1. Executive Summary

Ameren's Energy Vision for the Future

Ameren's vision is "Leading the Way to a Secure Energy Future," and its mission is "To Power the Quality of Life." At the center of that vision and mission is powering the daily lives of its customers and the communities they call home — not just today, but for generations to come.

Today's energy company operates much the same as it has for the past 100 years, where the energy grid — the infrastructure connecting generation sources and customers — is designed and operated with power flowing primarily in one direction from the generation source to the customer. In the future, the energy grid will operate in a dramatically different fashion.

Ameren anticipates that greater levels of private and variable generation sources such as renewable energy will be operating and power flows will be more bi-directional. The energy grid itself will be significantly more automated and self-healing. Customers — large and small — will be equipped with smart meters that enable new ways to manage their energy usage. Simply put, appliances, buildings, cities and customers will become smarter.

Ameren also envisions that the energy grid and related communications system will become more resilient and complex. The traditional central station generation, transmission and distribution system will evolve into the integrated grid, which will incorporate increasing levels of private energy resources and customer interfaces, such as connected devices and homes. These energy sources will all work together in a coordinated, bi-directional fashion to continuously and reliably maintain the balance between resources and customer demand.

Customers and investors will continue to be increasingly focused on the environmental impact of traditional generation resources. The public's concern around climate change and sustainability issues is fueling greater emphasis on reducing Ameren’s carbon footprint. The integrated grid will provide the advanced infrastructure to enable a reduction of the carbon footprint of electric supply through the integration of cleaner energy and advanced demand management. At the same time, reducing the carbon footprint of the general economy through the integration and advancement of electrification will continue with electric vehicles and evolve into other transportation methods such as shuttles, public transportation and urban buses. Industrial processes, including forklifts and mining equipment, agricultural processes, and heating will also

become more electrified. Electrification will proliferate because it is more efficient and environmentally-friendly.

This future will also require Ameren to operate this more complex, reliable and resilient energy grid, provide value-added products and services to customers, as well as collaborate with third parties to enable and integrate smart grid technologies for the long-term benefit of its customers and the communities it serves. The environment will benefit from greater levels of renewable energy resources, as well as the advancement of electrification in the transportation sector, heating, and agricultural and industrial processes.

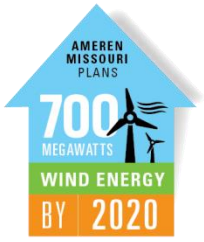
Key enablers of this brighter energy future are investments in energy infrastructure, including smart grid technologies and cleaner energy sources, as well as modernized, constructive regulatory and energy policies to support these investments, technologies, energy efficiency programs, and services to customers.

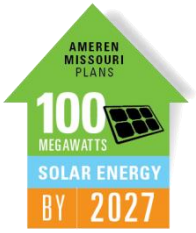
Ameren envisions that this evolving, more complex integrated energy grid will be the center of value creation and an energy future that will create a win-win for its customers and the communities it serves, as well as for the environment.

Customers will have greater convenience and control over their energy use, a more reliable and secure energy grid, a cleaner energy future and affordable electric bills. Local communities will also benefit from these same factors, as well as from economic development activity being driven by investment in energy infrastructure.

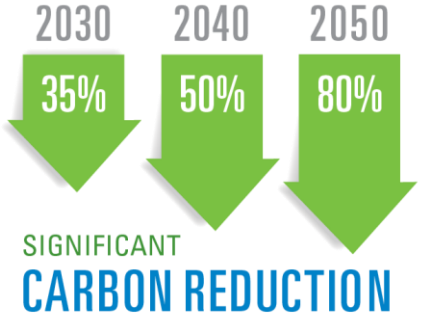
Integrated Resource Plan Highlights

- Ameren Missouri is accelerating the transition of its generation fleet to a cleaner and more diverse portfolio in a responsible fashion.
- By 2020, Ameren Missouri plans to add at least 700 megawatts (MW) of wind generation, representing an investment of approximately $1 billion. The potential exists to add even more wind generation in the coming years as a result of improving technology and economics, as well as renewable energy initiatives with large customers. In 2014, Ameren Missouri's previous IRP had forecasted additions of 120 MW of wind generation by 2020.
- By 2025, Ameren Missouri plans to add 50 MW of solar generation, with a total increase of 100 MW by 2027.





- The 2017 plan includes a 60 percent growth in renewable generation over the 2014 plan due to the improvement in the technology and economics of these cleaner energy resources.
- Ameren Missouri plans to reduce carbon dioxide (CO_2) emissions 35 percent by 2030, 50 percent by 2040 and 80 percent by 2050 (based on 2005 levels). This represents a significant increase from the 2014 IRP, where carbon dioxide emission reduction plans were 15 percent by 2030 and 40 percent by 2040.



- Ameren Missouri believes the cleanest and cheapest form of energy is the energy you don't have to produce in the first place. This is why the plan continues to include cost-effective customer energy efficiency programs and provides for cost-effective smart usage rewards programs to help customers better control consumption and reduce their electric bills.
- The plan provides for the continued development and deployment of smart grid, communications and other advanced technologies to enable new products and services and greater operational efficiencies.
- The 2017 IRP includes the planned retirement of more than half of Ameren Missouri's coal-fired generation capacity. This includes the Meramec Energy Center by the end of 2022, and others between 2033 and 2036.

Ameren Missouri will continue to ensure that customers' long-term electric energy needs are met in a safe, reliable, cost-effective and environmentally responsible manner. The company's Integrated Resource Plan (IRP), filed every three years with the Missouri Public Service Commission, provides an assessment of the future electric energy needs of customers for the coming 20 years and the preferred plan for meeting those needs. Ameren Missouri's 2017 IRP represents a further refinement to the plan published three years ago and continues to focus on transitioning the generation fleet to a cleaner and more fuel diverse portfolio in a responsible fashion, supporting customers' wants and needs.

Renewable Generation

Ameren Missouri's 2017 IRP calls for an addition of at least 800 MW of renewable generation in the next decade. By the end of 2020, the plan includes the addition of at least 700 MW of wind generation, using American-made turbines, located in Missouri and neighboring states. The addition of 100 MW of solar generation is planned in three stages: 25 MW by 2022, 25 MW more by 2025, and 50 MW more by 2027. Ameren Missouri will continue to explore renewable investments beyond the IRP that are in the

long-term best interest of customers—especially given advancing technologies and lower costs.

Renewable Energy Standard (RES)

Missouri's Renewable Energy Standard requires Ameren Missouri to purchase or generate 15 percent of native sales from renewable energy sources by 2021, subject to a 1 percent average increase limit on rates. The addition of 800 MW of renewable wind and solar energy in the plan allows Ameren Missouri to meet that standard at costs that are below the 1 percent rate limit.

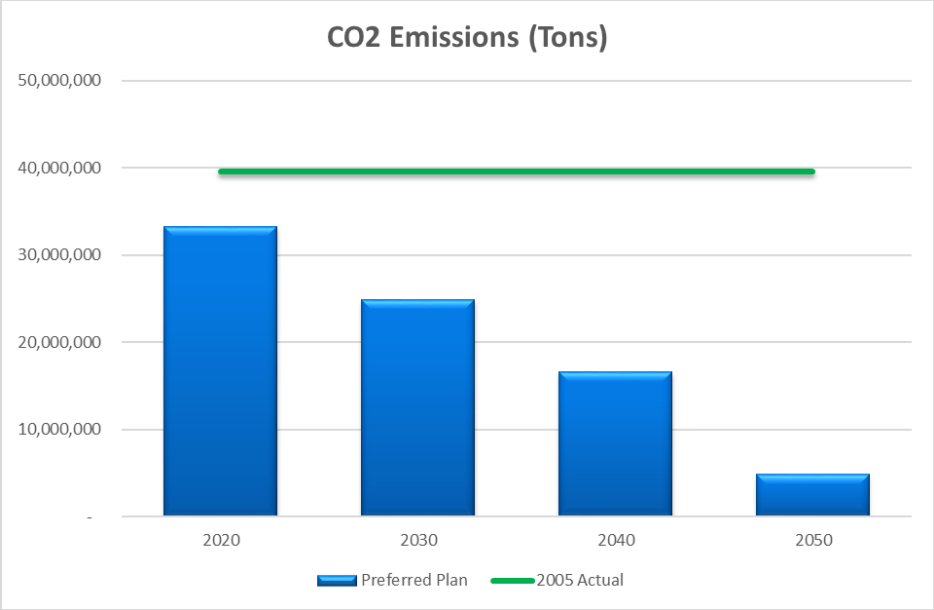
Energy Efficiency and Smart Usage Rewards

Ameren Missouri will continue to offer extensive energy efficiency programs and help customers identify and implement meaningful ways to manage their energy use. For every dollar spent on program costs, Ameren Missouri customers enjoy nearly $3 in benefits. The plan, under the Missouri Energy Efficiency Investment Act, is a portfolio of energy efficiency programs with energy savings of 571 gigawatt-hours and demand savings of 167 MW. The total benefits as a result of these efforts are expected to reach $425 million over the next 20 years, and would not be possible without the constructive regulatory framework that supports these programs.

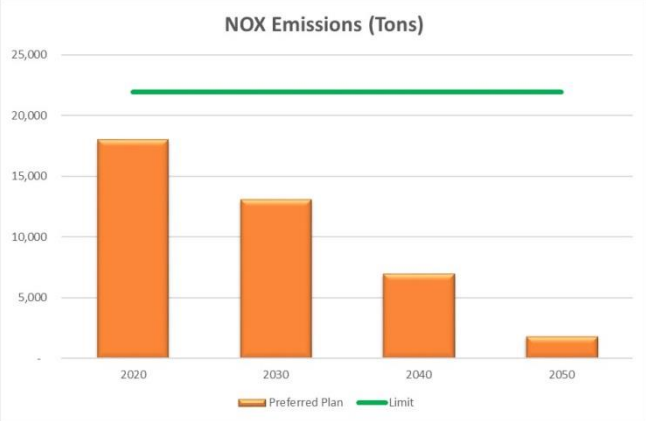
The level of customer participation in energy efficiency and smart usage rewards programs and the level of customer incentives needed to solicit their participation affect the overall economics of demand side resources. Based on Ameren Missouri's extensive market research focused on the behaviors and attitudes of customers in its service territory, estimates have been made of the amount of achievable energy and demand savings available and the cost to achieve it.

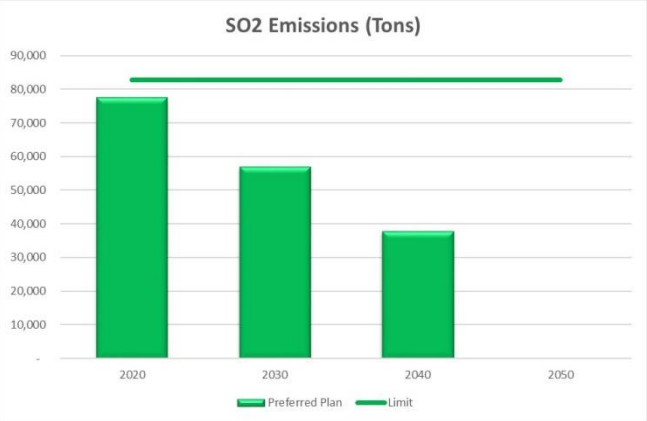
Reducing Carbon Emissions

By 2030, Ameren Missouri plans a diverse mix of coal, nuclear, natural gas and renewable energy resources that would achieve a carbon dioxide emissions reduction of 35 percent from 2005 levels. The plan also includes carbon dioxide emissions reduction goals of 50 percent by 2040 and 80 percent by 2050 from 2005 levels.



In addition to carbon dioxide emissions, other emissions from energy centers will be reduced. Emissions levels are below federal limits due to prudent investment and innovation at Ameren Missouri's energy centers.





Retirement of Current Generation Capacity

Ameren Missouri currently has approximately 5,100 MW of coal-fired generation capacity. The plan calls for retiring over half that amount, about 2,750 MW, in the next 20 years:

- Meramec Energy Center by the end of 2022 (594 MW[1])
- Sioux Energy Center by the end of 2033 (970 MW)
- Two of the four units at Labadie Energy Center by the end of 2036 (1,186 MW)

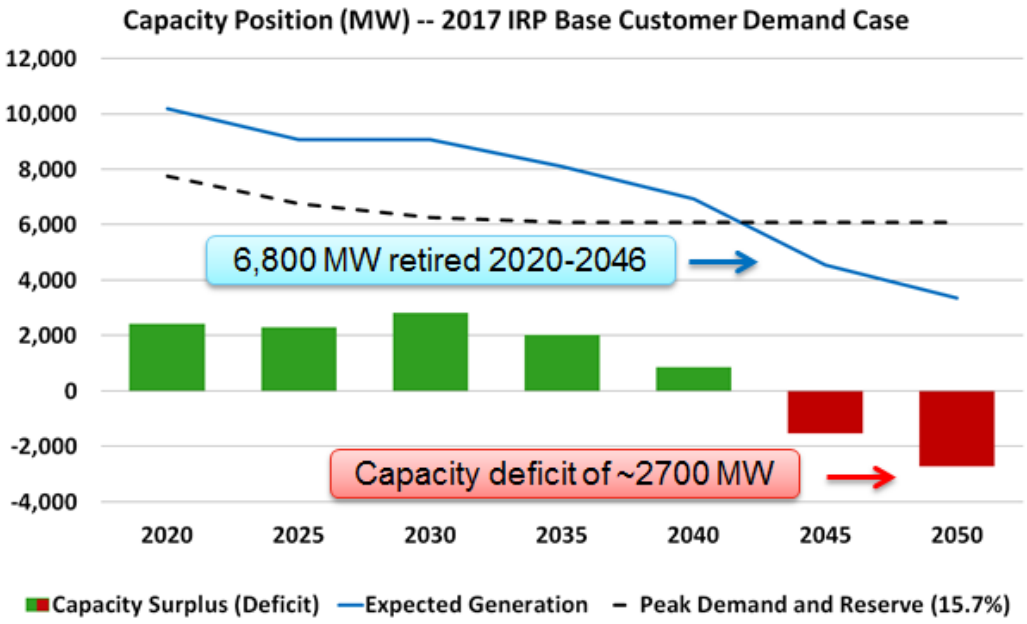
Ameren Missouri will continue to invest in technology such as particulate control to ensure that emissions remain significantly below current state and federal air quality requirements. These efforts have helped improve regional air quality.

Existing Nuclear Generation

In 2015, the Nuclear Regulatory Commission renewed Callaway Energy Center's operating license to the year 2044. The 2017 IRP does not plan for any new nuclear generation capacity. Ameren Missouri will consider extending the operating license of Callaway and will monitor developments in the industry.

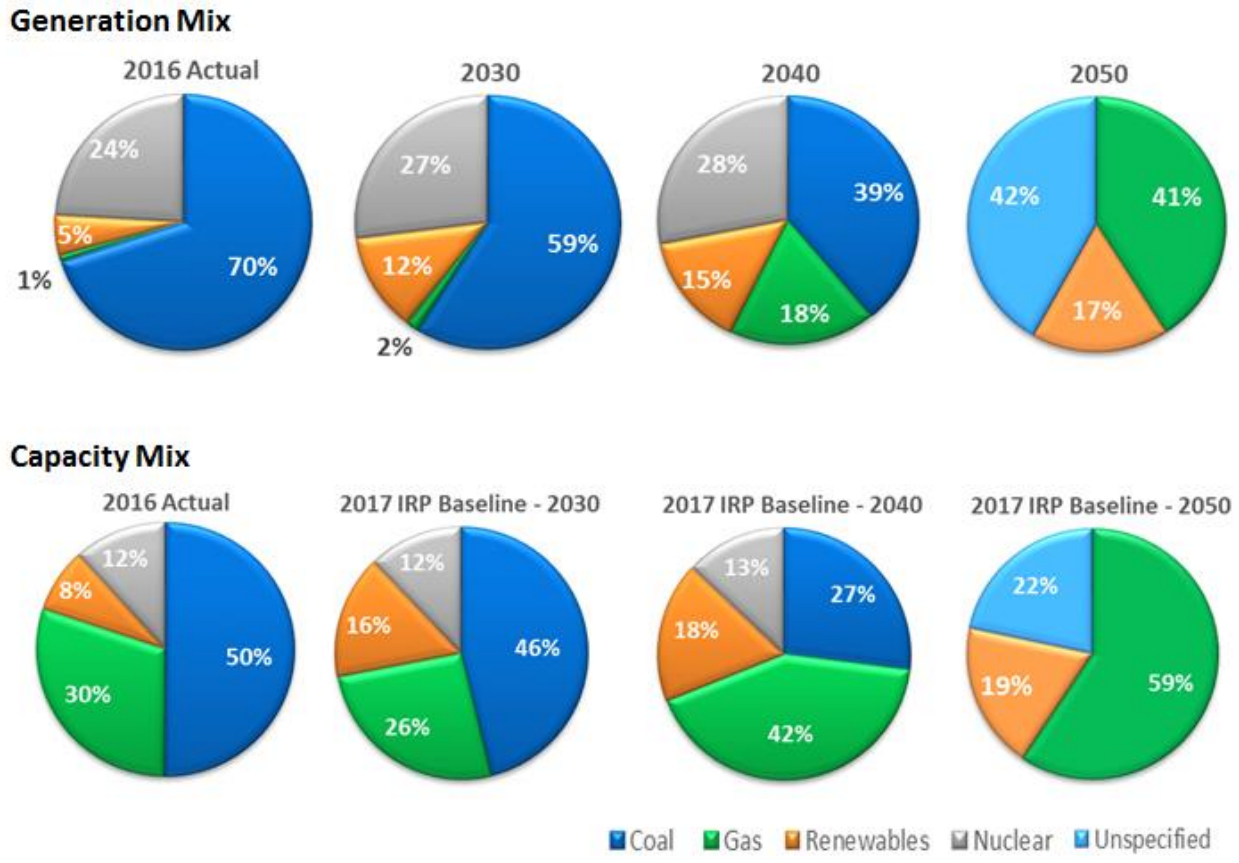
Capacity Needs

Customer sales are forecasted to decline over the next 20 years largely due to increasing energy efficiency as well as adoption of private generation resources such as rooftop solar. Sales reductions resulting from energy efficiency and private generation



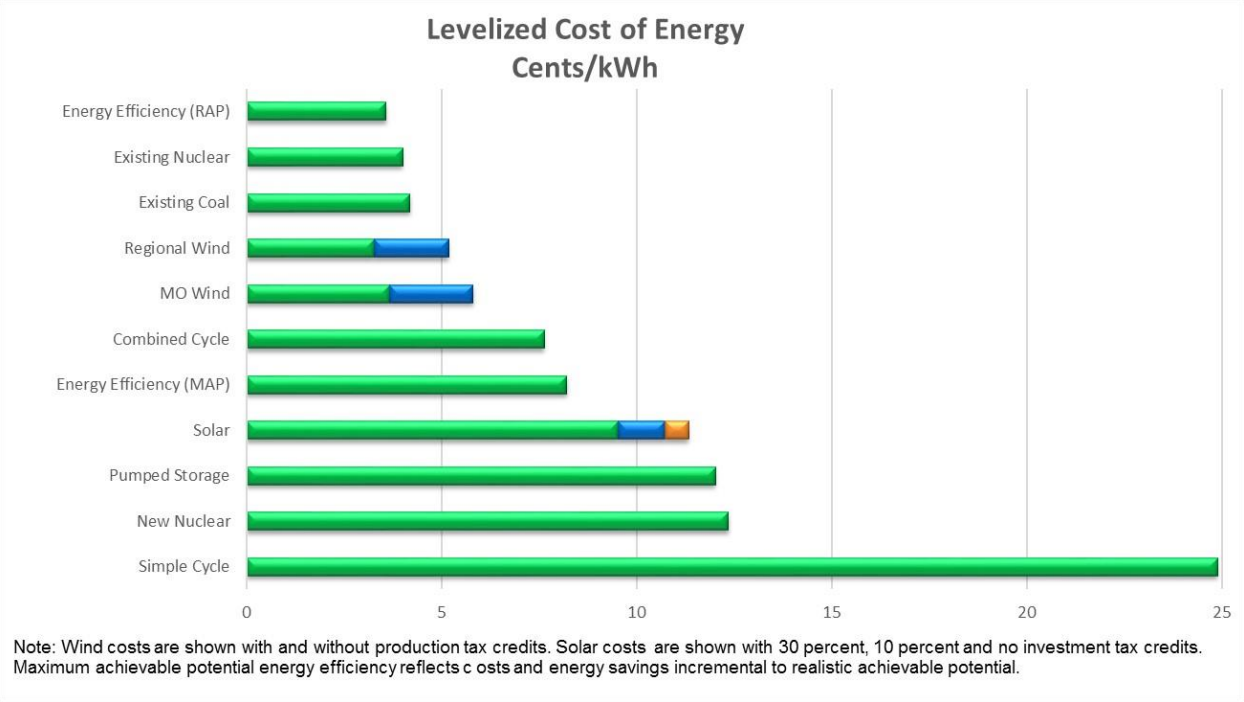
[1] MW rating excludes two gas-fired units that will also be retired at the end of 2022.

sources are forecast to be partially offset by increases in sales due to adoption of electric vehicles and broader electrification of other energy uses such as industrial vehicles (e.g., forklifts), heating, agriculture and manufacturing. Assumptions for greater electrification in the plan are modest. However, changes in policies and advancements in technologies could drive greater electrification, which will drive greater benefits for customers and the environment. The Midcontinent Independent System Operator, the regional transmission organization in the Ameren Missouri service territory, requires utilities to maintain reserve capacity in excess of customer demand of roughly 16 percent. Ameren Missouri's robust fleet of generating resources is expected to continue meeting customers' needs under its baseload forecast over the next 20 years, even as over half of the existing coal-fired generation is retired as it reaches the end of its useful life. This provides Ameren Missouri with the time and flexibility to allow new resource technologies to further develop and to optimize the operation of the existing fleet.



Resource Options

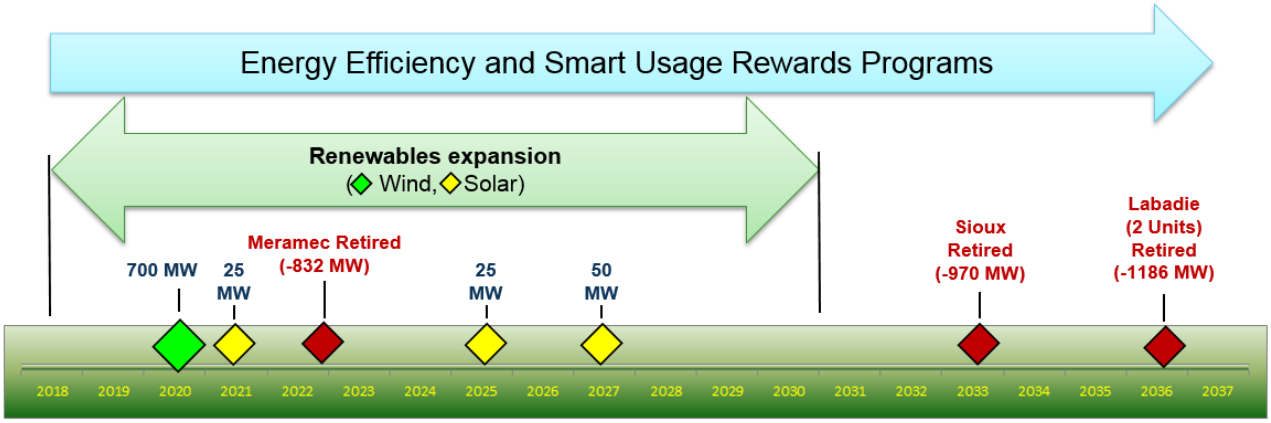
The levelized cost of energy (LCOE) is a measure of the per-unit cost of energy produced by a resource over its expected useful life expressed in cents per kilowatt-hour (cents/kwh). It includes all of the costs of construction and ownership, such as recovery of the capital investment and a fair return for investors, and all of the costs of operations, such as the people, fuel and other resources needed to operate and maintain the facilities in a safe and reliable manner.



Note: Wind costs are shown with and without production tax credits. Solar costs are shown with 30 percent, 10 percent and no investment tax credits. Maximum achievable potential energy efficiency reflects c osts and energy savings incremental to realistic achievable potential.

Preferred Plan

Ameren Missouri's plan calls for the addition of at least 700 MW of wind generation in the next three years and the addition of 100 MW of solar generation over the next ten years. In addition, Ameren Missouri plans to reduce carbon dioxide emissions 35 percent from 2005 levels by 2030, a 50 percent reduction by 2040 and an 80 percent reduction by 2050. Ameren Missouri will continue to include cost-effective customer energy efficiency program offerings and provide for the inclusion of cost-effective smart usage rewards programs to help its customers better control their consumption and reduce their energy bills.



Implementation of the plan relies on several actions including:

- Acquiring at least 700 MW of wind resources to meet the RES requirements and contribute toward the continued transition of the generation fleet.
- Securing approval for the next cycle of demand side programs under the Missouri Energy Efficiency Investment Act.
- Continuing to evaluate potential sites for new renewable and gas-fired generation and maintain options for their development.

Contingencies

Ameren Missouri has evaluated a range of potential options for new generation should future customer demand increase beyond the levels in the base forecast. The most cost-effective of these options include wind, solar and natural gas-fired generation. In addition, carefully managing investment in the existing generation fleet through the end of its useful life provides the ability to focus Ameren Missouri's investments on deploying smart grid and other advanced technologies for the benefit of customers.

Summary

By 2020, Ameren Missouri plans the addition of at least 700 MW of wind generation with the potential for even more in the coming years. The plan calls for the addition of 50 MW of solar generation by 2025, with a total of 100 MW by 2027. All together, the 2017 plan represents a 60 percent growth in renewable generation over the 2014 IRP.

Ameren Missouri is also setting a significant goal to reduce carbon dioxide emissions 80 percent by 2050. To meet this goal, Ameren Missouri is targeting a 35 percent carbon dioxide emissions reduction by 2030 and a 50 percent reduction by 2040 from the 2005 level. Since 2005, Ameren Missouri has significantly reduced emissions, including a 26 percent reduction in carbon dioxide emissions in 2016.

With this IRP, Ameren Missouri is accelerating the transition of its generation fleet to a cleaner and more diverse portfolio in a responsible fashion to ensure reliability while keeping customer energy bills affordable. As part of the country's most critical infrastructure, Ameren Missouri can never rest on past successes. That is why Ameren is not just focused on today, but is also taking steps now that will serve customers even better tomorrow and for generations to come.