

Joint Application of Louisville Gas & Electric Co. & Kentucky Utilities Co. for Certificates of Public
Convenience & Necessity to Construct New Generation Facilities
Case No. 2014-00002
Attorney General's Supplemental Requests for Information

1. Reference the Companies' response to AG 1-10, p. 2 of 2, wherein Haefling units 1 and 2 are identified as having 12 MW (each) of net summer rating generation. Please confirm:
 - a. the net summer rating for each plant;
 - b. that both units are combustion turbines; and
 - c. the type of fuel used for generation for each unit.

2. Reference the Companies' response to AG 1-10, p. 2 of 2, wherein it is stated that the Ohio Falls Units 1-8 have a combined net summer rating of 56 MW. Compare this to the Companies' web page regarding the Ohio Falls Units, which can be accessed at the following link:
http://www.lge-ku.com/neighbor2neighbor/ohio_falls_plantinformation.asp , wherein that page indicates that the combined net output capacity of the eight units is 80 MW and will increase to 102 MW after the upgrade is completed.
 - a. Clarify the discrepancy between these two figures; and
 - b. Provide an update on the rehabilitation project.

3. Reference the Companies' response to AG 1-10, p. 2 of 2, wherein it is stated that the Paddy's Run Units have net summer ratings of 12 and 23 MW, respectively. Please confirm:
 - a. the net summer rating for each plant;
 - b. that both units are combustion turbines; and
 - c. the type of fuel used for generation for each unit.

4. Reference the Companies' response to AG 1-10, p. 2 of 2, wherein it is stated that the Zorn 1 generating unit has a net summer rating of 14 MW. Please confirm:
 - a. the net summer rating for this unit;
 - b. that this unit is a combustion turbine; and
 - c. the type of fuel used for generation for each unit.

5. Reference the Companies' response to AG 1-10, p. 2 of 2. Provide an updated chart with a new column to the right, setting forth the nameplate rating of each generation unit.

6. Reference the response to AG 1-171. Please provide a definition of the term "rollover rights."
7. Reference the response to AG 1-171 and AG 1-52. Can the Companies guarantee that natural gas will be available to run the Green River NGCC at its expected level of operation on every day of its planned generation? If not, explain why not.
8. Reference the Companies' response to AG 1-183 (h). Please provide the analysis requested. If the company believes it would be too burdensome to provide the analysis, please state in complete detail the reasons supporting this assertion and refusal to provide the analysis. If the company will not provide analysis, please describe in detail the steps involved and any potential cost.
9. Reference the Companies' response to AG 1-186. Based on this response, please confirm whether the record in the instant case will contain the most up-to-date information available to the Companies, and whether the Public Service Commission will not have this information available to make the most informed decision.
10. Reference the Companies' response to AG 1-187. Please confirm that the Companies believe that although its customers' rates will increase as a result of both CR7 and the Green River NGCC, the customers will not reduce their consumption of electricity.
11. Reference the Companies' response to PSC 1-15, attachment, pp. 1-2. Explain whether the companies ever considered either directly appealing the FERC decision referenced in the June 18, 2012 letter, or re-filing and seeking an expedited review.
 - a. On p. 2 of the same letter, the following sentence appears:
"Circumstances may yet eventuate to make purchasing the units or entering into another kind of arrangement with Bluegrass Generation economical for our customers." Explain what circumstances might make the purchase of the Bluegrass units economical for the Companies' customers.

Attorney General's Supplemental Requests for Information

12. Reference the Companies' response to PSC 1-29 (a). Please identify the factors the company is considering in its analysis regarding the decision of whether to seek an extension of 1 or 2 years to the operation of Green River units 3 and 4.

Load Forecast/Need for Capacity

13. Identify any wholesale or industrial retail loads which are at risk of leaving the Companies' systems over the next 10 years, provide the peak demand of each such potential load loss, and explain how this potential risk was reflected in the resource analysis supporting the proposed Green River project.
14. Provide the forecasted interruptible load available during summer peak demand periods for each of the last five calendar years, along with load actually interrupted at the time of the summer peak and the contracts or tariffs governing such interruptions.
15. Provide the Companies' most recent assessment of interruptible load potential and discuss any programs or plans to increase interruptible load levels on the system.
16. Provide the annual demand charge discount (\$/kW) for interruptible service along with the current estimate of annual peaking capacity costs (\$/kW) from purchased power or new generating resources.
17. Reference Mr. Sinclair's direct testimony, page 4, explain why curtailable load is treated as an increase to supply rather than a decrease to firm load.
18. Reference the response to AG 1-114, did the Commission approve the Companies' 2011 IRP reserve margin analysis? If so, provide the order approving this analysis.

Existing Supply Resources

19. Provide the annual average capacity factor of each generating unit owned by the Companies for each of the last five calendar years.

20. Identify existing generating resources that typically supply peaking capacity and energy requirements of the Companies' systems.
21. Provide summaries of each long-term (one-year or more) firm purchased power contracts by the Companies other than the OVEC contract which were in effect during the last six calendar years, including:
 - a. Counterparty,
 - b. Term,
 - c. Annual capacity (MW) and energy purchased,
 - d. Capacity prices for remaining term of contract, and
 - e. Energy prices for remaining term of contract.
22. Provide summaries of each short-term (less than one-year) firm capacity purchase by the Companies, for each of the last six calendar years, including:
 - a. Counterparty,
 - b. Term,
 - c. Monthly capacity (MW) and energy purchased,
 - d. Capacity prices (\$/kW-mo), and
 - e. Energy prices for (\$/MWh).
23. Provide the Companies' most recent long-term forecast of market energy prices during on-peak and off-peak periods.
24. Provide the primary fuel source and average cost of energy supplied from the Companies' OVEC purchase contract.
25. Provide the average annual availability and capacity factor of resources which supply the Companies' OVEC purchase contract.
26. Provide the volume (MWh) and average price (\$/MWh) and associated margins (profit) earned from off-system sales for the combined Companies for each of the last six calendar years.
27. Provide the volume (MWh) and average cost (\$/MWh) of market energy purchases by the combined Companies for each of the last six calendar years.

CO₂ Price Forecast

28. Were the Companies aware when they filed testimony in this case that Synapse published a new long-term carbon price forecast in November 2013 which has significantly lower prices than the 2012 Synapse forecast used for the Company's analysis of the Green River project? If so, why was this new forecast not addressed in the Companies' testimony?
29. Provide any updates of the Phase 2 analysis of the Green River project and alternative resources using the updated November 2013 Synapse long-term carbon price forecast.
30. When do the Companies anticipate that EPA will establish regulations governing CO₂ emissions from existing power plants?
31. Provide the total evaluated present value cost advantage of the Green River NGCC project over each proposed coal-fired resource bid for each scenario that included CO₂ costs, along with the portion of the total cost advantage of Green River attributable to CO₂ costs in each such scenario.
32. Please provide the basis for the forecasted timing, cost level and structure of CO₂ regulations or legislation underlying the Synapse Energy Economics forecast which was used as the basis for the Companies' Mid CO₂ price forecast.
33. Provide forecasted total system carbon emissions for each year of each scenario evaluated in the Phase 2 analysis.

Evaluation of Green River NGCC

34. Reference the response to AG 1-146, reconcile the statement that there were no binding cost or performance guarantees in long-term power supply proposals with the statements in Section 3 of the RFP which indicate that bidders must guarantee pricing terms, capacity levels, and plant availability levels.

35. For each proposal evaluated in comparison to Green River, identify each specific cost and performance assumption that was developed by the Companies for use in the Phase 2 analysis and provide the basis for such assumptions.
36. Provide workpapers supporting the derivation of Green River fixed and variable non-fuel O&M costs and explain why the Companies' forecasted O&M costs for Green River appear to be significantly lower than the Energy Information Administration's (EIA) O&M forecast for new gas-fired combined cycle units.
37. For Green River, the recently approved Cane Run NGCC unit, and each alternative resource resulting from the 2012 RFP that was evaluated in the Phase 2 2013 Resource Assessment, provide the following information for each year of each scenario evaluated:
 - a. Annual generation (MWh)
 - b. Annual fuel costs
 - c. Annual non-fuel O&M costs
 - d. Annual CO₂ emissions
 - e. Annual CO₂ costs
 - f. Annual capacity costs, and
 - g. Annual other costs for the resource included in the analysis
38. Indicate whether the Companies would generally expect that including market energy purchases in the Green River Phase 2 analysis would have the effect of decreasing the forecasted generation levels and replacement fuel cost savings attributable to Green River when compared to the Companies' analysis. If not, explain why not.
39. Indicate whether the Companies would generally expect that including off-system market energy sales in the Green River Phase 2 analysis would have the effect of increasing the forecasted generation levels and production cost benefits of coal-fired resource options when compared to the levels forecasted in the Companies' analysis. If not, explain why not.

40. Reference the response to AG 1-139, provide a detailed breakdown of the capital cost estimate for the Green River NGCC analysis which separately reflects the costs of the generating unit, transmission upgrades, gas pipeline costs, as reflected in the Phase 2 resource analysis, along with workpapers supporting these capital cost estimates and the basis for such estimates.
41. Explain why the Companies' forecasted capital cost for the Green River NGCC project appear to be significantly lower than the Energy Information Administration's (EIA) current capital cost estimates for new gas-fired combined cycle units.
42. Reference the response to AG 1-150, provide workpapers supporting the transmission upgrade cost estimates reflected for each resource option evaluated along with the basis for such estimates.
43. Reference the response to AG 1-150, provide workpapers supporting the unit capital cost estimates reflected for each resource option evaluated along with the basis for such estimates.
44. Reference the response to AG 1-150, provide workpapers supporting the fixed O&M cost estimates reflected for each resource option evaluated along with the basis for such estimates.
45. Reference the response to AG 1-150, provide workpapers supporting the firm gas transportation cost estimates reflected for each resource option evaluated along with the basis for such estimates.
46. Reference the response to AG 1-150, provide workpapers supporting the fixed cost for firm transmission service cost estimates reflected for each resource option evaluated along with the basis for such estimates.
47. Reference the response to AG 1-150, provide workpapers supporting the PPA capacity charge cost estimates reflected for each resource option evaluated along with the basis for such estimates.

Attorney General's Supplemental Requests for Information

48. Will the Companies offer guarantees for the estimated capital and O&M costs of the proposed Green River NGCC project as used in the Phase 2 analysis of the project? If not, explain why not.
49. Will the Companies offer guarantees for the forecasted capacity and availability levels of the proposed Green River NGCC project as used in the Phase 2 analysis of the project? If not, explain why not.
50. Will the Companies offer guarantees for the estimated gas pipeline and transmission upgrade costs of the proposed Green River NGCC project as used in the Phase 2 analysis of the project? If not, explain why not.
51. When do the Companies expect to receive approval of the air permit for the Green River NGCC project including a final determination regarding the applicability of PSD for NO_x for the project?
52. Reference the response to AG 1-174, provide preliminary opinions obtained from environmental regulatory authorities regarding the likelihood of the Companies being able to avoid PSD for NO_x for the Green River NGCC project.
53. Reference the response to AG 1-174, provide preliminary opinions obtained from environmental consultants regarding the likelihood of the Companies being able to avoid PSD for NO_x for the Green River NGCC project.
54. Reference the response to AG 1-174, provide the estimated capital and operating costs and operating impacts on the Green River NGCC project if PSD for NO_x is required and SCRs must be installed on the units, and provide any economic analysis conducted by Companies to address this potential risk.
55. Reference the response to AG 1-174, identify any other cases reviewed by the Companies in which PSD for NO_x for a new NGCC unit has been avoided through net out provisions as planned for Green River.
56. Provide existing and new generating capacity levels by primary fuel and resource type for each year of each scenario evaluated in the Phase 2 analysis.

57. Provide total energy supply mix by primary fuel and resource type for each year of each scenario evaluated in the Phase 2 analysis.

Brown Solar Facility

58. Will the Companies offer guarantees for the estimated capital and O&M costs of the proposed Brown Solar facility as used in the Phase 4 analysis of the project? If not, explain why not.
59. Will the Companies offer guarantees for the forecasted capacity and annual generation levels of the proposed Brown Solar facility as reflected in the Phase 4 analysis of the project? If not, explain why not.
60. Will the Companies offer guarantees for the estimated transmission upgrade costs of the proposed Brown Solar facility as used in the Phase 4 analysis of the project? If not, explain why not.
61. Provide the annual net generation and annual nominal total capital and operating costs on a dollars per year and \$/MWh basis for the Brown Solar Facility for each year of each of the scenarios evaluated in the Phase 4 analysis of the project.
62. Reference the response to AG 1-162, provide the underlying components of the annual revenue requirement information provided in this response and explain why there are negative revenue requirements in certain years of these studies.
63. Provide the net annual nominal cost increase or savings of each solar alternative evaluated in the Phase 4 analysis in comparison to the alternative of not adding the Brown Solar facility, along with the cumulative present value of such cost increases or savings in each year of each scenario evaluated.
64. Provide existing and new generating capacity levels by primary fuel and resource type for each year of each scenario evaluated in the Phase 4 analysis.
65. Provide the total volume and average price of RECs purchased by the Companies in conjunction with green energy tariffs for each of the last four calendar years.