

Exhibit EP-1

Select Ameren Discovery Responses to Data Requests

Ameren Missouri
Case Name: EA-2024-0237
Docket No(s): Castle Bluff CCN

Response to Discovery Request: GB-GB 1.1
Date of Response: 9/4/2024
Witness: N/A

Question:In the Company's application (page 5) and in witness Michel's testimony, Ameren notes the need for the project is driven in part by "two recent severe winter storms, conditions which are reasonably expected to recur over time and which both threaten system reliability and create significant exposure to energy markets beyond the Company's historical market exposure."

Please answer the following questions with regard to this statement:

- a. Did the Company consider further investment in interregional merchant transmission or specifically bi-direction HVDC resources, to address such reliability and resiliency concerns?
- b. Did the Company consider investment in geographically diverse supply-side resources (defined as resources located outside of the MISO footprint) to support reliability? If the Company did not consider either or both of these investment strategies, explain why not.
- c. Did the Company evaluate the resource adequacy impact associated with highly correlated generating resources in its service territory, including with gas? If not, why not?

Response:

Prepared By: Matt Michels
Title: Director, Corporate Analysis
Date: August 27, 2024

- a. No. The Company evaluated options that were determined to provide consistent firm winter capacity under MISO's current and expected resource adequacy frameworks.
- b. No. The Company prioritized options that could be implemented within MISO Zone 5 within the next few years and which could make use of existing interconnect rights.
- c. Yes.

Ameren Missouri
Case Name: EA-2024-0237
Docket No(s): Castle Bluff CCN

Response to Discovery Request: GB-GB 1.2
Date of Response: 9/4/2024
Witness: N/A

Question: Witness Meyer notes on page 4, lines 12-15 of his testimony that “[t]hroughout winter storm Elliott, which spanned December 21-26, 2022, the Company was a net buyer in the MISO Day-Ahead Market of an average of 258 megawatts per hour. These market purchases were the result of widespread CTG unavailability across the Company’s fleet and the untimely outages of baseload coal units during this storm.”

- a. Please provide a summary of availability of the Company’s CTG fleet during Winter Storm Uri.
- b. What was the root cause of the widespread CTG unavailability during Winter Storm Elliott (gas availability, mechanical failure, etc.) referenced in witness Meyer’s testimony above?

Response:

Prepared By: Andrew Meyer
Title: Sr. Director Energy Management & Trading
Date: 08.26.2024

- a. A summary of GADS outages for the CTG fleet is provided in attached file 'GB 1.2 CTG GADS – Uri Feb 2021'.
- b. Similar to the data provided for the Uri event, the root cause for the majority of CTG outages is Gas Supply Limitation. As discussed in direct testimony on page 6, lines 9 – 13, it is the ratability requirement of the pipelines that generally requires the Company's simple cycle fleet to be made unavailable for operation during extreme cold weather events. The only notable exception is the Pinckneyville plant, which becomes mechanically unavailable due to inlet icing restrictions.

Ameren Missouri
Case Name: EA-2024-0237
Docket No(s): Castle Bluff CCN

Response to Discovery Request: GB-GB 1.3
Date of Response: 9/4/2024
Witness: N/A

Question:In Ameren's 2022 IRP Notification of Change in Preferred Plan in Docket No. EO-2022-0362, on page 14 Ameren notes that, because fuel constraints are most notably applied to the operation of Ameren Missouri's CTG fleet during the winter heating season when gas may not be available on the coldest winter days when winter peaks are highest, that CTGs were assumed to be unavailable for dispatch below 20 degrees Fahrenheit, leading to a recommendation for NGCC generation.

- a. What changed in Ameren's reasoning, in terms of the expected availability of its CTGs during these cold weather periods?
- b. What will Ameren's strategy be if such periods exceed 72 hours?

Response:

Prepared By: Andrew Meyer
Title: Sr. Director Energy Management & Trading
Date: 08.26.2024

To clarify, the IRP language cited in the question relates to a recommendation for a combined cycle generator and was not specific to the proposed Castle Bluff project, which is for simple cycle generation.

- a. Ameren's reasoning has not changed. The existing fleet of simple cycle CTGs are assumed to be unavailable for dispatch below 20F degrees due to Gas Supply Limitations. The specific limitation is the gas pipeline requirements to flow gas ratably throughout the gas day, which conflicts with MISO's typical commitments of natural gas simple cycle (NGSC) generation. For natural gas combined cycle (NGCC) generation, the Company's expectation is that the NGCC will receive a MISO commitment for a full operating day, which will allow the Company to consume gas in accordance with the pipeline requirements.
- b. The Company interprets the question with reference to "72 hours" as relating to the extent of fuel-oil storage that will be included in the Castle Bluff project. During a winter storm event, the Castle Bluff units will need to switch to fuel-oil. This will ensure the units remain available during the storm, but the company will still follow the commitment and dispatch instructions as provided by the MISO. The MISO may not necessarily commit the units continuously throughout a multi-day winter storm. If the units are cycled for economic reserve during points of lesser electric demand during the storm, then the fuel supply will last longer than 72 hours. In addition, the

Company will have the option to schedule fuel-oil deliveries to resupply the tanks during the winter storm event, thereby extending the supply beyond 72 hours.

Ameren Missouri
Case Name: EA-2024-0237
Docket No(s): Castle Bluff CCN

Response to Discovery Request: GB-GB 1.6
Date of Response: 9/4/2024
Witness: N/A

Question:In the company's application (page 5) and in witness Michel's testimony (pages 10 and 11) Ameren notes that "the Project's additional capacity will also be available to serve other needs, such as demand to serve potential future large load additions (e.g., data centers, manufacturing), and that Ameren Missouri has seen a rapid increase in interest from prospective customers who are searching for sites for new large data centers with peak demands in the hundreds of megawatts each.

- a. Who are the potential commercial customers?
- b. Do these customers have decarbonization goals?
- c. Please provide a specific number of the amount of demand associated with these customers.
- d. Have these customers signed binding agreements with Ameren such that it is guaranteed this demand will materialize?
- e. What criteria does Ameren apply to determine when such commitments are certain enough to be included in resource planning?

Response:

Prepared By: Matt Michels
Title: Director, Corporate Analysis
Date: August 27, 2024

- a. The prospective customers referenced are listed in the confidential version of my direct testimony on pages 10 and 11.
- b. The prospective customers referenced have not indicated specific service requirements regarding decarbonization goals. Ameren Missouri has an approved Renewable Solutions program by which large customers can subscribe to renewable resources as a means of meeting corporate sustainability goals.
- c. The demand for the prospective customers referenced is listed in the confidential version of my direct testimony on pages 10 and 11.
- d. Status of the prospective customers referenced is included in my direct testimony on pages 10 and 11. Note that since the time the Company's application was filed, discussions with the second of the two prospective customers have evolved as their plans have changed, and new prospects have emerged. The economic development project pipeline is dynamic, and customer project plans regularly adapt to changes in the market. Additionally, there is a queue of other large load

economic development prospects seeking locations in Ameren Missouri service territory.

- e. The Company includes potential increases in demand based on an assessment of the likelihood of commercial operation.

Ameren Missouri
Case Name: EA-2024-0237
Docket No(s): Castle Bluff CCN

Response to Discovery Request: GB-GB 1.7
Date of Response: 9/4/2024
Witness: N/A

Question: On page 10 of Witness Stumpf's testimony, the witness indicates that Castle Bluff will be subject to operating limits due to environmental regulations. Specifically, "[t]he new 111(b) rules will limit CO2 emissions from new gas-fired combustion turbines. The Castle Bluff units will comply with the new rule's Best System of Emission Reductions by firing "low emitting fuels," which include natural gas and fuel oil. Under the new rule, Castle Bluff falls within the "Low Load Subcategory," which imposes a capacity factor limit of 20%."

If Castle Bluff is being built in part to support the needs and demand of large commercial customers, but is limited in run time, how does Ameren justify the plant as the best source of energy (not capacity) for these new commercial customers?

Response:

Prepared By: Thomas Callahan
Title: Director, New Gas Generation
Date: 26AUG2024

Q. If Castle Bluff is being built in part to support the needs and demand of large commercial customers, but is limited in run time, how does Ameren justify the plant as the best source of energy (not capacity) for these new commercial customers?

Castle Bluff is being designed as a capacity resource, not as a best source of energy for new commercial customers. As noted on page 2 of Mr. Michel's direct testimony, the primary purpose of Castle Bluff units is to:

*ensure sufficient generating **capacity** to serve Ameren Missouri customers during extreme weather conditions, primarily extreme winter weather conditions such as those seen during winter storms that affected large portions of the United States (e.g., winter storms Uri and Elliott).*

As capacity resources, operation of the Castle Bluff units is not expected to be impacted by a limit of 20% capacity factor (CF) imposed by the recent 111(b) GHG rules. It is important to note that a 20% CF significantly exceeds any historical operations at any of Ameren's current CTG energy centers.

While Castle Bluff may help to meet some of the energy needs of new customers, it is not intended to satisfy all energy needs, which would be met by a combination of

existing and other planned resources.