RELIABLE AND SECURE ENERGY

We provide 24/7 convenience for millions of customers who depend on us for the fundamentals — reliable, affordable and safe energy from an increasingly clean mix of resources.

Energy is a necessity for the economy and our customers, and because of this, reliability is core to the service we provide. Company-wide, our electric service is consistently ranked among the top one-third of U.S. utilities, with customers having electricity on average 99.9% of the time. Natural gas is a safe, affordable and environmentally efficient energy source that is inherently reliable for heating homes and businesses, especially in colder climates. Our natural gas system is highly flexible and resilient with nearly 100% reliability.

We continually invest to strengthen and modernize our infrastructure — the plants, power lines, pipelines and other systems that serve customers. This includes upgrading technology and diversifying our energy supply to ensure a reliable mix of resources for managing energy cost and environmental impact while making sure we do not depend too heavily on any one resource. As we decide where to invest, we consider projects that provide the greatest value and meet the diverse interests of stakeholders, including customers, communities, regulators, policy makers and investors.

Over the next five years, we will invest $1.4 billion in new network infrastructure, smart meters, advanced software, equipment sensors and related data analytics capabilities. These investments will further improve security, reliability and reduce outage restoration times for our customers, while at the same time, enabling new options and opportunities for increased efficiency savings.

As our systems become more interconnected, security of the power grid is a greater concern. We continue to implement security measures designed to protect our information technology systems, network infrastructure and other assets, working closely with government and industry peers to identify and adopt best practices for grid security.

HIGHLIGHTS

- We added 700 megawatts of company-owned wind capacity through the completion of three wind farms in 2019 — Hale in Texas, Foxtail in North Dakota and Lake Benton in Minnesota. Constructing and operating wind projects has become a core competency, as we complete the nation's largest multi-state wind investment under our Steel for Fuel growth strategy.

- Xcel Energy's nuclear generating plants had a transformational year in 2019. Both plants were rated as exemplary by the Institute of Nuclear Power Operations and are in the Nuclear Regulatory Commission's Column 1 — the highest ratings attainable. We also made progress understanding how to operate our nuclear fleet alongside variable wind and solar energy resources, which will be important to achieving our vision for 100% carbon-free electricity.

- Our company delivered its best-ever public safety performance in 2019 by continuing to reduce the number of third-party dig-ins to underground pipes and wires. Company-wide we had 1.02 excavation damages per 1,000 locate requests — which is a 28% improvement over the past five years. We have achieved these results by continuously refining our processes and working with the industry and third-party contractors who encounter power lines and natural gas pipelines as part of their jobs.

- At least 92% of customers' power was restored within 24 hours following severe weather events in 2019. The Edison Electric Institute recognized our efforts during the year with two Emergency Recovery awards for outstanding restoration work. The first was following the Colorado bomb cyclone in March, and the second was in September after tornado damage in Sioux Falls, South Dakota.

INVESTING FOR THE FUTURE

Over the next five years, we plan to invest $22 billion in projects that, in addition to ongoing maintenance and repair, will increase renewable energy ownership, strengthen the power grid, ensure security and offer customers more options.

We are investing in projects that offer the most value for customers.

2020-2024 Capital Forecast

Electric Distribution	28%
Electric Transmission	24%
Renewables	9%
Electric Generation	16%
Natural Gas Delivery Business	13%
Other	10%

SYSTEM RESOURCE PLANNING

We are required by some state regulatory commissions to regularly conduct a system resource planning process. The process varies by state, but generally begins with Xcel Energy filing a proposed long-term resource plan with the public utilities commission, which is then evaluated by regulators, as well as customer, environmental and community stakeholders. The plans assess the overall resources we need to serve the energy needs of our customers. The plans also discuss many other factors related to our generation portfolio including associated transmission needs and our total load obligations, which are influenced by items like energy efficiency program goals.

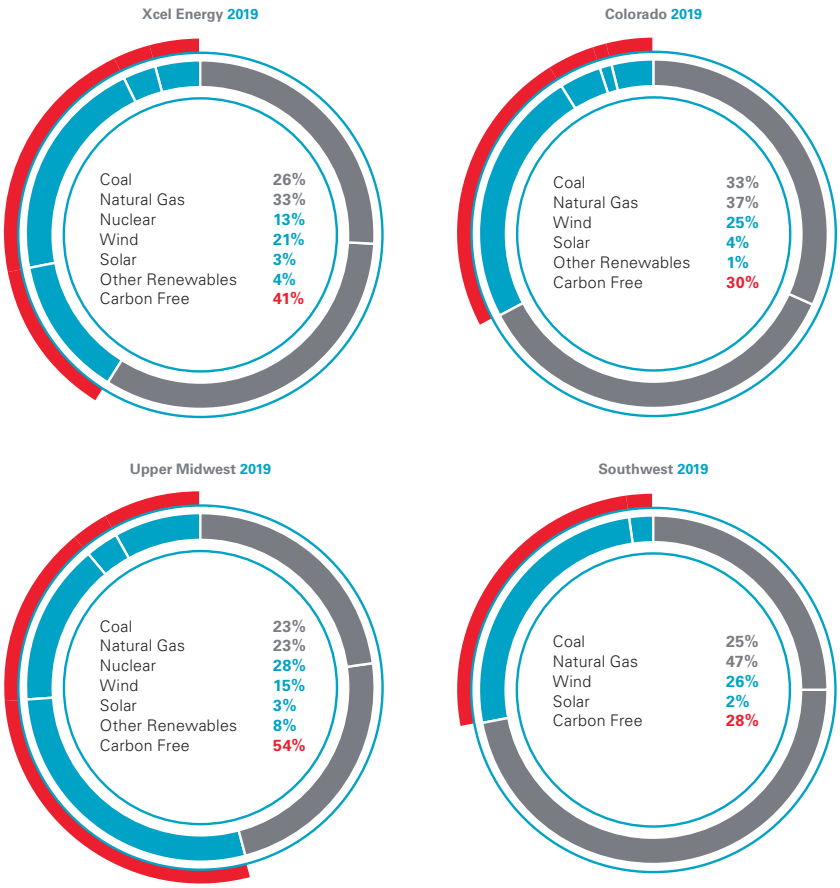
Once the plan is approved, it may result in the need to add resources to serve customers. We then typically release one or more requests for proposals, which may be general or targeted toward specific resources, such as natural gas or renewable energy. As the regulatory commission decides on the resources to be acquired, our stakeholders provide input.

To reach our goal to reduce carbon emissions 80% by 2030, we have started to work with stakeholders engaged in our state resource planning processes. In 2019, we originally proposed the Upper Midwest Energy Plan that would close our remaining coal units early, shutting down all the units in the region by 2030. It would also extend the use of nuclear energy at the Monticello plant and significantly add more wind and solar power, as well as firm capacity resources, such as natural gas or possibly storage. Through the end of 2019 into early 2020, we updated our planning model and worked with stakeholders and will resubmit a new plan for the Upper Midwest by the end of June 2020, based on input we received. We expect to make similar proposals in Colorado and New Mexico in 2021 as the energy planning processes in these states get underway.

UTILITY OPERATIONS

Generating Electricity

Xcel Energy provides electricity from a diverse mix of energy sources, including coal, natural gas, nuclear and renewables. We delivered more than 99.8 million megawatt hours of electricity to customers in 2019, produced at Xcel Energy generating plants and purchased from third-party suppliers.

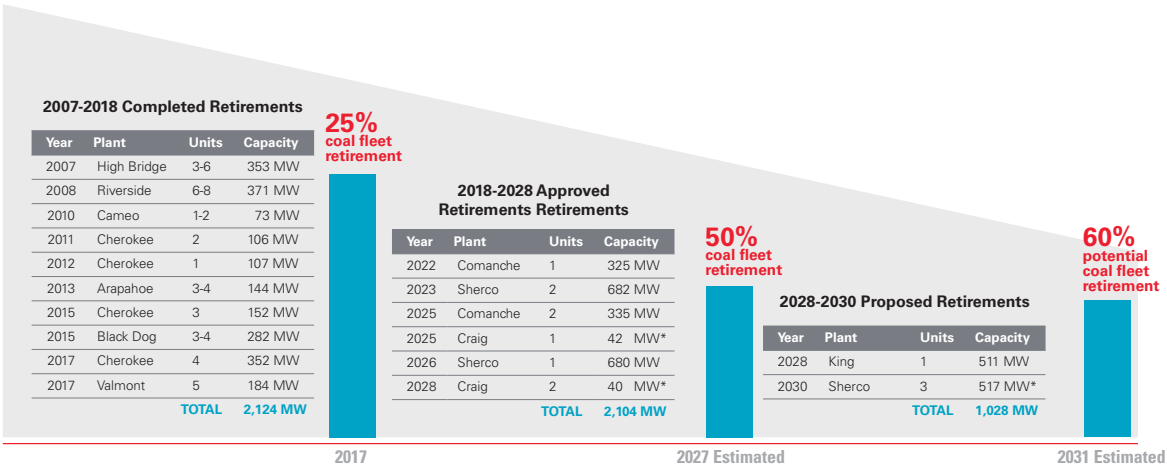


We currently own 18,700 megawatts of generating capacity across our eight-state service territory. Traditionally, our generation portfolio has depended on coal, but we are transitioning away from coal to rely more on renewable energy and energy sources that help to integrate renewable energy on our system, such as natural gas generation. We need technologies that can be dispatched to balance the peaks when customer use exceeds renewable generation and valleys when renewable generation exceeds customer use.

We report on flexible plant operations to integrate renewable energy in the Reducing Air and Other Emissions section of the Corporate Responsibility Report.

Xcel Energy generating plants consumed about 19.3 million tons of coal in 2019, down from 23.2 million tons in 2018. As we retire coal units and change the operation of existing units, our annual coal use is expected to continue declining. By 2028, we will retire 24 coal units under approved plans, representing approximately half the coal-fueled capacity we own. In addition, we have proposed early retirement of the Allen S. King Generating Plant and Sherco Unit 3 in Minnesota.

Xcel Energy's declining reliance on coal enables significant reductions in carbon and other emissions.



*Based on Xcel Energy's ownership interest

We continue to invest in wind energy under our Steel for Fuel growth strategy, capitalizing on historic-low wind prices and available tax credits to install new wind farms — where the cost to build the projects is offset by future fuel savings. Many of the wind farms we will own.

We discuss Steel for Fuel and the expansion of wind and solar resources on our system in the Renewable Energy section of the Corporate Responsibility Report.

Our nuclear fleet is among the safest and best run in the nation. With a combined capacity of more than 1,650 megawatts, the two generating plants in Minnesota — Monticello and Prairie Island — are rated as exemplary by the Institute of Nuclear Power Operations, and are in the Nuclear Regulatory Commission's Column 1, the highest ratings attainable. Information on our nuclear plants is available on xcelenergy.com.

Delivering Power
Xcel Energy operates thousands of miles of transmission and distribution power lines as well as substations and other equipment to safely and reliably deliver electricity to customers.

Transmission lines are a vital link to bring electricity over long distances from power sources to substations closer to homes and businesses. Xcel Energy is one of the fastest growing, investor-owned transmission systems in the country.

The following are notable projects in 2019:

- We completed the 125-mile, 345-kilovolt Pawnee-Daniels Park project between the Pawnee Substation near Brush, Colorado, and the Daniels Park Substation south of the Denver-metro area. The new line will bring customers more low-cost, clean energy.

- A drone was used for the first time to assist in stringing conductor on a new five-mile 115-kilovolt transmission line within the City of Fargo, North Dakota, reducing impact to land. The new line increases reliability of electricity service in the Fargo area by reducing overloads on neighboring lines and transformers.

- Crews completed a challenging two-mile transmission line rebuild in the backwaters of the Mississippi River between Nelson, Wisconsin, and Wabasha, Minnesota. With the help of J.F Brennan Marine Construction, the project deployed helicopters, air boats and floating barges to install foundations and set structures in several feet of water.

- As part of our Power for the Plains initiative, more than 100 miles of transmission were completed in Texas and New Mexico, including a 64-mile section of the TUCO-Yoakum-Hobbs 345-kilovolt transmission line. The entire 168-mile line between north of Lubbock, Texas, to Hobbs, New Mexico, will be complete in 2020 enhancing electric reliability, strengthening the power grid and increasing capacity for new generation resources, including low-cost renewable energy.

- The Minnesota Public Utilities Commission approved the Huntley-Wilmarth project, a partnership between Xcel Energy and ITC Midwest LLC to build the 50-mile 345-kilovolt transmission line north of Mankato, creating additional capacity on the system for wind and solar. Construction begins in 2020 and will be complete in 2021.

Fueling Homes and Businesses
Xcel Energy is the 10th largest provider of natural gas service in the country, based on number of customers. We fuel the homes and businesses of approximately 2.1 million customers in Colorado, Michigan, Minnesota, North Dakota and Wisconsin, and operate some gas transmission in South Dakota and Texas. Natural gas is a safe and efficient way to heat homes, from both a cost and environmental perspective, especially in our cold weather service areas. With nearly 2,200 miles of transmission and over 35,600 miles of distribution pipelines in service, we plan to add approximately 750 miles of new pipeline over the next five years.

To maintain safe and reliable natural gas service for everyone, we take a proactive approach to managing the integrity of our system. This includes regularly surveying and inspecting our transmission and distribution pipelines and equipment to meet or exceed the requirements of the Pipelines and Hazardous Materials Safety Administration. We inspected more than 189 miles, or nearly 9%, of the transmission pipeline we own in 2019, under the regulation.

We are investing approximately $1.4 billion to renew our pipelines and equipment, and so far, have replaced over 700 miles of pipeline since 2012. In 2014, we finished replacing all cast-iron pipes and have less than 10 miles of unprotected bare steel pipe remaining to replace, comprising less than 0.03% of the pipe on our system. Currently, all our transmission pipeline is protected steel and nearly all our distribution pipe is plastic or protected steel. Low natural gas prices and the use of a special monthly bill charge or rider in both Colorado and Minnesota have made it possible to invest in our system and accelerate upgrades with minimal impact to customer bills.

By upgrading our pipelines, we ensure safety and reduce the loss of natural gas. Over the past five years, we have decreased the occurrence of leaks on our pipelines and other equipment by more than 30%. We track this through annual inspections, day-to-day operations and customer reports. Once problem areas are identified, they are prioritized for repair, which involves a variety of measures from tightening joints to full-scale pipeline replacements.

Our work to improve the integrity of the natural gas system also reduces methane emissions and is part of our comprehensive plan to reduce the environmental impact of natural gas across the supply chain. We report on this effort in the Leading the Clean Energy Transition section of the Corporate Responsibility Report.

As a natural gas provider, we work to raise awareness and take steps to keep customers safe around natural gas in their homes and communities. This includes improving our emergency response time by 25% over the past five years. In 2019, our personnel arrived on-site within one hour of receiving a call associated with a suspected natural gas leak or other emergency 93% of the time. We also are a founding member of the Gold Shovel Standard, an industry-leading association aimed at reducing pipeline damages. Third-party damage to facilities is the number one risk to that nation's natural gas infrastructure, and our damage prevention program is achieving top-quartile results.

In 2019, we opened new training villages in Colorado and Minnesota to better prepare our natural gas employees and local emergency responders. The villages offer hands-on learning in a realistic setting that can simulate more than 40 different types of natural gas leaks and recreate incidents that have occurred across the country.

We also follow the American Petroleum Institute Public Awareness Programs for Pipeline Operators Recommended Practice 1162. This involves implementing measures to increase awareness about the safety of our facilities and energy service. Twice a year, we send information on staying safe around natural gas to customers through their bills. As part of our membership with the national, nonprofit Pipeline Association for Public Awareness and our participation in state-specific pipeline associations, as well as Minnesota's Community Awareness Emergency Response association, we distribute materials to important audiences. This includes providing safety guides, books and newsletters to excavators and to public and emergency officials, in addition to sponsoring and participating in pipeline emergency responder meetings and trainings.

We provide additional information on public safety awareness programs in the Customer Commitment section of the Corporate Responsibility Report.

In 2019, we reported three pipeline incidents to the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration. After further investigation, it was determined that our natural gas system was indirectly involved in two of the incidents and was directly associated with the third. The third incident involved a cracked and broken regulator that resulted in escaping natural gas at a senior living facility in Fargo, North Dakota. No one was injured during the incident and the cause of the break was never determined.

We also received 21 Notices of Probable Violation from regulatory agencies in 2019 in Michigan, Minnesota and Wisconsin. Approximately half of the notices were related to locating underground facilities. The others resulted from inspections of our operations and ranged from procedural or record keeping matters to component design or operating issues. All issues were responded to in the required time frame with an approved resolution by the state.

WILDFIRE MITIGATION PLANS

As part of our commitment to safety, Xcel Energy has developed a fire risk mitigation program designed to help protect lives, homes and property from the threat of wildfire. We recognize that wildfires pose a significant threat to our customers and communities as a whole — and we are proactively taking steps to minimize ignition risks associated with operating our system. While most of the work is taking place in Colorado, it could be expanded to other states as needed.

We have established a cross-functional Wildlife Mitigation Team that works together to:

- Accelerate inspections in identified Wildfire Risk Zones — and conduct new and enhanced inspections on equipment — to further identify potential safety concerns

- Analyze the strength and ability of transmission and distribution structures to withstand higher than normal windspeed and upgrade as necessary

- Replace equipment and poles that do not meet our inspection or strength criteria
- Conduct enhanced vegetation management in the areas around structures and equipment
- Improve protocols and fire-safe work practices to minimize wildfire risk
- Explore use of new technologies to further reduce risk
- Work directly with communities, first responders and other stakeholders to inform, educate and gather feedback for our program

To strengthen our system, we are making strategic investments and improvements to bolster the power grid, build resilience and increase situational awareness to enhance the region's ability to respond to wildfires. The team oversees work in three areas:

- **System hardening initiatives:** Strengthen assets to minimize the risks of them causing ignitions and protecting against extreme weather conditions. Risk modeling determines methods of failure; then, repair and replace programs prevent and fix defects to mitigate risks. While it is impossible to eliminate every risk, we continue to maintain and upgrade our system and collaborate with other energy providers to protect people and property.
- **Operational and situational awareness efforts:** Improve our capability to make critical operational decisions more quickly and effectively. These include specific protocols for periods that are conducive to wildfires, such as "Red Flag Warning" days with high-wind conditions and ensuring a better understanding of threat conditions — and appropriate actions to deal with those conditions. We are reinforcing our power grid by replacing current equipment with new technologies that help reduce wildfire risk and allow us to be more effective in responding to fire events when they occur.
- **Community and stakeholder outreach plans:** Communicate with various groups, educating them on the work being done for wildfire mitigation, answering questions about the plan and receiving feedback on what is important to them. Our plan will continue to evolve as we evaluate new technologies, gain more industry and stakeholder input and support, and complete more inspections and studies to inform our program. Our effort also includes collaboration and benchmarking with the Electric Power Research Institute, Edison Electric Institute, national labs and our neighboring energy providers to share lessons learned and best practices.

VEGETATION MANAGEMENT

Xcel Energy's Vegetation Management department manages millions of trees across more than 47,000 miles of distribution right of way and more than 20,000 miles of transmission right of way throughout our service territory. Since 2005, the Arbor Day Foundation has recognized our company as a Tree Line USA utility for our commitment to proper tree pruning, planting and care.

We use industry best practices to help achieve our vegetation management goals in an environmentally sensitive, socially responsible and cost-effective manner. This includes Integrated Vegetation Management, which encompasses a progressive system of information gathering and helps us develop compliant solutions for controlling vegetation near electric and natural gas facilities.

In addition, our pruning methods comply with standards set by the American National Standards Institute and the Tree Care Industry Association, which are endorsed by the International Society of Arboriculture. We also employ manual and mechanized clearing techniques, as well as responsible herbicide applications. All herbicides used are products registered by the EPA and the appropriate state regulatory agency. The herbicides are applied by licensed applicators.

For our distribution and transmission lines, work is generally performed on a four- to five-year cycle. Our practices seek to balance our customers' need for reliable energy while respecting the natural environment that surrounds our facilities. For example, we work with landowners to determine if trees and other vegetation can be deemed compatible with safe operation of our electric lines. In Colorado, we also have established various programs to minimize the risk of wildfire ignition such as our Mountain Hazard Tree Program which helps us stay ahead of the tree mortality caused by the Mountain Pine Beetle.

In our efforts to comply with governmental regulation and to better ensure electric system reliability, our transmission line vegetation management program emphasizes the removal of incompatible vegetation to promote long-term vegetation control. In many cases, this means removing trees in areas where trees had been pruned in the past.

GRID RESILIENCE AND SECURITY

As the use of technology and interconnected systems expands, the power grid is increasingly subject to attack by those who might choose to do us harm, whether for criminal purposes or as part of an effort to undercut our national security. Ensuring our power grid is secure from cyber and physical threats is an ever-evolving responsibility that demands our constant vigilance and is a top priority for Xcel Energy.

We continue to implement an array of efforts to increase preparedness and decrease vulnerability. Our Enterprise Security Services organization oversees the coordination of all security efforts, including employee training and awareness, compliance with federal regulations and corporate security governance.

Through our state-of-the-art Cyber Defense Center, we monitor and protect our networks 24/7. Our cyber security program is risk based and uses known standards and best practices which encompass security controls that provide adherence to government and regulatory requirements. It includes "defense-in-depth" methodology that provides multilayered safeguards to reduce or eliminate single points of failure and weakness.

While it is impossible to protect our systems and power grid against every malicious attack, we are taking reasonable and prudent steps to prevent, detect and mitigate the impacts of an intrusion. We are hardening systems to limit opportunities for attack and deploying enhanced monitoring and detection systems to help us promptly identify any successful intrusion. We established an Enterprise Command Center in 2018, which provides constant monitoring for natural and man-made events that could be disruptive to Xcel Energy's ability to serve our customers, protect our assets and keep our employees safe.

We engage with other members of our industry, other segments of the economy and the government to engage in threat information sharing and test our combined capabilities to respond to an attack. Individually and in collaboration with other energy providers, we are working to prepare our employees and systems for responding to a successful attack by developing inventories of spare equipment and processes for preserving reliability in the unlikely event our key operational systems were to be compromised.

As part of our commitment to security, Ben Fowke, Xcel Energy chairman and CEO, is a member of the National Infrastructure Advisory Council, which advises the President on ways the nation can protect its critical infrastructure. He also participates in the Electric Sector Coordinating Council, which serves as the principle liaison between the federal government and the electric power sector on these issues.

Xcel Energy is subject to mandatory physical and cybersecurity standards adopted by the North American Electric Reliability Corporation (NERC). Our practice is to self-report all identified instances of actual or potential noncompliance with the NERC physical and cybersecurity standards, regardless of severity. In 2019, we discovered several instances of actual or potential noncompliance that have been determined to be minimal risk violations not subject to penalty or tracking of repeat violations. The severity of two instances of potential noncompliance with the NERC standards discovered in 2019 has not yet been determined, but we expect they will be determined to have posed minimal risk.