Ameren Missouri – 2019 IRP Annual Update

Post-Workshop Summary Report

Background

On April 12, 2019, Ameren Missouri ("the Company") filed its 2019 Integrated Resource Plan (IRP) Annual Update Report in File No. EO-2019-0314 pursuant to the requirements of 4 CSR 240-22.080(3)(B). On April 30, 2019, Ameren Missouri hosted its 2019 IRP Annual Update workshop with its stakeholder group pursuant to 4 CSR 240-22.080(3). 4 CSR 240-22.080(3)(C) requires that the utility file a report indicating any action items resulting from the workshop that it will undertake prior to its next triennial compliance filing or annual update and to indicate whether the utility plans to make any changes to its Annual Update Report. Ameren Missouri files this report pursuant to that section of the IRP rules.

Changes to Annual Update Report

Ameren Missouri will not be making any changes to its Annual Update Report.

Action Items to be Undertaken by Ameren Missouri

During the workshop, Ameren Missouri was asked, and agreed to provide, a summary of the answers to questions discussed.

- <u>Question</u>: Discuss the avoided costs used by Ameren Missouri in the 2019 IRP Annual Update.
 <u>Answer</u>: These are the same avoided costs that were used in the 2017 IRP filing. The Company assessed the critical uncertain factors and determined that the current indicative values for these factors fall within the ranges outlined in the 2017 IRP. Therefore, there was no need for an update.
- <u>Question</u>: Does Ameren Missouri believe it should model scenarios in which Ameren Missouri would have to provide remedial actions related to Rush Island?
 <u>Answer</u>: This litigation matter is still pending before the trial court. The parties are in the process of briefing the issues and no decision on remedy has been issued. In addition, the Company intends to appeal the court's decision when finalized. As part of that appeal, it would seek to stay any judgment issued by the trial court.
- <u>Question</u>: Does Ameren Missouri's SB 564 filing include any of the future environmental compliance costs identified in Ameren Missouri's 2019 IRP update?
 <u>Answer</u>: Most, if not all, ash pond costs (closure) and landfill cell costs that are assumed to be in service after 2023 wouldn't be included the SB 564 filing. Other than those costs, environmental compliance costs are included.

- <u>Question</u>: What are the details and learning objectives around the microgrid pilot project that is referenced in the SB 564 filing?¹
 <u>Answer</u>: The Company has not worked out the details of the microgrid project yet. The learning objectives will be tied into the details of the project, so those have not been specifically determined yet, either.
- <u>Question</u>: What date does Ameren Missouri believe formal comments are due for its 2019 IRP Annual Update filing from stakeholders in EFIS?
 <u>Answer:</u> Per the Chapter 22 IRP rules [4 CSR 240-22.080(3)(C-D)], the utility files a summary report within 10 days of the workshop, and stakeholders may file comments within 30 days of utility's summary report. As the workshop was held on April 30th, the utility summary report is due by May 10th, and stakeholder comments are due by June 9th.
- <u>Question</u>: Why didn't Ameren Missouri prepare a comprehensive distributed energy resource "DER" study for the annual update?
 <u>Answer</u>: Ameren Missouri inadvertently recorded the commitment as relating to the next triennial IRP filing. The Company has committed to continue discussions with the Natural Resources Defense Council regarding the development of comprehensive DER potential for its 2020 IRP. The Company also notes that draft DER rules proposed by Missouri Public Service Commission Staff in mid-2018 indicated that significant portions of a DER potential assessment could be satisfied by analysis already required in the existing IRP rules. The Company noted those portions of DER potential already satisfied by its 2017 IRP filing.
- <u>Question</u>: There was no mention of battery storage in relation to special contemporary issue H.² <u>Answer</u>: The Company didn't have a different conclusion than it had in the 2017 IRP, as the costs of batteries are still relatively high. However, we are continuing to review and reassess and expect to have more battery storage analysis in the 2020 IRP filing.
- <u>Question</u>: How does Ameren Missouri decide to dispatch its coal units? <u>Answer:</u> Ameren Missouri does not make the decision on which units gets dispatched; it offers units into the Midcontinent Independent System Operator, Inc. ("MISO") market and MISO determines which units are dispatched.

There was a fair amount of discussion following this question as to differences between regulated and deregulated markets and how that impacts the economics of units. All units are offered into market at incremental cost, but the fixed cost portion can be recovered through regulated rates in the regulated markets, whereas deregulated plants would need to recover both fixed and variable costs through the market revenues. Another follow-up question was if Missouri were deregulated, would coal plants be at risk? There is not an easy answer: without a regulatory requirement to meet

¹ File No. EO-2019-0044

² File No. EO-2019-0065, Order Establishing Special Contemporary Resource Planning Issues, p. 5, issued October 24, 2018

the load and reserves, generating capacity could go down until supply/demand imbalance is reached, which could make the lower-cost units that are remaining much more attractive.

MISO Planning Reserve Margin (PRM)	2019/2020 PY (June 2019 - May 2020)	<u>Formula Key</u>
MISO System Peak Demand (MW)	125,501	[A]
Installed Capacity (ICAP) (MW)	153,896	[B]
Unforced Capacity (UCAP) (MW)	142,132	[C]
Firm External Support (ICAP) (MW)	1,883	[D]
Firm External Support (UCAP) (MW)	1,809	[E]
Adjustment to ICAP {1d in 10yr} (MW)	-6,250	[F]
Adjustment to UCAP {1d in 10yr} (MW)	-6,250	[G]
Non-Firm External Support (ICAP) (MW)	2,987	[H]
Non-Firm External Support (UCAP) (MW)	2,331	[1]
ICAP PRM Requirement (PRMR) (MW)	146,543	[J]=[B]+[D]+[F]-[H]
UCAP PRM Requirement (PRMR) (MW)	135,360	[K]=[C]+[E]+[G]-[I]
MISO PRM ICAP	16.8%	[L]=([J]-[A])/[A]
MISO PRM UCAP	7.9%	[M]=([K]-[A])/[A]

<u>Question</u>: Is MISO capacity long?

<u>Answer:</u> Yes, since most utilities participating in the MISO market are regulated and have load and reserve requirements.

• <u>Question</u>: What is the utility's current thinking about securitization? Could it be helpful in meeting the 2030 carbon dioxide emission reduction?

<u>Answer:</u> Maintaining flexibility is very important to the Company. Securitization may be helpful, but it depends on the details like how it is implemented, what kind of constraints it imposes, and how it compares to other alternatives you can utilize to achieve a given objective.

Table 5-1: Planning Year 2019-2020 MISO System Planning Reserve Margins