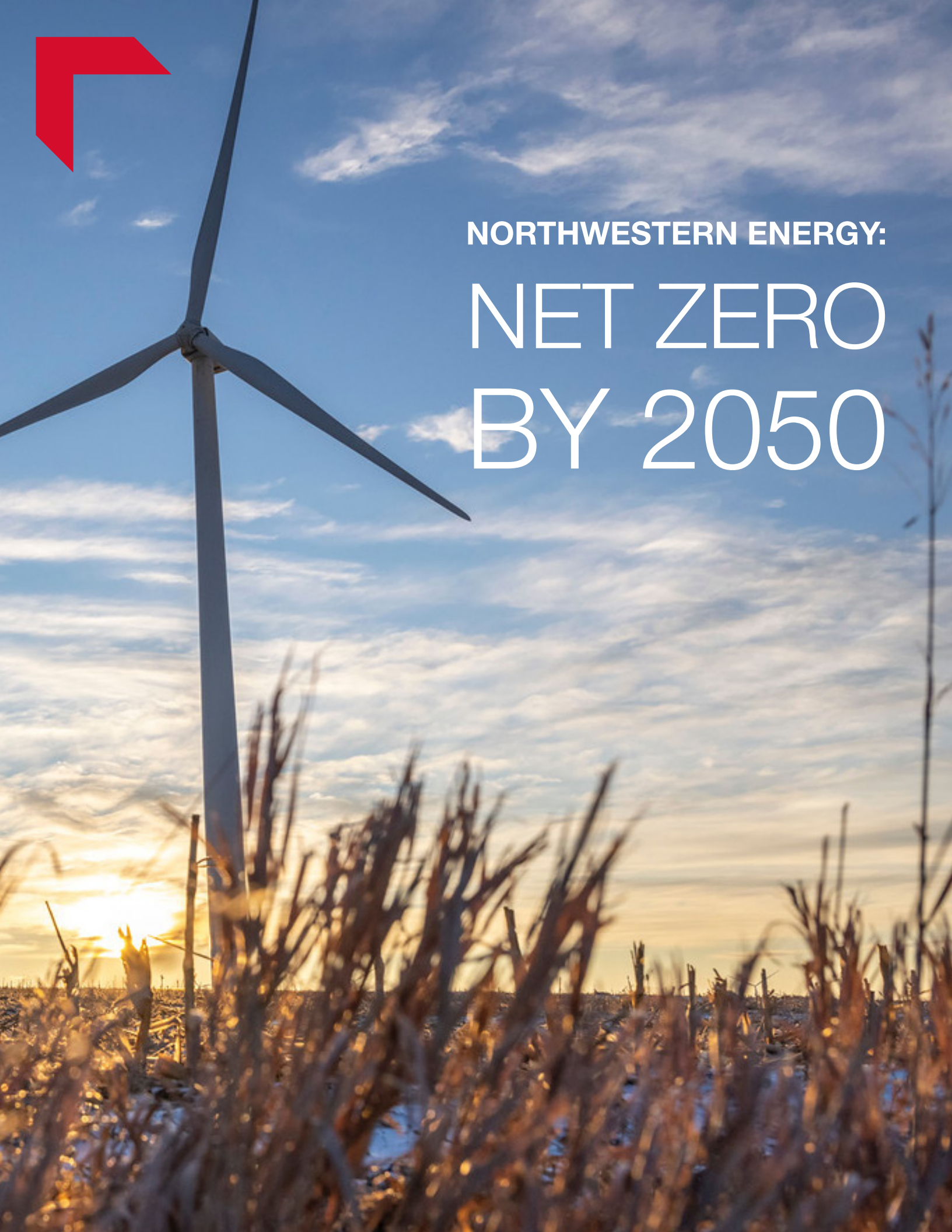
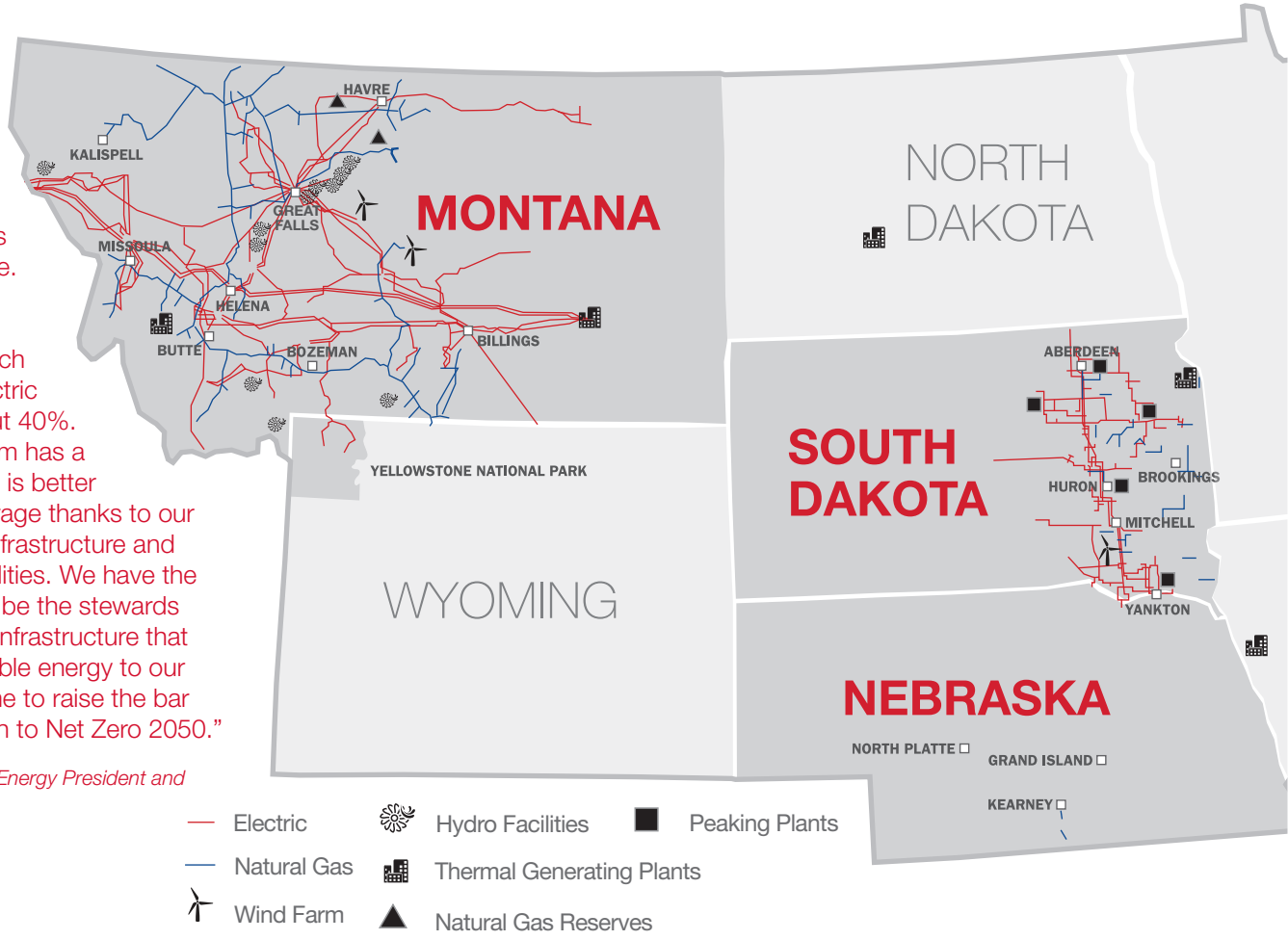


NORTHWESTERN ENERGY:

NET ZERO BY 2050

"NorthWestern Energy begins this transition to an even cleaner energy future building on the considerable progress we have already made. Our total portfolio of electric generation is 56% carbon free, which is higher than the electric utility average of about 40%. Our natural gas system has a leak per mile rate that is better than the industry average thanks to our investments in pipe infrastructure and leak detection capabilities. We have the tremendous honor to be the stewards of this critical energy infrastructure that delivers safe and reliable energy to our region. Now is the time to raise the bar and start the transition to Net Zero 2050."

-Brian Bird, *NorthWestern Energy President and Chief Operating Officer*



Over the past 100 years, NorthWestern Energy has maintained our commitment to provide customers with reliable and affordable electric and natural gas service while also being good stewards of the environment. We have responded to climate change, its implications and risks, by increasing our environmental sustainability efforts and our access to clean energy resources.

But more must be done.

WE ARE COMMITTED TO ACHIEVING NET-ZERO BY 2050 FOR SCOPE 1 AND 2 EMISSIONS

Though we are committed to net zero on Scope 1 and 2 emissions which are more in our control, we will endeavor to work with our suppliers and customers to also help them minimize their emissions (Scope 3). For instance, much of our contracted electric supply is wind resources that have helped us achieve our 56% total portfolio carbon free position. In addition, we continue to work with our customers on energy efficiency and other projects to help them reduce their emissions.

Reaching Net Zero will require a series of incremental steps and investments in energy generation, infrastructure, technology and sustainability practices, such as the electrification of our fleet. We must also maintain our commitment to providing reliable and affordable service to our customers. The technologies needed to reach this goal sooner are not currently available in a manner that is cost-effective for our company or our customers. Our needs require technologies and resources that are proven to be successful and cost-effective for both generation and capacity especially for critical long-duration service. Additionally, regulatory and policy support will be critical in the speed of our transformation. For these reasons, we believe the year 2050 is the appropriate realistic timeline for our commitment to reaching Net Zero carbon emissions.

SCOPE 1

The Environmental Protection Agency defines Scope 1 greenhouse gas emissions as those from activities in a company's control. NorthWestern Energy's Scope 1 emissions are primarily from owned electric generation plants, fugitive emissions from our natural gas production, gathering, transmission and distribution systems and company owned transportation fleet.

SCOPE 2

The Environmental Protection Agency defines Scope 2 greenhouse gas emissions as indirect emissions from purchased power used at facilities. NorthWestern Energy's Scope 2 emissions are primarily from the electric and natural gas utilized to heat, cool and power our offices, warehouses and other facilities.

SCOPE 3

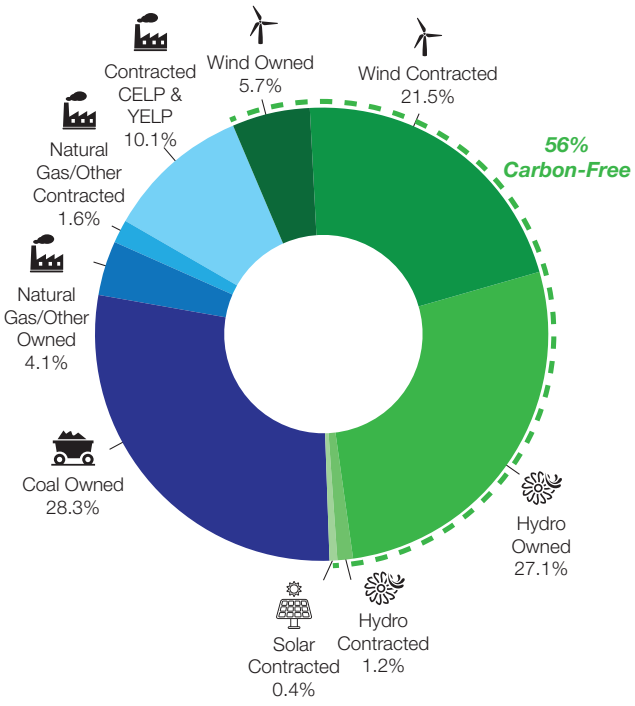
The Environmental Protection Agency defines Scope 3 greenhouse gas emissions as all other emissions. NorthWestern Energy's Scope 3 greenhouse gas emissions primarily result from the (upstream) production of electric and natural gas we purchase from third parties and the (downstream) consumption of electricity and natural gas by our customers. Emissions resulting from commercial travel and employee commuting are also included in Scope 3.

This document provides a high level overview of our plan to achieve net zero by 2050 for our electric and natural gas business, followed by a detailed emissions reduction plan for each component of our business.

OUR ELECTRIC OPERATIONS

Over the last 10 years, nearly all the owned electric generation we have put into service in Montana and South Dakota are carbon-free resources. In 2014, NorthWestern Energy bought Montana hydro facilities, adding 446 megawatts of clean generation to our portfolio. These facilities are the backbone of our generation fleet in that state. We built or bought more than 130 megawatts of wind facilities in both Montana and South Dakota. These clean resources have reduced our Scope 1 carbon emissions significantly over the last decade and reduced our need for thermal generation as a 24/7 energy source.

NORTHWESTERN ENERGY
2021 ELECTRIC GENERATION PORTFOLIO
BASED ON MWH OF OWNED AND LONG-TERM CONTRACTED RESOURCES



Contracted energy from Colstrip Energy Limited Partners (CELP), Yellowstone Energy Limited Partners (YELP) as well as a majority of the contracted wind, hydro and solar are federally mandated Qualifying Facilities, as defined under the Public Utility Regulatory Policies Act of 1978 (PURPA).

NorthWestern does not own all the renewable energy certificates (RECs) generated by contracted resources, and periodically sells its own RECs with proceeds benefiting retail customers. Accordingly, we cannot represent that 100% of carbon-free energy in the portfolio was delivered to our customers.

WE NEED A DIVERSE GENERATION PORTFOLIO

Our customers need energy they can rely on. During periods of severe weather conditions, or simply when the wind is not blowing or the sun is not shining, our customers depend on our cost-effective thermal assets to provide critical reliability. In our electric business, our owned and contracted supply resources are 56% clean (approximately one-third hydro-electric generation, one-third wind generation, and one-third thermal generation). This is ALREADY better than the electric industry as the exhibit below shows.

NorthWestern Energy - 2021 Electric Portfolio

55.9% Carbon-Free Electricity Portfolio
from Owned and Long-Term Contract Resources - Based on MWh's

U.S. Electric Utilities - 2020 Net Electric Generation

39.9% Carbon-Free
U.S. Electric Utilities Net Generation - Based on MWh's

Source: EIA.gov Table 7.2b Electric Net Generation: U.S. Electric Power Sector - 2020

RELIABILITY REQUIRES A BALANCED MIX OF RESOURCES

We are proud of our diverse generation fleet of hydro, wind, natural gas and coal resources. Each has a role to play in serving our customers. Over time we will close our coal plants at the earlier of depreciable life or when the plant is no longer cost effective. Until longer duration carbon free resources are available and cost effective, we are likely going to need natural gas fired generation to supplant the output and capacity provided by our coal resources. The natural gas-powered plants we are building in South Dakota (Bob Glanzer Generating Station) and in Montana (Yellowstone County Generating Station) will provide on-demand resources to support the variability of wind and solar projects coming onto our system and help serve our customers during extended periods of peak demand.

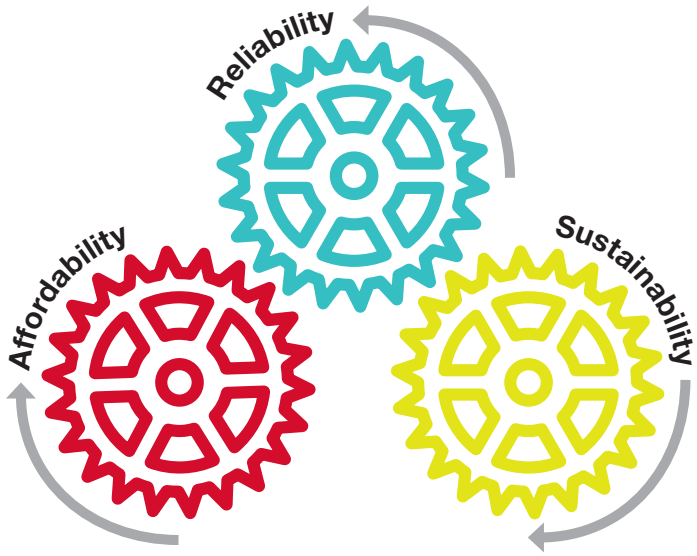
Over time, the natural gas plants and other thermal generation on our system will be used less as new cleaner, cost-effective resources are available. As these plants operate less, they will of course, emit less carbon. Nonetheless, we believe some of our natural gas resources will occasionally be needed beyond 2050 to meet customers' peak energy needs. To achieve net zero, we will procure available carbon offsets. Though a balanced mix of resources is important we will continue to transition over time to additional carbon free resources. In fact, we believe by 2035 we will only procure carbon free resources going forward. That is when we believe longer duration resources will be available and cost effective.

A RELIABLE TRANSITION PATH

We hold minority ownership in each of our coal plants and do not have the ability to dictate the ultimate retirement date of these units. At both our Colstrip plant in Montana and our Coyote plant serving customers in South Dakota, majority owners are planning to exit the facilities earlier than the current expected useful life date. This puts us in a difficult situation since these resources are cost-effective ways to provide energy during critical times.

It is our hope to operate the Colstrip and Coyote coal plants through their useful lives, and then replace them, at the right time and price, with newer and proven technologies which we believe will be available in the future. We see our coal plant resources as a necessary bridge to long duration, clean resources and technologies not yet developed. We are certainly excited about the rapid development of newer nuclear technologies and advances in hydrogen, but neither is proven and cost-effective today, nor are they expected to be in the near term. We are evaluating additional technologies like geothermal, pumped hydro storage and long duration battery storage as well. We believe advances in technology will allow us to avoid adding any incremental carbon-emitting generating resources after 2035.

A balance is required between sustainability, reliability and affordability. A successful energy transition will require a delicate balance between all three.



OUR NATURAL GAS OPERATIONS

NorthWestern Energy has 9,683 miles of gas transmission and distribution pipe. In addition, we have gas production, compression, and underground storage operations. These gas systems can be a source of leaks – either through normal operation or if damaged. We have already taken numerous actions to reduce methane and carbon emissions on our gas system.

- We have no cast iron or bare steel pipe on our system, which historically have been associated with higher leak rates.
- We replace aging pipe infrastructure and have improved our leak detection capabilities, resulting in better-than-industry average (lower) leaks per mile.
- Through our energy efficiency efforts, we have reduced the amount of gas needed by our customers. Nonetheless, as our region grows, demand for gas grows, especially at peak.

NET ZERO CARBON AND METHANE EMISSIONS BY 2050

As with our electric systems, the foundation for service to our gas customers is reliability, affordability and environmental sustainability. Our approach to Net Zero by 2050 will be primarily focused on Scope 1 emissions. To accomplish our 2050 goal, we will first take steps to reduce our methane emissions 30% by 2030 from a 2020 base. Through continued pipeline infrastructure investments, improved compression operations, improved leak detection, and other operational changes, we believe we will achieve the necessary methane reduction. We will also reduce the amount of flaring in our operations to reduce carbon emissions.

Going forward from 2030 to 2050, we will rely on new technologies and increased investments in pipe infrastructure to ensure our pipeline system, gas production, compression, and storage operations are tight. Any remaining methane or carbon emissions by 2050, albeit small, will be offset with carbon credits.

One carbon offset that will be considered is the production and delivery of renewable natural gas (RNG) for our customers. Whether that RNG is produced by us (Scope 1) or another party (Scope 3), it will dramatically reduce methane emissions. RNG production will be delivered into our South Dakota gas infrastructure in 2022, and we continue to evaluate ways we and others can increase the amount of RNG delivered onto our system in the future. Finally, we will monitor other cleaner fuels like hydrogen to consider as a replacement for natural gas when those resources become cost effective.

OTHER INITIATIVES TO REDUCE EMISSIONS

ENERGY EFFICIENCY

NorthWestern offers efficiency programs to customers. It is a way to help our customers reduce their emissions while also reducing our downstream Scope 3 emissions. Since the late 1970s, we have performed services and offered programs to assist our Montana customers with the wise and efficient use of energy. Over the years, our Efficiency Plus (E+) programs have included energy audits and virtual home energy assessments, electric and natural gas energy efficiency rebate programs, low-income energy assistance, and small-scale renewable activities. We provide training and continuing education to contractors and trade allies.

In 2020, E+ programs produced energy savings totaling **67,606 MWh** and **498,267 therms** for a total savings of **$11.6 million.**

AUTOMATED METERING INFRASTRUCTURE

Another way we will help customers reduce their carbon footprint is by providing better information to allow them to manage their energy use. The roll-out of automated metering infrastructure (AMI) is finished in South Dakota and will be completed in Montana over the next two years. AMI meters will allow our customers to access real-time information on their energy use and better analytics to make changes on their side of our meter to reduce their bills.

On our side of the meter, AMI helps us reduce emissions through two means. First, we will be able to significantly reduce dispatch frequency and miles traveled by our fleet of trucks. Secondly, AMI will help with volt/VAR optimization which will reduce emissions while providing the same power quality.

GRID AND GAS INFRASTRUCTURE

We continue to invest in the modernization of our grid and gas infrastructure which will provide us with more information, enabling us to reduce the energy needed to serve our customers.

We are deploying small scale renewables with battery storage in some difficult-to-serve locations to improve reliability in cleaner ways. Initially small pilots were deployed to better understand how these resources could help improve capacity, reliability and resiliency on our grid. We are planning to roll out this design on a much larger scale to improve rural reliability and to reduce emissions.

ELECTRIFICATION OF FLEET VEHICLES

We will electrify our fleet of 1,200 vehicles and equipment. In 2022, we will begin replacing vehicles and equipment at the end of their useful lives with electric alternatives. By 2030, we intend to replace 30% of our light-duty class vehicles (about 100 cars and light trucks), 20% of new medium and heavy-duty vehicles, and 30% of new bucket trucks with electric vehicles. In addition, by 2030, all new forklift replacements will be electric. We drive 13 million miles each year to serve our customers, so the emission reductions of going to EVs will be substantial.

EV INFRASTRUCTURE INVESTMENTS

We are developing turnkey installation of new charging infrastructure along highway corridors at commercial customers' properties in Montana and South Dakota.

In addition, we are conducting an in-depth analysis to design programs for business customers to ensure our electric infrastructure is adequate and efficient for significant EV charging growth.

SUSTAINABLE PROCUREMENT COMMITTEE

Finally, our employees are doing their part to reduce our carbon footprint. In 2021, we formed a Sustainable Procurement Committee, made up of employees from across our service territories, to take meaningful steps to ensure actions and operations at all of our facilities are more environmentally friendly and sustainable. The committee developed procurement and practice guidelines to be implemented in our facilities in 2022. These guidelines will continue to develop and evolve, with employee feedback and experience.

WORKING TOGETHER TO DELIVER A BRIGHT FUTURE

We will continue to increase NorthWestern Energy's environmental sustainability and create an even cleaner portfolio of electric and gas resources and infrastructure for our customers and communities. 100% Net Zero by 2050 is achievable for our electric and natural gas business by responsibly taking incremental steps toward this goal and maintaining our commitment to reliable, affordable, environmentally sustainable service capable of meeting the needs of all customers. Public policy support and alignment with customers is essential to achieve these goals.

NET ZERO BY 2050

Electric Operations

Carbon-Free Resources
Continue transition to a carbon-free portfolio

Natural Gas Plants
Gas plants needed to offset intermittency of renewable energy and will ultimately transition to peak load only

Fossil Fuel Transition
Retire coal plants the earlier of depreciable life or when no longer cost effective

Natural Gas Operations

Pipeline Modernization
Replace aging pipe and other infrastructure to minimize leaks

Enhanced Leak Detection
Use technology to improve leak detection and expand plant emission monitoring

Development of Alternative Fuels
Renewable natural gas and/or Hydrogen

Other Actions

Partner with customers on emission reductions
Enhance energy efficiency programs, expand green energy offering and develop other solutions for customers.

Electric Vehicles
Convert fleet to electric over time and develop infrastructure to support EVs

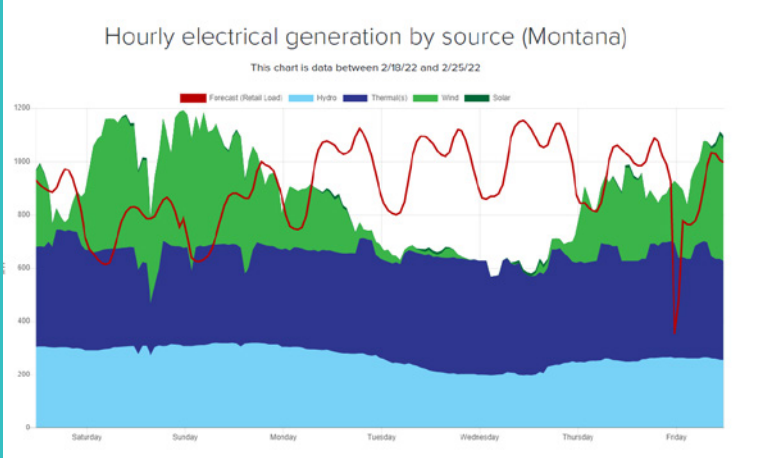
Carbon Offsets
Utilize carbon offsets as necessary

NorthWestern Energy's Electric Emissions Reduction Plan

NorthWestern Energy's approach to serving our customers' energy requirements reflects a carefully considered balance between customer affordability, reliability, and our commitment to environmental stewardship and sustainability. At times, decisions require tradeoffs or prioritizations in order to maintain regulatory compliance or meet expectations from our stakeholders.

Environmental sustainability is at the foundation of all NorthWestern Energy's energy resource decision-making. However, we acknowledge the financial impact energy bills place on many of our customers and the significant amount of our low income customers' disposable income that is devoted to energy costs. In Montana it's estimated that about 25% of our customers are eligible for low income assistance and about half of those customers are living below the actual poverty level. Our resource acquisitions for the portfolio must continue to be focused on cost-effectiveness in order to help provide affordable energy bills.

The reliability of our system is also paramount when planning and operating our power system, especially during critical weather when it's bitterly cold and snowy or hot and sunny. From the generation data we collect for our system, we recognized the intermittent renewable generation, on our system, provides diminished capacity at times of key demand. In the winter, this diminished capacity frequently occurs for a large number of hours or even days. In fact, during our peak load day in February 2022, over 950MWs of power were imported onto our system since wind resources were largely unavailable. Even if battery storage would have been available to us, it would have only provided us with 4 hours of capacity. As shown in the chart below, we actually encountered 4 days (not hours) of extreme temperatures. This is why long duration resources are important to our reliability.



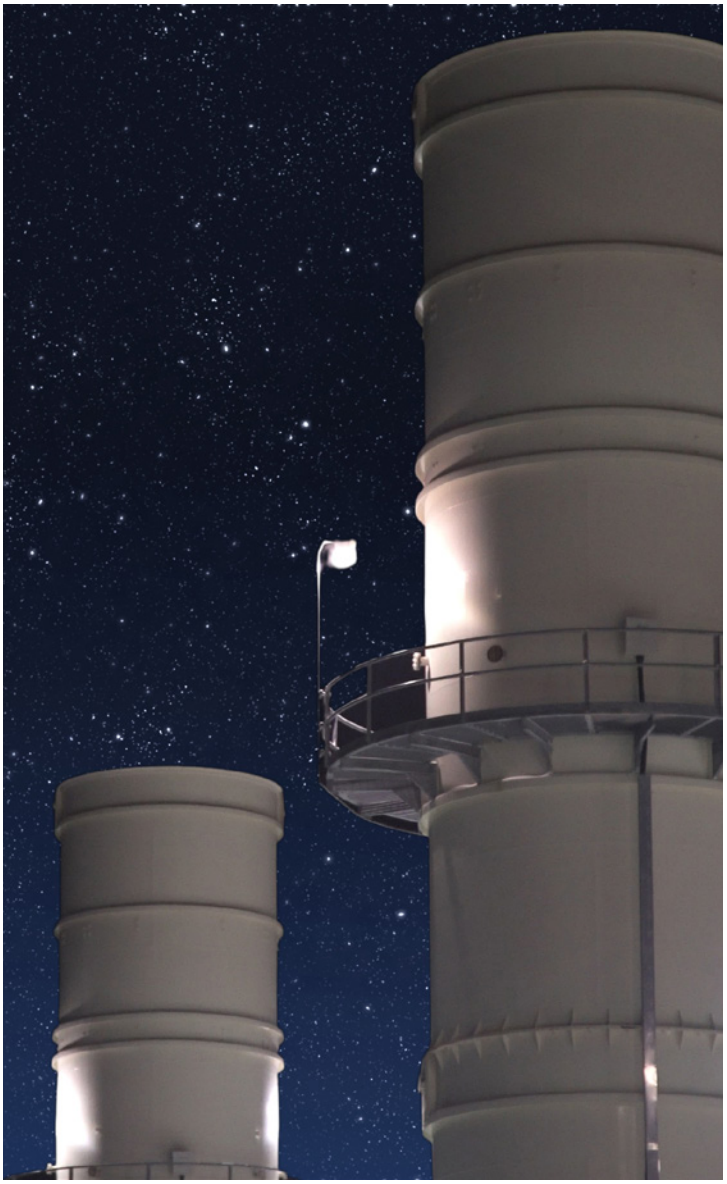
The Yellowstone County Generating Station and the Beartooth Battery project, along with a 5-year power purchase agreement with Powerex for 100 megawatts of capacity and energy products delivered from the BC Hydrosystem, were selected from a request for proposals issued in January 2020 by NorthWestern Energy for long-term capacity resources. This selection is the most diverse and flexible option at a cost-effective price for our customers.

Adding these resources to NorthWestern Energy's energy generation and supply contracts serving our Montana customers will reduce some of the risk of relying on market purchases to meet 40-50% of peak energy demand – risk to reliability and price stability – that impacts our customers today.

NorthWestern Energy must have resources that can provide service through an entire high-demand period at different load levels. NorthWestern Energy must have resources that can generate throughout the entire length of a high energy demand event, such as back-to-back days of extreme cold or hot weather, and resources that can also ramp up and down to adjust to load levels.

In addition, capacity resources are required to be available to meet Resource Adequacy requirements and keep the grid stable. Natural gas generation such as the Yellowstone County Generating Station, will have these capabilities.

Short-term storage, such as Beartooth Battery, and variable generation, such as wind and solar, cannot provide sustained energy over the duration



of a multi-day extreme weather event without significantly overbuilding the resources.

While ensuring affordability and reliability, environmental sustainability drives how we are planning to meet and serve our customers' and society's future energy needs. We provide our customers electricity service in both South Dakota and Montana with low carbon electric portfolios, implementing innovative technology, supporting de-carbonization of our state's transportation sectors, while also supporting stable and affordable energy bills for our customers. NorthWestern Energy's electric portfolio is diverse, comprised of owned and contracted generation using multiple fuels from the sun, wind and water to coal and natural gas. Importantly, NorthWestern Energy already has a low-carbon based electric portfolio. In 2020, NorthWestern's total electric generation portfolio was 65% carbon free. In 2021 this percentage decreased to 56%, primarily due to a decrease in wind and hydroelectric generation due to weather and several retrofitting projects at our hydro plants designed to increase their available capacity. Nonetheless, NorthWestern Energy's portfolio starts at a point today that is well ahead of the rest of our industry, which has an average of 40% carbon-free.

Our electric portfolio is a diverse mix of resources using various fuels. Currently, about 40% of our portfolio is derived from long-term contracts and power purchases from resources such as waste coal and petroleum coke (both from facilities that are federally required Qualified Facilities) along with natural gas, hydro, wind and solar. The power purchase contracts we have entered into includes a high percentage of carbon-free generation. Our owned and long-term contracted resources play a critical role in ensuring our customers a reliable and affordable product.

In 2021, our portfolio delivered about 16% more carbon-free energy than the national average. NorthWestern is striving to improve and transition our fleet in order to significantly reduce carbon emissions over the next 2 decades.

The table at the bottom of the page illustrates how effective NorthWestern has been in acquiring both cost-effective and environmentally sustainable generation for our portfolios. In fact we have added about 850 MW of carbon-free generation between 2014 and 2020.

The utility industry is currently focusing efforts on moderating and eventually eliminating what are referred to as Scope 1 emissions. NorthWestern's Scope 1 emissions are associated with our currently owned generation assets and the assets we are projecting to own in the future. A majority of our current Scope 1 emissions come from our minority ownership in four coal plants; one plant serves our Montana customers and three serve our South Dakota customers. The estimated carbon emissions from those plants in 2021 totaled approximately 2.46 million metric tons. We currently have gas peaking plants in both Montana and South Dakota but they collectively produce a much lower level of carbon emissions (approximately 0.21 million metric tons). A table of our owned fossil fueled generation is shown below.

Figure 1: NorthWestern Energy owned fossil fueled generation

Coal

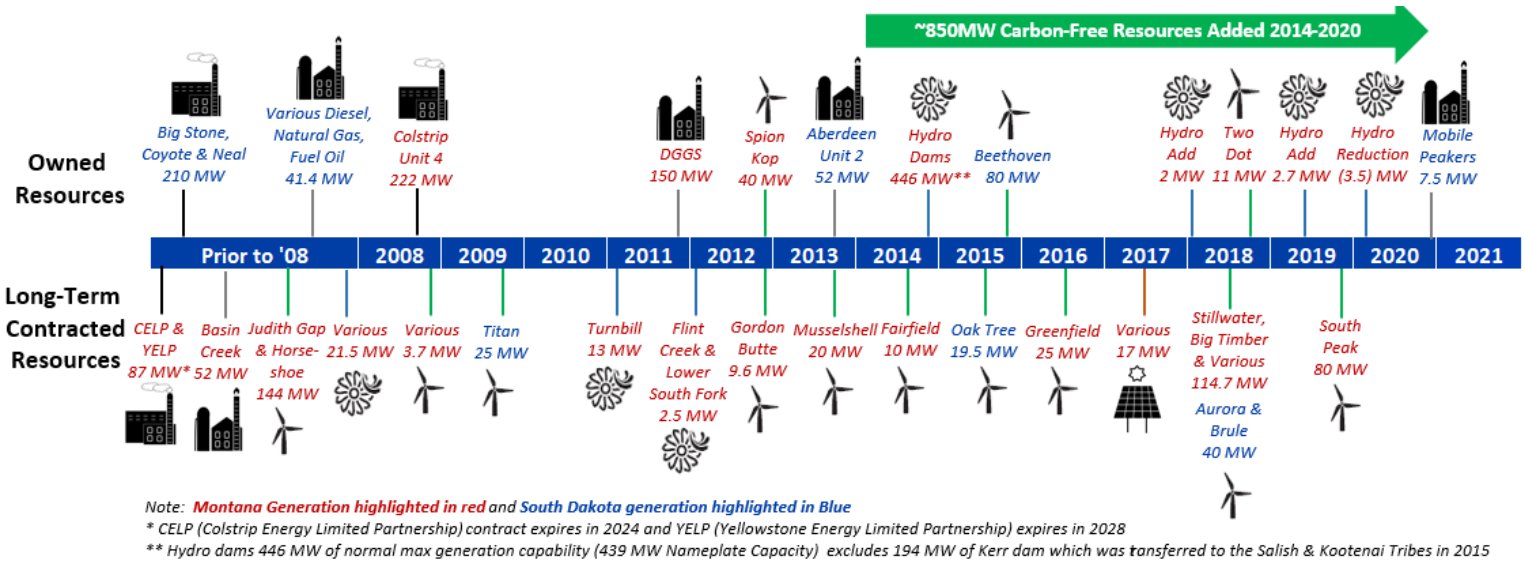
Name	Owned MW Capacity	% Ownership	Location	Expected Year of Retirement*	Generation - MWh's				Emissions - Metric Tons			
					2018	2019	2020	2021	2018	2019	2020	2021E
Colstrip Unit 4	222	30.0%	Montana	2042	1,315,188	1,429,074	975,445	1,455,321	1,441,522	1,564,749	1,248,162	1,688,172
Big Stone	111	23.4%	South Dakota	2046	454,487	524,742	358,384	373,915	492,072	563,623	413,598	403,454
Neal 4	56	8.7%	Iowa	2040	260,314	123,054	61,038	122,512	249,636	119,026	59,858	115,529
Coyote	43	10.0%	North Dakota	2041	301,654	203,820	262,584	228,875	337,798	229,253	291,489	257,256

Natural Gas Peakers

Name	Owned MW Capacity	% Ownership	Location	Expected Year of Retirement*	Generation - MWh's				Emissions - Metric Tons			
					2018	2019	2020	2021	2018	2019	2020	2021E
Dave Gates Generating Station	150	100.0%	Montana	2045	219,951	224,039	177,383	263,673	149,040	153,664	126,467	170,000
Aberdeen Peakers	80	100.0%	South Dakota	2054	35,666	48,334	26,693	54,899	23,761	32,002	19,709	36,782
Misc. Combustion Turbine Units & Small Diesel Units	25	100.0%	South Dakota	Various	14,227	3,521	1,611	-	9,545	2,365	1,082	-

*These dates are the expected years of retirement which are also end of the plants' depreciable lives. As minority owners in all four coal plants, other owners could dictate earlier retirement dates, and the plants could be retired earlier if they are no longer economic to operate.

Figure 2: NorthWestern Energy Owned and Long-Term Contracted Electric Portfolio by Capacity



Note: **Montana Generation highlighted in red** and **South Dakota generation highlighted in Blue**

* CELP (Colstrip Energy Limited Partnership) contract expires in 2024 and YELP (Yellowstone Energy Limited Partnership) expires in 2028

** Hydro dams 446 MW of normal max generation capability (439 MW Nameplate Capacity) excludes 194 MW of Kerr dam which was transferred to the Salish & Kootenai Tribes in 2015

NorthWestern does not own all the renewable energy certificates (RECs) generated by contracted resources, and periodically sells its own RECs with proceeds benefiting retail customers. Accordingly, we cannot represent that 100% of carbon-free energy in the portfolio was delivered to our customers.

NET ZERO STATEMENT

In 2018, NorthWestern issued a Montana only 90% reduction to our carbon emission intensity by 2045 off of a 2010 base for electric generation. We stated that we would update that goal and now NorthWestern Energy has a companywide goal, using Scope 1 and 2 measurements, of being Net Zero carbon emissions no later than 2050. In addition, NorthWestern is pledging to only acquire non-carbon emitting generation resources beyond 2035.

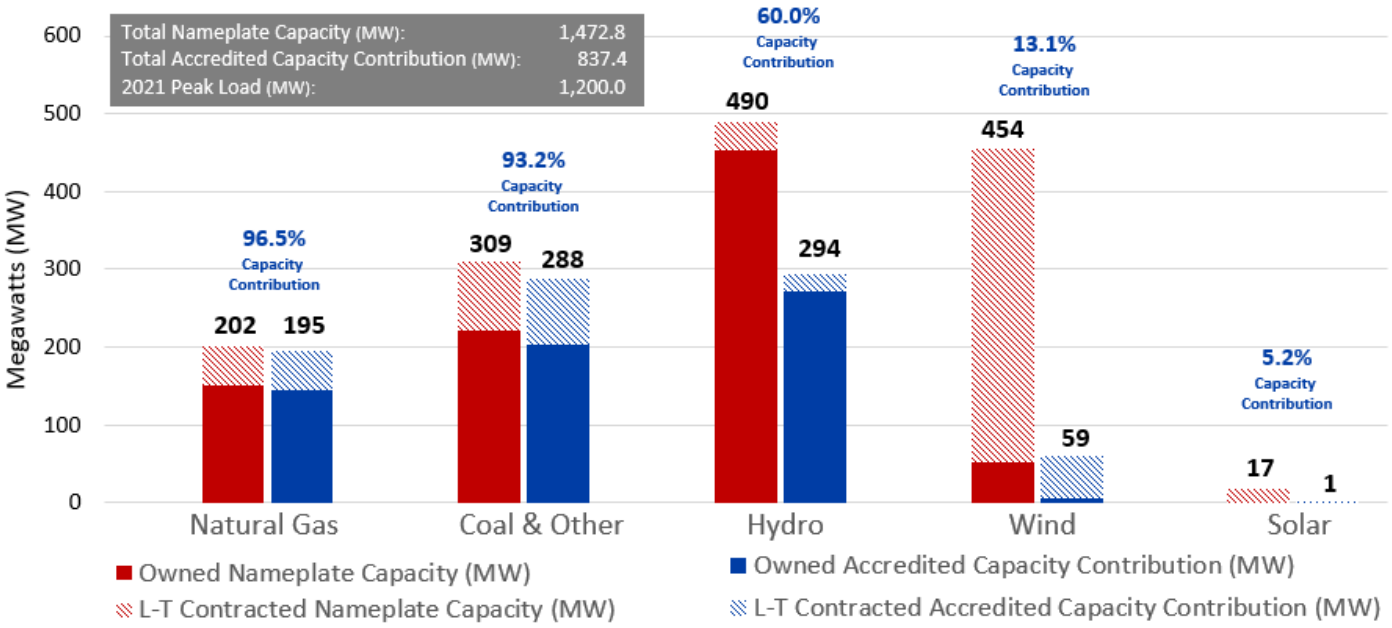
Resource Additions 2022-2035

Between now and 2035 NorthWestern must obtain additional long duration capacity to maintain reliability. Given the large amount of intermittent generation (e.g., wind and solar), lack of dispatchable on-demand generation, and a hydro system that is largely run of the river, additions of dispatchable thermal generation capacity remain necessary to maintain grid reliability as we transition to Net Zero. These additions will help to continue to reliably and cost effectively serve our customers. They will also be necessary to meet minimum participation requirements for joining regional reliability organizations and likely future regional transmission organizations.

There are also some contracted thermal resources in our portfolio that greatly affect our portfolio carbon emissions. NorthWestern does not own them, therefore they do not affect our Scope 1 emissions, but they do increase the carbon intensity of our portfolio of resources. These resources were carbon emitting Qualifying Facilities that NorthWestern was obligated under federal law to purchase. These resources in 2018 were responsible for 36% of carbon production but only 11% of generation. Our preference is to replace these resources as their contracts expire, with non-carbon emitting resources or limited natural gas resources which will result in a significant decrease in the carbon intensity of our portfolio.

Between now and 2035 NorthWestern has reliability concerns for meeting peak periods of capacity demand. Continued significant reliance on market purchases, especially for those periods of highest demand and lowest amount of available supply places unacceptable affordability and reliability risk onto our customers. NorthWestern has worked diligently to increase our access to capacity resources that only need to operate at key critical times. The table below illustrates several key points emphasizing the need to only phase out thermal generators when they have met their depreciable or economic life. Their contribution to meeting our capacity requirements on a per megawatt basis far exceeds the contribution that intermittent wind or solar provides.

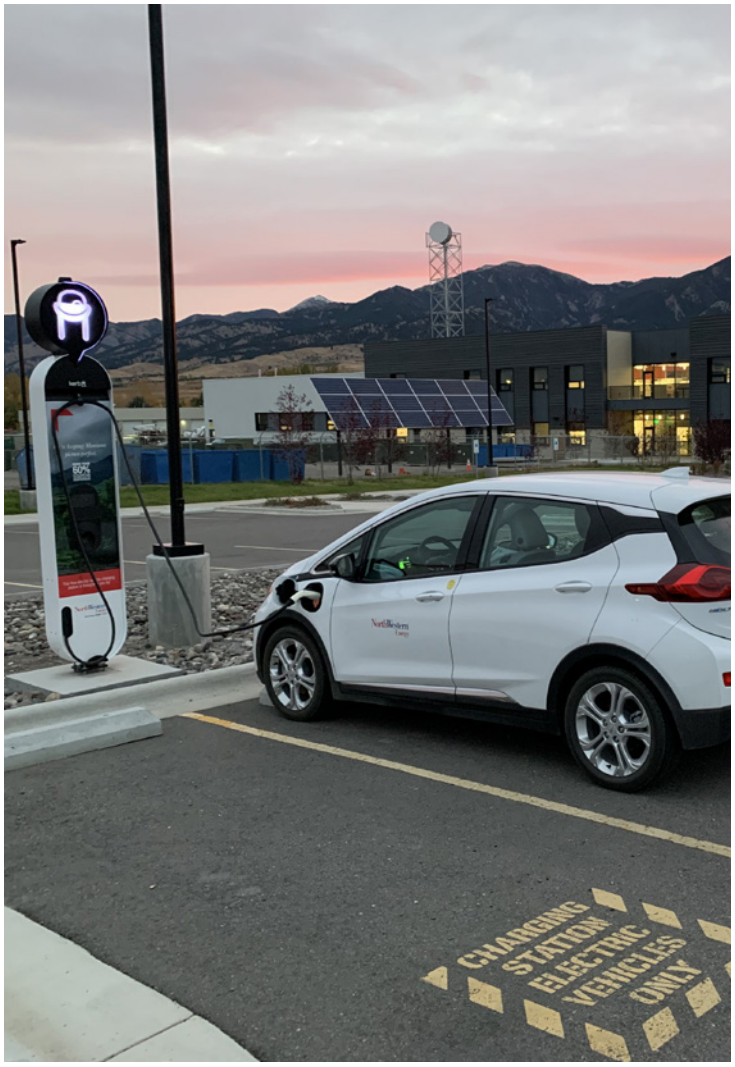
Figure 3: NorthWestern Energy Montana – Accredited Capacity Contribution of Resources (2021 Resource Mix of Owned and Long-Term (L-T) Contracted Resources)



Accredited Capacity Contribution is the ability of each resource fuel-type to contribute to meet demand during peak energy usage by customers.

Accredited Capacity Contribution or Peak Load Contribution is based on Effective Load Carrying Capability (ELCC) E3 Study on Peak Load Measurement for NorthWestern Energy's resources that are on-line or in service as of 12/31/2021 and the ELCC is based on 2021 values.

Coal & Other: 222MW Colstrip (30% ownership in jointly owned coal plant) and 87 MW of Federally mandated Qualifying Facilities (52MW Petroleum-coke contract with Yellowstone Energy Limited Partnership and 35MW waste coal contract with Colstrip Energy Limited Partnership).



Though the chart shown in Figure 3 is only for our Montana operations, it does a good job differentiating the amount of capacity from various generation resources. The Attributed Capacity of thermal (fossil fueled) generation ranges from about 92% to 97%; while that of wind is only about 13%. This means, to provide an equivalent amount of reliability we would have to build or acquire nearly seven more megawatts of wind for every one megawatt of thermal generation. Obviously spending this type of money would seriously affect our ability to affordably serve our customers. Over time we expect technology to enhance the performance and costs of this intermittent generation as well as storage.

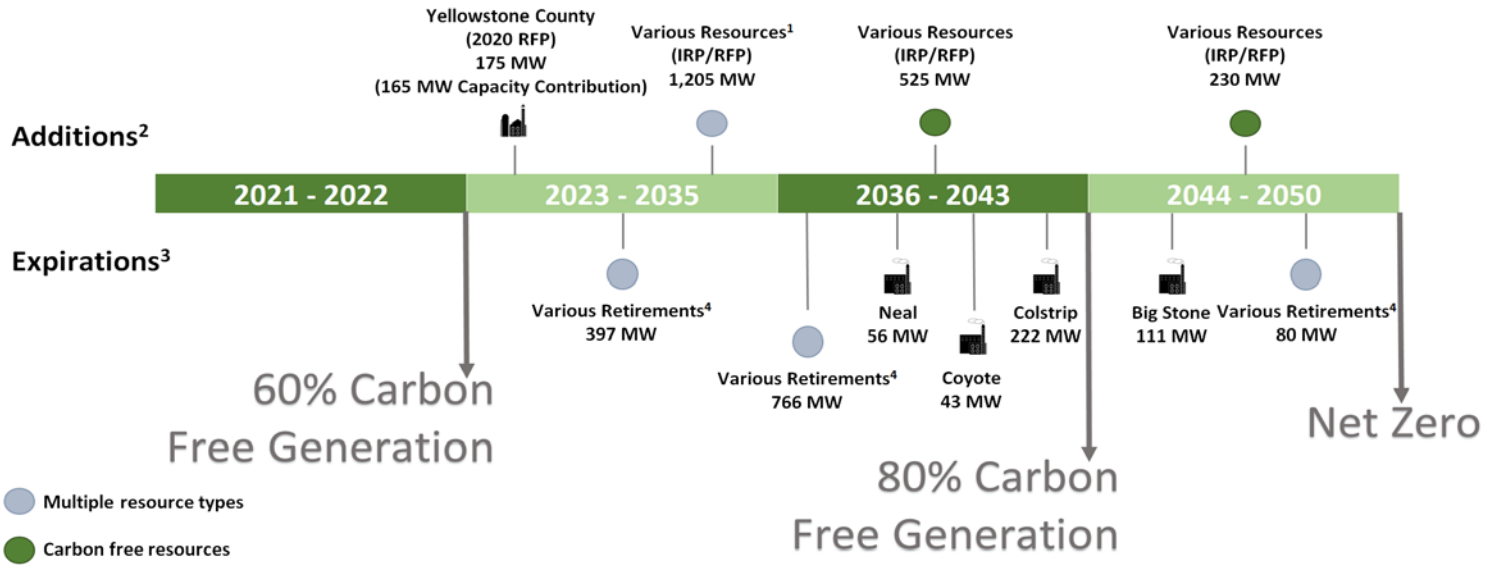
The Attributed Capacity is not a calculation derived from NorthWestern but is the capacity contribution as estimated by resource and region specific industry standard calculations. This points to a very clear need to prudently manage the roll off of thermal generation from our portfolio. Another important point is that our hydro fleet, which produces clean, carbon free energy also has an impressive 60% capacity contribution and is forecastable.

Resources Beyond 2035

Beyond 2035, large investments in cost-effective, long duration, carbon free generation, such as hydro, pumped storage, geothermal, small modular nuclear reactors or hydrogen fueled generation will be necessary. Technological advancements along with decreasing costs of carbon-free generation and the regionalization of intermittent generation will significantly contribute to achieve our goal of Net Zero carbon emissions by 2050. The pace of transition to Net Zero will depend on the timing of technological advancements, cost, and retirement of our existing coal fleet.

As depicted in Figure 4 we do not specify which resources we will be adding to our fleet over time. In South Dakota and Montana, NorthWestern develops an Integrated Resource Plan (Plan) every 2 and 3 years, respectively. These Plans presented to our state regulatory commissions, identify resource needs, known and expected risks, as well as key variables to be used in evaluating resources. NorthWestern then undertakes a transparent resource solicitation process, run by an independent third party, to evaluate the least cost resources that address key risks and needs identified by the Plan. All generation types have the opportunity to participate in our Request for Proposals. Therefore NorthWestern is unable to state with certainty the specific resources that will be acquired to meet future need. The future solicitation processes will provide that clarity.

Figure 4: Projected Owned and Contracted Resources



1. Includes resources from the 2020 Montana RFP (Beartooth battery and PowerEx contract) Resources from the RFP are currently under construction and total 325 MW
2. Additions: owned resources = 175 MW / contracted resources = 564 MW / unknown resources = 1,396 MW
3. Expirations: owned resources = 432 MW / contracted resources = 1,243 MW
4. These include long-term contracted resources, many of which are carbon-free, whose contract ends during the timeline presented above. Contracts may be renewed if they are cost effective and meet strategic goals and / or portfolio needs at the time of contract expiration.

Our current owned thermal assets provide baseload and peaking generation for service reliability and protection against market price volatility and resource scarcity. These resources generate an average of 2.5 GWh of the total annual load of 8 GWh. Since our coal-based generation currently provides such a reliable, economical source of baseload generation - and the plants are jointly owned - our plan for the future must include retiring these facilities at the end of their respective depreciable lives.

Early retirement of these facilities would be dependent on agreements with other joint owners, new laws or regulations, market pricing and technological advancements. However, due to the significant uncertainty and the many variables governing retirement dates, we are making conservative assumptions about the future of our coal-based generation.

NorthWestern will also be participating in partnerships with key renewable market leaders and technological frontrunners in order to leverage their expertise and help guide our future non-carbon emitting investments.

Portfolio Transition

State laws and regulations focusing on reliable and cost effective electric and gas service have been the primary drivers in developing portfolios for both Montana and South Dakota. As NorthWestern transitions its portfolio, new resources will be acquired using a competitive bidding process and with resource selections meeting the regulatory requirements in the states we operate. Additional resources needed to maintain resource adequacy will match the needs of customers with the most cost effective resources available at that time. Our pledge to only acquire non-carbon emitting resources after 2035 must also comply with the applicable laws and regulations in place at the time of acquisition.

A graphical representation of our road to Net Zero is provided in Figure 5. We expect our carbon emissions to approach zero as thermal facilities retire and are replaced with non-carbon emitting resources. Any remaining carbon emissions from necessary dispatchable thermal resources are expected to be offset through carbon credits to reach Net Zero by 2050.

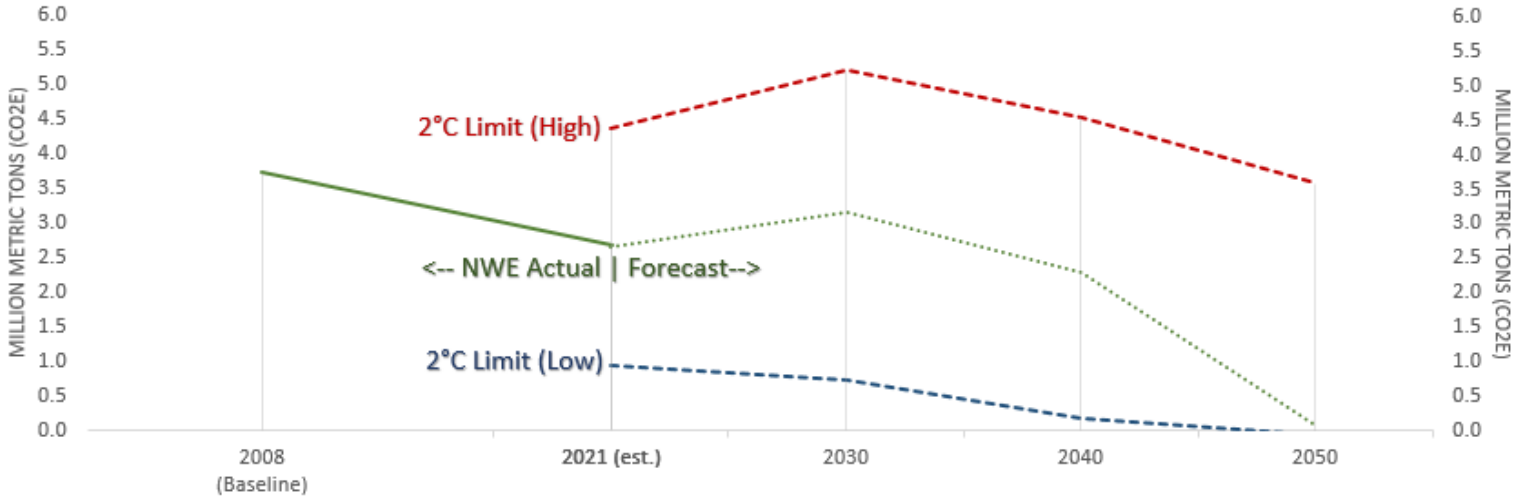
ALIGNING NORTHWESTERN'S SCOPE 1 EMISSIONS WITH CLIMATE-CHANGE POLICY

In addition to driving towards Net Zero by 2050, NorthWestern is also making portfolio decisions with the intent to align with the Paris Agreement – a landmark international accord adopted in 2015 with an intent to limit the global temperature increase this century to less than 2°C. In order to help make informed resource planning decisions that align with the 2°C goal, NorthWestern referenced two studies completed by the Electric Power Research Institute (EPRI).[1] EPRI is an independent, nonprofit organization for public interest energy and environmental research, focusing on electricity generation, delivery, and use to enhance the quality of life by making electric power safe, reliable, affordable, and environmentally responsible. EPRI conducts research, development, and demonstration projects for the benefit of the public in the United States and internationally.

The EPRI studies provide the public with scientifically-based technical resources that can serve as foundations for informed decision-making on company climate policy scenario analysis and emissions goals. The EPRI studies evaluate, summarize and provide insights for over 1,200 climate model emissions scenarios from the Intergovernmental Panel on Climate Change (IPCC) and the International Energy Agency (IEA) as well as others. The studies assess scenarios and pathways aligning with the 2°C and are useful tools to gain an understanding of the state of the science associated with climate modeling and to aid in informing and developing sector and company goals.

Figure 5 illustrates NorthWestern's modeling of our actual and forecasted emissions versus plausible global carbon emission reduction pathways published in EPRI's reports. Our projected emissions reductions associated with this scenario fall within the bookends of the plausible ranges for the 2°C pathways, with high-end of the range peaking by mid-century.[2,3,4] NorthWestern will continue to assess its energy supply portfolios against plausible pathways and scenario models as the scientific assessments of those scenarios and pathways continue to be updated and revised.

Figure 5: NorthWestern Energy's Electric Generation Portfolio Scope 1 Emissions vs Global Emission Reduction Pathways Consistent with 2°C Limit*



*Sources: Developed from Rose and Scott (2020) and Rose and Scott (2018) based on 529 IPCC and IEA scenarios. 2005 Global CO2 emissions assumed at approximately 35 Billion metric tons.

[1]Rose, S. and Scott, M. 2018. Grounding Decisions: A Scientific Foundation for Companies Considering Global Climate Scenarios and Greenhouse Gas Goals. EPRI, Palo Alto, CA. #3002014510. Rose, S., M. Scott, Review of 1.5°C and Other Newer Global Emissions Scenarios: Insights for Company and Financial Climate Low-Carbon Transition Risk Assessment and Greenhouse Gas Goal Setting. EPRI, Palo Alto, CA: 2020. 3002018053.

[2]There are limitations associated with using global pathways as benchmarks. As noted in Rose and Scott, 2018 and 2020, results from global scenarios are problematic for direct use due to embedded assumptions, missing relevant data, and other future socioeconomic uncertainties. Global scenarios are also not representative of individual companies, or specific company and local regulatory requirements, such as those governing least cost resources and maintaining certain levels of grid reliability. Results shouldn't be used to imply all companies should have the same relative emissions trajectories or be used as a prescription for an individual company.

[3]An initial attainability assessment was done to apply a high-level plausibility filter to the global pathways. Pathways unlikely to be realized, such as those assuming immediate global cooperation, economy-wide coordination, global emissions peaking prior to 2020 and rapid global deployment of negative emissions technologies were filtered.

[4]Actual emissions will vary from projected emissions

NorthWestern Energy's Natural Gas Emissions Reduction Plan

NorthWestern Energy is committing to net zero carbon by 2050, which also includes our plan to reduce methane emissions by 30% by 2030 and ultimately eliminate all methane emissions by 2050.

At NorthWestern Energy, we've already avoided or reduced methane emissions from our natural gas distribution, transmission, and storage systems over the past decade by maintaining our plastic and cathodically protected steel distribution lines, embarking on a storage well inspection program, and installing Excess Flow Valves on our distribution system. Additionally, NorthWestern Energy has modernized the design of compressor stations to minimize the blowdown of compressor piping during testing and activation of emergency shut down system. We have also modernized the design of many of our city gate stations to include low bleed or, in many cases, no bleed regulating systems as well as using monitor regulator systems to avoid blowing gas into the atmosphere with relief valves in the event of a failure. This report outlines the path to further emissions reductions by:

By achieving our 30% reduction goal by 2030, we'll reduce our methane emissions by more than 4,000 metric tons — that's the equivalent of removing about 22,000 vehicles from the road for a year or preserving more than 122,000 acres of forest.

- Accelerating the leak survey program.
- Rehabilitating or retiring older infrastructure.
- Embracing new technologies and operational practices to keep gas flowing more safely and efficiently than ever.
- Energy efficiency efforts.

We expect these measures — detailed in the following pages — will reduce methane emissions by 30% by 2030.

From 2030 to 2050, we will continue to optimize the steps noted above and will invest in new technologies that will help us further reduce emissions. One example is the use of renewable natural gas (RNG), which has a negative methane footprint, in our supply portfolio. We are working with RNG producers and expect to take on as much as 1.2 bcf of RNG in 2022.

By achieving our 30% reduction goal, we'll reduce our methane emissions by more than 4,000 metric tons — that's the equivalent of removing about 22,000 vehicles from the road for a year or preserving more than 122,000 acres of forest.

OUR NATURAL GAS SYSTEM

Our natural gas system is essential to keep our fellow citizens warm and safe. In our climate it is an especially cost-effective heating source. Therefore, demand is increasing. An efficient natural gas system can contribute to controlling green house gases. NorthWestern Energy operates a natural gas system serving about 300,000 natural gas customers in Montana, South Dakota, and Nebraska. Our natural gas system contains over 2,200 miles of high-pressure transmission pipelines, more than 7,400 miles of distribution gas mains and about 285,000 gas service connections. Our gas distribution system is made up of 2,384 miles of cathodically protected coated steel lines and 4,994 miles of plastic line. We do not have any bare steel or cast iron pipelines on our system, which historically have been associated with high leak rates. We move more than 40 billion cubic feet (Bcf) of natural gas through our transmission system annually.

Compressor stations move natural gas through our interstate transmission pipeline system, to and from our underground storage fields and to city gate stations, where odor is added and pressure is regulated for safe delivery to homes and businesses.

We own and operate 10 transmission, 4 storage, and 8 production compressor stations and 3 underground gas storage fields with a total storage capacity of 17.85 Bcf. We also receive supply from interstate and third-party pipeline sources. Compressor stations inject gas into storage fields during the summer when we can purchase gas at lower cost, transport gas through the system and withdraw gas from storage fields to increase system supply during the winter when demand is highest, and allow us to achieve system supply and demand balancing.

METHANE AS A GREENHOUSE GAS

Methane is the primary constituent of natural gas. The United States Environmental Protection Agency (EPA) states that methane (CH_4) accounted for almost 10 percent of all U.S. greenhouse gas (GHG) emissions from human activities. These emissions come from many sources, including development and transportation of oil and natural gas, livestock, solid waste disposal, and waste water treatment. Methane also is produced naturally in some ecosystems such as wetlands. However, more than 60 percent of global CH_4 emissions come from human activities. As a greenhouse gas, methane in the atmosphere traps a portion of the heat radiated from the Earth's surface, contributing to climate change. While methane remains in the atmosphere for much less time (approximately a decade) than carbon dioxide (potentially thousands of years), methane absorbs much more energy and traps more heat than carbon dioxide.

While methane remains in the atmosphere for much less time than carbon dioxide, it is about 25 times more effective at trapping heat than carbon dioxide.

METHANE EMISSIONS FROM NATURAL GAS SYSTEMS

Producing, processing, storing, transmitting, and distributing natural gas can result in two types of methane emissions: vented gas or fugitive emissions.

Gas sometimes is intentionally vented to create safe working conditions for maintenance and repair, or as part of emergency testing procedures. Vented gas is typically tracked and associated with specific events or locations.

By contrast, fugitive emissions are distributed across the gas system and are usually associated with minute leaks along low-pressure pipe, fittings, or valves that do not pose a public safety risk. Fugitive emissions are mitigated through robust system maintenance processes, leak survey, and repair and the replacement of older, vintage materials, and equipment.

The EPA requires owners of natural gas transmission, storage, and distribution systems to report emissions of methane and other GHGs from some sources annually if the emissions exceed a threshold. Gas system owners also can participate in voluntary reporting programs designed to reduce methane emissions.

VOLUNTARY COMMITMENTS

We joined the EPA Methane Challenge program and are committed to using best management practices to further reduce fugitive methane emissions. The Methane Challenge is a voluntary program. Participants transparently report systematic and comprehensive actions to reduce methane emissions and are recognized as leaders in reducing methane emissions in the U.S. Reducing methane emissions reduces operational risk, increases efficiency, and demonstrates company concern for the environment, with benefits spanning from climate change to air quality improvements to conservation of a non-renewable energy resource. Methane Challenge partners also enjoy the benefits of the Natural Gas STAR Program such as information sharing, technology transfer, peer networking, voluntary annual reporting, and communication of achievements.

Our Montana operations meet the reporting threshold of the Environmental Protection Agency's Greenhouse Gas Reporting Program, however, we also report greenhouse gas emissions from our South Dakota and Nebraska distribution systems, including methane, under the EPA's GHGRP even though only our Montana operations meet the reporting threshold. In addition to GHG reporting, we voluntarily disclose emissions metrics developed by the American Gas Association (AGA) and the Edison Electric Institute (EEI). The AGA-EEI partnership, led by a CEO taskforce, established the Natural Gas Sustainability Initiative (NGSI), which is in the process of developing additional metrics beyond those required by mandatory reporting.

WHAT WE'RE DOING NOW

Enhanced Infrastructure Replacement Program

NorthWestern Energy began "covering" mechanical couplings on older pipelines decades ago to improve cathodic protection on our pipelines as well as minimize the risk of venting natural gas at these couplings. Additionally, we are replacing sections of these lines to improve the reliability and safety of the lines.

Our city gate replacement and farm tap conversion program converts large farm taps to city gate stations to improve the reliability of service to the customer and replaces older equipment with more modern equipment that is less likely to vent. Our city gate replacement program also replaces aging infrastructure with modern control systems designed for low or no bleed pressure regulation. We also incorporate monitor regulators to minimize the risk of blowing methane into the atmosphere while maintaining safe, reliable service to our customers.

Our compressor modernization program includes using best available control technology on older compressors. This technology improves the emissions from the units as well as reducing the time and effort to bring units on line when they are needed to meet load demands.

Additionally, we recently started the in-line inspection of our existing pipelines. Many of these lines are in high or moderate consequence areas. Modern technology allows for a thorough inspection of lines, again minimizing the risk of venting gas as well as improving the safety and reliability of the gas transmission system.

Gas Distribution Infrastructure Program (GDIP)

Distribution mains are the pipelines connecting the natural gas transmission system to the service lines that deliver gas to individual customers. In 2013, we started the Gas Distribution Infrastructure Program (GDIP). One aspect of the program is to prevent leaks on aging infrastructure. The GDIP uses data to calculate an asset's life risk and rank prioritization for end of life replacement. By identifying and prioritizing sections of line for replacement, leaks are prevented from happening thus reducing potential methane emissions. As part of this process, Excess Flow Valves (EFVs), which shut-off the flow of gas if a line is damaged, are being installed where replacement work takes place.

EFVs are also being installed on new construction. Through 2020 we have replaced over 50 miles of main with this program.

Annual Leak Survey – Distribution System

We currently conduct annual leak surveys of our distribution system. Codes require a survey of the entire system once every five years by surveying 20% of the system annually. We exceed the code requirement by surveying our entire system once every four years by surveying a quarter of the system annually. With the accelerated leak survey, leaks are found and repaired more quickly than if we only complied with the minimal code requirements.

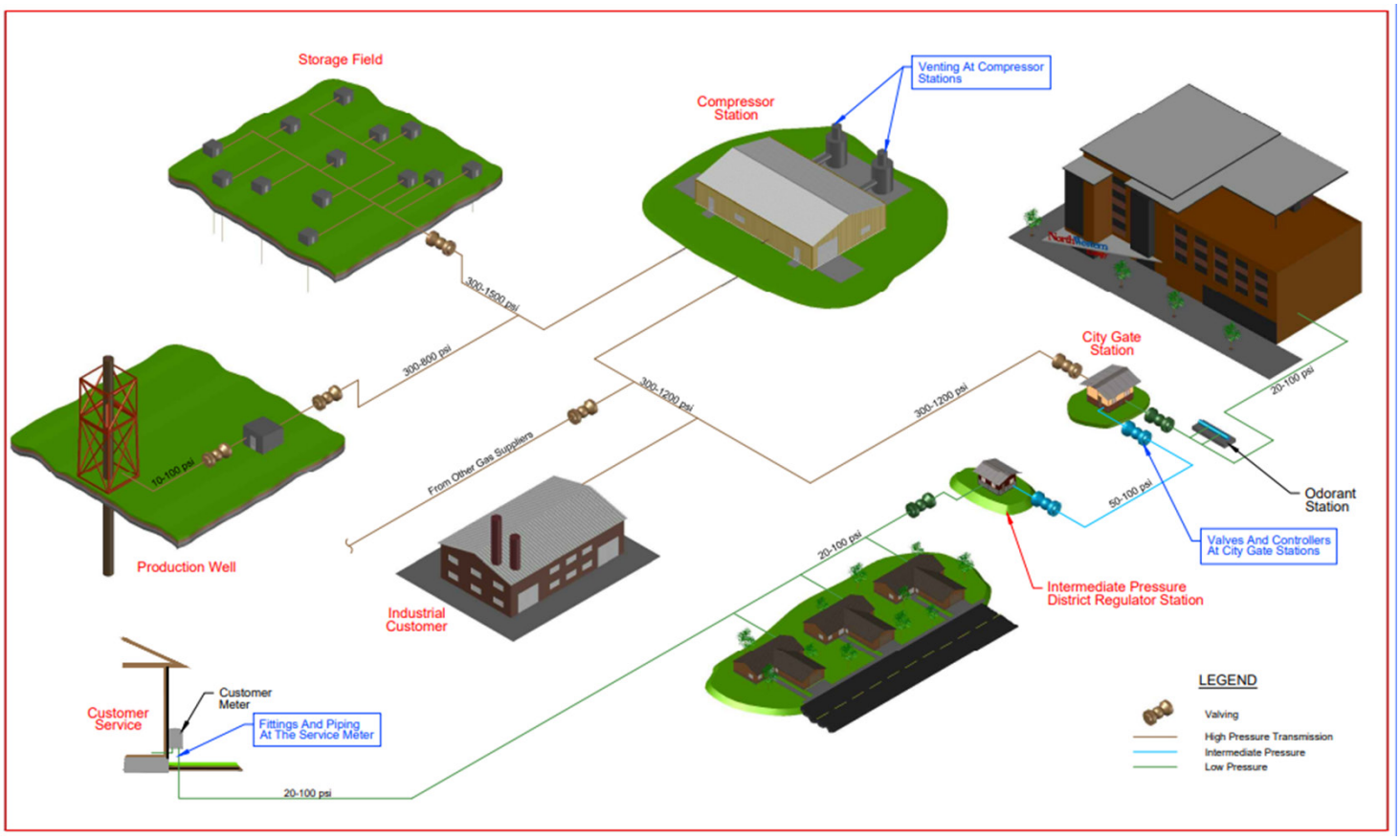
Damage Prevention Program

Third parties damage to natural gas infrastructure account for two thirds of all leaks on our distribution system. An excavator, for example, can accidentally damage a gas pipeline while working on a large civic project such as repairing roads or water mains. In 2020, there were over 230 excavation damages on our gas system that resulted in methane emissions. The emissions range from less than 1 cubic foot when a small gas service line is damaged, to larger gas losses when a gas main is damaged. An estimated 200,000 Mcf of gas was lost in 2020 due to excavation damages to our service lines and mains.

We work to reduce damage incidents and associated emissions by participating in the Call Before You Dig / 811 system. We also have public safety employees who participate in contractor safety fairs and develop information for contractors on safe digging practices and the dangers associated with excavating near natural gas infrastructure. Similarly, our public safety program promotes safe digging practices for the public. This program, among other things, educates homeowners on the need to call 811 at least three days prior to any digging.

Our gas transmission system has a third-party process in Montana and South Dakota that includes a standby requirement and process. Standbys are completed on all crossings and parallel digs that will be in close proximity of the transmission lines. Anyone that submits a locate request that is in the vicinity of a transmission line is contacted to discuss work that is planned. This same process takes place with excavations near our production and gathering system.

Figure 6: Typical Natural Gas System (from production through distribution, along with potential sources of methane emissions)



Storage Well Integrity Inspection Program

In 2018, we implemented an Underground Storage Integrity Management Plan (UGSIM). Part of the UGSIM is an 8-year effort to inspect each underground natural gas storage well, increasing overall well integrity and performance. We assess all storage wells for overall integrity, in addition to other safety, environmental and performance standards. Equipment is updated at this time to improve overall integrity and reliability. To date we have replaced leaking wellheads, valves, and fittings. We are also installing additional monitoring and implementing procedures to create a culture of proactive leak detection at our storage wells. After the initial baseline inspection period the UGSIM will continue on and storage wells will be continuously evaluated and inspected using a risk model. The risk model will drive which wells are inspected and how often based on data we gather as the program progresses.

Well Abandonment Program

Since 2015 NorthWestern Energy has plugged 57 non-producing wells, initially on a reactive as-needed basis or if funds were available. Beginning in 2019 a dedicated program was created to plug approximately 10 wells per year. The process of plugging a well removes all above-grade equipment such as valves and flanges that may contribute to fugitive emissions. We will continue plugging at least 10 wells each year.

Production Artificial Lift

Artificial lift systems such as pumping units, velocity strings, and plunger lifts are installed on candidate wells to alleviate the need to blow wells to atmosphere to remove liquids that accumulate in the natural gas well bores. The installation of the artificial lift systems can drastically reduce the amount of gas that is blown to atmosphere. The artificial lift systems also are able to extend the life of the well. Artificial lift installations are anticipated to be part of the ongoing operations for the life of the fields.

Liquid Removal

At our storage wells we are reducing the need for natural gas emissions associated with liquids removal from the wellbores and from the liquid traps associated with the pipeline gathering system. We are evaluating the critical flow rates in our storage wells that will keep liquids unloaded out of the well and in a separation vessel at the service, reducing the need to blow wells to atmosphere to clean out fluid accumulation in the wellbore. Automation at the separation vessels will eliminate the need to blow water out of the pipelines and separation vessels with methane. We are evaluating improved systems for handling water production at the wellhead. By removing the water as soon as possible we can reduce our need to use natural gas to blow the fluids out of the pipeline. One of our wells has automation installed and its effectiveness is being evaluated to establish the best operating procedure. After a process is proven and determined to be good practice, the automation on the separation vessels could be introduced companywide with 20-30 installations completed each year until all storage well separation vessels are upgraded.

Temporary Compression on Transmission Pipeline

For employee and public safety, we must lower pressure and remove natural gas from a high-pressure transmission pipeline before performing maintenance and other work. Historically, we reduce the pipeline's pressure as much as possible by rerouting the gas into neighboring pipelines, then vent the remainder of the gas to create a safe working condition. The venting practice, while standard in the industry, results in methane emissions and wastes valuable natural gas. That's why over the past decade we've implemented procedures to drawdown pipelines using city gates or compressor stations. In 2022, we plan to implement temporary compression to further reduce the pressure in our pipeline during maintenance activities. The drawdown procedures and use of temporary compressor technology allows us to transfer more natural gas to adjacent pipelines and significantly reduces the volume vented to the atmosphere or flared when appropriate. We also proactively replace transmission pipelines to reduce the number of repair projects and lower the likelihood of venting. We are committed to using drawdown procedures and/or temporary compression as well as flaring for planned transmission projects. These actions will reduce methane emissions.

Impact of Current Programs and Practices

Our current programs and practices to reduce methane emissions exemplify our commitment to environmentally sustainable practices. Replacing pipelines and wells with modern designs and materials, or retiring unnecessary infrastructure, reduces emissions. Similarly, protecting wellheads from damage proactively reduces emission risk.

OUR PLANS FOR THE FUTURE

Accelerated Leak Reduction Program

Natural gas pipelines, especially those at lower pressure such as distribution pipelines, can leak gas and thus contribute to emissions. Our leak detection program tracks leak repair as required by federal regulations. We are currently exceeding federal and state survey requirements and are looking to improve upon this even more.

Asset Retirements/Replacements

As part of our long term strategy that includes compliance with federal regulations, we will continue to evaluate all natural gas assets for effectiveness in operations as well as for their impact on the environment. For example, our maximum allowable operating pressure, MAOP, reconfirmation program is slated to spend approximately $15 million per year through 2035 to replace assets that will no longer meet the recently enacted, more stringent requirements of federal regulations. This program is intended to improve the safety and reliability of the gas system, but also has the benefit of reducing methane emissions as well as the risk for a substantial methane release.

We are also expanding a program in place for decades to replace obsolete control valves at metering and regulating stations throughout our service territory. This program extends into natural gas compression as well. An example is the removal of obsolete and underutilized gas compressors at our Telstad facility in 2015. NorthWestern removed a number of compressor units as well as the associated piping from this facility, thus reducing emissions and the potential for significant emissions. Many of the compressor units removed at this facility were installed in the 1950s. Another example was the removal of the original compressor units at our Absarokee Compressor facility and the replacement of these units in 2018 with modern compressors and new yard piping within the facility. Lastly, we currently have a program in our Dry Creek Storage facility to replace old gathering pipelines as well as valve assemblies and continue to evaluate the effectiveness of our existing compression at this facility.

Compressor Engine Rod Packing

Compressor station engines help pull gas from storage fields and push the gas through our system. Each compressor engine and associated cylinders are fitted with piston rods and required "packing systems" that maintain a seal around the piston rod to prevent high-pressure gas from leaking. Even in new condition, however, packing systems have some small leaks. As these

systems age and engine alignment changes, more leaks tend to occur.

We will continue to evaluate how best to align rod replacement schedules with packing replacements to reduce emissions. We will use emission monitoring equipment to quantify and reduce emissions associated with compressor stations.

Compressor Station Emergency Testing

We conduct annual tests of the fire gate systems at our compressor stations which simulate the venting of natural gas from a compressor station upon detection of an ignition source. Fire gate testing causes methane to be released to the atmosphere. We will evaluate the best management practice of installing block valves that function as a bypass system. This could significantly reduce emissions to the atmosphere during testing. We will evaluate which compressor station sites are best suited for the technical feasibility of similar technologies.

Compressor Station Air Starters

Currently, natural gas is used to start our compressor engines, however, we will evaluate the possibility of using air instead. This involves installing large air compressors, dryers, and volume tanks along with some infrastructure modifications and changes.

Distribution System Leak Survey and Maintenance Alignment

We survey for leaks at our city gates and are looking to enhance our accelerated leak survey program. In addition, when sites are rebuilt or upgraded, upgraded equipment such as EFVs, and low bleed or no bleed pneumatic devices are installed, which can reduce fugitive emissions at these sites. While emissions from these systems are a small portion of our overall emissions, simple procedural changes and alignment can efficiently reduce methane emissions. We are looking to begin aligning leak surveys and findings with upgrade and maintenance schedules to prioritize sites with higher emission levels. This alignment is expected to lower emissions for these assets over the long term.

Renewable Natural Gas

Renewable natural gas (RNG), a pipeline-quality gas derived from biomass or other renewable sources, is a critical part of achieving our goal to have net zero methane emissions. In most cases, the sources of renewable gas — such as farms or wastewater treatment facilities — emit methane to the atmosphere. Methane that would otherwise be emitted is captured, conditioned for quality and used in the natural gas system. RNG is usually a carbon-negative fuel due to this capture process and will help compensate for any remaining unavoidable emissions on our natural gas system.

We currently are participating in two RNG projects with completion dates of July 2022. These two projects will have a minimum annual obligation of 225,750 mmbtu. Several additional projects are planned that would add at least 1,034,000 mmbtu of minimum annual obligation to our system.

By participating in the investment in this sustainable resource, we are contributing to the growth of the RNG industry. Our investment provides sectors such as agriculture and transportation with innovative opportunities to reduce their greenhouse gas emissions. RNG is likely the largest offset we will be able to use to ultimately reach our net zero goal in 2050.

Future Technology Evaluation

Future technologies may provide more opportunities to reduce methane emissions and allow us to measure our total system emissions more accurately. Currently, we use EPA emission factors to estimate our emissions but are looking towards new and proven technologies to directly measure methane emissions. We will also evaluate whether we can apply new technologies to our natural gas delivery system in the area of leak surveys, equipment, and work procedures.

NET ZERO GOAL

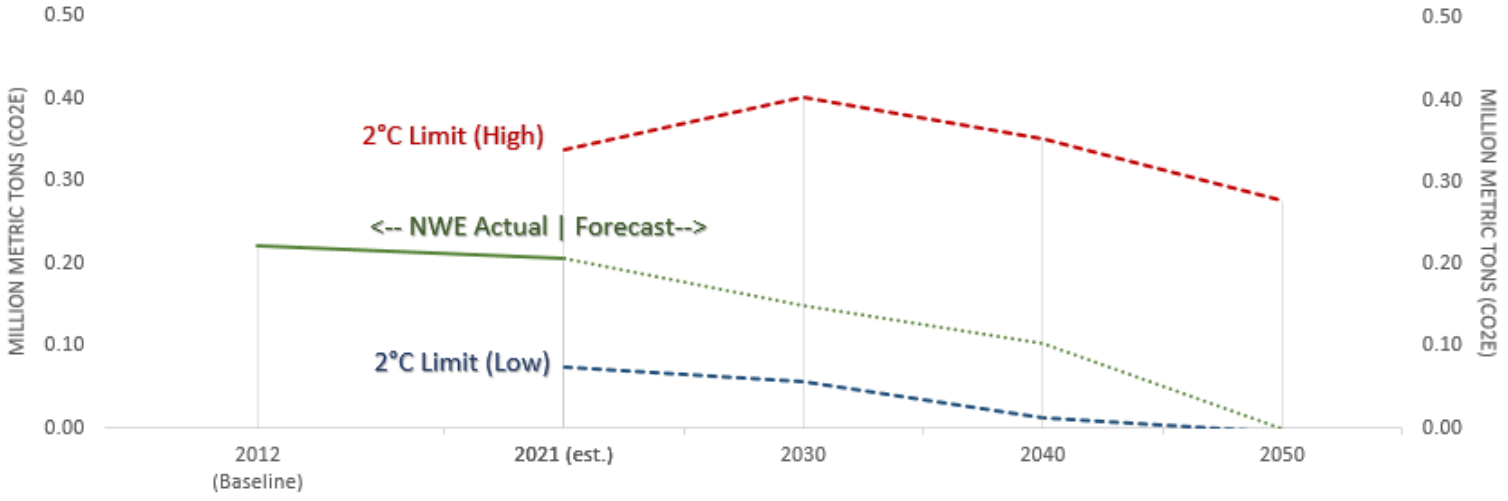
NorthWestern Energy is committed to emission reductions across our operations and is setting the ambitious target of a net zero methane emission gas delivery system by 2050. To accomplish this goal, we plan to reduce methane emissions from our natural gas delivery system by 30 percent by 2030 from 2020 levels.

This goal builds on reductions achieved through existing programs. Meeting the challenge of a 30 percent methane emissions reduction will require commitment to new practices, exceptional performance, and innovative solutions. It will also require policy and regulated support.

To reach Net Zero by 2050, we will continue improving our operations with advanced technologies not widely available today and will explore using cleaner fuels such as RNG to further clean our gas supply. In addition, if any emissions remain after these efforts we will deploy carbon credits as an offset to achieve net zero.

NorthWestern Energy is committed to industry-leading emission reductions across our operations and is setting the ambitious target of a net zero methane emission gas delivery system by 2050.

Figure 7: NorthWestern Energy's Natural Gas System Scope 1 Emissions vs Global Emission Reduction Pathways Consistent with 2°C Limit*



*Sources: Developed from Rose and Scott (2020) and Rose and Scott (2018) based on 529 IPCC and IEA scenarios. 2005 Global CO2 emissions assumed at approximately 35 Billion metric tons.

MARKET CONSIDERATIONS AND POLICIES

All choices we make in each of our regulatory jurisdictions are subject to prudency standards. For instance, in Montana we have a least-cost requirement when considering electric generation resources. This may not always result in the choice of the lowest carbon resources. Therefore, our regulators will be influential in the speed of our transformation. In addition, from a planning perspective, permitting processes for new resources are lengthy. We submit an integrated resources plan with regulators, obtain proposals for qualified resources as part of a formal request for proposals process, and retain an independent party to evaluate the selection of qualified resources. From a planning requirement, this process significantly increases the complexity of determining future resources.

We also will continue to monitor conditions that may affect our longer-term plans. This includes continually assessing the energy market conditions that affect the economics of our planned generation portfolio, such as prices for fuel and electricity. We will monitor expected customer demand and the adequacy and reliability of our portfolio resources to meet our customers' needs.

NorthWestern Energy will advocate for constructive energy policies, including those that address investment in energy infrastructure, incentives for clean energy technologies, and environmental regulations.

NorthWestern Energy will support policies that will enable the investment of critical infrastructure and oppose cost shifts for customers.

New technologies will be critical to achieving our goal of Net Zero by 2050. We will monitor these technologies as they are deployed to determine if they can be reliable, cost effective, and provide the clean outcomes we require to serve our customers.

Trends in customer demand will continue to drive our outlook for the need for generation resources. This includes the electrification trends mentioned earlier, along with continuing improvements in energy efficiency. Underlying economic trends are expected to produce modest increases in demand, and while the current pandemic is expected to continue to have significant short-term impacts on customer demand, the longer-term impacts are not known.

In addition to the trends in customer and investor attitudes and preferences, we must also consider the potential for changes in energy policy. One of the areas of great potential impact related to energy policy is addressing the risks of climate change. Other policies that could affect our planning include more stringent regulation of hydraulic fracking used to extract natural gas and policies promoting electrification of transportation and other uses of fossil fuels. Policies to incentivize the deployment of clean energy, such as production tax credits, investment tax credits, and potential changes in regulation of power plant emissions, water use, and waste handling may impact our planning

A number of future market conditions also influence our planning, and we have examined ranges of possibilities for such factors to test their potential impact. These factors include prices for natural gas, electric power, and the cost for debt and equity capital to fund infrastructure investments. The cost and reliability of our existing fleet of generation resources is important as we consider the specific actions necessary to implement our transition. We are actively engaged in regional market development in the West and work closely with SPP, WRAP, and CAISO-EIM. We will continue to evaluate the potential need for, and cost of, transmission infrastructure necessary to deliver increasing amounts of renewable energy to our customers. See the section of Forward Looking Statements for more considerations.

SUSTAINABILITY ACCOUNTING STANDARDS BOARD AND TASKFORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURE

The Sustainability Accounting Standards Board (SASB) voluntary reporting framework is used as the basis for sustainability reporting across multiple sectors. The SASB framework is designed to enable disclosure of company data and metrics in a clear and consistent manner so it can be utilized by our multiple stakeholders to make responsible and informed investment decisions. 2021 was NorthWestern Energy's first year mapping our ESG efforts to the SASB Standards. Our responses reflect year-end 2020 performance. Our SASB reporting can be found here.

The Taskforce on Climate-related Financial Disclosure (TCFD) is an expanded voluntary reporting framework used to further enhance the disclosure of climate-related information. The TCFD guidance supports informed decision making and capital allocation by investors, lenders and insurance underwriters. We have not finalized our TCFD analysis but expect to have this work completed in 2022. However, we believe there is value in sharing our preliminary thoughts on the Four Pillars of TCFD.

Governance Pillar: Our Board of Director's Governance committee is responsible for monitoring our ESG activities. In fact, ESG is now a standing item at each Board meeting during the Governance Committee. Other aspects of ESG, specifically those that are associated with our operations, are frequently addressed in our Safety, Environmental, Technology and Operations Committee. We established an ESG disclosure committee, chaired by the President and Chief Operating Officer. This committee meets monthly and is comprised of ESG subject matter experts throughout the company.

Strategy Pillar: We have been transitioning our generation portfolio to cleaner resources to reduce emissions. We have had great success through the addition of owned and contracted carbon-free resources. We see significant opportunity to continue to invest in assets to support this transition going forward. However, legislative and regulatory support of this transition will be necessary to ensure recovery of new investment and appropriate treatment on recovery of our existing fossil fuel resources - in the event these resources are retired in advance of their planned useful life. The Electric Business portion of this document highlights our preliminary portfolio analysis and its alignment with the Paris Accord (2 degree scenario).

Risk Management Pillar: The Company deploys a robust Enterprise Risk Management (ERM) program developed nearly 20 years ago. The ERM committee has identified wild fire as the largest climate related risk the company currently experiences. Over the last decade, we have made significant investment to clear hazard trees in heavily forested areas - especially focusing on those areas infested with mountain pine beetles. Those areas often have standing dead trees that are at a much higher risk of falling into our transmission and distribution power lines and sparking fire. In addition, with warmer temperatures and reduced precipitation, we are experiencing longer fire seasons. Both forested and prairie grass fires pose a risk to the company, its customers and communities. We continue to expand our fire mitigation activities to address these risks while also hardening our system against other physical and cyber related threats.

Metrics Pillar: We utilize several different frameworks to disclose our climate related metrics, including the industry specific templates developed in collaboration with the Edison Electric Institute and the American Gas Association. These reports can be found here. While our Net Zero 2050 target is specific to our Scope 1 and 2 emissions, we will continue to identify and assess our Scope 3 emissions. However, we currently believe there are too many complexities and variables outside our control to establish any Scope 3 targets at this time.

FORWARD LOOKING STATEMENTS

Statements in this report not based on historical facts are considered "forward-looking" and, accordingly, involve risks and uncertainties that could cause actual results to differ materially from those discussed. Although such forward-looking statements have been made in good faith and are based on reasonable assumptions, there is no assurance that the expected results will be achieved. These statements include (without limitation) statements as to future expectations, beliefs, plans, strategies, objectives, events, and conditions. In connection with the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, we are providing this cautionary statement to identify important factors that could cause actual results to differ materially from those anticipated. The following factors, in addition to those discussed within Risk Factors in our Annual Report on Form 10-K for the year ended December 31, 2021, and elsewhere in this report and in our other filings with the Securities and Exchange Commission, could cause actual results to differ materially from management expectations suggested in such forward-looking statements:

- federal, state or local administrative, regulatory, judicial, or legislative proceedings or actions, and any changes in laws, regulations, interpretations, policies and ratemaking determinations;
- the effects on demand for our services resulting from business and economic conditions or from technological advances, including advances in customer energy efficiency, energy storage, and private generation sources, which generate electricity at the site of consumption and are becoming more cost-competitive;
- our ability to align overall spending, both operating and capital, with frameworks established by our regulators and to recover these costs in a timely manner to earn the allowed return on equity;
- the cost and availability of fuel used to produce electricity; the cost and availability of purchased power, zero emission credits, renewable energy credits, and natural gas for distribution; and the level and volatility of future market prices for such commodities and credits, including our ability to recover the costs for such commodities and credits and our customers' tolerance for any related price increases;
- disruptions of the capital markets, actions of credit rating agencies or deterioration in our credit metrics, including the cost or availability of capital, including short-term credit and liquidity and our ability to finance a portfolio transition;
- the impact of weather conditions and other natural phenomena on us and our customers, including the impact of system outages;
- the construction, installation, performance, and / or the effects of breakdowns or failures of equipment in the operation of our electric and natural gas transmission and distribution systems and storage facilities, such as leaks, explosions, and mechanical problems, and compliance with safety regulations which could result in unanticipated liabilities or unplanned outages;
- the impact of current environmental laws and new, more stringent, or changing requirements, including those related to carbon dioxide that could limit or terminate the operation of certain of our generation assets, increase our operating costs or investment requirements, result in an impairment of our assets, cause us to sell our assets, reduce our customers' demand for electricity or natural gas, or otherwise have a negative financial effect;
- the impact of negative opinions of us or our utility services that our customers, legislators, or regulators may have or develop, which could result from a variety of factors, including failures in system reliability, failure to implement our investment plans or to protect sensitive customer information, increases in rates, or negative media coverage;
- the effects of strategic initiatives, including mergers, acquisitions, and divestitures; and
- acts of sabotage, war, terrorism, or other intentionally disruptive acts.

New factors emerge from time to time, and it is not possible for management to predict all of such factors, nor can it assess the impact of each such factor on the business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained or implied in any forward- looking statement. Given these uncertainties, undue reliance should not be placed on these forward-looking statements. Except to the extent required by the federal securities laws, we undertake no obligation to update or revise publicly any forward-looking statements to reflect new information or future events.