG&E/KU forecasted total energy requirements rising from 32,090 GWh (6,203 MW winter and 6,285 MW summer) to 49,320 GWh (8,148 MW winter and 8,248 MW summer) over the forecast period.²²⁴ LG&E/KU stated that energy requirements in the 2024 IRP are 31.7 percent higher by 2032 due to the addition data center loads and the first phase of BOSK, as compared to the 2021 IRP.²²⁵

In addition to the 1750 MW of data center load, the 2025 CPCN Load Forecast included BOSK II load, 20 MW from an economic development project in the auto industry and 19.4 MW from an existing customer's expansion in the economic development load forecast. LG&E/KU explained that LG&E/KU did not include additional economic development projects beyond 2032 to focus the portfolio planning analysis on resource decisions that must be made now to serve near-term economic development projects. 227

LG&E/KU explained that the 1,750 MW of data center load included in the 2025 CPCN Load Forecast does not consist of specific data center projects; rather, it is a reasonable estimate of how much of the more than 6,000 MW of potential data center load in the companies' current queue will come to fruition in the near term.²²⁸ The economic development pipeline consists of stages, defined by LG&E/KU as follows:

"Inquiry" indicates a request for high-level information, may involve a few meetings, and is generally in the early stages of evaluation. Currently there are five projects in this stage,

 $^{^{224}}$ Case No. 2024-00326, 2024 IRP, Vol. I, Section 7 at 13, and Table 7-27 at 34 and Table 7-28 at 36.

²²⁵ Case No. 2024-00326, 2024 IRP, Vol. I, Section 6 at 1.

²²⁶ Jones Direct Testimony at 21.

²²⁷ LG&E/KU's Response to Staff's First Request, Item 1(a)(1).

²²⁸ LG&E/KU's Response to Staff's First Request, Item 17.

representing 1,630 MW of peak demand. The Companies have not submitted a TSR for any of these projects.

"Suspect" indicates that there is a likelihood of, or evidence of, continued follow up. The project is likely engaged in continued information exchange and is on the verge of more formal processes and information exchange. There are six projects in this stage, representing nearly 1,785 MW of peak demand. The Companies have not submitted a TSR for any of these projects.

"Prospect" indicates very regular exchange of information, more detailed evaluation of a site and site characteristics that likely include detailed evaluation of infrastructure capabilities and capacities, costs of doing business, in-person site visits, and incentive negotiation. There are currently six projects in this stage, representing 2,200 MW of peak demand. The Companies have submitted three TSRs for two projects in this stage.

"Imminent" indicates a high probability for the project to announce and locate in the Companies' service territory. An imminent project likely has all the information necessary from the Companies and the state and local communities to make a decision and may only be finalizing its own business plan or internal processes before proceeding. There is currently one project in this stage, representing 402 MW. The Companies have submitted two TSRs for this project.

"Announced" means projects have made a formal public decision to locate in the Companies' service territory and have signed a contract for electric service. There are currently no projects in this phase.²²⁹

As reflected in the definitions, an economic development project can submit a transmission service request (TSR) at different stages to TranServ, which is LG&E/KU's Independent Transmission Organization (ITO).²³⁰ The TSR review process consists of

²²⁹ LG&E/KU's Response to Staff's First Request, Item 18(c).

²³⁰ LG&E/KU's Response to Staff's First Request, Item 18.

two primary phases: (1) the system impact study and (2) the facilities study.²³¹ The potential customer covers the cost of both studies performed to review the TSR, which is approximately \$50,000.²³² As of a May filing, the following projects had TSR requests submitted:²³³

Project	Date Submitted	Requested Load (MW)	Energize Date	TSR
Camp Ground 1	3/7/2024	335	2026	LGE-TSR-2024-001
Camp Ground 2	7/8/2024	67	2028	LGE-TSR-2024-011
Meridian 1	9/6/2024	100	2028	LGE-TSR-2024-012
Meridian 2*	9/6/2024	650	2030	LGE-TSR-2024-013
Maverick	10/25/2024	100	2031	LGE-TSR-2024-014
Shelby	6/1/2024	20	2025	LGE-TSR-2024-004

Note that Project Meridian 1 and 2, which were publicly announced as Project Lincon, has since been withdrawn.²³⁴ LG&E/KU stated that the current volume of TSRs does not reflect the actual level of market interest.²³⁵ LG&E/KU stated it has deliberately advised prospective customers not to submit TSRs prematurely, as doing so would unnecessarily clog the transmission interconnection queue.²³⁶ LG&E/KU stated that this approach helps maintain the integrity of the queue while serious negotiations continue in parallel.

²³¹ LG&E/KU's Response to Staff's First Request, Item 18.

²³² LG&E/KU's Response to Staff's First Request, Item 18.

²³³ LG&E/KU's Response to Sierra Club's Second Request, Item 19.

²³⁴ LG&E/KU's Response to Staff's Fifth Request, Item 11.

²³⁵ The Rebuttal Testimony of John Bevington (Bevington Rebuttal Testimony) (filed July 18, 2025) at 3.

²³⁶ LG&E/KU's Response to Joint Intervenors' Post-Hearing Request, Item 1.

Furthermore, as of August 13, 2025, LG&E/KU stated they were in the midst of filing two data center TSRs, which do not yet have assigned TSR numbers.²³⁷ Those data centers are approximately 150 MW and 25 MW.

LG&E/KU created an expected value calculation by weighting project sizes and probabilities for these stages of the economic development pipeline as the first way it arrived at their projected data center load of 1,750 MW.²³⁸ LG&E/KU described the probabilities as follows:

The probability ranges were developed based upon each project's assigned stage. The Companies assumed the "Mid" probabilities for:

Imminent projects to be 80%, Prospect projects to be 50%, Suspect projects to be 20%, and Inquiry projects to be 10%.

For Imminent and Prospect projects, the "Low" and "High" probabilities were calculated by subtracting and adding 20% to the "Mid" probability, respectively. For Suspect projects, the "Low" and "High" probabilities were calculated by subtracting and adding 15% to the "Mid" probability. For Inquiry projects, the "Low" and "High" probabilities were calculated by subtracting and adding 10% to the "Mid" probability. ²³⁹

LG&E/KU explained that the 1,750 MW of projected data center load falls below the mid-probability expected value of 1,905 MW but above the low probability expected value of 1,040 MW after removing the 120 MW of BOSK phase 2 load that is included in

²³⁷ LG&E/KU's Response to Joint Intervenors' Post-Hearing Request, Item 1.

²³⁸ LG&E/KU's Response to Staff's Second Request, Item 14(a).

²³⁹ LG&E/KU's Response to Sierra Club's Second Request, Item 9.

these calculations.²⁴⁰ A recent expected value provided from LG&E/KU shows that there the current expected value is 2,521 MW of both data center and non-data center economic development load.²⁴¹ The breakdown for probabilities is as follows²⁴²:

Opportunity Name	Electric Peak (kW)	Probability	
Data Center - Economic			
Development	123,000	50%	
Customer Expansion - Electric	4,700	50%	
Customer Expansion - Electric	29,400	10%	
Data Center - Economic Development	0	10%	
Data Center - Economic Development	7,000	10%	
Data Center - Economic Development	600,000	20%	
Data Center - Economic Development	402,000	80%	
Data Center - Economic Development			
Customer Expansion - Electric	14,700	10%	
Data Center - Economic Development			
Data Center - Economic Development			
Data Center - Economic Development	550,000	50%	
Data Center - Economic Development	1,400,000	50%	
Data Center - Economic Development	400,000	50%	
Data Center - Economic Development			

²⁴⁰ LG&E/KU Response Staff's Second Request, Item 14(a).

 $^{^{241}}$ LG&E/KU's Response to the Attorney General/KIUC's Post-Hearing Request, Item 3, Attachment.

 $^{^{242}}$ LG&E/KU's Response to the Attorney General/KIUC's Post-Hearing Request, Item 3, Attachment.

Data Center - Economic Development		
Data Center - Economic Development	65,000	50%
Data Center - Economic Development		
Data Center - Economic Development	400,000	20%
Data Center - Economic Development	500,000	50%
Data Center - Economic Development	450,000	50%
Data Center - Economic Development	45,000	50%
Data Center - Economic Development	100,000	50%
Data Center - Economic Development	350,000	50%

LG&E/KU stated that the expected value calculation for data center load has increased by almost 700 MW.²⁴³ The expected value of non-data center load remains above 550 MW, and certain projects discussed above that were announced in August have yet to be included in these figures.²⁴⁴

LG&E/KU also looked the average size of projects in the Suspect, Prospect, and Imminent phases, which was 350 MW, to create its load forecast MW.²⁴⁵ LG&E/KU stated that assuming the roughly 1,000 MW of Camp Ground and Project Lincoln data center load came to fruition, only two additional 350 MW data centers (one in LG&E's service territory and the other in KU's service territory) would amount to a total demand of about

 $^{^{243}}$ LG&E/KU's Response to the Attorney General/KIUC's Post-Hearing Request, Item 3, Attachment.

 $^{^{244}}$ LG&E/KU's Response to the Attorney General/KIUC's Post-Hearing Request, Item 3 Attachment.

²⁴⁵ LG&E/KU's Response to Staff's Second Request, Item 14(a).

1,700 MW.²⁴⁶ LG&E/KU indicated that adding two such data centers was and is reasonable given the queue of more than 5,000 MW of data center potential after removing the Camp Ground and Project Lincoln data centers.²⁴⁷

However, the trademark of the economic development queue has been its volatility. The Camp Ground project had undergone several material changes, and there has been no electric service agreement formalized between the utilities and the developers of that project despite the potential scope of the project growing to 525 MW.²⁴⁸ BOSK Phase II is delayed.²⁴⁹ Project Lincoln has been scrapped entirely following opposition from Oldham County residents and on July 1, 2025, Oldham County Fiscal Court voted to enact a 150-day moratorium on all applications to build data centers in the county, which included Project Lincoln.²⁵⁰

This fluidity, or volatility, depending on your disposition, appears to be where the parties supporting the proposed stipulation and those opposing its adoption diverge most acutely. Specifically, Joint Intervenors' pointed to the fact that at least nine data center projects have become inactive since joining the economic development queue, totaling more than 2.8 GW, despite more than 1.1 GW of that potential load having been in the prospect or suspect stage of the economic development queue. ²⁵¹ Likewise, the Sierra

²⁴⁶ LG&E/KU's Response to Staff's Second Request, Item 14(a).

²⁴⁷ LG&E/KU's Response to Staff's Second Request, Item 14(a).

²⁴⁸ LG&E/KU's Response to Staff's Third Request, Item 10.

²⁴⁹ Hearing Video Testimony (HVT) of the August 6, 2025 Hearing, John Bevington at 09:46:45–09:47:44

https://www.courier-journal.com/story/news/local/oldham/2025/07/22/whats-next-for-data-center-applications-in-oldham-county-kentucky/84531349007/?gnt-cfr=1&gca-cat=pp&gca-ds=override

²⁵¹ Joint Intervenors' Post-Hearing Brief at 15–18.

Club also found LG&E/KU's projected load growth of 1750 MW to be unconvincing, citing, among other factors common to both parties, the fact that other similarly situated utilities generally require signed electronic service agreements or like commitments from potential data center customers before including the project in their load forecasts. ²⁵² Additionally, Sierra Club pointed to the fact that LG&E/KU "did not reevaluate the prospective data center projects in their economic development pipeline" after Project Lincoln was withdrawn entirely..²⁵³ Finally, both Joint Intervenors and the Sierra Club articulated more general concerns, such as Sierra Club's argument that while data center growth is expected nationally, it is unclear what percentage, if any, of that is likely to locate in LG&E/KU's territory, and perhaps most saliently, that LG&E/KU "did not produce, cite, or rely on a single study forecasting how much . . . national data center load growth is expected to occur [in] their service territories." ²⁵⁴ Ultimately, both Sierra Club and Joint Intervenors argued that LG&E/KU's load forecast is too uncertain to risk approving construction of the significant capital investments requested in this application, approximately \$2.8 billion. 255 Sierra Club's expert witness, Stacy Sherwood quantified that risk by estimating that if data center load does not materialize the cost of the proposed

²⁵² Sierra Club's Post-Hearing Brief at 16.

²⁵³ Notably, Joint Intervenors also noted that the spreadsheet tracking the proposed data center loads in LG&E/KU experienced a significant increase in its August 2025 iteration, with a single project (#3603) growing from 300 MW to 1.4 GW. Joint Intervenors' Post-Hearing Brief at 22.

²⁵⁴ Sierra Club's Post-Hearing Brief at 13. Additionally, Sierra Club also noted that it's expert witness, Dr. Elizabeth Stanton, identified 36 states that had enacted substantially similar sales and use tax incentives to those enacted in Kentucky; and that at least ten states currently offered more than \$100 million per year in tax subsidies for data centers.

²⁵⁵ Sierra Club's Post Hearing Brief at 17; Joint Intervenors' Post-Hearing Brief at 58.

assets will increase KU residential customers' bills by \$23.05 per year and LG&E residential customers' bills by \$138.67 per year..²⁵⁶

By contrast, LG&E/KU and the parties supporting the stipulation agreement, took a different view of the dynamic economic development queue. From the outset LG&E/KU highlight the General Assembly's 2024 legislation that was developed to attract data center projects to the Commonwealth and which specifically states, "that the inducement of the location of data center projects within the Commonwealth is of paramount importance to the economic well-being of the Commonwealth." Additionally, as KIUC's brief notes, the General Assembly has also codified certain declarations regarding the Commonwealth's energy policy. Of those declarations, one is particularly poignant, and states that "[i]t is the policy of the Commonwealth to maintain adequate capacity of available, reliable, dispatchable, and resilient electric generation to provide for the existing and reasonably projected future energy consumption needs of all wholesale, retail, and other consumers of electricity in the Commonwealth."

Relying on these declarations, LG&E/KU argued that Kentucky's efforts to attract data centers are working as demonstrated by significant growth in potential load from zero in 2023 to approximately 6,700 MW at the time it's brief was submitted.²⁶⁰ Additionally, LG&E/KU was bullish on the Camp Ground Road data center project, stating

²⁵⁶ Sherwood's Direct Testimony at 10, Table 1; Sierra Club's Post Hearing Brief at 17.

²⁵⁷ KRS 154-20-222(3); LG&E/KU's Post-Hearing Brief at 14.

²⁵⁸ KIUC's Post-Hearing Brief at 4.

²⁵⁹ KRS 164.2807(1)(j).

²⁶⁰ LG&E/KU's Post-Hearing Brief at 14.

that the 525 MW facility "continues to progress." ²⁶¹ More broadly, LG&E/KU also argued that by "[a]pplying probabilities based on the companies' decades of experience in economic development in Kentucky, the expected load value of the projects in the current economic development pipeline is more than 2,500 MW of new data center load and more than 500 MW of new non-data center load." ²⁶² Those updated figures, LG&E/KU argued, exceed the 1,750 MW data center load growth and less than 40 MW of non-data center economic development load growth which LG&E/KU relied on in their original load forecast. ²⁶³

Of course, data center related economic development load growth does not represent the entirety of LG&E/KU's economic development queue. And while the parties have expended a majority of their energy on data centers, non-data-center economic development has grown significantly during the pendency of this case. To that end, Corning, Ford, GE Appliances, and General Matter each announced significant projects in the Commonwealth. And in July of this year, "the Department of Energy announced that the Paducah Gaseous Diffusion Plant was selected as one of four finalist sites to host AI Data Center and Energy infrastructure projects as part of the Trump Administration's strategy to accelerate the development of AI Infrastructure, and which would be located in KU's territory." ²⁶⁵

²⁶¹ LG&E/KU's Post-Hearing Brief at 14.

²⁶² LG&E/KU's Post-Hearing Brief at 13. LG&E/KU's conclusion cited LG&E/KU's Response to AG-KIUC's Third Requests.

²⁶³ LG&E/KU's Post-Hearing Brief at 13.

²⁶⁴ LG&E/KU's Response to AG-KIUC's Post-Hearing Request, Item 3.

²⁶⁵ LG&E/KU's Response to AG-KIUC's Post-Hearing Request, Item 3.

While not included in the original load forecast, in 2024, Toyota announced a \$1.3 billion investment at the company's Georgetown, Kentucky, site to assemble a new electric vehicle (EV) as well as a \$922 million investment to construct a new paint facility. More recent investments have also been announced, including significant investment from the University of Kentucky to construct a new cancer and advanced ambulatory building; and Norton Healthcare's announcement of a new pediatric hospital in Jefferson County. Healthcare's announcement of a new pediatric hospital in Jefferson County. LG&E/KU estimated that those projects alone (excluding the potential Paducah projects) will likely add an additional 100 MW of capacity need within the next few years. LG&E/KU predict that in total, of the 1.9 GW of non-data-center economic development projects in its queue, the expected load value exceeds 500 MW.

The Commission acknowledges that the need for the CPCNs is largely dependent on economic development load. Moreover, the Commission acknowledges the difficulty of translating the myriad prospective economic development project loads which are in various stages of fluid negotiations, into a reasonably transparent, understandable load forecast. LG&E/KU accomplished this by assigning probabilities to the various stages of project negotiations to provide an indication of actual projects coming to fruition. The understanding and application of the probabilities was complicated by having some prospective project developers, not all of whom had been assigned the same probability

²⁶⁶ LG&E/KU's Response to AG-KIUC's Post-Hearing Request, Item 3.

²⁶⁷ LG&E/KU's Response to AG-KIUC's Post-Hearing Request, Item 3.

²⁶⁸ LG&E/KU's Response to AG-KIUC's Post-Hearing Request, Item 3.

²⁶⁹ LG&E/KU's Response to AG-KIUC's Post-Hearing Request, Item 3.

of fruition in the economic development queue, request TSRs and EPC contracts. The submittal of TSRs and EPC contracts are understood as indications of the next steps taken by projects progressing toward fruition.²⁷⁰ However, the Commission notes that, while it does not take issue with the concept of assigning probabilities to the economic development pipeline stages, and then looking at the projects in the queue, it finds troubling the fact LG&E/KU did not provide evidence concerning how those probabilities were assigned nor did it have the same level of transparent rigor employed in forecasting other customer class loads. Therefore, the Commission is concerned that, on its face, LG&E/KU's methodology for arriving at 1,750 MW of data center load growth may not be reasonable. The Commission encourages LG&E/KU to consider following the recommendations of Joint Intervenors' witness, Elizabeth Stanton, when developing a load forecast related to data center load moving forward: (1) develop probability weights based on evidence, data, and analysis, (2) assign probability weights based on the specific details of each particular data center inquiry; (3) provide a transparent methodology with transparent assumptions made available to the Commission and stakeholders.271

Nevertheless, the Commission believes that, taken as a whole, LG&E/KU have met its burden of proof to demonstrate that there is an economic development market for data center loads in its service territory in the immediately foreseeable future that will be sufficiently large to make it economically feasible for a proposed system or facility to be constructed, and there is a reasonable basis of anticipation that the forecasted load will

²⁷⁰ See LG&E/KU's Supplemental Response to the AG/KIUC's Third Request, Item 3b. LG&E/KU have signed a Reimbursement Agreement with Camp Ground.

²⁷¹ Stanton Direct Testimony at 46.

materialize. The Commission's finding is consistent with the description of need set forth in current case precedent.²⁷² The latest update from LG&E/KU showed that, in 2024 and 2025 alone, there are 159 projects in the economic development pipeline, totaling 9,140 MW.²⁷³ For 2024 and 2025, there are 21 data center projects in this pipeline, totaling 7,245 MW of economic development load.²⁷⁴ The EPC contract executed between LG&E/KU and the 525 MW Campground Road data center project which includes \$30 million of transmission work, indicates that there are significant projects continuing to move forward. The Commission notes that, even if the Camp Ground data center project does not come to fruition, there is reasonable anticipation that other economic development projects will. LG&E/KU have also demonstrated that projects are continuing to advance within its system, with prospective customers willing to pay for the \$50,000 TSRs.

National projections also support that there is a reasonable basis economic development load growth is likely. As noted by Sierra Club, no party disputes that on a national level, data center energy needs are expected to increase dramatically in the coming years. ²⁷⁵ LG&E/KU cited to a comprehensive assessment by Deloitte of projected data center load growth of 143 GW of incremental data center load growth by 2035. ²⁷⁶

²⁷² Kentucky Utilities Co. v. Pub. Serv. Comm'n, 390 S.W.2d 168, 172 (Ky. 1965).

²⁷³ LG&E/KU's Supplemental Response to the Staff's Second Request, Item 17(g), Attachment.

²⁷⁴ LG&E/KU's Supplemental Response to the Staff's Second Request, Item 17(g), Attachment.

²⁷⁵ Sierra Club's Initial Brief at 12

²⁷⁶ Bellar Rebuttal Testimony at 6.

Also, LG&E/KU cited that the U.S. Department of Energy released a report assuming 52 GW of incremental data center load growth by 2030.²⁷⁷

However, the Commission acknowledges the concerns highlighted by Sierra Club and Joint Intervenors regarding how much data center load growth LG&E/KU can expect in their territories. Therefore, Commission finds that looking at a range of data center load growth, which LG&E/KU ultimately did in this case, is a reasonable approach given the amount of economic development interest in the queue. As noted above, to arrive at 1,050 MW, LG&E/KU used information provided by higher-probability prospective datacenter customers while also looking at national information. This level of load is likely the equivalent of approximately two or three data centers. Therefore, a 1,050 MW is a reasonable low-end measure of data center load growth coming to LG&E/KU's territory.

It is also reasonable to then look at a higher level of economic development load, such as 1,470 MW, when evaluating economic development load. Also as noted, approval of stipulated resources means that LG&E/KU can support up to 1,470 MW of data center load growth, which is less than the 1,750 MW of data center load projected by LG&E/KU. This would likely account for roughly three to four data centers, when looking at the average size of 350 MW. As an example, to test this range, when looking at the queue, the Camp Ground data center, which is 525 MW, and two additional average sized projects of 350 MWs would equal roughly 1,225 MW of economic development load. This falls squarely in the middle of this range. Therefore, the Commission finds that looking at a range of load growth from approximately 1,050 MW to 1,470 MW is a reasonable approach, supported by the evidence.

²⁷⁷ Bellar Rebuttal Testimony at 6.

Noting the unique nature of this CPCN request and the unpredictable nature of economic development, the Commission will take steps to protect ratepayers from over-investment, which will be articulated below, in the event that the economic development load does not materialize. However, while there may not be absolute certainty regarding whether the load will materialize, LG&E/KU have demonstrated that there is a reasonable basis of anticipation that economic development load is coming. Therefore, the Commission finds that LG&E/KU have demonstrated that the economic development load is sufficient to meet the CPCN standard for need for the stipulated resources.

DISCUSSION AND FINDINGS FOR MODELING

The modeling process used a similar process and modeling software that has been used in the last several IRPs and CPCNs.²⁷⁸ PLEXOS, a resource plan development and screening model was used to develop least cost resource plans over a wide range of fuel price scenarios to determine which one minimizes the cost of serving customers' load while meeting reserve margin and other constraints.²⁷⁹

After PLEXOS identifies the resources to include in a resource plan, PROSYM, an hourly chronological dispatch model production cost model, identifies which resources to include in a resource plan. Both PLEXOS and PROSYM use the same modeling inputs.²⁸⁰ Resource adequacy is tested using SERVM which develops minimum reserve margin constraints for resource planning, computing capacity contribution values for limited-duration resources, and evaluating loss of load expectation (LOLE) for different

²⁷⁸ For example, *see* Case No. 2024-00326 (filed Oct. 18, 2024) and Case No. 2022-00402, Application (filed Dec. 13, 2022).

²⁷⁹ Wilson Direct Testimony at 21.

²⁸⁰ Wilson Direct Testimony at 22.

resource portfolios.²⁸¹ Finally, a present value revenue requirement (PVRR) financial model is used to calculate and compare the PVRR of the various resource plans.²⁸²

The 2024 IRP provided the basis for the CPCN modeling with most of the same modeling assumptions carried over including the minimum seasonal reserve margins (23 percent summer and 29 percent winter)²⁸³ and fuel price scenarios.²⁸⁴ Addressing environmental uncertainty, the 2024 IRP evaluated four different environmental scenarios across five different fuel price scenarios. The environmental scenarios included (1) no new regulations; (2) the equivalent of the Good Neighbor Plan for the ozone NAAQS; (3) Ozone NAAQS and the 2024 Effluent Limitation Guidelines; and (4) Ozone NAAQS, ELG and recent GHG rules under the federal Clean Air Act Sections 111(b) and (d).²⁸⁵

The 2024 IRP modeling results showed that in the High Load forecast (1,750 MW), adding at least two 645 MW NGCCs and at least a 400 MW BESS charged with existing

²⁸¹ In this proceeding, the generation production costs, reliability costs and LOLE were modeled over 54 load scenarios and 300 unit availability scenarios. The load scenarios were based on weather in each of the last 54 years. Wilson Direct Testimony at 22.

²⁸² Wilson Direct Testimony at 22. *Also see* Case 2024-00326, Vol. 3 2024 IRP Resource Assessment at 27-28.

²⁸³ Wilson Direct Testimony at 23 and Exhibit SAW-1 at 17 and Case 2024-00326, Vol. 3 2024 IRP Resource Adequacy Analysis at 4-5.

²⁸⁴ Wilson Direct Testimony at 23 and Case 2024-00326, Vol. 3 2024 IRP Resource Assessment at 25-27.

²⁸⁵ Wilson Direct Testimony Exhibit SAW-1 at 25 and Case 2024-00326 Vol. 3 2024 IRP Resource Assessment at 24-25 and 44-48. In addition to the environmental scenarios, station landfill storage capacity limits were also accounted for including Brown unit 3 which cannot operate as a coal fired unit 2034. Similarly, Mill Creek units 3 and 4 cannot operate beyond as coal-fired generating units beyond 2044 in the No New Regulations and Ozone NAAQS environmental scenarios due to landfill storage capacity limits. Due to additional landfill storage requirements, Mill Creek 3 and 4 cannot operate as coal-fired generating units beyond 2036 in the ELG environmental scenarios.

resources created the least cost portfolio across all four environmental scenarios in combination with all five fuel price scenarios.²⁸⁶

Whereas the 2024 IRP modeling was based on generic cost and performance information of possible future resources, LG&E/KU gathered and developed cost and performance estimate for actual resources that could be used in the near term. As part of that effort on the demand-side, an RFP for renewable generation capacity and energy resources was issued in May 2024.²⁸⁷ Seventeen parties responded with 48 proposals across 22 different projects comprising 3,348 MW of solar, 435 MW of BESS and 600 MW of wind resources.²⁸⁸ In addition, new dispatchable DSM programs measures and an expanded Curtailable Service Rider (CSR) program were modeled.²⁸⁹ On the supply-side, site-specific costs were developed for Brown 12, Mill Creek 6, possible NGCC siting at KU's Green River Station, Cane Run BESS siting, and a possible BESS siting at Ghent Station. In addition, generic cost estimates were updated for SCCTs, NGCC units, and BESS resources.²⁹⁰

At the hearing, Witness Bellar stated that he does not believe that LG&E/KU have analyzed the possibility of converting retiring generating units, such as Mill Creek 1 and 2 into a synchronous condenser.²⁹¹ LG&E/KU stated that converting Mill Creek 1 into a synchronous condenser may provide a viable solution if reactive power or frequency

²⁸⁶ Wilson Direct Testimony Exhibit SAW-1 at 9 and 11.

²⁸⁷ Wilson Direct Testimony at 13–14.

²⁸⁸ Wilson Direct Testimony at 20.

²⁸⁹ Wilson Direct Testimony at 13–14.

²⁹⁰ Wilson Direct Testimony at 13–14.

²⁹¹ HVT of the August 4, 2025 Hearing, Lonnie Bellar at 02:21:26–02:22:00.

support becomes necessary in the Louisville area; however, in the event of this hypothetical, this option would require comparison to other viable solutions within the context of the Mill Creek decommissioning and demolition plan expressed in Case No. 2024-00317.²⁹² LG&E/KU stated that there are no plans to make this conversion as based on planning studies, and there is currently no determined need for such reactive power or frequency support.²⁹³

As the KCA did in Case No. 2022-00402,²⁹⁴ it continued to take issue with LG&E/KU's use of the coal-to-gas (CTG) ratio in its modeling. Specifically, the KCA argued that LG&E/KU have not provided justification for the methodology and that the methodology ignores differences between coal and natural gas procurements that affect the price of natural gas due to weather, liquified natural gas (LNG) demand and associated gas supply related to oil production.²⁹⁵ LG&E/KU used the same five fuel price scenarios from its 2024 IRP. However, in the Stipulation and Recommendation, which KCA was a party to, there was no mention of the coal-to-gas ratio.

The PLEXOS and PROSYM models were used to determine the optimal resource mix to serve forecasted load (forecast native load plus 1,750 MW forecast economic development load) and four additional economic development loads in 140 MW

²⁹² LG&E/KU's response to Staff's Post-Hearing Request, Item 20; Case No. 2024-00317, Electronic Application of Louisville Gas and Electric Company for Approval of Retired Asset Recovery Rider Cost Recovery for the Retirement of Mill Creek Unit 1 and of Retired Asset Recovery Rider Tariff Revisions and Monthly Reporting Forms (Ky. PSC Feb. 24, 2025).

²⁹³ LG&E/KU's response to Staff's Post Hearing Request, Item 20.

²⁹⁴ Case No. 2022-00402, KCA's Initial Brief (filed Sept. 22, 2023) at 24.

²⁹⁵ Direct Testimony of Emily Medine at 3.

increments: two above and two below the base case.²⁹⁶ Stage One used the PLEXOS model to develop resource plans with no technology constraints assuming economic development loads are added in 2030. Each load scenario was run for each of the five fuel scenarios²⁹⁷; 25 total runs. General results determined that the Brown 12 and Mill Creek 6 NGCCs were included on all portfolios and a BESS was included at Cane Run or Ghent. Additionally, Ghent 2 SCR is generally favorable in scenarios with low to mid fuel prices and renewables are favorable in high fuel price scenarios. The PROSYM model was then utilized to run detailed production cost runs to determine which of the 25 portfolios were least cost. The Stage One least cost portfolios (capacity additions shown only) are presented below.²⁹⁸

		1	1	T	1			
DC Load Scenario	Brown 12 NGCC	MC 6 NGCC	Generic NGCC	Cane Run BESS	Ghent BESS	Solar PPA	Add. DSM	GH2 SCR
2,030 MW	645	645	645	300	-	-	Υ	Υ
1,890 MW	645	645	645	100	-	265	Υ	N
1,750 MW								
(2025 CPCN)	645	645	-	400	200	-	Υ	Υ
1,610 MW	645	645	-	400	-	-	Υ	Υ
1,470 MW	645	645	-	200	-	-	Υ	Υ

In the Stage Two analysis, LG&E/KU used the SERVM model to assess the reliability of their generation portfolio with various combinations of new resources to

²⁹⁶ Wilson Direct Testimony at 18.

²⁹⁷ The five fuel scenarios are low gas, mid coal-to-gas (CTG); Mid Gas, Mid CTG; High Gas, Mid CTG; Low Gas, High CTG; High Gas, Low CTG. Wilson Direct Testimony at 19-20.

²⁹⁸ Wilson Direct Testimony Table 2 at 26 and Table 12 at 33. See also Wilson Direct Testimony, Exhibit SAW-1 Appendix C Tables 31-40 at 62-67 and LG&E/KU's Response to Staff's Second Request, Item 3 Attachment 1 for the portfolio modeling results of landfill constraints (on or off) modeled with the various fuel and load scenarios.

determine which combination would be optimal for serving the level of economic development load growth in the 2025 CPCN Load Forecast.²⁹⁹ In this modeling stage, new customers were not allowed to come onto the system until generation was available to serve them. Stage Two results indicated that LG&E/KU's 2028 portfolio plus Brown 12 NGCC, Mill Creek 6 NGCC, 400 MW Cane Run BESS results in a LOLE of one day in two years and a Ghent 2 SCR and dispatchable DSM measures were optimal for serving all existing and new customers by 2032. ³⁰⁰ ³⁰¹ The Stage Two LOLE measures of the portfolio resource adequacy show that the optimal resource portfolio includes the 2028 portfolio plus the addition of the Brown 12 and Mill Creek NGCCs and a 400 MW battery at Cane Run. This is the portfolio that most closely achieves the LOLE standard of one day in ten years. The results are shown in the table below.³⁰²

Portfolio	LOLE
2028 Portfolio + BR12 NGCC + MC6 NGCC + 400 MW CR BESS + 200 MW GH BESS	0.62
2028 Portfolio + BR12 NGCC + MC6 NGCC + 400 MW CR BESS + 100 MW GH BESS	0.67
2028 Portfolio + BR12 NGCC + MC6 NGCC + 400 MW CR BESS	1.07
2028 Portfolio + BR12 NGCC + MC6 NGCC + 300 MW CR BESS	1.25

²⁹⁹ Wilson Direct Testimony at 26.

³⁰⁰ The phrase "2028 Portfolio" "refers to the Companies' resource portfolio in 2028 and reflects the retirement of Mill Creek 1 (2024), the planned retirement of Mill Creek 2 (2027), the assumed retirement of the small-frame SCCTs (2026), the planned additions of Brown BESS (2027), Mill Creek 5 (2027), two company-owned solar facilities in 2026 and 2027, and dispatchable demand response programs from the Companies' 2024-2030 DSM-EE Program Plan, but it does not include the six total solar PPAs into which the Companies have entered due to three having been canceled and the challenges facing the advancement of the remaining three." Wilson Direct Testimony at 27 and Exhibit SAW-1 at 34. Also included in the modeling was the assumed "retirement of the six small-frame SCCTs and the Ohio Valley Electric Corporation (OVEC) generation (2040), the additions of the Brown BESS (2027) and Mill Creek 5 (2027, two company owned solar facilities and all dispatchable demand response resources from the 2024-2030 DSM-EE Program Plan." Wilson Direct Testimony at 22.

³⁰¹ Wilson Direct Testimony at 28.

³⁰² Wilson Direct Testimony Exhibit SAW-1 Table 2 at 8. Generally, a LOLE of less than one indicates that the amount and mix of generation in the portfolio is overcompensating for the risk of a loss of load event. The converse is true for LOLEs greater than one.

In Stage Three, LG&E/KU used SERVM to investigate the amount of new customer load that could be added to the system compared to when new generation could be added. So new customer load was allowed to come onto the system only at the earliest expected time a new generation resource could be made available. Stage Three results are shown in the table below.³⁰³

Year	Resource Additions	[A] Data Center Load that Can Be Served	[B] Data Center Load in CPCN Load Forecast	Difference ([A]-[B])
2028-2029	CR BESS (400 MW)	630	980	(350)
2030	CR BESS + BR12 (645 MW)	1,190	1,400	(210)
2031+	CR BESS + BR12 + MC6 (645 MW)	1,750	1,750	0

These results show that the data center load additions in the 2025 CPCN Load Forecast exceed the level of new data center load that can be served reliably in 2029 by 350 MW, which declines to 210 MW in 2030. So, if load increases more rapidly than can be accommodated by the generation proposed in this proceeding, LG&E/KU may file another CPCN to acquire or construct additional generation.

LG&E/KU also modeled different load scenarios throughout the case. LG&E/KU modeled 1,002 MW of data center load growth for resource adequacy.³⁰⁴ All else equal, the PLEXOS model produced two unique portfolios across the five fuel price scenarios if

³⁰³ Wilson Direct Testimony Exhibit SAW-1 Table 3 at 9.

³⁰⁴ See LG&E/KU's responses to Staff's Second Request, Items 14 and 16. Note that the request to model 1,002 MW of data center load growth was the result of two publicly announced data centers: 402 MW Camp Ground Road and 600 MW Project Lincoln.

1,002 MW materialized only as opposed to the projected 1,750 MW is shown in the table below.³⁰⁵

Portfolio	LOLE	LOLH	EUE
2028 Portfolio + BR12 NGCC + 300 MW CR BESS + GH2 SCR	0.42	1.46	345
2028 Portfolio + BR12 NGCC + 300 MW CR BESS + 815 MW Solar	0.32	0.74	155

The resulting LOLE amounts of 0.42 and 0.32 indicate that more capacity is being added to the 2028 portfolio than necessary to achieve a LOLE of 1.0 for a 1,002 MW load. In this lower load scenario, because Mill Creek 6 was not chosen, LG&E/KU also analyzed the resource adequacy of the 1,002 MW load by replacing the Cane Run 300 MW BESS with Mill Creek 6 645 MW NGCC. The results indicated that the LOLE for the full year would be 0.08, which reinforces the earlier results that the portfolio capacity is in excess of that needed to achieve a LOLE of 1.0 for a 1,002 MW load. The second state of 1.0 for a 1,002 MW load.

LG&E/KU also performed modeling on the stipulation portfolio with a 1,750 MW load and three scenarios. All three scenarios included Brown 12, Mill Creek 6 and Mill Creek 2 life extension to 2031. The differences included Ghent 2 with a SCR, Ghent 2 without a SCR and Ghent 2 with SCR and Cane Run BESS.³⁰⁸ The results of the portfolio analyses show that the portfolio of Brown 12, Mill Creek 6, Mill Creek 2 life extension to

³⁰⁵ LG&E/KU Response to Staff's Second Request, Item Ib. Note that LOLH is loss-of-load hours and EUE is expected unserved energy.

³⁰⁶ LG&E/KU's Responses to Staff's Post Hearing Request, Item 8.

³⁰⁷ LG&E/KU's Responses to Staff's Post Hearing Request, Item 8.

³⁰⁸ LG&E/KU's Responses to Staff's Post Hearing Request, Item 1.

2031, Ghent 2 with SCR and Cane Run BESS achieves a LOLE of 1.07.³⁰⁹ This indicating that LG&E/KU could reliably serve their forecasted 1,750 MW load.

Stage three modeling results of the stipulation portfolio assume that the timing of new customers coming onto LG&E/KU's system coincides with when new generation can be added to reliably serve customers both with and without the Mill Creek 2 life extension because without an SCR the life extension beyond the currently scheduled 2027 retirement date is uncertain. The Stipulated Mill Creek 2 life extension is through 2031 when Mill Creek 6 is schedule to come online.³¹⁰ The results are shown in the table below.³¹¹

Year	Portfolio	MC2 Available (Y/N)	[A] Data Center Load that Can Be Served	[B] Data Center Load in CPCN Load Forecast	Difference ([A]-[B])
2027	2027 Portfolio	Υ	600	210	390
2028- 2029	2027 Portfolio +	N	400	980	(580)
	GH2 SCR	Υ	600	980	(380)
2030	2027 Portfolio + GH2 SCR + BR12	N	900	1,400	(500)
		Y	1,150	1,400	(250)
2031+	2027 Portfolio + GH2 SCR + BR12 + MC6 – MC2	N	1,470	1,750	(280)

³⁰⁹ LG&E/KU's Responses to Staff's Post Hearing Request, Item 1.

³¹⁰ LG&E/KU's Responses to Staff's Post Hearing Request, Item 4.

³¹¹ LG&E/KU's Responses to Staff's Post Hearing Request, Item 4. Also, note that the "2027 portfolio refers to LG&E/KU's resource portfolio in 2027 and reflects the life extension of MC2, the assumed retirement of the small-frame SCCTs (2026), and the planned additions of Brown BESS (2027), Mill Creek 5 (2027), two company-owned solar facilities in 2026 and 2027, and dispatchable demand response programs from the Companies' 2024-2030 DSM-EE Program Plan."

The results show that with the stipulated resources, LG&E/KU can only reliably serve 1,470 MW of data center load by 2031 and beyond. LG&E/KU stated that its analysis showed that without the stipulated resources LG&E/KU would be able to reliably serve only 400 MW of new load after Mill Creek 2's planned retirement in 2027. LG&/KU stated that a single large data center, such as the 525 MW Camp Ground Road data center, would more than consume all of LG&E/KU's available capacity with current and currently approved resources, leaving no capacity for the other valuable economic development load growth already announced in LG&E/KU's service territories, to say nothing of potential additional load growth.

LG&E/KU stated that the analyses conducted in and for this case considered five different fuel price scenarios, four different tax credit and trade tariff scenarios, and numerous load scenarios, and they evaluated a wide array of renewable energy proposals offered to LG&E/KU, as well as LG&E/KU's own NGCC and BESS proposals, additional Curtailable Service Rider resources, and additional dispatchable demand-side management (DSM) measures. LG&E/KU also evaluated possible unit retirements, gas retrofits for coal-fired units, and landfill constraints. Those analyses showed the Brown 12 and Mill Creek 6 NGCCs are least-cost with as little as 1,002 MW of new economic development load, and they are mainstays of least-cost resource portfolios for incremental economic development load ranging from 1,470 MW to 2,030 MW.

³¹² See also LG&E/KU's Post-Hearing Brief at 22.

³¹³ LG&E/KU's Post-Hearing Brief at 18.

³¹⁴ LG&E/KU's Post-Hearing Brief at 18.

³¹⁵ LG&E/KU's Post-Hearing Brief at 22.

³¹⁶ LG&E/KU's Post-Hearing Brief at 22.

Having considered the record, and being otherwise sufficiently advised, the Commission finds that the methodology and modeling utilized by LG&E/KU is generally reasonable. LG&E/KU's use of PLEXOS, PROSYM, an Excel Financial Model, and SERVM is largely consistent with how LG&E/KU modeled portfolios in Case No. 2022-00402 and the 2024 IRP.³¹⁷ In terms of inputs related to load forecasting, the Commission finds that it was reasonable for LG&E/KU to model a range of load growth scenarios specific to potential data center load, given that the load is not absolutely certain. The Commission also finds that using SERVM to investigate the amount of new customer load that could be reliably served on its system given the timelines for adding new generation to the system was a reasonable approach to evaluating potential data center service requests through 2031.

Further, an extensive explanation of the updated coal and natural gas price forecasts and the derivation of the CTG ratio was provided,³¹⁸ which was the same methodology used and found to be reasonable by the Commission in Case No. 2022-00402.³¹⁹ The Commission reiterates its previous finding and finds that LG&E/KU's fuel price forecasts and CTG methodology is reasonable.

The Commission also finds that in LG&E/KU's next IRP proceeding, as part of the transmission planning process LG&E/KU should analyze and consider the conversion of previously approved retired generators to a synchronous condenser operation. The synchronous condenser can be utilized to stabilize the transmission system voltage and

³¹⁷ Case No. 2022-00402, Nov. 6, 2023 Order at 15.

³¹⁸ Wilson Direct Testimony at 45–54.

³¹⁹ Case No. 2022-00402, Nov. 6, 2023 Order at 93–94.

resultant frequency.³²⁰ The principal benefits of the synchronous condenser include: (1) system inertia, as inertia is an inherent feature of a synchronous condenser as it is a rotating machine; (2) increased short-term overload capability: depending on the type, a synchronous condenser can provide more than two times its rating up to a few seconds, which enhances system support during emergency situations or contingencies; (3) low voltage ride through: even under extreme low voltage conditions, the synchronous condenser remains connected and provides smooth, reliable operation; (4) rapid response: by using modern excitation and control systems, a synchronous condenser is fast enough to meet dynamic response requirements; (5) offers data center customers a critical tool for responding to large swings in data center load on a millisecond basis, that is typical of current data center loads.³²¹ Therefore, LG&E/KU should analyze this option and should report their findings to the Commission in their next IRP proceeding.

DISCUSSION AND FINDINGS FOR THE CPCN REQUEST FOR BROWN 12

Having considered the record and being otherwise sufficiently advised, the Commission finds that the Brown 12 unit should be granted a CPCN for the reasons discussed below.

Need

The stated need for Brown 12 is driven by economic development load growth, specifically data centers. LG&E/KU's modeling analyses presented in this case demonstrate that Brown 12 is chosen across all load scenarios from 1,470 MW to 2,030

³²⁰ See IEEE – PES Synchronous Condenser Description and Benefits to support Transmission System Stability, page 44, dated March 6, 2025.

³²¹ See IEEE – PES Synchronous Condenser Description and Benefits to support Transmission System Stability, page 44, dated March 6, 2025.

MW, and across all fuel scenarios, with and without landfill constraints for stage one, step one of the analyses.³²² When LG&E/KU conducted their analyses, with detailed production costs over each of the five fuel price scenarios to determine which resource plan for a given load scenario has the lowest PVRR on average across all fuel price scenarios, Brown 12 was again chosen across all load scenarios.³²³ In lower range scenarios, such as 1,002 MW, Brown 12 is also chosen as the least-cost option.³²⁴

Natural gas units offer fully dispatchable capacity. LG&E/KU explained that natural gas-fired generation units' capacity provides more than 40 percent of the nation's electricity today and account for more than 40 percent of installed utility-scale generation capacity in the United States. LG&E/KU also stated that natural gas is the dominant fuel source for new generation as utilities are installing and planning to build in order to provide reliable, around-the clock, year-round, fully dispatchable capacity. 326

A CPCN for the proposed NGCC at Brown 12 was originally requested by LG&E/KU in Case No. 2022-00402.³²⁷ The Commission, in that case, "found that there [was] not currently a need to construct Brown 12 or take action with respect to Ghent 2 and Brown 3 but expects the status of those generating units to come up again in the

³²² Wilson Direct Testimony, Exhibit SAW-1 at 31–32.

³²³ Wilson Direct Testimony, Exhibit SAW-1 at 31-32.

³²⁴ LG&E/KU's response to Staff's Second Request, Item 1.

³²⁵ Wilson Direct Testimony at 30.

³²⁶ Wilson Direct Testimony at 32–33.

³²⁷ Case No. 2022-00402, Electronic Joint Application of Kentucky Utilities Company and Louisville Gas and Electric Company for Certificates of Public Convenience and Necessity and Site Compatibility Certificates and Approval of a Demand Side Management Plan and Approval of Fossil Fuel-Fired Generating Unit Retirements (Ky. PSC Nov. 6, 2023), Order at 16–17.

near future when LG&E/KU have a better idea of what the Greenhouse Gas rules will look like and when they will be implemented."³²⁸ The Commission also stated

LG&E/KU appeared to consider Brown 12 to be replacing Brown 3 and, to a lesser extent, Ghent 2. However, because the Commission finds that the impetus for upgrading or replacing Brown 3 and Ghent 2 can be delayed at this time for the reasons discussed above, the Commission finds that there is currently no need that justifies the construction of Brown 12, and therefore, finds that the CPCN for Brown 12 should be denied.³²⁹

The Commission reiterated "that the denial of the CPCN for Brown 12 is wholly based on the Commission's finding that the construction of Brown 12 should be deferred with the construction beginning on a date that provides for an in-service date in 2030."

In this case, LG&E/KU stated that the cost of the Brown 12 NGCC has increased by \$400 million solely due to delaying its in-service date from 2028 (as requested in the 2022 CPCN case) to 2030.³³¹ LG&E/KU also argued that, although firm gas transportation service is still available for Brown 12, it is not the same firm gas transportation service that was available two years ago.³³² LG&E/KU argued that transportation options to supply basins from which LG&E/KU could have drawn two years ago to serve Brown 12 are no longer available, and there is no guarantee the firm gas

³²⁸ Case No. 2022-00402, Nov. 6, 2023 Order at 65.

³²⁹ Case No. 2022-00402, Nov. 6, 2023 Order at 77–78.

³³⁰ Case No. 2022-00402, Nov. 6, 2023 Order at 137 and 142.

³³¹ LG&E/KU's Brief at 31.

³³² LG&E/KU's Initial Brief at 32.

transportation service available today will continue to be available a matter of months from now. 333

KIUC argued that Brown 12 NGCC has many favorable operational attributes, including that: (1) NGCC technology is highly efficient (low heat rate) and highly reliable (low forced outage rate); (2) the ramp rate and load following capability of NGCC generation is superior to coal generation; (3) only three companies world-wide manufacture NGCCs and the demand is high so getting in line now has value; (4) a delay in the CPCN process runs the risk of higher costs for customers (costs for Brown 12 have increased \$400 million in only two years) and a lack of available firm gas transportation; and (5) the proposed NGCC will emit 65 percent less CO2 per MWh than a coal unit.³³⁴

Having considered the record, and being otherwise sufficiently advised, the Commission finds that LG&E/KU have met its burden of proof that there is a need for Brown 12. As discussed in more detail in the load growth section above, the Commission believes that LG&E/KU have provided sufficient evidence that new economic development growth is coming from both data center and non-data center alike, and there is, therefore, a reasonable basis of anticipation that economic development in general is coming into Kentucky. At the lower end range of about 1000 MW of data center load growth, Brown 12 is chosen to support this level of growth. Furthermore, even with load levels much higher than the 1,470 MW that the stipulated resources can support, the higher modeled loads of 2,030 MW, Brown 12 is chosen.

333 LG&E/KU's Initial Brief at 32.

³³⁴ KIUC's Brief at 9.

LG&E/KU argued that the Commission has previously found that a need existed for the construction of Brown 12. 335 The Commission's denial of Brown 12 was, as it stated in its final order in Case No. 2022-00402, predicated on a number of factors, including a lack of immediate need for the generation coupled with uncertainty regarding significant environmental regulations, namely the Greenhouse Gas Rules finalized by the previous presidential administration. Moreover, the Commission also recognized the benefit a delay would have in analyzing the effects of additional DSM-EE and DERs on load and would give LG&E/KU additional time to evaluate its economic development load growth. 336

The Commission also believes that an NGCC unit is well-matched to meet economic development load as it offers reliable and dispatchable capacity that can meet the high load factor characteristics of data centers. NGCC units are dispatchable in all weather conditions, can respond to significant load swings due to their high ramping capabilities, and can be cycled overnight.³³⁷

The Commission also acknowledges the risks associated with delaying the approval of the Brown BESS unit, such as rising costs LG&E/KU noted above, and the potential issues associated with securing firm gas supply. These risks, when taken together with the level of economic development load growth, demonstrate that it is appropriate to approve Brown 12 at this juncture. Finally, LG&E/KU have also stated that,

³³⁵ Application at 10.

³³⁶ Case No. 2022-00402, Nov. 6, 2023 Order.

³³⁷ Case No. 2024-00326,Oct. 18, 2024 Volume III, 3.1.2 at 15.

if it becomes imprudent to commence construction on Brown 12, they will not do so.³³⁸ Without Brown 12, LG&E/KU will likely be unable to meet its service requirements by 2031, and therefore, will likely be unable to provide adequate, efficient, and reasonable service to its customers as required by KRS 278.030(2). Consistent with *Kentucky Utilities Co. v. Public Service Commission*, LG&E/KU have demonstrated that there will be a substantial inadequacy of existing service, involving a consumer market sufficiently large to make it economically feasible for the new system or facility to be constructed and operated³³⁹. Therefore, LG&E/KU have demonstrated that there is a current need for Brown 12.

Lack of Wasteful Duplication

Brown 12 will cost \$1.383 billion, making it the cheapest of the NGCC options.³⁴⁰ Notably, this price is less than the projected \$1.415 billion for Mill Creek 6 as well.³⁴¹ The below chart summarizes the comparison in costs between the three NGCC options³⁴²:

	Brown 12	Mill Creek 6	Green River 5
Summer Capacity (MW)	645	645	645
Winter Capacity (MW)	660	660	660
Capital Costs (\$/kW)	2,120	2,138	2,352
Fixed O&M (\$/kW-yr)	7.8	7.1	14.5
Firm Gas Cost (\$/kW-yr)	15	27	27
Earliest In-Service Year	2030	2031	2032

³³⁸ Bellar Rebuttal Testimony at 8.

³³⁹ Kentucky Utilities Co. v. Public Service Commission, 252 S.W.2d 885, 890 (Ky 1952).

³⁴⁰ Application at 12.

³⁴¹ Application at 12.

³⁴² LG&E/KU's response to Staff's Third Request, Item 8(b), Attachment 1 at 6.

This chart shows that Brown 12's firm gas cost is significantly cheaper (approximately \$15/KW-yr) than Mill Creek 6 or a hypothetical Green River 5 NGCC. It also demonstrates that the capital costs are cheaper, and the fixed O&M is slightly higher than Mill Creek 6. Moreover, Brown 12's 2030 in-service date is enabled by the executed URA and the fact that LG&E/KU have been preparing the E.W. Brown site since 2022. LG&E/KU also estimated total transmission costs for Brown 12 totaled \$43 million.

As noted above, the first step of stage one consisted of allowing PLEXOS to create least-cost resource plans subject to reserve margin and other constraints for each load scenario and each of the five fuel price scenarios. Brown 12 was chosen for each load scenario and across all fuel price scenarios, and with and without landfill constraints. In the second step of stage one, LG&E/KU evaluated each of the 2030 portfolios with detailed production costs over each of the five fuel price scenarios to determine which resource plan for a given load scenario has the lowest PVRR on average across all fuel price scenarios. Brown 12 was again chosen as part of these resource plans. Stage two results for resource adequacy also chose Brown 12 across all data center load scenarios.

In the IRP, a generic NGCC was chosen to be built in 2030 for the mid and high load ranges across multiple environmental scenarios as well, including no new

³⁴³ Tummonds Direct Testimony at 11; Brown 12 Site Assessment Report.

³⁴⁴ LG&E/KU's Response to Joint Intervenors' Post Hearing Request, Item 8.

³⁴⁵ Wilson Direct Testimony, Exhibit SAW-1 at 30.

³⁴⁶ Wilson Direct Testimony at 24.

³⁴⁷ Wilson Direct Testimony, Exhibit SAW-1 at 7.

³⁴⁸ LG&E/KU's Response to Staff's Second Request, Item 8.

regulations, ozone NAAQs plus ELG, and Ozone NAAQS plus ELG plus GHG.³⁴⁹ LG&E/KU stated that the 2024 IRP demonstrated that NGCC and battery storage charged by existing resources are least-cost for serving economic development load growth.³⁵⁰ After Mill Creek 5 is commissioned in 2027, the optimal location for the next NGCC is the E.W. Brown Generating Station.³⁵¹

Having considered the record and being otherwise sufficiently advised, the Commission finds that Brown 12 will not result in wasteful duplication. As discussed above, Brown 12 is needed to meet data center demand, especially by 2030 when Brown 12 would likely be in service. LG&E/KU stated that without the stipulated resources, they would be able to reliably serve only 400 MW of new load after Mill Creek 2's planned retirement in 2027. As discussed in the load growth section, more than 400 MW will be needed to serve economic development growth. With the Ghent 2 SCR being added in 2028-2029, the addition of Brown 12 could help LG&E/KU serve approximately 900 MW of data center load. LG&E/KU also has several units that will reach the end of book depreciation life between 2035 and 2045. 354

LG&E/KU have demonstrated that a thorough review of all reasonable alternatives in this case. As noted in the modeling section above, LG&E/KU conducted a review of

³⁴⁹ Case No. 2024-00326, *Electronic 2024 Joint Integrated Resource Plan of Louisville Gas and Electric Company and Kentucky Utilities Company*, Executive Summary at 6–8.

³⁵⁰ Wilson Direct Testimony, Exhibit SAW-1 at 35.

³⁵¹ Wilson Direct Testimony, Exhibit SAW-1 at 35.

³⁵² LG&E's Brief at 19.

³⁵³ LG&E/KU's Response to Staff's Post-Hearing Request, Item 4.

³⁵⁴ Wilson Direct Testimony, SAW-1 at 40.

multiple generation alternatives, and Brown 12 was chosen as a least-cost resource in multiple fuel, environmental, and load growth scenarios. LG&E/KU have shown that Brown 12 is included in the reasonable and least-cost portfolios from 1,002 MW of data center load growth to as much as 2,030 MW.³⁵⁵ Brown 12 is also the least-cost of the NGCCs. Therefore, the Commission finds that Brown 12 will not result in wasteful duplication.

SITE COMPATIBILITY CERTIFICATE REQUEST FOR BROWN 12

To determine the optimal and lowest cost option for siting Brown 12, LG&E/KU conducted a Siting Study. According to the application, LG&E/KU considered several sites including Green River Generating Station, Brown Generating Station and Mill Creek Generating Station. LG&E/KU stated that, in the midst of constructing Mill Creek 5, LG&E/KU would be able to take advantage of efficiencies of scale such as site layout design incorporated a footprint for a possible Mill Creek 6 including civil designs, such as roadways, stormwater flow paths, and building and structural layout. LG&E/KU also argued that having two separate locations will reduce execution risks when the units are fully constructed.

Pursuant to KRS 278.216 and KRS 278.708(3) and (4), LG&E submitted a Site Assessment Report (SAR) with its application for a site compatibility certificate for the proposed Brown 12 facility. The SAR was prepared by Trinity Consultants and addressed

³⁵⁵ LG&E/KU's Response to Staff's Second Request, Item 1; Wilson Direct Testimony, SAW-1 at 7.

³⁵⁶ Tummonds Direct Testimony at 3.

³⁵⁷ Tummonds Direct Testimony at 4.

³⁵⁸ Tummonds Direct Testimony at 5.

the statutory requirements concerning inter alia the site characteristics, including land use compatibility, potential environmental impacts, setback requirements, noise levels, any effects on nearby property valuation, and proposed mitigation measures.

KRS 278.708(3)(a)(1–6) requires that the detailed site description in the SAR include a description of (1) surrounding land uses for residential, commercial, agricultural, and recreational purposes; (2) the legal boundaries of the proposed site; (3) proposed access control to the site; (4) the location of facility buildings, transmission lines, and other structures; (5) location and use of access ways, internal roads, and railways; and (6) existing or proposed utilities to service the facility.

Detailed Site Description. KU currently operates an electric generation power plant, the Brown Station, located at 815 Dix Dam Road in southeastern Mercer County, Kentucky. The Brown Station property is an approximately 1,222-acre contiguous site, owned by KU. The proposed Brown 12 unit would be constructed on the approximately 610-acre parcel located within the central-eastern portion of the existing Brown Station property. The existing Brown Station is a unique KU power facility in that it utilizes four different types of electricity-producing facilities, specifically a hydroelectric plant, a coal-fired generating unit, natural-gas fired combustion turbines, and a universal solar facility. The station is a unique KU power facility and a universal solar facility.

LG&E/KU are proposing to construct and operate Brown 12 with a maximum power rating of approximately 681 gross megawatts (MW) within the central/eastern portion of

³⁵⁹ Brown 12 NGCC Site Assessment Report at 1-1.

³⁶⁰ Brown 12 NGCC Site Assessment Report at 2-4.

³⁶¹ Brown 12 NGCC Site Assessment Report at 3-8.

the existing Brown Generating Station.³⁶² The majority of the existing Brown Station and the immediate surrounding area are designated with the I-2 (Heavy Industrial) zoning district, which represents heavy industrial areas.³⁶³ According to the SAR, the proposed NGCC would be installed within an area designated with the I-2 zoning district.³⁶⁴ To the north, west, and southwest of the onsite I-2 zone, the Brown Station lies near large portions of A-2 zoned rural residential agricultural lands.³⁶⁵ To the south, there are some multi-family residential parcels, zoned as R-3 (Multi-Family Residential).³⁶⁶ The SAR concluded that the proposed NGCC as a generation unit being constructed in an existing power plant station, it is compatible with the conditional land use allowed under the I-2 zoning code.³⁶⁷

LG&E/KU stated they plan to utilize and optimize the existing onsite electrical transmission system in conjunction with completing the NGCC Project to the extent feasible.³⁶⁸ The proposed NGCC will be located near the former location of the Brown Units 1 and 2 coal boilers.³⁶⁹ The new NGCC will consist of one natural gas-fired gas combustion turbine (GT), a steam turbine (ST), and one heat recovery steam generator (HRSG) with natural gas-fired duct burners (DB) arranged in a one-on-one

³⁶² Brown 12 NGCC Site Assessment Report at 1-1.

³⁶³ Brown 12 NGCC Site Assessment Report at 3-23.

³⁶⁴ Brown 12 NGCC Site Assessment Report at 3-23.

³⁶⁵ Brown 12 NGCC Site Assessment Report at 3-23.

³⁶⁶ Brown 12 NGCC Site Assessment Report at 3-23.

³⁶⁷ Brown 12 NGCC Site Assessment Report at 3-23.

³⁶⁸ Brown 12 NGCC Site Assessment Report at 2-5.

³⁶⁹ Brown 12 NGCC Site Assessment Report at 1-1.

configuration.³⁷⁰ Ancillary support equipment will also be installed to support the NGCC operations, including one natural gas-fired boiler (Auxiliary Boiler) rated at 95.52 million British thermal units per hour (MMBtu/hr) or less, one pipeline fuel gas (dewpoint) heater rated at 15.65 MMBtu/hr or less, one 2 megawatts (MW) emergency generator with a diesel-fired engine, one 422 horsepower (HP) emergency diesel driven fire pump, one 10-cell mechanical draft cooling tower, lube oil system demister vents, raw and demineralized water storage tanks, aqueous ammonia storage and handling equipment, and other miscellaneous infrastructure.³⁷¹

All the facilities are depicted on the site plan attached as Appendix B. Dix Dam Road provides direct vehicular access to the facility and neighboring industrial areas. Dix Dam Road leads to the Brown Station's primary entrance, runs laterally internally to provide the facility's vehicular access, and terminates at the east end of the facility, near the Dix Dam Spillway.³⁷² It is anticipated that traffic associated with the Brown 12 Unit construction will utilize KY 342 connecting to Dix Dam Road to access the site.³⁷³

As part of the SAR, a roadway capacity analysis of the area was performed for the main highways near the Brown Station that are expected to accommodate travel through Mercer County to the Brown Station.³⁷⁴ Trinity Consultants relied on both the American Association of State Highway and Transportation Officials: A Policy on Geometric Design of Highways and Streets and the Transportation Research Board Highway Capacity

³⁷⁰ Brown 12 NGCC Site Assessment Report at 2-1.

³⁷¹ Brown 12 NGCC Site Assessment Report at 2-1.

³⁷² Brown 12 NGCC Site Assessment Report at 2-5.

³⁷³ Brown 12 NGCC Site Assessment Report at 2-5.

³⁷⁴ Brown 12 NGCC Site Assessment Report at 3-27.

Manual.³⁷⁵ According to the Transportation Research Board Highway Capacity Manual, the capacity of a two-lane roadway is 3,200 vehicles per hour or 1,700 vehicles per hour in one direction.³⁷⁶

According to the SAR, labor is estimated to peak at approximately 712 construction personnel in months 19 through 21 of Brown 12's construction phase.³⁷⁷ In the analysis, Trinity Consultants assumed that 70 percent of the construction personnel will drive their vehicle to the site and the remaining 30 percent will carpool and be contained within the 70 percent driving personal vehicles.³⁷⁸ The resulting peak volume is approximately 498 vehicles entering and leaving the site on a daily basis during peak construction.³⁷⁹ According to the SAR, construction personnel will access onsite parking from the Brown Station access road on Dix Dam Road, which connects to an internal construction access road and overflow parking will also be available south of the Brown Station's entrance along Dix Dam Road.³⁸⁰

Construction truck deliveries are expected to peak in months two through seven of Brown 12's construction phase.³⁸¹ In the analysis, it was noted the daily truck deliveries would vary from approximately 0 up to 168 trucks.³⁸² LG&E/KU provided information for

³⁷⁵ Brown 12 NGCC Site Assessment Report at 3-27.

³⁷⁶ Brown 12 NGCC Site Assessment Report at 3-27.

³⁷⁷ Brown 12 NGCC Site Assessment Report at 3-29.

³⁷⁸ Brown 12 NGCC Site Assessment Report at 3-29.

³⁷⁹ Brown 12 NGCC Site Assessment Report at 3-29.

³⁸⁰ Brown 12 NGCC Site Assessment Report at 3-29.

³⁸¹ Brown 12 NGCC Site Assessment Report at 3-29.

³⁸² Brown 12 NGCC Site Assessment Report at 3-29.

the SAR that limited delivery times for the trucks will typically be limited to 8:00 a.m. to 3:00 p.m. Imported fill truckload deliveries will occur from months two through eight of Brown 12's construction phase, ranging from 80 to 160 deliveries per day. The daily concrete truckload deliveries will occur from months eight through fifteen of the construction phase, ranging from 15 to 80 truck deliveries per day. Lastly, the total truck deliveries are expected to peak in months 18 and 19 of Brown 12's construction phase, with an estimated maximum of 80 delivery trucks per day. Oversized equipment and material will be delivered by rail and the Brown Station's existing rail spur infrastructure to the extent possible to avoid interfering with roadway traffic.

Additionally, KU and the City of Burgin (Burgin), work together to restrict non-personnel vehicles from traveling through Burgin to the extent feasible.³⁸⁶ KU stated it will continue to work with their existing engineering, procurement and construction (EPC) contractor(s) to continue this practice to ensure potential traffic effects within Burgin will be minimized.³⁸⁷

According to the SAR, access to the site is controlled with security fencing around the perimeter of the Brown Station property. In addition, site access is also monitored via an attendant at the guard shack, video surveillance and security patrols.³⁸⁸

³⁸³ Brown 12 NGCC Site Assessment Report at 3-29.

³⁸⁴ Brown 12 NGCC Site Assessment Report at 3-29.

³⁸⁵ Brown 12 NGCC Site Assessment Report at 3-29.

³⁸⁶ Brown 12 NGCC Site Assessment Report at 3-30.

³⁸⁷ Brown 12 NGCC Site Assessment Report at 3-30.

³⁸⁸ Brown 12 NGCC Site Assessment Report at 2-4.

The existing Brown Station operations and facilities are currently served by rail access.³⁸⁹ The rail access is provided via existing onsite rail spurs, which are accessible by the Norfolk Southern Railway line to the west of the facility.³⁹⁰ Trinity Consultants concluded that no mitigation measures were necessary for traffic control and degradation.³⁹¹

The SAR noted that the construction utility needs will be served through existing services within the Brown facility. 392

The intervenors in this matter did not provide any evidence related to the site compatibility or mitigation measures nor did any intervenor make arguments related to either item.

The Commission finds that with the proposed mitigation measures and the mitigation measures imposed in Appendix C of this Order, address the concerns regarding the site compatibility with the scenic surroundings appropriately.

<u>Setback Compliance.</u> According to the SAR, the proposed Brown 12 unit installation will utilize a single exhaust stack for venting air emissions.³⁹³ In accordance with the setback requirements described in KRS 278.704, the proposed site design has the exhaust stack located more than 1,000 feet from the nearest property boundary and

³⁸⁹ Brown 12 NGCC Site Assessment Report at 2-5.

³⁹⁰ Brown 12 NGCC Site Assessment Report at 2-5.

³⁹¹ Brown 12 NGCC Site Assessment Report at 3-33.

³⁹² Brown 12 NGCC Site Assessment Report at 2-5.

³⁹³ Brown 12 NGCC Site Assessment Report at 2-7.

more than 2,000 feet from the nearest residential neighborhood, school, hospital or nursing home facility.³⁹⁴

According to the SAR, Mercer County does have planning and zoning requirements and a review process.³⁹⁵ Upon review of Mercer County, KY Zoning Ordinance 2024, dated July 9, 2024, the SAR notes that Mercer County has not defined any additional (or more restrictive) setback requirements than those found in KRS 278.704 as summarized above.³⁹⁶

The Commission finds that the current site design does not require any additional setbacks. However, as set forth in this Order and in the mitigation measures, any design change may impact that conclusion and as such, LG&E/KU will be required to update the Commission.

Noise Assessment. Trinity Consultants conducted a noise assessment as part of the SAR.³⁹⁷ Neither the Commonwealth of Kentucky nor Mercer County has any applicable ordinances, so the report notes that it used an industry standard guidance by the United States Environmental Protection Agency (USEPA).³⁹⁸

In 2022, Trinity Consultants conducted a study of the existing operations at the Brown Station.³⁹⁹ The noise assessment modeled existing operational sound levels at

³⁹⁴ Brown 12 NGCC Site Assessment Report at 2-7.

³⁹⁵ Brown 12 NGCC Site Assessment Report at 2-7.

³⁹⁶ Brown 12 NGCC Site Assessment Report at 2-7.

³⁹⁷ Brown 12 NGCC Site Assessment Report at 3-1.

³⁹⁸ Brown 12 NGCC Site Assessment Report at 3-2.

³⁹⁹ Brown 12 NGCC Site Assessment Report at 3-2.

six receptor points.⁴⁰⁰ According to the initial study the highest level of sound occurred at Receptor 6 at 47.1 dbA.⁴⁰¹ In that assessment, the report also noted that the operations of Brown Station ranged from inaudible to noticeable at the nearest residence.⁴⁰² However, LG&E/KU mentioned blasting and large concrete pour jobs, as well as the construction overall might increase noise in the area but modeled the study using "worst case" scenario information.⁴⁰³

As such, Trinity Consultants assumed that louder pieces of equipment, such as the ram hoe and rock drill, would operate 24 hours a day. During construction, the expected noise level during the day could reach up to 55 dbA at Receptor 3 while during the nighttime it may reach as high as 45 dbA at Receptor 6. In addition, the SAR noted construction noise was planned to occur primarily Monday through Friday during daylight hours, with occasional off-shift work performed on Saturdays or night shifts. Also, LG&E/KU planned mass concrete pours be scheduled during the summer through the nighttime period, if temperatures dictate. The SAR noted that the construction phase will also require intermittent blasting at low levels.

⁴⁰⁰ Brown 12 NGCC Site Assessment Report at 3-2.

⁴⁰¹ Brown 12 NGCC Site Assessment Report at 3-6; During this period, the generation equipment closest to that receptor was operating at approximately 50 percent capacity and the noise may be greater when the facility is operating at full capacity.

⁴⁰² Brown 12 NGCC Site Assessment Report at 3-2.

⁴⁰³ Brown 12 NGCC Site Assessment Report at 3-2.

⁴⁰⁴ Brown 12 NGCC Site Assessment Report at 3-7.

⁴⁰⁵ Brown 12 NGCC Site Assessment Report at 3-3.

⁴⁰⁶ Brown 12 NGCC Site Assessment Report at 3-6.

⁴⁰⁷ Brown 12 NGCC Site Assessment Report at 3-6.

⁴⁰⁸ Brown 12 NGCC Site Assessment Report at 3-6.

be conducted during the daytime hours only (estimated from 7:00 a.m. to dusk), and is expected to generate short-term peak air pressure levels of approximately 133 dBA at the nearest onsite building.⁴⁰⁹

The SAR then evaluated the project sound levels and overall, the noise was within the acceptable levels. Specifically, as designed, the project is expected to contribute a maximum sound level of approximately 42 dBA. The design of the project includes that the HRSG Stack and GT Inlet Filter will be equipped with silencers, and LG&E/KU also stated they planned on installing the gas compressors and the single-shaft powertrain will be installed within enclosed buildings to reduce noise. Based on the results of the noise study, LG&E/KU recommended no mitigation measures for this issue.

The Commission finds that, in addition to the mitigation measures included in the application related to noise abatement, LG&E/KU should adopt the mitigation measures as set forth in Appendix C.

Impact on Property Values. A Property Value Impact Study prepared by Trinity Consultants, was submitted as part of the SAR.⁴¹³ The property valuation study reviewed both the impacts of the construction activities as well as the operational period for the NGCC.⁴¹⁴ The Property Valuation Study utilized data from the Mercer County Property

⁴⁰⁹ Brown 12 NGCC Site Assessment Report at 3-6, 3-7.

⁴¹⁰ Brown 12 NGCC Site Assessment Report at 3-2.

⁴¹¹ Brown 12 NGCC Site Assessment Report at 3-2.

⁴¹² Brown 12 NGCC Site Assessment Report at 3-6, 3-7. It is possible with certain portions of the construction for the noise to reach 133 dbA for short periods of time.

⁴¹³ Brown 12 NGCC Site Assessment Report at 3.3; Appendix D.

⁴¹⁴ Brown 12 NGCC Site Assessment Report at 3-22.

Valuation Administrator (PVA) and was done in collaboration with Valbridge Property Advisors.⁴¹⁵

The evaluation looked at the assessed values for the 38 properties located within a two-mile radius from the Brown Station compared total assessed value of each property, as compared to its distance from the Brown Station. The study also reviewed sales data for the properties from 2020 to 2022 and used the most recent sale price for a given property. The Study found that there was no correlation between a property's value and its distance from Brown Station. The Study then concluded that the models suggest there will be no measurable detriment to property value with the installation of the proposed NGCC Unit. 18

The Commission finds that the proposed facility is not likely to impact property values in the area as the Brown Generating Station has been existence for some time and the proposed NGCC will be built entirely within the current facilities footprint.

Environmental Impacts and Environmental Compliance. LG&E's Siting Matrix and related evaluated potential for impacts to air quality, wetlands, floodplains, and sensitive species. According to the report, Mercer County has been designated "USEPA as an 'attainment' or 'unclassifiable' for all criteria pollutants. Designated 8 hour ozone non-attainment areas in the region include the Louisville, Cincinnati and Indianapolis metropolitan areas."

⁴¹⁵ Brown 12 NGCC Site Assessment Report at 3-25, Appendix D.

⁴¹⁶ Brown 12 NGCC Site Assessment Report at 3-25.

⁴¹⁷ Brown 12 NGCC Site Assessment Report at 2-35.

⁴¹⁸ Brown 12 NGCC Site Assessment Report at 3-26.

⁴¹⁹ Brown 12 NGCC Site Assessment Report at 4-1.

LG&E/KU proposed mitigation measures related to fugitive dust. According to the SAR, the measures will include watering unpaved roadways, daily sweeping/maintenance of paved roadways, limiting the area of open excavation/grading areas, and providing temporary cover for soil stockpiles. Standard erosion and soil stabilization measures would also be employed throughout the NGCC's construction phase. These strategies are anticipated to be incorporated in the construction stormwater permit that will be obtained for the construction operations and disturbances.

The construction of the NGCC at Brown Generation Station will result in the air emissions in excess of the thresholds for PM, PM10, PM2.5, NOx, CO, VOC, H2SO4 mists, and GHG, therefore a preconstruction Prevention of Significant Deterioration (PSD) permit is necessary. However, according to the Trinity Consultants report, Brown Station, a Class II area, would not have cause or contribution to exceed the NAAQS or Class II PSD Increments as a result of the proposed Brown 12 NGCC. LG&E/KU noted that the Brown 12 unit would comply with all federal and state preconstruction air permitting requirements, New Source Performance Standards (NSPS), and National

⁴²⁰ Brown 12 NGCC Site Assessment Report at 3-32.

⁴²¹ Brown 12 NGCC Site Assessment Report at 3-32.

⁴²² Brown 12 NGCC Site Assessment Report at 3-32.

⁴²³ Brown 12 NGCC Site Assessment Report at 3-32.

⁴²⁴ Brown 12 NGCC Site Assessment Report at 4-1.

⁴²⁵ Brown 12 NGCC Site Assessment Report at 4-1.

⁴²⁶ Brown 12 NGCC Site Assessment Report at 4-2.

Emissions Standards for Hazardous Air Pollutants (NESHAP) emission controls requirements.⁴²⁷

The most prominent water feature impacted by the Brown generation facility is Herrington Lake. According to the proposed plan for the Brown 12 unit, it will discharge into Lake Herrington via several drainage ways. The current Brown Station already discharges into Herrington Lake subject to the permitting requirements of the Kentucky Pollution Discharge Elimination System (KPDES) Permits. The NGCC is expected to discharge fewer pollutants than the current coal-fired units at the current Brown site. The KYPDES permit will need to be updated for this project. Specifically, the report notes that an NGCC unit does not have clean coal residuals (CCR) nor will it need wet flue gas desulfurization (WFGD) process so arsenic and selenium are not expected to be discharged from the new proposed unit. The SAR noted that LG&E/KU will continue to implement the existing stormwater pollution prevention plan and update as needed for

⁴²⁷ Brown 12 NGCC Site Assessment Report at 4-2.

⁴²⁸ Brown 12 NGCC Site Assessment Report at 4-2.

⁴²⁹ Brown 12 NGCC Site Assessment Report at 4.-2.

⁴³⁰ Brown 12 NGCC Site Assessment Report at 4-2.

⁴³¹ Brown 12 NGCC Site Assessment Report at 4-2.

⁴³² Brown 12 NGCC Site Assessment Report at 4-2.

⁴³³ Brown 12 NGCC Site Assessment Report at 4-2. Two chemicals often discharged from those processes.

⁴³⁴ Brown 12 NGCC Site Assessment Report at 4-2.

the proposed NGCC.⁴³⁵ In addition, LG&E/KU stated they planned to comply with Brown Station's Best Management Practice (BMP) plan.⁴³⁶

According to the SAR, the NGCC will need approximately 630 million gallons of net cooling water each year. No significant generation of solid waste is anticipated during the operation of the proposed Brown 12 unit. 438

The Commission finds that, the mitigation measures proposed by LG&E/KU as well as the mitigation measures found in Appendix C, will assist in reducing the environmental impacts from this project appropriately.

<u>Mitigation Measures.</u> LG&E/KU proposed several mitigation measures including the ones discussed in this section above. In addition, as it relates to air quality, LG&E/KU proposed to control fugitive dust by minimizing the area of exposed soil; application of water; application of mulch and seeding; surface roughening; structural barriers and windbreaks; and application of dust suppression chemicals.⁴³⁹

In order to reduce the water contamination the SAR included the following mitigation measures: develop and implement a soil and erosion control plan; assure all storage of chemicals and fuel onsite will be provided with secondary containment, and all unloading areas will have their own containment; and in the event of a fuel or oil spill during construction, the contaminated soil will be removed and hauled away by a licensed

⁴³⁵ Brown 12 NGCC Site Assessment Report at 4-3.

⁴³⁶ Brown 12 NGCC Site Assessment Report at 4-3.

⁴³⁷ Brown 12 NGCC Site Assessment Report at 4-4, 4-5.

⁴³⁸ Brown 12 NGCC Site Assessment Report at 4-5, 4-6.

⁴³⁹ Brown 12 NGCC Site Assessment Report at 5-1.

contractor for disposal at a licensed facility.⁴⁴⁰ The withdrawal of water from Lake Herrington will be mitigated by the water efficient design of cooling systems within the NGCC to minimize cooling water consumption.⁴⁴¹ According to the SAR, cooling water treatment methods will be employed to maximize the heat capacity of the cooling water and efficiency of heat transfer so that cooling water losses are minimized.⁴⁴²

LG&E/KU proposed several mitigation measures related to solid waste including construction and office waste will be disposed of in a local licensed landfill that has the capacity to manage the nominal quantity of solid waste that is anticipated.⁴⁴³

The Commission finds that LG&E/KU's proposed mitigation measures are generally reasonable and should be implemented as proposed, unless modified or added to herein. However, the Commission finds that a few of LG&E/KU's mitigation measures should be modified and that some additional mitigation measures should be included to ensure that the goals of KRS 278.216 are met. Each of these mitigation measures can be found in Appendix C to this Order.

DISCUSSION AND FINDINGS FOR THE CPCN REQUEST FOR MILL CREEK 6

The Commission, having considered the record, and being otherwise sufficiently advised, finds that LG&E/KU have established both that Mill Creek 6 is needed and will not result in wasteful duplication. However, as the Commission will explain more fully below, the basis of LG&E/KU's need for Mill Creek 6 is wholly reliant on its economic

⁴⁴⁰ Brown 12 NGCC Site Assessment Report at 5-1.

⁴⁴¹ Brown 12 NGCC Site Assessment Report at 5-2.

⁴⁴² Brown 12 NGCC Site Assessment Report at 5-2.

⁴⁴³ Brown 12 NGCC Site Assessment Report at 5-2.

development load growth analysis. Consequently, the Commission finds it necessary to establish additional safeguards to ensure that if circumstances change and the reasonably expected load growth presented in this case does not materialize, that ratepayers will not be harmed by the unnecessary construction of this approximately \$1.415 billion project. The Commission commends the parties for the safeguards already agreed to and presented in the stipulation but finds that a monitoring case should be established, Case No. 2025-00313. This case will become the repository of all filings related to Mill Creek 6 monitoring. The parties in this case will be granted intervention in the monitoring case, should they choose to request intervention, in that proceeding, and the separate case will allow the Commission the opportunity to provide rigorous oversight of the project.

<u>Need</u>

As with Brown 12, LG&E/KU conducted detailed analysis including production costs across five fuel scenarios in order to determine which resource plan had the lowest PVRR on average across fuel price scenarios. The results of that analysis demonstrated that in all load scenarios from 1,470 MW through 2,030 MW, Mill Creek 6 was part of the least-cost portfolio. Additionally, LG&E/KU relied on four environmental scenarios analyzed in Case No. 2024-00326, LG&E/KU's very recent Joint IRP filing. For the environmental filings, both Mill Creek 6 and Brown 12 were part of the least cost portfolios

⁴⁴⁴ Case No. 2025-0031, Electronic Monitoring of Louisville Gas & Electric and Kentucky Utilities Company's Mill Creek 6 Unit.

⁴⁴⁵ Wilson Direct Testimony, Exhibit SAW-1 at 30.

⁴⁴⁶ Case No. 2024-00326, Executive Summary at 6-8.

at 1750 MW across all environmental scenarios.⁴⁴⁷ LG&E/KU also demonstrated that at 1,002 MW of load, a portfolio including Brown 12, Mill Creek 6, and the Ghent 2 SCR had a lower PVRR than a portfolio which only constructed Brown 12, a 300 MW Cane Run BESS facility, and the Ghent 2 SCR.⁴⁴⁸ Though slightly different from its other analysis, that analysis indicates that even in lower load scenarios, Mill Creek 6 has roughly similar, and in this instance, lower, PVRR than other resources that could serve that demand.⁴⁴⁹

Additionally, Mill Creek 6 represents dispatchable capacity, as a base load unit, and will, therefore, become an integral part of LG&E/KU's system reliability. As the Commission noted in its discussion of Brown 12 above, natural gas is the dominant fuel source for new generation, more efficient than its aging coal counterparts, and emits significantly less emissions, beneficial, and even necessary, to ensure that LG&E/KU comply with state and federal environmental standards.

LG&E/KU have also demonstrated a number of risks associated with denying Mill Creek 6 in this proceeding. The first risk the Commission considers is the available capacity for firm natural gas transportation from Texas Gas Pipeline (TGT) which will serve Mill Creek 5 and is by far the most cost-effective pipeline for serving Mill Creek 6.⁴⁵⁰ Specifically, if LG&E/KU cannot secure its place in TGT's Project Borealis, which is adding additional capacity to its pipeline, the companies believe that they will not be able to plan on operating Mill Creek 6 prior to 2036.⁴⁵¹ Therefore, if LG&E/KU require

⁴⁴⁷ Case No. 2024-00326, Executive Summary at 6-8.

⁴⁴⁸ LG&E/KU's response to Staff's Fifth Request, Item 4(a).

⁴⁴⁹ LG&E/KU's response to Staff's Fifth Request, Item 4(a).

⁴⁵⁰ Schram Direct Testimony at 21.

⁴⁵¹ LG&E/KU's Post-Hearing Brief at 32.

additional generation in the next decade, the utilities will have to construct their next NGCC at Green River Generating Station (Green River). While LG&E/KU stated that Green River is a viable site, they estimated that building its next unit at Green River could add approximately \$300 million above the expected cost for Mill Creek 6.453 Additionally, Mill Creek 6's proximity to the already being constructed Mill Creek 5 (another NGCC) will simply offer more favorable transmission costs and gas supply, generally.454 Not to mention that much of the work being done on Mill Creek 5 can be replicated on Mill Creek 6 for likely additional savings.455 Therefore, denying Mill Creek 6, when it is reasonably likely that an NGCC is needed within the planning horizon of this case, will have meaningful cost impacts on ratepayers. This is especially so when considering the significant rise in costs associated with the construction of Brown 12 from Case No. 2022-00402.456

While the Commission believes that LG&E/KU have met its burden in establishing that Mill Creek 6 is needed, it acknowledges that Mill Creek 6 is not the least-cost NGCC in this case; that is Brown 12. Therefore, Mill Creek 6's justification represents additional risk above and beyond Brown 12 because it is not necessary except if a meaningful portion of LG&E/KU's expected economic development load materializes on the system. Predictably, the parties supporting the stipulation, and those opposed, are sharply divided

⁴⁵² LG&E/KU's Post-Hearing Brief at 32.

⁴⁵³ LG&E/KU's Post Hearing Brief at 32.

⁴⁵⁴ Mill Creek 6 Site Assessment Report at 1-1.

⁴⁵⁵ Tummonds Direct Testimony at 3.

⁴⁵⁶ Tummonds' Rebuttal Testimony at 2.

on whether the load forecast is sufficiently certain to make Mill Creek 6's approval reasonable.

While not itself sufficient to support Mill Creek 6, the Commission also recognizes the General Assembly's legislation, now codified at KRS 154-20-222(3). Specifically, the provision "that the inducement of the location of data center projects within the Commonwealth is of paramount importance to the economic well-being of the Commonwealth." Additionally, as KIUC's brief notes, the General Assembly has also codified certain declarations regarding the Commonwealth's energy policy. Of those declarations, the Commission notes "[i]t is the policy of the Commonwealth to maintain adequate capacity of available, reliable, dispatchable, and resilient electric generation to provide for the existing and reasonably projected future energy consumption needs of all wholesale, retail, and other consumers of electricity in the Commonwealth." And, while it is too early to analyze the impact of these policies, LG&E/KU's economic development pipeline is sufficiently filled to indicate tangible interest from data center companies. Which is to say nothing of the success of the Governor and the General Assembly in attracting billions of new investments in the Commonwealth in the past several years.

As the Commission found in its discussion of the load forecast above, it believes that there is sufficient evidence to support its finding of need in this case. However, given the nature of the load forecast, and its reliance on the economic development pipeline,

⁴⁵⁷ KRS 154-20-222(3); LG&E/KU's Post-Hearing Brief at 14.

⁴⁵⁸ KIUC's Post-Hearing Brief at 4.

⁴⁵⁹ KRS 164.2807(j).

⁴⁶⁰ LG&E/KU's Post Hearing Brief at 32.

the possibility of meaningful variance from the projected load forecast cannot be ignored. The Commission cautions LG&E/KU that its approval of a CPCN in this case is in no way a determination that moving forward with the project will be either reasonable or prudent. If the facts on the ground change, and Mill Creek 6 becomes unnecessary, LG&E/KU will not be entitled to seek recovery from ratepayers if it continues to forge ahead with the project. Nor will the Commission simply rely on the safeguards agreed to in the stipulation to ensure LG&E/KU's compliance with the Commission's language in this case. Therefore, the Commission will establish a monitoring case, Case No. 2025-00313,461 to allow it the necessary flexibility to provide meaningful oversight of Mill Creek 6. This monitoring is consistent with Commission precedent and allows the Commission the opportunity to provide ongoing oversight and prevent the continued investment in Mill Creek 6 if the Commission finds that the economic landscape has changed such that Mill Creek 6 is not the most prudent option to serve its customers. As the Commission noted in Case No. 2004-00507, continued oversight allows the Commission to "speed up, slow down, or cancel construction before too much has been invested in the project."462

With regard to the agreed upon monitoring provisions in the proposed stipulation, the Commission views favorably the proposal in the stipulation that a minimum of 500 MW of executed electric service agreements by new customers under the proposed

⁴⁶¹ Case No. 2025-00313, *Electronic Monitoring of Louisville Gas & Electric and Kentucky Utilities Company's Mill Creek 6 Unit.*

⁴⁶² Case No. 2004-00507, Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity, and a site Compatibility certificate, for the Expansion of the Trimble County Generating Station, (Ky. PSC Nov. 1, 2005) Order at 6.

Extremely High Load Factor (EHLF) tariff by the in-service date for Mill Creek 6⁴⁶³ should be used as a cost-recovery metric along with non-Rate EHLF load growth, an increase in off-system sales, the acquisition of municipal or other load, replacing lost capacity if the Ohio Valley Electric Corporation's coal plants close, selling to other utilities for supplying data centers or other large loads in Kentucky, or selling part of Mill Creek 6 capacity. This list is not intended to be exhaustive. Additionally, the Commission approves the stipulation's requirement that LG&E/KU provide in person, semi-annual construction, economic development, and load forecast updates to the Commission and all intervenors from the seconds quarter of 2026 through the second quarter of 2032.

Lack of Wasteful Duplication

Consistent with the Commission's findings in its discussion of Brown 12 above, Mill Creek 6 is the second least-cost option for an NGCC in this case. At approximately \$1.415 billion, Mill Creek 6 will cost significantly less than a hypothetical Green River 5 NGCC unit. Additionally, Mill Creek 6 will have lower capital costs than either Brown 12 or Green River 5 while having an equivalent firm gas cost to Green River 5. Additionally, Mill Creek 6's expected 2031 in-service date is a full year prior to when LG&E/KU believes it could construct Green River 5. That timing is important because LG&E/KU's expected data center demand is expected to be fully on-line by 2032, making Green River 5 a far less appealing option.

 $^{^{463}}$ As modified in the stipulation to include customers with an expected or actual real-time energy demand peak between 50 MVA and 100 MVA and an expected or actual monthly load factor of 75 percent or greater.

⁴⁶⁴ LG&E/KU's response to Staff's Third Request, Item 8(b), Attachment 1 at 6.

⁴⁶⁵ LG&E/KU's response to Staff's Third Request, Item 8(b), Attachment 1 at 6.

⁴⁶⁶ LG&E/KU's response to Staff's Third Request, Item 8(b), Attachment 1 at 6.

LG&E/KU's environmental analysis in its IRP also supports a finding that Mill Creek 6 is a least-cost option when considering more restrictive environmental regulatory scenarios. Specifically, in LG&E/KU's analysis of least-cost resource plans under its Ozone NAAQS + ELG+GHG scenario in its Joint IRP, even with zero incremental load, the least-cost resource plan called for five new NGCC units to be constructed by 2032.

Additionally, given challenges being faced by neighboring regional transmission markets, such as PJM and Midcontinent Independent System Operator, Inc. (MISO), there is no evidence that LG&E/KU could secure the kind of firm capacity that Mill Creek 6 offers by 2031, in order to ensure the reliability of its system when accounting for the economic development load. Thus, when coupling these considerations with the fact that Mill Creek 6 is part of least-cost portfolios from 1,470 MW to 2,030 MW, LG&E/KU have met their burden and established that Mill Creek 6 will not result in wasteful duplication.

SITE COMPATIBILITY FOR MILL CREEK 6

To determine the optimal and lowest cost option for siting Mill Creek 6, LG&E/KU conducted a Siting Study. According to the application, LG&E/KU considered several sites including Green River Generating Station, Brown Generating Station, and Mill Creek Generating Station. LG&E/KU stated that, in the midst of constructing Mill Creek 5, LG&E/KU would be able to take advantage of efficiencies of scale such as site layout design incorporated a footprint for a possible Mill Creek 6 including civil designs, such as

⁴⁶⁷ Wilson's Direct Testimony at 20-21, 29.

⁴⁶⁸ Case No. 2024-00326, 2024 IRP Vol. III, 2024 IRP Resource Assessment at 48, Table 28, Low Load column. Notably, the plan also calls for the retirement of Brown 3, Mill Creek units 3 and 4, and Ghent units 1 through 4 by 2032.

⁴⁶⁹ Tummonds Direct Testimony at 3.

roadways, stormwater flow paths, and building and structural layout.⁴⁷⁰ The Mill Creek 5 site layout design incorporated a footprint for a possible Mill Creek 6.⁴⁷¹ According to LG&E/KU, much of the Mill Creek 5 work can be replicated for Mill Creek 6, including mechanical and instrumentation electrical routing designs.⁴⁷² Laydown yards and temporary facilities used at Mill Creek 5 can be reused for Mill Creek 6.⁴⁷³ The gas line constructed to Mill Creek 5 can also serve Mill Creek 6 simultaneously with minimal additional construction or maintenance costs.⁴⁷⁴ LG&E/KU also argued that having two separate locations will reduce execution risks when the units are fully constructed.⁴⁷⁵

Pursuant to KRS 278.216 and KRS 278.708(3) and (4), LG&E/KU submitted a Site Assessment Report (SAR) with its application for a site compatibility certificate for the proposed Mill Creek 6 facility. The SAR was prepared by Trinity Consultants and addressed the statutory requirements concerning inter alia the site characteristics, including land use compatibility, potential environmental impacts, setback requirements, noise levels, any effects on nearby property valuation, and proposed mitigation measures.

Detailed Site Description. LG&E currently operates an electric generation power plant, the Mill Creek Station, located in Jefferson County, Kentucky, approximately 25 miles

⁴⁷⁰ Tummonds Direct Testimony at 4.

⁴⁷¹ Tummonds Direct Testimony at 4.

⁴⁷² Tummonds Direct Testimony at 4.

⁴⁷³ Tummonds Direct Testimony at 4.

⁴⁷⁴ Tummonds Direct Testimony at 4.

⁴⁷⁵ Tummonds Direct Testimony at 5.

⁴⁷⁶ Application, Exhibit 6.

southwest of Louisville.⁴⁷⁷ The Mill Creek Station property is an approximately 637 acre contiguous site.⁴⁷⁸ The proposed Mill Creek 6 unit would be constructed on the approximately 12-acre area located within the central portion, adjacent to Mill Creek 5, of the existing Mill Creek Station property.⁴⁷⁹ The current Mill Creek Station consists of Mill Creek 1, a coal unit currently in the process of being retired; Mill Creek 2, a coal unit whose retirement was approved in 2023; Mill Creek 5, an NGCC currently under construction.

LG&E/KU are proposing to construct and operate Mill Creek 6 with a maximum power rating of approximately 680 gross megawatts (MW) within the central/eastern portion of the existing Mill Creek Generating Station. The Mill Creek Station is located within a zoning district that is designated as Residential (R-4). According to the SAR, land uses in the area vary but most of the areas are zoned R-4. There are at least three additional areas of single family districts. To the south of the Mill Creek facility, there is an area designated for heavy industrial activity and to the East there is commercial and industrial land use.

⁴⁷⁷ Mill Creek 6 Site Assessment Report at 1-1, 2-4.

⁴⁷⁸ Mill Creek 6 Site Assessment Report at 2-4.

⁴⁷⁹ Mill Creek 6 Site Assessment Report at 4-3.

⁴⁸⁰ Mill Creek 6 Site Assessment Report at 1-1.

⁴⁸¹ Mill Creek 6 Site Assessment Report at 2-4.

⁴⁸² Mill Creek 6 Site Assessment Report at 2-4.

⁴⁸³ Mill Creek 6 Site Assessment Report at 2-4.

⁴⁸⁴ Mill Creek 6 Site Assessment Report at 2-4.

LG&E/KU stated they plan to utilize and optimize the existing onsite electrical transmission system in conjunction with completing the NGCC Project to the extent feasible. 485 The proposed NGCC will be located within the internal railway loop. 486 The new NGCC will consist of one natural gas-fired gas combustion turbine (GT), a steam turbine (ST), and one heat recovery steam generator (HRSG) with natural gas-fired duct burners (DB) arranged in a one-on-one configuration.⁴⁸⁷ Ancillary support equipment will also be installed to support the NGCC operations, including one natural gas-fired boiler (Auxiliary Boiler) rated at 95.52 million British thermal units per hour (MMBtu/hr) or less, one pipeline fuel gas (dewpoint) heater rated at 15.66 MMBtu/hr or less, one 2.18 MW emergency generator with diesel-fired engine, one 422 horsepower (HP) emergency diesel driven fire pump, one 10-cell mechanical draft cooling tower, lube oil system demister vents, raw and demineralized water storage tanks, aqueous ammonia storage and handling equipment, and other miscellaneous infrastructure. 488 Texas Gas has indicated it can supply both Mill Creek 5 and Mill Creek 6 on the same natural gas pipeline. 489 All of the facilities are depicted on the site plan attached as Appendix D.

Dixie Highway is a four lane undivided roadway that provides access to the facility and construction will utilize the highway to access the site.⁴⁹⁰ As part of the SAR, a roadway capacity analysis of the area was performed for the main highways near the Mill

⁴⁸⁵ Mill Creek 6 Site Assessment Report at 2-1.

⁴⁸⁶ Mill Creek 6 Site Assessment Report at 2-5.

⁴⁸⁷ Mill Creek 6 Site Assessment Report at 2-1.

⁴⁸⁸ Mill Creek 6 Site Assessment Report at 2-1.

⁴⁸⁹ Tummonds Direct Testimony at 10.

⁴⁹⁰ Mill Creek 6 Site Assessment Report at 2-5.

Creek Station that are expected to accommodate travel during construction. Trinity Consultants relied on both the American Association of State Highway and Transportation Officials: A Policy on Geometric Design of Highways and Streets and Transportation Research Board Highway Capacity Manual. According to the Transportation Research Board Highway Capacity Manual, the capacity of a two-lane roadway is 8,000 vehicles per hour or 4,000 vehicles per hour in one direction.

According to the SAR, labor is estimated to peak at approximately 712 construction personnel in Months 19 through 21 of Mill Creek 6's construction phase. ⁴⁹⁴ In the analysis, Trinity Consultants assumed that 70 percent of the construction personnel will drive their vehicle to the site and the remaining 30 percent will carpool and be contained within the 70 percent driving personal vehicles. ⁴⁹⁵ The resulting peak volume is approximately 498 vehicles entering and leaving the site on a daily basis during peak construction. ⁴⁹⁶ According to the SAR, construction personnel accessed from Dixie Highway. Variations in the number of construction personnel and work schedule may occur; however, these variations will be infrequent and will only be expected to affect a small portion of the total construction personnel. ⁴⁹⁷

⁴⁹¹ Mill Creek 6 Site Assessment Report at 3-31.

⁴⁹² Mill Creek 6 Site Assessment Report at 3-31.

⁴⁹³ Mill Creek 6 Site Assessment Report at 3-31.

⁴⁹⁴ Mill Creek 6 Site Assessment Report at 3-33.

⁴⁹⁵ Mill Creek 6 Site Assessment Report at 3-33.

⁴⁹⁶ Mill Creek 6 Site Assessment Report at 3-33.

⁴⁹⁷ Mill Creek 6 Site Assessment Report at 3-33.

Construction truck deliveries are expected to peak in months two through seven of Mill Creek 6's construction phase. ⁴⁹⁸ In the analysis, it was noted the daily truck deliveries would vary from approximately 0 up to 168 trucks. ⁴⁹⁹ LG&E/KU provided information for the SAR that limited delivery times for the trucks will typically be limited to 8:00 a.m. to 3:00 p.m. ⁵⁰⁰ Imported fill truckload deliveries will occur from months two through eight of Mill Creek 6's construction phase, ranging from 80 to 160 deliveries per day. ⁵⁰¹ The daily concrete truckload deliveries will occur from months eight through fifteen of the construction phase, ranging from 15 to 80 truck deliveries per day. ⁵⁰² Lastly, the total truck deliveries are expected to peak in months 18 and 19 of Mill Creek 6's construction phase, with an estimated maximum of 80 delivery trucks per day. ⁵⁰³ Oversized equipment and material will be delivered by rail and Mill Creek Station's existing rail spur infrastructure to the extent possible to avoid interfering with roadway traffic. ⁵⁰⁴

According to the SAR, access to the site is controlled with security fencing around the perimeter of the Mill Creek Station property.⁵⁰⁵ In addition, site access is also

⁴⁹⁸ Mill Creek 6 Site Assessment Report at 3-33.

⁴⁹⁹ Mill Creek 6 Site Assessment Report at 3-33.

⁵⁰⁰ Mill Creek 6 Site Assessment Report at 3-33.

⁵⁰¹ Mill Creek 6 Site Assessment Report at 3-33.

⁵⁰² Mill Creek 6 Site Assessment Report at 3-33.

⁵⁰³ Mill Creek 6 Site Assessment Report at 3-33.

⁵⁰⁴ Mill Creek 6 Site Assessment Report at 3-33.

⁵⁰⁵ Mill Creek 6 Site Assessment Report at 2-5.

monitored via an attendant at the guard shack, electronic key card controls, video surveillance and security patrols.⁵⁰⁶

The SAR concluded that no permanent impacts are anticipated on roadway capacity as a result of commercialization and operation of the proposed Mill Creek 6 Unit, and similarly there will be no increase in potential road degradation or congestion. 507

The intervenors in this matter did not provide any evidence related to the site compatibility or mitigation measures nor did any intervenor make arguments related to either item.

The Commission finds that that, although the SAR made minimal suggested mitigation measures, the mitigation measures imposed in Appendix E of this Order, address the concerns regarding the site compatibility with the surroundings appropriately.

Setback Compliance. According to the SAR, the proposed Mill Creek 6 unit installation will utilize a single exhaust stack for venting air emissions. In accordance with the setback requirements described in KRS 278.704, the proposed site design has the exhaust stack located more than 1,000 feet from the nearest property boundary and more than 2,000 feet from the nearest residential neighborhood, school, hospital or nursing home facility. So

LG&E/KU noted that there are two residences less than 2,000 feet from the project but stated that when taken together, the parcels are not five or more total acres.⁵¹⁰

⁵⁰⁶ Mill Creek 6 Site Assessment Report at 2-5.

⁵⁰⁷ Mill Creek 6 Site Assessment Report at 3-37.

⁵⁰⁸ Mill Creek 6 Site Assessment Report at 2-7.

⁵⁰⁹ Mill Creek 6 Site Assessment Report at 2-7.

⁵¹⁰ Mill Creek 6 Site Assessment Report at 2-7.

Jefferson County has planning and zoning and a review process.⁵¹¹ According to the SAR, Chapter 4 Part 2, Section 4.2.24 of the County's Land Development Code notes "that structures housing generating equipment and outdoor storage facilities shall be setback a minimum of 1,000 feet away from the nearest residential property line when adjacent to any non-industrial use or zoning district."⁵¹² LG&E/KU stated that the project would comply with the requirement but again argued that the utility was exempt from planning and zoning, as a regulated utility.⁵¹³

The Commission finds that the current site design does not require any additional setbacks. However, as set forth in this Order and in the mitigation measures, any design change may impact that conclusion and as such, LG&E/KU will be required to update the Commission on its site design. In addition, the Commission notes that, recently, the definition of "residential neighborhood" set forth in KRS 278.700(6) has become an in recent Siting Board cases. The Commission reminds LG&E/KU that it will continue to examine what a utility believes may or may not be a residential neighborhood. In addition, as noted in Case No. 2023-00261, the Commission does not necessarily agree with LG&E/KU's statement that LG&E/KU are exempt from local planning and zoning. The set planning and set planning and set planning and set planning.

⁵¹¹ Mill Creek 6 Site Assessment Report at 2-7.

⁵¹² Mill Creek 6 Site Assessment Report at 2-7.

⁵¹³ Mill Creek 6 Site Assessment Report at 2-7.

⁵¹⁴ Case No. 2024-00406, Electronic Application of Lost City Renewables LLC for a Certificate of Construction for an Approximately 250 Megawatt Merchant Electric Solar Generating Facility in Muhlenberg County, Kentucky Pursuant to KRS 278.710 and 807 KAR 5:110; Case No. 2025-00064, Electronic Application of Summer Shade Solar, LLC for a Certificate of Construction for an Approximately 106-Megawatt Merchant Electric Solar Generating Facility in Metcalfe County, Kentucky Pursuant To KRS 278.700 and 807 KAR 5:110 (Oct. 26, 2025).

⁵¹⁵ Case No. 2023-00361 Electronic Joint Application of Kentucky Utilities Company And Louisville Gas and Electric Company for a Site Compatibility Certificate for the Construction of a Solar Facility in Mercer County, Kentucky (Ky. PSC July 12, 2024), Order at 29-32.

Jefferson County does have local planning requirements that establish set back requirements that are stricter than those established by KRS 278.704(2), which could potentially apply to the Mill Creek 6 facility pursuant to KRS 278.216(2), KRS 278.708(3)(a)(7), and KRS 278.704(3).

As the Commission has stated previously, the Commission agrees that KRS 100.324 and KRS 278.216(5), taken alone, indicate that set back requirements established by local planning and zoning commissions would not apply to a utility seeking a site compatibility certificate. However, KRS 278.216(2) generally requires that a utility seeking a site compatibility certificate file a SAR as prescribed in KRS 278.708(3) and (4) but then states "except that a utility which proposes to construct a facility on a site that already contains facilities capable of generating ten megawatts (10MW) or more of electricity shall not be required to comply with setback requirements established pursuant to KRS 278.704(3)."

When interpreting a statute, it should be presumed that the legislature "intended for the statute to be construed as a whole, for all of its parts to have meaning, and for it to harmonize with related statutes." 517 As discussed in Case No. 2023-00361, the "conditional exemption to the local setback requirements in KRS 278.216(2) creates ambiguity regarding the applicability of local set back requirements pursuant to KRS 278.704(3), because the language would be superfluous and have no meaning if KRS

⁵¹⁶ Case No. 2023-00361, July 12, 2024 Order at 31.

⁵¹⁷ Shawnee Telecom Resources, Inc. v. Brown, 354 S.W.3d 542, 551 (Ky. 2011).

100.324 and KRS 278.216(5) exempted utilities from local setback requirements in all circumstances."⁵¹⁸

The Commission does not need to resolve the ambiguity created by KRS 278.216(2), KRS 278.216(5), and KRS 100.324 in this case. The project is proposed to be located at a current generation facility. The actual construction and new generator will be located in the section of the station. The Commission finds that the project does comply with local ordinances as well as the applicable statutes. No additional setbacks are necessary.

Noise Assessment. Trinity Consultants conducted a noise assessment as part of the SAR. S19 According to the SAR, KRS 224.30-175 is directly applicable; however, this statute does not contain numerical noise limits, but rather defers to noise thresholds and protocols promulgated by applicable local government agencies. Jefferson County has a noise ordinance but Trinity Consultants concluded that it also does not contain established numerical thresholds applicable to the Mill Creek Station. Trinity Consultants utilized guidelines from the United States Environmental Protection Agency (USEPA) to evaluate the noise impact for the proposed Mill Creek 6 project. S22

In 2022, Trinity Consultants conducted a study of the existing operations at the Mill Creek Station.⁵²³ The noise assessment modeled existing operational sound levels at

⁵¹⁸ Case No. 2023-00361, July 12, 2024 Order at 31-32.

⁵¹⁹ Mill Creek 6 Site Assessment Report at 3-1.

⁵²⁰ Mill Creek 6 Site Assessment Report at 3-2.

⁵²¹ Mill Creek 6 Site Assessment Report at 3-2.

⁵²² Mill Creek 6 Site Assessment Report at 3-2.

⁵²³ Mill Creek 6 Site Assessment Report at 3-2.

five receptor points.⁵²⁴ According to the initial study the highest level of sound occurred at Receptor 5 at 61.7 decibels.⁵²⁵ In that assessment, the report also noted that the operations of Mill Creek Station ranged from inaudible to noticeable at the nearest residence.⁵²⁶ In 2023, Cerjan Acoustics conducted a follow-up noise monitoring study using four receptors.⁵²⁷ The SAR noted that the findings were similar in both studies.⁵²⁸

Trinity Consultants made assumptions for "worst case noise level" for the studies. 529 Trinity Consultants assumed that louder pieces of equipment, such as the ram hoe and rock drill, would operate 24 hours a day. 530 During construction, the expected noise level during the day could reach up to 61.7 dbA at Receptor 5 while during the nighttime it may reach as high as 61.3 dbA at Receptor 4.531 In addition, the SAR noted construction noise was planned to occur primarily Monday through Friday during daylight hours, with occasional off-shift work performed on Saturdays or night shifts. 532 Also, LG&E/KU planned mass concrete pours be scheduled during the summer through the nighttime period, if temperatures dictate. 533

⁵²⁴ Mill Creek 6 Site Assessment Report at 3-2.

⁵²⁵ Mill Creek 6 Site Assessment Report at 3-4.

⁵²⁶ Mill Creek 6 Site Assessment Report at 3-3.

⁵²⁷ Mill Creek 6 Site Assessment Report at 3-6 and 3-7, 3-8.

⁵²⁸ Mill Creek 6 Site Assessment Report at 3-7.

⁵²⁹ Mill Creer 6 Site Assessment Report at 3-7.

⁵³⁰ Mill Creek 6 Site Assessment Report at 3-7.

⁵³¹ Mill Creek 6 Site Assessment Report at 3-6.

⁵³² Mill Creek 6 Site Assessment Report at 3-7

⁵³³ Mill Creek 6 Site Assessment Report at 3-7.

The SAR then evaluated the project sound levels during construction and overall, there were higher than acceptable levels of noise registered at Receptors 2, 3, 4, and 5.⁵³⁴ However, Trinity Consultants found that the noise increase, when considered in light of the increases seen from 2022 to 2023, would be negligible.⁵³⁵

Trinity Consultants also evaluated the operation noise levels of the facility. 536 Based on that evaluation, higher than acceptable levels of noise would occur at Receptor 3.537 However, LG&E/KU asserted that the proposed HRSG Stack and GT Inlet Filter will be equipped with silencers, and both the gas compressors and the single-shaft powertrain will be housed within enclosed buildings, which will attenuate noise reducing the impact noted in the study. 538 Based on the results of the noise study, LG&E/KU recommended no mitigation measures for this issue. The SAR did not recommend any specific mitigation measures but as noted in the report, proposed project construction was done in such a way to mitigate noise. 539

The Commission finds that, in addition to the mitigation measures included in the application related to noise abatement, LG&E/KU should adopt the mitigation measures as set forth in Appendix E. The additional measures recognize that the report indicated possible louder than acceptable noise levels at times. The Commission's mitigation

⁵³⁴ Mill Creek 6 Site Assessment Report at 3-8.

⁵³⁵ Mill Creek 6 Site Assessment Report at 3-8.

⁵³⁶ Mill Creek 6 Site Assessment Report at 3-9 through 3-11.

⁵³⁷ Mill Creek 6 Site Assessment Report at 3-11.

⁵³⁸ Mill Creek 6 Site Assessment Report at 3-9 through 3-11.

⁵³⁹ Mill Creek 6 Site Assessment Report at 3-11.

measures are to ensure that construction and operation of the facility is done in accordance with this Order.

Impact on Property Values. A Property Value Impact Study prepared by Trinity Consultants, was submitted as part of the SAR.⁵⁴⁰ The property valuation study reviewed both the impacts of the construction activities as well as the operational period for the NGCC.⁵⁴¹ The Property Valuation Study utilized data from the Jefferson County Property Valuation Administrator (PVA) and was done in collaboration with Valbridge Property Advisors.⁵⁴²

The evaluation looked at the assessed values for the 70 properties located within a two-mile radius from the Mill Creek Station compared total assessed value of each property, as compared to its distance from the Mill Creek Station.⁵⁴³ The study also reviewed sales data for the properties from 2020 to 2022 and used the most recent sale price for a given property.⁵⁴⁴ The Study found that there was no correlation between a property's value and its distance from Mill Creek Station.⁵⁴⁵ The Study then concluded that the models suggest there will be no measurable detriment to property value with the installation of the proposed NGCC Unit.⁵⁴⁶

⁵⁴⁰ Mill Creek 6 Site Assessment Report at 3.3; Appendix D.

⁵⁴¹ Mill Creek 6 Site Assessment Report at 3-3, Appendix D.

⁵⁴² Mill Creek 6 Site Assessment Report at 3-29, Appendix D.

⁵⁴³ Mill Creek 6 Site Assessment Report at 3-29.

⁵⁴⁴ Mill Creek 6 Site Assessment Report at 3-29.

⁵⁴⁵ Mill Creek 6 Site Assessment Report at 3-30.

⁵⁴⁶ Mill Creek 6 Site Assessment Report at 3-30.

Based on the evidence presented, the Commission finds that the proposed facility is not likely to impact property values in the area as the Mill Creek Generating Station has been existence for some time and the proposed NGCC will be built entirely within the current facilities footprint. In addition, there does not appear to be a correlation between property value and the generating station.

<u>Environmental Impacts and Environmental Compliance</u>. LG&E's Siting Matrix and related evaluated potential for impacts to air quality, wetlands, floodplains, and sensitive species. According to the report, Jefferson County has been designated by the

USEPA as an 'attainment' or 'unclassifiable' for all criteria pollutants, except ozone. For ozone, Jefferson County is designated as a marginal nonattainment area with respect to the 8-hour ozone National Ambient Air Quality Standards (NAAQS) promulgated in 2015. It is also located in the portion of Jefferson County that was redesignated as a maintenance area for the 2010 SO2 NAAQS on September 8, 2020. The nearest Federal PSD Class I area is Mammoth Cave National Park, located approximately 55 miles (88 kilometers) south of Mill Creek Station.⁵⁴⁷

According to the SAR, air quality regulation and permitting in Jefferson County, Kentucky is administered by the Louisville Metro Air Pollution Control District (APCD).⁵⁴⁸ The USEPA has given APCD authority to implement and enforce the federal Clean Air Act (CAA) provisions and state air regulations under its approved State Implementation

⁵⁴⁷ Mill Creek 6 Site Assessment Report at 4-1.

⁵⁴⁸ Mill Creek 6 Site Assessment Report at 4-1.

Plan (SIP).⁵⁴⁹ The SIP as well as the general regulation of the air quality of the area has been the subject of extensive testimony in this case.⁵⁵⁰

During the construction, LG&E/KU proposed mitigation measures related to fugitive dust.⁵⁵¹ Subsequent to construction, operational air emissions will be evaluated under the APCD authority to determine compliance with applicable CAA regulations.⁵⁵² Trinity Consultants' report averred that, since the new NGCC Unit will be constructed and operated within the existing Mill Creek Generating Station property, it will have the same standard industrial classification (SIC) code as existing operations, and will be under the same common control or ownership; hence, Mill Creek 6 will be considered a modification to an existing major stationary source.⁵⁵³

The SAR reported that the Mill Creek 6 project would not trigger nonattainment NSR per Regulation 2.04 for VOC (and NOX) as a precursor for ozone.⁵⁵⁴ LG&E/KU also anticipate taking a synthetic minor emissions limit for H2SO4 at less than 7 tons per year, which precludes PSD review for H2SO4 and at the same time, GHGs do not become subject to regulation.⁵⁵⁵ The Mill Creek 6 unit will also be subject to Federal New Source Performance Standards (NSPS) codified in 40 CFR Part 60 and National Emission

⁵⁴⁹ Mill Creek 6 Site Assessment Report at 4-1.

⁵⁵⁰ Mill Creek 6 Site Assessment Report at 4-1; *see also* Imber Direct Testimony, generally, Imber Rebuttal Testimony, generally; Imber Hearing Testimony, generally; LG&E/KU's first response to requests from Joint Intervenors; LG&E/KU's responses to Staff's post-hearing requests. This is not a comprehensive list but covers a substantial portion of the evidence.

⁵⁵¹ Mill Creek 6 Site Assessment Report at 4-1.

⁵⁵² Mill Creek 6 Site Assessment Report at 4-1.

⁵⁵³ Mill Creek 6 Site Assessment Report at 4-1.

⁵⁵⁴ Mill Creek 6 Site Assessment Report at 4-2.

⁵⁵⁵ Mill Creek 6 Site Assessment Report at 4-2.

Standards for Hazardous Air Pollutants (NESHAP) codified in 40 CFR Part 63.⁵⁵⁶ Based upon compliance with State and Federal pre-construction air permitting requirements, NSPS and NESHAP emission controls requirements, and a net decrease of emissions for many key pollutants, the SAR concluded the Mill Creek 6 unit will have no significant impacts on the air quality resource.⁵⁵⁷

The most prominent water feature impacted by the proposed Mill Creek 6 unit is the Ohio River which is 1,400 feet from the generation station. The Ohio River discharges into the Mississippi River approximately 117 miles west of the project site. The existing Mill Creek Station discharges cooling water into the Ohio River pursuant to its Kentucky Pollution Discharge Elimination System (KPDES) Permit No. KY0003221. In addition, Mill Creek Station withdraws water for steam generation, cooling/quenching, and make-up water from the Ohio River. According to the SAR, the proposed Mill Creek 6 unit does not require a WFGD system nor will it generate CCRs. LG&E/KU stated they would coordinate all changes in pollutant loads at outfalls in collaboration with KDEP DOW as part of the updated KPDES permit process.

⁵⁵⁶ Mill Creek 6 Site Assessment Report at 4-2.

⁵⁵⁷ Mill Creek 6 Site Assessment Report at 4-2.

⁵⁵⁸ Mill Creek 6 Site Assessment Report at 4-2.

⁵⁵⁹ Mill Creek 6 Site Assessment Report at 4-2.

⁵⁶⁰ Mill Creek 6 Site Assessment Report at 4-2.

⁵⁶¹ Mill Creek 6 Site Assessment Report at 4-2.

⁵⁶² Mill Creek 6 Site Assessment Report at 4-2.

⁵⁶³ Mill Creek 6 Site Assessment Report at 4-2.

The SAR noted solid waste generated at the proposed NGCC Unit will be minimal, generated mostly from routine maintenance operations.⁵⁶⁴ Routine maintenance may generate small quantities of used oil, which will be recycled or disposed of offsite via licensed contractors, or dirt and sludge from equipment cleaning that will be transferred to a commercial landfill offsite.⁵⁶⁵ The report made a finding that no significant generation of solid waste is anticipated during operation of the proposed Mill Creek 6 unit.⁵⁶⁶

The Commission finds that, the mitigation measures proposed by LG&E/KU as well as the mitigation measures found in Appendix E, will assist in reducing the environmental impacts from this project appropriately.

<u>Mitigation Measures</u>. LG&E/KU proposed several mitigation measures including the ones discussed in this section above. In addition, as it relates to air quality, LG&E/KU proposed to control fugitive dust by minimizing the area of exposed soil; application of water; application of mulch and seeding; surface roughening; structural barriers and windbreaks; and application of dust suppression chemicals.⁵⁶⁷

In order to reduce the water contamination, the SAR included the following mitigation measures: develop and implement a soil and erosion control plan; assure all storage of chemicals and fuel onsite will be provided with secondary containment, and all unloading areas will have their own containment; and in the event of a fuel or oil spill during construction, the contaminated soil will be removed and hauled away by a licensed

⁵⁶⁴ Mill Creek 6 Site Assessment Report at 4-5.

⁵⁶⁵ Mill Creek 6 Site Assessment Report at 4-5.

⁵⁶⁶ Mill Creek 6 Site Assessment Report at 4-5.

⁵⁶⁷ Mill Creek 6 Site Assessment Report at 5-1.

contractor for disposal at a licensed facility.⁵⁶⁸ The withdrawal of water from the Ohio River will be mitigated through water efficient design of cooling systems to minimize cooling water consumption.⁵⁶⁹ According to the SAR, cooling water treatment methods will be employed to maximize the heat capacity of the cooling water and efficiency of heat transfer so that cooling water losses are minimized.⁵⁷⁰

LG&E/KU proposed several mitigation measures related to solid waste including construction and office waste will be disposed of in a local licensed landfill that has the capacity to manage the nominal quantity of solid waste that is anticipated.⁵⁷¹

The Commission finds that LG&E/KU's proposed mitigation measures are generally reasonable and should be implemented as proposed, unless modified or added to herein. However, the Commission finds that some additional mitigation measures should be included to ensure that the goals of KRS 278.216 are met. Each of these mitigation measures can be found in Appendix E to this Order.

DISCUSSION AND FINDINGS FOR THE CPCN REQUEST FOR THE CANE RUN BESS

Having considered the record and being otherwise sufficiently advised, the Commission finds that the Cane Run BESS unit should be denied without prejudice for the reasons discussed below. The Commission also notes that it supports LG&E/KU's withdrawing of the request, consistent with the stipulation provisions.

⁵⁶⁸ Mill Creek 6 Site Assessment Report at 5-1.

⁵⁶⁹ Mill Creek 6 Site Assessment Report at 5-2.

⁵⁷⁰ Mill Creek 6 Site Assessment Report at 5-2.

⁵⁷¹ Mill Creek 6 Site Assessment Report at 5-2.

Need

LG&E/KU's request for a CPCN for the Cane Run BESS unit, like the other CPCN requests, is predicated on economic development load growth. In almost all scenarios modeled in the application and in lower load scenarios, such as 1,002 MW, some level of Cane Run BESS is chosen.⁵⁷² LG&E/KU have stated that speed to market is the first priority for data centers, and that means having energy to serve them as quickly as possible.⁵⁷³ LG&E/KU also stated data centers have a load factor of 90 to 95 percent.⁵⁷⁴ One of the benefits of a BESS is that it can be constructed more quickly than an NGCC. Furthermore, LG&E/KU also confirmed that a one-year delay, for example, of the Cane Run BESS to an in-service date of 2029 instead of 2028, could affect the ability to serve economic load growth in the near-term, but it would have no effect on the reliability metrics of the portfolio beyond 2031.⁵⁷⁵

Sierra Club highlighted the benefits of the Cane Run BESS unit that LG&E/KU spoke of throughout the proceeding including:

providing additional "peaking" capacity at times of high grid utilization; making "fuller use of existing and planned resources to reduce the need for fully dispatchable resources that would otherwise be required to meet peaking needs;" "meeting the ramp schedule anticipated for data center customers because the companies can add it relatively quickly and without regard for particular fuel supply or delivery constraints;" avoiding any impacts to transmission when located at Cane Run; enhanced certainty of authorization given the lack of any major construction permits necessary to install the batteries; promoting "fuel diversity" by receiving

⁵⁷² Application at 24; LG&E/KU's response to Staff's Second Request, Item 1.

⁵⁷³ Bellar Rebuttal Testimony at 2.

⁵⁷⁴ LG&E/KU's Application at 6-7.

⁵⁷⁵ LG&E/KU's response to Staff's Post-Hearing Request, Item 3.

energy from a variety of generation sources; fostering "future integration of renewable energy resources at scale;" and facilitating the Companies' familiarity with optimizing battery storage systems.⁵⁷⁶

Sierra Club also argued that benefits of a BESS unit include

deliver[ing] energy imbalance service (meeting hourly mismatch between scheduled and actual load)" and "providing ... 'quick-start' reserves due to their fast discharge characteristics; "balancing grid supply and demand and improving quality and reliability," adding "peak electricity demand shaving and price arbitrage opportunities," "storing and smoothing renewable electricity demand," "deferring electricity infrastructure investments," and "integrat[ing] with microgrids". 577

The Attorney General and KIUC raised concerns about the Cane Run BESS unit portion of the application. The Attorney General stated that the BESS does not make sense from a cost-benefit perspective, and the substantial cost does not support the limited benefits the BESS would have provided to LG&R/KU's system. KIUC argued that the Cane Run BESS resource is also not the right fit to meet the needs of the projected data center load. KIUC explained that the capacity value of a BESS resource is also dependent on the duration of the storage and its ability to provide reliable service in peak periods.

Having considered the record and being otherwise sufficiently advised, the Commission finds that LG&E/KU have not presented sufficient evidence regarding a

⁵⁷⁶ Sierra Club's Post-Hearing Brief at 26.

⁵⁷⁷ Sierra Club's Post-Hearing Brief at 25-26.

⁵⁷⁸ Attorney General's Initial Brief at 4.

⁵⁷⁹ KIUC's Initial Brief at 13.

⁵⁸⁰ KIUC's Initial Brief at 14.

current need for the Cane Run BESS. Although a quicker construction timeline is generally considered a benefit, here the longer time horizon of dispatchable generation provides LG&E/KU more flexibility to wait until there is increased certainty surrounding a higher level of data center load growth. While Sierra Club cited to many benefits regarding the BESS, many of the benefits, such as serving peak demand and price arbitrage, are not best-suited to meet the demand of a high-load factor data center. Therefore, the Commission finds that the Cane Run BESS is not currently needed.

Wasteful Duplication

The Cane Run BESS was modeled across load and fuel scenarios from as little as 1,002 MW of data center load growth to as high as 2,030 MW.⁵⁸¹ For the stage one results, the size of the Cane Run BESS was chosen across almost all load scenarios.⁵⁸² The stage two results, based on 1,750 MW of data center load growth, included the Cane Run BESS in its least cost portfolio.⁵⁸³ The stage three results show that adding the Cane Run BESS in the 2028-2029 time frame enables for approximately 630 MW of data center load to be served.⁵⁸⁴

The total projected capital cost for the Cane Run BESS is approximately \$775 million. The total cost per kW is LG&E/KU provided the complete cost breakdown as follows:

⁵⁸¹ Application at 24; LG&E/KU's response to Staff's Second Request, Item 1.

⁵⁸² Wilson Direct Testimony at 26.

⁵⁸³ Wilson Direct Testimony at 28.

⁵⁸⁴ Wilson Direct Testimony at 29.

⁵⁸⁵ Application at 12.



LG&E/KU also noted that the cost estimates included a 10 percent contingency. LG&E/KU explained that the fixed O&M cost assumptions for Cane Run BESS are based on the fixed O&M cost assumptions for Brown BESS submitted as part of Case No. 2022-00402. The Companies escalated the fixed O&M assumption for Brown BESS by 0.43 percent based on cost escalation for BESS resources in NREL's 2024 ATB. SEC.

LG&E/KU modeled multiple trade and tax scenarios, that include a 30 percent tariff with a 40 percent ITC for the BESS; a 40 percent ITC for the BESS; and a full repeal of

⁵⁸⁶ LG&E/KU's Response to Attorney General/KIUC's First Request, Item 18.

⁵⁸⁷ LG&E/KU's Response to the Attorney General/KIUC's First Request, Item 30.

ITC and federal production tax credits (PTC) in response to KCA and Staff requests for information.⁵⁸⁸ At the time LG&E/KU modeled these scenarios, there was uncertainty surrounding whether a BESS unit would be able to qualify for an ITC.⁵⁸⁹ As LG&E/KU explained, federal PTC under 26 U.S.C. Section 45Y and ITC under 26 U.S.C. Section 48E have a significant impact on the economics of renewable generation, including BESS resources.⁵⁹⁰

The final version of the H.R.1. bill was signed into law on July 4, 2025.⁵⁹¹ At the hearing, Witness Bellar stated that the ITC credits for the BESS have been extended under the final version of the law until 2033.⁵⁹² Bellar also explained that they believe that they would still qualify for a 40 percent ITC, but if materials are sourced from the United States, the ITC could go up to 50 percent.⁵⁹³ The additional 10 percent tax credit has the potential to offset much of the rising costs associated with a one year or greater construction delay and the relocation of certain manufacturing away from Foreign Entities of Concern.⁵⁹⁴ LG&E/KU also explained that the energy storage market is experiencing increased interest and growth as a result of the One Big Beautiful Bill Act.⁵⁹⁵ The least-cost portfolios over all fuel price scenarios showed that with a 30 percent tariff and the

⁵⁸⁸ LG&E/KU's Response to Staff's Third Request, Item 8(b), Attachment 1, page 4.

⁵⁸⁹ LG&E/KU's Response to KCA's First Request, Item 4, Attachment 1, page 10.

⁵⁹⁰ LG&E/KU's Response to KCA's First Request, Item 4, Attachment 1, page 10.

⁵⁹¹ Actions - H.R.1 - 119th Congress (2025-2026): One Big Beautiful Bill Act | Congress.gov | Library of Congress;

⁵⁹² HVT of the August 4, 2025 Hearing at 02:12–02:13.

⁵⁹³ HVT of the August 4, 2025 Hearing at 02:13:40-02:15:50.

⁵⁹⁴ LG&E/KU's Response to Staff's Post-Heating Request, Item 19.

⁵⁹⁵ LG&E/KU's Response to Staff's Post-Hearing Request, Item 19.

availability of Mill Creek 2, the Cane Run BESS unit is no longer least-cost and is replaced with SCCT capacity or a third NGCC at Green River. At the hearing, LG&E/KU confirmed that the material sourced from China is a tariffed rate of 30 percent.

LG&E/KU also looked at a BESS at the Ghent Station as an alternative to the Cane Run BESS. However, LG&E/KU said that, unlike at Ghent Station, there are advantages with transmission networks that are already in place at Cane Run to allow for integration, and LG&E/KU does not anticipate any significant system modifications or upgrades. ⁵⁹⁸ LG&E/KU also highlighted that the Ghent BESS has higher capital costs than the Cane Run BESS. ⁵⁹⁹

Joint Intervenors argued that the withdrawal of the Cane Run BESS CPCN will likely lead to increased costs to ratepayers. Joint Intervenors' highlighted witness Bellar's hearing testimony in which he said that if the Stipulation is approved, LG&E/KU will withdraw their CPCN request to be re-filed at a later date, likely in early 2026, for an intended in-service date of 2029, in order to avoid the foreign entities of concern restriction by using U.S. sourced materials for the BESS project. The Commission notes if LG&E/KU refiles its request for the Cane Run BESS, that it will need to meet the CPCN standard.

⁵⁹⁶ LG&E/KU's Response to Staff's Third Request, Item 8(b), Attachment 1, page 13.

⁵⁹⁷ HVT to the August 4, 2025 Hearing, 2:09:40-2:10:00 PM.

⁵⁹⁸ Wilson Direct Testimony, SAW-1 at 45; Tummonds Direct Testimony at 12.

⁵⁹⁹ Wilson Direct Testimony at 15.

⁶⁰⁰ Joint Intervenors' Post-Hearing Brief at 59.

⁶⁰¹ Joint Intervenors' Post-Hearing Brief at 59.

In Case No. 2022-00402, the Commission expressed concerns regarding the cost of the Brown BESS proposed in that case.⁶⁰² The Commission found that in relation to the Brown BESS

the operational experience LG&E/KU will be able to obtain from Brown BESS is worth the expected cost...The Commission believes that such experience is necessary given the current regulatory environment, and that it will allow LG&E/KU and the Commission to make more informed decisions in the future regarding whether it makes sense from an economic standpoint to make more significant investments in battery storage in the future, which could ultimately save customers money in the long term and will help ensure that LG&E/KU can continue to provide service in a more resource constrained environment.⁶⁰³

As the Brown BESS does not have an in-service date until 2027, LG&E/KU may not yet be best positioned to make informed decisions in the future regarding whether it makes sense from an economic standpoint to make more significant investments in battery storage and does not have the operational experience to better inform its decision regarding the operational impact of BESS units.

SREA recommended that LG&E/KU issue an RFP for the proposed BESS facility and that the Commission require LG&E/KU to study and consider competitively procured resources as LG&E/KU contends with increases in demand and to further diversify the generation portfolio.⁶⁰⁴ As part of the stipulation agreement, LG&E/KU stated that they commit to issue a request for proposals (RFP) for renewable energy and energy storage by mid-2026 seeking to procure energy and capacity of utility scale solar, wind, storage,

⁶⁰² Case No. 2022-00402, final Order at 96.

⁶⁰³ Case No. 2022-00402, Nov. 6, 2023 Order at 96.

⁶⁰⁴ SREA's Initial Brief at 7.

and/or hybrid resources.⁶⁰⁵ Joint Intervenors also highlighted that the Renewable RFP commitment cannot correct for LG&E/KU's failure to issue an RFP that could have provided real market pricing to support their Cane Run BESS proposal.⁶⁰⁶

Having considered the record and being otherwise sufficiently advised, the Commission finds that LG&E/KU have not met its burden of proof that building the Cane Run BESS would result in an absence of wasteful duplication. There is uncertainty regarding the impacts of tariffs on BESS's component parts, especially from China. With a 30 percent tariff, the BESS is no longer chosen as a least cost-resource. A delay in construction could also potentially mean that component parts will be able to be sourced from United States manufacturers, which could allow LG&E/KU to receive a 50 percent ITC and avoid the costs associated with tariffs. Furthermore, the short-term life extension of Mill Creek 2 appears to be a least-cost alternative when compared to the Cane Run BESS. A short-term life extension of Mill Creek 2 provides similar advantages to the Cane Run BESS, with less capital investment. As noted in Case No. 2022-00402, data from the Brown BESS will be informative into how a BESS unit its utilized within its current generation system. Therefore, the Commission finds that the Cane Run BESS currently does not meet the standard for lack of wasteful duplication.

The Commission finds that LG&E/KU's request for a CPCN for the Cane Run BESS is denied. Therefore, LG&E/KU's request for a site compatibility certificate for the Cane Run BESS is also denied as moot.

 605 Stipulation and Recommendation at 9. In terms of whether LG&E/KU should engage in an RFP process before re-filing an Application for the Cane Run BESS with the Commission, the Commission addressed this in the stipulation discussion below.

⁶⁰⁶ Joint Intervenors' Post-Hearing Brief at 78.

DISCUSSION AND FINDINGS FOR GHENT 2 SCR

Having considered the evidence, the Commission finds that KU should be granted a CPCN for the Ghent 2 SCR, as discussed below.

Although most of this Order relates to both LG&E and KU, the Ghent 2 unit is wholly owned by KU. As such, for clarity, the Commission will only reference KU when discussing the proposal to add SCR to the Ghent 2 unit. KU argued that installing the Ghent 2 SCR is necessary to ensure compliance with the federal Clean Air Act, particularly the ozone NAAQS, the most recent version of which is the 2015 Ozone NAAQS. KU argued that the EPA is obligated to drive attainment of the 70 parts per billion ozone standard of the 2015 Ozone NAAQs, including any state's significant contribution to downwind states non-attainment or interference with any state's maintenance of attainment. KU argued that having Ghent 2 available year-round including in the ozone season is part of a least-cost portfolio, because the Ghent 2 SCR is necessary to ensure LG&E/KU's ongoing compliance with the 2015 Ozone NAAQs and thus Ghent 2's continuing year-round availability, the Commission should grant an SCR for Ghent 2.609

KIUC, the Attorney General, and KCA filed briefs in support of approval of the request to add SCR to Ghent 2 in its brief. KCA noted that the SCR was the least cost option relative to building new resources.⁶¹⁰ KIUC argued that approving SCR for Ghent

⁶⁰⁷ LG&E/KU Post-Hearing Brief at 20.

⁶⁰⁸ LG&E/KU's Post-Hearing Brief at 20.

⁶⁰⁹ LG&E/KU's Post-Hearing Brief at 21.

⁶¹⁰ KCA's Initial Brief at unnumbered page 4.

2 will allow LG&E/KU to continue to operate the Ghent unit in order to serve the projected load.⁶¹¹ Additionally, should the Commission not approve the SCR, KIUC stated Ghent 2 would be the only large coal unit projected to operate beyond 2030 without NOx controls in the region.⁶¹²

In LG&E/KU's most recent IRP, the companies proposed several scenarios related to environmental compliance and generation portfolios, one of which was to retire all the Ghent units by 2032⁶¹³ and another one proposed to retire the Ghent units by 2039.⁶¹⁴ According to the IRP, SCR is needed on Ghent 2 as early as 2028.⁶¹⁵ Sierra Club argued that the Commission should reject LG&E/KU's proposed CPCN for SCR pollution control equipment at Ghent 2 because the Good Neighbor Plan does not apply to Kentucky.⁶¹⁶ In addition, Sierra Club averred that no other regulation will require an SCR at Ghent 2 at least during this presidential term, and rejecting this wasteful spending will protect customers from an unnecessary bill increase.⁶¹⁷ Moreover, Sierra Club argued that rejecting the SCR at Ghent 2 will also avoid significant spending on an aging coal resource that just two years ago LG&E/KU proposed to retire as part of a least-cost resource plan.⁶¹⁸

⁶¹¹ KIUC's Initial Brief at 10.

⁶¹² KIUC's Initial Brief at 10.

⁶¹³ Case No. 2024-00326, 2024 IRP, Volume III, Generation Planning and Analysis at 39.

⁶¹⁴ Case No. 2024-00326, 2024 IRP, Volume III, Generation Planning and Analysis at 39.

⁶¹⁵ Case No. 2024-00326, LG&E/KU IRP Executive Summary at 9; Case No. 2025-00045, Bellar Direct Testimony at 9-10.

⁶¹⁶ Sierra Club's Reply Brief at 2-3; Sierra Club's Brief at 21.

⁶¹⁷ Sierra Club's Brief at 20.

⁶¹⁸ Sierra Club's Brief at 20; Case No. 2022-00402, Joint Application at 8-9.

The issue of SCR being added to Ghent 2 has been an ongoing issue with KU since 2006.⁶¹⁹ In that case, the Commission granted KU's request to add an SCR to Ghent 2, but in October of 2007 KU filed to reopen the matter and remove the Ghent 2 SCR from its environmental compliance plan as it was no longer necessary to comply with applicable environmental regulations.⁶²⁰

Having considered the facts and evidence in the record, the Commission finds that a CPCN to add an SCR to Ghent 2 should be granted. Adding an SCR to Ghent 2 will allow the coal unit to continue to operate and provide energy as the overall demand on LG&E/KU's systems continues to increase. The Commission notes that an SCR on Ghent 2 was picked by the model as part of the least cost option for LG&E/KU to fulfill its obligation to reliably serve its native load.

Once again,⁶²¹ the Commission recognizes that these are uncertain regulatory times. In addition, the unprecedented interest in areas with an ability to serve data centers, with a high energy demand, coupled with a utility's obligation to serve customers creates a unique and complicated regulatory environment. The Commission has always evaluated "need" as a concrete concept but as discussed earlier in this Order, it may be time to expand the discussion. The environmental regulations, as they are today, require KU to add SCR to Ghent 2 in order to continue to utilize the unit into the 2030s. In fact.

⁶¹⁹ Case No. 2006-00206, The Application of Kentucky Utilities Company for a Certificate of Public Convenience and Necessity to Construct a Selective Catalytic Reduction System and Approval of Its 2006 Compliance Plan for Recovery by Environmental Surcharge (Ky. PSC Dec. 21, 2006).

⁶²⁰ Case No. 2006-00206, Feb. 28, 2008 Order at 1-2.

⁶²¹ Case No. 2024-00370, Electronic Application of East Kentucky Power Cooperative, Inc. for 1) Certificates of Public Convenience and Necessity to Construct a New Generation Resources; 2) for a Site Compatibility Certificate Relating to the Same; 3) Approval of Demand Side Management Tariffs; and 4) Other General Relief (Ky PSC July 3, 2025), Order at 58-59.

an SCR is chosen as a least cost option to serve native load making the "need" as to Ghent 2 clear. Ghent 2 continues to provide reliable energy to the customers of KU and investments in its continued use will assist in bridging the gap as the companies shift to become less reliant on coal-fueled generators.

The Commission notes that there is no wasteful duplication as to the SCR for Ghent 2. Each unit and, in turn, each generating station is subject to certain environmental regulations. Although at least one of the intervenors argued that SCR on Ghent 2 wasn't required for environmental compliance, the Commission recognizes that this request does not just implicate the current air standards but also the air quality standards in 2028 through possibly 2032. It is evident based on the discussions above that operating Mill Creek 5 and possibly Mill Creek 2 or Mill Creek 6 would result in possible air quality standards violations, especially if Ghent 2 continues to operate without an SCR. The SCR was part of the preferred least cost scenario chosen by the companies. The Commission agrees that SCR is the least cost, most reasonable option to prolonging the life of a generating unit to provide sufficient energy to meet demand. KU also presented evidence that the estimated nominal capital cost of installing SCR in 2009 (\$115 million) would have been less than the estimated nominal capital cost of installing SCR on Ghent 2 in 2028 (\$152 million), the present value of the 2028 cost in 2009 dollars is approximately only \$45 million. 622

KU has demonstrated that, as asserted in this case,⁶²³ KU will not endeavor to add SCR if it no longer is the least cost most reasonable option to addressing demand and

⁶²² LG&E/KU's response to Staff's Third Request, Item 24(a).

⁶²³ LG&E/KU's response to Staff's Second Request, Item 14(b).

complying with environmental regulations or reasonably prudent to construct. The Commission expects KU to comply with its own commitment. The Commission does have concerns that KU has pivoted from the proposed retirement of Ghent 2 to investing in the unit to prolong its useful life into the 2030s. However, KU has an obligation to provide adequate, reliable service to its customers at fair, just and reasonable rates. In a time of unprecedented energy demand, KU has chosen a least cost, most reasonable option. In addition, the evidence indicates that the current presidential administration is encouraging utilities to continue to utilize fossil fuel generation including coal fired units. Prolonging an older coal firing unit by choosing a lower cost environmental compliance upgrade satisfies the current federal objective and current environmental objectives while also achieving statutory service obligations.

DISCUSSION AND FINDINGS FOR THE PROPOSED AMENDMENT TO THE ENVIRONMENTAL COMPLIANCE PLAN AND RECOVERY

KU requested Commission approval of its revised ECR Surcharge tariff sheets. 625 KU proposed to revise its ECR Surcharge tariff sheets to include recovery of Commission-approved "Administrative Expenses," which would include the proposed recovery of customer notice costs and any other ECR administrative expenses the Commission approves for ECR Surcharge recovery in later proceedings. 626 Second, KU proposed to change the issue and effective dates of its revised ECR Surcharge tariff sheets. 627 In

⁶²⁴ LG&E/KU's response to Staff's Third Request, Item 16; <u>Trump administration to expand coal</u> leasing, fund coal plant upgrades | Reuters

⁶²⁵ Case No. 2025-00105, Electronic Application of Kentucky Utilities Company of its 2025 Compliance Plan for Recovery by Environmental Surcharge Plan (filed Apr. 30, 2025), Application at 7.

⁶²⁶ Case No. 2025-00105, Application at 2.

⁶²⁷ Case No. 2025-00105, Application at 2.

accordance with KRS 278.183(2), the revised ECR Surcharge tariff sheets have an issue date of April 30, 2025, and KU proposed for them to be effective on October 31, 2025.⁶²⁸ Therefore, bills issued during billing cycles beginning with KU's December 2025 billing cycle, which begins on December 1, 2025, will reflect the revised ECR Surcharge for expense months beginning with October 2025.

KU further requested Commission approval of its revised ECR Surcharge to reflect the recovery of the costs associated with the 2025 Plan, specifically adding Project 45,⁶²⁹ and the requested customer notice cost recovery.⁶³⁰

The Commission has reviewed KU's proposed amendments to its Environmental tariff sheets and found that the proposed amendments, as modified below, are approved. Based on the approval of the CPCN for the SCR addition to Ghent 2, the Commission finds that KU's proposed amendment to its environmental compliance plan should be approved. As a result, the proposed tariff sheets and effective date changes related to Project 45 are approved. However, the Commission does not approve the automatic recovery of the customer notice on a going forward basis.

The Commission has reviewed the notice expense related to the ECR in this case and finds that the amount⁶³¹ should be recovered through the ECR and amortized over a 12-month period. Therefore, the Commission approves the regulatory asset request related to customer notice related to the ECR surcharge in this case. The Commission

⁶²⁸ Case No. 2025-00105, Application at 6-8.

⁶²⁹ The SCR for Ghent 2; Case No. 2025-00105, Application at 6-7.

⁶³⁰ Case No. 2025-00105, Application at 8.

⁶³¹ Case No. 2025-00105, Application at 6. Estimated to be approximately \$359,976.

will continue to review regulatory asset requests on a case-by case basis related to customer notice.

The Commission finds that KU should continue to utilize the depreciation rates as well as the authorized return on equity approved in Case No. 2020-00349.⁶³²

DISCUSSION OF DEMAND SIDE MANAGEMENT PORTFOLIO

In the application, LG&E/KU did not propose any revisions to its current demand side management portfolio. However, the Joint Intervenors made multiple requests related to the impact a demand side management portfolio may have on a utility's generation profile, specifically as to the need of new generation if ways to reduce or limit demand may exist. In support of its position, the Joint Intervenors provided the testimony of Dr. Elizabeth Stanton.⁶³³ According to Dr. Stanton, a 2025 report by Duke University's Nicholas Institute for Energy, Environment, and Sustainability, found data centers to be promising areas for demand response programs.⁶³⁴ However, the cited report also noted that the current demand response programs were not developed for data centers; however, Dr. Stanton's position was that programs such as backup power could be useful in reducing the data center demand.⁶³⁵ The Joint Intervenors requested that the Commission require LG&E/KU to demonstrate that they have explored or offered back-

⁶³² Case No. 2020-00349, Electronic Application of Kentucky Utilities Company for an Adjustment of Its Electric Rates, a Certificate of Public Convenience and Necessity to Deploy Advanced Metering Infrastructure, Approval of Certain Regulatory and Accounting Treatments, and Establishment of a One-Year Surcredit (Ky. PSC Sept. 24, 2021).

⁶³³ Stanton Direct Testimony (filed June 17, 2025).

⁶³⁴ Stanton Direct Testimony at 44; *citing* Norris, T.H. et al. February 2025. *Rethinking Load Growth:* Assessing the Potential for Integration of Large Flexible Loads in US Power Systems. Nicholas Institute for Energy, Environment & Sustainability, Duke University. Available at: https://nicholasinstitute.duke.edu/publications/rethinking-load-growth at 9.

⁶³⁵ Stanton Direct Testimony at 45.

up generation, back-up storage, energy efficient equipment, and demand response functionality with prospective data center customers, and are either represented in projects plans, are infeasible, or the customers are unwilling to enter such contracts.⁶³⁶

LG&E/KU's position throughout the processing of this matter has been that there has not been any interest in demand management programs.⁶³⁷

The Commission notes that LG&E/KU did consider demand side management programs in its modeling and load forecasting. The phrase "2028 Portfolio" "referred to the LG&E/KU's resource portfolio in 2028 and reflected the retirement of Mill Creek 1 (2024), the planned retirement of Mill Creek 2 (2027), the assumed retirement of the small-frame SCCTs (2026), the planned additions of Brown BESS (2027), Mill Creek 5 (2027), two company-owned solar facilities in 2026 and 2027, and dispatchable demand response programs from the LG&E/KU's 2024-2030 DSM-EE Program Plan. 638

Joint Intervenors' argued that LG&E/KU's load forecast understates, and LG&E/KU did not reasonably evaluate, actual cost-effective demand-side management potential, a least-cost and genuinely no-regrets resource. Joint Intervenors stated that LG&E/KU's approach chronically understates the value of DSM and bloats the claimed need for relatively expensive supply-side capital projects. Joint Intervenors also argued that LG&E/KU's superficial engagement with stakeholders further reflects

⁶³⁶ Stanton Direct Testimony at 45.

⁶³⁷ LG&E/KU's Response to Joint Intervenors' First Request, Item 130.

⁶³⁸ Wilson Direct Testimony at 27 and Exhibit SAW-1 at 34.

⁶³⁹ Joint Intervenors' Brief at 25.

⁶⁴⁰ Joint Intervenors' Brief at 27.

indifference to reducing energy waste and customer need through DSM, including DERs.⁶⁴¹

As mentioned, numerous times in this Order, the demand growth projected by LG&E/KU is unprecedented. The Commission notes that LG&E/KU did consider the impact of the DSM programs currently being utilized by the companies. The Commission encourages LG&E/KU to consider and evaluate whether back-up generation or back-up storage for a data center would be helpful. Pending resolution of Case No. 2025-00113 and Case No. 2025-00114, if LG&E/KU have a customer receiving service pursuant to an approved ELHF tariff at the time of filing, LG&E/KU should consider at least three additional DSM programs when the companies come in for DSM program revisions. The Commission must have some actual recorded information, including usage data, contract terms, market purchase information, if necessary and outage information, which even the Joint Intervenors' own witness acknowledges does not exist at this time, even if data centers may be a useful customer class to expand the DSM programs.⁶⁴²

DISCUSSION AND FINDINGS FOR REGULATORY ASSET AND ACCOUNTING TREATMENT REQUESTS

LG&E/KU requested Commission approval to establish a regulatory asset to defer certain costs associated with the construction of Brown 12, Mill Creek 6, and the Cane Run BESS.⁶⁴³ LG&E/KU proposed to record their investment in these facilities as CWIP and accrue AFUDC using the methodology approved by FERC.⁶⁴⁴ LG&E/KU further

⁶⁴¹ Joint Intervenors' Brief at 32.

⁶⁴² Stanton Direct Testimony at 44-45.

⁶⁴³ Application at 14.

⁶⁴⁴ Conroy Direct Testimony at 14.

proposed to record a regulatory asset during the construction period for the difference between AFUDC accrued at LG&E/KU's weighted average cost of capital (WACC) and AFUDC accrued using the FERC methodology. LG&E/KU argued that, under this proposed methodology, they would recover only their "actual cost of capital, no more or no less." LG&E/KU explained that the AFUDC and regulatory asset accruals would end as each asset is placed in service.

LG&E/KU also requested the Commission approve regulatory asset treatment for post-in-service carrying costs, operating and maintenance expense, property taxes, investment tax credit amortization, and depreciation expense until such costs are fully reflected in LG&E/KU's retail base rates or an applicable cost recovery mechanism, with the costs to be accrued using the LG&E/KU's weighted average cost of capital. LG&E/KU stated the regulatory asset treatment of post-in-service costs would improve administrative efficiency for the Commission and reduce rate case costs for customers. LG&E/KU further stated timely cost recovery or the proposed post-in-service regulatory accounting treatment would be necessary to avoid significant adverse impacts to LG&E/KU's financial health. In this case, LG&E/KU stated timely cost recovery would require multiple annual base rate cases with back-to-back forecasted test periods and repeated rate cases would be administratively burdensome for the Commission and

⁶⁴⁵ Conroy Direct Testimony at 15.

⁶⁴⁶ Conroy Direct Testimony at 15.

⁶⁴⁷ Conroy Direct Testimony at 15.

⁶⁴⁸ Application at 14.

⁶⁴⁹ Conroy Direct Testimony at 15.

⁶⁵⁰ Conroy Direct Testimony at 15.

costly to customers.⁶⁵¹ LG&E/KU stated its proposed regulatory accounting approach would allow LG&E/KU to construct and operate these facilities without repeatedly impacting customers' bills through repeated rate cases, eliminating unnecessary regulatory burden and unnecessary rate case costs to customers.⁶⁵²

LG&E/KU did not request the same regulatory accounting treatment for the Ghent 2 SCR as it is smaller in scale and has a much shorter construction timeline.⁶⁵³

Intervenor Arguments. The Attorney General/KIUC and Sierra Club provided testimony regarding the first requested regulatory asset treatment proposed in this case, the difference between AFUDC accrued at LG&E/KU's WACC and AFUDC accrued using the FERC methodology. In his direct testimony, the Attorney General/KIUC's witness, Lane Kollen, stated he recommended the Commission authorize LG&E/KU to use AFUDC in lieu of CWIP in its rate base during construction of the proposed projects, but recommended four clarifications and conditions to protect customers. First, Kollen recommended to limit the AFUDC base to CWIP amounts actually paid as opposed to amounts recorded to CWIP that have offsetting construction accounts payable. Second, Kollen recommended setting the upper limit on the equity ratio used in the AFUDC WACC calculation to no more than the equity ratio authorized in LG&E/KU's most recent base rate case proceedings. Third, Kollen recommended requiring LG&E/KU

⁶⁵¹ Conroy Direct Testimony at 15.

⁶⁵² Conroy Direct Testimony at 15.

⁶⁵³ Conroy Direct Testimony at 15.

⁶⁵⁴ The Direct Testimony of Lane Kollen and Exhibits (Kollen Direct Testimony) at 5.

⁶⁵⁵ Kollen Direct Testimony at 6.

⁶⁵⁶ Kollen Direct Testimony at 7.

to maximize the use of short-term debt to the extent it is lower cost than long-term debt.⁶⁵⁷ Fourth, Kollen recommended using the average daily balance of short term debt each month and not the month end balance.⁶⁵⁸ In her direct testimony, Sierra Club's witness, Stacy Sherwood, stated they did not have concerns with LG&E/KU's request for a regulatory asset for the treatment of the difference between the AFUDC at LG&E/KU's weighted cost of capital and FERC's approved AFUDC protocol.⁶⁵⁹ Sherwood did state that should the Commission approve this regulatory asset treatment, the Commission should clarify it is not a finding that LG&E/KU can recover construction costs in rates.⁶⁶⁰

The Attorney General/KIUC and Sierra Club both also provided testimony regarding the second requested regulatory asset treatment proposed in this case, the post-in-service carrying costs, operating and maintenance expense, property taxes, investment tax credit amortization, and depreciation expense. Witness Kollen stated two concerns with the proposed regulatory asset. First, Kollen stated LG&E/KU cannot defer a return on rate base at their WACC under generally accepted accounting principles (GAAP) or for FERC USOA accounting or reporting purposes, stating LG&E/KU are only allowed to defer a debt return on rate base for GAAP and FERC USOA accounting purposes. Second, Kollen states there are revenues and costs LG&E/KU did not address in its proposal. These omitted items included incremental revenues from

⁶⁵⁷ Kollen Direct Testimony at 7.

⁶⁵⁸ Kollen Direct Testimony at 7.

⁶⁵⁹ Sherwood Direct Testimony at 6.

⁶⁶⁰ Sherwood Direct Testimony at 6.

⁶⁶¹ Kollen Direct Testimony at 8.

⁶⁶² Kollen Direct Testimony at 8.

organic customer growth and new data center loads, subtraction of investment tax credits available on the Cane Run BESS, subtraction of tax depreciation deferred tax liabilities and potential net operating loss deferred tax assets and calculations of incremental nonfuel operating expenses. Kollen recommended the Commission authorize the post inservice deferrals for Brown 12 and the Cane Run BESS, but limit the return on rate base to a debt only return consistent with GAPP and FERC UsoA purposes. Witness Kollen did not recommend authorization of the post in-service deferrals for Mill Creek 6, as he provided a recommendation for the Generation Cost Recovery Rider in lieu of the post inservice deferrals.

Sherwood disagreed with the proposed regulatory asset for post in-service deferrals, and recommended the Commission deny that request. Sherwood stated the projected carrying costs would significantly outweigh the minimal customer savings associated with avoiding a single rate case. Sherwood also stated the proposal did not meet prior Commission approval to establish a regulatory asset. Sherwood was also concerned LG&E/KU did not perform a cost/rate analysis for the CPCN requests and presented an unknown level of risk if the projects were to be approved.

⁶⁶³ Kollen Direct Testimony at 8.

⁶⁶⁴ Kollen Direct Testimony at 9.

⁶⁶⁵ Kollen Direct Testimony at 9.

⁶⁶⁶ Sherwood Direct Testimony at 10.

⁶⁶⁷ Sherwood Direct Testimony at 7.

⁶⁶⁸ Sherwood Direct Testimony at 7.

⁶⁶⁹ Sherwood Direct Testimony at 8.

The proposed stipulation agreed with granting LG&E/KU's request to record a regulatory asset during the construction period for the difference between AFUDC accrued at its WACC and AFUDC accrued using the FERC methodology.⁶⁷⁰ It did however, state the LG&E/KU would withdraw their request for a regulatory asset for post-in-service carrying costs and other related expenses.⁶⁷¹

LG&E/KU have historically included CWIP in rate base during their base rate cases, which allows them to recover financing costs as construction occurs, instead of capitalizing the construction costs as AFUDC and recovering them over the life of the asset. The Commission has previously allowed LG&E/KU to record AFUDC and defer the difference between the AFUDC accrued at LG&E/KU's WACC and AFUDC accrued using the methodology approved by the FERC for advanced metering infrastructure, due to the long construction period and significant expenditure. The Commission also previously allowed this regulatory asset treatment in Case No. 2022-00402. The commission also

Having reviewed the record and being otherwise sufficiently advised, the Commission finds that LG&E/KU's request for authorization to establish deferral accounting for the difference between AFUDC accrued at LG&E/KU's WACC and AFUDC accrued using the methodology approved by the FERC during the construction period of Brown 12 and Mill Creek 6 is an acceptable treatment for the financing costs during construction, given LG&E/KU's actual financing plans, the long construction period, and

⁶⁷⁰ Stipulation and Recommendation, Section 1.5(A) at 5.

⁶⁷¹ Stipulation and Recommendation, Section 1.5(B) at 5.

⁶⁷² Case No. 2020-00349, June 30, 2021 Order at 13 and Appendix A at 11; Case No. 2020-00350, June 30, 2021 Order at 15 and Appendix A at 11.

⁶⁷³ Case No. 2022-00402, Nov. 6, 2023 Order at 141.

the significant expenditure. Accordingly, the Commission finds that LG&E/KU should be authorized to establish, for accounting purposes only, regulatory assets based on the difference between AFUDC accrued at LG&E/KU's WACC and AFUDC accrued using the methodology approved by the FERC during the construction period of Brown 12 and Mill Creek 6. Because the Commission denied LG&E/KU's request for a CPCN to construct the Cane Run BESS at this time, the issue of a regulatory asset for deferred construction costs for the Cane Run BESS is moot. The Commission notes its approval of the regulatory asset is not a finding that LG&E/KU can recover construction costs in rates and will closely monitor construction progress to ensure those costs are prudently incurred. The Commission will thoroughly review the reasonableness of the deferred construction financing costs in the future rate case.

Having reviewed the record and being otherwise sufficiently advised, the Commission finds that LG&E/KU's request to approve regulatory asset treatment for post-in-service carrying costs, operating and maintenance expense, property taxes, investment tax credit amortization, and depreciation expense until such costs are fully reflected in the LG&E/KU's retail base rates or an applicable cost recovery mechanism, with the costs to be accrued using the LG&E/KU's WACC is denied. The Commission finds the proposed regulatory asset treatment proposed in the stipulation is reasonable. LG&E/KU did not provide revenue requirement, rate, or bill impact analysis, and further stated cost recovery would be requested through a future application for a change in base rates.⁶⁷⁴ The lack of expected costs and other omitted revenues and costs result in the

674 LG&E/KU's Response to Staff's First Request, Item 104a, at 133.

Commission being unable to determine whether the request meets the extraordinary, nonrecurring expense requirement.

DISCUSSION AND FINDINGS FOR THE MILL CREEK 2 MECHANISM AND MILL CREEK 6 MECHANISM

In their filed Stipulation, LG&E/KU proposed a cost recovery mechanism for all costs of Mill Creek 6 (Mill Creek 6 Mechanism). 675 LG&E/KU stated that the proposed Mill Creek 6 Mechanism would allow LG&E, who will own 100 percent of Mill Creek 6, to recover all costs of Mill Creek 6 from its in-service date through retirement, with temporary offsets from incremental revenues from Rate EHLF and Eligible Data Centers. 676 LG&E/KU asserted that the Mill Creek 6 Mechanism would provide benefits to customers that could not be achieved through a fully litigated outcome, such as near-real-time cost recovery based on actual costs rather than amounts embedded in base rates, and cost recovery for Mill Creek 6 being partially offset by data center revenues not then embedded in base rates.677 LG&E/KU explained that LG&E would recover all costs of Mill Creek 6, including without limitation depreciation, a WACC carrying cost using the most recently approved base rate return on equity appropriately grossed up for taxes, and all Mill Creek 6 operating expenses, including without limitation property taxes.⁶⁷⁸ LG&E/KU further explained that, during each expense month, the WACC would apply to the undepreciated capital cost of Mill Creek 6, including any future plant additions, and regulatory asset

⁶⁷⁵ Stipulation Testimony at 6. The actual mechanism filed with the Stipulation did not make the fuel and non-fuel distinction. However, for these purposes, the Commission will just address the filing as appropriately before the Commission.

⁶⁷⁶ Stipulation Testimony at 7.

⁶⁷⁷ Stipulation Testimony at 7.

⁶⁷⁸ Stipulation Testimony at 8.

balance for AFUDC, adjusted for accumulated deferred income taxes without any reduction for asset net operating loss accumulated deferred income taxes (NOL ADIT).⁶⁷⁹

LG&E/KU stated that cost recovery through the Mill Creek 6 Mechanism would be partially and temporarily offset by certain revenues LG&E would collect beginning with the in-service date of Mill Creek 6 and ending with the first date on which new electric base rates would take effect for LG&E following the in-service date of Mill Creek 6.680 The first expense month for Mill Creek 6 cost recovery through the Mill Creek 6 Mechanism would be the month in which Mill Creek 6 went into service, and the last expense month would be the month in which Mill Creek 6 retired.681 LG&E/KU explained that offsetting revenues collected in an expense month would be credited against costs that would be recovered under the Mill Creek 6 Mechanism in the corresponding billing month.682

Additionally, the Stipulating Parties agreed that the Commission should approve all necessary regulatory deferral accounting required for the operation of the Mill Creek 6 Mechanism, including all regulatory asset and liability accounting required to address the delay between each expense month and billing month. Finally, the Stipulating Parties agreed that the Mill Creek 6 Mechanism would use the Group 1 and Group 2 methodology for revenue allocation used in LG&E's Environmental Cost Recovery Surcharge.

⁶⁷⁹ Stipulation Testimony at 8.

⁶⁸⁰ Stipulation Testimony at 8.

⁶⁸¹ Stipulation Testimony at 9.

⁶⁸² Stipulation Testimony at 9.

⁶⁸³ Stipulation Testimony at 10.

⁶⁸⁴ Stipulation Testimony at 10.

Additionally, the Stipulation proposed the establishment of a cost-recovery mechanism for the stay-open costs of Mill Creek 2 (Mill Creek 2 Mechanism). LG&E/KU stated that the Mill Creek 2 Mechanism would provide recovery of Mill Creek 2's incremental stay-open costs that LG&E, who owns 100 percent of Mill Creek 2, would incur that are not recovered through base rates or other rate recovery mechanisms, including any such costs incurred after the date of the Stipulation. As with the Mill Creek 6 Mechanism, the Stipulating Parties agreed that the Commission should approve all necessary regulatory deferral accounting required for the operation of the Mill Creek 2 Mechanism, including all regulatory asset and liability accounting required to address the delay between each expense month and billing month.

LG&E/KU, in their post-hearing brief, argued that the Mill Creek 6 Mechanism and Mill Creek 2 Mechanisms would be beneficial to customers and ensure recovery only of prudently incurred costs, no more, and no less, and that the Commission has full authority in this proceeding to consider and approve the proposed Mill Creek 6 Mechanism and Mill Creek 2 Mechanism.⁶⁸⁷ LG&E/KU stated that the Mill Creek 2 Mechanism cost-recovery approach would be a benefit to customers because it would ensure precise recovery of prudent costs and regular reporting and review by the Commission, and the costs collected thereunder should tend to decrease over time as the net book value of required capital investments decreases with depreciation.⁶⁸⁸ Similarly, regarding the Mill

⁶⁸⁵ Stipulation Testimony at 13.

⁶⁸⁶ Stipulation Testimony at 13.

⁶⁸⁷ LG&E/KU's Post-Hearing Brief at 3.

⁶⁸⁸ LG&E/KU's Post-Hearing Brief at 8.

Creek 6 Mechanism, LG&E/KU stated that it will provide benefits to customers by recovering only prudently incurred costs, providing regular reporting to and review by the Commission, and a generally declining net book value, resulting in generally decreasing cost recovery over time. In addition, LG&E/KU stated that another benefit to the Mill Creek 6 Mechanism is that from the in-service date of Mill Creek 6 until new base rates take effect following LG&E/KU's next rate case after the in-service date, LG&E would credit to customers any incremental revenues generated from data centers served under the proposed Rate EHLF and other eligible data centers. LG&E/KU argued that the Mill Creek 6 Mechanism would ensure that customers would benefit from the economic development enabled by Mill Creek 6 in near-real-time, while recovering only the prudent costs of Mill Creek 6.691 LG&E/KU stated that they anticipate filing monthly cost-recovery forms for the proposed Mill Creek 6 Mechanism and Mill Creek 2 Mechanism, as well as annual reviews of the operation of each cost-recovery mechanism for the Commission to evaluate the prudence of the costs recovered through them.

Finally, LG&E/KU argued that the Mill Creek 6 Mechanism and Mill Creek 2 Mechanism are properly before the Commission and ripe for decision making in this proceeding, and that the Commission has authority to, and should, approve them.⁶⁹³ LG&E/KU also cited to *Ky. Pub. Serv. Comm'n v. Com. ex rel. Conway* (Ky. 2010).⁶⁹⁴

⁶⁸⁹ LG&E/KU's Post-Hearing Brief at 8.

⁶⁹⁰ LG&E/KU's Post-Hearing Brief at 8.

⁶⁹¹ LG&E/KU's Post-Hearing Brief at 8.

⁶⁹² LG&E/KU's Post-Hearing Brief at 30.

⁶⁹³ LG&E/KU's Post-Hearing Brief at 33.

⁶⁹⁴ Ky. Pub. Serv. Comm'n v. Com. ex rel. Conway, 324 S.W.3d 373 (Ky. 2010)

LG&E/KU argued that the Commission has previously treated as before it and approved rate mechanisms introduced for the first time as parts of stipulations and settlements, or introduced for the first time by the Commission itself, as well as other kinds of proposals that have arisen for the first time in settlements or stipulations or at other points during the pendency of the proceedings, not the applications giving rise to the proceedings or related customer notices.⁶⁹⁵

In its post-hearing brief, the Attorney General argued that the proposed Mill Creek 6 Mechanism would allow ratepayers to pay less as time goes on, which would ride down the cost curve, and avoid the potential for ratepayers to overpay through "sticky" rates. 696 Additionally, the Attorney General argued that the costs recovered through the proposed Mill Creek 6 Mechanism would be potentially offset by certain new EHLF and other data center load revenues, which would be a way for ratepayers to benefit immediately from new load. 697

In addition, the Attorney General stated that the Commission has authority to approve the Mill Creek 6 Mechanism and Mill Creek 2 Mechanism, and that the Attorney General and KIUC plan to file expert testimony in LG&E/KU's rate cases currently pending before the Commission⁶⁹⁸ which will propose Adjustment Clauses which mirror the

⁶⁹⁵ LG&E/KU Brief at 34-35.

⁶⁹⁶ Attorney General's Brief at 3.

⁶⁹⁷ Attorney General's Brief at 3.

⁶⁹⁸ See Case No. 2025-00113, Electronic Application of Kentucky Utilities Company for an Adjustment of its Electric Rates and Approval of Certain Regulatory and Accounting Treatments and Case No. 2025-00114, Electronic Application of Louisville Gas and Electric Company for an Adjustment of its Electric and Gas Rates and Approval of Certain Regulatory and Accounting Treatments (Ky. PSC .May 30, 2025) Filed; Case No. 2025-00114, Electronic Application of Louisville Gas and Electric Company for an Adjustment of its Electric and Gas Rates and Approval of Certain Regulatory and Accounting Treatments. (Ky. PSC May 30, 2025) Filed.

proposed Mill Creek 6 Mechanism and Mill Creek 2 Mechanism in the stipulation.⁶⁹⁹ The Attorney General asserted that, even if the Commission is reluctant to approve the Mill Creek 6 Mechanism and Mill Creek 2 Mechanism in this proceeding, it could take notice of the Stipulation and approve them in those proceedings, and urged the Commission to articulate support of the Mill Creek 6 Mechanism and Mill Creek 2 Mechanism, and the proposed temporary offset in this proceeding, as those mechanisms are important protections that were negotiated specifically for the benefit of ratepayers.⁷⁰⁰

Louisville Metro/LFUCG, in their post-hearing brief, argued that the Commission's plenary power to regulate utilities' rates to ensure they are fair, just and reasonable also allows the Commission to consider non-traditional cost recovery surcharges like that the Stipulation proposed for the Mill Creek 6 Mechanism.⁷⁰¹ Louisville Metro/LFUCG stated that the mechanism would temporarily offset cost recovery from the construction of Mill Creek 6 until the plant is in-service, which it asserted means that 500 MW of load has been sold by eligible data centers or acquired by LG&E/KU's other new or current customers.⁷⁰² Louisville Metro/LFUCG argued that the mechanism is fair, just and reasonable because it will protect ratepayers from bearing the financial burden associated with the new facility prior to its in-service date, and LG&E/KU would be able to seek a change in base rates for cost recovery only after Mill Creek 6 is in service in 2031.⁷⁰³ Additionally, Louisville Metro/LFUCG, KIUC, and KCA, in their post-hearing briefs cited

⁶⁹⁹ Attorney General's Brief at 6.

⁷⁰⁰ Attorney General's Brief at 6-7.

⁷⁰¹ Louisville Metro/LFUCG's Brief at 5.

⁷⁰² Louisville Metro/LFUCG's Brief at 5.

⁷⁰³ Louisville Metro/LFUCG's Brief at 5.

to *Ky. Pub. Serv. Comm'n v. Com. ex rel. Conway* (Ky. 2010),⁷⁰⁴ in which the Supreme Court of Kentucky found that the Commission's plenary authority is sufficient to approve a single issue cost recovery mechanism where there is no statutory authority forbidding such a mechanism, as evidence that the Commission has authority to establish singular cost recovery mechanisms such as the proposed Mechanisms in this case.

KCA stated that the Commission has approved other kinds of proposals that have arisen for the first time in settlements or stipulations, not the applications giving rise to the proceedings or related customer notices. KCA argued that, consistent with its longstanding practice and full ratemaking authority, the Commission may and should approve the Mill Creek 6 Mechanism and Mill Creek 2 Mechanism in this case. Representations of proposals that have arisen for the first time in settlements or stipulations, not the applications giving rise to the proceedings or related customer notices. Representations are stipulations and the proceedings of the proceedings of the first time in settlements or stipulations, not the applications giving rise to the proceedings or related customer notices.

KIUC argued that, if the Commission chose not to exercise its approval authority in this proceeding, then the Commission should adopt the exact same outcome in LG&E/KU's pending rate cases where the same cost recovery proposal will be proposed in intervenor testimony. Finally, SREA argued that the Commission has the plenary authority to attach conditions to a CPCN as a means to modify it so that the certificate will satisfy the full purposes of KRS Chapter 278.

Joint Intervenors argued that the settlement terms proposing the Mill Creek 6 Mechanism and Mill Creek 2 Mechanism raise matters that are not ripe for decision or

⁷⁰⁴ Ky. Pub. Serv. Comm'n v. Com. ex rel. Conway, 324 S.W.3d 373 (Ky. 2010)

⁷⁰⁵ KCA's Brief at 6.

⁷⁰⁶ KCA's Brief at 7.

⁷⁰⁷ KIUC's Brief at 17.

⁷⁰⁸ SREA's Brief at 18.

otherwise suitable for adjudication here. 709 Joint Intervenors argued that, as a matter of law, these terms must fail. In regard to the Mill Creek 2 Mechanism, Joint Intervenors argued that the recovery of costs related to Mill Creek 2's hypothetical operation beyond 2027, or beyond 2031, goes impermissibly beyond the requested relief in this CPCN proceeding.⁷¹¹ Joint Intervenors argued that the Commission cannot approve new cost recovery via a new adjustment clause unless and until LG&E/KU provide notice, file an application seeking appropriate relief, and make an adequate showing that recovering the costs, and doing so in the manner proposed, would be just and reasonable.⁷¹² Joint Intervenors argued that because none of that has happened in this proceeding, the record is not sufficiently developed to support reasoned decision-making by the Commission on Mill Creek 2 costs or cost recovery beyond 2027.713 Additionally, Joint Intervenors stated that there is time for LG&E/KU to pursue appropriate avenues to request a Mill Creek 2 Mechanism, time that will test the forecasted large load customer growth assumption allegedly justifying Mill Creek 2's continued operation substantially beyond the operation date of Mill Creek 5.714 Finally, Joint Intervenors argued that the Commission should reject the injection of a Mill Creek 2 Mechanism into this proceeding via opposed

⁷⁰⁹ Joint Intervenors at 49.

⁷¹⁰ Joint Intervenors Brief at 49.

⁷¹¹ Joint Intervenors Brief at 51.

⁷¹² Joint Intervenors' Brief at 51.

⁷¹³ Joint Intervenors' Brief at 51-52.

⁷¹⁴ Joint Intervenors' Brief at 52.

settlement and allow the issue of Mill Creek 2 costs beyond 2027 to ripen and arise in an appropriate future proceeding.⁷¹⁵

Similarly, Joint Intervenors argued that the Mill Creek 6 Mechanism presented issues not ripe for decision, not adequately supported by the record, and not otherwise appropriate for adjudication through an opposed settlement. Joint Intervenors asserted that, over the course of this CPCN proceeding, LG&E/KU insisted that customer protections against the stranded asset and other financial risks of Mill Creek 6 were irrelevant and beyond the proper scope of this proceeding. Joint Intervenors argued that LG&E/KU's past objections stunted development of the record in this proceeding, and that addressing cost allocation and recovery methods for all of Mill Creek 6's nonfuel costs once in-service is a major question that cannot reasonably be considered in the circumstances here. Joint Intervenors argued that the Commission should avoid reaching these issues which it argued are more appropriately saved for another proceeding, if and when the need arises.

Due to the Mill Creek 6 and Mill Creek 2 Mechanisms being introduced as part of the Stipulation Agreement in this case, the Commission finds that LG&E/KU have not met their burden of proof regarding the Mill Creek 6 Mechanism and Mill Creek 2 Mechanism. The Commission believes it did not have an opportunity to thoroughly investigate the proposals, and that LG&E/KU failed to provide substantial evidence that the proposed

⁷¹⁵ Joint Intervenors' Brief at 52.

⁷¹⁶ Joint Intervenors' Brief at 52.

⁷¹⁷ Joint Intervenors' Brief at 53.

⁷¹⁸ Joint Intervenors' Brief at 53.

⁷¹⁹ Joint Intervenors' Brief at 53.

Mechanisms should be approved. Therefore, the Commission finds that the proposed Mill Creek 6 Mechanism and Mill Creek 2 Mechanism should be denied without prejudice.

The Commission encourages LG&E/KU to provide more evidence in support of the Mill Creek 6 Mechanism and Mill Creek 2 Mechanism in a separate proceeding, allowing the Commission an opportunity to thoroughly investigate the proposals. In the event that LG&E/KU and/or other Parties anticipate introducing the Mill Creek 6 Mechanism and Mill Creek 2 Mechanism in LG&E/KU's pending rate cases in Case Nos. 2025-00113 and 2025-00114⁷²⁰ as indicated in this proceeding, the Commission encourages LG&E/KU and any party to provide further evidence in support of the proposed mechanisms in those proceedings.

OTHER STIPULATION REQUESTS

Mill Creek 2 Life Extension

The Commission notes that the stipulation's proposal regarding LG&E/KU's authority to retire Mill Creek 2 if the utilities continue to operate the unit after Mill Creek 5 is placed into service features prominently in the stipulation and the later portion of the case record. Specifically, Article IV, 4.2, titled: Existing Mill Creek 2 Retirement Authority Suffices, gives the following language:

The Parties agree, and ask and recommend the Commission's final order in this proceeding to explicitly state, that the Utilities' existing authority to retire Mill Creek 2 suffices for a later retirement. For avoidance of doubt, the Utilities are not withdrawing their existing Mill Creek 2 retirement authority.

⁷²⁰ Case No. 2025-00113, Electronic Application of Kentucky Utilities Company for an Adjustment of its Electric Rates and Approval of Certain Regulatory and Accounting Treatments and Case No. 2025-00114, Electronic Application of Louisville Gas and Electric Company for an Adjustment of its Electric and Gas Rates and Approval of Certain Regulatory and Accounting Treatments.

The Commission originally approved the retirement of Mill Creek 2 in LG&E/KU's 2022 CPCN case in which the utilities requested approval for, among other items, two new NGCCs and authority to retire a number of coal units.⁷²¹ In the Commission's final Order in that case it gave "defined retirement dates for Mill Creek 1 and 2, as long as certain conditions are met, and approve[d] LG&E/KU to retire [Haefling 1 and 2, and Paddy's Run 12]⁷²² when they break and the cost to fix or maintain them exceeds their value." Directly thereafter, the Commission found that: "[i]n approving the retirement of those five units, the Commission also approves a certificate to build a large natural gas-fired generator, called Mill Creek 5, at the Mill Creek Station in Jefferson County, Kentucky."723 The Commission reasoned that replacing the older units with Mill Creek 5 was cheaper than the cost of maintaining and upgrading the aging units while also making LG&E/KU's system more reliable. 724 Therefore, the Commission found that: "LG&E/KU should [not] proceed with the retirement of Mill Creek 2 until construction of Mill Creek 5 is completed."⁷²⁵ (emphasis in original). Finally, the Commission also noted that "in the event LG&E/KU have trouble timely constructing Mill Creek 5, the Commission finds that given their need for adequate generation, LG&E/KU should not retire Mill Creek 2 without sufficient replacement."726 The expected in-service date for Mill Creek 5 remains 2027.

⁷²¹ Case No. 2022-00402, Jan. 6, 2023 Amended Application deemed filed.

⁷²² Those units are small natural gas fired units.

⁷²³ Case No. 2022-00402, Nov. 6, 2023 Order at 174-175.

⁷²⁴ Case No. 2022-00402, Nov. 6, 2023 Order at 174-175.

⁷²⁵ Case No. 2022-00402, Nov. 6, 2023 Order at 114.

⁷²⁶ Case No. 2022-00402, Nov. 6, 202 Order at 175-176.

LG&E/KU states in its brief that the Commission's affirmation in this case is crucial because in their words:

[F]or extending the life of Mill Creek 2 to be beneficial, it must not interfere with the timely addition of Mill Creek 6. That is why, under the Stipulation, a key (but not the only) prerequisite to extending the life of Mill Creek 2 is receiving Commission affirmation in its final order in this proceeding that the Companies' existing authority to retire Mill Creek 2 would extend from its current expected retirement date of mid-2027 (i.e., the expected in-service date of Mill Creek 5) to mid-2031 (the proposed in-service date for Mill Creek 6).⁷²⁷

LG&E/KU emphasized their position and argued, barring unforeseen circumstances, that "the Companies *must* retire Mill Creek 2 when Mill Creek 6 goes in service or Mill Creek 6 will not be able to operate."

Notably, and crucial to the Commission's understanding of this issue, LG&E/KU's 2022 CPCN case was the first time the Commission approved retirement of a fossil-fuel fired unit using the framework in KRS 278.264. Specifically, KRS 278.264(1) gave the Commission "the authority to approve or deny the retirement of an electric generating unit owned by a utility." Additionally, the General Assembly also enacted SB 349 in 2024, which created the Energy Planning and Inventory Commission (EPIC). Relevant to this analysis, KRS 164.2807 states that the EPIC Commission is authorized to:

(c) Engage in the examination and study of:

. . .

2. The Continued operation, retirement, divestiture, or other major action impacting any electric power generating unit, or any pollution control equipment associated with any such unit, located in the Commonwealth.

⁷²⁷ LG&E/KU's Post-Hearing Brief at 37.

⁷²⁸ Prior to the enactment of KRS 278.264, utilities did not require Commission pre-approval to retire generating assets. Instead, the Commission provided oversight by determining the reasonableness of regulatory asset applications for stranded costs associated with the retirement of a particular unit.

This is a question of first impression, and the Commission is thankful to all the parties who engaged with the issue thoughtfully and capably. However, the Commission does not believe that it has the authority under KRS 278.264 to give LG&E/KU the affirmation it seeks. KRS 278.264(2) established "a rebuttable presumption against the retirement of a fossil fuel-fired electric generating unit." That same provision also forbade the Commission from "approv[ing] the retirement of an electric generating unit, authoriz[ing] a surcharge for the decommission of the unit, or tak[ing] any other action which authorizes or allows for the retirement of an electric generating unit, including any stranded asset recovery." Specifically, KRS 278.264(2)(a-d) requires the Commission find that:

- (a) The utility will replace the retired electric generating unit with new electric generating capacity that:
 - 1. Is dispatchable by either the utility or the regional transmission organization or independent system operator responsible for balancing load within the utility's service area;
 - 2. Maintains or improves the reliability and resilience of the electric transmission grid;
 - 3. Maintains the minimum reserve capacity requirement established by the utility's reliability coordinator; and
 - 4. Has the same or higher capacity value and net capability, unless the utility can demonstrate that such capacity value and net capability is not necessary to provide reliable service;
- (b) The retirement will not harm the utility's ratepayers by causing the utility to incur any net incremental costs to be recovered from ratepayers that could be avoided by continuing to operate the electric generating unit proposed for retirement in compliance with applicable law;
- (c) The decision to retire the fossil fuel-fired electric generating unit is not the result of any financial incentives or benefits offered by any federal agency; and
- (d) The utility shall not commence retirement or decommissioning of the electric generating unit until the replacement generating capacity meeting the requirements of paragraph (a) of this subsection is fully constructed, permitted, and in operation, unless the utility can demonstrate that it is

necessary under the circumstances to commence retirement or decommissioning of the existing unit earlier.

Properly understood, LG&E/KU's request is a two-part inquiry. The first question is whether the Commission, and/or LG&E/KU have the necessary authority to extend the life of Mill Creek 2 beyond the completion of construction of Mill Creek 5. The second question is whether, if LG&E/KU does extend the life of Mill Creek 2, it forfeits its existing authority to retire the unit and must file an application seeking retirement pursuant to KRS 278.264 with the Commission when it eventually intends to retire the unit.

The Commission agrees with the Attorney General and LG&E/KU, among several other parties, that extending the life of Mill Creek 2 is squarely in the Commission's authority under KRS 278.264. There is nothing in KRS Chapter 278 or relevant Commission regulations which prohibit such an action. Moreover, and crucially in this case, the Commission's final Order in Case No. 2022-00402 did not give a date certain for Mill Creek 2's retirement. Instead, the Commission conditioned its retirement on Mill Creek 5 finishing construction and being placed into service so that LG&E/KU retained necessary system reliability.

However, while that language provided for flexibility in the actual retirement date of Mill Creek 2, it only contemplated the retirement in connection to Mill Creek 5. As LG&E/KU have made clear throughout this case, the facts on the ground for its load forecast is significantly different than it was in 2022 and 2023. If LG&E/KU extend the life of Mill Creek 2, now connecting it to Mill Creek 6's expected in-service date and decoupling it entirely from Mill Creek 5, then there is no more connection to its original authorization. This is exacerbated by LG&E/KU's position in this case because the utilities do not actually commit to retiring Mill Creek 2 when Mill Creek 6 is placed into

service. If LG&E/KU was provided affirmation as it requested, it would arguably retain retirement authority in perpetuity, effectively, and impermissibly, negating the Commission's Order in Case No. 2022-00402.

This request appears most like a solicitation for an advisory opinion because there remains almost two years until Mill Creek 5 is expected to be completed, and which could be impacted by any number of factors. Therefore, it is unclear that any decision by the Commission at this juncture would meaningfully obligate LG&E/KU in any way. The Commission generally disfavors advisory opinions and will not issue one here, when there remains so much uncertainty, both factually and legally. The Commission does not come to this conclusion lightly, as extending Mill Creek 2 for a short period has the potential for real upside for ratepayers and will allow LG&E/KU greater flexibility in meeting the growing needs of new customers resulting from the Commonwealth's successful economic development efforts. The Commission is a creature of statute, and it must faithfully execute the requirements of KRS 278.264 and therefore is not empowered to simply grant LG&E/KU retirement authority at some point in the future. LG&E/KU are therefore in the unenviable position of choosing to retire Mill Creek 2 pursuant to the Commission's Order in Case No. 2022-00402; or extend the life of Mill Creek 2 and risk losing their retirement authority.

RFP Commitments

As part of the Stipulation, LG&E/KU stated it would commit to issue a request for proposals (RFP) for renewable energy and energy storage by mid-2026 seeking to procure energy and capacity of utility scale solar, wind, storage, and/or hybrid resources, with intervention feedback, and will apply for Commission approval by December 31,

2028, seeking approval for cost-effective resources.⁷²⁹ SREA highlighted the testimony of their witness, Benjamin Smith, who recommended that LG&E/KU issue an RFP for the proposed BESS facility and "that the Commission require the Companies to study and consider competitively procured resources as the Companies contend with increases in demand and to further diversify the generation portfolio."⁷³⁰ SREA stated that in view of LG&E/KU's stated and reasonably expected need for renewable energy and energy storage, these provisions of the Stipulation and Recommendation are wholly consistent with furthering LG&E/KU's goals in a best practices manner and are lawful and reasonable.⁷³¹

Joint Intervenors argued that should the Commission approve LG&E/KU's request for CPCN certificates, LG&E/KU would have no need for additional generation that may be identified through an RFP, and that even without the BESS, should Mill Creek 2 stay online beyond 2027, the need for additional resources is further foreclosed. Joint Intervenors argued that the Stipulation makes no commitment to procure a fixed amount of energy or capacity, thus an RFP could be a fruitless exercise. Joint Intervenors argued that the Commission should deny the Stipulation and instead require LG&E/KU to issue a new RFP that seeks updated renewable energy and energy storage proposals

⁷²⁹ Stipulation and Recommendation, Sections 5.1-5.3.

⁷³⁰ SREA's Brief at 7, quoting Smith Direct Testimony at 3 and 4.

⁷³¹ SREA's Brief at 8.

⁷³² Joint Intervenors' Brief at 76.

⁷³³ Joint Intervenors' Brief at 76.

that are tailored and appropriately sized to address actual needs that exist today in LG&E/KU's service territory.⁷³⁴

Having considered the record and being otherwise sufficient advised, the Commission finds that this provision be approved without modification. The Commission believes that a thorough RFP process can help LG&E/KU determine least-cost options moving forward. The Commission also believes that if any renewable resource is proven to be a least-cost option, that it would help to diversify LG&E/KU's portfolio. Therefore, the Commission believes this provision should be approved.

Other Provisions

The Stipulation, as noted above, also contains provisions related to (1) Commission approval for long-term energy or capacity sale contracts related to data centers; (2) semi-annual updates relating to economic development and construction; (3) EHLF Tariff commitments; (4) SEEM reporting requirements; (5) LMAPCD Jurisdiction.

As part of the Stipulation, LG&E/KU will provide semi-annual in-person construction, economic development, and load forecast updates to the Commission beginning in the second quarter of 2026 and ending in the second quarter of 2032. All Case No. 2025-00045 intervenors may attend such update meetings. LG&E/KU stated the various updates will give the Commission nearly real-time review of, and insight into, all the relevant factors showing the prudence of LG&E/KU's activities for the duration of (and a year beyond) the anticipated construction schedule of the resources the Stipulation

⁷³⁴ Joint Intervenors' Brief at 80.

⁷³⁵ Stipulation and Recommendation, Section 1.6.

⁷³⁶ Stipulation and Recommendation, Section 1.6.

recommends.⁷³⁷ Joint Intervenors' argued that the reporting commitments are not meaningful.⁷³⁸ The Commission finds that these updates are reasonable and should be approved. The Commission finds that these updates should occur within the monitoring case, Case No. 2025-00313. The Commission also finds that the term that LG&E/KU shall seek Commission approval for long-term energy or capacity sale contracts as set forth in Section 1.4 of the Stipulation is a reasonable requirement and should be approved. The Commission may include additional terms set forth in the Opening Order for Case No. 2025-00313.

EHLF is not under review in this proceeding, its terms do provide additional support for demonstrating that the Stipulation's recommended resources more than satisfy the CPCN need standard regarding economic feasibility. Joint Intervenors argued that approval of provisions regarding a proposed tariff under consideration in ongoing rate cases would violate due process as parties in this proceeding cannot negotiate utility or Commission positions for a separate proceeding with different parties and broader issues. For the EHLF tariff commitments laid out in in section 3.1, the Commission expects each party to follow through with their commitments in Case Nos. 2025-00113 and 2025-00114.

The Commission also finds that beginning in the first quarter of 2026 and ending in the first quarter of 2031, LG&E/KU shall file annual reports on their participation in the

⁷³⁷ LG&E/KU's Brief at 9.

⁷³⁸ Joint Intervenors' Brief at 63.

⁷³⁹ LG&E/KU's Brief at 19.

⁷⁴⁰ Joint Intervenors' Brief at 65.

Southeast Energy Exchange Market including company-specific cost and benefit assessments and underlying data, as discussed in Section 6.1. The Commission believes this provision is reasonable and should be approved. The Commission finds that these reports should be filed as a post-case filing in this case.

The Commission also notes that notwithstanding anything contained in the Stipulation to the contrary, the parties also agreed that the Stipulation and Recommendation does not impair, limit, or otherwise interfere with the jurisdiction of the Louisville Metro Air Pollution Control District (LMAPCD).

COMMUNITY ENGAGEMENT

Community resistance to data center development is a significant, bipartisan trend across the United States. Of the 28 states where hyperscalers and co-developers have proposed projects over 50 MW, 142 advocacy organizations are actively involved in blocking the associated projects. Driven by concerns over noise, increased energy and water consumption, environmental impact (including air pollution), visual blight, strains on local infrastructure, and limited economic benefits for residents, has resulted in the blocking or delaying of billions of dollars in data center projects, leading to increased regulatory scrutiny, and pushing developers to engage proactively with communities, offer tangible local benefits, and address environmental and aesthetic concerns. This action adds to the uncertainty in LG&E/KU's load forecast and the resultant need for additional generation. As noted above, LG&E/KU have already seen this occurring within its service territory as well, such as the moratorium in Oldham County.

⁷⁴¹ See Data Center Watch Report, dated May 13, 2025.

To mitigate the community resistance to locating a data center in LG&E/KU's territory, the Commission encourages LG&E/KU to collaborate with data center developers to proactively address community concerns through an engagement program that includes early intervention, transparent communication, emphasizes community benefits by prioritizing local hiring, addressing environmental concerns, and being upfront about potential impacts including aesthetics and noise abatement programs. Examples of early intervention include starting early and engaging with the local community representatives, local authorities, and multiple stakeholders early during the project conceptual phase before project plans are finalized and to share information about the project's scope, including size, timeline, and potential impacts.

For transparent communication, LG&E/KU could consider hosting public meetings and open houses to provide opportunities for local residents to ask questions, voice concerns, and receive accurate information directly from LG&E/KU, developers and industry experts; develop mechanisms for ongoing dialogue, such as advisory boards or liaison roles, to address concerns throughout the data center's life; utilizing various social media systems to transfer information and answer common questions; and continue developing a relationship with the local media in regards to data centers. When engaging with the community, LG&E/KU along with data centers could highlight benefits such as the potential for job creation (both during construction and during operation); increased tax revenue and potential partnerships with local businesses; focus on investment in local infrastructure improvements including the power grid and/or water infrastructure.

The Commission also encourages LG&E/KU to continue to collaborate with data centers to determine data center developer needs such as the expected load and ramp-

up rate, the data load pattern, the most cost-effective means of providing back-up power, and the Uninterruptible Power Supply requirements. Increased collaboration between utilities and data center developers can help to maximize the resiliency, power quality and efficiency of the power supply and delivery infrastructure. A transparent exchange of technical specifications, growth projections, and community priorities can transform potential obstacles into collaborative opportunities.

SUMMARY

The level of load growth projected to come to the Commonwealth is unprecedented. The Commission believes that the efforts of both the General Assembly and the Governor are working and will continue to attract economic development projects to both the Commonwealth and also LG&E/KU's territory. The proposed stipulation, as modified by the Commission, will enable LG&E/KU to meet the demand of data centers and other economic development projects. Specifically, Brown 12, the Ghent 2 SCR, and Mill Creek 6 will enable LG&E/KU to meet approximately 1,470 MW of data center load growth. As discussed more fully above, the Commission modified the settlement in the following ways:

- Section 1.1 The Commission has ordered various mitigation measures in relation to Brown 12 and Mill Creek 6.
- Section 1.3 and 1.6. The Commission, as part of the cost recovery review process and construction updates will open a monitoring case, Case No. 2025-00313, in relation to Mill Creek 6.
- Article II Sections 2.1 and 2.2. The Commission denies without prejudice the Mill Creek 6 cost recovery mechanism, and encourages LG&E/KU to provide more evidence in support of the mechanism in a separate proceeding.

⁷⁴² LG&E/KU's response to Staff's Post-Hearing Request, Item 4.

- Section 4.2. The Commission declines to state that LG&E/KU's existing authority to retire Mill Creek 2 suffices for a later retirement.
- Section 4.4. The Commission denies without prejudice the Mill Creek 2 adjustment clause, and encourages LG&E/KU to provide more evidence in support of the mechanism in a separate proceeding.
- Section 7.1. While the Commission generally approves LG&E/KU's ESM Application, originally filed in Case No. 2025-00105 and consolidated into this proceeding, the Commission denies the request for the recovery of the customer notice on a going forward basis.

In addition, the Commission order the study of a synchronous condenser as an option in their next IRP. While LG&E/KU have met their burden of proof to move forward with the approved CPCN projects, the Commission expects LG&E/KU to follow through on their statement that if load growth does not materialize as reasonably anticipated, that LG&E/KU will not build CPCN-approved facilities when it was not least-cost to do so.

IT IS THEREFORE ORDERED that:

- 1. The Stipulation and Recommendation attached as Appendix A is approved, with modification.
- 2. In LG&E/KU's next IRP proceeding, as part of the transmission planning process, LG&E/KU shall analyze and consider the conversion of previously approved retired generators to a synchronous condenser operation and report such analysis.
 - 3. LG&E/KU's request for a CPCN for Brown 12 is granted.
- 4. LG&E/KU's request for a CPCN for Mill Creek 6 is granted conditional on its compliance with the monitoring requirements discussed in this Order.
 - 5. LG&E/KU's request for a CPCN for Cane Run BESS is denied.
 - 6. LG&E/KU's request for a CPCN for an SCR on Ghent 2 is granted.

- 7. LG&E/KU's request for a site compatibility certificate to construct Brown 12 at the Brown Generating Station is granted subject to their full compliance with all mitigation measures and conditions listed in the Appendix C to this Order and all mitigation measures that LG&E/KU committed to implement in this matter.
- 8. LG&E/KU's request for a site compatibility certificate to construct Mill Creek 6 at the Mill Creek Generating Station is granted subject to their full compliance with all mitigation measures and conditions listed in the Appendix E to this Order and all mitigation measures that LG&E/KU committed to implement in this matter.
- 9. LG&E/KU shall fully comply with the mitigation measures and conditions prescribed in Appendix C and E to this Order and any other mitigation measures that LG&E/KU committed to implement in this matter.
- 10. In the event mitigation measures within the body of this Order conflict with those prescribed in Appendix C and E to this Order, the measures in the Appendix C and E shall control.
- 11. LG&E/KU's request for a site compatibility certificate to construct the Cane Run BESS at the Cane Run Generating Station is denied as moot.
- 12. LG&E/KU shall obtain approval from the Commission prior to performing any additional construction not expressly authorized by this Order.
- 13. LG&E/KU shall provide written notice to the Commission one week prior to the actual start of construction of Brown 12 in post-case filings.
- 14. LG&E/KU shall provide written notice to the Commission one week prior to the actual start of construction of Mill Creek 6 in monitoring Case No. 2025-00313.

- 15. LG&E/KU shall provide written notice to the Commission one week prior to the actual start of construction of the SCR on Ghent 2 in post-case filings.
- 16. LG&E/KU shall file written notice with the Commission of any increase to the cost of construction of Mill Creek 6 that exceeds five percent of the costs as filed in monitoring Case No. 2025-00313.
- 17. LG&E/KU shall file written notice with the Commission of any increase to the cost of construction of Brown 12 or the Ghent 2 SCR that exceeds five percent of the costs as filed in the post-hearing case filings in this case.
- 18. LG&E/KU shall file with the Commission documentation of the total costs of the construction of Mill Creek 6 including the cost of construction and all other capitalized costs (e.g., engineering, legal, and administrative), within 60 days of the date that the construction of each facility is substantially completed in monitoring Case No. 2025-00313. Construction costs shall be classified into appropriate plant accounts in accordance with the USoA for electric utilities prescribed by the Commission.
- 19. LG&E/KU shall file with the Commission documentation of the total costs of the construction of Brown 12 including the cost of construction and all other capitalized costs (e.g., engineering, legal, and administrative), within 60 days of the date that the construction of each facility is substantially completed in the post-case filings in this case Construction costs shall be classified into appropriate plant accounts in accordance with the USoA for electric utilities prescribed by the Commission.
- 20. LG&E/KU shall provide semi-annual in-person construction, economic development, and load forecast updates to the Commission beginning in the second

quarter of 2026 and ending in the second quarter of 2032 in monitoring Case No. 2025-00313.

- 21. Beginning in the first quarter of 2026 and ending in the first quarter of 2031, LG&E/KU shall file annual reports on their participation in the Southeast Energy Exchange Market including company-specific cost and benefit assessments and underlying data in the post-case filings of this case.
- 22. LG&E/KU's request for regulatory asset treatment for the difference between AFUDC accrued at LG&E/KU's weighted average cost of capital and AFUDC accrued using the methodology approved by the FERC during the construction periods of Brown 12 and Mill Creek 6 is granted.
- 23. LG&E/KU's requests for regulatory asset treatment regarding post-inservice carrying costs, operating and maintenance expense, property taxes, investment tax credit amortization, and depreciation expense until such costs are fully reflected in the Companies' retail base rates or an applicable cost recovery mechanism are denied.
- 24. The regulatory asset account for the difference in AFUDC methods established in this case are for accounting purposes only and is not a final approval of the individual expenses for ratemaking purposes.
- 25. The amount, if any, of the regulatory asset approved in this Order that is to be amortized and included in rates shall be determined in LG&E/KU's next base rate case. LG&E/KU shall maintain records, and provide the same in its rate case application, in sufficient detail to provide justification of all recorded expenses within the regulatory asset as prudent and necessary.

- 26. KU's request to add Project 45 to KU's Environmental Compliance Plan for purposes of recovering the costs of the project through the Company's ECR Surcharge is granted.
- 27. KU's request to record a regulatory asset for its customer notice cost for this application and to amortize that asset over 12 months and recover said amortization through the Company's ECR Surcharge is granted.
- 28. KU's request to grant KU ongoing authority to use its ECR Surcharge to recover future ECR compliance plan customer notice costs when and as incurred is denied.
- 29. KU's request to approve the proposed ECR Surcharge tariff sheets and revised Environmental Surcharge reporting forms for the recovery of the costs of the 2025 Plan and KU's customer notice costs beginning with the October 2025 expense month, which costs KU will collect beginning with bills issued for KU's December 2025 billing cycle, which begins on December 1, 2025, is granted.
- 30. KU's request to approve the continued use of the currently authorized return on equity for ECR Surcharge purposes, including Project 45, until the Commission approves a new return on equity is granted.
- 31. KU's request to approve the proposed use of KU's existing depreciation rates for the Ghent 2 SCR until the Commission approves new depreciation rates is granted.
- 32. Within 20 days of the date of service of this Order, KU shall file with the Commission, using the Commission's electronic Tariff Filing System, revised tariff sheets as approved in this Order.

- 33. The stipulated adjustment clauses for Mill Creek 2 and Mill Creek 6 are denied without prejudice.
- 34. All other provisions of the stipulation and recommendation not discussed in these ordering paragraphs are approved.
 - 35. This case is closed and removed from the Commission's docket.

PUBLIC SERVICE COMMISSION

Chairman

Commissioner

Commissioner

ATTEST:

Executive Director

ENTERED

OCT 28 2025

jdc

KENTUCKY PUBLIC
SERVICE COMMISSION

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2025-00045 DATED OCT 28 2025

TWENTY-ONE PAGES TO FOLLOW

STIPULATION AND RECOMMENDATION

This Stipulation and Recommendation ("Stipulation") is entered into this 29th day of July 2025 by and among Kentucky Utilities Company ("KU") and Louisville Gas and Electric Company ("LG&E") (collectively, "the Utilities"); Attorney General of the Commonwealth of Kentucky, by and through the Office of Rate Intervention ("AG"); Kentucky Industrial Utility Customers, Inc. ("KIUC"); Southern Renewable Energy Association ("SREA"); and Kentucky Coal Association, Inc. ("KCA"). (Collectively, the Utilities, AG, KIUC, SREA, and KCA are the "Parties.")

WITNESSETH:

WHEREAS, on February 28, 2025, KU and LG&E filed with the Kentucky Public Service Commission ("Commission") its Joint Application *In the Matter of: Electronic Application of Kentucky Utilities Company and Louisville Gas and Electric Company for Certificates of Public Convenience and Necessity and Site Compatibility Certificates* ("Joint Application"), and the Commission has established Case No. 2025-00045 to review KU's and LG&E's Joint Application;

WHEREAS, on April 30, 2025, KU filed with the Commission its Application <u>In the</u>

Matter of: Electronic Application of Kentucky Utilities Company for Approval of Its 2025

Compliance Plan for Recovery by Environmental Surcharge Plan ("Case No. 2025-00105"), and the Commission consolidated Case No. 2025-00105 into Case No. 2025-00045 by Orders dated May 14, 2025, in the records of both cases (for expediency, "this proceeding" or "this case" as used herein refers to the consolidated proceeding):

WHEREAS, the AG; KIUC; Lexington-Fayette Urban County Government ("LFUCG"); Louisville/Jefferson County Metro Government ("Louisville Metro"); Kentuckians for the Commonwealth ("KFTC"), Kentucky Solar Energy Society ("KYSES"), Metropolitan Housing

Coalition ("MHC"), and Mountain Association ("MA") (collectively, the "Joint Intervenors"); SREA, Sierra Club, and KCA have participated as full intervenors in Case No. 2025-00045;

WHEREAS, an in-person informal conference for the purpose of discussing settlement and the text of this Stipulation, attended by representatives of the Parties, Louisville Metro, LFUCG, Joint Intervenors, Sierra Club, and the Commission Staff, took place on July 22 and 23, 2025, during which a number of procedural and substantive issues were discussed, including potential settlement of all issues pending before the Commission in this case;

WHEREAS, the Parties hereto desire to settle all the issues pending before the Commission in this case;

WHEREAS, Louisville Metro and LFUCG take no position on the Stipulation and Recommendation and will not oppose it at the hearing;

WHEREAS, the Joint Intervenors and Sierra Club elected not to join this Stipulation and Recommendation;

WHEREAS, it is understood by all Parties hereto that this Stipulation is subject to the approval of the Commission insofar as it constitutes an agreement by the Parties for settlement, and, absent express agreement stated herein, does not represent agreement on any specific claim, methodology, or theory supporting the appropriateness of any proposed or recommended relief, matters, or issues addressed herein;

WHEREAS, all of the Parties, who represent diverse interests and divergent viewpoints, agree that this Stipulation, viewed in its entirety, is a fair, just, and reasonable resolution of their issues resolved in this Stipulation; and

WHEREAS, the Parties believe sufficient and adequate data and information in the record of this proceeding supports this Stipulation, and further believe the Commission should approve it without modifications or conditions;

NOW, THEREFORE, for and in consideration of the promises and conditions set forth herein, the Parties hereby stipulate and agree as follows:

ARTICLE I. <u>CPCN APPROVALS, SITE COMPATABILITY CERTIFICATES,</u> RELATED FINANCIAL MATTERS, AND REPORTING COMMITMENT

- 1.1. CPCN and Site Compatibility Certificate Approvals. The Parties agree the Commission should issue an order granting the Utilities Certificates of Public Convenience and Necessity ("CPCNs") and site compatibility certificates pursuant to KRS 278.216 as requested in the Utilities' application in Case No. 2025-00045, i.e., without condition or modification, for the following:
- (A) An approximately 645 MW net summer rating natural gas combined cycle combustion turbine at KU's E.W. Brown Generating Station ("Brown 12"), including related gas and electric transmission construction at the station;
- (B) An approximately 645 MW net summer rating natural gas combined cycle combustion turbine at LG&E's Mill Creek Generating Station ("Mill Creek 6"), including related gas and electric transmission construction at the station; and
- (C) A selective catalytic reduction system at KU's Ghent Generating Station for Ghent 2 ("Ghent 2 SCR").
- 1.2. Withdrawal of Cane Run Battery Energy Storage System ("BESS") CPCN Request. The Utilities will withdraw their request for the Cane Run BESS without prejudice in this case, but they may re-file a CPCN Application for Cane Run BESS, or a substitute for it, at any time, which would be supported by a competitive procurement process.

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1.3. Cost Recovery Review Metrics for Mill Creek 6. The Parties agree that one

sufficient Mill Creek 6 cost recovery review metric (not a precondition) is having a total of at least

500 MW of executed electric service agreements under the Utilities' proposed Rate EHLF

(Extremely High Load Factor) entered into by the in-service date for Mill Creek 6 in 2031. Support

for Mill Creek 6 cost recovery could also be shown in other ways, including, but not limited to,

non-Rate EHLF load growth, an increase in off-system sales, the acquisition of municipal or other

load, replacing lost capacity if the Ohio Valley Electric Corporation's coal plants close, selling to

other utilities or data centers in Kentucky, or selling part of Mill Creek 6 capacity.

1.4. Potential long-term power agreement with another Kentucky utility that is

related to Kentucky data center(s) not located in the Utilities' service territories. The Utilities

agree to seek Commission approval for any long-term (i.e., longer than one year) sale of capacity,

energy, or both to another Kentucky utility for the purpose of serving one or more Kentucky data

centers not in the Utilities' service territories. This could include, but not be limited to, joining an

application to the Commission by the data-center serving utility for approval of a power purchase

agreement under KRS 278.300. Issues that could be addressed in any such proceeding would

include: (1) the extent to which the data center serving utility would pay for any direct and indirect

incremental costs to provide electric service outside of the Utilities' service territories to the extent

consistent with the Utilities' Open Access Transmission Tariff and all other applicable regulatory

requirements; (2) the rates, terms and conditions of such an agreement and their relationship to the

Utilities' proposed Rate EHLF; and (3) any sharing of revenues above the proposed Rate EHLF

until the effective date of new base rates.

1.5. Deferral Accounting Requests. The Parties agree the Commission should

approve the following deferral accounting treatment for the Utilities:

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(A) As requested in the Utilities' application in Case No. 2025-00045 and

without condition or modification, the Utilities will establish regulatory asset(s) for the difference

between allowance for funds used during construction ("AFUDC") accrued at the Utilities'

weighted average cost of capital and AFUDC accrued using the methodology approved by the

Federal Energy Regulatory Commission during the construction periods of Brown 12 and Mill

Creek 6.

(B) The Utilities will withdraw their request for a regulatory asset for post-in-

service carrying costs ("PISCC"), operating and maintenance expense, property taxes, investment

tax credit amortization, and depreciation expense as requested in their Application.

1.6. Reporting Commitment. The Utilities will provide semi-annual in-person

construction, economic development, and load forecast updates to the Commission beginning in

the second quarter of 2026 and ending in the second quarter of 2032. All Case No. 2025-00045

intervenors may attend such update meetings.

ARTICLE II. MILL CREEK 6 COST RECOVERY MECHANISM

2.1. Mill Creek 6 Cost Recovery Mechanism. The Parties agree the Commission

should authorize LG&E to recover all non-fuel costs of Mill Creek 6 through a new Adjustment

Clause MC6 (Mill Creek 6 Cost Recovery; attached hereto as Stipulation Exhibit 1).

(A) Costs recovered through Adjustment Clause MC6 will be all non-fuel costs

of Mill Creek 6 from its in-service date through its retirement date, including without limitation

depreciation, a weighted average cost of capital carrying cost using the most recently approved

base rate return on equity appropriately grossed up for income taxes, and all Mill Creek 6 non-fuel

operating expenses (including without limitation property taxes). Property taxes for the first year

shall be based on the CWIP balance at the first of the year, not the in-service cost. Depreciation

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shall be based on the same service life and treatment of interim retirements, interim net salvage,

and terminal net salvage approved by the Commission for Brown 12 in a comprehensive base rate

proceeding. During each expense month, the weighted average cost of capital will apply to the

undepreciated capital cost of Mill Creek 6 (including any future plant additions) and regulatory

asset balance for AFUDC, adjusted for accumulated deferred income taxes without any reduction

for asset net operating loss accumulated deferred income taxes.

(B) The first expense month for Mill Creek 6 cost recovery through Adjustment

Clause MC6 will be the month in which Mill Creek 6 goes in service, and the last expense month

will be the month in which Mill Creek 6 retires. Cost recovery for any expense month will be

billed in the second month thereafter (the billing month), e.g., for a January expense month, the

following March will be the billing month.

(C) Temporary Offset to Cost Recovery through Adjustment Clause MC6. Cost

recovery through Adjustment Clause MC6 will be partially and temporarily offset by certain

revenues LG&E collects beginning with the in-service date of Mill Creek 6 and ending with the

first date on which new electric base rates take effect for LG&E following the in-service date of

Mill Creek 6. Such offsetting revenues will consist only of Maximum Load Charge revenues (i.e.,

all demand charge revenues, including all base, intermediate, and peak demand charge revenues

for rate schedules that include such demand charge components) incremental to those then

embedded in base rates from (1) customers taking service under Rate EHLF and (2) all Eligible

Data Center customers as defined in Section 2.2 (all such revenues are "Offsetting Revenues").

As with cost recovery under Adjustment Clause MC6, Offsetting Revenues collected in an expense

month will be credited against costs to be recovered under Adjustment Clause MC6 in the

corresponding Billing Month.

- (D) The Parties agree the Commission should approve all necessary regulatory deferral accounting required for the operation of Adjustment Clause MC6, including all regulatory asset and liability accounting required to address the delay between each expense month and billing month.
- (E) Adjustment Clause MC6 will use the Group 1 and Group 2 methodology for revenue allocation used in LG&E's Environmental Cost Recovery Surcharge.
- **2.2. Eligible Data Center.** For purposes of **ARTICLE II** of this Stipulation and Recommendation only, an "Eligible Data Center" is:
- (A) Any centralized facility that is used primarily or exclusively for electronic information services such as the management, storage, processing, and dissemination of electronic data and information (including mining of cryptocurrency) through the use of computer systems, servers, networking equipment, and related components (each, an "Eligible Data Center") where such Eligible Data Center meets the following requirements:
- (i) The expected or actual peak of the real-time energy demand of the Eligible Data Center is between 50 MVA and 100 MVA; and
- (ii) The expected or actual monthly load factor for the Eligible Data Center is seventy-five percent (75%) or greater.

ARTICLE III. RATE EHLF COMMITMENTS

- **3.1. Rate EHLF Commitments.** Regarding Rate EHLF, which the Utilities proposed in their pending rate proceedings in Case Nos. 2025-00113 and 2025-00114, the Parties agree to the following:
- (A) In Case Nos. 2025-00113 and 2025-00114, the Utilities will seek approval to apply Rate EHLF only to new customers, and all Parties will support that proposal; and

(B) The Utilities will file all Rate EHLF electric service agreements with the Commission.

ARTICLE IV. MILL CREEK 2 LIFE EXTENSION

- **4.1. Environmental Approvals.** The Utilities will seek necessary environmental approvals to allow Mill Creek 2 to continue to operate until Mill Creek 6 goes in service.
- **4.2. Existing Mill Creek 2 Retirement Authority Suffices.** The Parties agree, and ask and recommend the Commission's final order in this proceeding to explicitly state, that the Utilities' existing authority to retire Mill Creek 2 suffices for a later retirement. For avoidance of doubt, the Utilities are not withdrawing their existing Mill Creek 2 retirement authority.
- **4.3. Mill Creek 2 Life Extension.** The Parties agree that if the Utilities receive the necessary environmental approvals and the Commission's final order in this case affirms the Utilities' existing authority to delay Mill Creek 2's retirement until Mill Creek 6's in-service date, the Utilities will extend Mill Creek 2's life and continue to seek to maximize its value to customers as it does today, for instance, through economic dispatch and off-system sales.
- 4.4. Adjustment Clause MC2. The Parties agree the Commission should approve Adjustment Clause MC2 (attached hereto as Stipulation Exhibit 2), which is similar to LG&E's Adjustment Clause ECR (Environmental Cost Recovery Surcharge) and will provide recovery of the incremental Mill Creek 2 stay-open costs LG&E incurs that are not recovered through base rates, including incremental capital expenditures and other costs incurred specifically for this purpose after the date of this Stipulation. The Parties agree the Commission should approve all necessary regulatory deferral accounting required for the operation of Adjustment Clause MC2, including all regulatory asset and liability accounting required to address the delay between each expense month and billing month.

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4.5. Analysis of Continued Operations of Mill Creek 2. As part of their 2027

Integrated Resource Plan filing, the Utilities will provide an analysis of the continued operation of

Mill Creek 2 beyond 2031. If the analysis determines continued operation of Mill Creek 2 is

economical, the Utilities will take the necessary steps to obtain the required approvals to allow

Mill Creek 2 to operate beyond 2031. One of the required approvals would be obtaining

Commission affirmation that the Utilities' existing Mill Creek 2 retirement authority would extend

beyond the in-service date of Mill Creek 6. If such additional life extension would be economical

and the Utilities were able to obtain all required approvals, all such life extension costs would be

recovered through Adjustment Clause MC2.

4.6. LMAPCD Jurisdiction. Notwithstanding anything contained herein to the

contrary, the Parties agree that the Stipulation and Recommendation does not impair, limit, or

otherwise interfere with the jurisdiction of the Louisville Metro Air Pollution Control District

("LMAPCD").

ARTICLE V. OTHER COMMITMENTS

5.1. Renewable RFP Commitment. The Utilities commit to issue a request for

proposals ("RFP") for renewable energy and energy storage by mid-2026 seeking to procure

energy and capacity of utility scale solar, wind, storage, and/or hybrid resources.

5.2. Stakeholder Feedback. Prior to issuing the RFP, the Utilities agree to give

intervenors to this proceeding the opportunity to provide feedback on the RFP.

5.3. Contracting Resources. For any cost-effective resources or those needed to serve

customer requests (for instance, Green Tariff Option 3) identified in the RFP responses, the

Utilities will complete contracting (with appropriate regulatory-out provisions) by mid-2028, and

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apply for Commission approval by December 31, 2028, seeking approval for cost-effective resources.

ARTICLE VI. SEEM REPORTING COMMITMENT

6.1. SEEM Reporting Commitment. Beginning in the first quarter of 2026 and ending in the first quarter of 2031, the Utilities will file annual reports on their participation in the Southeast Energy Exchange Market ("SEEM"), including company-specific cost and benefit assessments and underlying data.

ARTICLE VII. ALL OTHER RELIEF TO BE GRANTED AS REQUESTED IN THE UTILITIES' APPLICATIONS

7.1. All Other Relief Requested by Utilities to Be Approved as Filed. The Parties recommend to the Commission that, except as modified in this Stipulation and the exhibits attached hereto, all other relief requested in the Utilities' filings in Case Nos. 2025-00045 and 2025-00105 should be approved as filed.

ARTICLE VIII. MISCELLANEOUS PROVISIONS

- **8.1.** Except as specifically stated otherwise in this Stipulation, entering into this Stipulation shall not be deemed in any respect to constitute an admission by any of the Parties that any computation, formula, allegation, assertion or contention made by any other party in this case is true or valid.
- **8.2.** The Parties agree that the foregoing Stipulation represents a fair, just, and reasonable resolution of the issues addressed herein and request that the Commission approve the Stipulation.
- **8.3.** Following the execution of this Stipulation, the Parties shall cause the Stipulation to be filed with the Commission on July 29, 2025, together with a request to the Commission for consideration and approval of this Stipulation.

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8.4. This Stipulation is subject to the acceptance of, and approval by, the Commission.

The Parties agree to act in good faith and to use their best efforts to recommend to the Commission

that this Stipulation be accepted and approved. The Parties commit to notify immediately any

other Party of any perceived violation of this provision so the Party may have an opportunity to

cure any perceived violation, and all Parties commit to work in good faith to address and remedy

promptly any such perceived violation. In all events, counsel for all Parties will represent to the

Commission that the Stipulation is a fair, just, and reasonable means of resolving all issues in this

proceeding, and all Parties will clearly and definitively ask the Commission to accept and approve

the Stipulation as such.

8.5. If the Commission issues an order adopting this Stipulation in its entirety and

without additional conditions, each of the Parties agrees that it shall file neither an application for

rehearing with the Commission nor an appeal to the Franklin Circuit Court with respect to such

order.

8.6. If the Commission does not accept and approve this Stipulation in its entirety, then

any adversely affected Party may withdraw from the Stipulation within the statutory periods

provided for rehearing and appeal of the Commission's order by (1) giving notice of withdrawal

to all other Parties and (2) timely filing for rehearing or appeal. If any Party timely seeks rehearing

of or appeals the Commission's order, all Parties will continue to have the right to withdraw until

the conclusion of all rehearings and appeals. Upon the latter of (1) the expiration of the statutory

periods provided for rehearing and appeal of the Commission's order and (2) the conclusion of all

rehearings and appeals, all Parties that have not withdrawn will continue to be bound by the terms

of the Stipulation as modified by the Commission's order.

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8.7. If the Stipulation is voided or vacated for any reason after the Commission has

approved the Stipulation, none of the Parties will be bound by the Stipulation.

8.8. The Stipulation shall in no way be deemed to affect or diminish the jurisdiction of

the Commission of jurisdiction under Chapter 278 of the Kentucky Revised Statutes.

8.9. The Stipulation shall inure to the benefit of and be binding upon the Parties hereto

and their successors and assigns.

8.10. The Stipulation constitutes the complete agreement and understanding among the

Parties, and any and all oral statements, representations, or agreements made prior hereto or

contemporaneously herewith shall be null and void and shall be deemed to have been merged into

the Stipulation.

8.11. The Parties agree that, for the purpose of the Stipulation only, the terms are based

upon the independent analysis of the Parties to reflect a fair, just, and reasonable resolution of the

issues herein and are the product of compromise and negotiation.

8.12. The Parties agree that neither the Stipulation nor any of its terms shall be admissible

in any court or commission except insofar as such court or commission is addressing litigation

arising out of the implementation of the terms herein, the approval of this Stipulation, or a Party's

compliance with this Stipulation. This Stipulation shall not have any precedential value in this or

any other jurisdiction.

8.13. The signatories hereto warrant that they have appropriately informed, advised, and

consulted their respective Parties in regard to the contents and significance of this Stipulation and

based upon the foregoing are authorized to execute this Stipulation on behalf of their respective

Parties.

12

Page 13 of 21

8.14. The Parties agree that this Stipulation is a product of negotiation among all Parties

hereto, and no provision of this Stipulation shall be strictly construed in favor of or against any

Party. Notwithstanding anything contained in the Stipulation, the Parties recognize and agree that

the effects, if any, of any future events upon the operating income of the Utilities are unknown and

this Stipulation shall be implemented as written.

8.15. The Parties agree that this Stipulation may be executed in multiple counterparts.

[Signature Pages Follow]

APPENDIX A: LIST OF STIPULATION EXHIBITS

Stipulation Exhibit 1: Adjustment Clause MC6 (Mill Creek 6 Cost Recovery)

Stipulation Exhibit 2: Adjustment Clause MC2 (Mill Creek 2 Incremental Stay-Open Cost

Recovery)

IN WITNESS WHEREOF, the Parties have hereunto affixed their si	signatures.
--	-------------

C	
Kentucky Utilities Company and Louisville Gas and Electric Company	
HAVE SEEN AND AGREED:	
By:	
Allyson K. Sturgeon	

Attorney General for the Commonwealth of Kentucky, by and through the Office of Rate Intervention

HAVE SEEN AND AGREED:

By:

J. Michael West T. Toland Lacy Angela M. Goad Lawrence W. Cook John G. Horne II

Kentucky Industrial Utility Customers, Inc.

HAVE SEEN AND AGREED:

By:

Michael L. Kurtz Jody Kyler Cohn

Lexington-Fayette Urban County Government

HAVE SEEN AND TAKE NO POSITION ON THE STIPULATION AND RECOMMENDATION AND WILL NOT OPPOSE IT AT HEARING:

Bv:

James W. Gardner M. Todd Osterloh Rebecca Price

Louisville/Jefferson County Metro Government

HAVE SEEN AND TAKE NO POSITION ON THE STIPULATION AND RECOMMENDATION AND WILL NOT OPPOSE IT AT HEARING:

Bv:

James W. Gardner M. Todd Osterloh Rebecca Price

Southern Renewable Energy Association

HAVE SEEN AND AGREED:

By: 2 1. 31

Randal A. Strobo David E. Spenard

Kentucky Coal Association, Inc.

HAVE SEEN AND AGREED:

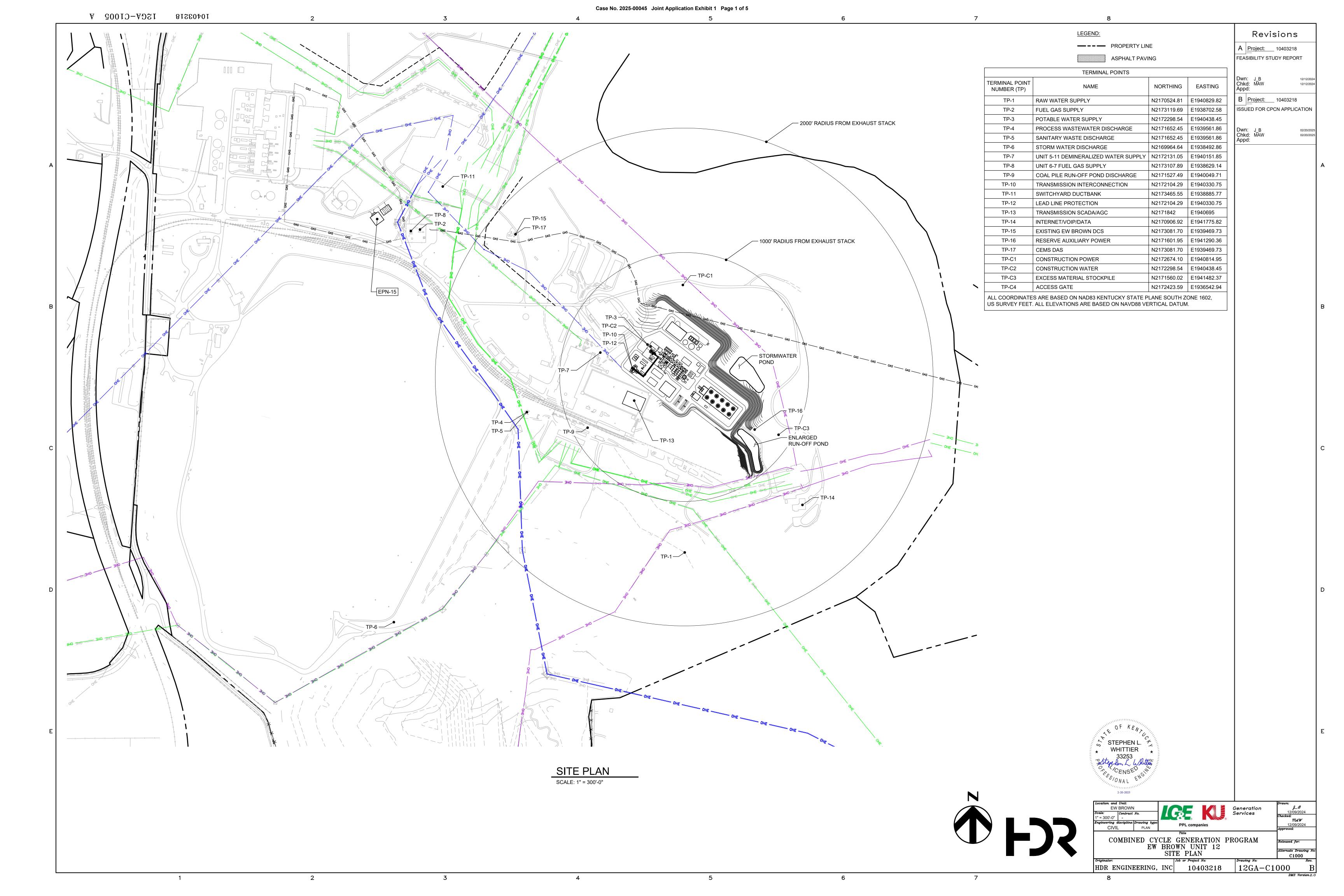
By: ____/s/ Matthew R. Malone (with permission)

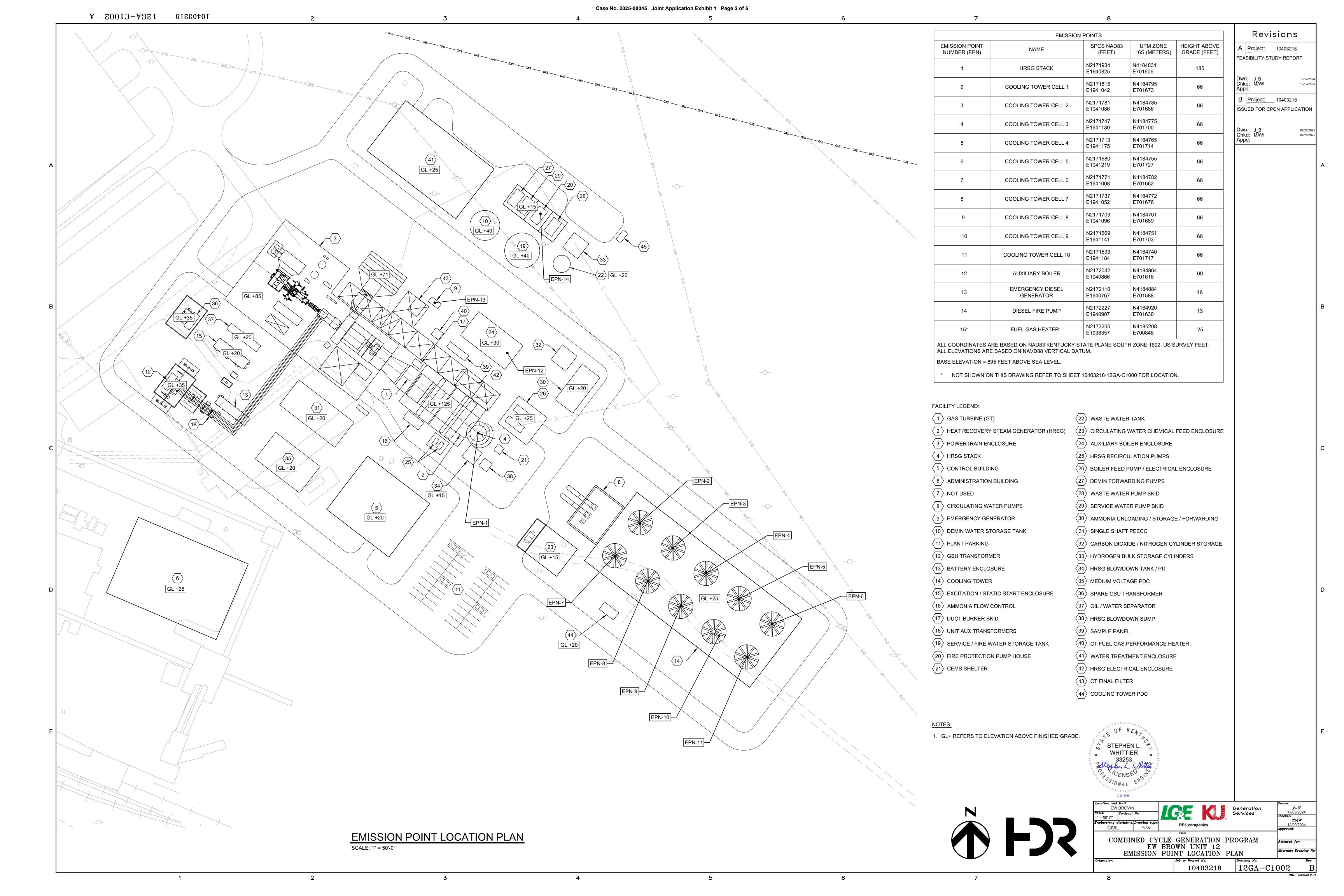
Matthew R. Malone William H. May, III

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2025-00045 DATED OCT 28 2025

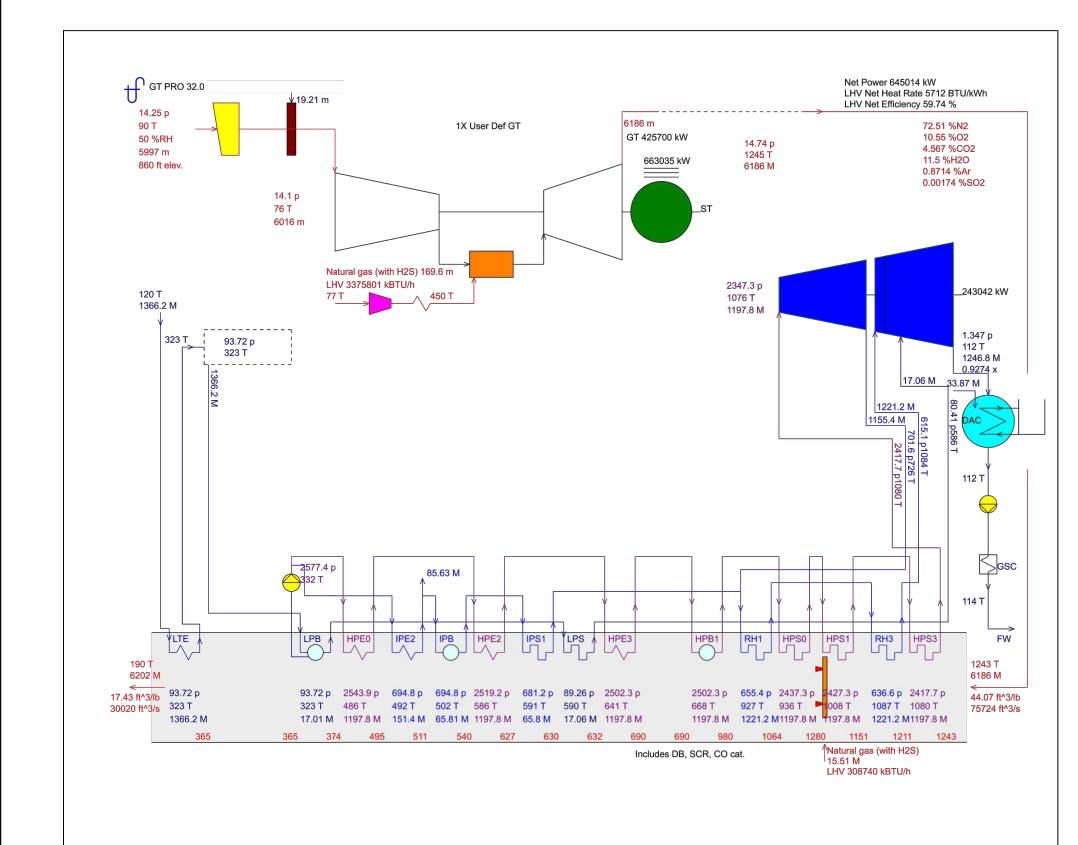
FIVE PAGES TO FOLLOW





Case No. 2025-00045 Joint Application Exhibit 1 Page 3 of 5 EIIOI 10403218 Revisions A Project: 10403218 INITIAL ISSUE 1. ALL EQUIPMENT RATINGS ARE ESTIMATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL EQUIPMENT RATING SELECTION. Dwn: REB Chkd: Appd: MAW 2. GENERATOR AND TRANSFORMER RATINGS GENERATOR RATING: 817 MVA, 25 kV, 0.85 PF B <u>Project:</u> 10403218 GSU TRANSFORMER: 480/640/800 MVA, 25 kV/353.625 kV Z = 9.0% @ 480 MVA TO BROWN NORTH ISSUED FOR CPCN APPLICATION UAT TRANSFORMER: 22/29/36 MVA, 25/6.9 kV, Z = 6.5% @ 22 MVA SUBSTATION (345kV) RAT TRANSFORMER: 22/29/36 MVA, 138/13.8/6.9 kV, Z = 7.0% @ 22 MVA Dwn: REB Chkd: Appd: MAW FROM WEST CLIFF SUBSTATION 138kV BUS METERING GENERATOR STEP-UP TRANSFORMER COMMON FACILITIES GENERATOR [CIRCUIT BREAKER ___ AUX POWER POWER UNIT AUXILIARY TRANSFORMER SINGLE SHAFT GENERATOR 2500/3333KVA 6.9KV-480V Z=5.75°° 2500/3333KVA 6.9KV-480V 7=5.75% RESERVE AUXILIARY TRANSFORMER FROM 7kV SWG 1A 7kV SWITCHGEAR-1A 7kV SWITCHGEAR-2A **A**008 **)**800A **)** 800A COMMON BOP WATER TRMT SPARE WATER TRMT SPARE COMMON BOP MCC A (TYPICAL MOTOR) (1) BFW PUMP (TYPICAL MOTOR) (TYPICAL MOTOR) (TYPICAL MOTOR) CT STATIC EXCIT XFMR SPARE SPARE SPARE SPARE `(1) CW PUMP (1) BFW PUMP (1) CW PUMP START SYSTEM (1) GAS COMPR (1) GAS COMPR (1) CCW PUMP (1) CCW PUMP (1) COND PUMP (1) COND PUMP 2500/3300kVA 2500/3300kVA 2500/3300kV 6.9kV-480V Z=5.75% 6.9kV-480V Z=5.75% 480V SWITCHGEAR 4000A BUS 65kAIC 480V SWITCHGEAR 4000A BUS 65kAIC 2500/3333KVA 6.9KV-480V Z=5.75% 2500/3333KVA 6.9KV-480V Z=5.75% SPARE BOP MCC B STG MCC 1B BOP MCC A STG SPARE MCC 1A 480V ESSENTIAL SERVIC2000A BUS, 65kAIC 2500/3300kVA 6.9kV-480V Z=5.75% 2500/3300kVA 6.9kV-480V Z=5.75% 4000A 4000A P N.O. 4000A 4000A CT ESS MCC ST ESS MCC 480V ESS MCC A 480V ESS MCC B DIESEL GENERATOR 2000kW 0.80PF, 480V COOLING TWR MCC A COOLING TWR MCC B **)** 4000A 480V SWITCHGEAR 4000A BUS 65kAIC 480V SWITCHGEAR 4000A BUS 65kAIC HRSG MCC 1B CT MCC 1B CT MCC 1A HRSG MCC 1A SPARE SPARE ngineering discipline: I ELECTRICAL COMBINED CYCLE GENERATION PROGRAM
EW BROWN UNIT 12
OVERALL ONE-LINE DIAGRAM

[Job or Project No: | Drawing No: | D Released for:
REVIEW
Alternate Drawing No:
0MP-E1101 10403218 12MP-E1101 HDR, INC.



	PERFORMANCE SUMMARY		
RE	PERFORMANCE SUMMAR MBIENT TEMPERATURE ELATIVE HUMIDITY EVATION	90°F 50% 860'	
CT EV NE	EL · LOAD AP COOLER STATUS :T OUTPUT NEW AND CLEAN :T HEAT RATE (HHV) NEW AND CLEAN	NATURAL GAS 100% ON 645,014 kW 6335 BTU/kWHR	



A 02/20/25 ISSUED FOR CPCN PROJECT MANAGER PROJECT NUMBER ISSUE DATE DESCRIPTION

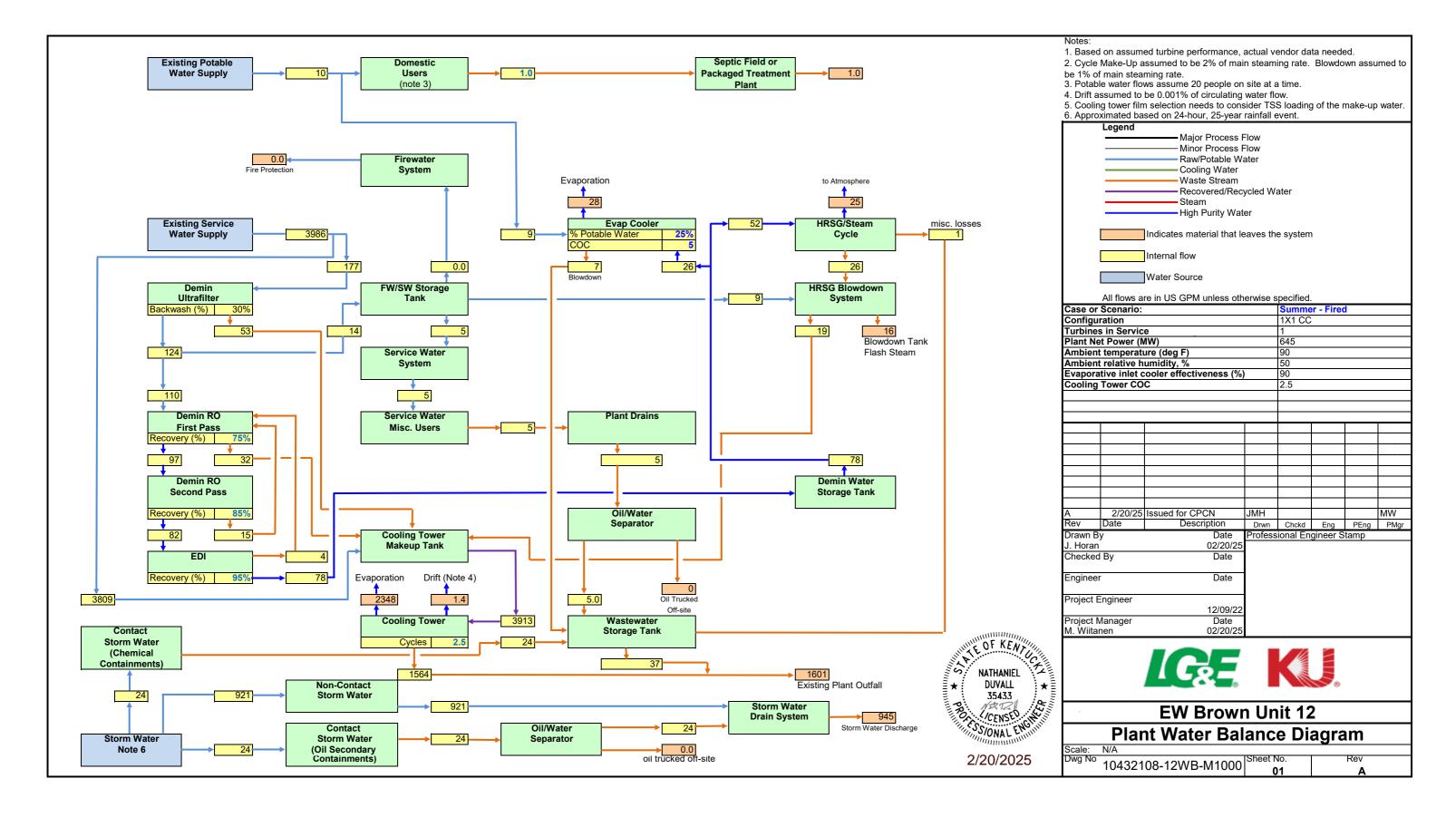




BROWN UNIT 12 HEAT BALANCE DIAGAM ADVANCED CLASS SINGLE SHAFT UNIT -SUMMER DAY FIRED CONDITION

02/20/2025

0HB-M1001



APPENDIX C

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2025-00045 DATED OCT 28 2025

The following mitigation measures and conditions are hereby imposed on Louisville Gas and Electric and Kentucky Utilities Company (LG&E/KU) to ensure the Brown 12 facilities proposed in this proceeding are constructed as ordered.

- 1. A final site layout plan shall be submitted to the Commission upon completion of the final site design. Deviations from the preliminary site layout should be clearly indicated on the revised graphic. Those changes could include, but are not limited to, plant building, stacks, substation, switchyard, natural gas line route, transmission line route(s), or other project facilities and infrastructure.
- 2. Any change in the project boundaries from the information that formed the evaluation in this Order shall be submitted to the Commission for review.
- 3. The Commission will determine whether any deviation in the boundaries or site layout plan is likely to create a materially different pattern or magnitude of impacts.
- 4. LG&E/KU shall provide the date construction will commence to the Commission 30 days prior to that date.
- 5. Prior to construction, LG&E/KU shall provide a finalized Emergency Response Plan to the local fire district, first responders, and any county emergency management agency. LG&E/KU shall provide site-specific training for local emergency responders at their request. Access for fire and emergency units shall be set up after consultation with local authorities.

- 6. LG&E/KU or its EPC will control access to the site during construction and operation. All construction entrances will be gated and locked when not in use.
- 7. LG&E/KU's access control strategy shall also include appropriate signage to warn potential trespassers. LG&E/KU must ensure that all site entrances and boundaries have adequate signage, particularly in locations visible to the public, local residents, and business owners.
- 8. The security fence must be installed prior to activation of any electrical installation work in accordance with National Electrical Safety Code (NESC) standards.
- 9. Existing vegetation between nearby roadways and homes shall be left in place to the extent feasible to help minimize visual impacts and screen the project from nearby homeowners and travelers.
- 10. LG&E/KU are required to limit construction activity, process, and deliveries to the times as set forth in the SAR. If LG&E/KU determines a night shift is necessary, LG&E/KU should submit that request to the executive director. The PSC Executive Director is tasked with determining whether that request should be granted.
- 11. LG&E/KU shall maintain functional mufflers and engine shrouds on all trucks and engine-powered equipment.
- 12. LG&E/KU shall notify residents and businesses, if any, within 2,400 feet of the Project boundary about the construction plan, the noise potential, any mitigation plans, and its Complaint Resolution Program referred to in Item 20 of this Appendix, at least one month prior to the start of construction.

13. LG&E/KU shall fix or pay for repairs for damage to roads and bridges resulting from any vehicle transport to the site. For damage resulting from vehicle

transport in accordance with all permits, those permits will control.

14. LG&E/KU shall comply with all laws and regulations regarding the use of

roadways.

15. LG&E/KU shall implement ridesharing between construction workers when

feasible, use appropriate traffic controls, or allow flexible working hours outside of peak

hours to minimize any potential traffic delays during AM and PM peak hours.

16. LG&E/KU shall continue to work with the city of Burgin to reduce traffic

impact.

17. LG&E/KU shall consult with the Kentucky Transportation Cabinet (KYTC)

regarding truck and other construction traffic and obtain necessary permits from the

KYTC.

18. LG&E/KU shall consult with the Mercer County Road Department (MCRD)

regarding truck and other construction traffic and obtain any necessary permits from the

MCRD.

19. LG&E/KU shall properly maintain construction equipment and follow best

management practices related to fugitive dust throughout the construction process,

including the use of water trucks. Dust impacts shall be kept at a minimal level. The

Commission requires LG&E/KU's compliance with 401 KAR 63:010.

20. Prior to construction, LG&E/KU shall maintain a Complaint Resolution Plan

to address any complaints from community members about the Brown 12 construction.

LG&E/KU shall also submit annually a status report associated with its Complaint

Resolution Plan, providing, among other things, the individual complaints, how LG&E/KU addressed those complaints, and the ultimate resolution of those complaints identifying whether the resolution was to the complainant's satisfaction. LG&E/KU shall submit a

final report within 30 days after commencement of electric generation, referencing the

monitoring case number and filed in that case record.

21. As LG&E/KU progress in the interconnection process, they shall provide the

Commission with all approvals or reports related to interconnection.

22. Any reports or studies that are completed by the natural gas transmission

company as it relates to this project should be submitted to the Commission for review

within 30 days of completion of said report or study. If these reports are duplicative of

any other required filing, LG&E/KU may submit a letter as an alternative, with an

explanation.

23. Within 30 days of service of this Order, LG&E/KU shall send a notice with

web address to this Order to all the adjoining landowners who previously were required

to receive notice of this Project, if applicable, and the notice shall advise the property

owner(s) that the project was approved. In addition, the notice should include any

construction complaint contact information.

24. If not specifically listed above, all mitigation measures set forth in the SAR

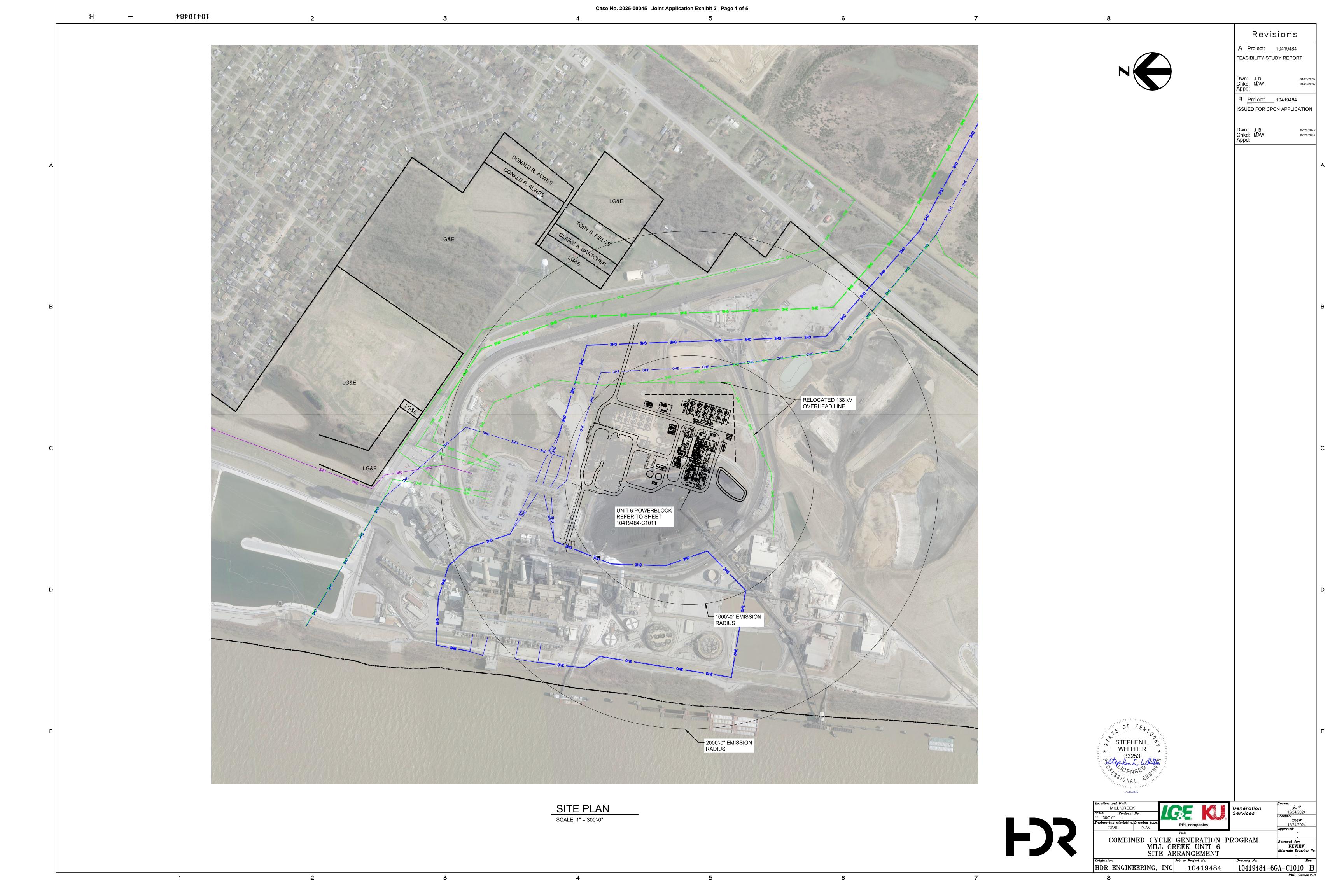
are incorporated.

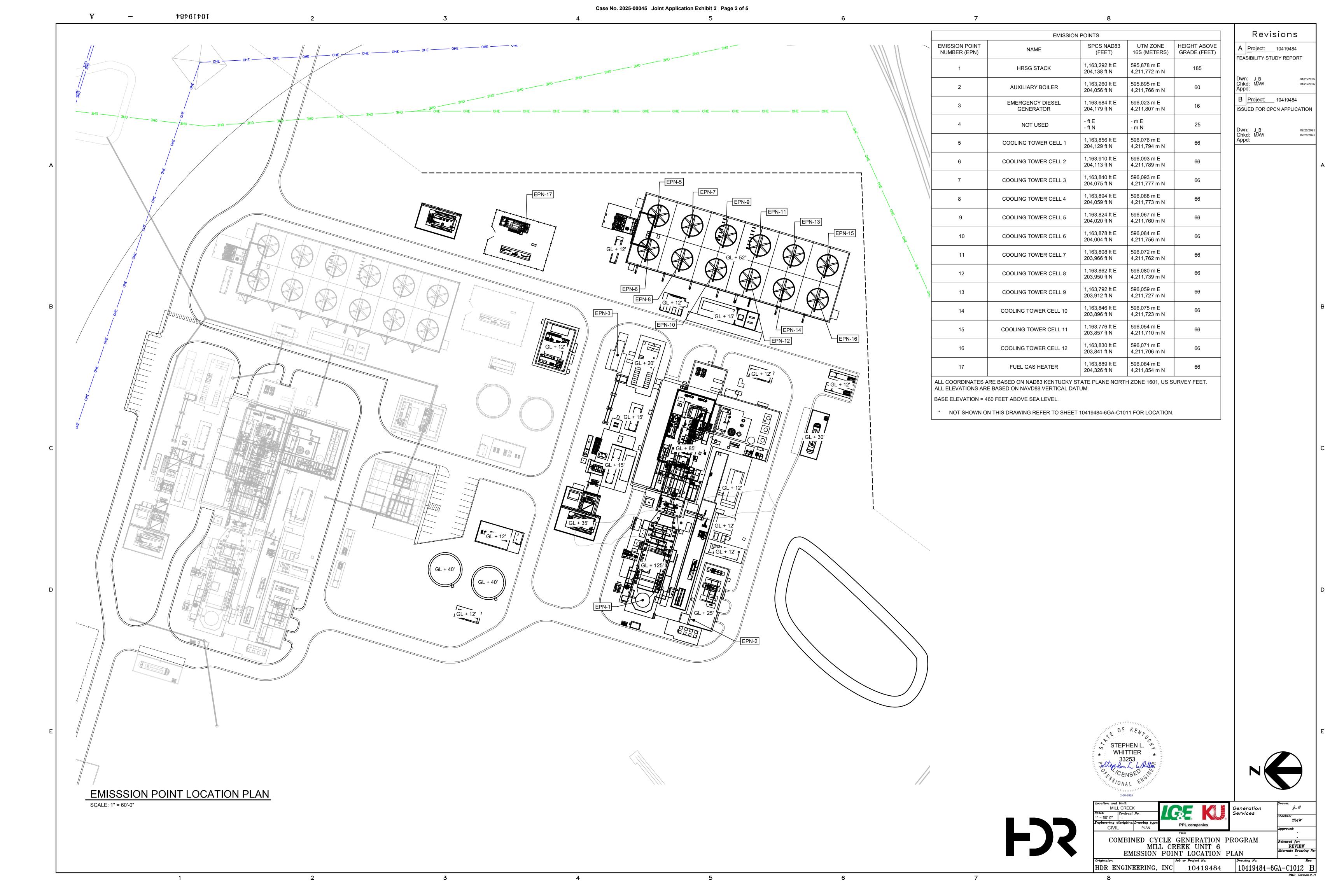
Appendix C

APPENDIX D

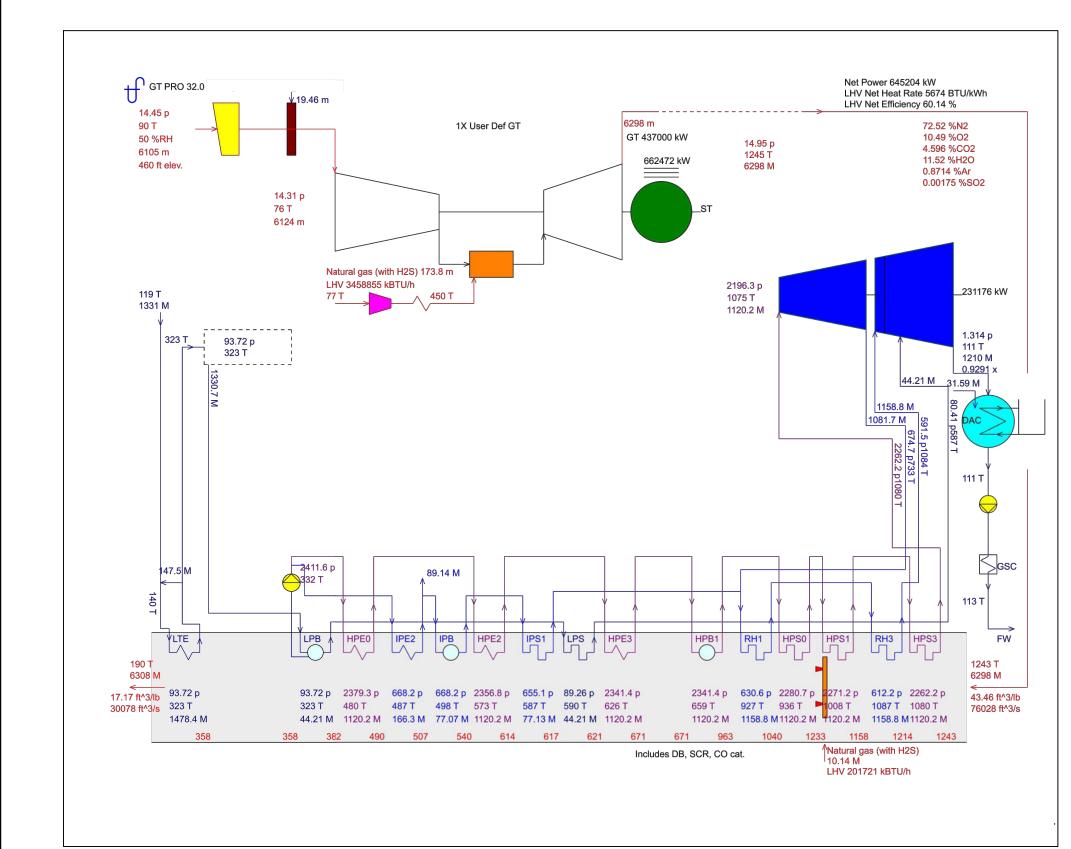
APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2025-00045 DATED OCT 28 2025

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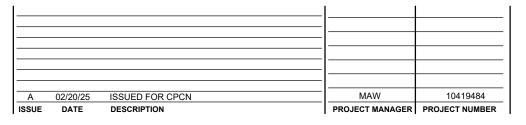


Case No. 2025-00045 Joint Application Exhibit 2 Page 3 of 5 9WP-E1101 B ₱861₱01 Revisions A <u>Project:</u> 1041984 INITIAL ISSUE 1. ALL EQUIPMENT RATINGS ARE ESTIMATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL EQUIPMENT RATING Dwn: REB Chkd: Appd: MAW 2. GENERATOR AND TRANSFORMER RATINGS GENERATOR RATING: 817 MVA, 25 kV, 0.85 PF B <u>Project:</u> 1041984 GSU TRANSFORMER: 480/640/800 MVA, 25 kV/353.625 kV Z = 9.0% @ 480 MVA ISSUED FOR CPCN APPLICATION TO MILL CREEK SUBSTATION (345kV) UAT TRANSFORMER: 22/29/36 MVA, 25/6.9 kV, Z = 6.5% @ 22 MVA FROM EXISTING MILL CREEK RAT TRANSFORMER: 22/29/36 MVA, 13.8/13.8/6.9 kV, Z = 7.0% @ 22 MVA Dwn: REB Chkd: Appd: MAW TRANSFORMER 10 14kV SWITCHGEAR SPARE NET METERING BREAKER GENERATOR STEP-UP TRANSFORMER COMMON FACILITIES GENERATOR CIRCUIT BREAKER AUX POWER AUX POWER UNIT AUXILIARY
TRANSFORMER SINGLE SHAFT RESERVE AUXILIARY TRANSFORMER GENERATOR 2500/3333KVA 2500/3333KVA A 2500/35351KV/ 6.9KV-480V Z=5.75% 6.9KV-480V Z=5.75% FROM 7kV SWG 1A 7kV SWITCHGEAR-1A 7kV SWITCHGEAR-2A A008 WATER TRMT SPARE COMMON BOP MCC B COMMON BOP WATER TRMT SPARE MCC A (TYPICAL MOTOR) (1) CW PUMP (1) CCW PUMP (TYPICAL MOTOR) (TYPICAL MOTOR) (TYPICAL MOTOR) CT STATIC EXCIT XFMR SPARE SPARE SPARE SPARE (1) BFW PUMP (1) CW PUMP (1) BFW PUMP START SYSTEM (1) GAS COMPR (1) GAS COMPR (1) CCW PUMP (1) COND PUMP (1) COND PUMP 2500/3300kVA 2500/3300kVA 2500/3300kV/ 6.9kV-480V Z=5.75% 6.9kV-480V Z=5.75% 480V SWITCHGEAR 4000A BUS 65kAIC 480V SWITCHGEAR 4000A BUS 65kAIC 2500/3333KVA 2500/3333KVA 6.9KV-480V Z=5.75% 6.9KV-480V Z=5.75% STG BOP MCC A STG SPARE SPARE BOP MCC B MCC 1A MCC 1B 480V ESSENTIAL SERVIC2000A BUS, 65kAIC 2500/3300kVA 6.9kV-480V Z=5.75% 2500/3300kVA 6.9kV-480V Z=5.75% **)** 4000A N.O. **Q** 4000A 4000A CT ESS MCC ST ESS 480V ESS 480V ESS MCC B MCC A MCC DIESEL GENERATOR 2000kW 0.80PF, 480V COOLING TWR COOLING TWR MCC B MCC A 480V SWITCHGEAR 4000A BUS 65kAIC 480V SWITCHGEAR 4000A BUS 65kAIC CT HRSG СТ HRSG SPARE SPARE MCC 1A MCC 1A MCC 1B MCC 1B ngineering discipline: L ELECTRICAL COMBINED CYCLE GENERATION PROGRAM
MILL CREEK UNIT 6
OVERALL ONE-LINE DIAGRAM Released for:
REVIEW
Alternate Drawing No:
6MP-E1101 6MP-E1101 10419484 HDR, INC.



PERFORMANCE SUMMARY		
AMBIENT TEMPERATURE RELATIVE HUMIDITY ELEVATION FUEL CT LOAD EVAP COOLER STATUS NET OUTPUT NEW AND CLEAN NET HEAT RATE (HHV) NEW AND CLEAN	90°F 50% 460' NATURAL GAS 100% ON 645,204 kW 6293 BTU/kWHR	









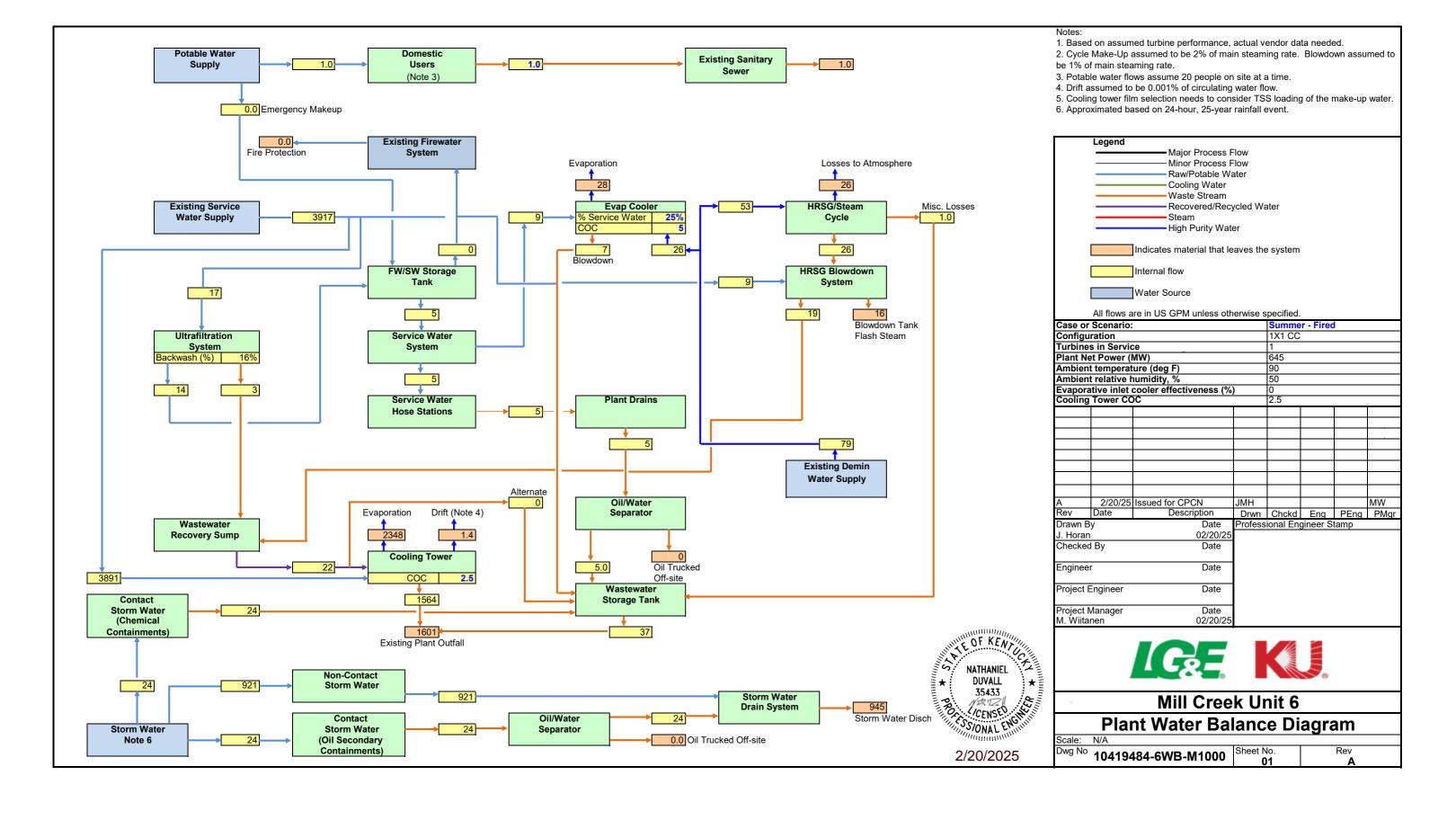
MILL CREEK UNIT 6
HEAT BALANCE DIAGAM
ADVANCED CLASS SINGLE SHAFT UNIT SUMMER DAY FIRED CONDITION

02/20

02/20/2025

FIGURE

0HB-M1001



APPENDIX E

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2025-00045 DATED OCT 28 2025

The following mitigation measures and conditions are hereby imposed on Louisville Gas and Electric and Kentucky Utilities Company (LG&E/KU) to ensure the Mill Creek 6 facilities proposed in this proceeding are constructed as ordered.

- 1. A final site layout plan shall be submitted to the Commission upon completion of the final site design. Deviations from the preliminary site layout should be clearly indicated on the revised graphic. Those changes could include, but are not limited to, plant building, stacks, substation, switchyard, natural gas line route, transmission line route(s), or other project facilities and infrastructure.
- 2. Any change in the project boundaries from the information that formed the evaluation in this Order shall be submitted to the Commission for review.
- 3. The Commission will determine whether any deviation in the boundaries or site layout plan is likely to create a materially different pattern or magnitude of impacts.
- 4. LG&E/KU shall provide the date construction will commence to the Commission 30 days prior to that date.
- 5. Prior to construction, LG&E/KU shall provide a finalized Emergency Response Plan to the local fire district, first responders, and any county emergency management agency. LG&E/KU shall provide site-specific training for local emergency responders at their request. Access for fire and emergency units shall be set up after consultation with local authorities.

- 6. LG&E/KU or its EPC will control access to the site during construction and operation. All construction entrances will be gated and locked when not in use.
- 7. LG&E/KU's access control strategy shall also include appropriate signage to warn potential trespassers. LG&E/KU must ensure that all site entrances and boundaries have adequate signage, particularly in locations visible to the public, local residents, and business owners.
- 8. The security fence must be installed prior to activation of any electrical installation work in accordance with National Electrical Safety Code (NESC) standards.
- 9. Existing vegetation between nearby roadways and homes shall be left in place to the extent feasible to help minimize visual impacts and screen the project from nearby homeowners and travelers.
- 10. LG&E/KU are required to limit construction activity, process, and deliveries to the times as set forth in the SAR. If LG&E/KU determines a night shift is necessary, LG&E/KU should submit that request to the executive director. The PSC Executive Director is tasked with determining whether that request should be granted.
- 11. LG&E/KU shall maintain functional mufflers and engine shrouds on all trucks and engine-powered equipment.
- 12. LG&E/KU shall notify residents and businesses, if any, within 2,400 feet of the Project boundary about the construction plan, the noise potential, any mitigation plans, and its Complaint Resolution Program referred to in Item 20 of this Appendix, at least one month prior to the start of construction.

13. LG&E/KU shall fix or pay for repairs for damage to roads and bridges resulting from any vehicle transport to the site. For damage resulting from vehicle

transport in accordance with all permits, those permits will control.

14. LG&E/KU shall comply with all laws and regulations regarding the use of

roadways.

15. LG&E/KU shall implement ridesharing between construction workers when

feasible, use appropriate traffic controls, or allow flexible working hours outside of peak

hours to minimize any potential traffic delays during AM and PM peak hours.

17. LG&E/KU shall consult with the Kentucky Transportation Cabinet (KYTC)

regarding truck and other construction traffic and obtain necessary permits from the

KYTC.

18. LG&E/KU shall consult with the Jefferson County Road Department (JCRD)

regarding truck and other construction traffic and obtain any necessary permits from the

JCRD.

19. LG&E/KU shall properly maintain construction equipment and follow best

management practices related to fugitive dust throughout the construction process,

including the use of water trucks. Dust impacts shall be kept at a minimal level. The

Commission requires LG&E/KU's compliance with 401 KAR 63:010.

20. Prior to construction, LG&E/KU shall maintain a Complaint Resolution Plan

to address any complaints from community members about the Mill Creek 6 construction.

LG&E/KU shall also submit annually a status report associated with its Complaint

Resolution Plan, providing, among other things, the individual complaints, how LG&E/KU

addressed those complaints, and the ultimate resolution of those complaints identifying

Appendix E Case No. 2025-00045 whether the resolution was to the complainant's satisfaction. LG&E/KU shall submit a final report within 30 days after commencement of electric generation, referencing the monitoring case number and filed in that case record.

- 21. As LG&E/KU progress in the interconnection process, they shall provide the Commission with all approvals or reports related to interconnection.
- 22. Any reports or studies that are completed by the natural gas transmission company as it relates to this project should be submitted to the Commission for review within 30 days of completion of said report or study. If these reports are duplicative of any other required filing, LG&E/KU may submit a letter as an alternative, with an explanation.
- 23. Within 30 days of service of this Order, LG&E/KU shall send a notice with web address to this Order to all the adjoining landowners who previously were required to receive notice of this Project, if applicable, and the notice shall advise the property owner(s) that the project was approved. In addition, the notice should include any construction complaint contact information.
- 24. If not specifically listed above, all mitigation measures set forth in the SAR are incorporated.

Appendix E Case No. 2025-00045 *Angela M Goad Assistant Attorney General Office of the Attorney General Office of Rate 700 Capitol Avenue Suite 20 Frankfort, KY 40601-8204 *Byron Gary Kentucky Resources Council, Inc. Post Office Box 1070 Frankfort, KY 40602 *John Horne
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700 Capitol Avenue
Suite 20
Frankfort, KY 40601-8204

*Ashley Wilmes Kentucky Resources Council, Inc. Post Office Box 1070 Frankfort, KY 40602 *Honorable David Edward Spenard Strobo Barkley PLLC 239 South 5th Street Ste 917 Louisville, KY 40202 *Joshua Smith Sierra Club 2101 Webster St. , Suite 1300 Oakland, CA 94612

*Honorable Allyson K Sturgeon Vice President and Deputy General Counsel-LG&E and KU Energy LLC 220 West Main Street Louisville, KY 40202 *Honorable W. Duncan Crosby III Attorney at Law Stoll Keenon Ogden, PLLC 2000 PNC Plaza 500 W Jefferson Street Louisville, KY 40202-2828 *Kristin Henry Staff Attorney Sierra Club Environmental Law Program 2101 Webster Street Suite 1300 Oakland, CA 94612

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*Bethany Baxter Childers & Baxter PLLC 300 Lexington Building, 201 West Sho Lexington, KY 40507 *James W Gardner Sturgill, Turner, Barker & Moloney, PLLC 333 West Vine Street Suite 1400 Lexington, KY 40507 *Michael West
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700 Capitol Avenue
Suite 20
Frankfort, KY 40601-8204

*Honorable William H May, III Attorney at Law Hurt, Crosbie & May PLLC The Equus Building 127 West Main Street Lexington, KY 40507 *Jody Kyler Cohn Boehm, Kurtz & Lowry 425 Walnut Street Suite 2400 Cincinnati, OH 45202 *Honorable Michael L Kurtz Attorney at Law Boehm, Kurtz & Lowry 425 Walnut Street Suite 2400 Cincinnati, OH 45202

*William H May, III Hurt, Deckard & May The Equus Building 127 West Main Street Lexington, KY 40507 *Joe F. Childers Childers & Baxter PLLC 300 Lexington Building, 201 West Sho Lexington, KY 40507 *Honorable Matthew R Malone Attorney at Law Hurt, Deckard & May The Equus Building 127 West Main Street Lexington, KY 40507 *Nathaniel Shoaff Sierra Club 2101 Webster St. , Suite 1300 Oakland, CA 94612

*Louisville Gas and Electric Company 820 West Broadway Louisville, KY 40203

*Rick E Lovekamp Manager - Regulatory Affairs LG&E and KU Energy LLC 220 West Main Street Louisville, KY 40202 *Sara Judd Senior Corporate Attorney LG&E and KU Energy LLC 220 West Main Street Louisville, KY 40202

*Robert Conroy Vice President, State Regulation and Rates LG&E and KU Energy LLC 220 West Main Street Louisville, KY 40202 *Toland Lacy Office of the Attorney General 700 Capital Avenue Frankfort, KY 40601

*Rebecca C. Price Sturgill, Turner, Barker & Moloney 155 East Main Street Lexington, KY 40507 *Tony Mendoza Staff Attorney Sierra Club Environmental Law Program 2101 Webster Street Suite 1300 Oakland, CA 94612

*Randal A. Strobo Strobo Barkley PLLC 239 South 5th Street Ste 917 Louisville, KY 40202 *M. Todd Osterloh Sturgill, Turner, Barker & Moloney, PLLC 333 West Vine Street Suite 1400 Lexington, KY 40507

*Simon Mahan Southern Renewable Energy Association 11610 Pleasant Ridge Road Suite 103 Little Rock, AR 72223

*Kentucky Utilities Company 220 W. Main Street P. O. Box 32010 Louisville, KY 40232-2010