

11. Stakeholder Process

Highlights

- *Ameren Missouri conducts an inclusive stakeholder process to solicit feedback on its assumptions and analysis methods.*
- *Ameren Missouri hosted a stakeholder meeting in April 2023 to present our key assumptions and solicit stakeholder feedback.*
- *Ameren Missouri has addressed Special Contemporary Issues as ordered by the Missouri Public Service Commission (Commission).*
- *Ameren Missouri has considered comments received from stakeholders in this IRP filing.*

Ameren Missouri conducts an inclusive stakeholder process to solicit feedback on its assumptions and analysis methods used for integrated resource planning. Our stakeholder group includes representatives of state agencies, consumer advocates, and environmental advocates. Our process includes the following key elements:

- A stakeholder workshop to review the assumptions and analytical methods used in the analysis of resource alternatives and selection of our preferred resource plan
- Distribution of drafts of certain chapters of our filing and review and incorporation, as appropriate, of stakeholder comments on those drafts¹
- Addressing Special Contemporary Issues as part of our analysis as suggested by stakeholders and ordered by the Commission²

This chapter describes how these key elements were satisfied pursuant to the Commission's rules and its order on Special Contemporary Issues.

¹ 20 CSR 4240-22.080(5)

² 20 CSR 4240-22.080(4); File No. EO-2023-0099

11.1 Stakeholder Group

Ameren Missouri's stakeholder group includes representatives of the following state agencies and private organizations:

- Commission Staff (Staff)
- Office of the Public Counsel (OPC)
- Department of Natural Resources – Division of Energy (DE)
- Missouri Industrial Electric Customers (MIEC)
- Midwest Energy Consumers Group (MECG)
- Natural Resources Defense Council (NRDC)
- Renew Missouri (RM)
- Sierra Club (SC)
- NAACP
- Clean Grid Alliance (CGA)
- Dutchtown South Community Corporation (DSCC)
- New Northside Missionary Baptist Church (NNMBC)
- Spire Missouri (Spire)

11.2 Stakeholder Workshop

On April 27, 2023, Ameren Missouri hosted a stakeholder workshop via a virtual meeting to present key assumptions and analytical methods to be used in our analysis of resource choices and decisions necessary to meet the electric energy needs of our customers in a safe, reliable, environmentally responsible, and cost-effective manner. The workshop included discussion of assumptions for:

- Forecasts of customer energy consumption and peak demand pursuant to 20 CSR 4240-22.030, which is discussed in detail in Chapter 3
- Potential, including costs and benefits, for utility programs to help customers use energy more efficiently and defer or reduce the need for new sources of electric generation pursuant to 20 CSR 4240-22.050, which is discussed in detail in Chapter 8
- Options, including costs and operating characteristics, for new generation pursuant to 20 CSR 4240-22.040, which are discussed in detail in Chapter 6
- Delivery infrastructure (transmission and distribution) needs and plans, and relationships to meeting customers' needs pursuant to 20 CSR 4240-22.045, which are discussed in detail in Chapter 7
- Options and costs, including the expected need for environmental equipment investments, for the operation of our existing generating portfolio pursuant to 20 CSR 4240-22.040, which are discussed in detail in Chapters 4 and 5.

We also presented alternative resource plans from which we would select a preferred plan, the planned assumptions, and analytical methods we expected to use to evaluate those alternative resource plans pursuant to 20 CSR 4240-22.060. This discussion covered the following topics:

- Alternative resource plans, which are presented in Chapters 9 and 10
- Assumptions for key variables that could affect the performance of alternative resource plans, as discussed in Chapters 2 and 9
- Our approach to sensitivity and risk analysis, as discussed in Chapter 9
- Planning objectives and measures used to guide the development of alternative resource plans, as discussed in Chapter 9, and to select the preferred resource plan, as discussed in Chapter 10

Feedback received at the workshop was noted and considered in our continuing analysis to support our IRP filing.

11.3 Stakeholder Comments on Draft Report, Assumptions and Analysis Approach

Following the stakeholder workshop in April, Ameren Missouri distributed drafts of certain chapters for its filing to stakeholders for review and comment. The following chapters were distributed:

- Chapter 3 – Load Analysis and Forecasting
- Chapter 4 – Existing Supply-Side Resources
- Chapter 5 – Environmental Regulation
- Chapter 6 – New Supply-Side Resources
- Chapter 7 – Transmission and Distribution

In addition, Ameren Missouri indicated that its Demand Side Management Market Potential Study (DSM Potential Study), finalized in early 2020, would serve as a proxy for a draft of Chapter 8 – Demand-Side Resources. The DSM Potential Study serves as the source of key assumptions for use in the development of demand side resource portfolios for inclusion in alternative resource plans. Ameren Missouri conducts a rigorous stakeholder process to review and test its assumptions for the DSM Potential Study as it is being developed.

Two stakeholder groups provided written comments to Ameren Missouri on its draft report, assumptions, and analysis approach in accordance with the Commission’s IRP rules – SC and NAACP. Their comments and our review of them are discussed in the following sections.

11.3.1 Comments - NAACP

NAACP provided written comments on May 26, 2023. Following are the comments and Ameren Missouri's review of each, as well as an indication of any discussion included in our filing to address each comment.

- A. NAACP expressed encouragement regarding the Company's pursuit of energy efficiency programs and a desire to see greater levels of efficient electrification and customer-owned distributed energy resources (DER). NAACP went on to indicate its intended advocacy for these resources and its willingness to continue working with the Company on development of these resources in low-income minority communities, as well as initiatives to make energy upgrades to lower energy costs, improve indoor air quality, and foster healthier learning environments in low-income minority school communities.**

Review and Application – Ameren Missouri thanked NAACP for its constructive comments and is ready and willing to discuss further partnership with NAACP on initiatives to improve its service to low-income and minority communities consistent with the regulatory structure within which Ameren Missouri operates. The Company has selected a preferred resource plan, as described in Chapter 1 and 10, that includes continued energy efficiency programs under the Missouri Energy Efficiency Investment Act (MEEIA) and recognizes the expanding role of efficient electrification and DER.

11.3.2 Comments - Sierra Club

SC provided written comments on May 26, 2023. Following are the comments and Ameren Missouri's review of each, as well as an indication of any discussion included in our filing to address each comment.

- A. Renewable cost projections are too high.**

Review and Application – Ameren Missouri based its cost assumptions for wind and solar resources on current market conditions and expected trends from the National Renewable Energy Laboratory (NREL), as discussed in Chapter 6. It should be noted that wind and solar resources feature prominently in the preferred plan selected by the Company, as discussed in Chapter 10, including in the near and medium terms. Ameren Missouri will continue to monitor market conditions for renewable projects and adjust its estimates and forecasts when warranted.

B. Gas price forecast is too high in the near- and medium-term, as gas prices and gas price forecasts have come down since the creation of Ameren's forecast.

Review and Application – The gas price forecast for the first few years makes little or no difference to the relative performance of alternative resource plans. Ameren Missouri has assumed a range of gas price forecasts that it believes best reflects the probable range of prices over the planning horizon, as discussed in detail in Chapter 2. In the process, the Company had to make assumptions regarding the near-term trajectory of natural gas prices at a time when prices were substantially elevated. The comparison curve provided by Sierra Club to challenge the Company's assumptions, from the Energy Information Administration's 2023 Annual Energy Outlook, is within the range of gas price forecasts used by the Company for its modeling. If anything, this curve validates the Company's assumptions. Regardless, the Company will continue to monitor market conditions and make appropriate changes to its assumptions as warranted.

C. Costs for compliance with the Good Neighbor Rule are too low.

Review and Application – Subsequent to the stakeholder meeting in April, Ameren Missouri updated its cost assumptions for selective catalytic reduction, assumptions that were still in flux at the time, from \$200 million per unit to approximately \$350 million per unit as noted in Chapter 5. The Company also evaluated plans with and without SCR retrofits at Labadie as part of the pre-analysis described in Chapter 9.

D. Ameren Missouri should include a "high regulatory case" for Labadie.

Review and Application – Ameren Missouri includes assumptions for probable environmental costs in its IRP analysis. This includes costs for compliance with known and expected regulations of waste, water and air emissions as well as a prices on CO₂ emissions. As described in Chapter 2, the range of assumed prices on CO₂ emissions reflect the potential for additional regulation of fossil-fueled resources that had not been specified at the time the Company finalized its assumptions for analysis. The Company is aware of the rule for power plant emissions of CO₂ proposed by the US Environmental Protection Agency (EPA) earlier this year, as discussed in Chapter 5. The Company will continue to monitor such regulatory developments and modify its analysis as warranted.

E. Costs for carbon capture and sequestration (CCS) are too high.

Review and Application – Ameren Missouri has used the best available information for its estimates for CCS costs, as described in Chapter 6, and project cost uncertainty, as described in Chapter 9, was applied to CCS costs in addition to new generation. Because this is still a developing technology, Ameren Missouri continues to monitor its development and will review and revised its assumptions as warranted as it continues to evaluate clean dispatchable resource options to partner with renewable resources to ensure energy reliability for customers.

11.4 Special Contemporary Issues

Pursuant to its rules on Integrated Resource Planning, the Commission, on December 3, 2019, issued a revised order establishing Special Contemporary Resource Planning Issues (Special Contemporary Issues) for Ameren Missouri to analyze and document as part of its 2020 triennial IRP filing. Following is a restatement of the Special Contemporary Issues included in the Commission’s order and a brief discussion of Ameren Missouri’s approach to analyzing and documenting its consideration of each issue and where in its triennial filing more detailed information can be found.

A. Explore the feasibility, impacts, and potential mitigation of a potentially more pronounced urban heat island over the greater St. Louis urban area over a twenty-year IRP cycle.

Ameren Missouri’s Approach – Ameren Missouri has analyzed this issue as discussed in Chapter 8.

B. Model for low, medium, and high participation scenarios of commercial and industrial customers electing to participate in demand response activities based on the introduction of third-party ARCs within its footprint and provide an analysis of that impact ARCs would have on its IRP.

Ameren Missouri’s Approach – Ameren Missouri has analyzed this issue as discussed in Chapter 8.

C. Account for and explicitly identify cost reductions, tax credits (including all available tax credits for renewable and storage assets), additional funding sources, and other potential benefits from the Inflation Reduction Act and incorporate those changes into its IRP modeling as appropriate.

Ameren Missouri’s Approach – Ameren Missouri has analyzed this issue as discussed in Chapter 8 (as it relates to demand side resources) and in Chapter 6 7 and 9 (as it relates to supply side resources).

D. Update its analysis and planning activities regarding actions necessary for system-wide voltage optimization analysis of its distribution system.

Ameren Missouri's Approach – Ameren Missouri has analyzed this issue as discussed in Chapter 7.

E. Analyze the impact resulting from satisfaction of the clean energy goals of large customers in general, and St. Louis' municipal clean energy goals in particular.

Ameren Missouri's Approach – Although Ameren Missouri does not have full visibility into the clean energy goals of all large customers, it is evident that customer demand for renewable generation is significant, and many of those customers are looking to their utilities to meet their needs. Many of the Company's largest commercial and industrial (C&I) customers have expressed interest in participating in green tariff program offerings – programs like the Company's recently approved Renewable Solutions Program. Such voluntary programs can provide avenues for utilities to meet the clearly expressed needs of large C&I customers with renewable energy goals while enhancing the affordability of renewable generation that may otherwise be needed resources as aging coal plants reach end of life.

To analyze the impact of satisfying that customer interest, the Company assessed how much capacity would need to be added to the Renewable Solutions Program (RSP) to meet demand from any large C&I customer that has expressed interest in the program and calculated an estimate of the additional revenues that would be generated from the addition of that capacity through the RSP. Based on that assessment, the Company estimates it could require approximately 702 MW of solar capacity to meet expressed customer demand for clean energy, which in turn could generate approximately \$37.4 million NPV in net RSP revenues.³

The City of St. Louis has a goal of 100% clean energy by 2035.⁴ To satisfy this goal for City Operations through the Renewable Solutions Program could require approximately 89 MW of solar capacity (in addition to the 702 MW estimate above)

³ Assuming the remaining demand from RSP Phase 1 customers is fully satisfied, and other customers who have expressed interest enroll at 50% of their usage. RSP pricing for future phases is assumed to be consistent with Phase 1. Does not include the City of St. Louis.

⁴ <https://www.stlouis-mo.gov/government/departments/aldermen/clean-energy-advisory-board/documents/upload/Pathways-Report.pdf>

and could generate approximately \$4.7 million NPV in estimated net RSP revenues.

As shown in the Company's preferred resource plan, as discussed in Chapter 10, Ameren Missouri plans to add sufficient renewable capacity to meet the potential resource needs discussed above. The Company has not yet designated any planned project beyond the Boomtown Project, approved by the Commission earlier this year, for the Renewable Solutions program but continues to evaluate the addition of such projects.⁵

F. Study and/or model various technologies and programs designed to reduce demand on the customer side of the meter, including but not limited to:

- ***Residential demand response programs, pairing increased rebates for web-enabled or “smart” thermostats with demand response program participation;***
- ***Increased rebates for residential electric vehicle charging units paired with customer agreements to participate in a program allowing the Company’s use of electricity from a customer’s connected electric vehicle at times of high demand;***
- ***New rebates for residential battery storage units paired with customer agreements to participate in a program allowing the Company’s use of batteries at times of high demand;***
- ***A program offering free installation of utility-owned battery storage units in exchange for customer agreements to allow the Company to use batteries at times of high demand.***

Ameren Missouri’s Approach – Ameren Missouri has analyzed this issue as discussed in Chapter 8.

G. Study and/or model the potential for utility-scale battery storage to meet current and future demand, including:

- ***Consideration of the range of potential price reductions in these technologies over the coming two decades;***
- ***Consideration of pumped hydro, stacked blocks, liquid air, above-ground and underground compressed air, and flow battery technologies in addition to lithium-ion battery technologies;***

⁵ Customer clean energy goals are also mentioned in discussions in Chapters 6 and 9.

- *Pairing mid-scale deployments of battery storage technologies with current and future utility-scale solar generation sites; and*
- *Offering free installation of utility-owned battery storage systems to large commercial and industrial customers in exchange for the Company's use of systems at times of high peak demand.*

Ameren Missouri's Approach – Ameren Missouri has analyzed this issue as discussed in Chapters 6 and 8.⁶

H. Model stand-alone or hybrid battery storage resources.

Ameren Missouri's Approach – Ameren Missouri has analyzed this issue in Chapter 9.

11.5 Post-Filing Activities

To assist stakeholders in the review of Ameren Missouri's IRP filing, Ameren Missouri plans to host a workshop in the fourth quarter of 2023 to provide an overview of the filing and to answer questions stakeholders may have after having had time to begin reviewing the filing. Ameren Missouri will reasonably work with stakeholders to aid in their understanding of the assumptions, analyses, conclusions and decisions presented in its IRP filing.

⁶ Based on the Market Potential Study performed by GDS customer programs for battery storage were not found to be cost effective and were not included in program potential.