

10. Strategy Selection

Highlights

- *Ameren Missouri is updating its Preferred Resource Plan (PRP) because customer demand is accelerating faster than previously planned, creating an urgent need to expand its generation portfolio to provide a reliable, affordable, and cleaner energy supply. Our plan reflects 5 GW of large load demand by 2035 and 6 GW by 2046. We have included contingency options, including options to serve even greater large load (LL) demand of 6 GW by 2035 and 9 GW by 2046. The plan also reflects continued electrification, changing federal incentives under the One Big Beautiful Bill Act (OBBBA), evolving technology costs, and higher wholesale power market prices.*
- *In response to these changes, Ameren Missouri has refined its PRP to transform and expand its generation portfolio while protecting reliability and affordability. The updated PRP adds on-demand natural gas resources for all-hour reliability, accelerates renewable and battery storage investments to capture customer cost savings from federal incentives, and preserves optionality for new nuclear generation. State protections, including SB 4, are designed to ensure large load customers pay their fair share of infrastructure costs while the Company continues to serve existing customers reliably and affordably.*
- *The result is a balanced resource plan that uses existing low-cost coal, gas, hydroelectric, and nuclear assets while adding new dispatchable generation, renewable resources, storage, and nuclear options over time. The plan is designed to maintain energy availability during extreme weather, support unprecedented economic growth, reduce carbon intensity, and preserve flexibility as market, policy, technology, and customer-demand conditions evolve.*
- *We have established an implementation plan for 2027-2030 that allows us to begin implementing the resource decisions embodied in our preferred resource plan and to preserve contingency options to allow us to effectively respond to changing needs and conditions while continuing to ensure safe, reliable, and cost-effective electric service to our customers.*

10.1 Planning Objectives

The fundamental objective of the resource planning process in Missouri is to ensure delivery of electric service to customers that is safe, reliable and efficient, at just and reasonable rates in a manner that serves the public interest. This includes compliance

with state and federal laws and consistency with state energy policies.¹ Ameren Missouri considers several factors, or planning objectives, that are critical to meeting this fundamental objective. Planning objectives provide guidance to our decision-making process and ensure that resource decisions are consistent with business planning and strategic objectives that drive our long-term ability to satisfy the fundamental objective of resource planning. Following are the planning objectives that continue to inform our resource planning decisions.

Cost (to Customers): Focusing on long-term costs helps us to ensure long-term affordability for customers. Therefore, minimization of present value of revenue requirements (PVRR) is our primary selection criterion.²

Costs alone do not and should not dictate resource decisions. Our other planning objectives are discussed below.

Customer Satisfaction: Ameren Missouri is dedicated to continuing to improve customer satisfaction. While there are many factors that can be measured, for practical reasons Ameren Missouri focused primarily on measures that can be significantly impacted by resource decisions: 1) rate impacts – levelized average rates, 2) supply and service reliability, and 3) availability of programs, and the resources to support them, that allow customers to participate in or source more of their energy needs from demand side or renewable resources.

Portfolio Expansion: While Ameren Missouri has recently retired coal-fired generating resources, coal currently produces the majority of the energy the Company generates. Ameren Missouri continues to be focused on transitioning its generation fleet to a cleaner and more fuel-diverse portfolio. We therefore evaluate alternative resource plans based on the degree and pace of the transition from coal generation sources to cleaner sources of energy, including reductions in energy consumption resulting from customer energy efficiency programs, as we also maintain reliability and affordability.

Financial/Regulatory: The continued financial health of Ameren Missouri is crucial to ensuring safe, reliable and cost-effective service for customers in the future. Ameren Missouri will continue to need the ability to access large amounts of capital for investments needed to meet unprecedented demand growth and provide reliable and affordable service to customers. Measures of expected financial performance and creditworthiness are evaluated along with potential risks.

¹ 20 CSR 4240-22.010(2); 20 CSR 4240-22.010(2)(A)

² 20 CSR 4240-22.010(2)(B)

Economic Development: Ameren Missouri is committed to supporting the communities it serves beyond providing reliable and affordable energy. The introduction and expansion of large load customers provide significant economic development opportunities for the state and for the communities Ameren Missouri serves. In addition to the opportunities arising from significant increases in the Company's customer base, Ameren Missouri also assesses the economic development opportunities, for its service territory and for the state of Missouri, associated with our resource choices to serve all customers. We do this by examining the potential for direct job growth for both construction and operation of resources, which in turn promotes additional economic activity.

Table 10.1 summarizes our planning objectives, the primary measures used to assess our ability to achieve these objectives with our alternative resource plans, and the weighting applied to each objective for scoring the alternative resource plans.

Table 10.1 Planning Objectives and Measures³

Planning Objective Categories	Measures	Weighting
Cost	Present Value of Revenue Requirements	30%
Customer Satisfaction	Customer Preferences, Levelized Rates	15%
Portfolio Balance	Resource Diversity, CO ₂ Emissions, Probable Environmental Costs	20%
Financial/Regulatory	Free Cash Flow, Financial Ratios, Stranded Cost Risk, Transaction Risk, Cost Recovery Risk	20%
Economic Development	Direct Job Growth (FTE-years)	15%

10.2 Assessment of Alternative Resource Plans

Ameren Missouri uses a scorecard to evaluate the performance of alternative resource plans with respect to our planning objectives and measures described above. The scorecard and measures include both objective and subjective elements that together represent the trade-offs Ameren Missouri's management considers in balancing these competing objectives. It is important to keep in mind that the scorecard is a tool for decision makers and does not, in and of itself, determine the preferred resource plan. The selection of the preferred resource plan is informed by the scorecard and by a more critical analysis of the relative merits of alternative resource plans, including an assessment of any risks or other constraints.

³ 20 CSR 4240-22.060(2); 20 CSR 4240-22.060(2)(A)1 through 7

10.2.1 Scoring of Alternative Resource Plans⁴

To score each of the alternative resource plans, we employed a standard approach to scoring for each planning objective on a 5-point scale and determined a composite score by applying the weightings shown in Table 10.1 to each planning objective. Because Cost is the primary selection criterion, it was given the greatest weight – 30% -- just as it was in the scoring performed for all of our IRP filings since 2011.⁵ The scoring approach for each planning objective is as follows:

Cost – The alternative resource plans were separated into five groups according to probability weighted average PVRR results from the risk analysis discussed in Chapter 9. The lowest cost group of plans were given a score of 5, the next lowest cost group a score of 4, and so on, with the highest cost group of plans receiving a score of 1.

Customer Satisfaction – Alternative resource plans were evaluated based on levelized annual average rates for a portion of the score. As was done with the PVRR results, the alternative resource plans were separated into five groups according to the probability-weighted average levelized annual average rate results produced from our risk analysis. The plans resulting in the lowest rates were given a score of 5, the next lowest rate group a score of 4, and so on, with the highest rate group of plans receiving a score of 1. Plans that yielded a score greater than 3 for rates were given 2 points in the overall scoring for Customer Satisfaction. Plans that yielded a score of 3 were given 1 point. Plans were given one additional point for each of the following:

- ✓ Inclusion of energy efficiency programs
- ✓ Inclusion of demand response programs
- ✓ Inclusion of renewables beyond those needed to comply with legal mandates

Portfolio Balance – Alternative resource plans were awarded points for each plan attribute contributing to greater resource diversity. Plans were awarded one point for each of the following:

- ✓ Addition of nuclear generation
- ✓ Early retirement of coal-fired generation (1 point per 2 large units)

⁴ 20 CSR 4240-22.010(2)(C); 20 CSR 4240-22.010(2)(C)1; 20 CSR 4240-22.010(2)(C)2; 20 CSR 4240-22.010(2)(C)3; 20 CSR 4240-22.070(1); 20 CSR 4240-22.070(1)(A) through (D)

⁵ 20 CSR 4240-22.010(2)(B)

- ✓ Addition of renewables beyond those needed to comply with legal mandates
- ✓ Inclusion of energy efficiency programs (2 points for RAP or MAP)

Financial/Regulatory – Scoring for Financial/Regulatory is based on a starting score of 5 with deductions for risks and financial impacts that may detrimentally affect Ameren Missouri’s ability to continue to access lower cost sources of capital. Plans that would result in relatively lower free cash flow (i.e., less than 3 out of 5 points) were reduced by one point. Plan scores were also reduced by one point each for potential risks associated with:

- ✓ Inclusion of energy efficiency programs beyond currently approved budgets
- ✓ Nuclear construction and financing risks
- ✓ Reduced risk mitigation due to constrained renewable expansion (including those resulting from potential changes in environmental and climate policies and regulations)
- ✓ Risks associated with recovery of coal-fired generation investment (including those resulting from potential changes in environmental and climate policies and regulations)

Economic Development – Alternative plans were scored based on direct job creation, including construction and ongoing operation. Construction and operating jobs were translated into full-time equivalent years (FTE-years). Alternative plans were ranked based on FTE-years and divided into five groups based on relative rank. The group of plans resulting in the highest FTE-year values were given a score of 5 points each, the next highest FTE-year group a score of 4, and so on, with the lowest FTE-year group of plans receiving a score of 1.

Table 10.2 shows the composite scores for each of 21 alternative resource plans. Note that eight alternative resources plans were considered contingency or reference plans and not included in the alternative plans scoring and ranking shown in Table 10.2 to avoid skewing the scoring comparisons of plans with base large load. The full scorecard with scores for each planning objective for each alternative resource plan is shown in Appendix A, which also lists the eight contingency/reference plans. Based on the scoring results, the alternative resource plans were separated into three tiers – Top, Mid, and Bottom. Plans with scores greater than 3.5 were placed in the Top Tier. Plans with scores between 2.8 and 3.5 were placed in the Mid-Tier. Plans with scores below 2.8 were placed in the Bottom Tier.

Table 10.2 Alternative Resource Plan Scoring Results⁶

Plan	Description	Composite Score
M	Base LL, Sx35, Lb42-42, EE LTR-DR RAP	3.85
U	Base LL, Sx35, Lb42-42, EE LTR-DR MAP	3.85
R	Base LL, Sx35, Lb42-42, EE RAP-DR RAP	3.80
Q	Base LL, Sx35, Lb42-42, EE LTR-DR RAP, No New Nuke	3.75
I	Base LL, Sx31, Lb42-42, EE LTR-DR RAP	3.70
G	Base LL, Sx31, Lb36-42, EE LTR-DR RAP	3.70
T	Base LL, Sx35, Lb42-42, EE LTR25%-DR RAP	3.65
H	Base LL, Sx35, Lb36-42, EE LTR-DR RAP	3.55
S	Base LL, Sx35, Lb42-42, EE MAP-DR MAP	3.55
K	Base LL, Sx35, Lb42-42-Cofire, EE LTR-DR RAP	3.35
J	Base LL, Sx35, Lb36-36, EE LTR-DR RAP	3.20
AA	Base LL, Sx35, Lb42-42, EE LTR-DR RAP, SC instead of CC	3.20
D	Base LL, Sx35, Lb42-42, EE MAP-DR MAP, RES Compliance Only	3.00
L	Base LL, Sx35, Lb42-42-FGD-SCR, EE LTR-DR RAP	2.95
W	Base LL, Sx35, Lb42-42, EE MEEIA 4-DR RAP	2.90
X	Base LL, Sx35, Lb42-42, EE MEEIA 4-DR MAP	2.90
C	Base LL, Sx35, Lb42-42, EE LTR-DR RAP, RES Compliance Only	2.85
P	Base LL, Sx35, Lb42-42, EE LTR-DR RAP, Pumped Storage	2.65
V	Base LL, Sx35, Lb42-42, EE MEEIA 4-DR MEEIA 4	2.50
BB	Base LL, Sx35, Lb42-42, EE LTR-DR RAP, Fuel Cells instead of CC	2.40
B	Base LL, Sx35, Lb42-42, EE MEEIA 4-DR MEEIA 4, RES Compliance Only	0.95

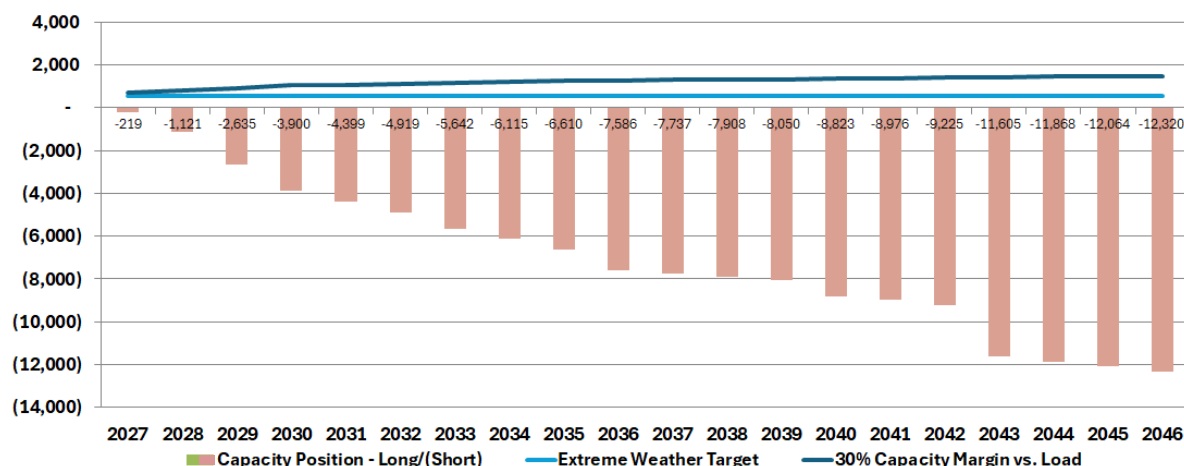
⁶ More detailed plan descriptions can be found in Chapter 9. In summary, names display the plan attributes of large load (LL), retirement date/modification for Sioux and Labadie Energy Centers, EE and DR portfolios, and Renewable Energy Standard (RES) Compliance levels, which includes more than compliance requirements unless otherwise stated.

10.2.2 Reliability Needs and New Dispatchable Generation

With the expectation of unprecedented demand growth comes a need for reliable and dispatchable resources to ensure that our resource portfolio can meet our customers' needs in all hours and under any conditions, including extreme weather. As discussed in Chapter 9, Ameren Missouri uses a capacity position to examine its need for reliable capacity to meet customer demand in all seasons. Those capacity positions reflect incremental capacity requirements beyond the MISO PRM to ensure reliability during extreme weather. The extreme weather capacity requirements are discussed in Chapter 2 and are based on the extreme weather analysis discussed in Chapter 3. Inclusion of capacity to ensure reliability during extreme weather is discussed in Chapter 9. The target for additional capacity in each of winter and summer is depicted by the light blue line in each chart.

With the relatively low expected winter accreditations for wind and solar, as shown in Chapter 2, we need dispatchable resources to meet customer demand and MISO PRM requirements and ensure reliability during extreme weather conditions. Each of the alternative resource plans includes sufficient accredited capacity to meet those needs, with combinations of new natural gas-fired generators (simple cycle and combined cycle), natural gas fuel cells, battery storage, and nuclear generation, in addition to our existing fleet of dispatchable natural gas, nuclear, hydro and coal-fired generation.

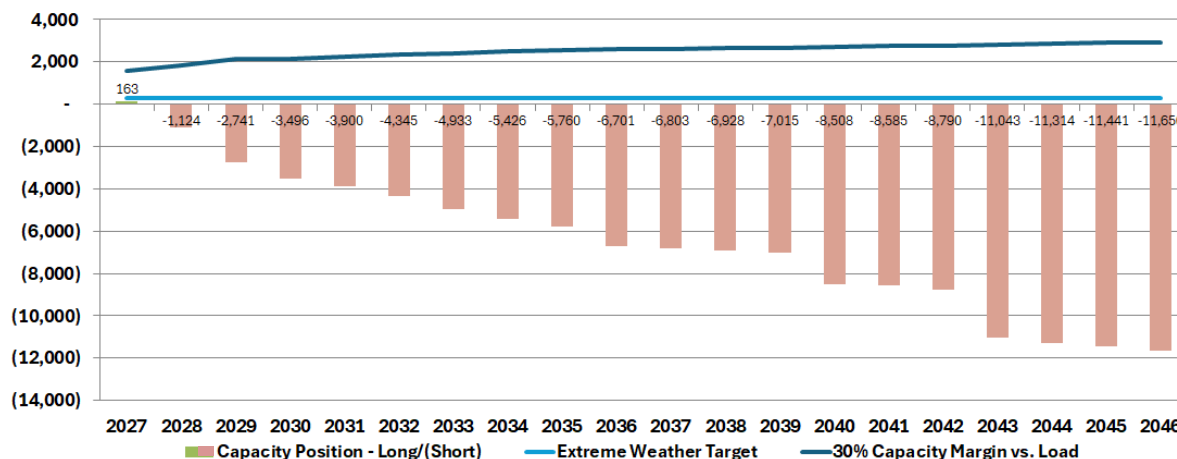
Figure 10.1 Winter Capacity Position – No New Supply Side Resources



Figures 10.1 and 10.2 show the Company's net winter and summer capacity positions, respectively, with base expectations for LL demand and no new supply side resources added. As Figures 10.1 and 10.2 show, the Company has a significant need for new capacity resources immediately and throughout the planning horizon. Capacity reserves

of 30 percent of load, which is indicative of actual capacity margins the Company has realized historically, are shown by the dark blue line in each chart.

Figure 10.2 Summer Capacity Position – No New Supply Side Resources



Figures 10.3 and 10.4 show the Company's expected capacity positions for winter and summer, respectively, over the planning horizon for Plan M. Figure 10.3 shows that Plan M resources are sufficient to meet capacity needs, including customer demand, MISO's required PRM, and ensuring sufficient capacity to meet customer needs during extreme weather conditions. Figure 10.4 shows that the resources in Plan M needed to meet winter capacity needs also meet summer capacity needs and provide some additional capacity margin, even during times of extreme summer weather. **

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Figure 10.3 Winter Capacity Position – Plan M

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Figure 10.4 Summer Capacity Position – Plan M

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Detailed Reliability Analysis⁷

In addition to the capacity position analysis described above, Ameren Missouri also analyzes reliability at a more granular level using SERVIM, as described in Chapter 2. SERVIM analyzes system reliability using Monte Carlo simulations with over forty years of historical weather data, including actual extreme weather events, along with probabilistic modeling of unit outages. Model results include loss of load expectation (LOLE), loss of load hours (LOLH), and expected unserved energy (EUE). Ameren Missouri analyzed system reliability using its base large load forecast and resources included in Plan M for the years 2027-2035. Modeling results indicate reliability risks are concentrated in the winter months, especially during the morning and afternoon load peaks. Year-by-year results of that analysis are shown in Table 10.3. As Table 10.3 shows, **

** and then dropping further to well below the target LOLE of 0.1 in 2032 and beyond. LOLH and EUE follow similar patterns, with LOLH reaching 4 hours and EUE reaching 4,574 MWh in 2029 before declining and becoming negligible in 2032, when the Company's planned West Alton combined cycle will be fully in service throughout the year.⁸ Years beyond 2035 are expected to yield results similar to those shown in 2032-2035 based on the Company's expected capacity length, particularly with new baseload generation, in those later years. More details of this analysis can be seen in Chapter 10 Appendix D.

⁷⁷ Order Approving Stipulation and Agreement and Granting Certificate of Convenience and Necessity File No. EA-2025-0238

⁸ As the Company has indicated in its application for a certificate of convenience and necessity (CCN) for the West Alton combined cycle facility, the three units will be placed in service during 2031 in four-month intervals, with the first unit placed in service in the second quarter of 2031 and the third and final unit placed in service in the fourth quarter of 2031.

Table 10.3 SERVM Reliability Analysis Results

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10.2.3 Renewable Resources

As discussed in Chapter 9, Ameren Missouri expects to need new renewable resources to meet the requirements of the Missouri RES. The Company also expects customer demand for renewable resources to continue to increase, including demand for renewable energy resources from LL customers. More critically, the Company expects to need new energy resources to meet customer demand as part of a balanced portfolio, with up to 30% of energy generation coming from renewable resources to meet those needs and mitigate future risks – fuel supply, environmental regulation, and energy policy more broadly.

Resource planning has traditionally focused on the balance of generating capacity with customer demand and reserve margin requirements. While that remains important, transforming our generation portfolio requires that we carefully consider all the implications of how we effectuate that transformation. This includes the following considerations, which are discussed in more detail in this section:

- 1. **Increasing Demand** – Ameren Missouri will need energy as well as capacity resources to meet customer demand and reserve margin requirements as we see unprecedented growth from LL customers, as well as demand growth due to electrification. As a result, Ameren Missouri has a clear, present, and ongoing need to add energy resources to its generation portfolio to address the increasing needs of customers over the next twenty years. Ameren Missouri expects to experience an energy shortage that will necessitate market purchases in the next several years, a dramatic change from the approximately 15-20% energy buffer from which customers have typically benefited, although at times that buffer has been as high as approximately 10 million MWhs. Without additional energy resources, this could expose our customers to reliability challenges and high market price risk.

2. **Low Cost, Emission-Free Energy** – Renewable resources represent the lowest cost, and emission-free, sources of new energy, as shown in Chapter 6.
3. **Future Environmental Regulations** – The large-scale expansion of renewable resources provides significant risk mitigation to Ameren Missouri's portfolio, particularly with respect to additional environmental regulations that could become law, other changes in climate policy and carbon dioxide (CO₂) prices, and other factors that may significantly affect the operating costs and benefits of its existing coal-fired resources.
4. **The Risk of Inaction** – Delaying the deployment of renewables creates significant implementation risk. The transformation and expansion of our portfolio to meet rapidly increasing demand will require a continued large-scale expansion of renewable generation at the same time that other utilities and states are pursuing the same. A task of this magnitude must be implemented over time to be successful. This is the case since each renewable energy project takes 5 to 8 years to develop and construct, requires geographical diversity of projects for reliability, and requires navigating several implementation risks, such as delays in the development or completion of projects, and lost opportunities for more viable projects.
5. **Availability of Significant Tax Credits** – Continuing renewable resource builds in the nearer term provides the ability to realize significant tax incentives for customers and thus lower the overall cost of adding needed renewables, making addition of these necessary resources more affordable for all customers. Because federal law and policy is subject to change, taking advantage of such incentives sooner and while the better projects are available provides greater certainty of benefits to customers.

Ameren Missouri's Need for Energy Resources

As demand increases, including demand from LL customers, new energy resources will be needed to supplement, and eventually replace, existing generation. While existing and new peaking resources like simple cycle gas and BESS will provide capacity to meet peak demand and reserve margin needs, simple cycle gas generation is primarily limited to peak hours, and BESS only shifts the time that energy is supplied to the grid, with some losses due to cycle efficiency. New dispatchable resources like combined cycle gas, fuel cells, and nuclear can provide both reliable capacity and baseload energy. Because the levels of generation from existing and new dispatchable resources vary depending on market prices, it is useful to examine energy production capability to assess whether the Company's portfolio can generate sufficient energy to meet its customers' needs. Figure 10.5 shows the Company's energy capability position by year for Plan M with existing

resources only, existing and approved resources (i.e., approved CCN), and existing and all planned resources, including new renewable resources.

Figure 10.5 Energy Capability Position – Plan M⁹

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As Figure 10.5 shows, ** _____, and existing and approved resources alone are not sufficient to meet long-term customer energy needs. Clearly, new resources are needed not only for capacity, as described previously, but also for energy production capability. It is important to note that the energy production reflected in Figure 10.5 represents the maximum reasonable energy production capability of the fleet, with limitations based on permitting, forced outages, and normal weather conditions for solar and wind. It is also important to recognize that the chart represents annual energy capability position and does not account for hourly energy needs. This highlights the importance of the SERVVM analysis described previously, which analyzes hourly energy needs and accounts for weather uncertainty as well as unit reliability on a probabilistic basis.

To better understand the contribution of different types of existing and new resources, it is helpful to view the energy capability of the portfolio by resource type. Figure 10.6 shows the energy capability of existing and new resources consistent with Plan M, along with total retail sales at generation (i.e., including transmission losses that must also be served with generation). Figure 10.6 also shows total retail sales plus a 20% buffer, consistent with the Company's historical economic energy buffer. This annual energy capability buffer represents levels of generating capability needed to ensure reliability in all hours,

⁹ Near-term energy shortfalls are hedged consistent with the Company's risk management policies.

as confirmed by the SERVIM analysis described previously, and provides flexibility to address key risks that may affect resource needs and resource production. As Figure 10.6 shows, the expected energy capability of the Company's portfolio under Plan M is sufficient to meet customer energy needs and provide a sufficient buffer to ensure hourly reliability and mitigate portfolio risks over the planning horizon.

Figure 10.6 Energy Capability by Resource Type vs. Retail Sales – Plan M

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**Figure 10.7 Energy Capability by Resource Type vs. Retail Sales – Plan M
(Without New Renewable Resources)**

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Figure 10.7 shows the same energy capability by resource type for Plan M as that shown in Figure 10.6, but without new renewable resources. As Figure 10.7 shows, the portfolio would fall short of the 20% buffer needed to ensure reliability and mitigate future risks absent the planned renewable resources. If new natural gas resources become more constrained, if new nuclear generation is delayed, if existing coal resources are forced to

be retired sooner than planned or their production becomes more constrained, the Company will not have the flexibility it needs to address those risks and ensure reliable service to its customers.

Risk Mitigation Benefits of Renewable Expansion

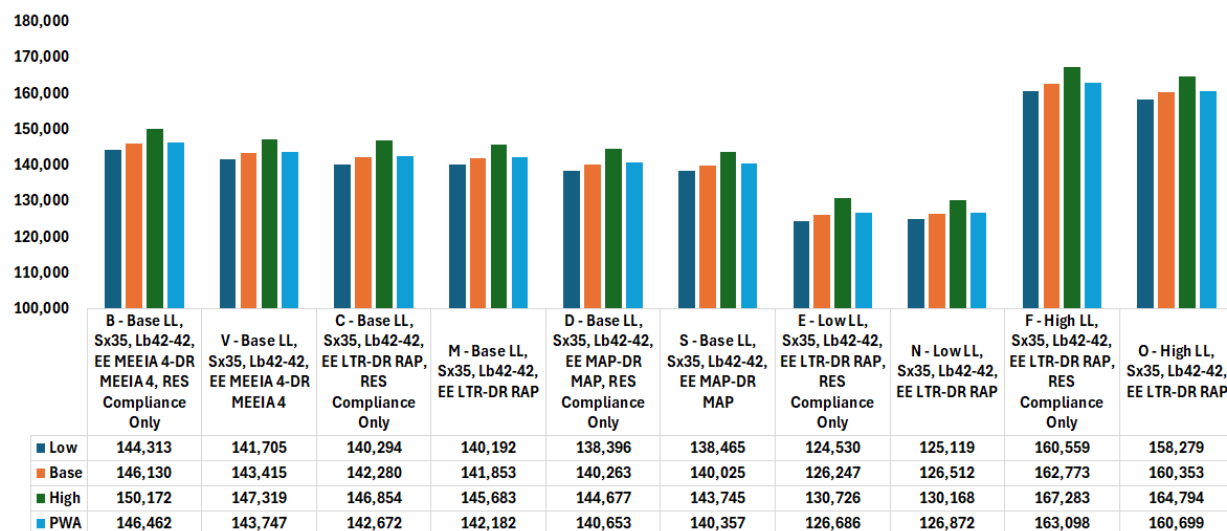
Our analysis shows that higher CO₂ prices have a beneficial impact on the economics of renewable resources and a detrimental effect on the economics of coal-fired resources, a decidedly unsurprising result. The impact on coal is somewhat obvious in that the CO₂ prices impose a cost directly on the energy production from coal generators. It is this cost imposed on coal and gas generators that also manifests itself in power market prices, as illustrated in Chapter 2. The higher the CO₂ price, the higher the power price. Wind and solar generation, along with other non-carbon-emitting generating sources like hydro and nuclear, therefore see a benefit from CO₂ prices through the revenue they receive in the market. In contrast, the absence of a CO₂ price results in maximal benefits to coal-fired generation and minimal benefits to renewables, nuclear and hydro.

To evaluate the affordability contribution of renewables while addressing future risks, we can compare plans that differ only in the level of renewable energy resources included under different scenarios for carbon prices. Figure 10.8 below shows the PVRR for five pairs of plans, with one plan to meet RES requirements only and a corresponding plan with additional renewable resources. Figure 10.8 shows that the plans with renewable resources to meet RES requirements alone result in higher PVRR than the corresponding plans with additional renewable resources, except for the plans with low LL customer demand under low or base carbon prices and the plans with MAP energy efficiency under low carbon prices. As a result, the inclusion of additional renewables can be considered insurance for key risks with an expected financial benefit rather than a cost.

By expanding the share of renewable resources in our portfolio, we improve the balance of resources that, from an economic perspective, perform better as CO₂ prices rise and resources whose performance diminishes as CO₂ prices rise. This is not unlike the diversification of personal investments like those many hold in retirement funds like a 401(k) plan. By investing in a variety of resources, each of which perform well under different conditions, the overall risk of the portfolio can be mitigated. As the chart in Figure 10.4 shows, the continued addition of wind and solar resources represented by Plan M provides not only lower PVRR relative to Plan C, but also provides risk mitigation around the range of CO₂ prices used for risk analysis, with the range of costs to customers across the different CO₂ price scenarios being significantly narrower than for Plan C.

Figure 10.8 RES Only Plans vs. Plans With Additional Renewables

PVRR by Carbon Price Scenario (\$MM)

*Capturing the Value of Available Tax Credits*

In 2025, Congress passed the OBBBA, which accelerated the phase-out of renewable energy tax credits previously established under the 2022 Inflation Reduction Act. This has increased the urgency of project developers to qualify projects for tax credits, with construction¹⁰ start required prior to July 4, 2026. The Company continues to evaluate and seek approvals for projects that qualify for the tax credits prior to the statutory phase-out dates. If the Company were to wait to add renewable resources, these tax benefits could be unavailable. Implementing a continued sustained expansion of renewable resources enables the Company to capture the tax incentives and pass them back to customers, helping maintain customer affordability while transitioning to a cleaner generating fleet.

Weighing the Considerations Together

In accounting for the foregoing considerations and in conjunction with our rigorous risk analysis of alternative resource plans, we conclude that a continued buildout of renewable wind and solar resources throughout the planning horizon yields significant real and potential benefits for our customers with limited downside. It provides us with valuable risk mitigation regarding CO₂ prices and other factors, and valuable flexibility in managing the expansion and transformation of our generation portfolio.

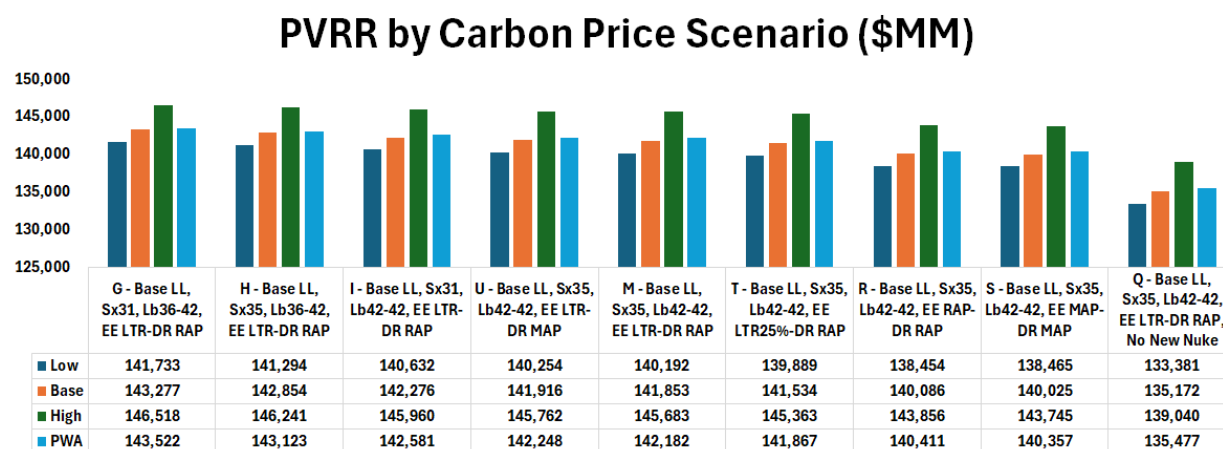
¹⁰ "Construction" for purposes of tax credit qualification does not mean on-site construction of the facility itself but can be satisfied in other ways under the tax code.

10.3 Preferred Plan Selection¹¹

In selecting its Preferred Resource Plan, Ameren Missouri decision makers¹² relied on the planning objectives discussed earlier in this chapter and the considerations reflected in the scoring and comparison of alternative plans highlighted in the previous sections. The Top Tier plans identified through scoring include the significant addition of new dispatchable gas (simple cycle, combined cycle, and fuel cell) and storage resources, continued expansion of renewable resources, both with and without new nuclear generation and with various coal energy center retirement dates and demand-side portfolios (both energy efficiency and demand response).

Cost (PVRR) – Figure 10.9 summarizes the PVRR results for the top tier plans by CO₂ price scenario and for the probability weighted average. Based on these results, plans with earlier coal retirements result in higher costs, primarily do the acceleration of replacement generation. Plans with higher levels of energy efficiency result in lower costs. Displacing new nuclear with additional natural gas generation results in lower costs at the expense of preserving the option for future emission-free baseload generation.

Figure 10.9 Results for Top Tier Plans – PVRR (\$ Million)



Customer Satisfaction – Figure 10.10 summarizes levelized average rates for the Top Tier Plans. Plan M results in the lowest levelized average rates over the planning horizon compared to other plans that include new nuclear generation. As with the PVRR results above, Plan Q, which excludes new nuclear generation, results in lower levelized rates at the expense of preserving the option for new nuclear. Levelized rates for Plan M are about 5% higher than levelized rates for Plan Q. Importantly, these are levelized rates

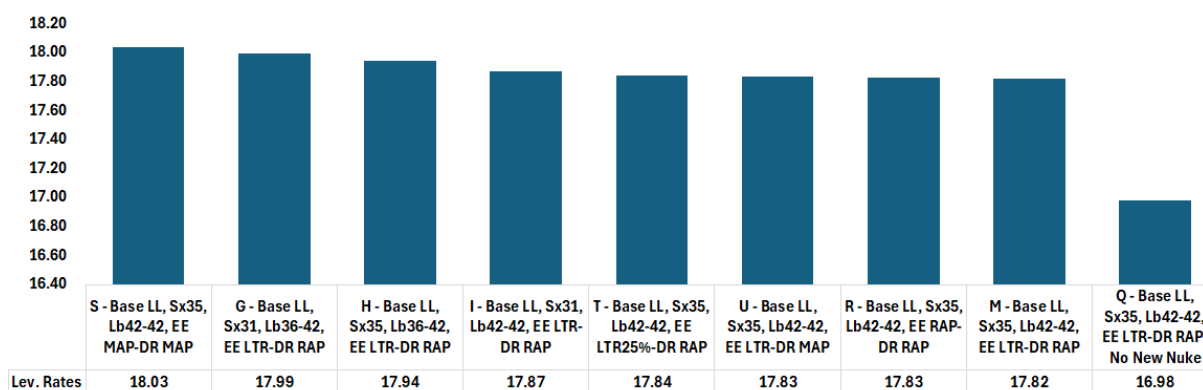
¹¹ 20 CSR 4240-22.010(2)(C); 20 CSR 4240-22.010(2)(C)1; 20 CSR 4240-22.010(2)(C)2
20 CSR 4240-22.010(2)(C)3; 20 CSR 4240-22.060(3)(A)5; 20 CSR 4240-22.070(1); 20 CSR 4240-22.070(1)(A) through (D)

¹² Names, titles and roles of decision makers are provided in Appendix B.

over the planning horizon, and the difference in annual rates between Plans M and Q does not materialize until 2040.

Figure 10.10 Results for Top Tier Plans – Levelized Rates

Levelized Rates (Cents/kWh)



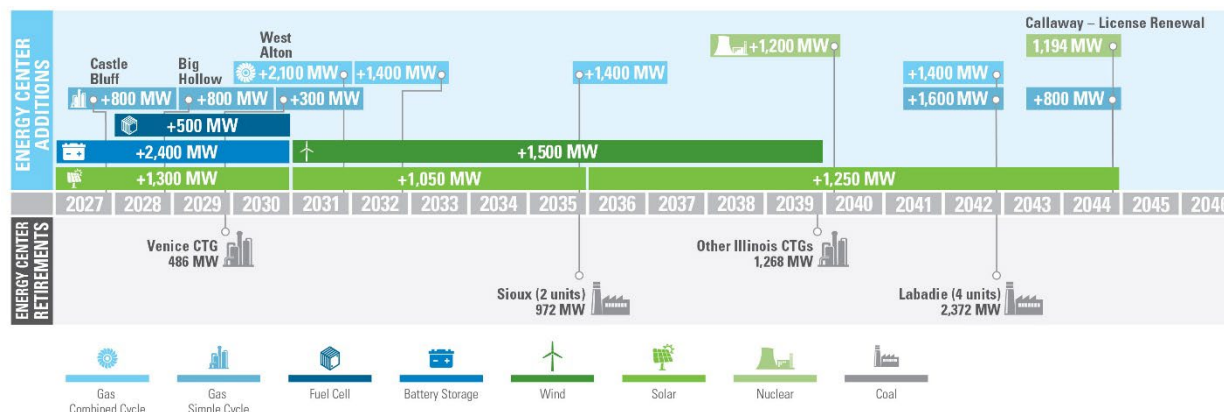
Financial and Regulatory – Plans with energy efficiency beyond current program approvals carry greater regulatory risk. Plans with earlier coal retirements provide some mitigation for regulatory risk, particularly for potential future environmental regulations. Plans with new nuclear carry additional implementation risks.

Portfolio Balance – Plans with new nuclear, additional renewables, and higher energy efficiency result in improved portfolio diversity.

Economic Development – Plans with new nuclear and higher energy efficiency result in incremental benefits for economic development.

Based on our consideration of all these objectives and factors and consideration of the results of our thorough analysis of a wide range of options, we have selected Plan M as our preferred resource plan. Figure 10.11 shows the major resource additions and retirements that define Plan M.

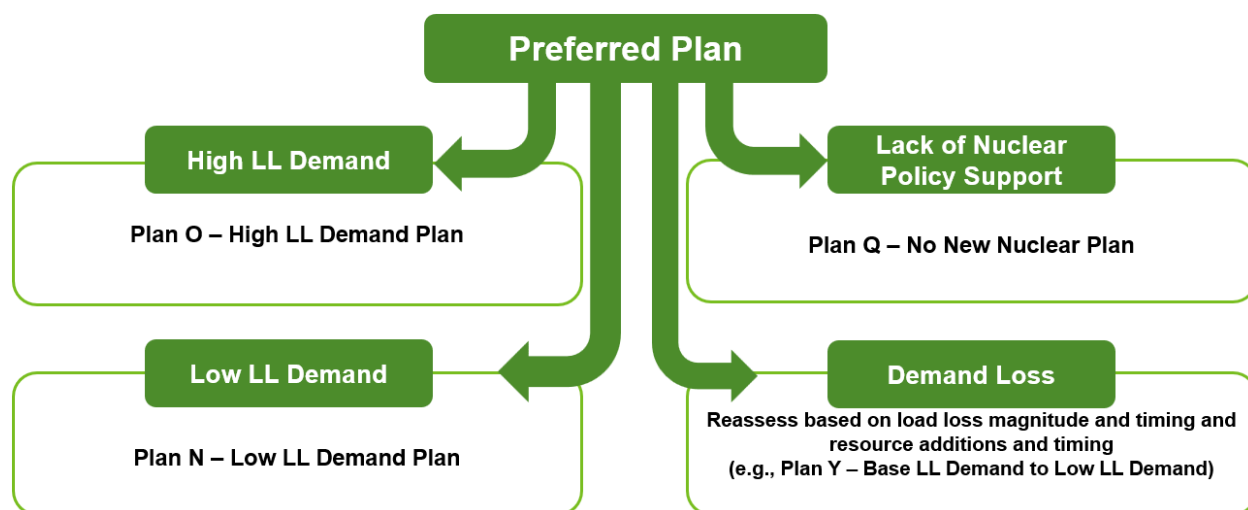
Figure 10.11 Preferred Resource Plan



10.4 Resource Acquisition Strategy¹³

Our resource acquisition strategy has three main components. First is the Preferred Resource Plan, which is discussed in more detail in Section 10.4.1. The second component of the resource acquisition strategy is contingency planning. Figure 10.12 shows the contingency options the Company has considered and the kinds of events that could lead to a change in our preferred plan. The final component of the resource acquisition strategy is the implementation plan, which includes details of major actions over the next three years, 2027-2029.¹⁴

Figure 10.12 Contingency Options



10.4.1 Preferred Resource Plan

Ameren Missouri is transforming and expanding its generation fleet to meet unprecedented growth while ensuring affordability and reliability and mitigating future risk. The plan also supports regional economic growth and the creation of thousands of jobs. Our preferred resource plan includes the planned retirement of all of Ameren Missouri's coal-fired generating capacity by 2042, including Sioux Energy Center by the end of 2035 and all four Labadie Energy Center units by the end of 2042. Continued production from these coal-fired resources, together with new dispatchable resources, supports a stable

¹³ 20 CSR 4240-22.070(1); 20 CSR 4240-22.070(1)(A) through (D); 20 CSR 4240-22.070(2); 20 CSR 4240-22.070(4); 20 CSR 4240-22.070(4)(A) through (C); 20 CSR 4240-22.070(7); 20 CSR 4240-22.070(7)(A) through (C)

¹⁴ While the current IRP rules define the implementation plan as the first three years of the planning horizon, we are also including implementation steps through 2030 to account for the anticipated changes to the IRP rules pursuant to SB 4, which as currently drafted call for Ameren Missouri's next IRP to be filed by October 1, 2029, and an expected Commission order by the end of September 2030.

fleet transformation while maintaining reliability. Extending the retirement dates of these existing units allows us to extract as much production as we can from these facilities through the end of their useful lives.

New dispatchable gas-fired generation resources will be added over the next 20 years to ensure reliability in all hours and under all weather conditions, including the kinds of extreme heat in summer and extreme cold in winter that we have seen in recent years. New dispatchable resources include 1,900 MW of simple cycle gas-fired combustion turbine generators by the end of 2029, 2,100 MW of efficient gas-fired combined cycle (NGCC) generation by the end of 2031, another 2,800 MW of NGCC generation by the end of 2035, and a further 1,400 MW of NGCC generation by the end of 2042. It also includes another 2,400 MW of simple cycle gas generation after 2040. Our plan also includes the addition of 500 MW of natural gas fuel cells, a promising technology that can deliver reliable around-the-clock energy with lower emissions than existing combustion technologies. The plan reflects our expectation to seek an extension of the operating license for our Callaway nuclear facility, ensuring its ability to continue providing reliable, low-cost and carbon-free electric energy around the clock. The plan also includes the addition of 1,200 MW of new nuclear generation by 2040, providing emission-free around-the-clock energy. While Ameren Missouri has not yet selected a technology for this new nuclear generation, the Company is considering both advanced large-scale reactor designs as well as small modular reactor (SMR) technology for deployment. Supportive state and federal policies will continue to be critical to consideration and implementation of new nuclear generation.¹⁵

By 2030, Ameren Missouri plans to add another 1,300 MW of new solar generation, which will bring the Company's total solar generating capacity to approximately 2,200 MW. Solar generation additions called for by the plan adopted in this IRP after 2030 would bring that total to 4,500 MW of operating solar energy centers. Our plan also calls for the addition of 1,500 MW of wind energy resources after 2030, which would bring total wind capacity to 2,200 MW. The plan provides for the continued replacement of aging distribution infrastructure and the development and deployment of smart grid, communications, and other advanced technologies on our distribution system, along with investments in transmission infrastructure, to enhance grid reliability and resiliency, enable new products and services, and achieve greater operational efficiencies and greater access to cleaner sources of energy.

¹⁵ The 2026 IRP reflects the addition of 1,200 MW of new nuclear generation, compared to 1,500 MW included in the Company's 2025 PRP, to better reflect the potential for using different technologies – advanced large-scale reactor designs or SMR designs.

Key changes to our PRP since the one we announced in February 2025 are highlighted in Table 10.4.¹⁶ Ameren Missouri will continue to ensure that customers' long-term electric energy needs are met in an affordable, reliable, safe, and environmentally responsible manner.

Table 10.4 Changes from 2025 PRP to 2026 PRP

	2026 Preferred Plan	2025 Preferred Plan
Coal Retirements	1,000 MW 2031-2035 2,400 MW 2036-2045	1,000 MW 2031-2035 2,400 MW 2036-2045
Natural Gas Retirements	500 MW through 2030 1,300 MW 2036-2040	500 MW through 2030 1,300 MW 2036-2040
Baseload Natural Gas Combined Cycle Additions	4,900 MW 2031-2035 1,400 MW (2042)	2,100 MW 2031-2035 1,200 MW 2036-2040
Baseload Natural Gas Fuel Cell Additions	500 MW through 2030	None
Dispatchable Peaking (Gas/Oil) Generation Addition	1,900 MW through 2030 2,400 MW 2036-2045	1,600 MW through 2030 1,200 MW 2036-2045
Solar Additions (incl. 900 MW placed in service 2024-2026)	2,200 MW through 2030 1,050 MW 2031-2035 1,250 MW 2036-2045	2,200 MW through 2030 500 MW 2031-2035
Wind Additions	None through 2030 1,500 MW by 2031-2040	1,000 MW through 2030 1,000 MW 2031-2040
Battery Storage Additions	2,400 MW through 2030	1,000 MW through 2030 400 MW 2031-2035 400 MW 2036-2045
Nuclear Additions	1,200 MW (2040)	1,500 MW (2040)

10.4.2 Contingency Plans¹⁷

Figure 10.8 presents our key contingency options. Key contingencies are focused on potential changes in expected LL customer demand and policy support for new nuclear generation. While explicit contingency plans have been analyzed for different levels of LL customer demand, planning analysis cannot account for every possible potential change in demand. As a result, future changes and their impacts on resource needs will likely warrant more rigorous consideration as new information becomes available.

In addition to the contingencies shown in Figure 10.8, we have also analyzed the potential impacts of future environmental regulations and mitigation options. While future requirements are not yet known, Plans J, K and L represent potential mitigation options in the event that significant emission reduction are required in the future. Plan J reflects

¹⁶ Resource amounts are cumulative except baseload gas additions, which are shown as separate additions in specific years. Solar amounts include 900 MW placed in service through 2026 for comparability with the 2025 PRP.

¹⁷ 20 CSR 4240-22.070(4)

retirement of all four Labadie coal-fired units at the end of 2036, Plan K reflects natural gas co-firing at the Labadie Energy Center, and Plan L reflects the addition of pollution controls at Labadie – flue gas desulfurization (FGD) and selective catalytic reduction (SCR) for control of NO_x, SO₂, and other emissions. Of those three plans, Plan J results in the lowest cost to customers. Future environmental regulations may take a number of different forms and require different levels of mitigation, so further analysis will be required to assess mitigation options as new information becomes available, but the comparison of Plans J, K, and L provide some assurance that continuing to operate the Labadie units through the end of their useful lives is likely to remain cost effective throughout the planning horizon.

10.4.3 Expected Value of Better Information

After selecting the preferred plan, Ameren Missouri conducted an expected value of better information (EVBI) analysis to assess the performance of its preferred resource plan and all alternative resource plans under the range of values defined for the critical uncertain factors and to inform its on-going research and implementation activities. Table 10.5 displays the results of the EVBI analysis as measured by PVRR.

Table 10.5 EVBI Analysis Results

Alternative Resource Plans		PVR Without Better Info	Carbon Price			Natural Gas Price			Load Growth			Project Cost		
			Low	Base	High	Low	Base	High	Low	Base	High	Low	Base	High
A	No LL, Sx31, Lb36-42, EE LTR-DR RAP	99,107	98,213	98,849	101,010	97,473	99,108	100,715	95,009	99,239	102,806	95,471	98,941	104,070
B	Base LL, Sx35, Lb42-42, EE MEEIA 4-DR MEEIA 4, RES Compliance Only	146,462	144,313	146,130	150,172	139,863	146,302	155,536	142,364	146,594	150,161	139,412	145,968	157,462
C	Base LL, Sx35, Lb42-42, EE LTR-DR RAP, RES Compliance Only	142,672	140,294	142,280	146,854	136,162	142,528	151,436	138,575	142,805	146,372	136,283	142,234	152,566
D	Base LL, Sx35, Lb42-42, EE MAP-DR MAP, RES Compliance Only	140,653	138,396	140,263	144,677	134,357	140,514	149,107	136,556	140,786	144,353	134,501	140,223	150,245
E	Low LL, Sx35, Lb42-42, EE LTR-DR RAP, RES Compliance Only	126,686	124,530	126,247	130,726	121,936	126,620	132,453	122,588	126,818	130,385	121,652	126,328	134,581
F	High LL, Sx35, Lb42-42, EE LTR-DR RAP, RES Compliance Only	163,098	160,559	162,773	167,283	154,651	162,885	174,857	159,001	163,231	166,798	154,729	162,528	176,032
G	Base LL, Sx31, Lb36-42, EE LTR-DR RAP	143,522	141,733	143,277	146,518	137,354	143,334	152,624	139,425	143,655	147,222	136,763	143,050	154,056
H	Base LL, Sx35, Lb36-42, EE LTR-DR RAP	143,123	141,294	142,854	146,241	137,065	142,947	151,918	139,025	143,256	146,823	136,435	142,657	153,539
I	Base LL, Sx31, Lb42-42, EE LTR-DR RAP	142,581	140,632	142,276	145,960	136,653	142,417	151,069	138,484	142,714	146,281	135,979	142,120	152,874
J	Base LL, Sx35, Lb36-36, EE LTR-DR RAP	144,019	142,285	143,797	146,875	137,744	143,832	153,198	139,921	144,152	147,719	137,269	143,553	154,500
K	Base LL, Sx35, Lb42-42-Cofire, EE LTR-DR RAP	143,191	141,306	142,931	146,350	136,935	143,003	152,365	139,093	143,323	146,890	136,609	142,731	153,450
L	Base LL, Sx35, Lb42-42-FGD-SCR, EE LTR-DR RAP	143,943	141,962	143,619	147,417	138,111	143,790	152,156	139,845	144,076	147,643	137,096	143,491	154,407
M	Base LL, Sx35, Lb42-42, EE LTR-DR RAP	142,182	140,192	141,853	145,683	136,364	142,030	150,362	138,084	142,315	145,882	135,651	141,726	152,357
N	Low LL, Sx35, Lb42-42, EE LTR-DR RAP	126,872	125,119	126,512	130,168	122,917	126,796	132,020	122,775	127,005	130,572	121,446	126,490	135,359
O	High LL, Sx35, Lb42-42, EE LTR-DR RAP	160,699	158,279	160,353	164,794	152,877	160,496	171,673	156,601	160,831	164,398	152,571	160,156	173,169
P	Base LL, Sx35, Lb42-42, EE LTR-DR RAP, Pumped Storage	144,367	142,443	144,065	147,702	138,644	144,224	152,316	140,269	144,500	148,067	137,078	143,834	155,919
Q	Base LL, Sx35, Lb42-42, EE LTR-DR RAP, No New Nuke	135,477	133,381	135,172	139,040	128,975	135,310	144,583	131,379	135,610	139,177	130,933	135,089	143,123
R	Base LL, Sx35, Lb42-42, EE RAP-DR RAP	140,411	138,454	140,086	143,856	134,689	140,263	148,431	136,313	140,544	144,111	134,019	139,961	150,406
S	Base LL, Sx35, Lb42-42, EE MAP-DR MAP	140,357	138,465	140,025	143,745	134,721	140,211	148,267	136,260	140,490	144,057	133,989	139,908	150,321
T	Base LL, Sx35, Lb42-42, EE LTR25%-DR RAP	141,867	139,889	141,534	145,363	136,063	141,716	150,011	137,769	141,999	145,566	135,336	141,411	152,041
U	Base LL, Sx35, Lb42-42, EE LTR-DR MAP	142,248	140,254	141,916	145,762	136,420	142,096	150,436	138,150	142,380	145,947	135,717	141,792	152,422
V	Base LL, Sx35, Lb42-42, EE MEEIA 4-DR MEEIA 4	143,747	141,705	143,415	147,319	137,810	143,594	152,061	139,649	143,879	147,446	136,971	143,281	154,245
W	Base LL, Sx35, Lb42-42, EE MEEIA 4-DR RAP	142,675	140,607	142,348	146,270	136,744	142,523	150,980	138,578	142,808	146,375	136,100	142,219	152,902
X	Base LL, Sx35, Lb42-42, EE MEEIA 4-DR MAP	142,742	140,669	142,412	146,350	136,801	142,589	151,054	138,644	142,874	146,441	136,167	142,285	152,968
Y	Base to Low LL, Sx35, Lb42-42, EE LTR-DR RAP	131,232	129,586	130,924	134,238	126,459	131,088	138,244	127,135	131,365	134,932	125,261	130,801	140,653
Z	High to Base LL, Sx35, Lb42-42, EE LTR-DR RAP	146,850	144,657	146,477	150,740	140,369	146,666	156,182	142,752	146,983	150,550	139,768	146,364	157,819
AA	Base LL, Sx35, Lb42-42, EE LTR-DR RAP, SC instead of CC	143,143	140,599	142,631	147,889	137,364	143,063	150,165	139,045	143,275	146,842	136,041	142,810	152,903
BB	Base LL, Sx35, Lb42-42, EE LTR-DR RAP, Fuel Cells instead of CC	146,530	143,935	146,041	151,272	139,996	146,304	156,566	142,432	146,662	150,229	139,493	146,137	156,708
CC	Base LL, Sx35, Lb42-42, EE LTR-DR RAP, No Replacement Resource for CC	139,825	137,375	139,411	144,163	134,478	139,737	146,540	135,728	139,958	143,525	133,552	139,529	148,469
Minimum PVR among plans			98,213	98,849	101,010	97,473	99,108	100,715	95,009	99,239	102,806	95,471	98,941	104,070
Plan with Minimum PVR			A	A	A	A	A	A	A	A	A	A	A	A
Subjective Probability			24%	57%	19%	6%	89%	6%	20%	60%	20%	10%	80%	10%
Expected Value of Better Info			42,082	43,431	45,844	38,689	43,419	50,721	43,566	43,566	43,566	40,812	43,294	48,496

10.4.4 Implementation Plan¹⁸

As mentioned earlier, the implementation plan outlines the major activities to be completed during the next three years, 2027-2029. Because the IRP rules are being revised pursuant to the enactment of SB 4 in 2025, we are also including implementation activities through 2030 in this IRP to account for a 2031 start for implementation of the Company's expected 2029 IRP filing under the new rules. Below is a description of the major activities in our implementation plan.

New Simple Cycle Gas Generation

Our preferred resource plan includes the addition of 800 MW of simple cycle CTG generation with dual fuel (natural gas and oil) capability by the end of 2027 to provide periodic generation during times of peak demand or when wind and solar generation are diminished. Construction of this facility is underway at the Company's Castle Bluff site, the site of the Company's former Meramec coal-fired energy center. The Company is also in the process of constructing a second 800 MW simple cycle CTG (dual fuel) site at its Big Hollow location, site of the Company's former Rush Island coal-fired energy center, with expected completion by the end of 2028. The preferred resource plan also includes another 300 MW of simple cycle CTG capacity, with planned completion by the end of 2029, for which a location has not yet been determined.

New Combined Cycle Gas Generation

Our preferred resource plan also includes the addition of 2,100 MW of natural gas-fired combined cycle generation by the end of 2031 to eventually replace the existing coal-fired generation at the Sioux Energy Center. The new facility will be at the Company's West Alton site, adjacent to the existing Sioux coal-fired energy center. The Company filed an application for a CCN for West Alton in July 2026, and that request is currently before the Commission. The preferred resource plan includes another 1,400 MW of natural gas-fired combined cycle generation by the end of 2032 and is currently in the initial planning stages for that facility.

New Fuel Cells

Our preferred resource plan also includes the addition of 500 MW of natural gas fuel cells by the end of 2030. Fuel cells are a promising technology option for baseload energy production and capacity. The Company is actively planning for the implementation of fuel cell projects, which can be connected to the distribution system, which allows for expedited completion. CCN applications are expected for these new resource additions during the implementation period.

¹⁸ 20 CSR 4240-22.070(6); 20 CSR 4240-22.070(6)(A) through (D)

New Battery Energy Storage

Our preferred resource plan also includes the addition of 2,400 MW of battery energy storage by 2030. The Company has received approval for a CCN for 400 MW of battery energy storage to be located at its Big Hollow site along with the aforementioned simple cycle CTG at that site. The Company has active applications before the Commission for another 545 MW of battery energy storage at the Castle Bluff, Huck Finn, and Millcreek sites. Further CCN applications are expected for additional battery energy storage projects during the implementation period.

Renewables

Our preferred resource plan includes the addition of 1,300 MW of new solar generation by the end of 2030, which when combined with the 900 MW of solar already in service will bring total solar generating capacity to 2,200 MW. The Company received approval for a CCN for the 250 MW Reform solar project in Callaway County in 2026 and has active applications before the Commission for the 175 MW Tom Sawyer solar project and the 225 MW Ringer solar project. Ameren Missouri will be engaging in activities during the implementation period to support the development of additional solar generation, including bid solicitation, contractor selection, applying for CCNs, and construction.

Demand-Side Resources Implementation

As noted in the 2025 IRP update, Ameren Missouri received approval on November 14, 2024 within EO-2023-1036 for its current MEEIA 4 program cycle, which covers the period 2025 to 2027. Ameren Missouri is currently working with stakeholders within the same docket to extend those programs at comparable levels through the end of 2028 for energy efficiency and through the beginning of 2029 for demand response (to align with the MISO planning resource auction periods).

Competitive Procurement Policies¹⁹

Ameren Missouri assigns a Project Manager to lead the activities necessary to ensure the successful completion of its acquisition and development of supply-side resources. In general, a project team comprised of a Project Manager and various lead engineers will identify all items to be procured and will coordinate with the Strategic Sourcing and Purchasing departments within Ameren to ensure proper contract structures are considered and used for each procurement activity. Ameren Missouri will be following Ameren's Project Oversight Process, which is provided in Appendix C, for monitoring the progress of projects that fulfill its Preferred Resource Plan.²⁰

¹⁹ 20 CSR 4240-22.070(6)(E)

²⁰ 20 CSR 4240-22.070(6)(G)

10.4.5 Monitoring Critical Uncertain Factors²¹

Ameren Missouri will be monitoring the critical uncertain factors that would help determine whether the Preferred Resource Plan is still appropriate and whether contingency options should be pursued. Below is a description of how Company decision makers will be monitoring the factors most relevant to future resource decisions.

Climate Policy

Ameren Missouri senior management and its Environmental Services organization will continue to monitor and evaluate developments on efforts to regulate greenhouse gas emissions. The Company reviews its assumptions for climate policy and CO₂ prices as part of its IRP annual update process.

Natural Gas Prices

Ameren Missouri evaluates natural gas prices at least annually, and a review of natural gas price assumptions is included as part of its IRP annual update process.

Load Growth

Ameren Missouri evaluates market-wide load growth at least annually, and a review of load growth assumptions is included as part of its IRP annual update process.

Generation Project Costs

Ameren Missouri will continue to monitor project pricing for various resources through industry sources and through its own resource acquisition activities, such as RFPs and competitive bidding. This includes gas, nuclear, storage, solar, and wind as well as environmental controls such as FGDs, SCR_s, and CCS. Evaluation of project costs will continue to be included as part of the Company's IRP annual update process.

²¹ 20 CSR 4240-22.070(6)(F)

10.5 Compliance References

20 CSR 4240-22.010(2)	2
20 CSR 4240-22.010(2)(A)	2
20 CSR 4240-22.010(2)(B)	2, 4
20 CSR 4240-22.010(2)(C)	4, 16
20 CSR 4240-22.010(2)(C)1.	4, 16
20 CSR 4240-22.010(2)(C)2.	4, 16
20 CSR 4240-22.010(2)(C)3	4, 16
20 CSR 4240-22.060(2)	3
20 CSR 4240-22.060(2)(A)1 through 7	3
20 CSR 4240-22.060(3)(A)5	16
20 CSR 4240-22.070(1)	4, 16, 18
20 CSR 4240-22.070(1)(A) through (D)	4, 16, 18
20 CSR 4240-22.070(2)	18
20 CSR 4240-22.070(4)	18, 20
20 CSR 4240-22.070(4)(A) through (C)	18
20 CSR 4240-22.070(6)	23
20 CSR 4240-22.070(6)(A) tough (D).....	23
20 CSR 4240-22.070(6)(E)	24
20 CSR 4240-22.070(6)(F).....	25
20 CSR 4240-22.070(6)(G)	24
20 CSR 4240-22.070(7)	18
20 CSR 4240-22.070(7)(A) through (C)	18
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