

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC INVESTIGATION OF LOUISVILLE)	
GAS AND ELECTRIC COMPANY AND)	CASE NO.
KENTUCKY UTILITIES COMPANY SERVICE)	2023-00422
RELATED TO WINTER STORM ELLIOTT)	

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION
TO KENTUCKY UTILITIES COMPANY, LOUISVILLE GAS
AND ELECTRIC COMPANY

Louisville Gas and Electric Company (LG&E) and Kentucky Utilities Company (KU) (jointly, LG&E/KU), pursuant to 807 KAR 5:001, shall file with the Commission an electronic version of the following information. The information requested is due on February 16, 2024. The Commission directs LG&E/KU to the Commission's July 22, 2021 Order in Case No. 2020-00085¹ regarding filings with the Commission. Electronic documents shall be in portable document format (PDF), shall be searchable, and shall be appropriately bookmarked.

Each response shall include the question to which the response is made and shall include the name of the witness responsible for responding to the questions related to the information provided. Each response shall be answered under oath or, for representatives of a public or private corporation or a partnership or association or a governmental agency, be accompanied by a signed certification of the preparer or the

¹ Case No. 2020-00085, *Electronic Emergency Docket Related to the Novel Coronavirus COVID-19* (Ky. PSC July 22, 2021), Order (in which the Commission ordered that for case filings made on and after March 16, 2020, filers are NOT required to file the original physical copies of the filings required by 807 KAR 5:001, Section 8).

person supervising the preparation of the response on behalf of the entity that the response is true and accurate to the best of that person's knowledge, information, and belief formed after a reasonable inquiry.

LG&E/KU shall make timely amendment to any prior response if LG&E/KU obtain information that indicates the response was incorrect or incomplete when made or, though correct or complete when made, is now incorrect or incomplete in any material respect.

For any request to which LG&E/KU fail or refuse to furnish all or part of the requested information, LG&E/KU shall provide a written explanation of the specific grounds for their failure to completely and precisely respond.

Careful attention shall be given to copied and scanned material to ensure that it is legible. When the requested information has been previously provided in this proceeding in the requested format, reference may be made to the specific location of that information in responding to this request. When applicable, the requested information shall be separately provided for total company operations and jurisdictional operations. When filing a paper containing personal information, LG&E/KU shall, in accordance with 807 KAR 5:001, Section 4(10), encrypt or redact the paper so that personal information cannot be read.

1. Refer to the NERC/FERC October 2023 Report attached to the Commission's December 22, 2023 Order in Case No. 2023-00422 as Appendix A (NERC/FERC October 2023 Report), page 33 and Figure 22, page 42.

a. Explain LG&E/KU's role as a Balancing Authority (BA) and the extent of its responsibility to the other three load serving entities (LSEs) in its footprint. Include

in the response whether LG&E/KU receive any compensation for serving as a BA and, if so, from which entities.

b. Explain why LG&E/KU use a 5 percent buffer in its short-term load forecast model. As part of the response, explain how the buffer is calculated and how often the buffer is recalculated.

c. Identify the corporation, limited liability company, or other legal person that acts as the BA for LG&E/KU's service territory and provide an organizational chart showing where that entity is located within LG&E/KU's larger corporate structure.

2. Provide an explanation detailing how LG&E/KU, in their role as an LSE, create weather forecasts. Include as part of the explanation the sources/inputs relied on, how often the forecast is updated, how many days out the forecast predicts weather, how these weather forecasts are used in short-term load forecasting, and who is responsible for creating, maintaining, and updating the forecasts.

3. Provide an explanation detailing how LG&E/KU, in their role as BA, create weather forecasts. As part of the explanation include the sources relied on, how often the forecast is updated, how many days out the forecast predicts weather, how these weather forecasts are used in short-term load forecasting, and who is responsible for creating, maintaining, and updating the forecasts.

4. Identify and explain any differences in the manner in which LG&E/KU create weather forecasts in their role as an LSE as compared to their role as BA.

5. State whether LG&E/KU, in their role as an LSE or BA, has changed the way it forecasts weather since Winter Storm Elliott. If so, provide a detailed explanation of those changes.

6. Refer to the NERC/FERC October 2023 Report, page 31.
 - a. State whether LG&E/KU, in their role as BA, provided any guidance to the three LSEs in LG&E/KU's BA footprint regarding the 90/10 or the 50/50 load forecasts under either normal or extreme winter weather. If so, identify and explain the guidance provided.
 - b. Explain the multiple contingencies LG&E/KU considered as required by Reliability Standard TPL-001-5.1.
7. Explain whether any of LG&E/KU's renewable resources or any renewable resource in their BA footprint were producing and transmitting energy leading up to or during December 22, 2022, through December 25, 2022. Include in the response whether any renewable resources are included as a reliable generation resource in the planning for such events.
8. Refer to the NERC/FERC October 2023 Report, page 43, and Figure 23 on page 44. For each column in Figure 23, provide a breakout of the outages by LSE for each LSE in LG&E/KU's BA footprint.
9. Refer to the NERC/FERC October 2023 Report, page 44. Explain whether there were any transmission lines or transmission related equipment other than generation resources out of service or derated for any reason during the time in question. If so, explain whether any problems with the transmission system were cured prior to the winter storm Elliott event.
10. Refer to the NERC/FERC October 2023 Report, page 47. Provide a breakout of all derates and outages in LG&E/KU's BA by unit and LSE from December 23, 2022, through December 25, 2022.

11. Refer to the NERC/FERC October 2023 Report, page 64.

a. For the period leading up to and during Winter Storm Elliott, provide copies of any public service announcements or other public messaging requesting customers to voluntarily reduce energy consumption.

b. State whether LG&E/KU have estimated the extent to which such messaging those requests resulted in a reduction in demand, and if so, provide those estimates.

12. Explain whether LG&E or KU experienced any outages as a result of Winter Storm Elliott other than those resulting from a lack of generation resources or the inability to import energy. If so, provide a detailed list of outages by company, circuit and outage location, and provide the causes of those outages, the amount of time the outages lasted, and time of service restoration.

13. Explain, in detail, LG&E/KU's processes for inspecting its transmission system, including but not limited to poles (wood and steel), lines, transformers, substation equipment, and all other equipment, and each inspection process, identify whether LG&E/KU personnel or an outside entity conducts each inspection.

14. Provide all inspection reports for transmission system inspections since 2019, and explain what information is documented in the reports and how the reports are organized.

15. For each year from 2020 through 2023, provide LG&E/KU's annual capital work plan and capital budget for transmission system projects, and if such projects were completed, state when they were completed and provide a comparison of the amounts actually spent on the projects as compared to the budgeted amounts. If additional

projects were undertaken in those years that were not included in LG&E/KU's capital work plan or budget, identify those projects by describing each such project and identifying amounts spent on each such project.

16. Explain, in detail, LG&E/KU's processes for inspecting their distribution system, including but not limited to poles (wood and steel), lines, transformers, substation equipment and all other equipment (such as the Capacitor and Regulator Inspection Maintenance Program, the Recloser Maintenance / Replacement Program, the Overhead Conductor Program). For each inspection process, identify whether LG&E/KU personnel or an outside entity conducts each inspection.

17. Provide all inspection reports for distribution system inspections since 2019, and explain what information is documented in the reports and how the reports are organized.

18. For each year from 2020 through 2023, provide LG&E/KU's annual capital work plan and capital budget for distribution system projects, and if such projects were completed, state when they were completed and provide a comparison of the amounts actually spent on the projects as compared to the budgeted amounts. If additional projects were undertaken in those years that were not included in LG&E/KU's capital work plan or budget, identify those projects by describing each such project and identifying amounts spent on each such project.

19. Refer to Mr. Lonnie E. Bellar's rebuttal testimony in Case No. 2022-00402 (Bellar's 2022-00402 Rebuttal), pages 18–19.²

² 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*

a. State what, if any, additional discussions have taken place between LG&E/KU and Texas Gas Transmission regarding Winter Storm Elliott since the final hearing in Case No. 2022-00402 to address the event and reduce the risk of future occurrence.

b. State what, if any, changes Texas Gas Transmission have implemented in response to the events occurring during Winter Storm Elliott. Include in the response any proposed changes which have not yet been implemented by Texas Gas Transmission.

20. Refer to Bellar's 2022-00402 Rebuttal, pages 18–19. State whether LG&E/KU has conducted an analysis of the proposed NGCC unit installation at Mill Creek which included analysis of gas compression capability as they relate to expected pipeline pressure conditions, including the costs and risks associated with operating the proposed unit on fuel oil.

21. Refer to Bellar's 2022-00402 Rebuttal, pages 18–19.

a. State whether the software improvements on the simple cycle combustion turbines at Trimble County have been installed. If they have been installed, provide the date of the installations.

b. Explain why the software was not installed prior to the events of Winter Storm Elliott. Include in the response when LG&E/KU became aware of the software improvements.

Generating Unit Retirements (filed Jan. 06, 2023), LG&E/KU's Rebuttal Testimony of Lonnie E. Bellar at 18–19.

22. Provide a detailed list of all unit outages or derates, if any, which have occurred during cold weather events in the last ten years. Provide a detailed explanation for why each unit was out of service or derated. Include in the answer whether the unit had any operational capacity during the period and how long the outage or derate lasted.

23. Provide a detailed list of all correlated unit outages or derates, if any, which have occurred during cold weather events in the last ten years. Provide a detailed explanation for why each unit was out of service or derated. Include in the answer whether the unit had any operational capacity during that period and how long the outage or derate lasted.

24. State whether LG&E/KU have any written operating procedures for extreme winter weather events, and if so, provide a copy of those procedures.

25. State what changes, if any, have been made to LG&E/KU's winter operating procedures to reduce risk of equipment failure following Winter Storm Elliott.

26. Refer to LG&E/KU's response to Commission Staff's Post-Hearing Request for Information in Case No. 2022-00402 (LG&E/KU's 2022-00402 Response to Staff's Post-Hearing Request),³ Item 13, Attachment 2.

a. Identify the plants, if any, that have incorporated changes related to NERC Reliability Standard EOP-012-1 into their cold weather checklists. Provide a detailed explanation of those changes, if any.

b. Provide a copy of LG&E/KU's current cold weather checklists.

³ 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* (filed Sep. 15, 2023) Response of Kentucky Utilities and Louisville Gas and Electric Company to the Commission Staff's Post-Hearing Request for Information, Item 13, Attachment 2.

c. State whether LG&E/KU have completed the construction of the permanent metal building at E.W. Brown 5 which was scheduled for completion in October 2023.

d. State whether LG&E/KU have conducted additional compression studies as part of the development of Mill Creek 5. Provide a copy of those studies and state whether additional onsite fuel gas compression will be included in the Mill Creek 5 project.

e. Provide a detailed explanation and update regarding the Trimble County 2 water coil air heater study. State whether any proposed changes to the system have been implemented.

f. State whether LG&E/KU is fully compliant with NERC Reliability Standard EOP-012-1. If not, state which recommendation LG&E/KU is not currently in compliance with and provide the date LG&E/KU expects to be in compliance. Additionally, state whether all critical components required to be identified by the reliability standard will have adequate freeze protection prior to the 2024 winter season.

g. State which units, if any, will not be in compliance with NERC Reliability Standard EOP-012-1 prior to the 2024 winter season.

27. Refer to LG&E/KU's 2022-00402 Response to Staff's Post-Hearing Request, Item 13, Attachment 1. Provide a detailed explanation of the outcome of the "capacity and energy emergency resulting in a load shed event" exercise which was scheduled for November 14, 2023.

28. Refer to LG&E/KU's response to the Attorney General's Initial Request for Information in Case No. 2022-00402 (LG&E/KU's 2022-00402 Response to Attorney

General's First Request), Item 13, Attachment 1. Provide a definition of the term "derate" as used within the context of Attachment 1.

29. Refer to LG&E/KU's 2022-00402 Response to Attorney General's First Request, Item 13, Attachment 1. Define "Generation Alert" as it is used within the context of Attachment 1, and explain how it is implemented.

30. Refer to LG&E/KU's 2022-00402 Response to Attorney General's First Request, Item 13, Attachment 1. Provide a timeline (date and specific time) of any changes to generation dispatch, including going into alert status, during the period between December 22, 2022, and December 25, 2022.

31. Refer to LG&E/KU's 2022-00402 Response to Attorney General's First Request, Item 13, Attachment 1. Provide a timeline (date and specific time) of all changes in Energy Emergency Alert status during the period between December 22, 2022, and December 25, 2022. Include in the response copies of all internal and public communications related to the EEA statuses and when the correspondence occurred.

32. Refer to LG&E/KU's Response to Attorney General's First Request, Item 13, Attachment 1. Explain the source of the other 58 percent of gas delivered to customers on December 23, 2022.

33. Refer to LG&E/KU's 2022-00402 Response to Attorney General's First Request, Item 13, Attachment 1, page 2. Provide a list naming the organizational titles of all personnel and departments which are responsible for making the decision to execute the capacity and energy emergency operating plan.

34. Refer to LG&E/KU's 2022-00402 Response to Attorney General's First Request, Item 13, Attachment 1, page 4. Explain in more detail what caused E.W. Brown

Generating Station, Unit 3 to be derated by 62 MW, including specifically what caused the problems with the combustion process instrumentation.

35. Refer to LG&E/KU's 2022-00402 Response to Attorney General's First Request, Item 13, Attachment 1, page 4. Provide any documentation provided by LG&E/KU to plant personnel regarding "avoid unnecessary risks with generating units" during a generation alert or any other communications regarding the Generation Alert status.

36. Refer to LG&E/KU's 2022-00402 Response to Attorney General's First Request, Item 13, Attachment 1, page 3. Provide a detailed explanation of any interruption in energy deliveries from OVEC during the period of December 22, 2022, through December 25, 2022. Include in the response a timeline of the energy deliveries received from OVEC with the associated MW for each delivery.

37. Refer to LG&E/KU's 2022-00402 Response to Attorney General's First Request, Item 13, Attachment 1. Provide a detailed timeline of the energy received from Tennessee Valley Authority (TVA) as part of the Contingency Sharing Group Agreement during the period of December 22, 2022, through December 25, 2022. Include in the response the associated MW of each delivery.

38. Provide all correspondence between LG&E/KU and TVA for the period between December 20, 2022, and December 26, 2022.

39. Provide copies of all agreements between LG&E/KU and TVA related to the Contingency Reserve Sharing Group.

40. State how often the Contingency Reserve Sharing Group agreement is updated or amended. Include as part of the response all current documentation related to the Contingency Reserve Sharing Group.

41. State whether the agreement between LG&E/KU and TVA related to the Contingency Reserve Sharing Group was amended after the events of Winter Storm Elliott. If yes, provide all documents that were in effect at the time of Winter Storm Elliott and the current version of the agreement. Include as part of the answer a red-lined copy detailing all differences between the original agreements and the current agreements.

42. Refer to LG&E/KU's 2022-00402 Response to Attorney General's First Request, Item 13, Attachment 1. Provide a detailed timeline of the energy received from PJM Interconnection, LLC during the period of December 22, 2022, through December 25, 2022. Include in the response the associated MW of the energy received.

43. Refer to LG&E/KU's 2022-00402 Response to Attorney General's First Request, Item 13, Attachment 1. Provide a detailed list and corresponding maps of all customers in the LG&E/KU BA who were impacted by loadshedding during Winter Storm Elliott.

44. Refer to LG&E/KU's 2022-00402 Response to Attorney General's First Request, Item 13, Attachment 1, page 4.

a. Provide a list identifying each of the units that experienced a forced outage or partial outage or derate during the ten days leading up to and during Winter Storm Elliott. Include in the response for each unit a detailed explanation of why the unit experienced a forced outage or derate, how long the unit experienced an outage or derate, and when the unit returned to normal operation.

b. Provide a list identifying each of the units that was not operating during the period leading up to and during Winter Storm Elliott due to a scheduled outage. Include in the response for each unit a detailed explanation of why the unit was scheduled to be out, how long the unit was scheduled to be out, when the unit was expected to return to normal operation, and when the unit returned to normal operation.

45. Refer to LG&E/KU's 2022-00402 Response to Attorney General's First Request, Item 13, Attachment 1. State whether LG&E/KU's load curtailment ended prior to the resolution of Texas Gas Supply's pressure issues. If so, state the amount and type of resources, including both generation and outside purchases, that LG&E/KU relied on to end the curtailment.

46. Refer to the NERC/FERC October 2023 Report, page 123. Explain whether and how LG&E/KU took into account resistive heating in their short-term load forecasts for December 22, 2022, through December 24, 2022.

47. Explain whether LG&E/KU has regularly relied on external non-firm energy purchases to serve its load in the last ten years. Include in the response the dates of such purchases in the winter in the last ten years and the extent to which LG&E/KU relied on such purchases on each such date.

48. Refer to LG&E/KU's Current Tariff, P.S.C. Electric No. 13, Original Sheet No. 50.

a. Provide how many customers voluntarily curtailed service pursuant to Curtailable Service Rider-1 on December 22, 2022, through December 25, 2022, identify the maximum demand savings from the Curtailable Service Rider-1 during that period in MW and when that maximum demand savings occurred, and identify the

demand savings from the Curtailable Service Rider-1 during the period in which LG&E/KU were shedding load in as much detail as possible (e.g., the savings in each instance, minute, or hour to the lowest increment possible).

b. Provide the number of customers, if any, that failed to curtail their load when requested under Curtailable Service Rider-1 from December 22, 2022, through December 25, 2022, and which dates this occurred.

c. State the organizational titles of all personnel and departments that are responsible for making the decision to contact customers under the Curtailable Service Rider-1 for curtailment of service.

d. State the organizational titles of all personnel and departments that are responsible for communications with the customers participating in Curtailable Service Rider-1.

e. Provide all internal procedures outlining the process for determining a curtailment is needed and how customers are notified of this decision.

49. Refer to LG&E/KU's Current Tariff, P.S.C. Electric No. 13, Original Sheet No. 51.

a. Provide how many customers voluntarily curtailed service pursuant to Curtailable Service Rider-2 on December 22, 2022, through December 24, 2022, identify the maximum demand savings from the Curtailable Service Rider-2 during that period in MW and when that maximum demand savings occurred, and identify the demand savings from the Curtailable Service Rider-2 during the period in which LG&E/KU were shedding load in as much detail as possible (e.g., the savings in each instance, minute, or hour to the lowest increment possible).

b. Provide the number of customers, if any, that failed to curtail their load when requested under Curtailable Service Rider-2 and which dates this occurred.

c. State the organizational titles of all personnel and departments that are responsible for making the decision to contact customers under the Curtailable Service Rider-2 for curtailment of service.

d. State which departments and individuals are responsible for communications with the customers participating in Curtailable Service Rider-2.

e. Provide all internal procedures outlining the process for determining a curtailment is needed and how customers are notified of this decision.

50. Refer to LG&E/KU's Current Tariff P.S.C. No. 20, Original Sheet No. 107.

a. State whether any of the following were subject to involuntary curtailment between December 22, 2022, and December 25, 2022, and if so, include in the name, location, and type of each impacted entity or person.

- (1) Hospitals and Treatment Facilities;
- (2) Life Support Equipment;
- (3) Police Stations and Government Detention Institutions;
- (4) Fire Stations;
- (5) Communication Services;
- (6) Water and Sewage Services ;
- (7) Transportation Services;
- (8) Defense-related Services; and
- (9) Schools.

b. For each person or entity identified as being curtailed in response to part a of this question, provide a listing of all communications between LG&E/KU concerning the involuntary curtailments, provide the type of each communication, and identify the date and time of each communication.

51. Refer to LG&E/KU's Current Tariff P.S.C. No. 20, Original Sheet No. 107. Explain what steps were taking to preserve system integrity and to prevent the collapse of LG&E/KU's electric system or interconnected electric network or to restore service following an outage.

52. Refer to LG&E/KU's Current Tariff, P.S.C. No. 20, Original Sheet No. 107.1.

a. Provide a list of residents affected by involuntary load curtailment on December 22, 2022, through December 25, 2022.

b. Provide a list of the companies designated as critical commercial and industrial uses affected by involuntary load curtailment on December 22, 2022, through December 25, 2022.

c. Provide a list and map of all circuits impacted by involuntary load curtailment on December 22, 2022, through December 25, 2022.

53. Refer to LG&E/KU's Current Tariff, P.S.C. No. 20, Original Sheet No. 107.2. State whether the LG&E/KU's load exceeded internal generation, transmission, or distribution capacity between December 22, 2022, and December 25, 2022.

54. Refer to LG&E/KU's Current Tariff, P.S.C. No. 20, Original Sheet No. 107.2. Explain what internal efforts were made to secure emergency energy purchases relating to Winter Storm Elliot before or between December 22, 2022, and December 25, 2022.

55. Refer to LG&E/KU's Current Tariff, P.S.C. No. 20, Original Sheet No. 107.2. State which positions and departments are responsible for securing emergency energy purchases within LG&E/KU.

56. Refer to LG&E/KU's Current Tariff, P.S.C. No. 20, Original Sheet No. 107.2. Provide the number of customers who had their own internal generation capacity between December 22, 2022, and December 25, 2022, and explain whether any of these customers were curtailed at any point during that time.

57. Refer to LG&E/KU's Current Tariff, P.S.C. No. 20, Original Sheet No. 107.2. State whether power output was maximized at LG&E/KU's generating units on December 23, 2022. If not, explain why.

58. Refer to LG&E/KU's Current Tariff, P.S.C. No. 20, Original Sheet No. 107.2. State whether power output was maximized at LG&E/KU's generating units on any other date between December 22, 2022, and December 25, 2022, or in preparation for the storm that would become Winter Storm Elliott. If not, explain why.

59. Refer to LG&E/KU's Current Tariff, P.S.C. No. 20, Original Sheet No. 107.2. State whether LG&E/KU's use of generating units was reduced to a minimum on December 23, 2022.

60. Refer to LG&E/KU's Current Tariff, P.S.C. No. 20, Original Sheet No. 107.2. State whether LG&E/KU's use of generating units was reduced to a minimum on any other date between December 22, 2022, and December 25, 2022.

61. Refer to LG&E/KU's Current Tariff, P.S.C. No. 20, Original Sheet No. 107.3. State whether LG&E/KU advised the Public Service Commission that they would begin involuntary curtailments on December 23, 2022.

62. Refer to LG&E/KU's Current Tariff, P.S.C. No. 20, Original Sheet No. 107.3. Provide any communications LG&E/KU made through news media to appeal for the voluntary curtailment of load between December 22, 2022, and December 25, 2022.

63. Refer to LG&E/KU's Current Tariff, P.S.C. No. 20, Original Sheet No. 107.3. Provide any communications that occurred between LG&E/KU to its customers to appeal for the voluntary curtailment of load between December 22, 2022, and December 25, 2022.

64. Refer to LG&E/KU's Current Tariff, P.S.C. No. 20, Original Sheet No. 107.3. State whether customers were advised through the use of news media and personal contact that load interruption is imminent and explain how communication occurred.

65. Refer to LG&E/KU's Current Tariff, P.S.C. No. 20, Original Sheet No. 107.3. State which department and positions are responsible for communications with the news media.

66. Refer to LG&E/KU's Current Tariff, P.S.C. No. 20, Original Sheet No. 107.3. Explain the procedures for determining the interruption of selected distribution circuits, including the order of circuits affected by involuntary load curtailment, and provide any documentation relating to these procedures.

67. Refer to LG&E/KU's Current Tariff, P.S.C. No. 20, Original Sheet No. 107.3. Provide a list of all positions in either LG&E/KU or the BA responsible for this determination of which areas are affected by involuntary load curtailment.

68. Refer to LG&E/KU's Current Tariff, P.S.C. No. 20, Original Sheet No. 107.3. State whether, prior to Winter Storm Elliott, LG&E/KU had a predetermined list for which

areas would be subjected to the opening of circuits and involuntary load curtailment and, if so, explain how this list was created.

69. Refer to LG&E/KU's 2022-00402 Response to Attorney General's First Request, Item 13, Attachment 1, page 2, stating, "[t]he LG&E and KU Balancing Authority ("BA") had to shed load on 12/23 from 17:58 through 22:11 by as much as 317 MW."

a. Provide a list of circuits opened before or between December 22, 2022, and December 25, 2022, in preparation for or during Winter Storm Elliott.

b. Provide a list of all circuits that were curtailed between December 22, 2022, and December 25, 2022, and how long each circuit was offline.

c. Describe how LG&E/KU assessed the demand on each circuit when determining its involuntary load curtailment.

d. Provide a list stating in which LSE each opened circuit was located.

70. Provide how many traffic lights were impacted by LG&E/KU's involuntary energy curtailment and opening of circuits on December 23, 2022. Include in the answer a list of each traffic light location.

71. Provide how many traffic lights were impacted by LG&E/KU's involuntary energy curtailment and opening of circuits on any other days between December 22, 2022, and December 25, 2022.

72. Explain what alternatives, if any, that LG&E/KU considered prior to ordering load shed of approximately 317 MW on December 23, 2022.

73. Explain what risks LG&E/KU would have faced had it not ordered load shedding on December 23, 2022.

74. Refer to the Commission's June 30, 2021, Order in Case No. 2020-00349.⁴ Identify which open circuits, if any, included customers equipped with advanced metering infrastructure (AMI). Include in the answer the number of customers equipped with AMI in each open circuit.

75. Refer to the Commission's June 30, 2021, Order in Case No. 2020-00349. State whether LG&E/KU believe more widespread adoption of AMI would have reduced the required voltage headroom and prevented the need to open circuits.

76. State whether LG&E/KU, or any of its representatives, sought permission to operate below the NERC reserve margin guidelines. Include in the answer any correspondence between LG&E/KU and NERC/FERC.

77. Provide a copy of all customer complaints received in connection with Winter Storm Elliott.

78. State whether any customer has filed any legal action against LG&E or KU as a result of the events of Winter Storm Elliott. If yes, provide the basis of the claim, the docket number and relevant court information.

79. State whether LG&E/KU or their BA had any correspondence with other balancing authorities in the week leading up to, and during, Winter Storm Elliott. If yes, provide the name of the of BA and all correspondence between the entities.

⁴ 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 June 30, 2020) at 13.

80. State whether LG&E/KU or their BA had any correspondence with other utilities in the week leading up to, and during, Winter Storm Elliott. If yes, provide the name of the utilities and all correspondence between the entities.

81. Provide a circuit-by-circuit list of all substations that were damaged or otherwise failed to properly operate during Winter Storm Elliott. Include as part of the answer how long it took to repair the substations.

82. Provide a circuit-by-circuit list of all transformers that were damaged or otherwise failed to properly operate during Winter Storm Elliott. Include as part of the answer how long it took to repair the transformers.

83. Provide a circuit-by-circuit list of all poles that were damaged or otherwise failed to properly operate during Winter Storm Elliott. Include as part of the answer how long it took to repair the poles.

84. For each pole damaged during Winter Storm Elliott, provide the date of installation and the most recent inspection performed on the pole prior to its damage.

85. Provide a copy of any internal assessment report conducted by LG&E/KU addressing the preparation, impact, and response to Winter Storm Elliott.

86. Provide all correspondence (email, internal memos, meeting notes, etc.) related to LG&E/KU's assessment of their preparation, impact, and response to Winter Storm Elliott.

87. Provide a copy of any risk assessment LG&E/KU conducted as a result of Winter Storm Elliott.

88. Explain what efforts LG&E/KU has undertaken to update their forecast planning to prepare for future winter risk events.

89. Refer to LG&E/KU's 2022-00402 Response to Attorney General's First Request, Item 13, Attachment 1.

a. Provide a summary and timeline of the events in the LG&E/KU's BA during Winter Storm Uri like that provided in Attachment 1 to LG&E/KU's 2022-00402 Response to Attorney General's First Request, Item 13, for Winter Storm Elliott in 2022.

b. Identify any changes, if any, LG&E/KU made in response to the events of Winter Storm Uri. As part of the answer, include any updated checklists or training procedures that were implemented.

c. State whether LG&E/KU, as an LSE or in their role as BA, made any changes to its weather forecast model in response to Winter Storm Uri, and if so, provide a detailed list of all changes made.



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DATED JAN 26 2024

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