Andy Beshear Governor

Rebecca W. Goodman Secretary Energy and Environment Cabinet



Commonwealth of Kentucky Public Service Commission 211 Sower Blvd. P.O. Box 615 Frankfort, Kentucky 40602-0615 Telephone: (502) 564-3940 psc.ky.gov Angie Hatton Chair

Mary Pat Regan Commissioner

John Will Stacy Commissioner

November 20, 2024

PARTIES OF RECORD

Re: Case No. 2024-00326

Notice is given to all parties that the attached Informal Conference Memorandum and attendance list has been filed into the record of this proceeding.

If you have any comments you would like to make regarding the contents of the document, please do so within five days of receipt of this letter. If you have any questions, please contact Jurgens van Zyl, Staff Attorney, at jurgens.vanzyl@ky.gov.

Sincerely,

6. Bridwell

Linda C. Bridwell, PE Executive Director

Attachment



INTRA-AGENCY MEMORANDUM

KENTUCKY PUBLIC SERVICE COMMISSION

TO: Case File No. 2024-00326

FROM: Ashley Hatcher, Staff Attorney III

DATE: November 18, 2024

RE: Informal Conference of November 12, 2024

Pursuant to an Order issued on October 30, 2024 an informal conference (IC) was conducted on November 12, 2024. Attached is a copy of the attendance roster.

The purpose of the IC was to discuss Louisville Gas and Electric Company's (LG&E) and Kentucky Utilities Company's (KU) (jointly, LG&E/KU) 2024 Integrated Resource Plan (IRP). The meeting included parties from LG&E/KU, the Attorney General's Office; the Kentucky Coal Association; Sierra Club, Southern Renewable Energy Association; and Mountain Association (MA), Kentuckians for the Commonwealth (KFT), Kentucky Solar Energy Society (KYSE), and Metropolitan Housing Coalition (MHC) (collectively, Joint Movants). LG&E/KU had no objection to all parties being at the technical conference. LG&E/KU gave a PowerPoint presentation to assist parties in navigating the IRP filing. LG&E/KU provided a physical copy of its presentation to participants. A copy that presentation is attached to this memo.

LG&E/KU first presented the planning objectives for the IRP. Next, LG&E/KU went over the documents filed within the case record for the IRP and included a recommended reading plan for the IRP. LG&E explained the load forecasting process, the first step in this process is developing monthly sales and energy requirements forecasts. LG&E/KU provided information related to economic development in Kentucky, and its impact on the load forecast. LG&E/KU discussed the second step which is to develop long-term hourly energy requirements forecasts. LG&E/KU discussed the third step in the load forecasting process, which is to develop weather year energy requirement forecasts. LG&E/KU explained the key inputs that factor into the resource planning analysis. LG&E/KY provided new resources in the resource assessment and discussed that the cost of new resources in the 2024 IRP is higher than 2021 IRP and the 2022 Certificate of Public Convenience and Necessity (CPCN) filing. LG&E/KU provided the resource planning process, including a summary of winter resources. LG&E/KU provided a summary of its resource plan.

There being no further discussion, the IC was then adjourned.

cc: Parties of Record

2024 Integrated Resource Plan Kentucky Public Service Commission – Informal Conference



PPL companies

November 12, 2024

Agenda

- IRP Objective
- IRP Documents
- Load Forecasting Process
- Summary of Other Key Inputs
- Resource Planning Process
- Summary of Results



IRP Objective



The IRP represents a snapshot of an ongoing resource planning process

- The IRP contemplates numerous resource decisions over a 15-year planning horizon, but not all resource decisions need to be made today.
- The Companies' planning process is founded on an understanding of:
 - Customer usage trends and issues impacting the way customers use electricity.
 - Supply- and demand-side resource costs and operating characteristics.
- Planning Objective: To develop a portfolio of supply- and demand-side resources that can reliably serve customers at the lowest reasonable cost, day and night, across a broad range of possible futures and weather scenarios.



IRP Documents



IRP Documents

- Executive Summary
- Volume I*
 - Section 4 (Format)
 - Section 5 (Plan Summary)
 - Section 6 (Significant Changes)
 - Section 7 (Load Forecasts)
 - Section 8 (Resource Assessment and Acquisition Plan)
 - Section 9 (Financial Information)
- Volume II (Load Forecast Technical Appendix)
 - Electric Sales & Demand Forecast Process
 - 2024 IRP Inflation Assumptions

- Volume III (Resource Plan Technical Appendix)
 - Staff Recommendations for LG&E/KU's 2024 IRP
 - 2024 IRP Technology Update
 - 2024 IRP Resource Adequacy Analysis
 - 2024 IRP Resource Assessment
 - 2024 RTO Membership Analysis
 RTO Analysis Appendices 1-12**
 - Natural Gas Fuel Security Analysis
 - Generation Forecast Process
 - 2024 IRP Transmission Section
 - Generation Replacement & Retirement Scenarios Impact to the LG&E/KU Transmission System
 - Long-Term Firm Transfer Analysis Impact to the LG&E/KU Transmission System
- Workpapers

*The sections in Volume I are prescribed by 807 KAR 5:058 **Appendices to RTO Analysis were filed as separate documents.



Recommended Reading Plan

- 1. Executive Summary (9 pages)
- 2. Volume I, Section 5 (Plan Summary) is a longer executive summary (28 pages)
- 3. Volume III, 2024 IRP Resource Assessment is a complete summary of the resource planning analysis (12 resource plans) and cites IRP documents containing additional information regarding key inputs.
 - Document provides rationale for selecting the single resource plan for IRP reporting ("Recommended Resource Plan").
- 4. Volume I, Sections 8 and 9 focus primarily on the Recommended Resource Plan
- 5. Volume III, Staff Recommendations for LG&E/KU's 2024 IRP provides references to where the Companies have addressed each of the Staff's recommendations in their 2021 IRP report.
 - Other:
 - The introduction to Volume III, 2024 IRP Technology Update notes the strengths and weaknesses of various
 resources and explains why the value of a resource depends on the load being served.

IGE KU

Load Forecasting Process

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Step 1: Develop Monthly Sales and Energy Requirements Forecasts

- Monthly sales forecasts are developed through econometric modeling of energy sales by rate class, but also incorporate specific intelligence on the prospective energy requirements of the Companies' largest customers.
- Residential and General Service forecasts comprise 45% of total sales and are developed with statistically-adjusted end-use ("SAE") models to account for forecasted changes in the saturation and efficiency of end uses.
 - In addition to energy efficiency improvements, the forecasts explicitly account for growth in customers, distributed generation, and electric vehicles.
 - The Companies' goal is to model actual customer behaviors based on the economics of end uses.
- Level of economic development load growth is a significant change from 2021 IRP.
- Sales forecasts are developed on a billing period basis and then converted to calendar months. AMI will obviate the need for this conversion step. Energy requirements are the sum of calendar-month sales and losses.

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Economic development load growth (data centers) accounts for largest changes in load moving forward



Change in Mid Energy Requirements Forecast from 2023

LGE KU

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Kentucky's economic development progress has been historic for the last several years, and the state continues to invest heavily to ensure this progress continues

- Kentucky has a number of advantages that make data center and manufacturing customers want to locate within the state.
- Economic Development is a key focus area for the Governor and Legislature.
 - Nearly \$300 million has been committed from the state budget since 2022 to fund site development, including megasites, which provides certainty and speed to market for site selection projects
- Energy availability is one of one of the most important issues facing corporate site selection projects.
- Economic development load growth includes data centers as well as automotive manufacturing projects.
 - Data centers tend to be large (up to 1,000 MW) with load factors in the range of 95%.



IGE KU

IRP considers three energy requirements forecast scenarios



Low, Mid, and High Energy Requirements Forecasts

Energy Requirements (Differences from Mid)



LGE KU

Step 2: Develop Long-Term Hourly Energy Requirements Forecasts

- A reliable forecast of hourly energy requirements is needed to plan a generation portfolio that gives customers the option to use electricity whenever they want.
- This forecast is developed based on historical energy requirements, but
 - — (1) historical energy requirements have different levels of distributed generation, electric vehicles, and economic development load growth than our forecast, and
 - (2) each of these things has unique load shapes.
- Therefore, to develop an hourly energy requirements forecast, we
 - — (1) remove the impacts of distributed generation, electric vehicles, and economic development load from the calendar energy requirements forecast,
 - (2) allocate the result to hours based on historical energy requirements, and
 - (3) add back hourly forecasts of distributed generation, electric vehicle, and economic development load.



43% of annual energy and 53% of winter energy is consumed at night



Annual peak demands can occur in the winter or summer



Winter Peak (Differences from Mid)



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Step 3: Develop "Weather Year" Energy Requirements Forecasts

- Weather in the long-term energy requirements forecasts is computed as the average of weather over the past 20 years, but weather is seldom normal. Therefore, resource adequacy is significantly focused on serving load during extreme weather events.
- To assess resource adequacy and determine minimum reserve margin constraints for resource planning, the Companies develop 51 hourly energy requirement forecasts based on the weather in each of the last 51 years.

Distributions of Summer and Winter Peak Demands, 2032





Summary of Other Key Inputs



Volume III, 2024 IRP Resource Assessment explains how key inputs factor in into the resource planning analysis

- 12 load and environmental scenarios
 - 3 load scenarios (low, mid, and high)
 - 4 environmental regulation scenarios
 - No New Regulations
 - Ozone NAAQS
 - Ozone NAAQS + ELG
 - Ozone NAAQS + ELG + 111 GHG
- 5 fuel prices scenarios
- Costs and operating characteristics for new and existing resources
 - Construction capital costs (new resources)
 - Fixed and variable operating costs (new and existing resources)
 - Resource availability inputs (EFOR, capacity contribution, maximum run-time)

- Existing unit retrofit costs
 - Cost to add SCR to Ghent 2
 - Costs to retrofit coal units to co-fire or burn 100% natural gas
- Modeling constraints
 - Reserve margins
 - Legislative unit retirement restrictions (KRS 278.264)
 - Landfill storage capacity (Brown and Mill Creek)
 - Technology availability
 - Renewable limits
 - Solar: 20% of annual energy requirements (3,800 MW)
 - Wind: 25% of energy (2,800 3,700 MW)
 - Solar + Wind: 25% of annual energy requirements



Compared to the 2021 IRP, the cost of new resources in the 2024 IRP is higher

New Resources in the Resource Assessment

- Fully Dispatchable Resources
 - Simple-Cycle Combustion Turbine ("SCCT")
 - Natural Gas Combined Cycle ("NGCC")
 - Small Modular Nuclear Reactor ("SMR")
- Renewable Resources
 - Kentucky Solar
 - Kentucky & Indiana Wind
- Limited-Duration Resources
 - 4-Hour Battery Energy Storage System ("BESS")
 - 8-Hour Battery Energy Storage System ("BESS")
 - Dispatchable DSM BYOD Energy Storage
 - Dispatchable DSM BYOD Home Generators
 - Dispatchable DSM BDR 50-200 kW
 - Expansion of Curtailable Service Rider-2 ("CSR")

Capital + Non-Fuel O&M (levelized \$/kW-yr)

	2021 IRP (2022 \$)	2022 CPCN* (2026/2027 \$)	2024 IRP (2030 \$)
SCCT	127	83	182
NGCC	140	117	222
Solar No ITC/PTC	126	136	183
Solar with ITC/PTC	101	90	133
4-hr BESS No ITC	172	300	265
4-hr BESS with ITC	N/A	138	138
SMR No ITC	N/A	N/A	1,074
SMR with ITC	N/A	N/A	903

*2022 CPCN values reflect costs as filed. The Companies provided an update to NGCC capital costs based on bids received in their response to the Joint Intervenors' post-hearing data request 4.1 in Case No. 2022-00402. This update equates to \$151/kW-yr.



Resource Planning Process



Resource Planning Process

- **Resource Adequacy:** Develop reserve margins for limiting loss of load expectation ("LOLE") to 1 day in 10 years.
 - Analysis is completed in SERVM (see Volume III, 2024 IRP Resource Adequacy Analysis).
- **Resource Plan Screening:** Develop least-cost resource plans subject to reserve margin and other constraints for 12 load and environmental scenarios over 5 fuel price scenarios (60 resource plans).
 - Analysis is completed using PLEXOS (see Stage One, Step One of Volume III, 2024 IRP Resource Assessment).
 - Model runs take multiple days given granularity required to properly evaluate wide range of resource & retirement options.
 - Results are considered "high level" and may require further assessment of resource adequacy.
- Resource Plan Optimization: Evaluate each of the 60 resource plans with detailed production costs over the same 5 fuel price scenarios to determine which resource plan for a given load and environmental scenario is least-cost across all fuel price scenarios.
 - Detailed productions costs are modeled using PROSYM.
 - Revenue requirements are summarized in the Companies' Financial Model.
 - See Stage One, Step Two of Volume III, 2024 IRP Resource Assessment.
- Recommended Resource Plan: Develop one resource plan for IRP reporting based on common elements of least-cost resource plans.

IGE KU

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New resources are needed to serve economic development load growth

Winter Resource Summary

	2028	2029	2030	2031	2032	2035	2037	2039
Winter Peak – Mid Load	6,347	6,471	6,733	7,003	7,135	7,118	7,118	7,117
Fully Dispatchable Generation Resource	s							
Existing Resources	7,977	7,977	7,977	7,977	7,977	7,977	7,977	7,977
Retirements/Additions		and the second second second		The second second				
Coal ¹	-597	-597	-597	-597	-597	-597	-597	-597
Small-Frame SCCTs ²	-55	-55	-55	-55	-55	-55	-55	-55
NGCC (Mill Creek 5)	660	660	660	660	660	660	660	660
Total	7,985	7,985	7,985	7,985	7,985	7,985	7,985	7,985
Reserve Margin ("RM")	25.8%	23.4%	18.6%	14.0%	11.9%	12.2%	12.2%	12.2%
Renewable/Limited-Duration Resources								- Sales Maria
Existing Resources	72	72	72	72	72	72	72	72
Existing CSR	115	115	115	115	115	115	115	115
Existing Disp. DSM ³	110	124	125	135	145	158	160	163
Retirements/Additions								
Solar ⁴	0	0	0	0	0	0	0	0
BESS ⁵	125	125	125	125	125	125	125	125
Total	421	435	437	446	456	469	471	475
Total Supply	8,406	8,420	8,422	8,431	8,441	8,454	8,456	8,460
Total RM – Mid Load	32.5%	30.1%	25.1%	20.4%	18.3%	18.8%	18.8%	18.9%
Minimum Capacity Need – Mid Load ⁶	-219	-73	264	602	764	728	726	722
	2028	2029	2030	2031	2032	2035	2037	2039
Winter Peak – High Load	6.600	7.059	7.551	7.984	8 1 4 2	8 140	8 1 4 8	8 1 4 8
Total RM – High Load	27.4%	19.3%	11.5%	5.6%	3.7%	3.9%	3.8%	3.8%
Minimum Capacity Need - High Load ⁶	108	687	1,319	1,868	2,062	2,047	2,054	2,051

- ¹ Mill Creek 1 will be retired at the end of 2024. Mill Creek 2 will be retired after Mill Creek 5 is commissioned in 2027.
- ² Due to their age and relative inefficiency, the Companies do not perform major maintenance on their small-frame SCCTs, Paddy's Run Unit 12 and Haefling Units 1-2, but continue to operate them until they are uneconomic to repair. This analysis assumes that they will be retired in 2025 for planning purposes.
- ³ Existing Dispatchable DSM reflects expected load reductions under normal peak weather conditions.
- ⁴ This analysis assumes 120 MW of solar capacity is added in 2026, and an additional 120 MW of solar capacity is added in 2027. Capacity values reflect 0% expected contribution to winter peak capacity.
- ⁵ Brown BESS is assumed in-service in 2026.
- ⁶ The winter capacity need is based on a 29% winter minimum reserve margin target. Positive values reflect a capacity deficit.



Summary of Results



Resource Adequacy: LOLE is 1 day in 10 years at winter and summer reserve margins of 29 and 23 percent, respectively

Minimum Reserve Margin Methodology

- Companies evaluated LOLE over a range of load scenarios to determine the reserve margins at which LOLE is 1 day in 10 years.
- Analysis focused on the 2032 portfolio less solar
 - 2032 is the first year in the analysis period with all economic development load.
 - By removing solar from this analysis and using the resulting reserve margins to develop resource plans, the resource plans have lower unserved energy risk in the winter months where the consequences of service curtailments are the greatest.
 - LOLE in the winter/summer is 0.32/0.68.

Minimum Reserve Margin Analysis Results

	Reserve Margin & LOLE: 2032 Portfolio Less Solar				
Load Change	Winter Reserve Margin	Summer Reserve Margin	Annual LOLE		
0	18.3%	13.2%	10.84		
-140	20.7%	15.5%	6.19		
-210	22.0%	16.7%	4.68		
-280	23.2%	17.8%	3.39		
-560	28.5%	22.8%	1.00		

LGEE KU

Resource Plan Optimization: Load growth is served with a combination of NGCC and batteries charged by existing resources

	No New Re	egulations	Ozone	NAAQS	Ozone NAAQS + ELG		Ozone NAAQS + ELG + GHG	
Year	Mid Load	High Load	Mid Load	High Load	Mid Load, Solar Cost Sensitivity	High Load	Mid Load	High Load
2028	+Disp DSM	+Disp DSM; +300 MW 4hr BESS	+Disp DSM	+Disp DSM; +300 MW 4hr BESS	+Disp DSM	+Disp DSM; +300 MW 4hr BESS	+Disp DSM	+Disp DSM; +200 MW 4hr BESS; +49 MW Solar
2029		+700 MW 4hr BESS		+700 MW 4hr BESS		+700 MW 4hr BESS		+700 MW 4hr BESS; +42 MW Solar
2030	Retire BR3; +1 NGCC; +100 MW 4hr BESS	+1 NGCC	Retire BR3; Add GH2 SCR; +1 NGCC; +100 MW 4hr BESS	Add GH2 SCR; +1 NGCC	Retire BR3; Add GH2 SCR; +1 NGCC; ELG @ GH, TC; +100 MW 4hr BESS	Add GH2 SCR; +1 NGCC; ELG @ GH, TC;	Co-fire MC3-4; Co-fire GH1-4; GH2 Non-Ozone; Convert TC1-2; +1 NGCC; ELG @ GH, MC; +36 MW Solar	Co-fire GH1-4; GH2 Non-Ozone; Co-fire MC3-4; Convert TC1-2; +2 NGCC; ELG @ GH, MC;
2031	+400 MW 4hr BESS	Retire BR3; +1 NGCC; +200 MW 4hr BESS	+400 MW 4hr BESS	Retire BR3; +1 NGCC; +200 MW 4hr BESS	+400 MW 4hr BESS	Retire BR3; +1 NGCC; +200 MW 4hr BESS	Retire BR3; +1 NGCC; +128 MW Solar	Retire BR3; +1 NGCC
2032	+200 MW 4hr BESS	+200 MW 4hr BESS	+200 MW 4hr BESS	+200 MW 4hr BESS	+200 MW 4hr BESS	+200 MW 4hr BESS		
2035			Ne alleringen		Retire MC3-4; +1 NGCC; +200 MW 4hr BESS	Retire MC3-4; +1 NGCC; +1 SCCT		
2036							+3,346 MW Solar; +306 MW IN Wind	+4,146 MW Solar; +671 MW IN Wind
2039	Auto and						Retire GH1-4; Retire MC3-4; Retire TC1-2; +6 NGCC	Retire GH1-4; Retire MC3-4; +4 NGCC



Recommended Resource Plan: Recommended Resource Plan is a "no regrets" resource plan

Recommended Resource Plan

(Table 3 in Executive Summary; only years in which changes occur are shown)

	Least-Cost Re Ozone NA	esource Plans AQS + ELG	Recommended		
Year	Mid Load, Solar Cost Sensitivity	High Load	Resource Plan Ozone NAAQS + ELG Mid Load	Enhanced Solar Resource Plan Mid Load	
2028	+Dispatchable DSM	+Dispatchable DSM; +300 MW 4hr BESS	+Dispatchable DSM; +400 MW 4hr BESS; Add Ghent 2 SCR	+Dispatchable DSM; +400 MW 4hr BESS; Add Ghent 2 SCR +200 MW Solar	
2029	Service Stationary Pro-	+700 MW 4hr BESS			
2030	Retire Brown 3; Add Ghent 2 SCR; +1 NGCC; ELG @ Ghent, Trimble County; +100 MW 4hr BESS	Add Ghent 2 SCR; +1 NGCC; ELG @ Ghent, Trimble County	+1 NGCC; ELG @ Ghent, Trimble County	+1 NGCC; ELG @ Ghent, Trimble County; +200 MW Solar	
2031	+400 MW 4hr BESS	Retire Brown 3; +1 NGCC; +200 MW 4hr BESS	+1 NGCC	+1 NGCC	
2032	+200 MW 4hr BESS	+200 MW 4hr BESS		+600 MW Solar	
2035	Retire Mill Creek 3-4; +1 NGCC; +200 MW 4hr BESS	Retire Mill Creek 3-4; +1 NGCC; +1 SCCT	Retire Mill Creek 3-4; Retire Brown 3; +500 MW 4hr BESS; +500 MW Solar	Retire Mill Creek 3-4; Retire Brown 3; +500 MW 4hr BESS;	

Recommended Resource Plan accelerates resources that will be needed if High load growth doesn't occur

- The Mid load, Ozone NAAQS + ELG scenario includes retirements of Brown 3 and Mill Creek 3-4, ELG compliance at the Ghent and Trimble County stations via zero liquid discharge, and the additions of new dispatchable DSM measures, two NGCCs, 900 MW of battery storage, and a Ghent 2 SCR.
- To support the potential for high economic development load growth and CO₂ regulations, the additions of the Ghent 2 SCR and 400 MW of battery storage are accelerated to 2028, the addition of the second NGCC is accelerated to 2031, and the retirement of Brown 3 is deferred to 2035.
- In addition, 500 MW of solar is added in 2035 after prices fall to hedge natural gas price volatility and future CO₂ regulation risk.
- The Recommended Resource Plan is a "no regrets" resource plan because the accelerated resources are needed by 2035 if high economic development load growth or CO₂ regulations do not come to fruition. Furthermore, the addition of 500 MW of solar reflects the likelihood that some level of solar will be least-cost even without CO₂ regulations.



Key Takeaways from 2024 IRP

- Planning Objective: To develop a portfolio of supply- and demand-side resources that can reliably serve customers at the lowest reasonable cost, day and night, across a broad range of possible futures and weather scenarios.
- Economic development increases load by 30 to 45% by 2032.
- With higher cost of new resources, all coal units except Brown 3 operate through end of analysis period absent ELG and GHG regulations.
- NGCC and battery storage is needed to serve economic development load growth.



Appendix



2024 IRP considers four environmental scenarios

- No New Regulations: This scenario assumes the Good Neighbor Plan (related to the National Ambient Air Quality Standards ("NAAQS") for ozone, "Ozone NAAQS"), 2024 Effluent Limit Guidelines ("ELG"), and recent Clean Air Act ("CAA") Section 111(b) and (d) Greenhouse Gas ("GHG") Rules or their equivalents do not take effect over the IRP planning period, and no new regulations are implemented through the end of the IRP planning period (2039) that require significant investment for environmental compliance.
- Ozone NAAQS: This scenario assumes the 2024 ELG and GHG Rules or their equivalents do not become effective during the IRP planning period, but the Good Neighbor Plan or its equivalent does become effective. In this case, because selective catalytic reduction ("SCR") is a Reasonably Achievable Control Technology for ozone NAAQS compliance, the Companies assume SCR will be needed to operate Ghent 2 in the ozone season (i.e., May through September) beyond 2030.
- Ozone NAAQS + ELG: This scenario builds on the Ozone NAAQS scenario and assumes the 2024 ELG or its equivalent will also become effective, but GHG Rules or their equivalents do not become effective during the IRP planning period. Based on Environmental Protection Agency ("EPA") obligation, EPA authority, and a pragmatic evaluation of compliance technology implementation, the Companies consider this environmental scenario to be most likely.
- Ozone NAAQS + ELG + GHG: This scenario assumes the Good Neighbor Plan (or a regulation with the same effect), 2024 ELG, and the GHG Rules or their equivalents all become effective during the IRP planning period. For the reasons discussed in Section 4.1.3 of Volume III (2024 IRP Resource Assessment), the Companies assign a low likelihood to this scenario.



Abbreviations

- AMI: Advanced metering infrastructure ٠
- **BDR: Business demand response** .
- BESS: Battery energy storage system .
- **BR: Brown Generating Station**
- BYOD: Bring your own device
- CO2: Carbon Dioxide
- CPCN: Certificate of Public Convenience and Necessity .
- CSR: Curtailable service rider
- DG: Distributed generation .
- **Disp: Dispatchable**
- DSM: Demand-side management .
- EE: Energy efficiency
- EFOR: Equivalent forced outage rate .
- ELG: Effluent limitations guidelines .
- EV: Electric vehicle

- GH: Ghent Generating Station
- GHG: Greenhouse gas
- GS: General service
- · GWh: Gigawatt-hour
- IN: Indiana
- IRP: Integrated Resource Plan
- ITC: Investment tax credit
- KY: Kentucky
- kW: Kilowatt
- · LOLE: Loss of load expectation
- LG&E/KU: Louisville Gas & Electric and Kentucky Utilities
 TC: Trimble County Generating Station
- NGCC: Natural gas combined cycle
- MC: Mill Creek Generating Station
- MW: Megawatt
- · MWh: Megawatt-hour

- NAAQS: National Ambient Air Quality Standards
- O&M: Operations and maintenance
- PTC: Production tax credit .
- **RM: Reserve margin** .
- RS: Residential service
- **RTO: Regional Transmission Organization** ٠
- SAE: Statistically-adjusted end-use •
- SCCT: Simple cycle combustion turbine
- SCR: Selective catalytic reduction
- SMR: Small modular reactor



PSC INFORMAL CONFERENCE SIGN IN SHEET

CASE NUMBER: ITC 2024-00326 LGE KU

LOCATION: Hearing room #2

DATE: November 12, 2024 9:00am –

NAME	COMPANY
Turgens un Zyl	PSC
Duacun Crosby	SKO for LGE-KO
Robert Conroy	LGYE/KY
Sara Judd ~	LFEE/Kh
Zovit Robus of Spendel	Shull BILLY SREA
Joe Children	Sierra Club
John Barington	LGTE/KU
Tim Jones	LG+E/KU
Ashley Hatcher	PSC
MICFURE SEBOURN	Len The
Milke Werk	AG
John Rospess	PSC
Ben Bellany	PSC
Hayleigh hiley	PSC
David Sinclair	LLE/KU

PSC INFORMAL CONFERENCE SIGN IN SHEET

CASE NUMBER: ITC 2024-00326 LGE KU

LOCATION: Hearing room #2

DATE: November 12, 2024 9:00am -

NAME	COMPANY
Lonnic Bellin	· LEE/KU
Matt Maload	RCA
Emily Childress	SKO For LGE-KU
Strant Wilson	LGIEVICN
Byron Gary	Joset Werrenorg
Rick Lovekamp	LGRE/KU
allyson Sturgeon	Love Kil
Kristen Henry	Sierra Club (by phone)
	그는 것은 사람은 것은 것을 하는 것을 하는 것을 하는 것을 수 있다.

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*Denotes Served by Email