

2020-2034 Upper Midwest Resource Plan Page 1 of 126

## **Forward-looking Statements**

Except for the historical statements contained in this report, the matters discussed herein are forward-looking statements that are subject to certain risks, uncertainties and assumptions. Such forward-looking statements, including the 2019 EPS guidance, long-term EPS and dividend growth rate, as well as assumptions and other statements are intended to be identified in this document by the words "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "objective," "outlook," "plan," "project," "possible," "potential," "should," "will," "would" and similar expressions. Actual results may vary materially. Forward looking statements speak only as of the date they are made, and we expressly disclaim any obligation to update any forward-looking information. The following factors, in addition to those discussed elsewhere in this Annual Report on Form 10-K for the fiscal year ended Dec. 31, 2018 (including the items described under Factors Affecting Results of Operations; and the other risk factors listed from time to time by Xcel Energy Inc. in reports filed with the SEC, including "Risk Factors" in Item 1A of this Annual Report on Form 10-K hereto), could cause actual results to differ materially from management expectations as suggested by such forward-looking information: changes in environmental laws and regulations; climate change and other weather, natural disaster and resource depletion, including compliance with any accompanying legislative and regulatory changes; ability of subsidiaries to recover costs from customers; reductions in our credit ratings and the cost of maintaining certain contractual relationships; general economic conditions, including inflation rates, monetary fluctuations and their impact on capital expenditures and the ability of Xcel Energy Inc. and its subsidiaries to obtain financing on favorable terms; availability or cost of capital; our customers' and counterparties' ability to pay their debts to us; assumptions and costs relating to funding our employee benefit plans and health care benefits; our subsidiaries' ability to make dividend payments; tax laws; operational safety, including our nuclear generation facilities; successful long-term operational planning; commodity risks associated with energy markets and production; rising energy prices; costs of potential regulatory penalties; effects of geopolitical events, including war and acts of terrorism; cyber security threats and data security breaches; fuel costs; and employee work force and third party contractor factors.

Who We Are	4
Message from the CEO	6
Corporate Responsibility Governance	9
Defining Corporate Responsibility	g
Aligning with Corporate Strategic Priorities	10
Corporate Responsibility Governance	11
Stakeholder Engagement	13
Identifying Areas of Focus for Corporate Responsibility	15
About this Report	19
Customers and Communities	21
Earning Customer Satisfaction and Trust	
Raising Safety Awareness	
Partnering with Communities	
Corporate Citizenship	
Energy Innovation	
Renewable Energy	
Encouraging Efficient Energy Use	53
Company and Workplace	59
Corporate Compliance and Business Conduct	60
Our People and Culture	63
Our Journey to Zero	69
Total Rewards for Employees	
Providing Reliable and Secure Energy	78
Public Policy	
Supply Chain Management	89
Environment	93
Environmental Management	94
A Carbon-free Future	
Reducing Air and Other Emissions	
Managing Water Use	111
Preventing and Managing Waste	
Managing Wildlife and Habitat	122



### Who we are

Every day we power millions of homes and businesses across eight Western and Midwestern states. Our customers can count on us to be there 24/7 with safe, reliable energy. But, what we provide goes much deeper than that.

Based in Minneapolis, we are a recognized industry leader in delivering renewable energy and in reducing carbon and other emissions, efforts that have put us on a path to a more sustainable energy future. Through a growing range of innovative solutions, we continue to empower customers with energy options and alternatives to support their goals and objectives.

Destination 2050 is all about delivering on our bold vision for a carbon-free future. We are the first major U.S. energy provider to announce an aspiration to serve customers with 100% carbon-free electricity by 2050.

In a rapidly changing industry, we are taking a smart and thoughtful approach to how we produce and deliver energy, looking for better ways to serve our customers and anticipate their needs and expectations. Through our efforts, we are not just preparing for the future we are building it, today.

### **Our Vision**

We will be the preferred and trusted provider of the energy our customers need.

### **Our Mission**

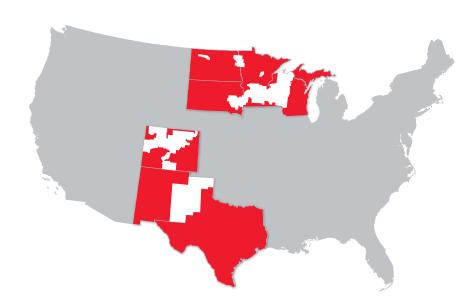
We provide our customers the safe, clean, reliable energy services they want and value at a competitive price.

### **Our Values**

Our values reflect our core beliefs — who we are, how we conduct our business and the importance of our customers. They guide us in our work and in our interactions with each other. We are Committed, Connected, Safe and Trustworthy.

### **Our Service**

Xcel Energy is a major U.S. regulated electric and natural gas delivery company with four utility subsidiaries. We serve 3.6 million electric and 2 million natural gas customers across parts of Minnesota, North Dakota and South Dakota (Northern States Power Company-Minnesota); Wisconsin and Michigan (Northern States Power Company-Wisconsin), Colorado (Public Service Company of Colorado); and Texas and New Mexico (Southwestern Public Service Company).





## Message from the CEO

### To Our Stakeholders:

For decades, the fundamental role of energy providers was simple: keep the lights on. But as energy has become more central to people's lives, expectations are far greater. Today our customers and communities depend on us to do much more — especially when it comes to leading the transition to clean energy and confronting the risk of climate change.

At the end of 2018, we became the first energy provider in the country to announce plans to serve customers with 100% carbon-free electricity by 2050. The theme of this report — Destination 2050: Building the Future — describes our bold vision for a carbon-free future while delivering the reliability and affordability that our customers need and expect.

### **A Carbon-free Energy Future**

Clean energy matters to our stakeholders. It matters to us too. We've been at the forefront of the clean energy transition for the last 15 years. Since 2005, we've reduced carbon emissions by 38%, and the confluence of changing customer preferences, declining prices of clean technologies and the latest climate reports have accelerated our plans.

On our way to Destination 2050, we established a new interim goal to reduce carbon emissions produced from the electricity that serves our customers by 80% in 2030. We believe we can reach this 2030 target by using existing technologies. Removing the last 20% of carbon from the grid will require advances in technology to develop carbon-free, always-on energy sources. But I'm optimistic and believe we can get there.

To reduce carbon as quickly as possible without impacting reliability and affordability, we expect to continue our Steel for Fuel strategy of building large-scale renewables that deliver both economic and environmental benefits. We currently have a dozen wind farms under development with more on the drawing board. We also expect to expand our use of large-scale solar farms that provide the best consumer value. By 2030, we project renewable sources will generate at least 60% of our electricity. In addition to these renewables that serve all customers, we support customers who want more now by providing options to subscribe for up to 100% renewable energy through unique programs like Renewable\*Connect in Colorado, Minnesota and Wisconsin.

Meanwhile, we have plans to retire four coal units in the early to mid-2020s — two in Minnesota and two in Colorado. Altogether, we are retiring half of our coal-fueled generation by 2026 — and are evaluating the feasibility of additional early retirements. As our energy mix changes with more renewables and less coal, we will continue to use more carbon-friendly natural gas as a bridge that supplies the back-up capacity to help integrate more renewables. We also plan to operate our carbon-free nuclear plants through their licensing periods in the early 2030s.

The easiest way to reduce carbon is to never produce it in the first place. We offer more than 150 energy efficiency programs to help our customers reduce their bills. In fact, five of those programs recently were acknowledged among the best in the country by the American Council for an Energy-Efficient Economy.

Companies like Xcel Energy are uniquely positioned to leverage our carbon-reducing expertise to other sectors of the economy. We're focusing our initial efforts on transportation, as we have several pilot projects under way to help make it easier for customers to purchase electric vehicles and produce 70% less carbon than gas-powered vehicles — and the results will get even better as we continue to transition away from fossil fuels. We have announced a \$25 million investment in Minnesota to develop infrastructure needed to improve home charging and public charging capabilities and plan to expand these efforts soon to other states.

### **Building Stronger Communities**

Just as EVs are beginning to gain traction, coal units are heading in the opposite direction. However, decisions to shut down a coal plant have significant ramifications to the employees who work there, along with the communities that benefit from the tax base.

Announcing plans years in advance is crucial to give these important stakeholders enough time to prepare for the change and provide economic development assistance where possible. A great example comes from Becker, Minnesota, where we announced the closure of two units at the Sherco Generating Plant. We have worked behind the scenes to provide economic development assistance to the local community through the construction of a natural gas-powered plant onsite, which will make up for lost generation, and to attract businesses. This includes Northern Metals Recycling, which is relocating from Minneapolis to Becker, and a large Google data center, pending approval.

As a local business, we're mindful of local spending that helps drive local economies. Last year nearly 70% of our purchasing was with businesses located in our service territory and 12% of our purchasing was with businesses owned by women, minorities or veterans. In addition, some of the projects we invest in, such as transmission lines and wind farms, create hundreds of local construction jobs and significant tax base.

Of course, we are also building the future by working with communities to help them reach their clean energy goals. We have partnered with several communities through our Energy Future Collaborations and Partners in Energy programs to help them reach their clean energy and sustainability goals.

This is in addition to providing reliable and affordable energy that our customers expect. These, along with a strong commitment to public safety, are table stakes in our industry. Last year, we delivered electric reliability that remains in the industry's top one-third, kept bills under the level of inflation and delivered our best-ever performance in gas emergency response. Another way we positively impact our communities is through our dollars and time. In 2018, the Xcel Energy Foundation and our employees donated more than \$11 million and volunteered 90,000 hours with a focus on STEM education, economic sustainability, environmental stewardship and access to arts and culture.

### **Building our Future Workforce**

To best serve our customers and solve tomorrow's energy challenges, we continue to build and train our workforce for the future. We are one team comprised of 11,000 employees. We recently refreshed our corporate values to better align with how we approach our jobs each day. Through a bottom-up approach, employees embraced our four values — Safe, Committed, Connected and Trustworthy — and demonstrate them each day when they come into work.

Through our performance management, professional development and recognition programs, we align employee responsibilities with our three strategic priorities: Leading the Clean Energy Transition, Enhancing the Customer Experience and Keeping Bills Low.

Employee safety is a core value for our organization and is at the forefront of everything we do. Although we achieved first-quartile employee safety in 2018, we had a few significant injuries. As a result, we re-doubled our safety precautions and expanded our communications efforts.

We are committed to hiring and retaining a diverse workforce. Thirty-four percent of our new hires were female, which is just slightly below first-quartile performance. Our hiring of people of color slightly increased to 24%, but remains short of our goals. We began developing customized diversity plans in five business areas, and we expect to build on that program in 2019. We also set a record with 66 high school interns and were named Employer of the Year by St. Paul-based Right Track, a youth training program.

### **Building the Future**

Powering homes and businesses, driving economic development, supporting our communities and protecting the environment are fundamental to how we do business. We embrace the trust our customers place in us and our responsibility to deliver solutions to improve their lives. As you read our Corporate Responsibility Report, you will learn more about our progress and plans for building the future and fulfilling our economic, environmental and community responsibilities.

Thanks for your partnership on this important journey.

Sincerely,

Ben Fowke

Chairman, President and CEO



## **Corporate Responsibility Governance**

How we define, govern and align corporate responsibility with our strategic priorities

For more than a century, Xcel Energy has had the privilege of serving customers and operating in hundreds of communities across its eight-state service territory. We have accomplished this by never losing sight of our responsibilities and the understanding that our success is uniquely tied to the success of those we serve.

## **Building the Future, Today**

Our corporate vision is to be the preferred and trusted provider of the energy our customers need. To fulfill this, we view our success today and in the future not simply as a measure of profit but equally as our broader impact on the public good. We have a tremendous obligation and opportunity to power people's lives and possibilities with energy that they can trust to be safe, affordable and progressively clean. We work every day to deliver on these requirements for customers and other stakeholders through our focus on the following environmental, social and governance responsibilities.

### **Environmental Responsibility**

### Managing natural resources and protecting the environment

We are committed to minimizing and carefully managing our environmental impacts and providing transparent disclosure. As an early adopter of renewable energy, we are leading the clean energy transition and managing the risk of climate change through our bold vision to serve customers with 100% carbon-free electricity by 2050. By reducing carbon emissions, we also decrease other environmental impacts, such as air emissions, waste and water use. Our communities can count on us to protect the environment, and this includes supporting stewardship and conservation projects through our community investment — projects that further enhance and preserve the places where we live, work and do business.

### **Social Responsibility**

### Supporting the people and places we serve

We serve people, helping to run their homes and businesses and providing comfort and convenience. We continually strive to create value by offering products and services that our customers want and need, and operating in a way that protects the public and drives economic growth. We support our local communities as a partner in economic development, by assisting customers in need, and giving of our time, talent and financial resources. Building stronger communities is fundamental to our business.

### Running a successful business and cultivating a strong workforce

Now more than ever, we are investing in the processes, technology and clean energy that will enhance our service for the future, while maintaining reliable, affordable energy. Our focus is on continuous improvement. This means carefully managing costs and a responsible supply chain, encouraging innovation and ensuring a secure and resilient energy grid for the future. As an employer, we provide a safe and rewarding workplace, one that values people and their contributions and reflects the diversity and strengths of our communities. We operate in a rapidly changing industry, driven by new technologies and evolving customer expectations. Cultivating a workforce that is equally dynamic, highly skilled and customer focused is one of our most important investments.

### Governance

### Maintaining strong governance practices

Our proven track record of strong financial and operational performance is rooted in a foundation of sound corporate governance and oversight. It starts at the top through a board that is diverse, engaged and experienced. With a strong independent lead director, 12 of our 13 board members are independent and five self-identify as female and/or minority. Together, they bring the diverse perspectives and experience our company needs to be successful. Through annual strategy sessions and other best practices, we effectively manage risks and opportunities, including those related to our environmental and social responsibilities. Throughout Xcel Energy, we continue to foster a culture of compliance and ethical business conduct — one that is founded in our values: Connected, Safe, Committed and Trustworthy.

Throughout our Corporate Responsibility Report, we demonstrate our leadership and progress in fulfilling our social and environmental responsibilities. We cover performance across 24 issues that are associated with these responsibilities and that are important to our industry and to those we serve. We put special emphasis on 10 focus areas that our stakeholders identified as being of most interest to them through a survey conducted in early 2017.

# Aligning Corporate Responsibility with Corporate Strategic Priorities

Through our strategic planning process, the board of directors and executive leadership team identified three strategic priorities that represent the keys to our continued success in achieving our vision to be the preferred and trusted provider of the energy our customers need. These priorities include:

- Lead the clean energy transition
- Enhance the customer experience
- Keep bills low

Strong alignment exists between these strategic priorities and our corporate responsibility. The table below demonstrates this alignment to our corporate responsibility focus areas.

	Strategic Priorities	Corporate Responsibility Focus Areas
Social Responsibility	Enhance the Customer Experience  • View our work through customers' eyes  • Make it easy for customers to do business with us  • Offer products and services that our customers value  • Help strengthen our local communities  Keep Customer Bills Low  • Carefully manage our costs  • Continuously improve how we work to improve efficiency without compromising safety or reliability  • Keep total bill increases at or below the rate of inflation	Affordable Energy. Transform our cost structure to become more efficient and customer focused, while investing in projects that reduce fuel and other expenses for customers.  Reliable Energy. Deliver strong system reliability and outage response capabilities.  Public Safety and Employee Safety. Ensure individuals living and working near our facilities are aware of potential hazards and respond safely to them.
Environmental Responsibility	Lead the Clean Energy Transition     Serve customers with cleaner, reliable energy through increased ownership of wind and solar generation and continued operation of our nuclear fleet.     Invest in the grid, including advanced technologies and transmission that enable more renewable energy     Reduce carbon and other emissions, improving environmental performance     Encourage and help enable the electrification or implementation of low-carbon solutions in other	Energy Efficiency. Support customers and the communities we serve in attaining their energy conservation goals.  Renewable and Advanced Clean Technologies. Increase the use of economic renewables and position the power grid as a platform for new energy services.  Greenhouse Gas Emissions and Air Quality. Continue to pursue a cost-effective clean energy strategy to reduce carbon and other air emissions.
		of All Our Efforts governance and a culture of compliance by focusing

## **Corporate Responsibility Governance**

Corporate responsibility is embedded throughout our organization and integrated into our governance processes. With strong leadership from our board of directors and executive management team, along with engaged leaders and organizations across the company, we are able to effectively manage risks and opportunities and drive strong performance across a spectrum of corporate responsibility issues.

on strong practices, independent oversight and shareholder rights.

The table below describes key aspects of our corporate governance that cover corporate responsibility.

### **Board Oversight**

Our board of directors, led by the chairman, president and CEO, oversees corporate responsibility-related issues and initiatives.

- Board committees and responsibilities related to corporate responsibility include:
  - The Governance, Compensation and Nominating and Audit committees oversee respectively the Code of Conduct and corporate compliance.
  - The Operations, Nuclear, Environmental and Safety Committee oversees environmental strategy and compliance, safety and operational performance, customer service levels and all aspects of excellence in delivering electricity and natural gas service to customers.
  - The Finance Committee oversees our clean energy investments, investor relations and financial health.
- The board follows a regular meeting schedule that ensures it is able to consider and address key issues, including those related to corporate responsibility. In addition, it conducts an annual strategy session to consider new and emerging trends, consult with outside experts and assess current strategies and initiatives.

### Executive Oversight and Management

The executive team plans and executes on strategies designed to achieve Xcel Energy's priorities, including corporate responsibility-related issues and initiatives.

- The executive team is responsible for the strategic direction of the company and sets
  key initiatives, including growth plans, the clean energy strategy and other corporate
  responsibility efforts. They consider evolving customer trends and preferences, industry
  and technology needs affecting our business, developments in the external landscape
  and policy considerations.
- Strategies and key initiatives are crafted and executed to strike a balance between reliability, affordability and environmental impact.
- Our executive compensation is tied directly to company performance, specifically reliability, cost management, customer satisfaction, public and employee safety, achievement of carbon emission reduction goals and financial performance.

# Business Area Management

While the entire organization supports our corporate responsibility efforts, specific issues are directly tied to individual areas to manage. We use effective performance management techniques and compensation design to align employees around successful execution of our goals and efforts.

- General Counsel: Ethics and compliance
- Corporate Secretary: Governance, ethics and compliance, strategic planning and disclosure
- Operations: Energy affordability and reliability, fuel diversity, advanced grid and environmental performance
- Customer and Innovation Office: Energy efficiency, customer programs and satisfaction, economic development, security and emerging technology
- Human Resources: Labor practices, safety and community giving
- Financial Operations: Risk management, investor relations and disclosure
- Nuclear Operations: Nuclear generation, safety and waste management

## Operating Companies

Our operating companies execute on our corporate strategy and develop and implement plans that address corporate responsibility and fulfill our economic, environmental and community responsibilities.

- Operating company staff engages with stakeholders to help ensure mutual priorities and goals are addressed.
- Policy staff develops strategy and engages on energy policy issues, including climate change, environmental policy and sustainability strategy.
- Resource plans are developed and analyzed for meeting customers' future energy needs and achieving clean energy and other stakeholder priorities.

## **Stakeholder Engagement**

As a regulated, public utility we can only be successful if we have insight into the needs and priorities of those who our business relies on and serves. Because of this, we regularly engage with our stakeholders and seek opportunities to better understand their interests, concerns and emerging trends. The feedback we receive from these interactions helps to inform our business plans and strategies.

Xcel Energy's stakeholders are those individuals and groups who affect or are affected by our business operations. They fall within the following general categories:

- Customers
- Employees
- · Communities, including local government officials, non-profits and community organizations, and advocacy groups
- · Legislators and regulators
- Investors

Our stakeholder engagement is far-reaching and transparent, with regular, ongoing business interactions and special meetings, presentations and proceedings before our state public utilities commissions. Our account management and state and local affairs and community relations teams have always engaged with large customers, city and county governments, influential organizations and individuals, state legislators and policy makers to discuss important service and energy-related issues and projects. We annually report on our lobbying and political contributions, which are governed by corporate policy. We also have a strong presence in our service territory through our community giving and volunteer support of community initiatives and programs.

In addition to our regular, ongoing engagement, we conducted a special survey in 2017 to better understand our local stakeholders and their priorities related to corporate responsibility. Results from the survey helped to inform the content and focus for this report, as well as our efforts in general.

### **How We Engage**

The table below outlines our regular, ongoing engagement with stakeholders and our response to stakeholder interests.

Stakeholder group	Engagement	Key interests	Our response
Customers	Customer Contact Center Key account managers Personal account representatives for customers in need Customer advocate process Surveys and focus groups Customer communications and account information Special events and meetings	<ul> <li>Energy service start and stop</li> <li>Service reliability and timely outage response</li> <li>Electric and natural gas safety</li> <li>Energy affordability and money saving opportunities</li> <li>Easy billing and online account management</li> <li>Information privacy</li> <li>Neighborhood construction or repair work</li> <li>Renewable and clean energy</li> </ul>	<ul> <li>Public safety materials, programs and advertising</li> <li>Extensive energy-saving programs and tips</li> <li>Online account management programs and the Xcel Energy app</li> <li>Online outage map and improved outage communications</li> <li>Construction project communications</li> <li>Data privacy process</li> <li>Renewable choice programs</li> <li>Clean energy leadership and strategy</li> </ul>

Stakeholder group	Engagement	Key interests	Our response
Employees	Leadership meetings     Employee meetings and webcasts     Bargaining unit negotiations and communications     Employee surveys     Employee Communications     Quarterly performance connections	Market-based compensation and benefits     Professional development     Communication     Recognition     Community involvement     Engagement in energy policy	<ul> <li>Total Rewards statement and tools, such as My Financial Future planning tool</li> <li>Connect4Performance performance management</li> <li>Professional development resources and tuition reimbursement</li> <li>I Deliver and Innovator recognition awards</li> <li>New employee orientation</li> <li>Print, electronic and video communications</li> <li>Volunteer activities and paid-time-off program</li> <li>United Way campaigns and matching gift program</li> <li>Business Resource Groups</li> <li>Diversity and inclusion education</li> <li>Wellness programs</li> <li>Grassroots political events and political action committees</li> </ul>
Communities	<ul> <li>Project-specific stakeholder meetings and open house events</li> <li>Community relations staff</li> <li>Partnerships and local memberships</li> <li>Franchise agreements</li> <li>Presentations and speaking engagements</li> <li>Sponsorships and community events</li> <li>Volunteer projects</li> </ul>	<ul> <li>Public safety</li> <li>Project input and communication</li> <li>Community giving</li> <li>Economic development and jobs</li> <li>Support for community goals</li> <li>Renewable and clean energy</li> <li>Energy efficiency</li> </ul>	<ul> <li>Public safety programs</li> <li>Project communications</li> <li>Xcel Energy Foundation giving and United Way campaigns</li> <li>Employee volunteer programs and community board support</li> <li>Programs for customers in need</li> <li>Clean energy leadership and strategy</li> <li>Renewable choice and energy efficiency programs</li> </ul>

Stakeholder group	Engagement	Key interests	Our response
Legislators and regulators*	<ul> <li>Policy and legislative involvement</li> <li>Governmental and regulatory staff</li> <li>Regulatory filings and proceedings</li> <li>Political action committees and grassroots employee events</li> <li>Speaking engagements</li> </ul>	<ul> <li>Affordable energy</li> <li>Reliable energy service</li> <li>Renewable and clean energy</li> <li>Climate change and greenhouse gas emissions</li> <li>Environmental protection</li> <li>Responsible corporate governance</li> </ul>	<ul> <li>Continuous improvement and cost management</li> <li>Clean energy leadership and strategy</li> <li>Renewable choice and energy efficiency programs</li> <li>Corporate environmental policy and environmental management system</li> <li>Voluntary emissions reduction initiatives</li> <li>Highly rated corporate governance program</li> </ul>
Investors	<ul> <li>Investor meetings, presentations and teleconferences</li> <li>Participation at investor conferences</li> <li>Website</li> <li>Annual report, 10-K, 10-Q, proxy, financial press releases and other disclosures</li> <li>Annual shareholder meeting</li> </ul>	<ul> <li>Stock appreciation and company growth prospects</li> <li>Meet earnings per share guidance</li> <li>Meet long-term EPS and dividend growth objectives</li> <li>Deliver a superior total shareholder return relative to our peer group</li> <li>Solid credit ratings</li> <li>Financing needs</li> <li>Favorable regulatory environment</li> <li>Transparency</li> <li>Risk management</li> </ul>	Corporate strategy that includes a fair return on investment, utility business investment and stakeholder alignment Clean energy leadership and Steel for Fuel strategy Highly rated corporate governance programs Investor relations communications and mobile app

## **Identifying Areas of Focus for Corporate Responsibility**

Based on stakeholder engagement, research and participation in a number of industry and sustainability forums, we have identified 24 major corporate responsibility issues for Xcel Energy. These issues closely align with the sustainability issues facing the entire electric sector, as identified through an extensive study conducted by the Electric Power Research Institute's Energy Sustainability Interest Group — of which, Xcel Energy is a member.

In early 2017, using the Global Reporting Initiative methodology to guide us, we conducted an online survey with nearly 1,000 stakeholders to understand which issues are currently most important to the individuals and organizations within our service territory, as well as within our own organization. The results are provided in the chart below.

While all of these issues are important, we consider the issues highlighted in red to be focus areas. They reflect the current priorities of our stakeholders and for our company where we can have a meaningful impact. Consequently, to the extent we are successful in addressing and managing these issues, we will be delivering real value.

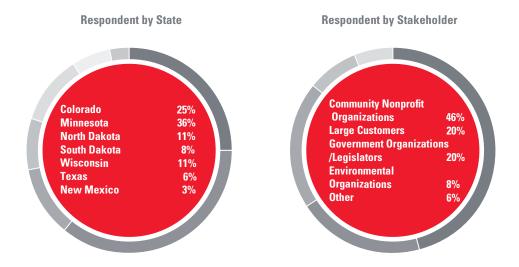
### ergy Reliability and Emergency Prepa ss • Energy Affordability Employee Safety Public Safety Local Economic Development and Jobs te Governance. Ethics and Compliance Energy Efficiency Climate Change and Greenhouse Gas Emissions Renewable and Advanced Clean Energy Technologies Stakeholder and Company Priorities Community Giving and Volunteerism Water Quality, Availability and Management Advanced Grid, Cybersecurity, Physical Security Innovative Energy Programs and Options Workforce Development er Engagement and Satisfaction Fuel Diversity Public Policy Engagement Labor Practices Wildlife Protection and Biodiversity Procurement Practices Waste Managment (Including Coal Ash) Technology Research and Demonstration Nuclear Generation, Safety and Waste Management

### **Corporate Responsibility Focus Areas**

Company Influence and Impact

## **Methodology for Corporate Responsibility Survey**

The corporate responsibility survey was conducted internally and designed to have stakeholders identify their top priorities for Xcel Energy's corporate responsibility efforts. Xcel Energy's executive leadership also answered the survey to understand our internal priorities. Altogether, the survey was distributed to nearly 1,000 internal and external stakeholders across our eight-state service territory. Approximately 26% of potential respondents participated. The respondents represented a good mix of our local stakeholder categories and our service territory.



The survey was based on the 24 corporate responsibility issues we identified for our company. These issues were based on our experience through regular stakeholder engagement, research and participation in a number of industry and sustainability forums. Many of these issues align with industry research conducted by the EPRI Sustainability Interest Group.

Throughout the survey, respondents were asked to prioritize the corporate responsibility issues in different ways and had the opportunity to identify new issues. First, the respondents ranked their priority issue within five categories. These are the responses shown in the graph in the section above. Second, respondents listed their top five corporate responsibility issues without any categories. Lastly, respondents could add new issues and describe any sustainability goals that their own organizations may have and how Xcel Energy could help meet those goals.

Xcel Energy corporate responsibility issues and definitions, including 10 identified focus areas highlighted below.

Advanced Grid, Cybersecurity, Physical Security	Upgrading the power grid with advanced technologies to improve reliability and security; protecting important systems and infrastructure from unauthorized access or attack; drilling emergency scenarios both with and without external stakeholders to ensure effective response to potential events
Air Quality	Reducing air emissions other than greenhouse gases from our operations, including nitrogen oxides, sulfur dioxide, mercury and particulate matter, both through emissions controls and fleet transformation
Climate Change and Greenhouse Gas Emissions	Managing and reducing the greenhouse gas emissions from our operations, including carbon dioxide, methane and sulfur hexafluoride (SF6) through fleet transformation
Community Giving and Volunteerism	Giving both time and money to local nonprofit organizations; supporting energy assistance programs for customers in need
Corporate Governance, Ethics and Compliance	Ensuring adherence to the rules, practices and processes that direct and control our company; setting ethical expectations and values and monitoring adherence to applicable laws and regulations
Customer Engagement and Satisfaction	Working with customers to understand their needs and improve the service and products we provide; ensuring a positive customer experience with interactions that are focused, simple and transparent; meeting our scorecard objective of building customer loyalty
Employee Safety	Adopting, enacting, and promoting effective programs that protect the health and safety of employees and contractors
Energy Affordability	Ensuring electricity and natural gas bills are affordable for consumers
Energy Efficiency	Providing programs to help customers take control of their energy usage and save money, including traditional rebate programs and advanced home solutions
Energy Reliability and Emergency Preparedness	Providing electricity and natural gas with few to no interruptions; being prepared to quickly repair outages caused by storms or other incidents
Fuel Diversity	Minimizing dependence on any one energy source by using a diverse mix of sources to generate electricity
Innovative Energy Programs and Options	Offering programs that give customers choice over their energy sources, such as helping them access more wind and solar power or helping them fuel electric or natural gas vehicles
Labor Practices	Adopting responsible practices related to employee pay, benefits and equal opportunity
Local Economic Development and Jobs	Working with the community to attract and support new business development and economic growth

Nuclear Generation, Safety and Waste Management	Maintaining Xcel Energy's nuclear fleet that provides reliable, carbon-free electricity, in a way that ensures safety and emergency preparedness; safely handling and storing solid waste from nuclear generation
Procurement Practices	Doing business with responsible, local and/or diverse suppliers for the equipment, materials and services we purchase
Public Policy Engagement	Engaging and collaborating with policymakers and providing input on proposed legislation and regulations
Public Safety	Providing education to prevent accidental contact with electric power lines and natural gas pipelines; protecting the public around our facilities and facility operations; ensuring effective emergency response to public safety issues around our facilities
Renewable and Advanced Clean Technologies	Increasing electricity generation from clean, renewable energy sources, including wind farms and solar power plants; deploying advanced technologies to reliably manage higher levels of wind and solar energy
Technology Research and Demonstration	Participating in projects to test advanced energy technologies that have potential for providing customers with new products and services in the future; supporting industry research efforts through financial contributions, staff involvement and demonstration projects
Waste Management	Preventing and reducing waste produced from our operations, including coal ash; reusing or recycling waste instead of disposing of it in landfills; operating power plants fueled by waste
Water Quality, Availability and Management	Ensuring the availability of water for electricity generation and all other users; protecting water quality
Wildlife Protection and Biodiversity	Avoiding or minimizing impacts to protect species and their habitats; supporting raptor habitat and providing education and conservation opportunities on raptors
Workforce Development	Maintaining a workforce of the right size and skill profile, includes our talent management strategy and diversity and inclusion efforts; engaging in community efforts to develop pipeline of future employees; providing competitive employment opportunities and supporting diverse business resource groups

## **About this Report**

**Publication Date:** May 2019

Reporting Period: Jan. 1 – Dec. 31, 2018

Date of Previous Report: May 2018 (for 2017)

Reporting Cycle: Annual

**Report Boundary:** Xcel Energy and its four regulated subsidiaries **Contact Point:** corporateresponsibility@xcelenergy.com

Xcel Energy's annual Corporate Responsibility Report focuses on the company's environmental and social contributions, and is built on 24 issues that we have identified as important to our stakeholders and company.

This year marks the 14th year we have published the report. Our first Corporate Responsibility Report (formerly known as the Triple Bottom Line report) was published in April 2005, with the contents covering the 2004 calendar year. The report is published online, and to raise awareness for it, we print a highlights brochure that is distributed at our annual shareholders' meeting and at other events throughout the year.

### **How to Use this Report**

Our ongoing goal for this report is to improve transparency and to meet the different information needs of the stakeholders that use it. With this in mind, we provide different levels of information.

- The CEO Message from Xcel Energy's chairman, president and CEO, Ben Fowke, discusses our role in serving communities and our priorities and annual performance.
- The 2018 Highlights page provides an introduction to Xcel Energy and a high-level look at our environmental, social and economic contributions for the year.
- The *Library of Briefs* offers a deeper discussion of our approach to managing specific topics the content of the briefs covers the 24 corporate responsibility issues we identify in the Corporate Responsibility Governance section of the report.

- The *Corporate Responsibility Governance* section describes our corporate responsibility and how we govern it, along with our stakeholder engagement and 24 issues underpinning this report. It also demonstrates the alignment between with our corporate responsibility focus areas and corporate strategic priorities.
- For those interested in the numbers, we provide a *Performance Summary* that is a list of disclosures and also the *GRI Standards Content Index*.
- A full copy of the report, which includes all the content from this website, can be downloaded as a PDF. Past
  reports can be found in the report archive online.
- Xcel Energy publishes an Edison Electric Institute (EEI) environmental, social, governance and sustainability report, a new industry report that provides information in a measurable and consistent format for investors.
- Throughout the report, we also provide links to more information published in other corporate reports, such as the 2018 Annual Report, 2019 Proxy Statement or online at xcelenergy.com.

### **Global Reporting Initiative Guidelines**

Xcel Energy continues to base its Corporate Responsibility Report on Global Reporting Initiative (GRI) guidelines, which we have used since 2008. This year's report is based on GRI's Standards in accordance with the Core option and the Electric Utilities Sector Supplement. We have tried to meet the intent and follow the standards as closely as possible; however, there are instances where we track information for disclosure differently or not at all, based on our company or stakeholder information needs.



2020-2034 Upper Midwest Resource Plan Page 21 of 126

Appendix M: Xcel Energy Corporate Responsibility Report

Our customers today are asking us to do more, and we have the opportunity to deliver on their evolving expectations and help to build the future of our industry.

Customer engagement, satisfaction and energy affordability

# Earning customer satisfaction and trust

Each and every time our customers engage with us, we want to make it easy for them and deliver a positive, best-in-class experience.

We understand that energy is a necessity in people's lives. Above all else, to earn their satisfaction and trust, we must first deliver on our responsibility to provide safe, reliable and affordable energy that is increasingly clean. This also means being there when customers need us most — whether they are experiencing a service outage, struggling to pay a bill or looking for ways to better manage their energy use.

Enhancing the customer experience is a strategic priority for Xcel Energy, and to fulfill it, we are focused on improving all levels and points of service for customers. We constantly manage the systems, processes and people we have in place to meet different customer needs and circumstances, and we are expanding the products and services we offer to support our customers even more.

### 2018 Results

As we continue to focus on improving the customer experience during an outage, we worked to improve
our internal processes in 2018. This included training employees on when and how to update estimated
restoration times to provide customers with more timely and accurate information, coupled with reporting to
emphasize process adherence. This ongoing effort is showing up in customer satisfaction perceptions. We
moved ahead of 12 utilities in our peer set of 56 utilities from 2017 to 2018, placing us in the upper second
quartile for outage communications.

- We continue to foster a workforce culture where all employees take ownership in ensuring a dependable, easy, enjoyable and personal experience for our customers. We launched Customer Experience Training, with more than 3,000 employees completing the in-person sessions that focus on: building a customer-centric mindset, ownership and personal accountability, and taking action. The goal is for all employees to complete the training in the next several years.
- Xcel Energy's average annual residential energy bills continue to be below the national average. Our average
  residential electric bills from 2009 to 2018 are 26% lower than average, and from 2008 to 2017, our natural gas
  bills are 14% lower than average.
- We provided approximately \$51.9 million to customer energy assistance programs for the year that helped almost 198,000 individuals and families throughout our service area.

## **The Regulatory Compact**

We operate under carefully regulated conditions that are determined in part by state public utilities commissions — a governing body that regulates the rates and services of utilities such as ours. In exchange for the exclusive right to provide electricity and natural gas services in certain regions, we agree to the following regulatory compact:

- Duty to serve: We cannot pick and choose our customers. We will provide service to any residence or business
  within our service territory that requests it under reasonable terms and conditions.
- **Cost of service pricing:** We cannot arbitrarily raise prices to levels beyond our costs. Pricing for our services is regulated by the costs we incur to deliver them.
- Resource planning process: Every few years, we go through a process to determine the resources
  necessary to serve customers' future energy needs. Resource plans must be reviewed and approved by
  regulatory commissions, and stakeholders can provide input on the plans through a public process.

In return, we are granted the ability to recover our costs of doing business and earn a reasonable rate of return. Although, this rate of return is not guaranteed — we have only the opportunity to earn it. To operate effectively in a closely regulated business like ours, it is imperative that we stay in sync with the current demands of the public and our policy makers.

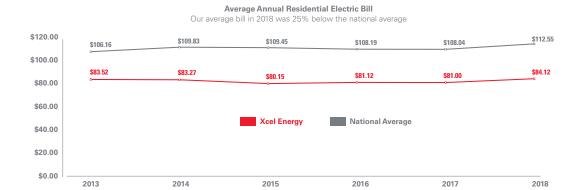
## **Managing Customer Energy Bills**

We continue to focus on the cost of service to deliver on our company's priority to keep energy bills low for customers. We saw an uptick in Xcel Energy's average residential electric and natural gas bills in 2018, although we continue to have among the lowest average residential bills in the country. We calculate that Xcel Energy customers over the past decade have spent \$3,365 less on electricity and \$1,007 less for natural gas compared to the national average.

Xcel Energy's lower than average customer bills are likely but not exclusively the result of:

- Our comprehensive portfolio of energy efficiency programs, as well as changing codes and standards that result in more efficient buildings and appliances
- Company-wide disciplined cost management
- Investments through our Steel for Fuel strategy, which calls for adding clean, renewable projects at a cost that is offset by the future fuel savings
- Growth in on-site or rooftop solar panels
- Increases in multi-family housing construction
- Weather differences, which can increase or reduce average bills for the year

### **Xcel Energy Comparison of Average Monthly Bills**



#### Average Annual Residential Natural Gas Bill Our average bill in 2017 was 18% below the national average \$80.00 \$65.35 \$59.71 \$60.00 \$55.05 \$50.32 \$53.25 \$47.81 \$48.17 \$40.00 \$45.40 \$42.48 **Xcel Energy** National Average \$20.00 \$0.00 2014 2015 2016 2017 2018

Based on EIA bill trend data reported each year by utilities and revised by EIA in early 2019. Represents Xcel Energy annual average of monthly bills, excluding taxes and franchise fees; annual national natural gas bill information is not yet available.

## **Measuring Customer Satisfaction**

We monitor customer perceptions of the company and our performance through several tools. The two most notable are the J.D. Power & Associates Electric Utility Customer Satisfaction studies and the customer transactional satisfaction studies that we implement with our partner, MaritzCX.

J.D. Power & Associates implements an industry-wide benchmark that provides details of our relationship with residential and small- to medium-sized business customers and how that compares to industry peers. For the residential electric study, we improved from low second quartile in our peer set in 2017 to high second quartile in 2018. Residential customers provided the most positive feedback in the areas of quality and reliable electricity service, efforts to develop energy supply plans for the future and total monthly cost of electric service. With business customers, Xcel Energy ranked in the second quartile in our peer set in 2018. Our highest satisfaction scores among business customers were for efforts to develop supply plans for the future and for actions to take care of the environment.

We also continue to demonstrate strong performance at our customer contact centers. Through regular transactional surveys in 2018, 85% of residential and business customers reported that they were satisfied with their transaction involving an agent at our contact centers. Similarly, more than 86% of customers reported their problem or issue was resolved on the first call to Xcel Energy. Our Customer Care organization sets annual goals with satisfaction and first call resolution, and we met or exceeded both of these in 2018.

### **Customers in Need**

We work with state and local agencies and advocates for low-income customers to provide energy assistance to those in need. Our Personal Accounts department helps to monitor and assist customers who have medical needs or who are struggling to make their monthly energy payments. They can assist and make energy bills more affordable to income-qualified individuals and families by promoting special energy efficiency programs, arranging payment plans and providing energy assistance resources.

Our support of energy assistance includes:

- Public policy and advocacy supporting efforts on the state and federal level for funding of Low-income Home Energy Assistance Programs (LIHEAP)
- Funding for state and local energy assistance agencies and energy weatherization programs
- Encouraging our customers to contribute to statewide fuel funds via their Xcel Energy bills
- In-kind marketing and public relations to support energy assistance organizations and advocates for low-income customers

We encourage customers who are having trouble paying their bills to contact us to develop a payment plan and determine if additional assistance is available. In Minnesota and Colorado, we have medical exemption or affordability programs for low-income customers with special medical needs to help them with their utility bills.

We only disconnect service as a last resort if we are unable to resolve the issue or arrange a payment plan. For customers behind on their payments, we typically send a reminder notice 33 days after the unpaid bill is due and a disconnection notice 64 days after the original due date. In 2018, we disconnected service to a total of 64,635 customers. The majority of these customers were reconnected within 72 hours of the disconnect after they arranged payment plans or paid their bills in full. Heat-affected disconnections are not performed in our five Upper Midwest states during the heating season. In each of our states, our Customer Care leadership has the authority to suspend disconnections during extreme weather or other emergency situations.

### **Scam Awareness**

Nationwide and internationally scammers continue to target utility customers, trying to take their money. Utility scam activity first spiked in 2014, and since then, we have combatted the problem by making technology changes and raising awareness to expose the tactics of scammers and help customers protect themselves.

Customer losses were down 8% in 2018 compared to the previous year, while the reported number of scam attempts was up, indicating customers may be increasingly informed around the danger scammers present. Since we formally began to address the issue, customer losses are down by more than half.

We are able to track both in-person and phone-based scam attempts thanks to the reports of customers. When we learn of heightened scam activity in specific locations, we promptly contact local media and use our social media channels to release information and alert customers. The data we collect is also used in partnership with law enforcement to investigate possible larger scam efforts and trends across our territory, with the ultimate goal of shutting down scammers. Xcel Energy security alone has shut down more than 250 phone numbers used by scammers to target our customers.

In addition, we joined Utilities United Against Scams in 2016, a collaborative of more than 100 utilities across the United States. Members share leading practices and updates about how scams are affecting their customers, as well as ideas and updates on what they are doing to spread awareness. The group was instrumental in establishing an annual awareness day — National Utilities United Against Scams Day — which takes place on the third Wednesday each November.

## **Data Privacy**

Xcel Energy takes seriously our responsibility to protect company information, including the confidential information that we generate and receive about our operations, customers, employees, contractors and vendors. Our corporate policies and standards regarding information management and protection are designed to maintain the trust of the individuals and organizations we do business with.

We operate in a highly regulated industry that requires the continued operation of sophisticated information technology systems and network infrastructure. In the ordinary course of business, we use our systems and infrastructure to create, collect, use, disclose, store, dispose of and otherwise process information. Our employees and contractors are trained on information management and protection requirements.

Our Enterprise Security Services group helps ensure the protection of company information across all business units. This organization includes four main branches: Cyber Security, Enterprise Resilience, Physical Security and Security Governance and Risk Services. In addition, we have established a Cyber Defense Center and an Enterprise Command Center designed to investigate, respond, mitigate and remediate incidents and vulnerabilities that may involve company information.



# Raising safety awareness

Our goal is for everyone who lives, works or gathers near our facilities to be aware of possible hazards and how to respond safely to them.

Ensuring the safety of our employees, customers and the public is a responsibility we take very seriously. To do this, we have comprehensive outreach programs that promote safe behavior among our customers, communities, emergency responders and third-party workers.

Ultimately, we aim to prevent accidents that can result in serious injury or death, property damage, costly repairs or fines and decreased service reliability. Most serious accidents involving the energy we deliver happen because someone directly or indirectly makes contact with an overhead electric line, digs into an electric or natural gas line, or fails to respond safely to the warning signs of a natural gas or electric emergency.

### 2018 Results

- Our company delivered its best-ever public safety performance during the year. We surpassed our annual
  target of 1.30 or fewer excavation damages per 1,000 locate requests by more than 8% as the number of
  third-party dig-ins to underground pipes and wires continued to decline and responded within an hour or less
  to 87% of customer calls associated with a suspected natural gas leak or other emergency.
- We opened new training villages in Minnesota and Colorado that will provide 600 to 800 employees and community emergency responders with the opportunity to train in a realistic setting. The villages can simulate more than 40 different types of natural gas leaks and recreate incidents that have occurred across the country.
- Customer recall of our safety advertising and perception of our commitment to public safety continue to steadily increase, as measured by customer survey responses.

- An advertising partnership among utilities to promote calling 811 before digging resulted in nearly 1.1 million total message impressions in April 2018 — national safe digging month.
- Xcel Energy linemen Kellen Schmidt and Scott Knight were instrumental in changing Minnesota's Move
  Over law, which now requires drivers to slow down or move over when approaching utility, construction and
  emergency vehicles stopped along two-lane roads.

## **Public Safety Awareness Efforts**

Raising awareness about the dangers associated with activities near overhead and underground electric and natural gas lines is no easy task. We send direct mail to thousands of customers each year and offer free safety materials through fulfillment programs and partner organizations. We also offer online safety resources for emergency responders, public officials, elementary educators, students and their parents, and third-party workers.

We employ the following tactics to raise public safety awareness:

- Advertising
- · Broadcast media appearances and outreach
- Email communications
- Event appearances
- Mailings
- Social Media
- Sponsorships
- Trainings and meetings
- Websites

### **Advertising**

Xcel Energy's Always Delivering campaign launched in mid-2016 and continued to carry public safety messages throughout 2018. While the campaign uses simple language and consistent, entertaining visuals, as well as subtle humor and a friendly approach, we adjusted safety language to be a bit more serious and even more direct to make a quicker connection to our critical safety messages.

Advertising continues to be one of our most successful tactics for raising safety awareness. With an objective to reach as many customers as possible, we extended our campaigns to run year-round in 2018 and concentrated on high-impact media, such as television, radio and digital advertising. As a result, we increased total number of impressions by approximately 50%.

### **Outreach to Specialty Audiences**

Throughout the year, we also focus awareness efforts on audiences that are influential or play an important role in supporting public safety. These audiences include:

- Emergency responders, such as firefighters and law enforcement, who may be first to respond to electric and natural gas emergencies
- Third-party contractors who may come into contact with power lines or natural pipelines as part of their jobs, including construction, roofing and tree care professionals, as well as agricultural workers and those who do excavation work
- · Educators, including principals and superintendents, and teachers and students in second through sixth grades

We have fulfillment programs that annually distribute tens of thousands of brochures, booklets, DVDs, videos, posters, activity sheets, visor cards or other materials tailored to educate and inform these audiences of safety practices and hazards. Many of these communications are provided in both English and Spanish. We also direct these groups to use our e-SMART worker and e-SMART kids websites, as well as the Responding to Utility Emergencies online training that we sponsor.

In addition to materials and online resources, we provide in-person trainings and conduct numerous emergency drills for local emergency responders, and offer school and community safety presentations. There is an online course to encourage and train Xcel Energy employees who want to volunteer as Public Safety Ambassadors and conduct public safety presentations or participate in community events.

## **Public Safety Campaigns**

Our public safety campaigns are targeted at communicating outreach messages in four key areas, including:

- Calling 811 before digging
- Staying at least 10 feet away from overhead lines to be safe
- · Recognizing and responding to a possible natural gas leak
- Keeping natural gas meters clear of snow and ice

### **Call 811 Before You Dig**

Accidental third-party excavation damage to underground electric and natural gas facilities not only interrupts service for our customers unnecessarily, it is a significant safety concern and remains the biggest threat to our natural gas distribution systems. Xcel Energy is a member of the Common Ground Alliance, a member-driven association committed to saving lives and preventing damage to underground infrastructure by promoting effective damage prevention practices. The association's most prominent initiative is the national 811 phone number that people can call to have underground utility lines marked before they dig.

Some of our outreach efforts to promote 811 in 2018 included:

- Launching an advertising partnership in Colorado and Minnesota. Together with Colorado 811, Centerpoint Energy and Gopher State One Call, we created a cohesive, separately branded message for calling 811 before digging.
- Sending semi-annual bill inserts with details about the importance of maintaining customer-owned service
  lines, and updating the semi-annual natural gas safety bill insert to include this information, so that this
  message will now be delivered quarterly.
- Participating in the National Excavator Initiative video as a subject matter expert for calling 811 and safe
  digging practices. Xcel Energy was joined by peer utilities, locate and excavation companies along with heavy
  equipment providers and operators.
- Collaborating in lighting the Lowry Bridge in Minneapolis green for National 811 Day, as well as Xcel Energy's Hiawatha and Midtown substations in Minneapolis.
- Participating in the third annual Colorado 811 5K run, which included a post-run safety event with electric safety demonstrations and bucket truck rides, local emergency responders, Red Cross information and games.
   The number of registration spaces was increased again in 2018 and registration was full before race day.
- Sponsoring JJ Harrison, the 811 Rodeo Clown, with over 1 million FaceBook followers.
- Participating in and sponsoring the Colorado Mock Line-strike Drill attended by more than 300 excavators and emergency responders.
- Sponsoring the Cold Zone Hazmat Conference in Minnesota for 200 attendees from seven states.

### **Electric Safety**

Contact with electricity can result in serious injury or even death. We continually work to engage and educate the public, urging them to stay away from equipment, such as overhead lines, underground lines, downed power lines and damaged electrical equipment.

Some of our outreach efforts in 2018 included:

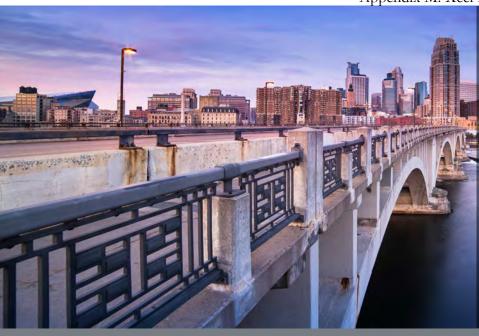
- Conducting dozens of public electric safety demonstrations featuring the Power Town arcing display.
- Conducting electric safety demonstrations at the Minnesota State Fair for our 29th year. We had 72 employees
  volunteer nearly 200 hours to educate approximately 30,000 fair attendees about electric and natural gas
  safety and calling 811 before you dig.
- Including safety messaging with our press releases and social media during severe weather.
- Providing thousands of electric and natural gas safety pamphlets at public safety events throughout our service territory.

### **Natural Gas and Pipeline Safety**

While keeping the public safe is a core value for Xcel Energy, it is also a requirement when it comes to natural gas pipeline safety. We must meet the American Petroleum Institute Public Awareness Programs for Pipeline Operators Recommended Practice 1162. This involves taking steps to increase awareness about the safety of our facilities and energy service that build trust among stakeholders, including customers, communities, investors, employees, public officials, at-risk workers, educators and the industry.

We annually distribute materials through 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. Through these organizations in 2018, we helped distribute more than 111,000 safety guides, books and newsletters to excavators and to public and emergency officials in states where we have natural gas distribution and transmission pipelines. We also participated in and helped sponsor many pipeline emergency responder meetings in our states and provided additional, in person pipeline safety trainings to hundreds more emergency responders.

Twice a year, we send safety information designed to share details about staying safe around natural gas to all of our natural gas customers with their bills. The bill inserts include a special mercaptan scratch-and-sniff badge that helps to educate customers on how a natural gas leak smells. Customers that receive electronic bills can request the insert with the mercaptan scratch-and-sniff badge.



Increasingly, as the communities we serve take control of their energy futures, we are supporting and encouraging their efforts through unique energy services, collaborations, partnerships and economic development assistance.

Economic development and jobs

# **Partnering with communities**

We play a valuable role in supporting local economies as an energy provider through our electric and natural gas service and our partnership.

With our ongoing investment in infrastructure — the plants, pipes, poles and wires that make up our business — we generate tax revenue, purchase goods and services and employ local workers. But, our connection and contribution to local economies goes much deeper than this.

By working side-by-side with local chambers of commerce and economic development organizations, we provide energy expertise and a valuable service that can help attract and retain area business. After all, for many businesses, energy is an important consideration for where they locate — it may be their largest expense or the focus of corporate sustainability goals. By offering a complete package of energy solutions, including a comprehensive portfolio of renewable and energy-saving options, along with competitive prices and outstanding service reliability, we are helping our communities successfully compete for business, something that supports all of our bottom lines.

### 2018 Results

- Through our focus on economic development, we generated and supported over 85 new business prospects for our communities in 2018. Of those, nine located and began doing business within our service area, supporting nearly 1,950 jobs and \$750 million in capital investment.
- We filed a plan with regulators in early 2019 to provide renewable energy to a proposed Google data center to
  be located on Xcel Energy property adjacent to our Sherco Generating Plant in Becker, Minnesota. Consistent
  with transition plans developed in partnership by the company, Becker and Sherburne County, the project will
  add tax base and generate jobs for the community affected by the planned retirement of the plant's two oldest
  coal units. If approved, the Minnesota Department of Employment and Economic Development estimates the
  project will result in nearly 2,000 construction jobs, 50 full-time jobs and general economic growth of almost
  \$150 million.

- Xcel Energy supported legislation in Colorado that was adopted to support economic development and new
  customer growth in the state. It allows utilities to offer negotiated, economic development rates to customers
  that require a new minimum electric load of three megawatts. The legislation also allows utilities to expand
  already authorized renewable programs to provide up to 20 megawatts of renewable energy for a customer
  that meets the criteria under the economic development rate program.
- Since 2014, Partners in Energy has worked with 37 communities to develop energy action plans 20 in Minnesota and 17 in Colorado. Working with these communities to provide outreach delivered strong results for the year, including more than 49,000 participants in Xcel Energy efficiency programs and 15,500 participants in renewable energy offerings.
- We signed Memorandums of Understanding to establish Energy Future Collaborations with eight communities in Colorado. Customers in these communities represent approximately 32% of our retail load in the state, and the communities reflect a cross-section of the varied municipalities we serve — from rural to urban and mountain locations.

## **Xcel Energy Direct Economic Impacts**

### **2018 Economic Value Generated (in millions)**

Total revenues	\$11,537
Electric utility revenues	\$9,719
Natural gas revenues	\$1,739
Other operating revenues	\$79

### **2018 Economic Value Distributed (in millions)**

Electric fuel and purchased power costs	\$3,854
Cost of natural gas sold and transported	\$843
Employee compensation, including wages and benefits	\$1,983
Property tax payments	\$442.9
Franchise fees	\$190.8
Community investment	\$63.1
Interest charges and financing costs	\$652
Dividends paid	\$730

## **Energy Future Collaborations: A Proactive Partnership Approach**

Through Energy Future Collaborations, Xcel Energy is taking a new approach and uniting the specific energy goals of communities with our company's services and expertise to achieve shared objectives. The proactive collaborations are aimed at addressing a wide range of priorities, including how best to:

- Advance specific reduction carbon and renewable energy targets
- Reduce a city's carbon footprint
- Maximize energy efficiency programs
- Support economic development
- Integrate emerging energy-related technologies into area homes and businesses

The relationship-driven approach taps into many existing Xcel Energy programs and offerings but also focuses on uncovering creative solutions to new ideas and needs. From Xcel Energy's standpoint, not only do we develop a more meaningful relationship with some of our largest customers — our communities — but the collaborations provide an opportunity to inform key leaders and community members about our business and significant initiatives. Ultimately, the collaborations can help increase support for company initiatives that support community goals, such as the Colorado Energy Plan and the company's carbon reduction vision.

We have signed Memorandum of Understandings (MOU) for Energy Future Collaborations with eight diverse communities including: Alamosa, Breckenridge, Denver, Lakewood, Louisville, Lone Tree, Nederland and Westminster. We also believe the collaborations can be replicated with other cities and towns throughout Colorado, as well as in other jurisdictions.

With the MOUs in place, the company and the communities develop work plans involving a number of projects, along with objectives, timelines, resources required, funding needed, metrics for success, reporting measures and ultimate deliverables. We have finalized work plans with six of the eight communities and are on track to complete the other plans this year. An important point about the new framework is that the MOU guiding principles allow flexibility, but also protect nonparticipants from things like cost shifts.

## **Partners in Energy**

Xcel Energy has a program and special team to support communities in achieving clean energy, economic development and energy conservation goals. The effort, known as Partners in Energy, started in fall of 2014 and is targeted at communities with the objective of helping them identify their future energy goals and develop strategic plans to drive activity. We then provide the resources to put the plan into action, supporting communities as they implement projects designed to achieve their goals.

Local governments play a larger role in choices around energy, and through the program, we can work with communities to support development and implementation of energy action plans that they own. Partners in Energy is unique in that it provides the opportunity to connect directly with community officials and organizations to help them meet their goals, leveraging our entire portfolio of energy solutions including efficiency, renewable and even payment programs. Typically, a community brings ideas and resources, while Xcel Energy offers direction, guidance and project management. We learn what communities prioritize and identify potential gaps where we can provide products to meet their needs and help them reach their goals. In return, the partnerships help to raise awareness and increase participation in Xcel Energy's current conservation and renewable energy offerings.

An energy action team is a group of local residents, business owners or energy stakeholders who work to develop the community's energy action plan and oversee its implementation. They are often the local leaders who work with Partners in Energy while connecting with their community. Action plans are based on community needs, resources, leadership commitment and the local vision for energy use in the future. Strategies to gain local support may include educational workshops, outreach at local events and promotional outreach including newsletters or personal canvasing — all approaches designed to gain recognition, participation and spread awareness to local residents.

Each community determines its goals, and we work together to drive success. We also help communities to track and report progress. In 2018, we expanded to reach and support even more communities through the following improvements:

- Planning services broadened to assist communities that did not have the need or resources to develop a full energy action plan.
- In-person programming was introduced to deliver educational resources to community leaders while providing
  opportunities to network and learn from the experience of others.
- The program's online presence was expanded to give participants a place to access their individual community
  documents, plus other resources critical to making informed choices around energy in today's rapidly changing
  energy landscape

## **Focus on Economic Development**

Xcel Energy is leading local economic development activities in the communities it serves. We start by providing a competitive solution that meets customer needs. This includes offering outstanding reliability and customer service, combined with favorable pricing on our nationally recognized renewable energy and efficiency options.

We have developed strong partnerships with local, state and regional economic development organizations to support opportunities for customer and economic growth. In 2018, our Corporate Economic Development team attended more than 35 national conferences and industry events to promote economic development opportunities across our service area. This work focused on developing relationships to expand business development in all eight states where we operate.

We continue to focus on serving top industry clusters that represent the leading employers and capital investors within our service area.

#### These include:

- Aerospace and defense contractors
- Data centers
- Refrigerated storage warehouse and distribution
- Food and beverage processors
- Industrial manufacturing
- Medical device, instrument and supply manufacturing
- Oil and gas

Our team tracks trends that affect the growth of these industries to identify new service options and programs that can facilitate continued growth of these key industries. We develop deep-dive customer analytic reports to better understand individual customer needs and create individualized action plans that can enhance our relationship we these customers. We host Business Expansion and Retention meetings with key accounts to strengthen our existing relationships and explore matters that are of mutual interest that go beyond energy. Through these efforts, we can explore new product offerings and promote policies that anticipate customers' future needs.

Our Certified Site program provides business prospects with real estate options to increase their speed to market in locating their operations. In 2018, an inventory of 41 certified sites was identified throughout our eight states. These sites have undergone rigorous review of more than 120 data points to attract business development. We work directly with site representatives including landowners, developers, municipalities and economic development organizations to develop the data and complete the certification process. A nationally recognized site selection expert reviews the reports and validates the data and its significance for identifying prominent real estate options for potential users. Information on Xcel Energy's Certified Sites is available on xcelenergy.com.

## **Minneapolis Clean Energy Partnership**

The city of Minneapolis, Xcel Energy and CenterPoint Energy teamed up to form a novel Clean Energy Partnership (CEP) in 2014 in support of the city's Climate Action Plan and 2040 Energy Vision. Now in its fifth year, the partnership continues to build on a long history of collaboration to explore innovative approaches and enhanced outcomes in energy efficiency and the use of renewable energy in Minneapolis and create longstanding community impacts. The partnership provides a leadership framework through which the city and utilities can work together to prioritize, plan, coordinate, implement, market, track and report progress on clean energy activities in the city.

The Clean Energy Partnership has approved the following priorities:

- Achieve energy efficiency in the industrial, commercial and residential sectors
- Make clean energy accessible through financing tools
- Make the city more sustainable or resilient through increased local renewable energy

The 2019-2021 work plan was approved by the board in late 2018. Xcel Energy partnered with the city on pilot projects including, developing a plan to decrease city enterprise energy consumption 10%, installing electric vehicle infrastructure to enable earlier transition of city fleet, and a focused effort to work with our business customers. We are also working with the city to build a community solar garden with a focus on low-income subscribers where we will target energy efficiency efforts to decrease the energy usage of the solar garden subscribers. The partnership continues to explore equitable access to clean energy jobs through study and project implementation, and we are working on energy disclosure tools to help the city implement new energy requirements.

We continue to help the city progress towards its clean energy goals through our precedent setting transition to a cleaner generation mix as well as by helping city residents and businesses save energy and increase options in our renewable choice programs. According to the partnership's latest annual report, released in mid-2018, citywide greenhouse gas emissions are down 20.4% from 2006 levels, exceeding the city's 2015 reduction goal of 15%.



# **Corporate citizenship**

We are committed to making a positive impact — as an energy provider, environmental steward, good neighbor and community advocate.

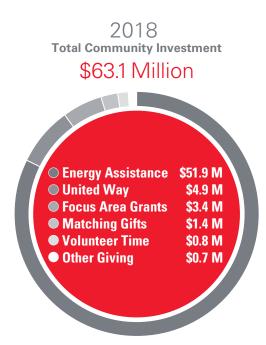
Xcel Energy serves hundreds of cities and towns across eight states. Through our active investment in their infrastructures and the energy we provide, we are literally connected to and serve as an integral member of those communities.

We understand our company's success is directly tied to the success of our communities. That is why investing in them through charitable giving and sharing our time and talents is fundamental to how we do business.

### 2018 Results

- Xcel Energy employees volunteered more than 90,000 hours and served on over 400 community, chamber and nonprofit boards. During the past year, we improved our tracking of volunteer and board participation because we use the information to measure community engagement.
- Through programs funded by our focus area grants, more than 450,000 students benefitted from science, technology, engineering and math education — an essential field of study for our future workforce and for the economy as a whole.
- The Xcel Energy Foundation contributed \$60,000 to relief efforts following the Lake Christine, Spring Creek and other wildfires that burned almost 120,000 acres in Colorado in early summer. The funds helped to replace damaged equipment for the fire departments and other emergency responders who managed the wildfires.

- For National Philanthropy Day, the Association of Fundraising Professionals recognized the Xcel Energy
  Foundation as an Outstanding Foundation that is demonstrating an exceptional commitment through its
  strategic financial support and its encouragement and motivation of others to take leadership roles in
  philanthropy and community involvement.
- The Amarillo Branch of the National Association for the Advancement of Colored People (NAACP) honored Xcel Energy with its Diamond Jubilee for the company's support of its efforts. In this Texas community, we have funded and presented scholarships as part of the NAACP's spring scholarship luncheon for more than a decade and have consistently sponsored the group's educational and fundraising programs.
- Junior Achievement of Northwest Wisconsin recognized Xcel Energy as its Outstanding Community Partner
  of the Year for the company's commitment to helping area youth with financial literacy, work readiness and
  entrepreneurship. The organization serves a district of approximately 18,000 students in classrooms across 20
  Wisconsin counties, most of which Xcel Energy serves.
- Xcel Energy was nominated as Corporate Supporter of the Year by the Black Data Processing Associates (BDPA) Twin Cities chapter. The award recognizes the efforts of corporations that support BDPA's mission to increase participation of people of color in the information technology field. For a number of years, we have provided the organization with financial support, volunteers and internship opportunities.
- Xcel Energy was a recipient of a Colorado Business Committee for the Arts Award, a statewide recognition
  that honors companies and individuals for their outstanding partnerships and engagement with the arts. We
  were nominated by several of our arts and culture grant partners including Cleo Parker Robinson, Dairy Arts
  Center, 40 West Arts and the Alamosa Live Music Association, among others.



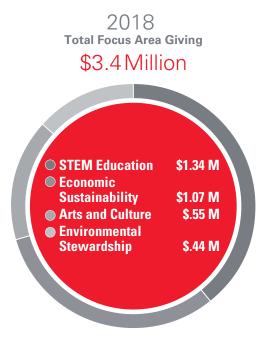
# **Xcel Energy Foundation**

The Xcel Energy Foundation is our company's charitable arm that oversees giving and volunteer programs. Its mission is to use the collective knowledge, resources and skills of our staff and colleagues to make a positive impact in communities throughout our service territory.

### The foundation generally focuses its support in four areas:

- STEM Education (science, technology, engineering and math): The economic growth and future of
  the communities we serve relies on the educational systems and programs that produce a quality workforce
  for tomorrow. Just like other businesses in the community, Xcel Energy's future success relies on having a
  workforce that is educated and well trained.
- Economic Sustainability: Employment levels directly impact a community's economic prosperity, and
  ultimately, quality of life. We believe that all of our customers should have the skills and opportunity to be
  successfully employed so we support organizations that promote workforce development and economic
  self-sufficiency.
- Environmental Stewardship: Our communities count on us to produce energy responsibly and to conserve
  natural resources. While we do all we can in our operations to meet these expectations, we can do more by
  supporting organizations and programs that work to protect and enhance the natural environment.
- Arts and Culture: Thriving arts and cultural activities are a key component to vibrant and strong communities.
   With a mission to help create desirable communities in which to live, we support programs that increase the opportunities and accessibility of arts and cultural programs to all.

In 2018, the Xcel Energy Foundation contributed over \$3.4 million in grants to promote our primary focus areas of STEM education, economic sustainability, environmental stewardship and access to arts and culture. Altogether, 380 nonprofit organizations received grants averaging about \$9,000 each.



# **Employee Involvement**

Our employees are active members of their communities, where they live and work. We support this commitment by offering a number of programs that encourage their involvement, including:

- Volunteer Paid Time Off (VPTO): Full-time employees are eligible for up to 40 hours per year to volunteer for nonprofit organizations in our service area to help strengthen the communities we serve.
- Dollars for Doing: The Xcel Energy Foundation matches each hour an employee volunteers with a \$10-perhour contribution to the nonprofit, up to 100 hours annually per employee.
- Volunteer Energy: Groups of employees and retirees that volunteer together on a project are eligible for Volunteer Energy funding of up to \$1,000 annually, which goes to the associated nonprofit from the Xcel Energy Foundation, in appreciation for the volunteer effort.
- Matching Gifts: The Xcel Energy Foundation matches dollar for dollar any employee and retiree charitable donations of \$50 or more, up to \$750 for nonprofit organizations and up to \$2,000 for higher education institutions.
- United Way: the Xcel Energy Foundation sponsors an annual United Way campaign and matches the pledges
  of employees, retirees and contractors.
- Day of Service: Xcel Energy hosts a special volunteer day where employees demonstrate collectively their community spirit.
- Board Service: Throughout our service territory, we currently have hundreds of employees serving on nonprofit boards, with some employees serving on multiple boards.

# **United Way Campaign**

Xcel Energy has a long-standing tradition of supporting United Way and the community organizations it assists. Each year, we sponsor an employee campaign that for seven consecutive years has raised well over \$2.5 million annually in employee and retiree pledges, which the company matches.

The campaign is a fun and rewarding part of working at Xcel Energy, with a number of special fundraising events — from chili cook-offs to sport tournaments. This includes a popular "dress down" badge that employees can purchase which gives them a pass to wear jeans to work and significantly boosts fundraising.

Combined with the company match, the campaign in 2018 raised more than \$4.9 million to support United Way programs and hundreds of nonprofit organizations throughout Xcel Energy's service territory. More than 4,000 employees and retirees contributed about \$2.72 million in pledges, surpassing the campaign goal by 7%.

In addition, employees in our Texas and New Mexico service area support United Way's Day of Caring each spring. More than 70 employees volunteered in 2018 to lend a hand to complete improvement projects at several local nonprofit agencies.

# 2018 Day of Service

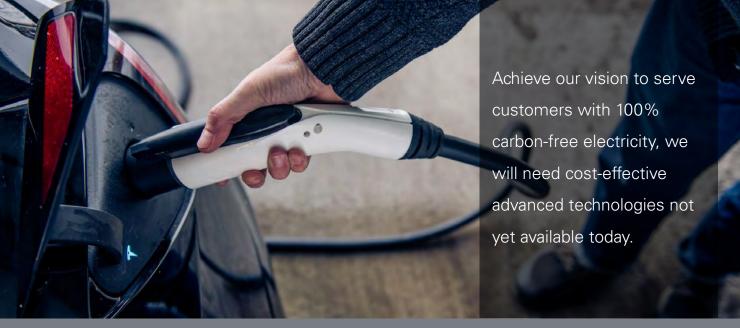
More than 4,600 employees, retirees and family members, along with some friends and customers, came together in September to volunteer to better their communities by participating in Xcel Energy's eighth annual Day of Service. The volunteers joined together at 116 project sites across Colorado, Minnesota, South Dakota, North Dakota, Michigan and Wisconsin to dig, plant, paint, cut, sort, organize and much more on behalf of a variety of community nonprofit partners.

In total, the effort contributed approximately 13,800 volunteer hours to support our local communities, valued at more than \$429,000.

# **Energy Education**

We want our customers to know how their energy is produced and delivered. To help achieve this objective, we support energy education in a number of ways. Most of our major non-nuclear power plants provide public tours for their neighboring communities, and through our online Energy Classroom, we offer educational resources for teachers and students.

Through a special community program in New Mexico, we support solar energy education for customers and schools. Our solar education center in Roswell demonstrates different technologies for collecting sunlight to generate electricity. We own four photovoltaic systems located on partner sites that are available to help teachers with energy curriculum specifically developed for New Mexico classrooms.



Innovative energy programs and technology research and demonstration

# **Energy innovation**

Rapidly evolving technology is changing customer preferences for more sophisticated products and services, and those customer preferences are driving change in how we serve our customers.

Within the next decade and beyond, we will have more change in our industry than we have experienced in the last half century, driven largely by technology. Through collaborations with researchers, technology developers, venture investors and others in our industry, we actively monitor and stay abreast of developments in emerging and advanced energy technology. We also have underway a number of pilot and demonstration projects that are testing the real-world application of cutting-edge technologies and are serving our customers today.

This work has become increasingly important because of our ambitious carbon reduction goals. To realize our vision for a carbon-free future, we will need clean 24/7 technologies to integrate high levels of renewable energy, as well as other advanced technologies.

Advanced technologies also make our operations more efficient, safer and cost effective. As powerful tools emerge to transform our work, they can reduce our costs, improve productivity and enhance the service we provide, benefitting our customers through their overall experience and the costs they pay.

### 2018 Results

- We launched our first set of voice actions using the Google Assistant as a seamless way for customers to access information to improve energy efficiency in their homes. It is part of a new collaboration with Google to deliver tools that customers can use to manage energy use.
- In Minnesota, we announced plans to build on our clean energy leadership by investing more than \$25 million to increase access to electric vehicles (EVs), and help drivers and fleet operators start driving electric.

- In Colorado, we proposed and received approval for a residential demand response battery pilot. It will study
  the integration of batteries into utility systems, battery performance and customer preferences. We are
  seeking to work with two to four battery vendors and engage up to 500 customers during the pilot term, which
  will begin in late 2019 and continue for up to two years.
- We continue to gain valuable insights from our investment in Energy Impact Partners, which has now invested \$325 million in 25 companies that support a number of advancements from distributed energy resources to storage, electric vehicles, advanced data analytics, microgrid applications, cybersecurity and other clean energy technologies.
- Xcel Energy became the first public utility to receive permission from the Federal Aviation Administration to inspect transmission lines using drones flown beyond the operator's visual line of sight.
- We began piloting the use of bots to drive speed and accuracy in performing routine tasks within our Finance department, enabling employees to shift time to higher-value work.

# **Advanced Grid Intelligence and Security**

Through our Advanced Grid Intelligence and Security (Advanced Grid) strategic initiative, we plan to transform the grid into an intelligent, integrated network that securely, efficiently, reliably and safely integrates distributed energy resources.

We have started building Advanced Grid technology infrastructure in Colorado where regulators have approved the initiative. This includes:

- Upgrading to advanced meters for 1.5 million Colorado electric customers from 2019 to 2024.
- Installing Integrated Volt-VAR Optimization technology (IVV0) from 2017 to 2022 which allows customers'
  appliances to run more efficiently, and in turn, use less energy and potentially reduce monthly bills.
- Implementing the Field Area Network (FAN), a new communications network that provides the infrastructure
  necessary to enable two-way communications between intelligent devices on the grid such as advanced
  meters and the control center. These communications include automatically notifying us when customers
  lose or regain power, improving our ability to identify outages and more efficiently deploying repair crews. The
  FAN continues to be installed in the Denver metro area and the entire network will be complete by 2023.

We began deploying FAN advanced field devices in 2018 and implemented a secure, two-way private network that will function as the foundation for the technology in Colorado, as well as Minnesota, where we have regulatory approval for a time-of-use pilot that will launch in 2020. The network enables the secure flow of information between control centers, new advanced devices in the field and our customers.

The FAN infrastructure is critical for when we begin deploying advanced meters to Colorado and Minnesota customers in 2019. We plan to begin rolling out advanced meters to 13,000 Denver metro area customers in late 2019. Through the pilot in Minnesota, 17,500 meters will be deployed giving 10,000 customers from the Hiawatha West and Midtown area of Minneapolis and customers in the Westgate area of Eden Prairie the opportunity to save money by using electricity when it is less expensive to generate and deliver.

## **Electric Vehicles**

The future of transportation is dramatically changing, and as more electric vehicle options become available, a growing number of customers want to reduce their carbon footprint through the cars they drive. We are uniquely positioned to support our customers and communities and to work with electric vehicle (EV) stakeholders to make this change and ensure it truly benefits customers, the environment and the power grid we all rely upon.

Through our EV strategy, we are focused on:

- Raising awareness and increasing access to information on the benefits of EVs
- Helping reduce the upfront costs of infrastructure needed to charge EVs
- Establishing time-varying rates and smart charging technologies to ensure that EVs can charge as much as
  possible on low-cost, low-carbon energy

While EVs create a significant opportunity for drivers and fleet operators to save on fuel and other costs, barriers exist to wider-scale adoption, such as customer awareness, high up-front costs and the availability of charging infrastructure. We can help overcome these barriers by developing new services, piloting them and then rolling out our most successful ideas to customers on a broader scale.

We developed a portfolio of innovative pilots in Minnesota that will benefit drivers, customers and the environment. The initiatives and pilot programs focus in three main areas: home charging, public charging and fleet operations. This includes a two-year pilot in Minnesota to 100 residential customers that offers a turn-key approach to charger installations by reducing the upfront costs for equipment and providing off-peak pricing benefits. Future options could include a new subscription service that would provide drivers with a set bill for EV charging and equipment each month, and we are exploring dynamic digital tools to help customers understand all their options when it comes to vehicle choices, pricing options and charging solutions.

For public charging, our fast-charging-corridor pilot will seek to leverage public and private funds to increase the availability of fast-charging stations on highways and other major corridors. We are also working with the cities of Saint Paul and Minneapolis on a pilot to support a charging network for everyone, including those who may not own vehicles. Through a partnership with HOURCAR, a local, independent, nonprofit car-sharing service, Xcel Energy will support a new, all-electric, one-way car-sharing service and other innovative mobility services in the Twin Cities. This project is intended to increase access to the benefits of electric transportation, including those in low-income, underserved communities.

We also plan to make it easier and more affordable for large fleet operators like Metro Transit, the Minnesota Department of Administration and the City of Minneapolis to integrate electric vehicles into their fleets. We will provide the electrical infrastructure needed to charge the first eight of Metro Transit's electric buses and are looking to provide charging infrastructure for the State of Minnesota and the City of Minneapolis EV fleets and other customers over time.

We expect to expand our EV efforts to other states, and as we pursue our EV Plan, we are focused on these objectives:

- Empower customers with information, tools and options
- Increase access to electricity as a transportation fuel in an equitable manner
- Encourage efficient use of the power grid and integrate renewable energy
- Improve air quality and decrease carbon emissions
- Ensure reliability, interoperability and safety of equipment
- Leverage public and private funding opportunities
- Provide benefits to all customers, both EV drivers and non-EV drivers
- Ensure transparency and measure results

# **Colorado Innovative Clean Technology Projects: Battery Demonstration Projects**

Our Colorado Innovative Clean Technology program was first approved in 2009 to test emerging technologies intended to lower emissions. We have and continue to test several new technologies and evaluate their cost, reliability and environmental performance on a small, demonstration scale before determining whether to deploy them more widely for our customers.

We have two battery-storage demonstration projects currently under the program:

- As demand for solar energy at our customers' homes and businesses increases, we are examining how battery
  storage can help integrate higher concentrations of customer solar energy on our system. Through a project
  in Denver's Stapleton neighborhood, six homeowners have received Sunverge customer battery systems to
  test with their rooftop solar installations. We also have installed six larger grid battery systems, supplied by
  Northern Reliability, Inc., in right-of-ways or easements.
- Through a public-private partnership, Xcel Energy, Panasonic and Denver International Airport are
  collaborating to test a battery storage system that can both serve as a microgrid to provide backup power to
  Panasonic's Denver headquarters and to support Xcel Energy's grid at other times. As part of the project, Xcel
  Energy owns a 1.3 MW-AC solar carport installation and a 1 MW/2MWh lithium ion battery. Panasonic also
  owns a 0.20 MW-AC solar array located atop its building, which is tied into the system.

With both projects, we are testing various ways to operate the battery systems, and are evaluating and analyzing performance. Testing will be completed in 2020. We are finding that the battery systems perform well and are learning many things that will influence future battery system design and associated integration with our system.

### **Drones**

We are using unmanned aircraft systems or drones in a number of applications. From inspecting power lines to wind turbine blades and evaluating substations for equipment upgrades, drones are making these tasks easier, safer and helping to reduce costs.

We were the first in the nation to enter into a partnership for safety with the Federal Aviation Administration (FAA), and now hold one of five of the partnerships, along with GE, Amazon, Google, and Florida, Light and Power. In 2018, we increased the use of drones as we became the first public utility in the country to receive FAA permission to fly drones beyond the operator's visual line of sight and without a visual observer to inspect transmission lines. The flights, which began last summer and continued monthly through the year, are part of a program to prove the value of using unmanned aircraft to inspect critical infrastructure in the power industry.

As a regulated utility we are required to inspect electric transmission lines on a routine basis. Traditionally, we have conducted these inspections with helicopters and foot patrols. Using drones to inspect our 24,000 miles of electric transmission lines delivers value on many fronts, starting with ensuring reliability for our customers thanks to better data. It is also safer for employees, especially in remote mountainous areas, and less costly. As technology improves, the cost to operate drones continues to fall, which will save even more money for customers.

The program started in Colorado, and pending FAA approval, we plan to expand the transmission inspection program in other states in 2019.

# **Energy Impact Partners**

With the pace and scale of emerging technologies and changing customer interests, the energy industry is evolving in ways it never has before. Xcel Energy joined Energy Impact Partners in 2015 as an opportunity to better understand technology's impact on our business and to drive greater efficiency and innovation as we meet customer needs.

EIP is a collaborative, strategic investment platform that provides capital primarily to clean-tech companies that seek to optimize energy consumption and improve sustainable energy generation. Our planned \$50 million investment over five years represents a new era for us, where we move beyond clean energy implementation for our customers and into the clean-tech investment space.

Xcel Energy was an original participant in the collaboration that now includes more than 15 utility and industrial participants. By joining with peer companies, we gain greater visibility into the business models and technologies of promising companies and have the opportunity to influence emerging business models so that energy companies and third parties can collaborate and grow together. Also EIP brings together energy companies from around the world to share diverse, global perspectives and insights into policy and regulations, helping position us for new trends, rules and other requirements in the states we serve.

We are gaining insights that are helping inform our strategic decisions and how we conduct our business across the organization from energy supply to distribution, customer solutions and cybersecurity.

## **Electric Power Research Institute (EPRI)**

Through our long-time membership with EPRI, we gain insights into the challenges and opportunities for using advanced clean energy technologies and reducing carbon emissions. This includes EPRI's work on electric system resiliency, climate scenario analysis and greenhouse gas reduction goals, as well as integrating renewables, electric vehicles, combined heat and power, customer demand response and energy efficiency.

EPRI also informs our regulators and customers on technical and economic issues, opportunities and challenges related to the use of new grid technologies, including large-scale and customer-sited distributed energy resources, such as energy storage and distributed generation. In this collaborative research environment, we can engage with the industry, technology developers and other stakeholders who test and evaluate new technologies and products, develop tools and methodologies to analyze the effects of distributed energy resources on the power delivery network and optimize their use.

### GridNXT at SolarTAC

The Solar Technology Acceleration Center (SolarTAC) in Aurora, Colorado, is a world-class facility for demonstrating and validating advanced solar and distribution grid technologies in a real-world, grid-connected environment. Even before the project's grand opening in 2011, Xcel Energy recognized the potential benefit of the facility and signed on as an original founding member.

Our investment has paid off for customers. Not only have we tested important battery projects at the site, solar technologies fine-tuned at SolarTAC serve our customers in Colorado and New Mexico with more cost-effective, efficient solar energy. Through testing, solar developers were able to make adjustments for adverse weather conditions before installing the technology in our service areas.

To continue evolving with technology and developer needs, the 74-acre site has transitioned to become a test-bed for solar, storage and other distributed energy enabling products and components. GridNXT at SolarTAC now supports the demonstration of advanced technologies for integrating distributed generation and storage, including microgrid capabilities at the edge or end of the electric distribution system.



# Renewable energy

Xcel Energy operates in some of the country's best regions for producing wind and solar power, and we are putting these resources to work for customers.

Increasingly, the customers and communities we serve want their energy from clean, renewable sources, and we are delivering. Renewable energy plays a vital and growing role in our energy supply and future plans for meeting customer needs.

As wind and solar technologies continue to improve, prices decline, making it possible to operate a reliable, affordable power grid with significant levels of renewable generation. When it comes to managing cost and reliability, scale matters. We are focused on increasing the use of large-scale, universal wind and solar energy because these resources are significantly more economical and can provide energy for all customers at half the cost compared to smaller, distributed resources.

We also recognize that some customers want more renewable energy, beyond what is currently in our energy supply, including some of our business customers and communities that have set goals for up to 100% renewable energy. To meet this need, we continue to expand and improve our voluntary renewable choices, enabling customers to achieve their goals.

### 2018 Results

- Since 2005, we have been a national leader in wind energy, and according to the American Wind Energy Association, are ranked the No. 2 utility wind provider with nearly 8% of the country's wind capacity on our system.
- Our new, 600-megawatt Rush Creek wind project was completed and is estimated to produce enough
  electricity to power approximately 325,000 homes annually. It is the largest project we have built and is
  among the largest in Colorado, with 300 Vestas wind turbines manufactured in the state. The project
  injected \$1 billion into Colorado's economy and is projected to help avoid 1 million tons of carbon per year.

- At year-end, we had 762 megawatts of large-scale, universal solar capacity and 7,288 megawatts of wind capacity — enough to power approximately 3.8 million homes. This includes 1,440 megawatts at wind farms we own.
- After its 2017 debut in Minnesota, our Renewable\*Connect® program quickly sold out during its 2018 launch
  in Colorado. Early in 2019, we successfully transitioned 100% of Windsource® subscribers in Wisconsin to
  Renewable Connect, demonstrating high engagement and satisfaction with this new option. As customer
  demand for Renewable\*Connect grows, we have proposed expanding the program in Minnesota and expect to
  propose an expansion in Colorado.
- Nearly 190,000 customers participate in renewable choice programs. Plus, we achieved a milestone of more than 1 gigawatt of distributed solar installed on our system since the programs began.
- The City of Eau Claire, Wisconsin, recognized Xcel Energy for making a difference and helping the city to become more sustainable through the company's efforts to increase renewable energy, efficiency and conservation.

### Renewable energy is a vital and growing part of our energy supply.



<sup>\*</sup>Results are estimated and reflect potential scenarios that achieve 80% reduction in carbon emissions by 2030; actual system depends on various factors, including regulatory approval of future plans.

# **Ramping Up Renewables: Steel for Fuel**

Xcel Energy's Steel for Fuel strategy resonates with all types of stakeholders because it expands the company's renewable portfolio and delivers carbon-free energy without raising customer bills. Under the effort, we are adding renewable resources — the steel — at a net savings because the capital costs of the projects are more than offset by future avoided fuel costs.

### Delivering on the nation's largest multi-state wind investment

Several years ago, we announced the addition of 12 new wind farms across seven states, totaling 3,680 megawatts of new wind capacity, enough clean wind capacity to power about 1.7 million homes annually. All the projects have now moved from the approval to execution phase. When complete, we will own about 70% of the new capacity, more than quadrupling our company-owned wind portfolio.

Our Rush Creek wind project was the first to be completed in fall 2018, and we are now building three wind farms to be completed in 2019: Hale (478 megawatts) in Texas, Foxtail (150 megawatts) in North Dakota and Blazing Star I (200 megawatts) in Minnesota. Nearly all 12 projects will be online by year-end 2020 to take advantage of the full production tax credit. Only the Dakota Range wind project will be complete in 2021 and is still low cost despite qualifying for a partial tax credit.

All of these projects must be built from the ground up, except for one. For about 20 years we purchased power from the Lake Benton wind project in southern Minnesota. Now we plan to buy and operate the project as part of our wind fleet once it is rebuilt in 2019 with new, more efficient turbines. By repowering an existing wind farm such as this, we are able to take advantage of existing transmission and other infrastructure. It is one of the reasons Lake Benton could successfully compete in the bidding process against other wind projects.

### **The Colorado Energy Plan**

Under the Colorado Energy Plan approved by regulators in 2018, we will add 1,100 megawatts of wind energy from three new wind farms and the repowering of a fourth, existing wind farm. The projects include the 500-megawatt Cheyenne Ridge wind farm that we will construct and own. We will also add a 72-megawatt solar farm and three solar and battery storage projects, which combined incorporate 560 megawatts of large-scale solar and 275 megawatts of battery storage.

The solar-battery projects are located in different parts of Colorado, with one project in Adams County near the Denver metropolitan area and the other two in southern Colorado. The two projects in Pueblo County are the largest, with capacities of 100 to 125 megawatts and four hours of battery storage. They will help provide reliable generation capacity to replace coal power from nearby Comanche units 1 and 2, slated for retirement by 2026.

### **Economic benefits**

In addition to providing affordable, carbon-free electricity for customers, all of these projects support economic development. Our 12 new wind projects are expected to create 2,700 construction jobs, 150 full-time jobs and generate \$800 million in landowner lease and property tax payments over the lives of the projects. The Colorado Energy Plan is anticipated to inject \$2.5 billion into the state's economy, including \$1 billion from Xcel Energy.

### Repowering plans

We continue to seek new, economic opportunities to expand our wind portfolio and have asked regulators for approval to buy two older wind farms in southern Minnesota, which are currently being repowered with the latest wind technology. We have purchased power from the Jeffers and Community Wind North projects over the past decade under long-term agreements. Adding the refurbished wind farms with a capacity of 44 and 26 megawatts, respectively to our own energy portfolio further supports our clean energy transition and will save customers money compared to long-term purchases. If approved, we would close on the completed projects by year-end 2019. We plan to pursue similar opportunities in the future.

# **Renewable Choice Programs**

Just as customers want more control over their energy use, they also want more choice in how they engage with energy options. Our goal is to offer innovative solutions that enable our customers to meet their priorities around clean energy and the environment, while balancing these choices with the cost that all customers pay to support them.

We were an early adopter of voluntary green power back in 1998 with the introduction of our flagship program, Windsource. Since then, our program offerings have expanded to include options for community solar gardens, on-site solar and Renewable\*Connect — our newest offering.

Through Renewable\*Connect, customers can choose to make their energy up to 100% renewable through different contract options, such as month-to-month, five-year and 10-year terms. There is no equipment to install and customers can remain on the program if they move to a different home or business location within our service area.

Renewable\*Connect exemplifies innovation. We have combined our program and regulatory experience and customer input to design the program so customers retain the renewable energy credits and rights to renewable energy claims. Renewable\*Connect also keeps bills low for participating customers, while not increasing costs for nonparticipants. It is self-supporting through subscription fees, so nonparticipants don't pay more.

In Colorado, the program's energy is delivered from the new 50-megawatt Titan Solar facility, near Deer Trail, Colorado. The energy sources for the Minnesota and Wisconsin programs include the Odell Wind Farm and North Star Solar.

Participation in our other renewable choice programs continues to grow as well. In Minnesota, there were approximately 7,700 subscribers participating in our Solar\*Rewards Community® program at the end of 2018. With more than 500 megawatts of capacity from 170 participating solar gardens, the program is easily the largest community solar garden program in the country, although the purchase rate for this Minnesota solar energy is two to four times higher than what we would pay from more cost-efficient energy sources. Our Colorado community solar garden program was one of the first in the nation and also continues to grow, quadrupling in size between 2017 and 2019.

In Wisconsin, our Solar\*Connect Community® program is fully subscribed and continues to expand. A second community solar garden located in La Crosse began generating power for subscribers in March 2019 and a third project is expected to be built later during the year in Ashland. Once that project is complete, local gardens will be available to customers throughout our Wisconsin service territory. Similar to Renewable\*Connect, the incremental program costs are covered through subscription fees so that non-participating customers do not pay extra to make the program available.

Customers also continue to install more on-site solar, with our Colorado customers increasingly choosing to install solar panels without incentives through Solar\*Rewards®. Across all states, more than 7,600 solar systems were installed during 2018, adding 66 megawatts of additional on-site distributed solar. To reduce the impact of energy bills for customers struggling to make ends meet, we recently launched incentive options to test solar installations for income-qualified households in Colorado and Minnesota.

# We offer the following renewable choice programs that reflect our company's commitment to meeting the clean energy interests of customers.

Program	Description	REC Attribution	MN	WI	ND	SD	СО	NM	тх	MI
Renewable*Connect	A flexible and affordable way to subscribe for up to 100% renewable energy	Participant								
Windsource	An easy, low risk way to subscribe to clean wind energy	Participant								
Solar*Connect Community	Subscribe to a solar garden and get full rights to the solar claims, plus a bill credit for choosing solar energy	Participant						*		
Solar*Rewards Community	Subscribe to third-party solar gardens and receive electric bill credit payments for solar energy produced	All Customers								
Solar*Rewards	Install your private on-site solar system and earn an incentive for transferring the RECs to Xcel Energy	All Customers						**		
Net Metering	When you produce wind or solar energy through on-site equipment, you're able to retain RECs and sell any excess energy back to the grid	Participant								

<sup>\*</sup>Solar\*Connect Community has been filed but not yet approved in New Mexico.

<sup>\*\*</sup>New Mexico Solar\*Rewards availability varies from year to year and is not currently available.

In addition to renewable choices, we started offering customers in Wisconsin a Certified Renewable Percentage as a way to let them claim the full benefit of our increasingly clean energy mix. We now retire Renewable Energy Credits (RECs) to cover the entire renewable energy portion of the electricity we deliver to customers in Wisconsin, beyond what we retire to meet Wisconsin's Renewable Portfolio Standard. Certified Renewable Percentage is not something customers enroll in or subscribe to but is a benefit they automatically receive. This enables customers to make renewable energy claims. For example, our commercial customers can claim the portion of renewable energy included in the Certified Renewable Percentage just by being an Xcel Energy customer.

We plan to propose the approach for regulatory approval in Colorado and Minnesota this year to begin offering customers the same benefit in these states.

# Integrating Wind and Solar Power

The significant wind and solar resources on our systems have fundamentally changed the way we operate. With each increase in renewable capacity, we have improved system operations, enabling our ability to incrementally grow the use of wind and solar power and achieve new system records.

Some of our operational improvements for accommodating more wind and solar energy include:

- Adding more flexible backup generation. As we retire aging coal plants, we are replacing some of the energy with more carbon-friendly natural gas generation, which can more efficiently and cost-effectively ramp up or down to accommodate variable, renewable generation.
- Cycling coal offline and reducing minimum generation levels. Once considered infeasible, we are turning off coal units to accommodate more wind generation and are reducing the time that units need to be offline before than can be restarted. Cycling off coal units and then turning them back on is much more challenging than with a natural gas unit because of all the systems involved, but our Operations team has studied the issues and is working to cycle coal units more efficiently and cost effectively, helping to reduce fuel use and emissions.
- Negotiating greater flexibility from our natural gas suppliers. These agreements allow us to efficiently use our gas generation resources to balance variable renewable generation, helping to increase system reliability and lowering customer costs.
- Investing in transmission. We are improving and building new transmission facilities that can deliver more wind and solar energy to customers.
- Using control equipment. We use set-point controls for wind farms in combination with automatic generation control of thermal units that lets wind farms operate at peak levels while fossil-fuel production is reduced.
- Establishing a 30-minute flexibility reserve. We previously carried one megawatt of reserve capacity for every megawatt of wind generation as backup in case winds suddenly dropped off. As our wind portfolio grew, we studied the maximum amount of wind energy typically lost within 30 minutes and were able to reduce this reserve, dramatically decreasing costs associated with carrying large wind reserves while maintaining system reliability.
- Adjusting planned maintenance. We now plan transmission and plant maintenance outages around times of the year when wind and solar production is lowest.

Generally, we find that wind and solar are very compatible resources for meeting customer needs. Our renewable generation works together fairly consistently to operate on average across all hours of the day.

While solar energy is relatively simple to forecast, wind generation has been notoriously difficult because of its variability. Most weather forecasting models are designed to generate information about winds near ground level rather than at 200 to 300 feet, where turbine hubs are located. Also, landscape features such as hills and trees can reshape wind speeds and directions, causing turbulence in ways that can greatly influence the amount of energy produced.

To improve on this, we began working in 2009 on a multi-year research and development project with the National Center for Atmospheric Research (NCAR) and its affiliate company Global Weather Corp. (GWC). Today the WindWX system helps utilities around the globe including Xcel Energy to make better commitment and dispatch decisions. It uses real-time, turbine-level operating data and applies sophisticated algorithms to forecast the amount of wind

power that will be produced. Forecasts for a 168-hour period are provided every 15 minutes across Xcel Energy's entire service territory — from the hills of western Minnesota to the plains of eastern Colorado and the

Texas Panhandle.

Compliance with State Renewable Energy and Portfolio Standards

Xcel Energy is on pace to surpass established renewable energy requirements in the states we serve through at least 2030. New Mexico recently adopted the Energy Transition Act to set one of the most ambitious renewable portfolio standards in the nation. We are currently evaluating our compliance strategy with the increased targets that will be set by the law once it takes effect in June of 2019.

### **Renewable Energy Requirements in Xcel Energy States**

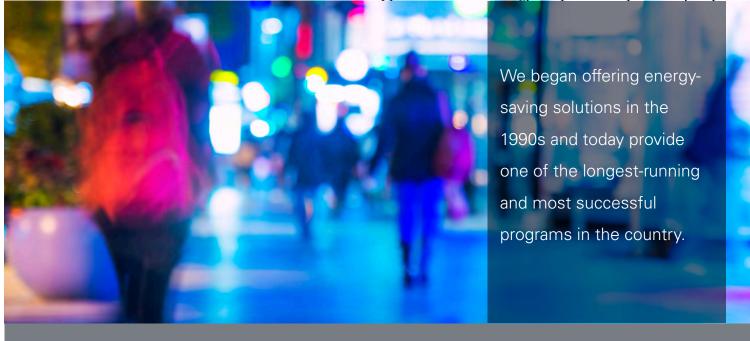
State	2018	Next Increase	Notes
Colorado Renewable Energy Standard	20%	30% by 2020	30% of retail sales by 2020, with 3% from distributed generation (DG), including at least 1.5% from retail net-metered DG resources and up to 1.5% from wholesale DG resources (defined as resources ≤30 megawatts located in Colorado that are not customer sited)
Michigan Renewable Portfolio Standard	10%	12.5% by 2019; 15% by 2021	Goal of 35% by 2025
Minnesota Renewable Portfolio Standard	25%	31.5% by 2020	30% of retail sales by 2020, with at least 24% from wind, plus 1.5% of retail sales from solar by 2020, with at least 10% from on-site solar 40kW or less
New Mexico Renewable Portfolio Standard	15%	20% by 2020	The New Mexico Energy Transition Act increases future goals of the RPS; in addition to the immediate goals, it sets a standard of 40% by 2025, 50% by 2030, 80% by 2040 and then 100% carbon-free electricity by 2045  Note: the Public Regulation Commission must consider the safe and reliable operations of the system and the prevention of unreasonable costs
North Dakota Renewable and Recycled Energy Objective		Voluntary	No RPS Requirement for North Dakota
South Dakota Renewable, Recycled and Conserved Energy Objective	10%	Voluntary	No RPS Requirement for South Dakota
Texas Renewable Generation Requirement	Statewide Goal	10,000 MW statewide by 2025 (goal achieved) & (non-wind goal: 500MW)	Xcel Energy's portion is approximately 3.3% of the statewide goal (the 3.3% is based on Xcel Energy Texas electric retail sales as a percentage of the total state electric retail sales)
Wisconsin Renewable Portfolio Standard	12.89%		

# **Renewable Energy Credits**

A renewable energy certificate or credit (REC) is created for every megawatt-hour of renewable electricity generated (1 REC = 1 MWh). RECS provide a mechanism to commoditize renewable energy attributes and are tracked in national commission-approved REC tracking registries. RECs can be disaggregated or separated from the underlying renewable energy and sold separately. Typically, RECs are traded to companies looking to claim green energy or transferred to other utilities to reduce compliance costs.

Xcel Energy uses RECs to satisfy compliance with state renewable energy standards throughout our service territory. Our company carefully tracks its REC ownership and works to comply with the rules and best practices around renewable energy claims. Only parties that own and retire RECs can claim to use the renewable energy, according to the Federal Trade Commission's Green Guides. However, renewable energy separated from or without the associated REC can retain its value and be used for compliance with environmental regulations.

In 2018, we continued to look for ways to increase the value of the renewable energy on our systems through the sale of RECs. In several states, Xcel Energy has more renewable energy on its system than is needed for compliance with renewable energy standards. Based on market opportunities and the projected shelf life of RECs, we sold more than 3.7 million RECs in 2018, about 3 million less than in 2017. The renewable energy that generated these RECs came from Colorado, New Mexico, Texas and the Upper Midwest. Our customers benefit by sharing portions of these profits associated with the sales. REC sales make up a minor portion of our REC holdings.



Energy efficiency

# **Encouraging Efficient Energy Use**

Our comprehensive portfolio of energy solutions meets the individual needs and preferences of customers and gives everyone an opportunity participate — from large industrials to small businesses and customers living on fixed incomes.

Customers rely on the energy we provide for their comfort, security and convenience, but increasingly they want more control and new options for managing and using energy. We are paying attention to the market, listening to our customers and responding with new and improved solutions.

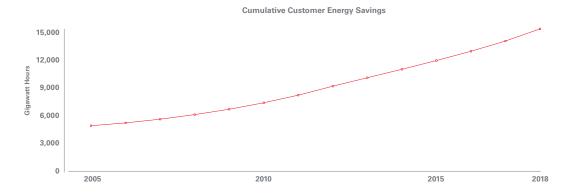
We continuously evaluate emerging technologies and program models, looking for opportunities to expand our portfolio of energy solutions and anticipate evolving customer needs and interests. Beyond our customer offerings, we continue to demonstrate leadership by incorporating energy efficient technologies and practices at Xcel Energy office buildings and service centers.

#### 2018 Results

- Five of Xcel Energy's energy efficiency programs are recognized as being among the country's best, according
  to the American Council for an Energy-Efficient Economy (ACEEE). The following programs received the
  organization's Exemplary Program Award in early 2019: the Low-Income Program and Energy Design
  Assistance in Colorado, Home Energy Squad and One-Stop Efficiency Shop in Minnesota, and Partners in
  Energy in both Colorado and Minnesota.
- Our customers completed nearly 3.5 million electric and 1.4 million natural gas efficiency projects and received \$141million in rebates through our conservation programs. We had more than 42,000 customers participate in our load management or demand response programs.

- We launched five new demand response programs, which helped participating customers save money and
  provided flexibility in how we manage the power grid. Under the programs, customers reduce or shift their
  energy use during peak periods, helping balance the supply and demand of electricity. We have around 25 new
  programs set to launch between 2018 and 2021 and have installed a new system to track demand response
  use and effectiveness.
- Altogether, customers saved about 1,240 gigawatt hours of electricity for the year, equivalent to powering 160,000 average homes, and 1.6 million dekatherms of natural gas, enough to fuel 20,000 average homes.
   The annual energy savings through efficiency measures was enough to avoid about 780,000 tons of carbon emissions, equivalent to the annual carbon emissions from approximately 150,000 cars.
- Some of the states we serve provide incentives for achieving energy efficiency goals. Thanks to strong program performance, we earned more than \$41 million in incentives, exceeding our expectations.
- In early spring 2019, we hosted our annual Energy Expo for Colorado industrial, commercial and small-business customers. It featured teams of energy experts from Xcel Energy and outside organizations providing energy-saving ideas and opportunities for rebates and energy efficiency study funding. During the event, 13 businesses were recognized for outstanding efforts to save energy. These companies greatly lowered energy costs and reduced their impact on the environment. Altogether, they saved more than 33 million kilowatt hours of electricity in a 12-month period.
- Xcel Energy's Education and Outreach program promotes and encourages customer participation in our energy efficiency and renewable choice programs. During the year, we successfully expanded our efforts in Colorado, Minnesota and New Mexico. We reached more than 4.2 million people and generated over 19,800 targeted customer leads and 5,900 direct program sign-ups through event participation and community sponsorships. Some of our more notable partners include the Como Zoo in Minnesota, Denver Botanic Gardens, and sports teams the Saint Paul Saints and Denver Outlaws.

Since we began consistently tracking results in 1992, we estimate that the energy savings through our efficiency programs has avoided the need for 21 average-size power plants.



# **State-by-State Efficiency Programs and Performance**

Xcel Energy's portfolio of over 150 electric and natural gas conservation programs continues to experience strong customer engagement and growth. We continued to help our customers achieve significant energy savings in 2018, meeting and exceeding savings goals in several key states. The following is a summary by state of overall performance and program offerings.

### Minnesota

2018 Approved Savings Goals of 433,694,480 kWh and 769,720 Dth				
Electric Projects	1,920,207			
Natural Gas Projects	765,805			
Total Spending	\$122,958,724			
Electric Savings	680,448,447 kWh			
Natural Gas Savings	913,240 Dth			

In Minnesota, we offer residential programs that range from prescriptive rebates to in-home services providing energy-efficient materials and labor for installation. Consumer education is included with most of the residential programs to increase conservation awareness and encourage energy-wise choices and behavior in the home. We also offer services and products to help income-qualified customers reduce their energy use and ultimately lower their bills.

The business segment includes electric and natural gas commercial, industrial and small business customers. We offer a variety of programs that encourage business customers to save energy, lower their energy bills, reduce peak demand and minimize environmental impacts. The portfolio has three primary components, including prescriptive products focused on common equipment, custom products to encourage savings from unique situations, and study and educational products that help customers identify energy efficiency opportunities.

### **North Dakota**

Electric Projects	14
Natural Gas Projects	88
Total Spending	\$257,67
Electric Savings	16,426 kW
Natural Gas Savings	12,697 Dt

We provide savings opportunities for North Dakota business customers through load management programs, as well as residential natural gas rebate programs and home energy audits.

### **South Dakota**

2018 Approved Savings Goal of 5,761,199 kWh				
Electric Projects	62,953			
Total Spending	\$775,604			
<b>Electric Savings</b>	6,057,290 kWh			

Our energy efficiency portfolio for South Dakota customers is a mix of electric programs designed to encourage both residential and business customers to save energy and lower their energy bills in a variety of ways. We offer programs for lighting, load management and educational outreach for business and residential customers and continue to work with trade partners to promote our programs.

### Wisconsin

Electric Projects	153,135
Natural Gas Projects	152,758
Total Spending	\$9,872,298
Electric Savings	119,139,835 kWh
Natural Gas Savings	98,169 Dth

In Wisconsin, Xcel Energy participates in a statewide program called Focus on Energy that provides incentives to eligible residents and businesses for installing cost-effective energy efficiency and renewable energy projects. We retain a portion of the approved annual funding for our voluntary customer programs and to promote the Focus on Energy programs. We also use the funds for general conservation activities, advertising and energy efficiency education for residential customers, commercial customers and trade allies in our service territory.

### Michigan

Electric Projects	15,634
Natural Gas Projects	321
Total Spending	\$384,663
Electric Savings	1,292,727 kWh
Natural Gas Savings	6,170 Dth

We participate in a statewide program in Michigan called Efficiency United that educates residential and commercial customers about energy efficiency and offers cost-effective solutions and rebates for reducing energy use.

### Colorado

2018 Goals/Targets of 400 GWh and 573,136 Dth			
Electric Projects	793,208		
Natural Gas Projects	449,006		
<b>Total Spending</b>	\$107,385,072		
Electric Savings	453,894,496 kWh		
Natural Gas Savings	604,928 Dth		

Our Colorado residential energy efficiency programs focus on cost-effective, direct impact products that target household appliances, HVAC and lighting. This effort is supplemented with educational services intended to further increase customer understanding and interest in conservation and energy efficiency. We also offer income-qualified customers products to analyze natural gas and electric consumption, and provide products, services and education designed to help lower energy bills.

Our business program — for commercial and industrial customers of all sizes — offers a broad portfolio of demand side management products designed to meet the needs of this varied segment. The portfolio has three primary components, including prescriptive products focused on common equipment, custom products to encourage savings from unique situations, and study and educational products that help customers identify energy efficiency opportunities.

### **New Mexico**

Electric Projects	371,298
Total Spending	\$10,685,496
Electric Savings	51,698,426 kWh

We offer a broad portfolio of programs to meet the needs of business, residential and low-income customers in our eastern New Mexico service territory.

### **Texas**

Electric Projects	145,992
Total Spending	\$3,610,230
Electric Savings	20,524,107 kWh

We offer our Texas customers energy efficiency programs through Standard Offer Programs and third-party Market Transformation programs. These programs are provided to residential, low-income, commercial and industrial customers.

# **Conservation at Xcel Energy Facilities**

Our building management practices support our commitment to the environment and the communities we serve. We own or lease more than 150 office building and service centers throughout our eight-state territory and strive to set an example with conservation. Similar to how we encourage customers to use energy more efficiently in their homes and businesses, we look for ways to save energy and water in our own facilities, especially when those opportunities reduce our costs and conserve resources.

We also go beyond conservation to incorporate a number of environmentally sound practices into our daily building management, including steps that ensure indoor air and water quality, green cleaning and the use of GREENGUARD Certified products and materials.

We proactively began managing our facilities to reduce environmental impact in 2008, and by the end of 2018, have accomplished the following:

- Saving more than 8 million kilowatt hours
- Conserving more than 173,600 therms of natural gas
- Reducing water usage by 4.7 million gallons

Through our energy management initiative, we plan to continue trying to identify and implement projects that reduce energy use and costs at our facilities while helping to reduce overall maintenance needs. Projects will consist of individual, standalone opportunities, as well as efforts to support and improve new construction, remodeling and HVAC replacement projects that are planned and approved. To do this, we review past facility energy audits with the company's annual capital budget to identify energy improvement opportunities to support.

### **LEED Certified Facilities**

Xcel Energy continues to seek LEED (Leadership in Energy and Environmental Design) certification for our facilities. We currently have 15 facilities that are LEED certified throughout the eight states where we operate. LEED is a U.S. Green Building Council certification program that recognizes sustainable building strategies and practices. To receive LEED certification, building projects satisfy prerequisites and earn points to achieve different levels of certification. LEED certification has four levels — Certified, Silver, Gold and Platinum — based on achievement in five areas: sustainable site development, water savings, energy efficiency, materials selection and indoor environment quality.



2020-2034 Upper Midwest Resource Plan Page 59 of 126



Governance, ethics and compliance

# Corporate compliance and business conduct

For decades we have fostered a culture of compliance and ethical business conduct, striving to earn and maintain the trust of our stakeholders.

For more than 100 years, we have had the privilege of serving our customers and doing so with honesty and integrity. Because trust is so essential to our ongoing success, it is included in our corporate vision to be the preferred and trusted provider of the energy our customers need. To help deliver on this vision, we hold our employees, contractors and board of directors to the highest ethical standards and ensure their decisions are consistent with our values.

Every day we deliver safe, clean, reliable and affordable energy while holding ourselves accountable and acting responsibly. Through our commitment to doing what is right, we have established a reputation that our employees can be proud of and gives customers confidence in doing business with us.

### 2018 Results

- We revised our corporate values, putting new focus on who we are as a company today and who we want to
  be in the future. Through conversations across the organization, we asked ourselves what values will guide us
  for the years to come as we continue to evolve. Employees have responded positively to our renewed values
  of Connected, Committed, Safe and Trustworthy.
- We updated policy content in response to new or changing regulations and business practices. An example is
  our new, stand-alone anti-retaliation policy. While our Code of Conduct has always prohibited retaliation and
  protected employees who report concerns, we created a dedicated anti-retaliation policy to increase visibility
  of the company's expectations.

- We focused on educating leaders on how to respond to employee concerns and prevent, recognize and report
  retaliation. We held in-person compliance and ethics training, created a micro-learning training module and
  launched an e-learning course titled Compliance for Leaders.
- We completed a system refresh of Xcel Energy's allegation of wrongdoing case management system. This
  initiative included streamlining the hotline phone- and online-reporting intake form to make it easier for
  employees to report concerns, as well as simplifying the process of recording and monitoring progress on the
  investigations. These improvements drive consistency in reporting and enhance the employee experience.

### **Ethical Foundation: Code of Conduct**

Our Code of Conduct serves as the foundation for our Corporate Compliance and Business Conduct program. It guides everything we do — how we work together, make business decisions and interact with stakeholders. Our Code of Conduct also provides guidance for handling difficult judgement calls and reporting concerns.

The board of directors reviews and approves the Code of Conduct annually, ensuring top-level ownership for this foundational resource.

Employees at all levels, as well as contract workers and our board of directors, are expected to apply the Code of Conduct to their work with Xcel Energy. Code of Conduct training occurs annually and included in the training course is a statement of commitment. While contract workers are not required to take Code of Conduct training, they are required to perform services in accordance with the Code of Conduct as specified in the terms of their agreements with Xcel Energy.

# **Corporate Compliance and Business Conduct Program**

The focus of Xcel Energy's Corporate Compliance and Business Conduct program is to:

Do What's Right: Report What Seems Wrong.

### **Sound Governance Practices**

Xcel Energy's Board of Directors has overall authority for the Corporate Compliance and Business Conduct program, with key elements of oversight delegated to the Audit and Governance, Compensation and Nominating committees. Our Corporate Compliance and Business Conduct Council is comprised of leaders from across the company and ensures engagement with all employees.

The company's CEO sets a strong tone at the top and supports that tone in many ways including championing the values refresh and highlighting the company's commitment to compliance on webcasts and in-person at various team meetings. The chief ethics and compliance officer reports to the CEO, and also oversees the company strategy and corporate governance functions, enabling her to effectively drive company culture and values. The integration of these activities and responsibilities ensures that compliance is part of how we make decisions across the company.

### **Policies, Training and Communications**

Company policies, training and communications help employees understand expectations in order to make good decisions every day. Information about policies and expectations are shared through multiple channels and in multiple ways to ensure that they are a regular part of all employees' work experience.

Employees are responsible for knowing and following not only the Code of Conduct but also multiple other corporate policies associated with Corporate Compliance and Business Conduct. Training courses include content from corporate policies and other information that demonstrate how our values guide the way we do business. Employees use training information to ensure their actions protect and enhance the company's brand and reputation by working safely and effectively and complying with the many policies, laws, regulations and expectations governing our work.

Regular, consistent communications are designed to help employees do what's right. We use a variety of channels to reach employees across teams, such as emails, posters, videos, intranet news articles and in person discussions.

### **Issues, Investigations and Actions**

When things don't seem right, employees are encouraged to discuss concerns with their leaders. We know reporting a potential issue can be difficult, so we offer multiple reporting options that include contacting:

- Equal Employment Opportunity, Employee Relations or Workforce Relations
- The employee's next level of management
- The Compliance Hotline, available 24 hours a day and with the option to remain anonymous
- The Corporate Compliance and Business Conduct Office
- Legal Services
- The Xcel Energy Board of Directors

Employees working at our nuclear generating plants have additional reporting options that include completing a Nuclear Corrective Action Request form, reporting issues to the Employee Concerns program or contacting the Nuclear Regulatory Commission.

Our Compliance Hotline also offers employees the opportunity to ask questions about decisions they are unsure about.

As we follow up on reports, we conduct effective and timely investigations, take appropriate action and ensure employees are safe from retaliation. The Investigations Governance Committee oversees the investigation process and is comprised of the chief ethics and compliance officer, general counsel, chief financial officer and chief human resources officer.

When concerns are reported through the Compliance Hotline, the Corporate Compliance and Business Conduct Office assigns them to the appropriate business function to investigate based on allegation type. Business functions include Equal Employment Opportunity and Employee Relations, Workforce Relations, Legal, Security or Audit. These business functions also receive and investigate concerns reported through other channels. All reports are tracked and processed through a case management system that provides the company with a comprehensive view of allegations.



# Our people and culture

At Xcel Energy, our business and workforce are changing while customer expectations are rising — a dynamic that is driving us to become more innovative, competitive and customer focused.

Our workforce strategy begins with a mission to proactively attract, retain and develop the highest quality talent. We take a proactive approach to workforce planning and are identifying the skills we need to prepare and meet our future energy objectives, aligning our talent strategies to build diverse pipelines and identifying opportunities to retrain or develop our workforce.

We know our people are our greatest strength. That is why once employees are part of our team, we offer extensive training and engagement opportunities to develop their skills and talents and help them grow professionally, in addition to recognizing their achievements. We are also improving our leadership development programs, tools and resources to help ensure our leaders are effective in our changing environment. Through these efforts, our objective is to develop inspirational and courageous leaders that hold employees accountable for achieving results.

### 2018 Results

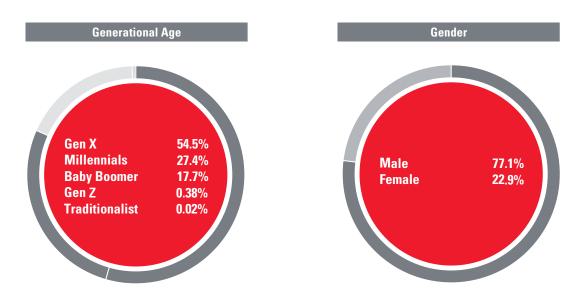
- More than 96% of employees participating in Connect 4 Performance met with their leaders for Quarterly Connections to discuss job performance, professional development and alignment with company goals and priorities.
- Internal candidates successfully filled 41% of our 2,318 job postings, and of employees newly hired to the company, 56% came from within the states we serve and nearly 24% had ethnically diverse backgrounds.

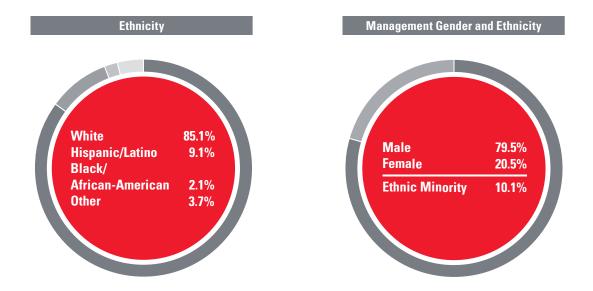
- Xcel Energy was named a Top Veteran-friendly Company by U.S. Veteran's Magazine for the fifth consecutive
  year, a Best for Vets employer by Military Times for the fourth consecutive year, and a Top-10 Military Friendly
  Employer by GI Jobs for the ninth consecutive year. We are included in Military Times' Best for Vets Index, and
  are honored to be a Most Valuable Employer for Military, according to Recruit Military. More than 10% of our
  new hires were veterans.
- For the third consecutive year, we received a perfect score on the Human Rights Campaign Corporate Equality Index and the designation as one of the Best Places to Work for LGBTQ Equality.
- Through a collaborative process that included feedback from employees throughout the organization, we renewed and streamlined our corporate values to reflect our core beliefs who we are, how we conduct our business and the importance of our customers. We are Committed, Connected, Safe and Trustworthy.

### **Workforce Profile**

Bargaining		Non-bargaining			
43% Bargaining	5% Temporary Craft	2% Temporary	38% Nonmanagement Professional	12% Management	

As of year-end 2018, Xcel Energy had 11,691 full-time, part-time and temporary employees.





The average employee turnover in 2018 was 9.9%. About 29.7% of turnover was the result of retirements, about 56.1% were resignations and the remaining 14.2% includes turnover for other reasons, such as unsatisfactory performance, misconduct, severance or death.

Our projections show that 27.9% of our workforce will be eligible for retirement over the next five years and 41% over the next 10 years. However, we do not expect all employees to retire once they become eligible.

# **Workforce Planning and Analytics**

Our strategic workforce planning models and process support leaders in using the opportunities that arise as a result of changes in our business objectives, including the workers required to complete budgeted work and turnover. By leveraging data and analytics, we are able to more accurately determine what the organization will need in terms of size and skill sets to achieve its objectives. The strategic workforce plan supports a more intentional approach to deploying solutions that will address our changing workforce.

In conjunction with this effort, we provide a Human Capital Report that helps leaders make data-based decisions. It is a dashboard that includes standard measures related to employee cost, performance management, and headcount and attrition trends. This information, combined with consultation with business partners, informs our leaders about their current workforce and predictive and statistical analysis provides insights into future impacts.

# **Attracting Top Talent**

To ensure a steady stream of qualified candidates for Xcel Energy's available jobs, we proactively engage with community and educational organizations to prepare a future workforce. We are focused on helping military veterans make the transition to civilian jobs through targeted recruitment and participation in the Hiring our Heroes program. To ensure we can best support our customers' needs, we are committed to having a diverse workforce that reflects the communities we serve.

### Some of our targeted recruitment activities include:

### **Educational Relationships**

We work with a number of colleges, universities and technical schools to provide an avenue to educate students on the opportunities for stable, well-paid jobs with energy providers like Xcel Energy. As a member of the Center for Energy Workforce Development (CEWD), we also help develop training and curriculum that prepares students for skilled jobs in the energy industry. Through our partnership with CEWD, we implemented the Legacy I-3 program for high school students in the Twin Cities to build a pipeline of diverse candidates.

### **Internships**

Through internships we ensure a pipeline for our future workforce needs. We hired 26 college interns into full-time positions with the company in 2018. We work with high schools throughout our Texas and New Mexico service areas, where we have the greatest needs. In Colorado, we have four programs in partnership with Denver Public Schools and Jefferson County high schools. In Minnesota, we continue our partnership with Step-Up Achieve and Right Track to hire high school summer interns. Through these programs, we had 60 high school interns in 2018.

### **Targeted Job Fairs**

We seek out employment events that help us successfully identify and hire qualified employees who are customer focused, curious and innovative. We maintain relationships with several schools and local organizations within our service territory that hold job fairs for diverse populations. Partnerships like this allow us to reach prospective employees to continuously improve our candidate pool.

### **Search Engines**

Xcel Energy markets its jobs on several key sites, including Indeed, LinkedIn and other social media platforms. In partnership with Professional Diversity Network and other industry and skill-specific boards, we target diverse, local talent and individuals that have specialized skills. We also work with local, community-based organizations to reach candidates throughout our service areas, reducing the need for candidate relocation and supporting our local economies.

### **Military and Veteran Outreach**

We remain focused on strengthening our strategic partnerships with military veteran organizations and engaging in activities that maintain our visibility as a preferred employer for veterans. Through military-specific marketing and communications efforts and participation in more than 35 job fairs that specifically target military veterans throughout our service territory, our commitment to hiring veterans and active duty reservists remains strong.

### **Diversity Outreach**

Through our partnerships with workforce centers in Minnesota, Colorado, Texas and New Mexico, Local Job Network and Diversity Minnesota, we are able to reach diverse job seekers in the places where they live and work. We also engage with diverse student groups such as National Society of Black Engineers, Society of Women Engineers, Society of Hispanic Professional Engineers and Society of Asian Scientists and Engineers to attract diverse entry-level employees.

# **Diversity and Inclusion**

We believe that a diverse and inclusive workforce makes our company stronger. Our commitment to diversity and inclusion goes beyond human resource policies and practices — it is an integral part of who we are, how we operate and how we see our future.

Our inclusive work culture embraces all employees and provides them with equal access to employment opportunities and development. To us, diversity is more than ethnicity, gender, age, race, national origin, disability, religion and sexual orientation. It includes differences in thought processes, educational backgrounds, work experiences, personalities, lifestyles and cultural backgrounds.

Each Xcel Energy employee is empowered to make a difference when it comes to creating an inclusive environment. We encourage our employees to remember that:

Diversity Exists: Inclusion is My Responsibility.

### **Diversity and Inclusion Education**

Xcel Energy's commitment to diversity and inclusion is instilled in employees from their first day on the job, as part of our new employee orientation program. Employees receive ongoing education in these areas, and in 2018, 813 employees and leaders throughout our service territory participated in a new half-day diversity and inclusion education session. The classes are designed to provide knowledge, insight and skills to manage diverse teams and create an inclusive culture. The company goal is to have 100% of employees through the program within three years.

### **Business Resource Groups and the Council for Diversity and Inclusion**

Our 11 Business Resource Groups give Xcel Energy employees an inclusive and supportive venue to unite for personal and professional growth. They offer opportunities for cultural exchange and community outreach and helping solve business challenges. Additionally, through the Council for Diversity and Inclusion, leaders of our Business Resource Groups collaborate with leaders from our business areas to help address key challenges and achieve goals.

- ECN (Employee Connection Network): Connects new and existing employees and helps broaden all
  employees' understanding of Xcel Energy through networking opportunities, meet ups and community
  service events.
- GCEEE (General Counsel Employee Excellence and Equality Committee): Aids the general counsel in fostering a spirit of inclusiveness throughout the company.
- GenNext: Aims to support employees through employee education, collaboration and development.
- **GROW:** Identifies and implements innovative ideas and strategies for recruiting, developing, promoting and retaining women in non-traditional work roles in our Energy Supply business area.
- MOVE (Military Ombudsmen for Veterans and Employees): Sustains awareness on issues of interest to
  veterans and active military employees in our workforce and programs and policies that support the welfare of
  veterans and their families.
- SAGE (Supportive Association for Gay/Lesbian/Bisexual/Transgender Employees): Works to help the company become and remain a leader in this area of workforce diversity by addressing issues relating to sexual orientation and gender identification.
- SOURCE (Strategic Organization Utilizing Resources for Career Enhancement): Promotes career
  development, continued education, training and cultural awareness with a focus on African Americans.
- **Tribal Wind:** Supports diverse workforce initiatives and the Native American population through business initiatives such as recruiting, retention, professional development and cultural awareness.
- WIN (Women's Interest Network): Focuses on issues of interest to women, such as professional development and work/life balance.
- !Xcelente;: Increases visibility of Latino employees within the company and community while also promoting
  professional development and sharing Latino culture through awareness, inclusion and celebration.

 XE WiN (Women in Nuclear): Explores and develops programs that help all employees working within our nuclear organization to expand their leadership skills, network and create positive visibility for the nuclear industry within the communities we serve.

# **Performance Management**

Last year was the third year for Connect 4 Performance, our performance management approach for non-bargaining employees who make up over half of our workforce. Connect 4 Performance enables employees to align their individual goals with the priorities of Xcel Energy through simple, meaningful and frequent conversations with their leaders. Throughout the year, employees and leaders work together to identify opportunities that support employee professional development while helping achieve the company's strategic priorities. Employees are encouraged to record their development goals and regularly update and discuss progress and ideas with their leaders.

# **Employee Engagement**

After pausing from our traditional approach to measuring engagement through an annual survey, Xcel Energy spent 2018 developing a comprehensive plan to measure our employee engagement and sentiment. In 2019, we are introducing a new platform that allows employees to provide feedback digitally giving leaders real-time results. This new approach will provide us the flexibility to gather employee feedback at different career points and conduct pulse surveys on engagement.

We help employees stay engaged through a number of channels, including regular webcasts with our senior leadership team, an intranet site that is updated daily, a regular company news magazine for employees and retirees, rewards and recognition programs, company-sponsored volunteer opportunities and our annual Day of Service.

Employees are continuously encouraged to offer feedback to Xcel Energy leadership through a variety of methods. They can submit anonymous comments and questions during regular leadership webcasts and face-to-face meetings, and respond to blogs and articles that our leaders publish throughout the year.

### Workforce Relations

Xcel Energy is committed to providing all employees with a safe, rewarding workplace that values their contributions and ensures fair treatment. We respect our employees' right to organize if desired, and approximately half of our workforce is currently represented by unions.

While each collective bargaining agreement is negotiated with a specific local union, we include equal opportunity clauses in all our bargaining contracts. We also operate in compliance with the policies and regulations established by the National Labor Relations Board, the statutes of the National Labor Relations Act and the guidance of the federal Department of Labor.

Xcel Energy recognizes that all parties benefit by coming together to achieve mutual goals, so we meet frequently with our unions to discuss new and ongoing issues. Employee safety is a mutual focus for both bargaining units and the company. Bargaining unit employees fully support and participate in the company's safety advisory councils, committees, training and other programs.

Interim bargaining has been used for the past 18 years to improve union relations and promote collaboration on business challenges that impact our operations and workforce. We also hold regular meetings between management and labor unions to address grievances with the goal of resolving issues between the parties.

In early 2018, Xcel Energy (Public Service of Colorado) reached an agreement with the International Brotherhood of Electrical Workers (IBEW), Local 111 the Union representing our employees in Colorado.



# Our journey to zero

When we refreshed our corporate values in 2018 to reflect our core beliefs, there was never a doubt that staying safe would remain a top priority.

Given the nature of our business, our employees face numerous hazards while performing their jobs. That is why we continue to instill a culture that values safety through the work of our safety committees, company policies, and training and ongoing awareness campaigns.

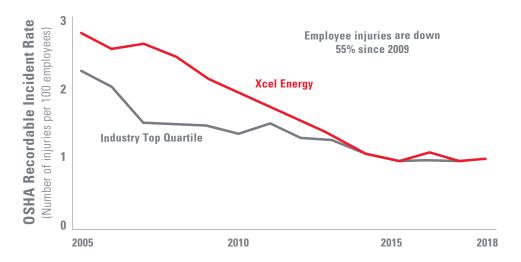
Our Journey to Zero is not just a slogan or program but is a commitment that all employees will return home from work injury free every day. It is about building a safer work environment by putting safety at the forefront of everything we do. Starting with top leadership, we continue to actively demonstrate support for safety throughout the organization. We strive to advance a safety culture through strategic behavioral safety programs and initiatives that encourage employees to take personal responsibility for their safety and the safety of others.

### 2018 Results

- Our employee safety performance ranks in the top-quartile for our industry. We have reduced OSHA
  recordable injuries by 55% and injuries classified as Days Away, Restricted and Transferred by 59% since
  embarking on our Journey to Zero.
- All contract employees receive safety training from their employers as a requirement of working with Xcel Energy. Plus, job briefings and job-site safety reviews occur daily. The total safety incident rate for contract workers in 2018 was down by almost 30%, even though the number of hours that contractors worked nearly doubled.
- We conducted Safety Leadership Training for all employees who are most at risk because they work directly with the delivery of electricity and natural gas.

- We continued to encourage employees to share their safety experiences and to learn from one another.
   Through a special campaign, we increased our near-miss sharing by 150% over 2017.
- The American Gas Association recognized our annual performance with the 2018 AGA Safety Achievement Award for excellence in employee safety.

Our Journey to Zero commitment entered into its ninth year in 2018 and continued to make significant progress in keeping employees safe. Although, as the name of this effort implies, we won't be satisfied until 100% of employees go home injury free.



# **Managing Employee Safety**

Xcel Energy has 21 corporate safety policies in place to address occupational safety and health issues. These policies apply to all company bargaining and non-bargaining unit employees, as well as contractors. Our policies cover a wide range of topics — from working in confined and enclosed spaces to preparing for and responding to emergency situations.

As part of our corporate values, and to protect our employees and the public, working safely is the first consideration while planning or performing work. It is the role of Xcel Energy management to foster, develop, implement and provide training and communication about safety programs that will help reduce occupational injuries and illnesses at work. We expect employees to report unsafe acts, behaviors or conditions to management in a timely manner so that we may address these safety concerns. Any retaliation against an employee who, in good faith, reports a safety violation or suspected violation is strictly prohibited. All employees are empowered to stop work if they see unsafe practices

Our corporate safety organization manages implementation of regulatory compliance, provides technical consultation to business areas, tracks and communicates the company's safety performance, and fosters our safety philosophy and core value. The vice president of Safety and Workforce Relations leads this organization and reports to the chief human resources officer, who reports directly to the president, chairman and CEO. Xcel Energy's Operations, Nuclear, Environmental and Safety committee for the board of directors oversees the company's safety strategy and performance.

There are three key components to our safety and health culture that include:

- **Communication:** Within each business area, we verify that OSHA-required written programs are current and maintained at our facilities. Employees must be thoroughly briefed on site-specific hazards and protective measures prior to starting any job at an Xcel Energy operating facility or on electric and natural gas transmission and distribution lines and equipment. Finally, we establish a system of hazard analysis, which includes hazard identification and control in each business area, and we communicate this system to all affected employees.
- Safety Committees: Our safety committees are organized and represented by bargaining unit and
  non-bargaining unit employees and management. The expectations for these committees are outlined by
  management and periodically audited to track progress and effectiveness. Managers in each business area
  provide support for safety committee findings and recommendations that align with our corporate values.
- Training: Each business area and Corporate Safety develop training plans annually to include OSHA-required training and required elements of our Corporate Safety and Industrial Hygiene programs. We maintain thorough records of all training, including recording the names and dates of employees who complete required safety training.

We provide effective safety and health communications in various formats, including verbal instructions, written documents and posters, safety committee meetings and multimedia presentations, such as video and computer-based training. Through these various media, all employees have access to required safety and health training, policies, programs and safety manuals, as well as federal or state required communications. All Xcel Energy employees are expected to actively participate in the company's safety and health training and communications program.

# **Safety Initiatives**

We continued a number of important safety initiatives in 2018, while also launching new initiatives to help keep employees safe.

### 24/7 Safety

Our 24/7 Safety campaigns focus on maintaining a safety mindset around the clock, helping employees to be safe both on and off the job. The 2018 campaign focused on intervening when you see something unsafe and some of the common household and public hazards to watch out for.

### **Ergonomics**

Musculoskeletal Disorders (MSDs or strains and sprains and cumulative trauma disorders) are the leading type of injury at Xcel Energy, with sprains and strains representing more than 41% of our injuries. Several ergonomics training modules were initiated in 2018 to help improve this, including the Eyes on Ergo training module, Ergo Tips pocket guides and videos, prevention exercises and a Five-week Workplace Athlete Challenge.

### **Near Miss Sharing**

Sharing near misses with coworkers provides a learning opportunity that can prevent similar situations in the future. To encourage employees to share their stories, we do not pursue discipline for employees who report near misses, and we carried out a campaign in 2018 that included video testimonials, posters and articles.

### **Safety Blitzes**

After recognizing certain injury trends, company leaders set out to connect with employees to hear their views and suggestions about safety. Three safety blitzes were held in 2018 and a commitment was made by leaders to spend more time visiting with employees in 2019, as well.

### **Safety Leadership Training**

To help reduce serious life-changing incidents, the Safety Leadership Training program was conducted in 2018 for all at-risk employees. The program was designed to transform how employees view their role in safety because everyone is a leader when it comes to safety.

# Safety Promise

Xcel Energy's Safety department hosted a series of events in 2018 offering employees' families an opportunity to ask their loved ones to work safely on camera. The employees were then given the opportunity to make a safety promise on camera. These requests and promises were shared in various formats, encouraging everyone to make a personal commitment to their safety and the safety of those around them.

### **Slips, Trips and Falls**

Slips, trips and falls are avoidable, yet each year they make up a significant number of Xcel Energy's OSHA recordable injuries. We enhanced our Slips, Trips and Falls Toolkit in 2018 to include even more videos, training and guides detailing strategies for these incidents and minimizing the chance of injury when falling.



# **Total Rewards for employees**

As our industry becomes more competitive, it is vital that we continue to offer current and prospective employees an attractive package of pay, benefits and professional development.

Xcel Energy is committed to providing employees with market-competitive compensation and benefits. We use best practices and benchmarking to ensure the programs we offer are aligned with the market and attractive to our workforce, while also finding ways to manage costs to keep our compensation and benefits programs financially viable.

We have reviewed and made changes to our contracts with benefit providers to help manage costs at their source rather than change plan design or increase cost to our employees.

#### 2018 Results

Labor practices

- Forbes recognized Xcel Energy as one of the World's Top Regarded Companies and World's Best Employers, as rated by employees.
- We developed a new parental leave policy that allows non-bargaining employees up to an additional four weeks paid time off to care for a new addition — whether it is through birth, adoption or foster care.
- Employees participated in 440,000 internal learning opportunities as recorded through our Learning Management System.
- Our tuition reimbursement program supported 256 employees with their continuing education, with annual reimbursements totaling \$806,755.
- We identified 286 "ready now" successors to key positions around the company potential successors that
  possess the necessary skills to make a seamless transition if needed into a role for which they have been
  identified.

## **Employee Total Rewards**

Xcel Energy's Total Rewards package includes base and variable compensation, along with benefits like health and well-being, retirement and pension, paid time off, recognition and talent development. We have a pay-for-performance philosophy, recognizing and providing larger rewards to our best performers. Base pay is influenced by job descriptions and external market pay data, as well as the employee's skills, experience and job performance. Bargaining unit employees are paid in accordance with their collective bargaining agreements.

Our annual incentive plan includes three award opportunities:

- Annual Incentive Program (AIP) Year-end
- I Deliver
- Innovator awards

These awards are given to exempt, non-bargaining employees who went above and beyond and who achieved results that were aligned with Xcel Energy's corporate goals. Our non-exempt employees are eligible for Spot-On bonus awards in recognition of above-and-beyond results in their responsibilities. Employees and leaders can also recognize one another through an online system, and when appropriate, give points-based awards that can be redeemed for merchandise and gift cards.

We provide a Total Rewards Statement that shows our employees the full value of the pay and benefits they receive. It offers a personalized snapshot of pay and benefits information, as well as links to additional program and service information. Employees can access their individual statements online.

#### **Benefits**

A significant portion of our investment in employees is made through a benefits package that remains competitive in the marketplace. Offering a comprehensive approach to well-being, Xcel Energy provides programs that address the physical, emotional and financial welfare of employees.

We are committed to supporting the health of employees and offer a medical plan that provides comprehensive coverage, encouraging preventive care so health issues can be identified.

Our Employee Assistance Program connects employees with free, confidential support to resolve a variety of issues including mental health counseling, elder care, financial and legal advice.

Xcel Energy continues to offer defined benefit pension plan along with a 401(k) savings plan, which demonstrates our commitment to partnering with employees to meet their long-term financial goals. Unlike many employers who have frozen pension plans or reduced contributions to 401(k) accounts, we continue to contribute to these plans at market-appropriate levels to indicate our commitment to help employees save for the future.

Xcel Energy Benefits Package for Eligible Non-bargaining Unit Employees\*

#### **Health Benefit Plans**

- High Deductible Healthcare Plan (HDHP)
  - Reasonable and affordable premiums
  - Includes a Health Savings Account (HSA) employees can contribute pre-tax dollars
  - In aggregate, Xcel Energy pays approximately 75% of medical costs
- Dental plan
  - Xcel Energy offers a basic and enhanced dental plan
- Vision plan
  - Xcel Energy offers access to a vision plan
- Wellness Program
  - Financial incentives to encourage healthy lifestyles
  - Wellness coaching including tobacco cessation, weight management, diabetes management, onsite yoga and flu shots
  - Fitness center reimbursements

#### **Retirement Plans**

- Pension plan
  - 5% cash balance plan for new employees and legacy formulas for other employees
  - 100% paid by Xcel Energy
- 401(k) savings plan
  - Savings Plan allows employees to save for their future through automatic payroll deductions (pre-tax, Roth 401(k) after-tax or a combination of both)
  - Variety of investment options (cash, bond and stock investments)
  - Company matching contributions

#### **Income Protection**

- Life Insurance
  - Xcel Energy covers the full cost of basic life insurance
  - Offers voluntary supplemental and dependent life insurance coverage
- Paid Time Off
  - Xcel Energy covers the full cost of short-term and long-term disability for eligible employees

#### **Work/Life Balance Programs**

- Employee Assistance Program (EAP)
- Paid Time Off
  - Vacation/PTO
  - Sick leave

- Transit pass subsidies
- Adoption assistance
- Parental leave allows employees up to an additional four weeks paid time off
- Flexible Spending Accounts
  - Dependent care
  - Medical
  - Transportation

#### **Professional Development Programs**

- Tuition reimbursement
- Variety of internal and external development opportunities

## **Professional Development**

Total Rewards is more than pay and benefits. It also includes providing employees opportunities for professional development. Xcel Energy is committed to professional development and maintaining an environment where learning and growth can occur. Employees are ultimately responsible for owning and managing their own professional development. However, we expect managers to encourage development through feedback, coaching and support.

With this in mind, we offer employees resources and tools to support their personal and professional development, including a Learning Management System (LMS), which provides e-learning, virtual and traditional training options. We also provide employees with development planning tools, assessments and suggestions for practicing new skills and behaviors.

#### **2018 Professional Development Opportunities**

Learning Programs	Opportunities
Online Courses	We offer an extensive catalog of online courses for employees to complete, ranging from technical and computer application training to professional and management training to compliance-related education and more. Some of these training programs are mandatory.
Classroom Courses	Employees can choose to attend a number of different training programs that are taught in person, ranging from safety and compliance-related classes to professional development classes to technical trainings. Depending on job responsibilities, some of these courses are mandatory.
Career Development Assignment Program	The Career Development Assignment Program is an intentional effort to support the development of high-performing employees through cross-functional experience aligned to business needs. Employees may be pre-identified through succession planning or, in some cases, the opportunity may be posted.

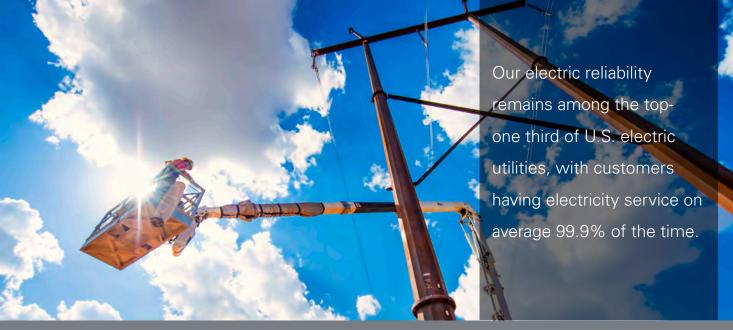
<sup>\*</sup>Xcel Energy employees are eligible for benefits based on employee group and status (regular full-time and regular part-time non-bargaining). Bargaining unit benefits are based on the contract negotiated with the specific local union.

### **2018 Leadership Development Opportunities**

Programs	Opportunities
Succession Planning	Talent Review identifies individuals who might be successors for critical positions at Xcel Energy. Through this systematic process, executives and managers discuss assessments regarding the long-term performance, leadership potential and career aspirations of their employees. Working in teams, they determine the developmental readiness of each employee, create customized development plans and identify talent gaps. Potential "ready now" successors are identified for key positions around the company. This ensures there are successors that possess the necessary skills to make a seamless transition into the role for which they have been identified. In 2018, about 202 key positions were identified and nearly 2,300 leaders and individual contributors were assessed during Talent Review.
Coaching in the Moment	Coaching in the Moment is a course that teaches leaders how to coach employees by using insightful observations, shifting their worldviews and empowering them to take meaningful action. Offered both in a classroom and online setting, this training is transforming how our leaders interact with their team members by helping them learn to resolve their own dilemmas.
Leadership Essentials	Leadership Essentials is an online portal accessible to all employees that features over 25 learning topics, such as managing relationships, influencing and development planning. Each topic contains informational content, practice activities, and links to curated internal and external resources such as helpful articles and videos.
Leading the Call	Leading the Call is a small cohort-based executive development program for high potential, senior leaders. A cohort will meet regularly over several months to engage on topics such as culture, leading change, self-awareness, cross-functional and enterprise thinking, and to prepare for the highest levels of leadership. To put learning into action, they also divide into small groups to address real business challenges. In 2018, a cohort of 17 leaders went through the program.

## **Equal Employment Opportunity and Non-discrimination Policies**

Our corporate Code of Conduct prohibits all forms of discrimination and promotes equal employment opportunities. We have Equal Employment Opportunity and Non-Discrimination policies in place that apply to all Xcel Energy operating companies and subsidiary companies. Xcel Energy provides equal opportunity in hiring, training, compensation, promotion, termination, transfer and all other terms and conditions of employment, without regard to race, color, religion, creed, national origin, gender, age, disability, veteran status, sexual orientation or any other protected class status in accordance with applicable federal, state and local laws.



Energy reliability, fuel diversity, nuclear generation, security, emergency preparedness and advanced grid

# 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 cleaner mix of resources.

Above all else, our fundamental purpose is to provide customers with safe, clean, reliable and affordable energy. We continually invest to strengthen and upgrade our infrastructure — the generating plants, power lines, pipelines and other systems that serve customers. This includes diversifying our energy supply to provide energy from a reliable mix of resources while managing cost, environmental impact and making sure we don't depend too heavily on any one energy source. As we decide where to invest, we naturally consider projects that address all these considerations while providing the best overall value for all stakeholders — addressing the interests of regulators, policy makers, communities, customers and investors.

To run and maintain our system, we must also invest in our people to cultivate a culture of continuous improvement where we strive to work better and smarter for our customers. Among our operations employees, we have a mantra of getting better every day.

#### 2018 Results

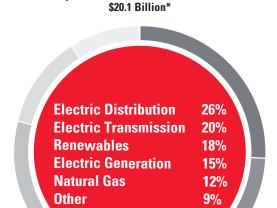
Regulators approved our Colorado Energy Plan that is supported by a diverse coalition of stakeholders, including environmental groups, consumer advocates, municipalities and customers. Under the plan, we will retire 660 megawatts of coal-fueled generation and add 1,100 megawatts of wind, 700 megawatts of solar, 275 megawatts of battery storage and 380 megawatts of existing natural gas resources. We will own 500 megawatts of the new wind and all of the natural gas resources.

- We reached a \$650 million agreement to purchase the Mankato Energy Center, a 760-megawatt natural gas
  power plant. The plant currently provides power to our customers under a purchased power agreement with
  Southern Power, a subsidiary of Atlanta-based Southern Company. Purchasing the plant is a great value for
  customers because of the cost savings and operating flexibility it can provide as we transition to clean energy
  and reduce reliance on coal.
- We delivered the Rush Creek wind project on time and within budget. The 600-megawatt project is our largest
  constructed to date. We also made progress advancing eight other wind projects across seven states to
  different stages of development. Xcel Energy is building and will own the projects, totaling 2,550 megawatts
  of capacity. In addition, we expect to own an additional 470 megawatts of wind capacity from four projects
  that others are building or repowering.
- Under our Advanced Grid Intelligence and Security initiative, we deployed 100 network and more than 200 advanced distribution devices, and implemented a secure, two-way private network that will function as the foundation for advanced technology in Colorado and Minnesota. This work is just the beginning of the initiative that will upgrade the power grid to better serve customers and enhance our ability to efficiently restore power and improve reliability. The initiative will create a platform that provides enhanced visibility and control of the energy grid through the integration of modern information system technology and traditional distribution systems.
- Xcel Energy was one of several companies recognized with a special 2018 Emergency Assistance Award by the Edison Electric Institute. Approximately 200 of our line workers and support personnel traveled to Puerto Rico to help restore power following the devastation of Hurricane Maria.

## **Investing for the Future**

Over the next five years, we plan to invest \$20.1 billion in projects that, in addition to ongoing maintenance and repair, will improve energy production, strengthen the energy grid, ensure security and offer customers more options.

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



Capital Investments 2019-2023

<sup>\*</sup>Includes the purchase of the Mankato Energy Center and the Jeffers and Community Wind North repowering projects, which are awaiting regulatory approval in 2019.

## **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 associated with our generation portfolio including 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 our 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 commissions decide on the resources to be acquired, our stakeholders have the opportunity to provide input.

In Colorado, regulators approved the Colorado Energy Plan in August 2018, which completed phase two of our 2016 resource plan. We are now acquiring the new renewable, battery and natural gas resources that are part of the plan.

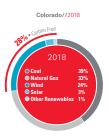
In the Upper Midwest, we are preparing to file a new resource plan in July 2019. We have announced our 2030 goal to reduce carbon emissions from the electricity that serves our customers 80% while maintaining reliability and keeping customer bills affordable. We are currently working with stakeholders on the upcoming proposal to achieve this goal.

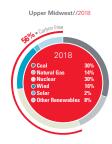
In our southwestern states, we are only required to file a resource plan in New Mexico. In early 2018, regulators in New Mexico and Texas approved our plans to add 1,230 megawatts of new wind generation for the region in 2020. We are now implementing the wind projects, which are expected to meet customer energy needs while saving money long term through lower fuel and other costs. We anticipate filing updated resource plans in New Mexico as our system load requirements and generation portfolio continues to evolve.

## **Our Energy Supply**

Xcel Energy provides electricity from a diverse mix of energy sources, including coal, natural gas, nuclear and renewables. We delivered more than 102 million megawatt hours of electricity to customers in 2018 produced at Xcel Energy generating plants and purchased from third-party suppliers.









## **Utility Operations**

#### **Generating Electricity**

We currently own 79 generating plants that operate across our eight-state service territory with more than 18,000 megawatts of capacity. Traditionally, our generation portfolio has depended on coal, but we are transitioning our energy supply away from coal to rely more on renewable energy and energy sources that enable renewable integration, such as flexible 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.

By 2026, we will retire 23 coal units under approved plans, representing approximately 50% of the coal-fueled capacity we own. When we file our proposed Upper Midwest Energy Plan in July 2019 for consideration with the Minnesota Public Utilities Commission, it will include additional coal retirements. We will propose closing the Allen S. King Generating Plant in 2028 and Sherco Unit 3 in 2030 — our last remaining coal plants in the region.

As we retire resources and replace them with new ones, we are making the transition responsibly and thoughtfully for the communities and employees who are impacted. To date, we have managed plant closures through attrition and employee transfers to different company work locations. For our communities, we continue to partner on economic development opportunities, and we expect the transition will also create new jobs and economic development opportunities throughout our service area.

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



<sup>\*</sup>Based on Xcel Energy's 10% ownership interest in Craig Unit 1.

We continue to invest in wind energy under our Steel for Fuel 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. Xcel Energy is recognized as a national leader in wind energy. Currently, most of the wind power on our systems is contracted under long-term agreements with third parties, but that is changing under our Steel for Fuel strategy.

Our two nuclear generating plants in Minnesota play an essential role in our energy future, providing 1,657 megawatts of reliable, carbon-free capacity, enough to power 2.3 million homes. The plants delivered exceptional performance in 2018, generating more than 14.6 million megawatt hours of energy. It is a record for the plants, which produced power 96% of the time while reducing operating and maintenance costs by nearly 3%. Both plants also received the top rating under the Nuclear Regulatory Commission's Reactor Oversight Process that classifies the nation's nuclear reactors into categories based on safety. Our Monticello Nuclear Generating Plant was honored with the Institute of Nuclear Power Operations' Excellence Award for achieving an excellent rating on the plant's annual evaluation.

#### **Delivering Power**

Xcel Energy operates nearly 21,000 miles of power lines and more than 1,200 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 2018:

- As part of the Power for the Plains initiative in New Mexico and Texas, we completed nearly 250 miles of new transmission. The largest effort was the new 90-mile 345-kV Hobbs-China Draw project in New Mexico that provides a new source of bulk power to meet growing electricity demand in Eddy and Lea Counties.
- We completed the 83-mile, 345-kV transmission line between Missile Site Substation and the new Pronghorn and Rush Creek II Substations. The new line carries power from the Rush Creek wind project to Colorado business and residential customers.
- In Minot, North Dakota the 20-mile Magic City-McHenry 230-kV transmission line and new substation went into service, providing another source of electricity and improving reliability for the area. Xcel Energy crews partnered with the U.S. Fish and Wildlife Partners for Wildlife program to plant 40 acres of pollinator habitat around the new substation.
- The La Crosse-Madison Transmission Line Project, also known as the Badger Coulee Project, was completed
  and energized in December 2018. The approximately 180-mile, 345-kV line provides electric system reliability
  to benefit western Wisconsin communities, the state of Wisconsin and the entire Upper Midwest region and
  provides access to lower-cost power and renewable energy.

In addition to these projects, we successfully started a critical rebuild project near Boulder in difficult terrain. In three days, we hauled and set 19 steel transmission structures by helicopter to rebuild a 110-year-old 115-kV line that runs between the El Dorado Substation and the NCAR Substation in Colorado. The line is located in Boulder Open Space in an area largely inaccessible to vehicles.

#### **Fueling Homes and Businesses**

Xcel Energy is the tenth largest provider of natural gas service in the country, based on number of customers. We fuel the homes and businesses of approximately 2 million customers in Colorado, Michigan, Minnesota, North Dakota and Wisconsin, and also operate some gas transmission in South Dakota and Texas. Natural gas is an extremely safe and efficient way to heat homes, from both a cost and environmental perspective, especially in our cold weather service areas. With more than 2,200 miles of transmission and 35,000 miles of distribution pipelines already in service, we plan to add approximately 750 miles of new pipeline over the next five years.

To maintain safe and reliable gas service for everyone, we continue to upgrade and renew our natural gas pipelines and other equipment. We finished replacing all cast-iron pipes on our system in 2014. Low natural gas prices have made it possible to invest in our system and accelerate upgrades with minimal impact to customer bills.

Xcel Energy purchases natural gas from third-party producers to generate electricity and distribute to customers for use in their homes and businesses. Natural gas production is governed by federal, state and local regulations, with additional regulations under consideration. We expect all our suppliers to conduct their operations responsibly and in compliance with all regulatory requirements.

We can play an important role in ensuring natural gas is produced responsibly and as sustainably as possible. To help promote sustainable production upstream of our operations, we joined the Natural Gas Supply Collaborative — a group of the nation's large natural gas purchasers. Collaborative members have called for and are encouraging enhanced transparency from natural gas producers across 14 social and environmental metrics.

## **Vegetation Management**

Xcel Energy's Vegetation Management department manages millions of trees across more than 47,000 miles of distribution right-of-way and nearly 21,000 miles of transmission right-of-way throughout our service territory. For 24 years, 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 such as 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. The practice helps us achieve our vegetation management goals in an environmentally sensitive, socially responsible and cost-effective manner.

In addition, 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.

For our distribution and transmission lines, work is generally performed on a four- to five-year cycle. In Colorado, we have established a Mountain Hazard Tree Program that helps us stay ahead of the tree mortality caused by the Mountain Pine Beetle. 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 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.

We 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.

## **Safety: Grid Resilience and Security**

As the use of technology and interconnected systems expands, the 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 energy 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 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 hours a day, seven days a week. 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 multi-layered safeguards to reduce or eliminate single points of failure and weakness.

While it is impossible to protect our systems and 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.

In 2018, we introduced the Enterprise Command Center, which provides constant monitoring for natural and manmade 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, president 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.

We advocate for policies that support the needs of all customers while creating opportunities for Xcel Energy to invest in the grid and continue delivering energy that is safe, reliable, affordable and increasingly clean.

Public policy engagement

# **Public policy**

Xcel Energy engages in policy and regulatory issues important to ensuring our ability to provide all customers with the energy service and products they want and value.

As the energy industry continues to undergo a significant transformation, it is essential that we participate in the policy developments that will determine our future, representing the interests of our company and its many diverse stakeholders. With more than a century of experience in meeting the energy and financial needs of customers, communities and investors, we aim to share our expertise with policy makers and elected officials to better inform and guide decisions that impact the service we provide.

While we may not always share the same positions, we participate in industry, trade, business and other associations to provide our perspectives and to learn from the perspectives and experiences of others. We discuss issues and solutions with policy makers on all levels — local, state and federal. We also provide informal input and formal testimony and comments on proposed legislation and regulation.

Our policy priorities focus on advancing research of new clean energy technologies and developing the right conditions that allow technologies to be seamlessly adopted by our existing system, once they are ready. To help facilitate or accelerate our industry transformation, we are exploring targeted incentives and the right mandates that will not increase customer costs.

#### 2018 Results

When we announced the company's industry-leading carbon vision in late 2018, policy makers, community
leaders and environmental advocates from around the country expressed their support for our new goals.
 We worked extensively with stakeholders on this commitment to help confirm our goals and advocate for the
policy objectives for achieving them.

- We worked with public utilities commissions in all of our states to determine how cost savings associated
  with major tax reforms passed by the U.S. Congress in late 2017 will be shared with our customers. Overall,
  our average electricity rates were 0.2% lower in 2018 due to customer refunds associated with the Tax Cuts
  and Jobs Act.
- The President's National Infrastructure Advisory Council released its report on how the nation can best prepare for and recover from a catastrophic power outage. Xcel Energy's chairman, president and CEO Ben Fowke participates on the council, and we were significant contributors to the report, which examines how our nation can strengthen its long-term power outage prevention and recovery capabilities.
- The 2018 Farm Bill signed into law at the end of the year includes a provision that we supported to authorize
  the U.S. Forest Service to work with utilities to manage vegetation adjacent to transmission rights-of-way on
  federal lands. The program supports overall forest health and can help protect utility infrastructure
  from wildfires.
- The U.S. House of Representatives passed a bill in spring 2018 that allows for consolidated interim storage
  facilities and encourages the finalization of a permanent repository for radioactive waste from the nation's
  nuclear generating plants. We supported the bill and continue to work on a solution to this long-standing
  issue. In May 2019, our Chief Nuclear Officer testified in support of similar legislative proposals in the
  U.S. Senate.

## **Public Policy Principles**

Our energy landscape is evolving, driven by new technologies and customers demanding new energy options and a reduced carbon footprint. In this new landscape, we are striving to meet the interests of individual customers while continuing to deliver safe, clean, reliable energy at an affordable cost and creating opportunities for our company to invest in the grid. To meet the challenges ahead, we follow these four core principles as we support the transformation of our energy landscape.

- Utilities are engines for innovation and deployment at scale. The vertically integrated utility model with regulatory oversight is well-positioned to adapt to changing energy markets, new technologies, new customer preferences and community goals. This model provides inherent system value through efficiency, optimization and economies of scale that benefit all customers and balances the allocation of risks and benefits between the utility and its customers. As such, we are well-positioned to grow the market for value-added services such as energy storage, microgrids, electric vehicles, and solar power and to do so at scale and in a manner that benefits all customers.
- We can enable greater customer choice without eroding fundamental rate design principles. Ideally, rates should reflect the cost of service provided to a customer and continue to prioritize affordability because reliable, affordable energy is essential to a strong economy and protecting low-income customers. Matching rates to price signals moves the system to a more efficient state of operation and options like time-of-use pricing can incentivize customers to shift energy use to more desirable times.
- The grid is our economy's greatest physical asset and utilities are its stewards. More than a collection of wires, the grid is an integrated system of plants, wires, transformers, substations, control systems, and other equipment that is foundational to our economy. In our jurisdictions, the vertically integrated utility model from supply to delivery is the most effective way to economically maintain a reliable and secure grid and make the investments necessary to meet customer needs and achieve environmental goals.
- Our economy will continue to electrify and utilities should be the architects of that transition. There are clear signs that our economy is undergoing a transformation to greater and cleaner electricity usage, and through lower-carbon electricity and electrification, we can further reduce greenhouse gas emissions. The transition must be done as part of a thoughtful, deliberate, policy process one that builds upon past utility successes and engages customers and communities who wish to actively participate.

Our society does not need a new business model for utilities in order to meet modern day challenges. We need a modernized version of the model that has been delivering for decades. The utility industry, and Xcel Energy as a leader in the industry, is well poised to meet these challenges in direct partnership with our regulators and our customers.

# Advocacy for Innovation and Developing Advanced Energy Technologies

We continue to engage in and work to address policy issues at all levels of government. One of those issues, and a significant objective for us going forward, is establishing a path for the development of advanced, carbon-free 24/7 technologies that we will need to fulfill our aspiration to serve customers with 100% carbon-free electricity by 2050.

Federal and state policies must support the development of new, carbon-free, 24/7 resources to complement our existing and growing portfolio of renewable energy, energy efficiency and demand response resources. We can also send clear signals to the market around price, capabilities and timing for when these technologies will be needed. In this way, utility resource plans provide the market signal — the state-level "technology pull" — from which the private sector and national laboratories and federal agencies can align their investments. This investment in further research and demonstration will help develop the carbon-free solutions we need at the cost and scale at which our sector will need them.

We are advocating for policies that help take advanced clean energy technologies from demonstration stage to commercialization by creating programs to manage cost and spread risk. In order for this to happen most effectively, it is important that developers leverage existing infrastructure and current market conditions. There is also opportunity to provide incentives for clean energy innovation and reducing barriers to new development. These incentives can be powerful mechanisms for deploying these technologies in the marketplace, but they require careful design. For that reason, we are working on policies that allow the efficient use of existing and new tax incentives.

## **Political Contributions and Lobbying**

Xcel Energy has a corporate policy that sets guidelines and rules for political contributions and to ensure all contacts with government officials meet legal and ethical standards.

Our board of directors, leadership and employees must comply with all federal laws restricting the making of political contributions or expenditure using corporate funds in connection with elections for federal offices. When communicating about matters involving Xcel Energy, the board of directors, leadership and employees must accurately convey corporate messages and support the Xcel Energy brand. Xcel Energy's Political Contributions Report provides corporate contributions and dues paid to trade associations.

## **Employee Policy Engagement**

Grassroots advocacy is important to Xcel Energy because our industry is so complex. Xcel Energy employees can help educate their friends, neighbors and community leaders by participating in:

- Legislative Days: We offer a special day at the capitol in each of our jurisdictions for employees to meet their elected officials and learn more about the legislative process.
- Local events and meetings: Employees can represent the company at community meetings and special events.
- **Political Action Committees:** Employees can voluntarily participate in seven different groups that are organized and run by employees.

#### **Political Action Committees**

Xcel Energy sponsors seven Political Action Committees or PACs organized and run by employees, six at the state level and one at the federal level. Participation in the company's PACs is completely voluntary and is part of the engagement opportunities that we offer employees.

Each of the company-sponsored PACs has its own board of directors elected by its members that make contribution decisions. All of our PACs are strictly voluntary, and there are no employment benefits based upon participation. Each complies with all applicable local, state and federal laws.

#### **2018 Xcel Energy Political Action Committee Activity**

		-	
PAC	Employees Participating	Total Employee Contributions to PAC	Total Contributions Made to Candidates*
Colorado (Western PAC)	327	\$28,927	\$38,375
Minnesota**	329	\$48,705	\$44,700
North Dakota	24	\$1,945	***\$6,200
South Dakota	0	\$0	***\$3,900
Texas/New Mexico (SCOPE)	368	\$35,787	\$59,050
Wisconsin	342	\$36,614	\$27,488
XPAC (federal PAC)	389	\$246,220	\$253,000

<sup>\*</sup>Funds contributed by employees can accrue over multiple years and are not necessarily distributed in the same year they were contributed. Contributions vary by year and are typically lower in nonelection years or years when state legislatures are in session.

<sup>\*\*</sup>The state PAC in Minnesota is operated outside of Xcel Energy in accordance with state law that prohibits the use of corporate resources to support the PAC; although, payroll deduction is specifically permitted in Minnesota. Activity for the Minnesota PAC is only included in this report for transparency and informational purposes.

<sup>\*\*\*</sup>With the exception of 24 North Dakota state PAC-only contributors, all contributions made to both the North Dakota and South Dakota state PACs were made via funds transferred from the Minnesota state PAC in compliance with all federal, state and local campaign finance laws.



# **Supply chain management**

Suppliers play a vital role in our company's ability to manage costs, operate efficiently and provide the ongoing service that our customers value.

We continuously look for ways to improve efficiency and reduce the cost of doing business through our supply chain processes. As we negotiate favorable prices or find ways to reduce waste, we pass the savings on to customers, helping to manage their energy costs.

Much of our spending on materials and services is with local businesses, which supports economic prosperity in the communities we serve. We also look for business partners that share our priorities around safety, diversity and environmental protection and that will adhere to our Code of Conduct.

#### 2018 Results

- We spent \$533 million, directly and indirectly, with businesses owned by women, minorities or veterans, achieving our goal to spend 12.4% of total annual spending with diverse suppliers.
- Nearly 70% of our supply chain spending was with local businesses, totaling more than \$2.9 billion. While not
  all materials and services can be sourced locally, we build relationships and set targets to support our area
  economies.
- Through our supply chain, we saved approximately \$307 million, which was first-quartile performance in a benchmarking of peer utilities.
- The Hispanic Chamber of Commerce of Metro Denver named Xcel Energy its Corporate Advocate of the Year in early 2019 for the company's ongoing support and work with member companies. Three of our largest contractors in Colorado are chamber members, including Alvarado Construction, Campos EPC and Redeker Excavating.

## **Supply Chain Process**

Our central Supply Chain organization is responsible for the sourcing and procurement of goods and services, materials management, fleet management and accounts payable for all of Xcel Energy's operations. The group negotiates contracts for everything from day-to-day business necessities, such as office supplies and furniture, to capital items used to construct, operate and maintain our generation and transmission assets, including transmission poles and transformers. They develop supplier and contractor management strategies and policies, handle accounts payable and execute company-wide sourcing and procurement strategies.

We employ a systematic sourcing method to deliver needed materials and services to the right place at the right time for the right price. To select suppliers, we use a five-step sourcing process that includes: preparation, request for information, request for proposal, contract evaluation and negotiation, and implementation.

# Four key business objectives — each associated with specific initiatives — drive our supply chain strategy. These include:

- Maximizing investment yield
- Achieving operational excellence
- Managing risks and opportunities
- Supporting community and environmental leadership

In 2019, we expect to spend approximately \$4.58 billion on materials and services that fall into 35 categories with more than 800 subcategories. These categories are used to determine risk, opportunity and negotiation leverage with suppliers. We have developed guidelines for bid analysis for all categories. Within these guidelines, up to 20% of the bid analysis weight can be allocated to social and environmental factors such as diversity, safety and environmental performance.

#### **2018 Supply Chain Spending Categories**

Battery	Engineering Services	Meters	Steel Structures
Boiler Systems	Environmental	MRO Materials	Transformers
Cable and Wire	Fleet	Other Plant Systems	Transportation Services
Chemicals Gases and Lubes	Gas Materials	Property Services	Travel Services
Circuit Breakers	HR and Benefits	Radiation Protection	Turbine and Generator Systems
Construction	IT and Telecom	Revenue Cycle	Vegetation Management
Consulting Services	Logistics Integrator	Safety	Wind
Dry Fuel Storage	Maintenance Services	Solar	Wood Poles
Electrical Materials and Equipment	Marketing and DSM	Staff Augmentation	

## **Risk Management**

Through our Supplier Qualification program, we use services such as Dunn & Bradstreet to regularly monitor all active suppliers for Office of Foreign Assets Control, Excluded Parties List System, OSHA and EPA violations, as well as criminal proceedings and disaster events. We assess suppliers' financial health, safety and use of diverse subcontractors before contracting with them, and suppliers who will have access to our confidential data must undergo a data security review.

Periodically, we conduct key risk assessments, looking at categories such as commodity price risk, supply continuity, quality and governance processes. We also design sourcing strategies that take into account multiple fulfillment locations and supply channels that can minimize potential supply disruptions in case of extreme weather or disaster-related events.

Our company works with a broad range of suppliers. The majority of our spending is with American suppliers, but we also do significant work with American-based affiliates of foreign suppliers and a small amount of work with foreign suppliers.

We have recently implemented a program for Security Vendor Risk Assessment that focuses on exposure to cyber, information and other security risks to Xcel Energy that could result from suppliers' access to our systems, confidential information and critical infrastructure. The requirement for this additional level of scrutiny is established in sourcing and contracting processes and involves a comprehensive testing of the supplier's security environment by our Enterprise Security Services team.

All contractors that provide services or materials at our sites are required to complete a contractor health and safety questionnaire and submit five years of safety-related performance data. Our contractor safety department reviews this data and may reject a contractor or require a safety improvement plan. We continue to monitor safety performance once a contract is implemented.

Tier	Annual Spending	No. of Suppliers	% of Annual Spend
Tier 1	More than \$10 million	77	73%
Tier 2	Between \$4-10 million	59	8%
Tier 3	Between \$1-4 million	211	10%
Tier 4	Less than \$1 million	3,382	8%

In addition, all contracts include a clause requiring suppliers to abide by equal employment opportunity and affirmative action mandates prohibiting discrimination on the basis of race, color, religion, sex, national origin, actual or perceived sexual orientation or gender identity of an individual, or physical or mental disability. All suppliers are expected to comply with our Code of Conduct, which is referenced in our standard agreement language and is made available to them upon request.

## **Supplier Classifications**

We classify our suppliers in four tiers based on a combination of overall supplier spend and their importance or risk to our operations. Critical suppliers provide essential materials and services required to support daily operations. Tier one suppliers, including those who are critical to our operations, are part of our Supplier Relationship Management program. The program enables us to build longer-term contracts with these strategic suppliers and implement continuous improvement initiatives to benefit both the supplier and Xcel Energy in terms of costs and operations. Suppliers are also tiered, based on their total spend.

We support suppliers in non-tier one spend classifications through collaborative initiatives and programs. For example, we are a founding member of the ITASCA-Project in the Twin Cities, which is dedicated to helping smaller local suppliers grow through procurement opportunities. The ITASCA-Project group is made up of chief supply chain personnel from large corporations, such as Xcel Energy, U.S. Bank, Target, United Health and General Mills, who meet monthly to discuss ideas for supporting the local economy by growing the capacity of small- and medium-sized businesses.

## **Supplier Diversity Program**

Our corporate policies underscore our commitment to supplier diversity by recognizing that it is in our best interest to encourage a broad base of supplier relationships. Using diverse suppliers contributes to the economic growth and expansion of the communities we serve. Our policy is to offer these businesses the opportunity to compete in our procurement for products and services. We develop and strengthen business relationships with diverse suppliers by:

- · Conducting outreach efforts to seek, identify and encourage supplier diversity in our procurement processes
- Facilitating alliances and partnerships
- Educating businesses about our procurement and business processes
- Identifying and encouraging subcontracting (tier two) opportunities with major suppliers when direct participation is not possible

For 2019, we have set a goal of approximately \$575 million, or roughly 12.5% of total spending, to spend with diverse suppliers. Most of the recent increases in our goal have been associated with Xcel Energy's continued investment in renewable energy, especially in constructing new wind farms. Wanzek, one of our diverse suppliers, is constructing multiple new wind projects on our system.

We are an active member of the Edison Electric Institute's Supplier Diversity Best Practices Group, as well as the Mountain Plains and North Central Minority Supplier Development Councils, the Women's Business Enterprise National Council, the National Association of Women Business Owners, the National Veteran Business Development Council, National Gay and Lesbian Chamber of Commerce and most local chambers of commerce in our service territory.

#### **Annual Spending with Diverse Supplier**

	2016	2017	2018
<b>Dollars Spent</b>	\$401 million	\$378 million	\$533 million
% of Total Purchases	11.2%	10.5%	12.4%



2020-2034 Upper Midwest Resource Plan Page 93 of 126



To live up to our commitment to protect the environment, Xcel Energy has a comprehensive management system that promotes environmental excellence and continuous improvement.

Our policy and management approach

# **Environmental management**

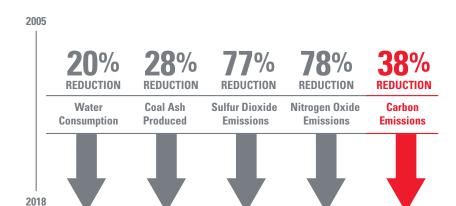
At Xcel Energy, protecting the environment is a priority and expectation for all employees and contractors as part of their jobs.

Every year we produce millions of megawatt hours of electricity and deliver millions of cubic feet of natural gas to serve our customers, fueling their homes and businesses. Our operations depend on natural resources — from fossil fuels to water and wind and solar — and they have an impact on the environment. It is an important relationship, and one that we are committed to managing carefully.

The customers and communities we serve depend on us and expect that through our daily operations we will protect our air and water, reduce waste and conserve natural resources.

#### 2018 Results

• The Colorado Department of Public Health and Environment through its Environmental Leadership Program recognized Xcel Energy as a Gold Leader for the company's comprehensive Environmental Management System as well as its clean energy leadership and environmental stewardship.



We have significantly reduced our environmental impact since 2005.

## **Environmental Policy**

Xcel Energy's environmental policy lays the foundation for the company's commitment and approach to protecting the environment and sets expectations for aligning our business practices with this commitment.

Our policy is to pursue environmental excellence through our corporate strategy and daily operations, striving to demonstrate leadership by doing what is right and advancing initiatives that will benefit the environment. At the same time, it is important that we balance our environmental commitment with the ability to provide customers with reliable and affordable energy.

Examples of our environmental leadership include:

- Significantly reducing carbon emissions through our proactive clean energy strategy
- Reducing other air emissions beyond what is required by regulations
- Surpassing state-level renewable standards by adding more cost-effective wind and solar
- Offering customers a robust portfolio of energy efficiency and renewable choice programs to meet unique needs and interests
- Conserving and reducing water consumption through electric generation
- Establishing more than 2,000 acres of pollinator habitat on the land we manage

As part of our decision making, we consider opportunities to reduce emissions, eliminate waste and conserve resources, including taking additional steps to protect wildlife. We also regularly monitor our operations to ensure we are acting in an environmentally responsible manner, and if appropriate, take steps to improve our efforts. We support environmental research and development, as well as environmental projects and partnerships in our communities.

To fulfill the responsibilities of our corporate environmental policy, we have more than 40 policies and procedures that ensure our ongoing environmental performance and that help to foster our commitment to environmental excellence.

All Xcel Energy employees, as well as contractors and vendors, are expected to follow these policies, and our employees are trained and empowered to take responsibility for protecting the environment through their jobs.

## **Environmental Principles**

Engaging with stakeholders is essential to our work in addressing policy issues involving energy and the environment. As we engage on these matters with our regulators, elected officials, community leaders and others, we keep the following principles in mind:

- Proactive solutions. On behalf of customers, we have invested substantially in clean energy and
  environmental improvements. We continue to look for ways to proactively address environmental issues,
  especially when we can improve efficiency and reduce costs.
- Rewarding leadership. We believe that environmental and clean energy policy should appropriately
  recognize the environmental benefits of our proactive efforts made on behalf of our customers and
  communities.
- **Supporting technology.** Environmental and clean energy policy should drive forward the development of new, cost-effective technologies. As a national leader in wind, as well as energy efficiency and renewable choice programs, we are optimistic about the future opportunities that clean energy technologies present. Additionally, we are committed to owning these resources to improve the overall value and cost savings to our customers and stakeholders.
- Efficiency and cost effectiveness. The most efficient and effective response to environmental mandates is
  not always stack-by-stack or emission-specific compliance requirements. In some cases, compliance should be
  coordinated on a system-wide basis to maximize cost effectiveness and environmental benefits.
- **Flexibility.** Flexibility mechanisms, such as alternative compliance options and market-based environmental programs, should be incorporated into environmental rules. Flexibility yields real cost benefits to customers while maintaining environmental benefits.

## **Environmental Management System**

We have a comprehensive environmental management system designed to promote environmental excellence and ensure continuous improvement and compliance with all applicable environmental requirements. Although we have not used formal certification under ISO 14001, our environmental management system aligns with and enables the nine elements of the ISO 14001 standard, including: policies, responsibilities, environmental interaction, impacts, compliance, objectives and targets, monitoring and measurement, performance review and continuous improvement.

#### Our management system provides:

Oversight	Board of Directors — Operations, Nuclear, Environmental and Safety Committee
	Chairman, president and CEO
	Executive Committee
	Environmental Policy department
	Environmental Services department
Risk analysis	Goals and performance indicators at corporate and operating levels
	Multidisciplinary teams for developing new compliance programs
	Environmental Audit program
	Regular risk assessments
Policies & procedures	Corporate environmental policy
	Formal, documented processes, procedures and standards
	Routine monitoring of new, evolving regulatory activity

Monitoring	Centralized and automated compliance tracking system that uses real-time data
	Monthly performance reporting
	Routine facility audits
Follow-up for compliance gaps	Tracking for corrective action and internal audit findings
Training and communication	New employee orientation
	Site and topic specific employee training and tracking
	Updates and information communicated through internal channels

## **Compliance Results**

We strive to operate in compliance with all federal, state and local rules and regulations. However, there are occasions when regulatory agencies issue notices of violation (NOVs) or other types of notifications of potential noncompliance for alleged exceedances of permit limits or regulatory requirements. These NOVs can result in fines or penalties. Often there can be disputes about the alleged noncompliance, and even when it is our view that we remained in compliance, settlements are often reached to avoid the transaction costs of litigation and to cooperate with the regulatory agencies.

Every year as part of our internal and ongoing efforts to self-identify and self-correct any potential noncompliance issues, we conduct our own facility audits.

#### **2018 Compliance Activity**

Activity*	2016	2017	2018
Notices of Violation or Compliance Advisories	4	7	5
Penalties Paid	\$25,000	\$14,949	\$0
External Agency Audits or Inspections	83	64	71
Internal Audits Conducted to Ensure Compliance	99	95	94

<sup>\*</sup>Because of the regulatory process and timing, penalties are not typically paid in the same year that Notices of Violation or Compliance Advisories are issued.

We received five notices of violation or compliance advisories in 2018 involving activities at our facilities. All were considered minor infractions and no penalties or fines have been assessed. Of the five incidents, two involved wastewater discharges and the others related to air emissions testing, drinking water sampling and regulated waste storage.

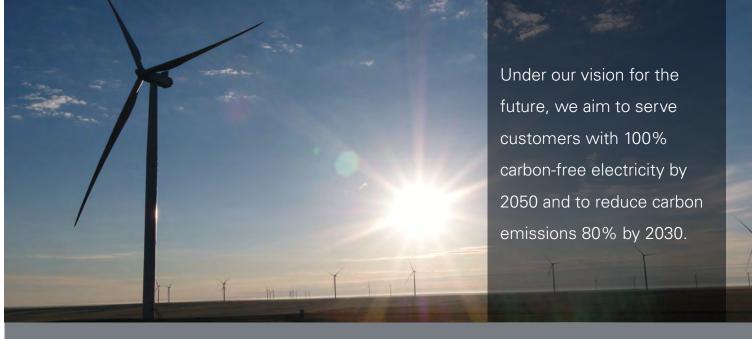
## **Environmental Expenditures**

Environmental costs include payments for nuclear plant decommissioning, storage and ultimate disposal of spent nuclear fuel, disposal of hazardous materials and waste, remediation of contaminated sites and monitoring of discharges to the environment. As we have reduced emissions through the addition of environmental controls, the total costs of investing in and operating the controls has risen somewhat over time.

#### **Environmental Expenditures**

Expenditure Type	2016	2017	2018
Operating and Maintenance	\$304	\$303	\$309
Capital	\$93	\$61	\$50

More detailed information regarding nuclear decommissioning and spent nuclear fuel disposal expenses is provided in our 2018 Form 10-K.



Climate change and greenhouse gas emissions

## A carbon-free future

Energy is an essential service that powers the economy and provides comfort and security. As we lead the clean energy transition, we will ensure that customers have energy when they need it, at an affordable price.

We know that climate change is an urgent issue for many of our policy makers and investors and is a growing concern of our customers who want to help make a difference. It is a priority for us as well, and is the reason we were the first major energy company in the nation to announce a vision to serve customers with 100% carbon-free electricity.

Planning for this transition to a clean energy future today will allow us to deliver the products our customers want and achieve reductions that our policy makers and investors are increasingly demanding. By acting now, we increase our ability to achieve our goals while assuring that our system remains reliable and our energy service affordable.

#### 2018 Results

- We established our bold, new vision to provide customers with 100% carbon-free electricity by 2050 and to reduce carbon emissions 80% by 2030 from the electricity that serves our customers. To successfully make this transition, we must also maintain the reliable, affordable energy that customers expect.
- Climate modeling experts from the University of Denver, led by a lead author for the Intergovernmental Panel on Climate Change, analyzed our carbon goals and concluded they are consistent with electric sector emissions in scenarios likely to achieve the temperature targets of the Paris climate agreement.

- Our carbon emissions continue to decline. Since 2005, we have decreased carbon emissions 38% from
  electricity that serves our customers an additional 3% reduction compared to 2017 levels. Our reduction
  levels surpass the U.S. commitment under the Paris climate agreement, which called for a 26% to 28%
  reduction in carbon emissions by 2025, and the EPA Clean Power Plan, which would have reduced carbon
  emissions 32% by 2030.
- For 13 consecutive years, our carbon reporting has been third-party verified in accordance with The Climate Registry — we are the only electric utility with this length of consecutive verified data.
- Since Xcel Energy became a member of EPA's Natural Gas STAR program in 2008, we have reduced methane
  emissions by more than 350 million cubic feet while expanding our miles of pipe 6%.

## **Our Pathway to a Carbon-free Future**

As we produce energy to serve our customers, we emit greenhouse gases. Our primary source of these emissions is from the combustion of fossil fuels to generate electricity, which makes up 99% of our total greenhouse gas emissions. Nearly all of our generation-related emissions are carbon dioxide. Because of this, it makes sense that our clean energy strategy focus primarily on reducing carbon emissions from electricity.

To achieve our carbon vision, we will continue working with our states and stakeholders. Our interim goal to reduce carbon emissions 80% by 2030 is based on absolute, company-wide emissions from the electricity that serves our retail and wholesale customers, measured from a 2005 baseline. Likewise, our aspiration to serve customers with carbon-free electricity by 2050 is company-wide.

Currently, we are implementing plans to achieve our previous goal to reduce carbon emissions 60% by 2030, from 2005 levels. Our state regulatory commissions have already approved the following efforts underway:

- The Colorado Energy Plan, which calls for the early retirement of 660 megawatts of coal-fueled generation by 2026 and the addition of 1,100 megawatts wind, 700 megawatts solar, 380 megawatts existing natural gas and 275 megawatts large-scale battery storage.
- Our current 2016 to 2030 Minnesota Resource Plan, which increases renewables in the Upper Midwest and
  retires nearly 1,400 megawatts of coal-fueled generation by 2026. A new resource plan for the region will be
  proposed in summer 2019.
- Our multi-state wind expansion announced in 2017 that will add nearly 3,700 megawatts of wind energy from 12 new projects across seven states.

We also are working on plans that take us all the way to reduce carbon emissions 80%. This is not a single plan, but will happen through a series of resource plans to be approved through our state regulatory processes.

In setting our goals, we did sensitivity analysis to identify key elements and variables that could affect our plans for reaching the interim goal. There are a variety of cost-effective pathways to reduce carbon emissions 80% by 2030, and we know the following common elements will be part of the plans:

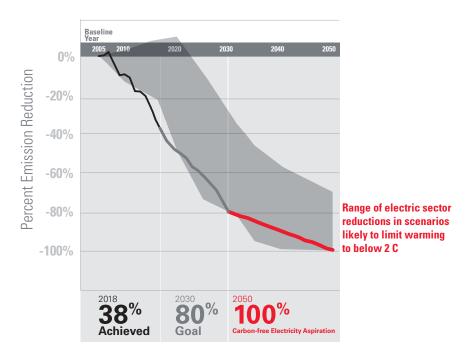
- Adding thousands of megawatts of wind and solar power to our system
- Incorporating both natural gas and storage resources to help balance high levels of renewable energy
- Deploying strategic electrification of certain end uses to help create flexible demand
- Continuing to implement industry-leading energy efficiency programs
- Seeking to operate our nuclear plants through at least the remainder of their licenses
- · Retiring additional coal units or changing their operations to minimize emissions affordably and reliably
- Investing in supportive infrastructure to modernize the power grid

Looking beyond 2030 to our 2050 carbon-free aspiration, we will need new, 24/7 carbon-free technologies that are not yet commercially available at the cost and scale needed. These are technologies that can integrate high levels of renewables, balancing the peaks when customer use exceeds renewable generation and valleys when renewable generation exceeds customer use. To ensure these technologies are ready when we need them at an affordable price, there must be more research, innovation and development. Technology advancement is key to the long-term success of our strategy, and it has a long lead time for development.

## Scientific Analysis

The most recent climate science informed our carbon vision, which is designed to minimize the long-term risks associated with climate change. After reviewing international and national climate reports released in 2018, we hired an IPCC lead author and other climate modeling experts with the University of Denver to understand how our vision relates to global temperature goals. They consulted the newest International Panel on Climate Change emission scenarios database and analyzed carbon emissions for the electric sector in industrialized countries, within the scenarios that have a high (66% or greater) probability of achieving the 2 C goal and those more likely than not (50% or greater) to achieve the 1.5 C goal.

#### Xcel Energy's carbon goals align with scenarios likely to limit warming to 2 C.



The dark gray shaded area in the chart above represents the range from the highest to the lowest of these emission scenarios. The climate modeling experts then compared Xcel Energy's carbon emission reduction trajectory, including carbon reductions to date and the 2030 and 2050 goals. Based on their analysis, our reduction targets are clearly consistent with — even on the low end of — the electric sector reductions in scenarios that achieve the international 2 C goal. Even more encouraging, this analysis shows that our emission trajectory is also consistent with the more aggressive 1.5 C goal.

## **Driving Change**

We believe reducing carbon emissions reliably and affordably must be the top priority of our clean energy transition. To achieve this, we need to be disciplined and focus on efforts that will produce the greatest carbon reductions at the lowest cost to customers.

We have identified the following drivers that will make the change possible:

- Protect energy reliability and affordability. Our goals rely on maintaining these service fundamentals and cannot be achieved without them.
- **Support from our states and stakeholders.** We will need the support of stakeholders and state regulators to implement the resource plans that will achieve our goals.
- A constructive policy environment and framework. Reducing carbon emissions at the lowest cost should be the policy objective. To that end, we are advocating for policies that encourage economical large-scale clean energy development and utility ownership of resources.
- Availability of cost-effective, carbon-free, 24/7 technologies. There must be research and development
  to advance clean energy technologies, beyond renewables. We will need these technologies to eliminate the
  last 20% of carbon from the electricity serving our customers.

While our vision is ambitious, we believe these drivers implemented together will make it possible to transform our operations and the industry overall. Our plan is to continue working proactively and collaboratively in all these areas and to advance the solutions that emerge.

## **Energy and Carbon Emissions Reporting**

Xcel Energy supports timely, transparent public reporting of carbon dioxide and other greenhouse gas emissions. Our comprehensive greenhouse gas reporting, from all parts of our business, is based on The Climate Registry and its Electric Power Sector Protocol, which aligns with the World Resources Institute and ISO 14000 series standards.

We joined The Climate Registry as a founding member in 2007 to help establish a consistent and transparent standard for calculating, verifying and reporting greenhouse gases. Through The Climate Registry, we annually third-party verify, register and publicly disclose our greenhouse gas emissions.

We report carbon emissions from electric generating plants that we own and from electricity that we purchase from others. We sell a small portion of the electricity we generate into the market to retailers outside our service territory. The carbon emissions from these off-system sales are excluded from our goal and associated carbon reporting because the energy does not serve our customers. Also, it is likely that companies purchasing the energy account for the emissions in their reporting, so excluding the carbon emissions associated with off-system sales from our reporting avoids double counting.

#### Our progress toward a carbon-free future.



#### **Methane Emissions**

Our efforts to reduce greenhouse gas emissions also include methane emissions — a primary concern for the natural gas value chain. We are actively involved in programs that work to address the supply, midstream, distribution and consumer use of natural gas that are important to maintaining the industry's ability to operate. Xcel Energy serves about 2 million customers with natural gas for heating and other energy uses critical to the colder parts of our territory, Colorado and Minnesota, and does so with minimal methane emissions.

Methane emissions make up a small part of our total greenhouse emissions — less than 1% of our total greenhouse gas emissions (190,249 metric tons  $CO_2$ e) in 2018. Nevertheless, we strive to operate the cleanest distribution system possible and minimize our methane emissions through cost-effective improvements to our natural gas system.

We have achieved these reductions through voluntary efforts. Since 2008, we have participated in EPA's Natural Gas STAR program, and we are a founding member of the program's Methane Challenge launched in 2016. Through the Methane Challenge, we plan to reduce methane releases more than 50% from the venting of pipelines during scheduled construction. We are also investing in operational improvements that not only reduce methane emissions but improve the overall safety and efficiency of the natural gas system for customers. These improvements include:

- Replacing the cast iron pipe and unprotected steel pipe on our system, originally installed 50 to 100 years ago. We replaced all 880 miles of cast iron pipe and have regulatory approval to continue removing bare-steel pipe from our system over the next five years.
- Using pressure reductions and other methods to reduce methane emissions during pipeline maintenance and repairs. We reduced our emissions from blowdowns on systems operating at excess of 60 psig by 89%, therefore, avoiding the release of 24 million cubic feet of gas into the atmosphere.
- Replacing high-bleed controllers on our distribution and high-pressure pipelines. We are currently working to replace the high-bleed controllers in our processing plants and are considering new programs to modernize the high-bleed controllers at our storage fields and compressor stations to reduce emissions at these facilities.

In addition to these programs, we are collaborating within the natural gas industry on initiatives that support our own proactive approach to operating and maintaining a natural gas system. For example, we are members of the Natural Gas Downstream Initiative, a collaborative effort with other major gas utilities, facilitated by MJ Bradley & Associates, focused on addressing the regulatory and technical issues related to the role of natural gas in a low-carbon future.

Beyond our direct distribution operations, we also recognize that the majority of greenhouse gas emissions associated with natural gas is in other parts of the value chain. This includes methane emissions from upstream sources through the production, compression and long-distance transmission of natural gas, and carbon emissions from downstream, end-use consumers. We participate in the Natural Gas Supply Collaborative, a group of natural gas producers calling for transparency and sustainability from upstream suppliers. Our industry associations, the American Gas Association and the Edison Electric Institute, are also partnering to understand methane emissions and enhance disclosures across the value chain.

For our customers who use natural gas, we are exploring opportunities to offer low-carbon solutions. We already provide a comprehensive portfolio of natural gas efficiency programs, but are exploring new technologies and methods to help our customers further reduce their carbon footprints. We see great potential for renewable natural gas to provide a lower carbon alternative and the potential for targeted, strategic electrification, such as water heaters, that could be powered with clean, renewable energy. As always, we are monitoring long-term technologies, such as hydrogen or power-to-gas, which could fundamentally shift natural gas supply and related carbon emissions.



# Reducing air and other emissions

With support from stakeholders and regulators, we are voluntarily retiring half of our coal-fueled capacity by 2026 — a step that will significantly reduce emissions.

Our largest source of air and other emissions is the combustion of fossil fuels to generate electricity, primarily from coal. For well over half a century, coal has been a steady source of low-cost, dependable electricity for our customers that we have carefully controlled and operated in an environmentally responsible manner.

Since the 1990s, we have worked with our states and other local stakeholders on proactive environmental projects that serve as a national model for addressing state air quality needs while providing operational flexibility and ensuring reliable, affordable energy for customers. We know that clean air and cleaner energy are priorities for the customers and communities we serve, and as a leader in this field, they continue to be our priorities too.

As the cost to generate electricity with natural gas and renewable sources declines and these technologies improve, the way we generate electricity is becoming progressively cleaner. We are moving away from coal to lead the transition to clean energy, especially now as we work to achieve our vision to serve customers with 100% carbon-free electricity by 2050. To fulfill this commitment, we plan to rely on the relationships we have built and our successful model for engaging stakeholders to find new solutions — solutions that will not only cut carbon, but have the added benefit of reducing other emissions and improving the environment overall.

#### 2018 Results

Air quality

- Since 2005, we have reduced carbon emissions 38% from the electricity that serves customers.
- We continued to decrease emissions of sulfur dioxide, nitrogen oxides, mercury and particulate matter to levels that were 77%, 78%, 91% and 73% lower, compared to 2005.
- Under the EPA's Toxic Release Inventory program, we have reduced releases by nearly 30%, compared to 2005 levels.

- The Colorado Department of Public Health and Environment through its Environmental Leadership Program recognized Xcel Energy as a Gold Leader for the company's comprehensive Environmental Management System as well as its clean energy leadership and environmental stewardship.
- Within our vehicle fleet, we essentially replace all sedans scheduled for retirement with electric vehicles. We estimate that our 43 plug-in hybrid electric vehicles (PHEVs) helped to avoid emission of nearly 92 metric tons of carbon emissions for the year.

## **Maximizing System Operations to Reduce Emissions**

There is a significant shift in how we operate our power grid now compared to several decades ago. Not only are we changing the way we produce electricity, but the dispatch and operation of our generating resources is different too.

Through major clean energy initiatives in Colorado and Minnesota, we have retired coal units and replaced the power with cleaner, more flexible natural gas and wind and solar generation, and we have plans to do more. Last year, regulators approved our new Colorado Energy Plan that will retire two coal units and add thousands of megawatts of new wind, solar and battery storage, as well as existing natural gas. We also have approval to retire two coal units in Minnesota by 2026, and are moving forward with our multi-state wind initiative with 12 new wind farms to be completed in 2021.

As renewable energy gradually becomes the majority energy source on our system, we are focusing our operations to follow the wind and sun to maximize clean electricity production and do so reliably and cost effectively.

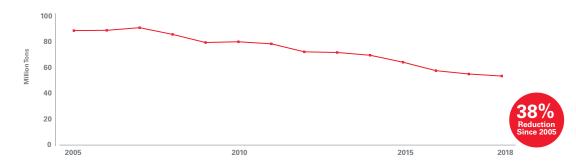
Advanced forecasting tools have dramatically improved the predictability of wind energy, making a variable energy source much more dependable. With reliable wind forecasts now available seven days in advance, we are able to make more accurate commitment and dispatch decisions associated with wind energy. Cleaner natural gas generation is an excellent companion to renewable generation. It has long managed the variability of wind-power production, with natural gas units cycling up and down as needed to help meet electric loads as wind speeds rise and fall.

Several years ago, an Xcel Energy operations team began exploring how coal units could do the same, although ramping up and down coal units is much more challenging. Traditionally, coal units have provided baseload power for our system, with the capability to run dependably 24/7. The company's coal plants began testing and learning their limitations, working around problems at lower load points and figuring out how to overcome them.

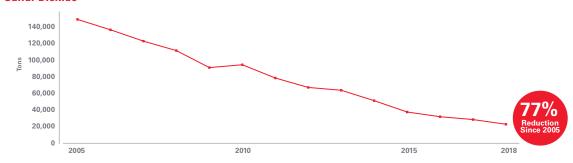
Today, this reduction in coal operations is creating additional system flexibility and helping to advance our transition to clean energy while reducing emissions and saving customers money. In 2018, our efforts to turn down and cycle off these units reduced coal generation by more than 788,000 megawatt hours, saving an estimated \$1.6 million and avoiding approximately 886,000 tons of carbon dioxide, as well as other emissions.

## **Air Emissions Reporting**

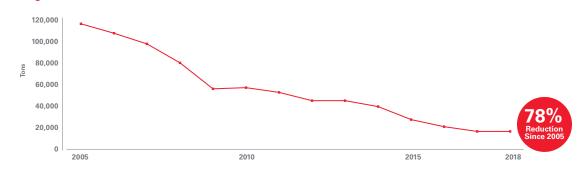
#### **Carbon Dioxide**



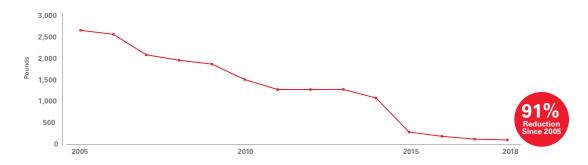
#### **Sulfur Dioxide**



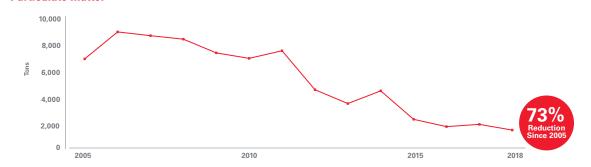
### **Nitrogen Oxides**



### Mercury



## Particulate Matter



## **Reducing Fleet Vehicle Emissions**

Our fleet of about 7,000 vehicles includes everything from small cars to light trucks, bucket trucks, excavators and trailers. In 2014, our vehicles were equipped with telematics to reduce fuel costs and improve driver safety. Using the technology has reduced idling and fuel consumption, wear and tear on vehicles, and emissions. In 2018, we estimate that the use of telematics saved approximately 150,000 gallons of fuel at a value of more than \$350,000.

## **Community Right to Know and the Toxic Release Inventory Program**

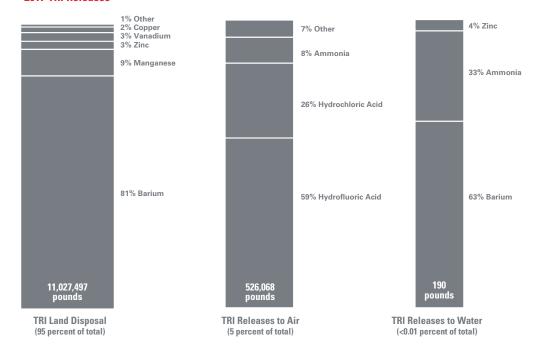
The EPA has administered the Emergency Planning and Community-Right-to-Know Act or EPCRA since 1986. The program is intended to help communities protect residents from potential chemical hazards. Under EPCRA, residents have the "right-to-know" about chemicals in their communities. Each year facilities in specific industries that manufacture, process or use the nearly 650 substances identified under the program must report their releases to air, land and water. The EPA manages the information in a publicly available database under the Toxic Release Inventory (TRI) program.

Xcel Energy supports this type of reporting and has participated since 1999 when the program was expanded to include electric utilities. We annually report to EPA our releases, which are the result of using coal, oil and refuse-derived fuel (processed municipal solid waste) to produce electricity. When these fuels are combusted, they release trace amounts of TRI reportable substances, including barium, chromium, copper, lead, manganese, mercury, nickel and zinc.

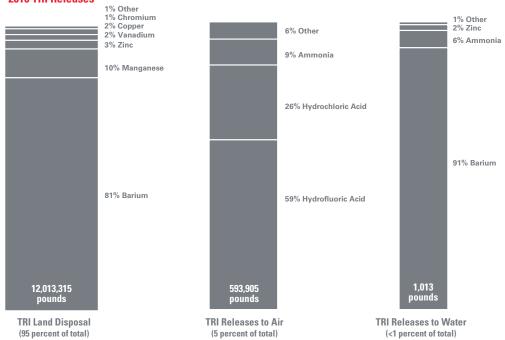
TRI reportable substances are reported by facility and release type — land, air and water. A facility's releases may change slightly from year to year based on the amount of electricity produced and the associated fuel that is consumed, as well as the fuel composition and mineralogy.

The vast majority of our TRI reportable substances are controlled at our facilities as part of the coal ash where they are contained, preventing them from entering the air. We capture about 95% of these substances and safely dispose of them in managed landfills.

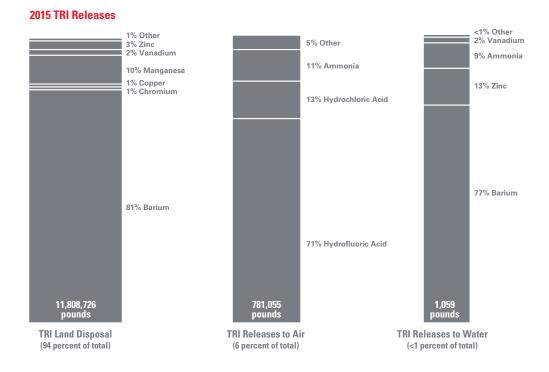
### **2017 TRI Releases**



### 2016 TRI Releases



# Appendix M: Xcel Energy Corporate Responsibility Report



Releases provided here are from 11 generating plants in locations throughout our service territory. For individual plant information visit the EPA's TRI Explorer website or contact corporateresponsibility@xcelenergy.com.

Appendix M: Xcel Energy Corporate Responsibility Report



Water quality, availability and management

# Managing water use

We regularly collaborate with local stakeholders and water managers on innovative partnerships and agreements to ensure reliable, cost-effective water supplies for our operations while also addressing different community needs.

Water conservation and protecting water quality are priorities for us. In the more arid Western and Southwestern regions where we operate, conserving and managing our water supply is especially important given challenges we face in dry years and concerns over drought. In all regions, we continually evaluate and monitor our systems and processes to ensure the water we return to local waterways is safe and meets the discharge limits contained in our Clean Water Act permits.

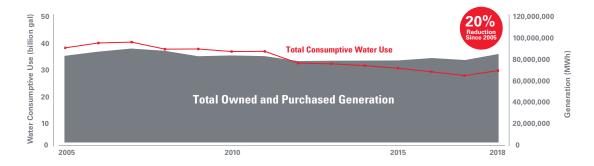
We understand that water is a fundamental, shared resource and is vital to the growth and development of our communities and to other industries, agriculture and ecosystems. As competition for water increases and weather patterns change, our water resources will become more stressed. That is why we continue to work cooperatively with our communities and states to secure responsible supply options and to save fresh water where we can.

#### 2018 Results

- Water powers steam turbines and cools equipment at thermal electric generating plants. Our thermal plants in Colorado, Texas and New Mexico use closed-loop cooling which requires less water to operate efficiently and minimizes fresh water withdrawals by recirculating water multiple times within the system — up to 25 times at some plants.
- From 2005 to 2018, we reduced water consumption approximately 20% from the electricity we generate
  and purchase, while total electricity production remained generally the same over that period. We expect
  water consumption to continue to decrease as we retire additional coal units and rely more on wind and solar
  resources that require no water to produce electricity.

- We withdrew approximately 638 billion gallons of water during the year, including municipal wastewater
  or effluent, to generate electricity at our thermal electric and hydroelectric generating plants. From these
  withdrawals, our facilities consumed approximately 24 billion gallons of water and returned approximately 614
  billion gallons (96%) to the original water source.
- Our Upper Midwest thermal plants use open-loop cooling where water is continuously withdrawn and directly returned. Although water withdrawals are higher with this type of cooling system, consumption is lower. Our plants with open-loop cooling systems return about 99% of the water they withdraw to its original source.
- Over the past 38 years, we have saved about 200 billion gallons of freshwater by pioneering the use of treated municipal effluent to cool the Nichols-Harrington and Jones generating plants in Texas — enough water to fill nearby Lake Meredith and then some.
- The Xcel Energy Foundation contributed more than \$135,000 through its environmental stewardship focus area to nonprofit programs that support water quality, education and riparian restoration efforts. For several years, the foundation has supported the restoration work of RiversEdge West and its DesertRivers Collaborative. The program supports local land managers and efforts to restore riparian areas along the Colorado River in the Grand Valley region of Colorado and the lower Gunnison River. In Minnesota, we are a longstanding supporter of Friends of the Mississippi and currently fund its Community Stewards program. Working with agency staff, volunteers and local partners, the organization held 35 stewardship events for the year at different sites along the river.

### Xcel Energy water consumption compared to electricity supply from owned and purchased generation.



# **Managing Water Supply**

### **Thermal Operations in the West and Southwest**

In the semi-arid and arid states where we operate — Colorado, New Mexico and Texas — we have strategic water resource plans that are updated annually to reflect our current operational requirements, local climate conditions and water use. Throughout the year we conduct a variety of activities to accurately predict and plan for future water supplies, which include:

- Forecasting plant water requirements based on anticipated electric generation
- Accounting for the water we need and use
- Monitoring snowpack reports
- Studying stream flow forecasts, seasonal climate projections and changes to the Ogallala aquifer the primary aquifer that underlies much of the region in Texas and New Mexico that we serve

We acquire water for our thermal and hydroelectric plants through water rights and other agreements Our integrated portfolio of water supply resources includes owned or self-supplied water rights, reservoir storage, groundwater rights and a number of other supplies, such as municipal and recycled water supplies. We own water supplies dedicated for our own use, and in Colorado, these water rights are available depending on regional water supply conditions in accordance with the state's prior appropriation system. Our portfolio also includes water from geographically diverse areas, including trans-basin water imported from other basins. This diversity is critical for maintaining a resilient, reliable water supply in the arid, climatically variable western United States.

We have expended significant resources to improve our water supply and the resiliency of our systems. Other suppliers that we do business with have responded similarly, taking steps to improve their water supplies and adopt drought response plans for ensuring they meet their municipal and industrial water supply obligations. Further, they pursued the acquisition of geographically diverse water supplies originating in other river basins, enhancing the resiliency of their systems.

Finally, we use recycled water or treated municipal effluent where available and feasible, which minimizes the competition between water needs for power generation and needs for environmental, recreational, municipal or other industrial uses. Recycled water use has the added benefit of increasing the reliability of our water supply because it is virtually drought proof and preserves billions of gallons of fresh water.

### **Thermal Operations in the Upper Midwest**

In Minnesota and Wisconsin where we operate thermal plants, water is more abundant and these facilities are permitted to withdraw and return water to nearby rivers and other waterways. While this helps to minimize water consumption, we still take a strategic approach to water use in these areas by monitoring weather patterns and using meteorological forecasting models to predict and ensure an adequate water supply during times when unusually dry conditions are likely to persist.

During these rare dry periods or drought years, we evaluate the use of alternative cooling options for each facility and implement prudent, temporary measures to provide supplemental thermal cooling. In times of energy emergencies, our permits have provisions that allow some plant operating flexibility, along with additional environmental monitoring requirements to ensure the protection of fish and other aquatic life.

### 2018 Water Use by Source (Billions of Gallons)

Source	Withdrawn	Consumed	Returned
South Platte River Basin	*5.18	4.48	0.70
Arkansas River Basin	*4.56	3.72	0.84
Yampa River Basin	1.32	1.32	0.00
Colorado Total	11.06	9.52	1.54
Ogallala Aquifer	3.63	3.33	0.30
Treated Municipal Effluent (Lubbock, Amarillo)	5.19	3.99	1.20
Southwest Total	8.82	7.32	1.50
St. Croix River	112.31	0.0	112.31
Lake Superior	9.83	0.0	9.83
Mississippi River	459.87	7.18	452.69
Minnesota River	36.47	0.0	36.47
Upper Midwest Total	**618.48	7.18	611.30
XCEL ENERGY TOTAL	638.36	24.02	614.34

<sup>\*</sup>Includes transbasin diversions

<sup>\*\*</sup>Does not include groundwater from these locations

Appendix M: Xcel Energy Corporate Responsibility Report

### **Hydroelectric Operations**

Xcel Energy operates 26 hydroelectric plants, including six in Colorado, one in Minnesota and 19 in Wisconsin, with enough capacity to power more than 280,000 homes. Although these plants use water to produce electricity, the only water loss is through natural evaporation from reservoirs. We work with environmental and wildlife agencies to ensure plans are in place for monitoring watering quality, protecting aquatic life, ensuring minimum stream flow, preventing erosion, and controlling noxious weeds and other invasive plants. Many of our hydroelectric plants offer public recreational opportunities and some are stocked with fish.

Xcel Energy's hydroelectric plants operate on the following waterways; many of these are open to public recreation:

### 2018 Water Use by Source (billions of gallons)

Colorado	Minnesota	Wisconsin
Lower Clear Creek	Mississippi River	Chippewa River
South Fork Arkansas River		Apple River
South Clear Creek		Red Cedar River
Colorado River		Namekagon River
Animas River and tributaries		Montreal River
San Miguel River and tributaries		White River
		Flambeau River
		St. Croix River

# **Meeting Mutual Water Needs**

Planning for and managing future water supply is essential for the states and communities we serve. We actively participate in these efforts to provide our expertise and solutions, as well as to plan for our own water needs. The following are examples of our engagement and some of the innovative partnerships and agreements we have in place.

- Our Water Resources staff is actively engaged in the ongoing Colorado Water Plan process. They participate
  on volunteer boards and technical working groups, serve on the board of water user groups working to meet
  Colorado's obligations under Endangered Species Recovery programs, and participate in other water user
  groups working to craft policy and legislation to better adapt Colorado's water supplies to changing conditions.
  For decades, they have served on boards and as officers overseeing nine ditch companies in Colorado where
  the company owns significant water rights. Through these organizations, conflicts involving water are often
  identified and amicably resolved.
- We own very senior water rights on the Colorado River that are used to operate the Shoshone Hydroelectric Generating Plant. To help meet water needs within the city of Denver, along the Front Range and for some users on the Western slope, we established an agreement in 2006 to "relax" a portion of our water requirements for Shoshone during dry years. Colorado experienced below-average moisture in 2013, which is the most recent year that we executed on the agreement. We reduced Shoshone's water use by more than half and allowed water to be stored for critical uses, benefitting users throughout the state.

- We have agreements with the cities of Longmont and Westminster in Colorado to exchange high quality water under our water rights with their lowest quality water or effluent, which we use at our area power plants.
   It's similar to a practice we pioneered in Texas where we use recycled municipal effluent for cooling at our power plants.
- In dry years, Colorado farmers typically lack the full water supply needed to produce marketable crops.
   Through a mutually beneficial agreement, we buy limited quantities of water that farmers have available and use it in our power plants. Under this arrangement, farmers are compensated, helping them financially during dry years.
- In the Southwest, our Water Resources staff serves on regional groundwater planning committees to better manage critical resources like the Ogallala Aquifer which is the region's primary water supply and underlies much of our service area.
- Xcel Energy is a member of the Minnesota Sustainable Growth Coalition, a business-led partnership of 33
  businesses and organizations working to promote a circular economy in the state. The coalition focuses on
  energy, water and waste issues to optimize use of resources, minimize waste and conserve resources. In the
  water area, the coalition is working on "greening gray infrastructure" or promoting infrastructure and practices
  designed to mimic the natural water cycle.

## **Maintaining Water Quality**

All of our large plants in Texas and New Mexico, as well as several plants in Colorado, are zero-discharge facilities — no process water is discharged from the plant site. Instead, it can be reused for growing crops or disposed through evaporation ponds.

Other plants, especially those in Minnesota and Wisconsin, use once-through cooling where water is taken from a river or other waterway and returned to the environment. At all our plants where we return or discharge water, we systematically treat, monitor and analyze the water to ensure we are meeting discharge requirements and to protect fish and other aquatic life.

Appendix M: Xcel Energy Corporate Responsibility Report



Xcel Energy's program for approving waste vendors is designed to minimize risk and ensure the safe disposal of materials through the exclusive use of vendors that meet our exacting standards.

Waste management

# **Preventing and managing waste**

We follow the same high standards outlined in our corporate environmental policy to responsibly reduce, reuse or dispose of our waste.

Our primary waste streams result from producing and delivering energy. This includes the coal ash that is left from burning coal to generate electricity, and the materials and equipment that come from the maintenance and repair of our transmission and distribution systems, as well as our natural gas system.

The best way to manage waste is to prevent it, and we have programs in place to help with this. We also look for opportunities to recycle or reuse waste as appropriate. When we must dispose of waste, we take steps to ensure that it is safely and properly disposed, which requires that our employees have the right training and follow the proper guidelines and procedures and that we use licensed facilities where applicable.

### 2018 Results

- We continue to reduce coal ash production as we transition to cleaner energy sources. Our generating plants produced 28% less coal ash for the year, compared to 2005.
- Approximately 19% of the coal ash our plants produced was reused. At our Texas generating plants, 100% of the coal ash is beneficially used, replacing products that would normally be produced from natural resources.
- We recycled nearly 23,000 tons of material from our operations, including more than 18,000 tons of wire and scrap metal.
- Altogether, we disposed of almost 10,000 tons of regulated waste from our operations, including 47 tons of hazardous waste.

## **Coal Ash Management**

Coal-fueled generating plants produce coal combustion residuals or byproducts commonly referred to as coal ash. Xcel Energy's generating plants consumed about 23.2 million tons of coal in 2018, supplied from mines in Colorado and the Powder River Basin of Wyoming.

Our plants operate in states that have regulated coal ash for many years. We store and dispose of ash in impoundments or ponds and landfills in accordance with these regulations, which specify construction standards and operating requirements including routine inspections and groundwater monitoring.

The following are important facts about our coal ash management:

- More than half of our coal operations are in arid regions where groundwater is scarce or at a greater depth, a favorable geologic condition that mitigates the risks of impacts from ash storage or disposal.
- We reduced our number of coal ash repositories in 2018 by about 30%, from 13 to nine. We now manage
  three impoundments and six landfills. This is the result of shutting down coal units and actively removing ash
  impoundments that are no longer needed.
- Only 18% of the total ash our plants produced in 2018 was permanently disposed in impoundments.
- Our three active impoundments include a three-acre incised pond, a 17-acre bottom ash pond, and a 100-acre
  ash disposal impoundment. This larger impoundment is built to state-of-the-art standards and meets stringent
  safety requirements, according to an EPA inspection.

Throughout our system, we try to recycle coal ash whenever possible for beneficial use, such as in concrete products, roadbed material, soil stabilization, engineered-fill material and more. As we install and operate new emission controls at our plants, such as scrubbers and activated carbon for controlling mercury emissions, the ash composition changes, making it potentially less desirable for beneficial use.

### **Coal Ash Summary (estimated in tons)**

	2016		20	17	2018	
	Produced	Reused	Produced	Reused	Produced	Reused
Colorado	934,063	127,657	731,740	91,996	987,652	37,510
Southwest	274,785	274,785	289,391	289,391	207,092	207,092
Upper Midwest	699,401	55,982	649,662	43,531	775,237	121,675
TOTAL	1,908,249	458,424	1,670,793	424,918	1,969,981	366,277

### **EPA's Final Rule for Managing and Disposing Coal Ash**

The final Coal Combustion Residuals Rule became effective in October 2015 and regulates coal ash as a non-hazardous waste under Subtitle D of the Resource Conservation and Recovery Act (RCRA-D). It establishes minimum national standards for the design, operation and closure of landfills and surface impoundments. Beneficial use of coal ash as defined under the regulation is exempted. Although it has undergone a number of changes since being enacted, Xcel Energy's facilities are well positioned to meet the rule's requirements without significant impact to operations and cost.

Our company completed our second annual groundwater monitoring reports required by the rule in January of 2019. We identified two sites in Colorado where there are impoundments or landfills present and where a statistically significant increase of certain constituents exists in the groundwater. However, at one of these locations, we have already removed the coal ash from the impoundment. Furthermore, the groundwater monitored at those two sites is directly adjacent to the impoundments or landfills and does not indicate any impact to local drinking water. We have

kept county officials informed of the situation, and are currently conducting additional groundwater sampling and initiating an assessment of corrective measures as prescribed by the rule to evaluate whether corrective action is required at these facilities. If applicable, we will be informing stakeholders on that process.

## **Waste Management**

Xcel Energy's central Environmental Services department facilitates the company's waste management program, which is supported by facilities that generate regulated wastes. Environmental Services staff routinely visits these facilities and provides training and job aides to ensure facility personnel understand their waste management responsibilities. Our largest facilities have specific personnel trained to properly manage waste.

We have a program for approving waste vendors that is designed to minimize risk and ensure the safe disposal of materials through the exclusive use of vendors that meet our exacting standards. A team comprised of Environmental Services, Supply Chain, Legal, Risk Management and Investment Recovery employees meets quarterly to discuss the program and any relevant vendor issues. Vendors contracted to manage the higher risk wastes, such as hazardous waste, are audited on a routine basis.

### **Material Recycling and Reuse**

We are committed to preventing pollution and reducing waste as part of our business planning and decision making processes. Some of our waste materials can be recycled, reused or may consist of parts and materials that can be reclaimed. Not only is the recovery of these materials good for the environment, but it also can help manage the cost of generating and delivering energy.

We began a major effort in 2016 to recycle "cobra head" style streetlights after launching a five-year project to replace these older lights with new energy-efficient LED fixtures throughout our territory. We are investing in the new technology to support the energy goals of the communities we serve and to reduce operating costs. The new LED fixtures use about 40% to 60% less electricity than high pressure sodium lights and have a longer operating life, which means fewer replacements and less maintenance.

We could have potentially sold the fixtures for reuse, but we agreed not to put these older, less efficient lights back on the street. Instead, we are recycling the lights after removing and properly disposing of environmentally sensitive components.

We will begin a multi-year project in 2019 to replace gas and electric meters as part of our Advanced Grid Intelligence and Security strategic initiative. Depending on regulatory and planning considerations, we could replace up to 5.5 million meters. We are developing a plan for managing and recycling the old meters as part of the sourcing effort for this project.

Global market conditions have negatively impacted the recyclables market, and in 2019, we saw a sharp decline in the market for recycled cardboard and plastic. We constantly look for viable and environmentally responsible recycling opportunities. The vendors that we choose to recycle these materials are selected by a competitive bid process. Waste recycling vendors that handle sensitive materials, such as oil and batteries, are reviewed using the same approved vendor process that is used for the disposal of wastes.

### **Material Recycling Summary (in Tons)**

	2016	2017	2018
Cardboard		72	21
Batteries <sup>1</sup>		49	76
Plastic	53	72	2
Scrap metal	20,841	13,390	18,334
Used oil	3,609	3,635	4,320

<sup>1</sup> Large lead-acid batteries recycled for reclaiming lead.

### **Waste Disposal**

The waste we generate must be disposed at properly licensed facilities based on the waste type. All of the vendors that we contract to manage regulated wastes are part of our approved vendor program and are required to have a valid contract established in accordance with Xcel Energy's Supply Chain. The regulated wastes identified below are disposed at licensed facilities that have been vetted for financial viability, a positive compliance record and proper insurance.

The waste summary below generally represents normal operating conditions in 2018. In addition, we completed two significant environmental projects that resulted in the one-time generation of special wastes that are excluded from the totals below. We closed a water treatment pond at the Black Dog Generating Plant, which resulted in the disposal of 4,992 tons of coal and coal ash tainted sediments. We also completed remediation of a legacy manufactured gas plant site in Fargo, North Dakota that resulted in 46,000 tons of nonhazardous contaminated soils.

### **Waste Disposition Summary (in Tons)**

	2016	2017	2018
Hazardous	31	50	47
Universal <sup>1</sup>	78	112	163
PCB related <sup>2</sup>	517	415	670
Asbestos	546	448	326
Special <sup>3</sup>	16,978	8,363	8,716

<sup>1</sup> Universal waste includes regulated waste such as fluorescent light bulbs, rechargeable batteries and mercury switches.

<sup>2</sup> PCBs (polychlorinated biphenyls) are chemicals controlled under the Toxic Substances Control Act. PCBs were historically used in transformer oil.

<sup>3</sup> Special waste includes oily materials recovered from our operations, such as rags, filters, soil and water.

#### **PCB Phase-out Effort**

We have been phasing out PCB-containing equipment from our transmission and distribution system for many years. The Toxic Substances Control Act of 1979 defines PCB equipment as equipment containing oil having a PCB concentration of 500 parts per million (ppm) or more, while PCB-contaminated equipment has oil with a PCB concentration of 50 to 499 ppm.

Xcel Energy has made dedicated efforts to remove all known PCB equipment from its system, including transformers, capacitors and other regulated categories of equipment. This equipment was targeted, removed and replaced with non-PCB equipment.

Other phase-out efforts include the replacement of regulated equipment with non-PCB equipment as systems are upgraded. Any regulated equipment removed from the field is disposed of and replaced with non-PCB equipment unless there are extenuating circumstances associated with the design or procurement of the equipment. Xcel Energy personnel are trained on PCB regulations and the proper identification, handling, removal and disposal of this equipment to facilitate phase-out efforts. Aside from PCBs that are occasionally discovered during facility upgrade projects in small sealed or previously untested specialized equipment, most of the PCB and PCB-contaminated equipment left on our system is the result of cross-contamination occurring during manufacturing or maintenance activities prior to or shortly after the adoption of the Toxic Substances Control Act.

# PCB Contaminated Equipment and Oil Removed from the Xcel Energy System

	2016	2017	2018
PCB and PCB-contaminated oil (gallons disposed)	21,378	36,632	33,311
PCB and PCB-contaminated equipment (units removed from service)	632	815	1,235

# **Legacy Manufactured Gas Plant Projects**

In the late1800s until the mid-1900s, gas was manufactured using coal, oil and petroleum. It was used as natural gas is today, primarily for heating, cooking and street lighting. EPA estimates that thousands of manufactured gas plants or MGP facilities operated in the United States between 1815 and 1960. They were owned by municipalities and corporations, including predecessor companies to today's electric utilities. MGPs produced a variety of wastes and byproducts, including coal tar. Some of the waste and byproducts were sold for reuse or disposed off-site, and some were left at plant sites.

Given the extensive history of our operating companies — going back more than 100 years — Xcel Energy has inherited legacy MGP sites. All the plant facilities were closed and dismantled many years ago, and some of the properties where MGPs once operated have been sold. Over the years, Xcel Energy has worked cooperatively with environmental agencies and communities to successfully investigate and remediate former MGP sites when necessary.

#### **Ashland**

We successfully completed the remedial phase of an eight-year cleanup project along the lakefront of Lake Superior in Ashland, Wisconsin, which was one of the busiest industrial ports in the country during the late 1800s and early 1900s. A final site cap, as prescribed by the Record of Decision (ROD), will be installed at the site in 2019. It was the site not only of a legacy MGP, but other industrial operations. The MGP was operated at the site from 1885 to 1947 and provided gas for street lighting and businesses. Later, the site was used for a city-owned landfill and waste water treatment plant. We have owned a portion of the Ashland site since 1986.

The \$200 million project was done under the supervision of EPA and the Wisconsin Department of Natural Resources. It involved more than 460,000 hours of work and employed best-in-class techniques, innovative technologies and a first-of-its-kind strategy to safely remove impacted lake sediments from the lakefront.

The effort included a unique agreement for cost recovery that effectively managed customer impact. In addition, numerous issues were successfully negotiated and litigated, including the recovery of more than \$50 million in insurance and third-party settlements to reduce overall cost. Working closely with state and federal agencies, the project was environmentally sound and economically balanced. Throughout the effort, we maintained strong community relations with the city, customers, elected officials and local Native American tribes. With the project completed, the Ashland community can now move forward with waterfront-redevelopment plans.

Appendix M: Xcel Energy Corporate Responsibility Report



Our environmental protection efforts include safeguarding birds, bats and other wildlife around our operations. We regularly work with environmental agencies and conservationists to preserve wildlife and its habitat.

Wildlife protection and biodiversity

# Managing wildlife and habitat

We have a long history of working proactively with wildlife agencies and conservationists on special programs, research studies and regulatory efforts designed to protect wildlife and its habitat.

Our operations cover thousands of miles of transmission and power line right-of-ways, as well as the lakes, rivers and acres of land that surround our generating plants and wind farms. Given our footprint, we must take care and coexist responsibly with wildlife and the natural habitat that surrounds our facilities.

We consider our impact on wildlife as we upgrade, design and build facilities. For power line and plant construction projects, we evaluate our projects to determine possible impacts and take appropriate steps to help avoid and minimize potential risks. If we do have impacts, we have programs in place to document and report incidents to regulatory agencies, and then determine what actions we can take to prevent future issues.

#### 2018 Results

- Under our Avian Protection Plans, 2,700 electric transmission and distribution power-line locations have been retrofitted with equipment to protect birds.
- We continued to support pollinator habitat on Xcel Energy property, especially in the Upper Midwest where
  we planted 47 acres of new habitat through three volunteer projects with agency and nonprofit partners.
   We even completed a demonstration garden at our downtown Amarillo headquarters by filling planters that
  surround the building with plants that are visually appealing and pollinator friendly.

- Our popular Bird Cam website had more than 1.3 million views with visitors tuning in to watch bald
  eagles, great horned owls and peregrine falcons. As early as 1989, we began working with the
  nonprofit Raptor Resource Project to install nest boxes at several of our Minnesota generating plants
  to help restore the peregrine falcon to the Mississippi River Valley. With the program's success, we
  began installing web-based cameras to share live video of the birds and their nesting habits. Our Bird
  Cam program grew from there.
- Through the Xcel Energy Foundation, we contributed nearly \$436,000 in environmental stewardship
  grants to support organizations and programs that work to protect and enhance our natural
  environment.
- Former Vice President Walter Mondale, representatives from the National Park Service, and elected
  officials and community leaders from Minnesota and Wisconsin honored Xcel Energy for the
  company's donation of more than 24,000 acres of land along the St. Croix and Namekagon Rivers,
  which led to the creation of the Wild and Scenic Rivers Act of 1968. Events were held throughout
  Minnesota and Wisconsin in 2018 to recognize the 50th anniversary of the Act.

### **Avian Protection Plans**

Xcel Energy was the first utility in the country to enter into a historic agreement with the U.S. Fish and Wildlife Service to proactively address potential issues involving birds and power-line structures, while helping the company comply with federal avian protection laws. Our utility operating companies entered into separate voluntary memorandums of understanding with USFWS in 2002 to collaborate on developing Avian Protection Plans.

Transmission and distribution lines and equipment can be attractive to birds for roosting and building nests and can pose a collision and electrocution hazard that may result in death or injury of the birds. In addition, threatened and endangered avian species and eagles are protected by the federal Endangered Species Act and the Bald and Golden Eagle Protection Act, respectively. Our Avian Protection Plans are a critical initiative for protecting birds and complying with these federal wildlife protection laws.

As part of its plan, each operating company developed a schedule for retrofitting facilities determined to pose a higher risk for bird injuries or deaths. Since then, we've had great success completing the retrofits in a timely manner, as called for under the plans. All of the initially identified retrofits have been completed in our Colorado, Texas and New Mexico service territories. In our Upper Midwest service territory, we have finished the highest priority lines and poles and are working through the next level of retrofit projects. Additionally, all of our facility design standards have been revised so that new or modified construction meets industry standards to prevent or mitigate avian incidents.

Xcel Energy employees are required under the plans to report injured or dead birds using the company's online reporting form. We then analyze whether reasonable retrofits or the installation of additional avian controls can minimize the risk of avian incidents at the location in the future. This reporting and evaluation process is another step in complying with federal avian protection laws and demonstrating our commitment to taking responsible actions for avian protection.

## **Helping Pollinators**

Xcel Energy has been supporting the development and maintenance of pollinator habitats for over 30 years. With our Upper Midwest service territory coinciding with the Monarch Migration Corridor from Minnesota to Texas, we see tremendous potential to be a leader in helping pollinators.

The company currently has over 2,100 acres of pollinator habitat in Minnesota, North Dakota and Wisconsin. We have 44 active sites ranging from 0.25 to 800 acres on various company property including under transmission lines, around substations, power plants, community solar gardens, a wind project and company office sites. We are supporting and initiating projects that make a difference in the lives of pollinators, restoring native prairie ecosystems and targeting pollinator species of concern including the monarch butterfly, rusty patched bumblebee, and karner blue butterfly.

We can't achieve success on our own. We have many partners including state and federal agencies, communities and non-profit organizations. In 2018, we planted 40 acres of pollinator habitat around our Magic City Substation in Minot, North Dakota in collaboration with the U.S. Fish & Wildlife Service Partners for Wildlife. We partnered with Great River Greening and Xcel Energy employee volunteers to seed four acres of milk weed outside our Blue Lake Power Plant in Shakopee, Minnesota. An additional 16 acres will be planted in 2019 with the goal of creating a seed bank. We also partnered with the city of Burnsville, Minnesota in 2018 to plant three acres of pollinator habitat under transmission lines in an area where a new natural gas pipeline was installed leading to the Black Dog Generating Plant.

In Colorado, employee volunteer groups are partnering with nonprofit organizations to educate our employees on the importance of pollinator species and supporting projects for the development and maintenance of pollinator habitats in our communities. Partner organizations include the Butterfly Pavilion, Volunteers for Outdoor Colorado and the Colorado Pollinator Network.

Xcel Energy and the contractors we employ do not use chemicals that are harmful to beneficial insects in our vegetation management practices to control brush, trees and weeds on our rights-of-way and properties. This includes not using neonicotinoids, which is of special concern to people working to improve bee populations.

As we move forward with the pollinator initiative, we are focusing on developing habitat that can be sustained, allowing time for the sites to develop. Our primary goal is to continue to educate the communities we serve on the importance of the pollinators in their daily lives while utilizing company property to make a difference.

## **Responsible Wind Development**

Wind energy is an important and growing part of our energy mix, especially as we look to build and operate more company-owned wind farms. Through wind, we are reducing carbon and other emissions and improving the environment in ways that ultimately support and protect wildlife. But, wind farms must be properly located, constructed, operated and monitored to minimize impacts to wildlife and protected species.

### **Project Siting and Development**

Before construction, we carefully select wind farm sites to ensure impacts to birds, bats and other wildlife are minimized to the fullest extent practicable. This includes following the USFWS's Land-based Wind Energy Guidelines, conducting wildlife and habitat surveys and following other best practices. As part of this, we work with wind project developers, the USFWS and appropriate state wildlife and natural resource agencies during siting and permitting to ensure turbine locations are not in critical habitat for threatened and endangered species. If issues are identified, we work with the appropriate agencies to avoid or minimize impacts.

Our Sagamore Wind project in New Mexico is an example of our commitment to responsible wind development. The project developer sited turbines in locations that avoid and minimize impacts, and we are voluntarily entering into a conservation agreement. We have signed a letter of intent with the Lost Draw Conservation Bank to purchase preservation and restoration credits for the Lesser Prairie-Chicken (LPC) pending project approval and transfer of ownership.

Our participation in the Lost Draw Conservation Bank will help support LPC conservation by expanding, improving, and protecting high-quality LPC habitat. The bank is expected to restore thousands of acres of habitat by reconverting agricultural fields and removing tall woody species such as mesquite. It will eliminate existing fragmentation, such as pivot irrigation, wind mills, and other tall structures, and provide permanent protection of this high-quality habitat using easements held by a New Mexico land trust.

### Construction

Pre-construction surveys are conducted prior to excavation for road or foundation construction, cable installation or crane relocation. This helps ensure that potential wildlife impacts can be minimized during wind farm construction. During construction of the Rush Creek wind project in Colorado, pre-construction surveys located burrowing owl nests in prairie dog colonies. Buffer zones were identified and marked to allow construction to continue while protecting the owls.

These surveys provide opportunities to identify other potential wildlife impacts due to indirect construction activity. At Rush Creek, for example, construction activity along a section of access road was restricted to protect an active swift fox den. We will also try to maintain existing trees and abandoned buildings on these sites when possible to avoid disturbing bat roosting habitat.

### **Wind Farm Operations**

Once a wind farm is built, we continue to perform studies and monitor wind turbine operations. Our wind farms have detailed Bird and Bat Conservation Plans, which provide a framework for how we study, monitor and minimize impacts over the life a project — from wind farm planning to construction to the operation and maintenance and decommissioning.

Despite all these efforts, wildlife can be unpredictable, and there are no guarantees. We report injuries or fatalities to USFWS and appropriate state agencies. If protected avian species build nests in close proximity to existing wind turbines, we will evaluate what actions are needed to avoid and minimize impacts and engage our state and federal wildlife experts to ensure we take the right steps.

In addition to the wind farms we own, we also purchase a significant amount of wind capacity. We expect our thirdparty wind suppliers to perform similar permitting, reporting, reviews and studies of their wind farm operations.

### **Preserving Native American Cultural Resources**

Protecting significant tribal cultural resources during the siting, construction and operation of our wind facilities is a priority. We voluntarily work with interested tribes to identify tribal cultural resources in areas where there are potentially important resources and may modify the final wind facility design to avoid impacts as much as possible. During construction, tribal cultural resource monitors may be used to help with the unexpected discovery of artifacts, ensuring they are evaluated and managed in a culturally appropriate manner.

During development and construction of the Foxtail wind project, we worked closely with the Standing Rock Sioux Tribe and others because the facility is sited near the Whitestone Hill State Historic Site in North Dakota, which was identified early in the development process as a historical site with major significance to a number of Tribes.

# **Enticing Ospreys to Alternative Nest Sites**

Ospreys are federally protected raptors that have been successfully reintroduced in the Midwest, following decades of restoration and conservation efforts. Ospreys like distribution poles and transmission structures for nesting, but nests built on utility poles can pose a threat to the birds and may cause outages and damage to electrical equipment. Xcel Energy frequently erects alternative nest platforms that are taller than nearby lines in known osprey nesting areas to provide more attractive and safer nesting sites, while protecting system reliability. We also work closely with communities and civic groups to help them evaluate utility poles near high-quality osprey habitat, to identify alternative sites and assist with building and installing safe osprey nest platforms.

# **Lesser Prairie-Chicken Conservation Agreement**

We voluntarily entered into a conservation agreement with the Western Association of Fish and Wildlife Agencies (WAFWA) pursuant to the Lesser Prairie-Chicken Range-Wide Conservation Plan to help protect this species of prairie grouse.

Rangelands in our Colorado, New Mexico and Texas service areas provide important habitat for the LPC. To participate in the conservation agreement, we pay enrollment and mitigation fees based on our anticipated development activity. We also take conservation measures, following avoidance, minimization and mitigation practices during operation, maintenance and new construction activities. As an example, we may bury distribution lines within the buffers of active breeding areas and use special types of pole construction in certain LPC habitat areas.

The goal of the WAFWA conservation plan is to increase the population of the species from about 17,000 birds in 2013 to 67,000 birds across Colorado, Kansas, New Mexico, Oklahoma and Texas. These efforts appear to be working — in 2018, WAFWA reported that there has been a steadily increasing LPC population trend over the last years.

Appendix M: Xcel Energy Corporate Responsibility Report **2** Xcel Energy® xcelenergy.com | © 2019 Xcel Energy Inc. | Xcel Energy is a registered trademark of Xcel Energy Inc. | 19-03-304

2020-2034 Upper Midwest Resource Plan Page 126 of 126



414 Nicollet Mall Minneapolis, MN 55401

## PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED

July 1, 2019

—Via Electronic Filing—

Anne Sell Minnesota Department of Commerce 85 Seventh Place East, Suite 280 St. Paul, MN 55101

RE: ANNUAL ELECTRIC UTILITY REPORT

DOCKET NO. E999/M-19-11

Dear Ms. Sell:

Northern States Power Company, doing business as Xcel Energy, submits the enclosed 2018 Electric Utility Annual Report required under Minn. Rule 7610.0130. Our Annual Report consists of the enclosed pages as well as individually uploaded live spreadsheets.

## Private and Trade Secret Data Justification

This report contains private data on individuals such as the names, addresses, and usage of our largest electric customers. This information is maintained by the Company as private customer data, and for this reason, pursuant to Minn. Stat. §13.679, we have removed this data from the public version of our filing.

Please note that this report also contains Trade Secret information protected by the Minnesota Data Practices Act. That information has economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by other persons and is subject to efforts by the Company to protect the information from public disclosure. Xcel Energy maintains this information as a trade secret based on its economic value from not being generally known and not being readily ascertainable by proper means by other persons who can obtain economic value from its disclosure or use. For this reason, we ask that the data be treated as non-public data pursuant to Minn. Stat. § 13.37, subd. 1(b).

The forecast purchase and resale energy information has economic value to Xcel Energy, its customers, suppliers, and competitors. Because Xcel Energy competes for purchased energy, fuel and transportation services in a competitive marketplace, disclosure would directly harm Xcel Energy by making its delivered supply costs less competitive. For this reason, pursuant to Minn. Stat. § 13.37, subd. 2, we have removed this data from the public version of our filing.

We have electronically filed this document with the Minnesota Public Utilities Commission. Please feel free to contact me at (612) 330-6935 or gail.baranko@xcelenergy.com if you have any questions regarding this report.

Sincerely,

/s/

GAIL A. BARANKO MANAGER, REGULATORY PROJECT MANAGEMENT

Enclosures

Docket No. E002/RP-19-368

### 7610.0320 - Forecast Methodology

# NSP Electric – Minnesota Annual Report Peak Demand and Annual Electric Consumption Forecast

### OVERALL METHODOLOGICAL FRAMEWORK

Xcel Energy prepared its forecast by major customer class and jurisdiction, using a variety of statistical and econometric techniques. The NSP System serves five jurisdictions. Minnesota, North Dakota and South Dakota are served by Northern States Power Company, a Minnesota corporation (NSP). Wisconsin and Michigan are served by Northern States Power Company, a Wisconsin corporation (NSPW). The overall methodological framework is "model oriented". The NSP and NSPW Systems operate as an integrated system. The forecast is referred to as the 2018v2.1 Forecast.

### SPECIFIC ANALYTICAL TECHNIQUES

- 1. Econometric Analysis. Xcel Energy used econometric analysis to develop jurisdictional MWh sales forecasts at the customer meter for the following sectors (exceptions to this are noted in bullet 2):
  - a. Residential without Space Heating;
  - b. Residential with Space Heating;
  - c. Small Commercial and Industrial;
  - d. Large Commercial and Industrial (Minnesota only);
  - e. Public Street and Highway Lighting (Minnesota only);
  - f. Sales to Public Authorities (Minnesota only).

Xcel Energy also used econometric analysis to develop the total system MW peak demand forecast.

- 2. Trend analysis was used for all other sectors, which includes North Dakota, South Dakota, Wisconsin and Michigan Large Commercial and Industrial; North Dakota, South Dakota, Wisconsin and Michigan Public Street and Highway Lighting; North, Dakota, South Dakota, Wisconsin and Michigan Other Sales to Public Authorities; and Interdepartmental sales (all jurisdictions).
- 3. Loss Factor Methodology. Loss factors by jurisdiction were used to convert the sales forecasts into system energy requirements (at the generator).
- 4. Judgment. Judgment is inherent to the development of any forecast. Whenever possible, Xcel Energy used quantitative models to structure its judgment in the forecasting process.

The sales forecasts are estimates of MWh levels measured at the customer meter. They do not include line or other losses. The various jurisdictional class forecasts are summed to yield the total system sales forecast. Native energy requirements are measured at the generator and include line and other losses. Xcel Energy creates native energy requirements based on the sales forecasts. A system loss factor for each jurisdiction, developed based on average historical losses, is applied to the sales forecast to calculate total losses. The sum of the MWh sales and the MWh losses equals the native energy requirements. The native energy requirements, along with peak producing weather and binary variables, then are used as independent variables within an econometric model to forecast MW peak demand for the

Docket No. E002/RP-19-368

Xcel Energy North System.

### **MODELS USED**

- 1. **Residential Econometric Models.** Sales to the residential sectors represent 29.7% of total NSP System electric sales in 2018. Residential sales are divided into with space heating and without space heating customer classes for Minnesota, North Dakota, and South Dakota. Econometric regression models using historical data are developed for each residential sector. A variety of independent variables are used in the models, including:
  - Number of customers;
  - Real Personal Income or Real Personal Income per Capita for respective jurisdiction;
  - Gross State Product;
  - Total Employment for respective jurisdiction;
  - Price of oil (WTI crude);
  - Actual heating and temperature humidity index (THI) degree days;
  - Number of monthly billing days;
  - Price of electricity (\$/kWh).
- 2. **Small Commercial and Industrial Econometric Models.** The small commercial and industrial sector represents 43.7% of NSP System electric sales in 2018. The models are econometric regressions using historical data. The models include a combination of variables, including the following:
  - Number of small commercial and industrial customers;
  - Gross Metro Product for respective jurisdiction;
  - Gross State Product (North Dakota only);
  - Employment for respective jurisdiction;
  - Real Personal Income per Capita for respective jurisdiction;
  - Actual heating and temperature humidity index (THI) degree days;
  - Number of monthly billing days.
- 3. Large Commercial and Industrial Econometric Model. Sales to the large commercial and industrial sector represent 26.0% of NSP System electric sales in 2018. The regression model uses historical data and the following explanatory variables:
  - U.S. Industrial Production Index;
  - Number of monthly billing days.
- 4. *Others.* Sales to the "Others" sector represent 0.6% of NSP System electric sales in 2018. This sector includes Public Street and Highway Lighting (PSHL), Sales to Public Authorities (OSPA) and Interdepartmental (IDS) sales. Regression models are used to estimate sales for the PSHL and OSPA classes (Minnesota only), using historical data and a combination of variables, including the following:
  - Number of customers;
  - Population for Minneapolis St. Paul MSA;
  - Number of monthly billing days.
- 5. *Municipals.* As of 2014 there are no longer any municipal customers for whom NSP or NSPW provides firm service.

- 6. Peak Demand Model. An econometric model is developed to forecast base peak demand for the entire planning period. The model includes a combination of variables, including the following:
  - Weather normalized native energy requirements;
  - Peak producing weather by month.

### METHODOLOGY STRENGTHS AND WEAKNESSES

The strength of the process Xcel Energy used for this forecast is the richness of the information obtained during the analysis. Xcel Energy's econometric forecasting models are based on sound economic and statistical theory. Historical modeling and forecast drivers are based on economic and demographic variables that are easily measured and analyzed. The use of models by class and jurisdiction gives greater insight into how the NSP System is growing, thereby providing better information for decisions to be made in the areas of generation, transmission, marketing, conservation, and load management.

With respect to accuracy, forecasts of this duration are inherently uncertain. Planners and decision makers must be keenly aware of the inherent risk that accompanies long-term forecasts. They must also develop plans that are robust over a wide range of future outcomes.

### DATA FOR FORECASTS

### **Data Definitions**

The following is a list of definitions of the variables used in Xcel Energy's econometric models.

### **Jurisdiction Abbreviations**

M or MN	State of Minnesota
N or ND	State of North Dakota
S or SD	State of South Dakota
W or WI	State of Wisconsin
Mi or MI	State of Michigan

### Monthly MWh Sales Series

SLS_Reswo(Juris)	Residential without space heating for given jurisdiction
SLS_ResSH(Juris)	Residential with space heating for given jurisdiction
SLS_SmCI(Juris)	Small commercial and industrial for given jurisdiction
SLS_LgCI(Juris)	Large commercial and industrial for given jurisdiction

### **Monthly Customer Series**

Cust_Reswo(Juris)	Residential without space heating for given jurisdiction
Cust_ResSH(Juris)	Residential with space heating for given jurisdiction
Cust_SmCI(Juris)	Small commercial and industrial for given jurisdiction
Cust_LgCI(Juris)	Large commercial and industrial for given jurisdiction

Docket No. E002/RP-19-368

### Monthly Economic and Demographic Series

HH\_(Juris) Number of Households in given jurisdiction NR\_(Juris) Total Population in given jurisdiction

CGMP\_(MSA) Real Gross Metro Product for given metropolitan statistical

CGSP\_(State) Real Gross State Product for given state EE\_(Juris) Total employment in given jurisdiction

EEMFG\_(Juris) Manufacturing employment in given jurisdiction CYP\_(Juris) Real Personal Income in given jurisdiction

CYPNR\_(Juris) Real per capita Personal Income in given jurisdiction (Juris)TotRes\_RAP Real Average Price for electric sales to residential customers

### Monthly Data Variables used in Demand Model

THI12(Month)Cust Temperature Humidity Index @12:00 noon multiplied by

total retail customers

Temperature Humidity Index @15:00 (3:00 PM) on the peak THI15(Month)Cust

day multiplied by total retail customers

HDD(Season) Normal Heating Degree Days on the day of the Peak

multiplied by a binary variable for the season (winter – Wtr,

shoulder month – sh)

WNActEnergy\_LpYrAdj\_12MoSum 12 month rolling sum of the weather

normalized net energy requirements adjusted to remove the

effect of leap years

### Monthly Weather Variables

H65\_bill (Juris) (Month) HDD base 65 for given jurisdiction and month T65\_bill (Juris) (Month) THI DD base 65 for given jurisdiction and month

### Other Monthly Variables

BillDaysCellnet21 Billing Month Days

### Monthly Binary Variables

Jan	Binary variable for the month of January
Feb	Binary variable for the month of February
Mar	Binary variable for the month of March
Apr	Binary variable for the month of April
May	Binary variable for the month of May
Jun	Binary variable for the month of June
Jul	Binary variable for the month of July
Aug	Binary variable for the month of August
Sep	Binary variable for the month of September
Oct	Binary variable for the month of October
Nov	Binary variable for the month of November
Dec	Binary variable for the month of December

Xcel Energy used internal and external data sources to create its MWh sales and MW peak demand forecast.

Docket No. E002/RP-19-368

Historical MWh sales are taken from Xcel Energy's internal company records, fed by its billing system. Historical coincident net peak demand data is obtained through company records. The load management estimate is added to the net peak demand to derive the base peak demand.

Weather data (dry bulb temperature and dew points) were collected from the National Oceanic and Atmospheric Administration for the Minneapolis/St. Paul, Fargo, Sioux Falls, and Eau Claire areas. The heating degree-days and THI degree-days were calculated internally based on this weather data.

Economic and demographic data was obtained from the Bureau of Labor Statistics, U.S. Department of Commerce, and the Bureau of Economic Analysis. Typically they are accessed from IHS Global Insight, Inc. data banks, and reflect the most recent values of those series at the time of modeling.

### **DEMAND-SIDE MANAGEMENT PROGRAMS**

The regression model results for the residential and commercial and industrial classes were reduced to account for the expected impacts of demand-side management (DSM) programs. The DSM methodology implemented for both the State of Minnesota and the State of South Dakota utilizes a transparent method for projecting the impacts of energy efficiency and load management on sales forecasts. There are three distinct steps to this process:

- Collect and calculate historical and current effects of DSM on observed sales
- Project the forecast using observed data with the impact of DSM removed (i.e. increase historical sales to show hypothetical case without DSM)
- Adjust the forecast to show the impact of all current and planned DSM in future years.

The Company's Saver's Switch program results in short-term interruptions of service designed to reduce system capacity requirements rather than permanent reductions in energy use, so it is not considered here.

Adjustments equivalent to those made to sales have also been made to the historical monthly energy and peak demand used in the peak demand regression model and to the resulting peak demand forecast.

### BEHIND-THE-METER DISTRIBUTED SOLAR GENERATION

In response to the establishment of a Solar Energy Standard (SES) by the Minnesota Legislature an increased emphasis has been placed on distributed solar generation. A forecast of the expected impact on demand and energy has been developed based on new programs designed to meet goals established for the SES. The Minnesota class-level sales forecasts and the system peak demand forecast were adjusted to account for the impacts of customer sited behind-the-meter solar installations on the NSP System. This process of adjusting the sales and peak demand forecasts for behind-the-meter solar generation is similar to the adjustments made for DSM programs. There are three distinct steps to this process:

 Collect and calculate historical and current effects of behind-the-meter solar generation on observed sales and peak demand

Forecast Documentation Page 5 of 7

- Project the forecast using observed data with the impact of behind-the-meter removed (i.e. increase historical sales to show hypothetical case without behind-themeter solar generation)
- Adjust the forecast to show the impact of all current and planned behind-the-meter solar generation in future years.

### PLUG-IN ELECTRIC VEHICLE CHARGING

The residential sales and peak demand forecasts also are adjusted to account for the increasing use of plug-in electric vehicle charging. The forecast adjustment for the monthly consumption of electricity for electric vehicle charging is based on a model that incorporates the stock of electric vehicles, electricity consumption per vehicle, an adoption rate for this technology, and financial incentives. The peak demand forecast adjustment is based on monthly electric vehicle energy consumption, daily consumption profile, and the time of day the monthly peak hour occurs.

### DATA ADJUSTMENTS AND ASSUMPTIONS

- 1. Weather Adjustments. Xcel Energy adjusted its monthly weather data to reflect billing schedules. Therefore, the monthly weather data corresponds exactly with the billing month schedule.
- 2. Economic Adjustments. All price data and related economic series were deflated to 2009 constant dollars.
- 3. Large Customer Adjustments. The large commercial and industrial sales model results have been adjusted to account for announced changes in operations for large customers.

### ASSUMPTIONS AND SPECIAL INFORMATION

Xcel Energy believes that its process is a reasonable and workable one to use as a guide for its future energy and load requirements. The underlying assumptions used to prepare Xcel Energy's median forecast are as follows:

- 1. Demographic Assumption. Population or household projections are essential in the development of the long-range forecast. The forecasts of customers are derived from population and household projections provided by IHS Global Insight, Inc., and reviewed by Xcel Energy staff. Xcel Energy customer growth mirrors demographic growth over the forecast period.
- 2. Weather Assumption. Xcel Energy assumed "normal" weather in the forecast horizon. Normal weather is defined as the average weather pattern over the 20-year period from 1998-2017. The variability of weather is an important source of uncertainty. Xcel Energy's energy forecasts are based on the assumption that the normal weather conditions will prevail in the forecast horizon. Weather-related demand uncertainties are not treated explicitly in this forecast.
- 3. Loss Factor Assumptions. The loss factors are important to convert the sales forecast to energy requirements. Xcel Energy uses a historical average loss factor for each jurisdiction, and assumes it will not change in the future.

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

### FORECAST COORDINATION

Xcel Energy reports its energy and peak demand forecasts to the Midwest ISO (MISO). MISO then combines the forecasts of all its member utilities. Xcel Energy also reports its forecast to the Public Service Commission of Wisconsin as part of its Strategic Energy Assessment (SEA) process. In this process, the Wisconsin portion of the total Xcel Energy System load is combined with other Wisconsin electric utilities to form a statewide Wisconsin forecast.

## 7610.0410 – Future Facility Additions 7610.0420 – Future Facility Retirements

The Company's most recent, completed, Resource Plan (Docket No. E002/RP-15-21) was approved by Minnesota Public Utilities Commission (MPUC or the Commission) through an Order issued January 11, 2017. The next Resource Plan will be filed on July 1, 2019.

The Order to close the 2016-2030 Upper Midwest Resource Plan docket identified it reasonable to acquire 1000 MW of wind resources, manage solar acquisition to 650 MW between 2016-2021 through Community Solar Gardens and other acquisitions, retire Sherco units 1 & 2 in 2026 and 2023, respectively, identified a need for an additional 750 MW of intermediate capacity in 2026, and acquire an additional 400 MW of demand response by 2023.

The Company fulfilled the Ordered wind with the acquisition of resources through ownership and power purchase agreements. On September 22, 2016, the Company issued a Request For Proposals (RFP) for 1000 MW wind resources. The Company filed petitions (Docket No. E002/M-16-777, E002/M-17-694) to build, own, and operate an additional 1850 MW wind. These resources will achieve Commercial Operation between 4<sup>th</sup> quarter of 2019 and 4<sup>th</sup> quarter of 2021. Orders granting approval were received from the Minnesota Commission in September 2017 and May 2018, respectively.

Project	Fuel	Size	COD	Location	Туре
Blazing Star 1	Wind	200 MW	2019	Lincoln County, MN	Self-Build
Blazing Star II	Wind	200 MW	2020	Lincoln County, MN	Self-Build
Foxtail	Wind	150 MW	2019	Dickey County, ND	Self-Build
Freeborn	Wind	200 MW	2020	Freeborn County, MN and Worth & Mitchell Counties, IA	Self-Build
Crowned Ridge	Wind	300 MW	2019	Codington County, SD	PPA
Crowned Ridge	Wind	300 MW	2019	Codington County, SD	ВОТ
Lake Benton	Wind	100 MW	2019	Pipestone County, MN	ВОТ
Clean Energy #1	Wind	100 MW	2019	Mercer & Morton Counties, ND	PPA
Dakota Range	Wind	300 MW	2021	Watertown, SD	Self-Build

Note: The Wind Petitions (Docket Nos. E002/M-16-777 and E002/M-17-694) provide additional information regarding these resources, including accredited capacity value, accredited capacities and production, and estimated costs.

The Company is on track to fulfill the Ordered solar acquisition through the Community Gardens (CSG) program. As of June 3, 2019, 559 MW of CSG

resources are connected. The program forecasts exceed 650 MW by 2019 year end.

The 2019 Review of Remaining Lives (Docket No. E,G002/D-19-161) – an annual review of the remaining lives depreciation of its electric and gas production and gas storage facilities service lives and salvage rates – updated the Remaining Life forecast for all Northern States Power Company – Minnesota (NSPM) units. This remaining life is associated with Financial End of Life for rate making purposes. Projections for the 2019-2029 timeframe are listed below. This is a tentative schedule, subject to change, pending the outcome of future Annual Review of Remaining Lives filings and the next Resource Plan filing.

	Projected Plant Retirements*					
Year	Unit/Site	Size (MW)**	Fuel Type			
2019	Granite City	47	Natural Gas			
2019	Bayfront 4	20	Natural Gas			
2023	Blue Lake Units 1 thru 4	160	Oil			
2024	Sherco Unit 2	765	Coal			
2026	Wheaton	250	Oil/Natural Gas			
2027	Sherco Unit 1	765	Coal			
2027	Inver Hills	281	Natural Gas			
2028	Red Wing	23	Refused Derived Fuel (RDF)			
2028	Wilmarth	25	Refused Derived Fuel (RDF)			

#### Notes:

The following list outlines current Power Purchase Agreements (PPA) and their scheduled termination dates.

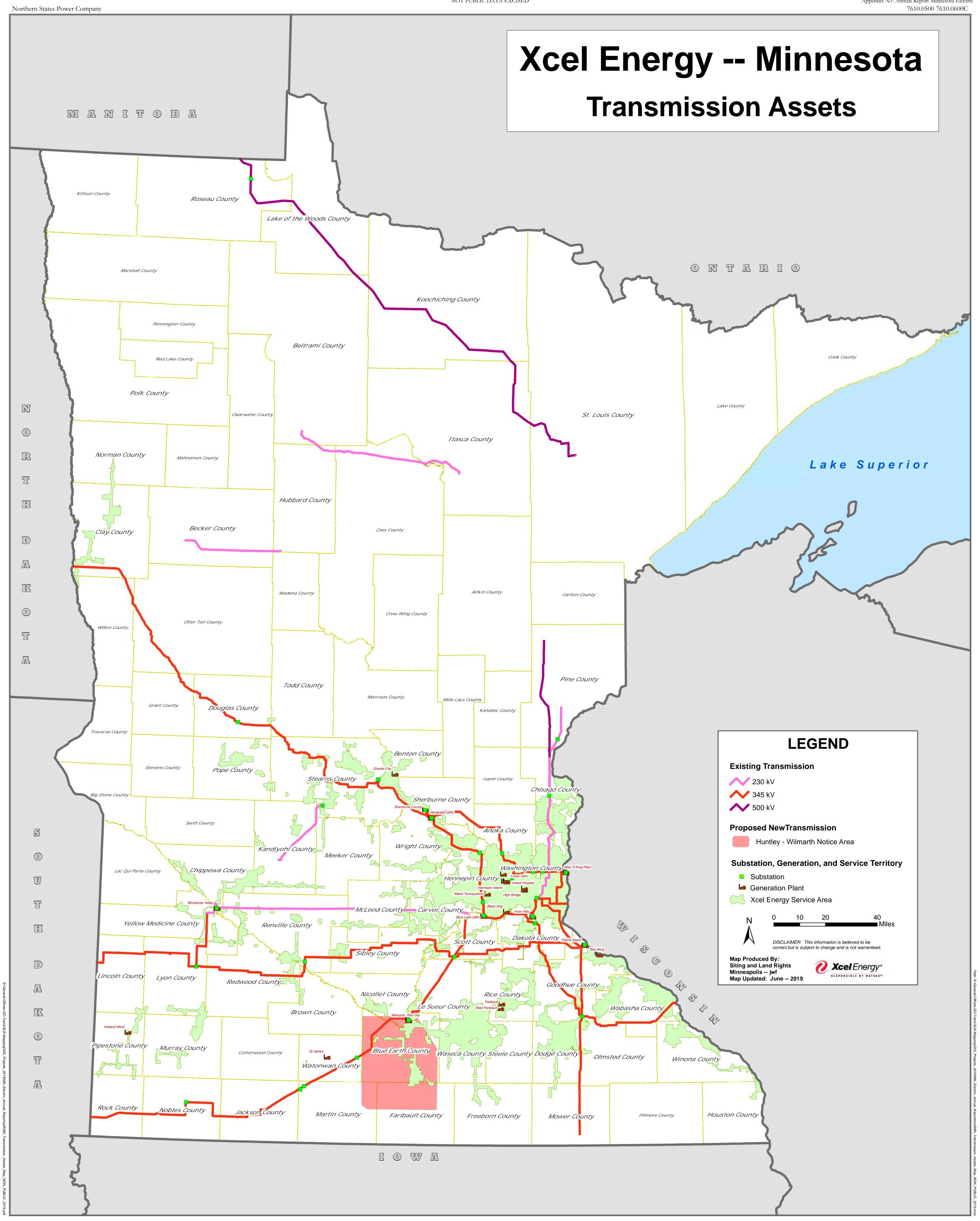
Projected PPA Retirements				
Year	Unit/Site	Size (MW)**	Fuel Type	
2019	Koda/Rahr	12	Biomass	
2019	Renewable PPAs	24	Renewable	
2020	Manitoba Hydro	73	Hydro	
2020	Renewable PPAs	1	Renewable	
2021	Renewable PPAs	1	Renewable	
2022	Renewable PPAs	7	Renewable	
2023	Renewable PPAs	22	Renewable	

<sup>\*</sup> Years indicated represent the financial end-of-life as identified in the above referenced Remaining Lives docket. Financial end-of-life dates may be adjusted to coincide with the MISO Planning Year, ending May 31st. \*\* Size represents nameplate or contracted value of the resource.

2023	St. Paul CoGen	25	Biomass
2024	Renewable PPAs	13	Renewable
2025	Renewable PPAs	21	Renewable
2025	Manitoba Hydro	827	Hydro
2025	Invenergy	312	Natural Gas
2026	Mankato 1*	277	Natural Gas
2026	Renewable PPAs	10	Renewable
2027	Renewable PPAs	44	Renewable
2028	LS Power	235	Natural Gas
2028	Renewable PPAs	7	Renewable
2029	Renewable PPAs	17	Renewable

<sup>\*</sup>Termination year may change pending a decision in MPUC Docket No. IP6949,E002/PA-18-702 regarding the proposed acquisition.

Xcel Energy proposes to fulfill future electric generating resource needs through our resource planning process and subsequent resource acquisition processes. The specific generation technology, location of future generation facilities, and mix of utility-owned, PPAs, and other resources are subject to approval by the Commission.



### Information Sheet

Benton Township E

Cass County G

Minnesota



# 2019 Minnesota Communities Served by Xcel Energy

	U = Unincorporate	d <b>E</b> = Electricity only <b>G</b> =	Gas only <b>EG</b> = Electricity and Gas	W = Wholesale
А	Ada <b>W</b>	Bergen Township <b>E</b>	Castle Rock Township <b>E</b>	Corcoran <b>E</b>
	Afton EG	Bernadotte Township <b>E</b>	Center City <b>EG</b>	Cordova Township <b>EG</b>
	Albany <b>E</b>	Big Lake <b>EG</b>	Centerville <b>EG</b>	Corinna Township <b>E</b>
	Albany Township <b>E</b>	Big Lake Township <b>E</b>	Champlin <b>E</b>	Cornish Township <b>E</b>
	Albertville E	Birch Cooley Township <b>E</b>	Chandler <b>E</b>	Cosmos <b>EG</b>
	Alma City <b>UE</b>	Birchwood <b>EG</b>	Chanhassen <b>E</b>	Cosmos Township <b>EG</b>
	Almelund <b>UEG</b>	Bird Island E	Chaska <b>E</b>	Cottage Grove <b>EG</b>
	Alton Township <b>E</b>	Bird Island Township <b>E</b>	Cherry Grove Township <b>E</b>	Cottonwood <b>E</b>
	Altura <b>E</b>	Blaine <b>EG</b>	Chester Township <b>E</b>	Courtland E
	Amador Township <b>EG</b>	Blakely Township <b>E</b>	Chickamaw Beach G	
	Annandale <b>E</b>	Blomkest E	Chippewa County <b>E</b>	Courtland Township E
	Anoka County <b>EG</b>	Blooming Grove Township E	Chisago City <b>EG</b>	Credit River Township E
	Apple Valley E	Bloomington <b>E</b>	Chisago County <b>EG</b>	Crosslake <b>G</b>
	Arden Hills <b>EG</b>	Blue Earth County <b>EGW</b>	Chisago Lake Township <b>EG</b>	Crow Lake Township <b>E</b>
	Arlington Township <b>E</b>	Blue Hill Township <b>EG</b>	Circle Pines E	Crow Wing County UG
	Ashland Township <b>E</b>	Bombay <b>UE</b>	Clara City E	Crystal <b>E</b>
	Atwater <b>E</b>	Bongards <b>UE</b>	Claremont <b>E</b>	Currie <b>E</b>
	Averill <b>UE</b>	Borup <b>E</b>	Claremont Township <b>E</b>	Dahlgren <b>E</b>
	Avon <b>E</b>	Brainerd <b>G</b>	Clarkfield <b>E</b>	Dakota <b>E</b>
	Avon Township <b>E</b>	Breezy Point G	Clarks Grove E	Dakota County <b>EG</b>
В	Baker <b>UE</b>	Bridgewater Township <b>E</b>	Clay County <b>EG</b>	Danube <b>E</b>
	Balaton <b>E</b>	Briggs Lake <b>G</b>	Clear Lake <b>EG</b>	Danville Township <b>E</b>
	Baldwin Township <b>G</b>	Brighton Township <b>E</b>	Clear Lake Township <b>E</b>	Darwin <b>G</b>
	Bancroft Township <b>E</b>	Brockway Township <b>EG</b>	Clearwater <b>EG</b>	Darwin Township <b>G</b>
	Barclay Township <b>G</b>	Brooklyn Center <b>E</b>	Clements <b>E</b>	Dassel <b>EG</b>
	Barnesville Township*** G	Brooklyn Park <b>E</b>	Cleveland <b>EG</b>	Dassel Township <b>EG</b>
	Bath Township <b>E</b>	Brooten <b>E</b>	Cleveland Township G	Dayton <b>E</b>
	Baxter <b>G</b>	Brownton <b>E</b>	Clinton Falls <b>UE</b>	Deephaven <b>E</b>
	Bayport <b>EG</b>	Brown County <b>E</b>	Clinton Falls Township <b>E</b>	Deerfield Township <b>E</b>
	Baytown Township <b>EG</b>	Buffalo <b>EGW</b>	Coates <b>E</b>	Delano <b>EGW</b>
	Beauford <b>UE</b>	Buffalo Lake <b>E</b>	Cobden <b>E</b>	Delavan Township <b>E</b>
	Beauford Township E	Buffalo Township <b>EG</b>	Cokato <sup>E</sup>	Delhi <b>E</b>
	Becker <b>EG</b>	Burnsville <b>E</b>	Cokato Township <b>E</b>	Dellwood <b>EG</b>
	Becker Township <b>E</b>	Butterfield <b>E</b>	Cold Spring <b>E</b>	Denmark Township <b>EG</b>
	Belgrade <b>E</b>	Byron <b>E</b>	Collegeville <b>EG</b>	Dennison <b>E</b>
	Belle Creek Township <b>E</b>	Camden Township <b>E</b>	Collins Township <b>E</b>	
	Belle Plaine E	Canisteo Township <b>E</b>	Collinwood Township <b>EG</b>	Dilworth <b>EG</b>
	Belle Plaine Township <b>E</b>	Cannon City <b>UE</b>	Cologne <b>E</b>	Dodge Center E
	Bellechester <b>E</b>	Cannon City Township <b>E</b>	Columbia Heights <b>E</b>	Dodge County E
	Bellevue Township <b>G</b>	Cannon Falls <b>E</b>	Columbus Township <b>EG</b>	Douglas County <b>E</b>
	Belvidere Township <b>E</b>	Cannon Falls Township <b>E</b>	Comstock E	Dresbach <b>UE</b>
	Belview <b>E</b>	Carver <b>E</b>	Concord <b>UE</b>	Dresbach Township <b>E</b>
	Benton County <b>EG</b>	Carver County <b>EG</b>	Concord Township <b>E</b>	Dryden Township <b>E</b>

Coon Rapids E

Dundas **EG** 

### 2019 Minnesota Communities Served by Xcel Energy

Information Sheet

Minnesota

U = Unincorporated	E = Electricity only G =	Gas only <b>EG</b> = Electricity and	d Gas W = Wholesale
Eagan G Eagle Lake E East Bethel EG East Grand Forks* GW East Gull Lake G Echo E Echo Township E Eden Lake Township E Eden Valley E Edgerton E Edwards Township E Ellington Township E Ellsworth Township E Ellsworth Township E Elysian EG Elysian Township E Essig UE Exan E Excelsior E Fairfield G Fairview Township G Falcon Heights EG Faribault County E Farmington EG Farmington EG Farmington EG Fatherstone Township E Felton E Fifty Lakes G	Garden City Township E Garvin E Gaylord E Gem Lake EG Gibbon E Gillford Township E Glasgow Township E Glasgow Township E Glencoe EW Glencoe Township E Glenwood Township E Glyndon Township E Glyndon Township E Goodhue Valley E Goodhue County EG Goodhue Township E Grafton Township E Grafton Township E Granite Falls Township E Grant Township E Green Isle Township E Green Isle Township E Greenfield Township E Greenwood E Greenwood E Greenwood E Greenwood E Greenwood F Greenwood E Grey Cloud Island Township E Greenwood E Grey Cloud Island Township E Hamburg EG Hamel UE Hammond E Hampton Township E Hampton Township E Hampton F Hampton Township E Hancock E Hanley Falls E Hanover E Harland E Harris E Hartland Township E	Hastings E Hatfield E Haven Township EG Hawk Creek Township E Hay Creek Township E Hay Creek Township E Hayfield E Hector E Helen Township E Helena Township E Henderson E Hennepin County EG Hillsdale Township E Hiltor E Hitterdal G Hokah E Holding Township E Holland Township E Holland Township E Hollywood Township E Hollywood Township E Howard Lake E Hugo EG Hyde Park Township E I ldeal Township G Inhen E Independence EG Inver Grove Heights EG Iona E Iosco Township EG	Kellogg E Kenyon Township EW Kilkenny E Kilkenny Township E Kimball E Kingston E Kingston Township E Krain Township E La Crescent E La Crescent Township E Lac Qui Parle County E Lafayette E Lake City EGW Lake Crystal W Lake Edward Township G Lake Henry E Lake Henry Township E Lake Lillian E Lake Lillian Township E Lake Shore G Lake St. Croix Beach E Lake Township EG Lake Washington G Lake Wilson E Lakeland EG Lakeland Shores EG Laketown Township E Lakeville E Landfall EG Lanesburgh Township E Lawerdale EG Le Sauk Township E Leundrale EG Le Sueur County EG LeHillier E Lemond Township E Lent Township E Lent Township E Lester Prairie E Leven Township E Lexington E Lilydale EG Lime Township E Lincoln Township E Lindstrom EG Lindstrom EG Lindstrom EG Lind Lakes EG Linwood Township EG Little Canada EG Long Beach E Long Lake E
Frontenac <b>UE</b>	Hassan Township <b>E</b>	Kasson W	Lonsdale <b>E</b>

7610.0600 C

## 2019 Minnesota Communities Served by Xcel Energy

Information Sheet

Minnesota

U = Unincorporated	E = Electricity only G = 0	Gas only <b>EG</b> = Electricity and	Gas W = Wholesale
Loon Lake Township <b>G</b>	Milton Township <b>E</b>	New Sweden Township <b>E</b>	Pine Springs <b>EG</b>
Loretto <b>E</b>	Minden Township <b>EG</b>	New Ulm W	Pipestone <b>E</b>
ouisville Township <b>G</b>	Minneapolis <b>E</b>	Newport <b>EG</b>	Pipestone County <b>E</b>
owry <b>E</b>	Minneapolis-St. Paul	Nicollet <b>E</b>	Plato <b>E</b>
ura Township <b>E</b>	International Airport E	Nicollet County <sup>E</sup>	Pleasant Hill Township <b>EG</b>
uxemburg Township <b>E</b>	Minneiska <sup>E</sup>	Nicollet Township <b>E</b>	Pleasant Lake G
ydia <b>UE</b>	Minneola Township E	Nininger Township <b>E</b>	Plymouth <b>E</b>
ynden Township <b>EG</b>	Minnesota City <b>EG</b>	Nisswa <b>G</b>	Point Douglas Park <b>E</b>
Lyon County <b>E</b>	Minnesota Falls Township <b>E</b>	Nobles County G	Polk County G
Lyra Township <b>E</b>	Minnesota Lake E	Nodine <b>UE</b>	Pope County <b>E</b>
, Madelia <mark>W</mark>	Minnetonka E	Norman County <b>E</b>	Princeton <b>G</b>
Madison Lake <b>EG</b>	Minnetonka Beach E	North Branch EG	Prinsburg <b>E</b>
Mahtomedi <b>EG</b>	Minnetrista <b>EG</b>	North Branch Township G	Prior Lake E
Maine Prairie Township <b>E</b>	Minnewaska Township <b>E</b>	North Mankato E	R Ramsey County EG
Manchester <b>E</b>	Moltke Township E	North Oaks <b>EG</b>	Randolph <b>E</b>
Manhattan Beach <b>G</b>	Montevideo E	North St. Paul <b>G</b>	Randolph Township <b>E</b>
Mankato <b>E</b>	Monticello E	Northfield <b>EG</b>	Rapidan <b>UE</b>
Mankato Township <b>E</b>	Monticello Township <b>E</b>	Northfield Township <b>E</b>	Raymond <b>E</b>
Mantorville <b>E</b>	Montrose <b>EG</b>	Norwood Young America E	Reads Landing UE
Mantorville Township <b>E</b>	Moorhead <b>EG</b>	Oak Center <b>UE</b>	Red Wing EG
Maple Grove E	Moorhead Township <b>G</b>	Oak Park Heights <b>EG</b>	Redwood County <b>E</b>
Maple Lake <b>E</b>	Morgan E	Oak Township <b>E</b>	Redwood Falls W
Maple Plain E	Morgan Township <b>E</b>	Oakdale <b>EG</b>	Regal <b>E</b>
Mapleton E	Morrison County G	Oaklawn Township 😉	Renville E
Mapleton Township <b>E</b>	Morristown <b>E</b>	Oakport Township <b>EG</b>	Renville County <b>E</b>
Maplewood <b>EG</b>	Morristown Township <b>E</b>	Oakwood Township <b>E</b>	Rheiderland Township <b>E</b>
Marine on St. Croix <b>EG</b>	Morton E	Olmsted County <b>E</b>	Rice <b>EG</b>
Marshall W	Mound E	Orono <b>E</b>	Rice County <b>EG</b>
Marysville Township <b>EG</b>	Mounds View <b>EG</b>	Orrock Township <b>G</b>	Rich Valley <b>E</b>
	Mountain Lake W	Osakis <b>E</b>	Richfield <b>E</b>
May Township	Mount Pleasant Township <b>EG</b>	Oshawa Township <b>E</b>	Richmond <b>E</b>
•	Mount Vernon Township <b>E</b>	Osseo E	Ridgeway <b>UE</b>
Mazeppa <b>E</b>	Mower County <b>E</b>	Otisco <b>UE</b>	Robbinsdale <b>E</b>
Mazeppa Township <b>E</b>	Munson Township <b>E</b>	Otsego <mark>E</mark>	Rock County <b>E</b>
McLeod County E	Murray County E	Ottawa Township <b>E</b>	Rockford <b>E</b>
McPherson Township EG	Navarre E	Otter Tail County <b>G</b>	Rockford Township <b>EG</b>
Medford E	Nerstrand E	Owatonna <b>E</b>	Rockville <b>EG</b>
Medford Township E	New Auburn E	Oxford Township G	Rogers E
Medicine Lake E	New Brighton <b>EG</b>	P Palmer Township G	Rollingstone <b>EG</b>
Medina E	New Germany E	Paxton Township <b>E</b>	Rollingstone Township E
Medo Township E	New Hartford Township <b>E</b>	Paynesville <b>E</b>	Roscoe E
Meeker County <b>EG</b>	New Haven Township E	Paynesville Township <b>E</b>	Roscoe Township <b>E</b>
Meire Grove E	New Hope E	Pelican Township <b>G</b>	Roseland <b>UE</b>
Melrose W	New London EG	Pemberton E	Rosemount <b>EG</b>
Mendota <b>EG</b>	New London Township <b>EG</b>	Pepin Township E	Roseville <b>EG</b>
Mendota Heights <b>EG</b>	New Market Township E	Pequot Lakes <b>G</b>	Royalton <b>G</b>
Meriden <b>UE</b>	New Munich E	Pillager** G	Ruthton E
Meriden Township <b>E</b>	New Prague E	Pine Island E	s Sabin E
Middleville Township G	New Richland E	Pine Island Township <b>E</b>	Sacred Heart E
Mille Lacs County G	New Richland Township E	Pine River <b>G</b>	Sacred Heart Township E
Millville <b>E</b>	New Scandia Township <b>EG</b>	Pine River Township <b>G</b>	Salem Township <b>E</b>
		20′	20-2034 Upper Midwest Reso

2019 Minnesota Communities Served by Xcel Energy

**Information Sheet** 

Minnesota

U = Unincorporated	d <b>E</b> = Electricity only	<b>G</b> = Gas only <b>E</b> G = Electricity and Gas	W = Wholesale
San Francisco Township <b>E</b>	St. Cloud <b>EG</b>	v Vadnais Heights <b>EG</b>	Webster Township <b>E</b>
Sand Creek Township <b>E</b>	St. James W	Vermillion <b>E</b>	Wegdahl <b>UE</b>
Santiago G	St. Joseph <b>EG</b>	Vermillion Township <b>E</b>	Welch Township <b>E</b>
Sartell <b>EG</b>	St. Joseph Township <b>E</b>	Veseli <b>UE</b>	Wells Township <b>E</b>
Sauk Center W	St. Lawrence Township <b>E</b>	Victor Township <b>EG</b>	West Concord E
Sauk Rapids <b>EG</b>	St. Louis Park <b>E</b>	Victoria <b>E</b>	West Lakeland Township EG
Sauk Rapids Township <b>E</b>	St. Martin E	Villard <b>E</b>	West St. Paul <b>EG</b>
Savage E	St. Mary Township <b>E</b>	w Wabasha <b>EG</b>	West Union E
Scandia <b>UEG</b>	St. Mary's Point <b>E</b>	Wabasha County <b>E</b> G	Westport <b>E</b>
Scott County <b>EG</b>	St. Michael <b>EG</b>	Waconia E	Westport Township <b>E</b>
Sedan <b>E</b>	St. Paul <b>EG</b>	Waconia Township <b>E</b>	Wheatland Township <b>E</b>
Severence Township <b>E</b>	St. Paul Park <b>EG</b>	Wacouta Beach UE	Wheeling Township <b>E</b>
Shafer <b>EG</b>	St. Peter W	Wacouta Township <b>EG</b>	White Bear Lake <b>EG</b>
Shafer Township <b>EG</b>		Waite Park <b>EG</b>	White Bear Lake Township
Shakopee <b>EG</b>	St. Stephen G	Wakefield Township <b>E</b>	White Bear Township <b>EG</b>
Sherburne County <b>EG</b>	St. Wendell Township G	Walcott Township E	Wilken County E
Sherman Township <b>E</b>	Stacy <b>EG</b>	Walden G	Willernie <b>EG</b>
Shieldsville Township <b>E</b>	Stanton <b>UE</b>	Waldorf <b>E</b>	Wilson <b>UEG</b>
Shoreview <b>EG</b>	Stanton Township <b>E</b>	Waltham <b>E</b>	Wilton Township <b>E</b>
	Starbuck <b>E</b>		Windom W
Shorewood E	Stearns County <b>EG</b>	Waltham Township E	Winona EG
Sibley County <b>EG</b>	Steele County <b>E</b>	Wanamingo <b>E</b>	Winona County <b>EG</b>
Sibley Township <b>EG</b>	Sterling Township <b>E</b>	Wanamingo Township <b>E</b>	Winona Township E
Silver Lake <b>E</b>	Stewart <b>E</b>	Warsaw UEG	Winsted <b>E</b>
Skyberg <b>UE</b>	Stillwater <b>EG</b>	Warsaw Township <b>EG</b>	
Skyline <b>E</b>	Stillwater Township <b>EG</b>	Waseca EW	Winsted Township E
Slayton <b>E</b>	Stockholm Township <b>E</b>	Waseca County E	Witoka <b>UE</b>
Sleepy Eye W	Stoneham Township <b>E</b>	Washington County EG	Wolverton <b>E</b>
Smiths Mill <b>UE</b>	Stony Run Township <b>E</b>	Washington Lake Township <b>EG</b>	Wood Lake E
South Bend <b>UE</b>	Sumter Township <b>E</b>	Washington Township <b>G</b>	Wood Lake Township <b>E</b>
South Bend Township <b>E</b>	Sunfish Lake <b>EG</b>	Wasioja <b>UE</b>	Woodbury <b>EG</b>
South Haven E	Sunrise <b>UEG</b>	Wasioja Township E	Woodland E
South St. Paul <b>EG</b>	Sunrise Township <b>EG</b>	Watab Township <b>EG</b>	Woodland Township <b>EG</b>
Southside Township <b>E</b>	Swedes Forest Township	Waterford <b>UEG</b>	Woodstock E
Sparta Township <b>E</b>	Sylvan Township** G	vvalerioviii = 3	Woodville Township E
Spencer Brook Township <b>G</b>	l	Watertown Township <b>EG</b>	Wright County <b>EG</b>
Spicer <b>EG</b>		Waterville <b>E</b>	Wyanett Township <b>G</b>
Spring Hill <b>E</b>	Timothy Township G	Waterville Township <b>E</b>	Wyoming <b>EG</b>
Spring Lake Park <b>E</b>	Todd County E	Watkins <b>E</b>	Wyoming Township <b>EG</b>
Spring Lake Township <b>E</b>	Tonka Bay E	Watonwan County <b>E</b>	Y Yellow Medicine County E
Spring Park <b>E</b>	Tracy <b>E</b>	Watopa Township <b>E</b>	Young America Township E
Springfield <mark>W</mark>	Trosky <b>E</b>	***************************************	z Zimmerman G
St. Anthony Village <b>E</b>	Tunsberg Township <b>E</b>	Waverly <b>EG</b>	Zion Township <b>E</b>
St. Augusta <mark>EG</mark>	Tyrone Township <b>E</b>	Wayzata <b>E</b>	Zumbro Falls <b>E</b>
St. Bonifacius <b>E</b>	0.0	Weaver <b>UE</b>	Zumbrota <b>E</b>
St. Clair <b>EG</b>	Union Grove Township E	Webster <b>UE</b>	Zumbrota Township <b>E</b>

Communities served based on tariff sheets on file with the Minnesota Public Utilities Commission. Minnesota Electric Rate Book, MPUC No. 2, Sheet Nos. 3-1 through 3-8, effective 11-01-15, and Minnesota Gas Rate Book, MPUC No. 2, Proposed Sheet Nos. 3-1 through 3-3, effective 11-01-14.



Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

7610.0600 EElectric Rate Schedules

> **Electric Rate Schedules** June 1, 2018 – June 1, 2019

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RAT	E S	CHI	EDU	LES	3
TAD		ΛE	CON	ITE	NTC

Section No. 5 11th Revised Sheet No. TOC-1

<u>ltem</u>	Sheet No.	
RESIDENTIAL		
Residential	5-1	
Residential Time of Day	5-2	
Residential Time of Use Pilot Program Service	5-4.1	N
Residential Electric Vehicle Service		
Residential Electric Vehicle Pilot Service	5-7	
Energy Controlled (Non-Demand Metered)	5-9	
Limited Off Peak	5-11	
Rules for Application of Residential Rates	5-13	
Automatic Protective Lighting	5-14	
GENERAL		
Small General	5-21	
Small General Time of Day (Metered and Non-Metered)		
General		
General Time of Day		
Peak Controlled		
Peak Controlled Time of Day		
Rules for Application of Peak Controlled		
Real Time Pricing		
MUNICIPAL		
Light Rail Line Tariff	5-71	
Street Lighting System		
Street Lighting Energy (Closed)		
Street Lighting Energy (Metered)		
Street Lighting City of St. Paul		
Rules for Application of Street Lighting Rates		
Small Municipal Pumping		
Municipal Pumping		
Fire and Civil Defense Siren		

## (Continued on Sheet No. TOC-2)

Date Filed: 11-01-17 By: Christopher B. Clark 08-07-18 Effective Date:

President, Northern States Power Company, a Minnesota corporation

E002/M-17-775 Docket No. Order Date: 08-07-18

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RATE SCHEDULES	
TABLE OF CONTENTS	

Section No. 5 10th Revised Sheet No. TOC-1

<u>Item</u>	Sheet No.		
<u>RESIDENTIAL</u>		_	
Residential	5-1		
Residential Time of Day	5-2		
Residential Electric Vehicle Service	5-5	-	
Residential Electric Vehicle Pilot Service	5-7	ı	
Energy Controlled (Non-Demand Metered)	5-9	-	
Limited Off Peak	5-11		
Rules for Application of Residential Rates	5-13		
Automatic Protective Lighting	5-14		
<u>GENERAL</u>			
Small General			
Small General Time of Day (Metered and Non-Metered)			
General			
General Time of Day			
Peak Controlled			
Peak Controlled Time of Day			
Rules for Application of Peak Controlled			
Real Time Pricing	5-64		
MUNICIPAL			
Light Rail Line Tariff	5-71		
Street Lighting System			
Street Lighting Energy (Closed)			
Street Lighting Energy (Metered)			
Street Lighting City of St. Paul			
Rules for Application of Street Lighting Rates			
Small Municipal Pumping			
Municipal Pumping			
Fire and Civil Defense Siren		-	

## (Continued on Sheet No. TOC-2)

Date Filed: 11-17-17 By: Christopher B. Clark Effective Date: 06-25-18

President, Northern States Power Company, a Minnesota corporation

E002/M-17-817 Docket No. Order Date: 05-09-18

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RATE	SCH	EDUL	ES
TARI	FOF	CONT	FNTS

Section No. 5 9th Revised Sheet No. TOC-1

<u>lte</u>	<u>em</u>	Sheet No.
RE	SIDENTIAL	
1.	Residential	5-1
2.	Residential Time of Day	5-2
3.	Residential Electric Vehicle Service	5-5
4.	Energy Controlled (Non-Demand Metered)	5-9
5.	Limited Off Peak	5-11
6.	Rules for Application of Residential Rates	5-13
7.	Automatic Protective Lighting	5-14
GE	NERAL	
8.	Small General	5-21
9.	Small General Time of Day (Metered and Non-Metered)	5-23
10.	General	5-26
11.	General Time of Day	5-29
12.	Peak Controlled	5-40
13.	Peak Controlled Time of Day	5-44
14.	Rules for Application of Peak Controlled	5-48
15.	Real Time Pricing	5-64
	<u>NICIPAL</u>	
16.	Light Rail Line Tariff	5-71
17.	Street Lighting System	5-74
18.	Street Lighting Energy (Closed)	5-76
19.	Street Lighting Energy (Metered)	5-78
20.	Street Lighting City of St. Paul	5-80
21.	Rules for Application of Street Lighting Rates	5-82
22.	Small Municipal Pumping	5-85
23.	Municipal Pumping	5-87
24.	Fire and Civil Defense Siren	5-89

## (Continued on Sheet No. TOC-2)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RATE SCHEDULES				
<b>TABLE OF CONTENTS</b>	(Continued)			

Section No. 5 17th Revised Sheet No. TOC-2

<u>Item</u>	Sheet No.
<u>RIDER</u>	
Fuel Clause Rider	5-91
Conservation Improvement Program Adjustment Rider	5-92
Surcharge Rider	5-93
Franchise and Other City Fees	5-93.1
Interim Rate Surcharge Rider	5-94
Low Income Energy Discount Rider	5-95
Residential Controlled Air Conditioning and Water Heating Rider	5-97
Commercial and Industrial Controlled Air Conditioning Rider	5-99
Off Season Load Rider	5-100
Standby Service Rider	5-101
Supplemental Generation Service Rider	5-108
Tier 1 Energy Controlled Service Rider	5-115
Revenue Decoupling Mechanism Rider	5-117
Area Development Rider	5-119
Competitive Response Rider	5-122
Photovoltaic Demand Credit Rider	5-125
Tier 1 Peak Controlled Short Notice Rider	5-126
City Requested Facilities Surcharge Rider	5-131
Voluntary Renewable and High-Efficiency Energy Purchase (Windsource Program) Rider	r 5-134
WAPA Bill Crediting Program Rider	5-135
Mercury Cost Recovery Rider	5-136
Environmental Improvement Rider	5-137
Business Incentive and Sustainability Rider	5-139
State Energy Policy Rate Rider	5-142
Renewable Development Fund Rider	5-143
Transmission Cost Recovery Rider	5-144
Renewable Energy Standard Rider	5-146
Voluntary Renewable*Connect Rider	5-149
Voluntary Renewable*Connect Government Rider	5-154

Date Filed: 11-01-17 By: Christopher B. Clark Effective Date: 08-07-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-17-775 Order Date: 08-07-18

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RATE SCHEDULES	
TABLE OF CONTENTS	(Continued)

Section No. 5 16th Revised Sheet No. TOC-2

<u>Item</u>	Sheet No.	eet No.	
RIDER		_	
Fuel Clause Rider	5-91	T	
Conservation Improvement Program Adjustment Rider	5-92		
Surcharge Rider	5-93		
Franchise and Other City Fees	5-93.1		
Interim Rate Surcharge Rider	5-94		
Low Income Energy Discount Rider	5-95		
Residential Controlled Air Conditioning and Water Heating Rider	5-97		
Commercial and Industrial Controlled Air Conditioning Rider	5-99		
Off Season Load Rider	5-100		
Standby Service Rider	5-101		
Supplemental Generation Service Rider	5-108		
Tier 1 Energy Controlled Service Rider	5-115		
Revenue Decoupling Mechanism Rider	5-117		
Area Development Rider	5-119		
Competitive Response Rider	5-122		
Photovoltaic Demand Credit Rider	5-125		
Tier 1 Peak Controlled Short Notice Rider	5-126		
City Requested Facilities Surcharge Rider	5-131		
Voluntary Renewable and High-Efficiency Energy Purchase (Windsource Program) Rider	5-134		
WAPA Bill Crediting Program Rider	5-135		
Mercury Cost Recovery Rider	5-136		
Environmental Improvement Rider	5-137		
Business Incentive and Sustainability Rider	5-139		
State Energy Policy Rate Rider	5-142		
Renewable Development Fund Rider	5-143		
Transmission Cost Recovery Rider	5-144		
Renewable Energy Standard Rider	5-146		
Voluntary Renewable*Connect Rider	5-149		
Voluntary Renewable*Connect Government Rider	5-154	Т	

Date Filed: 11-17-17 By: Christopher B. Clark Effective Date: 06-25-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-17-817 Order Date: 05-09-18

## PUBLIC DOCUMENT NOT PUBLIC DATA EXCISED

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# RATE SCHEDULES TABLE OF CONTENTS (Continued)

Section No. 5 15th Revised Sheet No. TOC-2

lte	<u>Shee</u>	et No.	
RID	ER		
	Fuel Clause Rider	. 5-91	Γ
26.	Conservation Improvement Program Adjustment Rider	. 5-92	İ
27.	Surcharge Rider	. 5-93	İ
28.	Franchise and Other City Fees	. 5-93.1	İ
29.	Interim Rate Surcharge Rider	. 5-94	İ
30.	Low Income Energy Discount Rider	. 5-95	İ
31.	Residential Controlled Air Conditioning and Water Heating Rider	. 5-97	İ
32.	Commercial and Industrial Controlled Air Conditioning Rider	. 5-99	İ
33.	Off Season Load Rider	. 5-100	İ
34.	Standby Service Rider	. 5-101	
35.	Supplemental Generation Service Rider	. 5-108	
36.	Tier 1 Energy Controlled Service Rider	. 5-115	İ
37.	Revenue Decoupling Mechanism Rider	. 5-117	İ
38.	Area Development Rider	. 5-119	İ
39.	Competitive Response Rider	. 5-122	İ
40.	Photovoltaic Demand Credit Rider	. 5-125	١
41.	Tier 1 Peak Controlled Short Notice Rider	. 5-126	İ
42.	City Requested Facilities Surcharge Rider	. 5-131	İ
43.	Voluntary Renewable and High-Efficiency Energy Purchase (Windsource Program) Rider	. 5-134	İ
44.	WAPA Bill Crediting Program Rider	. 5-135	İ
45.	Mercury Cost Recovery Rider	. 5-136	İ
46.	Environmental Improvement Rider	. 5-137	İ
	Business Incentive and Sustainability Rider		İ
48.	State Energy Policy Rate Rider	. 5-142	İ
49.	Renewable Development Fund Rider	. 5-143	İ
50.	Transmission Cost Recovery Rider	. 5-144	İ
51.	Renewable Energy Standard Rider	. 5-146	
52.	Voluntary Renewable*Connect Rider	. 5-149	ĺ
53.	Voluntary Renewable*Connect Government Rider	. 5-154	Γ

Date Filed: 05-19-16 By: Christopher B. Clark Effective Date: 06-01-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-315 & E999/CI-15-115 Order Date: 04-20-18

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL SERVICE Section No. 5
RATE CODE A00, A01, A03 31st Revised Sheet No. 1

#### **AVAILABILITY**

Available to any residential customer for domestic purposes only in a single private residence and qualifying farm customers.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Standard	Electric Space Heating	
\$0.00	N/A	
\$8.00	\$10.00	
\$10.00	\$12.00	
\$0.10301	\$0.10301	R
\$0.08803	\$0.05988	R
	\$0.00 \$8.00 \$10.00	\$0.00 N/A \$8.00 \$10.00 \$10.00 \$12.00 \$0.10301 \$0.10301

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

#### **MONTHLY MINIMUM CHARGE**

Customer Charge.

(Continued on Sheet No. 5-1.1)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL SERVICE Section No. 5
RATE CODE A00, A01, A03 30th Revised Sheet No. 1

#### **AVAILABILITY**

Available to any residential customer for domestic purposes only in a single private residence and qualifying farm customers.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

### **RATE**

	<u>Standard</u>	Electric Space Heating	
Customer Charge per Month – Water Heating (A00)	\$0.00	N/A	
<ul><li>– Overhead (A01)</li></ul>	\$8.00	\$10.00	
<ul><li>– Underground (A03)</li></ul>	\$10.00	\$12.00	
Energy Charge per kWh			
June - September	\$0.10815	\$0.10815	R
Other Months	\$0.09241	\$0.06287	R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

## **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

#### **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

#### MONTHLY MINIMUM CHARGE

Customer Charge.

## (Continued on Sheet No. 5-1.1)

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19
President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL SERVICE Section No. 5 **RATE CODE A00, A01, A03** 29th Revised Sheet No. 1

## **AVAILABILITY**

Available to any residential customer for domestic purposes only in a single private residence and qualifying farm customers.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

## **RATE**

Customer Charge per Month – Water Heating (A00) – Overhead (A01) – Underground (A03)	<u>Standard</u> \$0.00 \$8.00 \$10.00	Electric Space Heating N/A \$10.00 \$12.00	
Energy Charge per kWh June - September Other Months	\$0.10582 \$0.09032	\$0.10582 \$0.06082	R R D

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

#### MONTHLY MINIMUM CHARGE

Customer Charge.

(Continued on Sheet No. 5-1.1)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

## PUBLIC DOCUMENT NOT PUBLIC DATA EXCISED

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

#### MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL SERVICE (Continued)
RATE CODE A00, A01, A03

Section No. 5 9th Revised Sheet No. 1.1

## SURCHARGE

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

#### LOW INCOME ENERGY DISCOUNT RIDER

Bills are subject to the adjustment provided for in the Low Income Energy Discount Rider.

#### REVENUE DECOUPLING MECHANISM RIDER

Bills are subject to the adjustments provided for in the Revenue Decoupling Mechanism Rider.

The following are terms and conditions for service under this tariff.

#### LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

## LOW INCOME ENERGY DISCOUNT

Energy discount is available to qualified low income customers under this schedule subject to the provisions contained in the Low Income Energy Discount Rider.

## **OTHER PROVISIONS**

This schedule is also subject to provisions contained in Rules for Application of Residential Rates.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

D Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

#### MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL TIME OF DAY SERVICE	Section No. 5	
RATE CODE A02, A04	31st Revised Sheet No. 2	

## **AVAILABILITY**

Available to any residential customer for domestic purposes only in a single private residence and qualifying farm customers.

## **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

## **RATE**

<u>Standard</u>	Electric Space Heating	
\$10.00	\$12.00	
\$12.00	\$14.00	
		_
\$0.20497	\$0.20497	R
\$0.16508	\$0.09284	R
		_
\$0.04170	\$0.04170	R
\$0.04170	\$0.04170	R
	\$10.00 \$12.00 \$0.20497 \$0.16508	\$10.00 \$12.00 \$12.00 \$14.00 \$0.20497 \$0.20497 \$0.16508 \$0.09284 \$0.04170 \$0.04170

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

## **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

## (Continued on Sheet No. 5-3)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL TIME OF DAY SERVICE	Section No. 5
RATE CODE A02, A04	30th Revised Sheet No. 2

#### **AVAILABILITY**

Available to any residential customer for domestic purposes only in a single private residence and qualifying farm customers.

## **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

	<u>Standard</u>	Electric Space Heating	
Customer Charge per Month			
Overhead (A02)	\$10.00	\$12.00	
Underground (A04)	\$12.00	\$14.00	
On Peak Period Energy Charge per kWh			_
June - September	\$0.21520	\$0.21520	R
Other Months	\$0.17328	\$0.09748	R
Off Peak Period Energy Charge per kWh			_
June - September	\$0.04378	\$0.04378	R
Other Months	\$0.04378	\$0.04378	R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

#### **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

(Continued on Sheet No. 5-3)

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

#### MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL TIME OF DAY SERVICE	Section No.	5
RATE CODE A02, A04	29th Revised Sheet No.	2

## **AVAILABILITY**

Available to any residential customer for domestic purposes only in a single private residence and qualifying farm customers.

## **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

## **RATE**

	<u>Standard</u>	Electric Space Heating	
Customer Charge per Month			
Overhead (A02)	\$10.00	\$12.00	
Underground (A04)	\$12.00	\$14.00	
On Peak Period Energy Charge per kWh			_
June - September	\$0.21096	\$0.21096	R
Other Months	\$0.16968	\$0.09385	R
Off Peak Period Energy Charge per kWh			
June - September	\$0.04260	\$0.04260	R
Other Months	\$0.04260	\$0.04260	R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

## (Continued on Sheet No. 5-3)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17

D

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**RESIDENTIAL TIME OF DAY SERVICE (Continued)** Section No. 5 RATE CODE A02, A04 12th Revised Sheet No. 3

## MONTHLY MINIMUM CHARGE

Customer Charge.

#### **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

## LOW INCOME ENERGY DISCOUNT RIDER

Bills are subject to the adjustment provided for in the Low Income Energy Discount Rider.

## REVENUE DECOUPLING MECHANISM RIDER

Bills are subject to the adjustments provided for in the Revenue Decoupling Mechanism Rider.

The following are terms and conditions for service under this tariff.

#### LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

## LOW INCOME ENERGY DISCOUNT

Energy discount is available to qualified low income customers under this schedule subject to the provisions contained in the Low Income Energy Discount Rider.

#### **DEFINITION OF PEAK PERIODS**

The on peak period is defined as those hours between 9:00 a.m. and 9:00 p.m. Monday through Friday, except the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. When a designated holiday occurs on Saturday, the preceding Friday will be designated a holiday. When a designated holiday occurs on Sunday, the following Monday will be designated a holiday. The off peak period is defined as all other hours. Definition of on peak and off peak period is subject to change with change in Company's system operating characteristics.

#### **OPTIONAL TRIAL SERVICE**

Customers may elect time of day service for a trial period of three months. If a customer chooses to return to non-time of day service after the trial period, the customer will pay a charge of \$20.00 for removal of time of day metering equipment.

(Continued on Sheet No. 5-4)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. Order Date: E002/GR-15-826 06-12-17

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**RESIDENTIAL TIME OF DAY SERVICE (Continued)** RATE CODE A02, A04

Section No. 5 6th Revised Sheet No. 4

## TERMS AND CONDITIONS OF SERVICE

- Customer selecting the above time of day rate schedule will remain on this rate for a period of not less than 12 months, except as provided under Optional Trial Service. While served under this schedule, the Residential Service rate is not available.
- This schedule is also subject to provisions contained in Rules for Application of Residential Rates. 2.
- Time of Day Metering Charge per Month Option (Closed): For any customer who prior to November 1, 1988, elected to pay a non-refundable payment of \$310.00 in lieu of the time of day metering charge, the monthly customer charge is reduced by \$2.00.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**RESIDENTIAL TIME OF USE PILOT PROGRAM** Section No. 5 1st Revised Sheet No. 4.1 SERVICE RATE CODE A72, A74

## **PILOT PROGRAM DESIGN**

This is an experimental rate design for the residential Time of Use Pilot Program to be applied for two years from the effective date of this rate schedule. Participating customers will have received Residential Service without electric space heating prior to the Pilot, and may elect a return to the Residential Service rate schedule following the Pilot.

#### **AVAILABILITY**

A maximum of 10,000 customers will be selected to receive service with this rate schedule. The Company will determine pilot participants that receive service through the Hiawatha West, Midtown, or Westgate substations. Pilot participants will not include customers that are on net metering service or have other interconnected distributed generation on their premise, or customers that also receive Energy Controlled (Non-Demand Metered) Service, Residential Electric Vehicle Service, Limited Off-Peak Service, or customers that are medical equipment-dependent. Pilot participants may elect to opt out of participation in this Pilot for a specific premise.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Bill Protection may also apply. Details regarding the specific charges applicable to this service and Bill Protection are listed below.

#### **RATE**

Customer Charge per Month		
Overhead (A72)	\$8.00	
Underground (A74)	\$10.00	
Energy Charge per kWh		
June – September		
On-Peak Period	\$0.22576	R
Mid-Peak Period	\$0.09013	R
Off-Peak Period	\$0.02784	R
Other Months		
On-Peak Period	\$0.19266	R
Mid-Peak Period	\$0.07515	R
Off-Peak Period	\$0.02784	R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

## **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## (Continued on Sheet No. 5-4.2)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19 President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Ν

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL TIME OF USE PILOT PROGRAM Section No. 5 **SERVICE** Original Sheet No. 4.1 RATE CODE A72, A74

#### **PILOT PROGRAM DESIGN**

This is an experimental rate design for the residential Time of Use Pilot Program to be applied for two years from the effective date of this rate schedule. Participating customers will have received Residential Service without electric space heating prior to the Pilot, and may elect a return to the Residential Service rate schedule following the Pilot.

#### **AVAILABILITY**

A maximum of 10,000 customers will be selected to receive service with this rate schedule. The Company will determine pilot participants that receive service through the Hiawatha West, Midtown, or Westgate substations. Pilot participants will not include customers that are on net metering service or have other interconnected distributed generation on their premise, or customers that also receive Energy Controlled (Non-Demand Metered) Service, Residential Electric Vehicle Service, Limited Off-Peak Service, or customers that are medical equipment-dependent. Pilot participants may elect to opt out of participation in this Pilot for a specific premise.

#### DETERMINATION OF CUSTOMER BILLS

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Bill Protection may also apply. Details regarding the specific charges applicable to this service and Bill Protection are listed below.

#### **RATE**

Customer Charge per Month

Overhead (A72)	\$8.00
Underground (A74)	\$10.00

Energy Charge per kWh

June - September

On-Peak Period	\$0.23094
Mid-Peak Period	\$0.09270
Off-Peak Period	\$0.02913

Other Months

On-Peak Period	\$0.19675
Mid-Peak Period	\$0.07720
Off-Peak Period	\$0.02913

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

## **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

(Continued on Sheet No. 5-4.2)

Date Filed: 11-01-17 By: Christopher B. Clark Effective Date: 08-07-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-17-775 Order Date: 08-07-18

Section No. 5

Original Sheet No. 4.2

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL TIME OF USE PILOT PROGRAM
SERVICE (Continued)
RATE CODE A72, A74

#### RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

#### **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

### MONTHLY MINIMUM CHARGE

Customer Charge.

#### SURCHARGE

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

#### LOW INCOME ENERGY DISCOUNT RIDER

Bills are subject to the adjustment provided for in the Low Income Energy Discount Rider.

#### REVENUE DECOUPLING MECHANISM RIDER

Bills are subject to the adjustments provided for in the Revenue Decoupling Mechanism Rider.

The following are terms and conditions for service under this tariff.

## **LATE PAYMENT CHARGE**

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

### LOW INCOME ENERGY DISCOUNT

Energy discount is available to qualified low income customers under this schedule subject to the provisions contained in the Low Income Energy Discount Rider.

## **BILL PROTECTION**

Billing charges considered for bill protection will include customer and energy charges, fuel cost charges and if applicable, the Residential Controlled Air Conditioning and Water Heating Rider discounts. Bill protection will be considered only for customers that have been pilot participants at the same residential location for 12 months from the effective date of this rate schedule, based on the first 12 months of participation in the pilot program. Any Pilot program billing charge in excess of 10 percent of the corresponding billing charge that would have been applied had the customer not been a pilot participant will be credited to the customer's account, including any applicable taxes. The bill protection in this paragraph will terminate after the first 12 months of participation in the pilot program.

Customers that have received LIHEAP assistance within the 12 months prior to participation in the pilot program will have bill protection determined monthly for the first 12 months of pilot participation for any billing charges in excess of the corresponding billing charge that would have been applied had the customer not been a pilot participant. This will be determined on a monthly basis for the first 12 months of pilot participation. For the second 12 months of pilot participation, the bill protection will continue to be provided for these LIHEAP assistance customers for billing charges in excess of 10 percent of the corresponding billing charge on an annual basis for the second 12 months of pilot participation. Customers that start to receive LIHEAP assistance after their participation in the pilot has begun will receive monthly bill protection up to the first 12 month anniversary of the pilot, and shall receive annual bill protection for the second 12 month period of the pilot. Customers who opt out or leave the pilot area will forego the annual protection otherwise offered for this second 12 month period.

(Continued on Sheet No. 5-4.3)

Date Filed: 11-01-17 By: Christopher B. Clark Effective Date: 08-07-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-17-775 Order Date: 08-07-18

Ν

2020-2034 Upper Midwest Resource Plan Page 36 of 421

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL TIME OF USE PILOT PROGRAM **SERVICE** (Continued) RATE CODE A72, A74

Section No. 5 Original Sheet No. 4.3

#### **DEFINITION OF PEAK PERIODS**

The On-Peak period is defined as those hours between 3:00 p.m. and 8:00 p.m. Monday through Friday, except the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. When a designated holiday occurs on Saturday, the preceding Friday will be designated a holiday. When a designated holiday occurs on Sunday, the following Monday will be designated a holiday. The Mid-Peak period is defined as all hours not defined as On-Peak or Off-Peak periods. The Off-Peak period is defined as those hours between midnight (12:00 a.m.) and 6:00 a.m. every day.

## RESIDENTIAL CONTROLLED AIR CONDITIONING AND WATER HEATING RIDER

Customers that received service with the Residential Controlled Air Conditioning and Water Heating Rider in combination with Residential Service prior to participation in the pilot will have a revised discount for Company controlled central air conditioning or electric water heating that is specific to the pilot program. The controlled air conditioning discount is a monthly \$10 credit applied during the billing months of June through September. The controlled electric water heating discount is a monthly \$2 credit during each billing month. Pilot customers will receive these revised credits in place of percent discounts and are subject to all other terms of the Residential Controlled Air Conditioning and Water Heating Rider.

## TERMS AND CONDITIONS OF SERVICE

This schedule is also subject to provisions contained in Rules for Application of Residential Rates.

Ν

N

Date Filed: 11-01-17 By: Christopher B. Clark Effective Date: 08-07-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-17-775 Order Date: 08-07-18

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL ELECTRIC VEHICLE SERVICE Section No. **RATE CODE A08** 19th Revised Sheet No. 5

#### **AVAILABILITY**

Available to residential customers for service only to electric vehicle loads including battery charging and accessory usage. The customer must complete Company-approved documentation verifying possession, through ownership or lease, of an electric vehicle as defined in Section 169.011, subdivision 26a of Minnesota law.

## **CHARACTER OF SERVICE**

Single-phase 60-Hertz service at approximately 120 or 120/240 volts will be provided hereunder. Three-phase service or other service upgrade requests will be provided in accordance with Company service regulations.

## RENEWABLE ENERGY SUPPLY OPTION

Customers have the option to elect all or a portion of the supply of electricity under this schedule from renewable energy resources. The renewable energy supply option is available subject to the provisions contained in the Voluntary Renewable and High-Efficiency Energy Purchase (Windsource Program) Rider, or other available rate schedule for voluntary renewable energy supply that is applicable.

## **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Customer Charge per Month \$4.95

On-Peak Period Energy Charge per kWh

Off-Peak Period Energy Charge per kWh

R June - September \$0.20497 Other Months \$0.16508 R

\$0.04170

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

## **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## (Continued on Sheet No. 5-6)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19 R

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL ELECTRIC VEHICLE SERVICE Section No. 5 **RATE CODE A08** 18th Revised Sheet No. 5

## **AVAILABILITY**

Available to residential customers for service only to electric vehicle loads including battery charging and accessory usage. The customer must complete Company-approved documentation verifying possession, through ownership or lease, of an electric vehicle as defined in Section 169.011, subdivision 26a of Minnesota law.

#### CHARACTER OF SERVICE

Single-phase 60-Hertz service at approximately 120 or 120/240 volts will be provided hereunder. Three-phase service or other service upgrade requests will be provided in accordance with Company service regulations.

## RENEWABLE ENERGY SUPPLY OPTION

Customers have the option to elect all or a portion of the supply of electricity under this schedule from renewable energy resources. The renewable energy supply option is available subject to the provisions contained in the Voluntary Renewable and High-Efficiency Energy Purchase (Windsource Program) Rider, or other available rate schedule for voluntary renewable energy supply that is applicable.

## **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

## **RATE**

Customer Charge per Month	\$4.95
Customer Charge per Month	φ4.9

On-Peak Period Energy Charge per kWh

June - September \$0.21520 R Other Months \$0.17328 R

Off-Peak Period Energy Charge per kWh \$0.04378 R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

(Continued on Sheet No. 5-6)

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL ELECTRIC VEHICLE SERVICE Section No. 5 **RATE CODE A08** 17th Revised Sheet No. 5

#### **AVAILABILITY**

Available to residential customers for service only to electric vehicle loads including battery charging and accessory usage. The customer must complete Company-approved documentation verifying possession, through ownership or lease, of an electric vehicle as defined in Section 169.011, subdivision 26a of Minnesota law.

#### CHARACTER OF SERVICE

Single-phase 60-Hertz service at approximately 120 or 120/240 volts will be provided hereunder. Three-phase service or other service upgrade requests will be provided in accordance with Company service regulations.

## RENEWABLE ENERGY SUPPLY OPTION

Customers have the option to elect all or a portion of the supply of electricity under this schedule from renewable energy resources. The renewable energy supply option is available subject to the provisions contained in the Voluntary Renewable and High-Efficiency Energy Purchase (Windsource Program) Rider, or other available rate schedule for voluntary renewable energy supply that is applicable.

## **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Customer Charge per Month	\$4.95
---------------------------	--------

On-Peak Period Energy Charge per kWh

June - September R \$0.21096 Other Months \$0.16968 R

Off-Peak Period Energy Charge per kWh \$0.04260 R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## (Continued on Sheet No. 5-6)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17 D

NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL ELECTRIC VEHICLE SERVICE
RATE CODE A08

Section No. 5 16th Revised Sheet No. 6

## MONTHLY MINIMUM CHARGE

Customer Charge.

#### SURCHARGE

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

#### LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

#### **DEFINITION OF PEAK PERIODS**

The on-peak period is defined as those hours between 9:00 a.m. and 9:00 p.m. Monday through Friday, except the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. When a designated holiday occurs on Saturday, the preceding Friday will be designated a holiday. When a designated holiday occurs on Sunday, the following Monday will be designated a holiday. The off-peak period is defined as all other hours. Definition of on-peak and off-peak period is subject to change with change in Company's system operating characteristics.

#### **COMMUNICATION COSTS**

The Company will maintain separate accounting of the information, education, advertising and promotion costs associated with electric vehicles as provided in Minn. Stat. §216B.1614, subd.2, paragraph (c) 2 by deferring the costs to a tracker account, and will petition the Minnesota Public Utilities Commission to recover the qualifying costs.

#### TERMS AND CONDITIONS OF SERVICE

- Residential Electric Vehicle Service shall be separately served and metered and must at no time be
  connected to facilities serving customer's other loads. Metering may be installed as a sub-meter behind the
  customer's main meter, in which case consumption under this rate schedule will be subtracted from the main
  meter for purposes of billing customer's non-Electric Vehicle electricity usage.
- 2. The customer shall supply, at no expense to the Company, a suitable location for meters and associated equipment used for billing. Installations must conform to the Company's specifications.
- 3. Company may require customer to provide access for Company-owned equipment for the recording and wireless communication of energy usage.
- 4. The rate contemplates that this service will utilize existing facilities with no additional major expenditures. Customer shall reimburse Company for any expenditure for facilities necessary to serve this load which would not otherwise be required to serve customer's load.
- 5. This schedule is also subject to provisions contained in Rules for Application of Residential Rates.
- 6. Customers that elect the Windsource program in calendar year 2015 for at least three (3) 100 kWh blocks or their entire usage on this schedule may receive a one-time \$25 bill credit or gift card of the same value.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# RESIDENTIAL ELECTRIC VEHICLE PILOT SERVICE RATE CODE A80, A81 Section No. 5 5th Revised Sheet No. 7

#### **AVAILABILITY**

Available while this Pilot Service is in effect to Residential Service customers for service only to electric vehicle loads including battery charging and accessory usage. Bundled service includes Company installed and provided charging equipment. Pre-Pay Option service is available to customers electing to pay Company for the installed cost of charging equipment prior to beginning service with this tariff. Customers electing Pre-Pay Option service are separately invoiced at the time of installation. The customer must complete Company-approved documentation verifying possession, through ownership or lease, of an electric vehicle as defined in Section 169.011, subdivision 26a of Minnesota law.

## **CONTRACT**

Customers must contract for this service through an Electric Vehicle Pilot Electric Service Agreement with the Company. The initial contract period will normally be for 24 months.

#### **CHARACTER OF SERVICE**

Single-phase 60-Hertz service at approximately 120 or 120/240 volts will be provided hereunder. Three-phase service or other service upgrade requests will be provided in accordance with Company service regulations.

#### RENEWABLE ENERGY SUPPLY OPTION

Customers have the option to elect all or a portion of the supply of electricity under this schedule from renewable energy resources. The renewable energy supply option is available subject to the provisions contained in the Voluntary Renewable and High-Efficiency Energy Purchase (Windsource Program) Rider, or other available rate schedule for voluntary renewable energy supply that is applicable.

## **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and /or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

## **RATE**

Cust	tomer	Charg	e per	Month

Bundled (A80) \$17.47 Pre-Pay Option (A81) \$7.10

On-Peak Period Energy Charge per kWh

 June - September
 \$0.20497
 R

 Other Months
 \$0.16508
 R

Off-Peak Period Energy Charge per kWh \$0.04170

## **PRE-PAY OPTION**

The Pre-Pay Option Customer Charge per Month applies in place of the Bundled Customer Charge per Month to customers that have paid the installed cost of charging equipment to the Company.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

(Continued on Sheet No. 5-8)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota Corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### RESIDENTIAL ELECTRIC VEHICLE PILOT SERVICE Section No. 5 4th Revised Sheet No. 7 RATE CODE A80, A81

#### **AVAILABILITY**

Available while this Pilot Service is in effect to Residential Service customers for service only to electric vehicle loads including battery charging and accessory usage. Bundled service includes Company installed and provided charging equipment. Pre-Pay Option service is available to customers electing to pay Company for the installed cost of charging equipment prior to beginning service with this tariff. Customers electing Pre-Pay Option service are separately invoiced at the time of installation. The customer must complete Company-approved documentation verifying possession, through ownership or lease, of an electric vehicle as defined in Section 169,011, subdivision 26a of Minnesota law.

#### CONTRACT

Customers must contract for this service through an Electric Vehicle Pilot Electric Service Agreement with the Company. The initial contract period will normally be for 24 months.

#### CHARACTER OF SERVICE

Single-phase 60-Hertz service at approximately 120 or 120/240 volts will be provided hereunder. Three-phase service or other service upgrade requests will be provided in accordance with Company service regulations.

### RENEWABLE ENERGY SUPPLY OPTION

Customers have the option to elect all or a portion of the supply of electricity under this schedule from renewable energy resources. The renewable energy supply option is available subject to the provisions contained in the Voluntary Renewable and High-Efficiency Energy Purchase (Windsource Program) Rider, or other available rate schedule for voluntary renewable energy supply that is applicable.

## **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and /or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### RATE

Customer	Charge	per	Month
----------	--------	-----	-------

Bundled (A80)	\$17.47
Pre-Pay Option (A81)	\$7.10

On-Peak Period Energy Charge per kWh

R June - September \$0.21520 R Other Months \$0.17328

Off-Peak Period Energy Charge per kWh \$0.04378 R

## **PRE-PAY OPTION**

The Pre-Pay Option Customer Charge per Month applies in place of the Bundled Customer Charge per Month to customers that have paid the installed cost of charging equipment to the Company.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

(Continued on Sheet No. 5-8)

Date Filed: 11-28-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota Corporation

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company , a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL ELECTRIC VEHICLE PILOT SERVICE RATE CODE A80, A81

3rd Revised Sheet No. 7

Section No. 5

#### **AVAILABILITY**

Available while this Pilot Service is in effect to Residential Service customers for service only to electric vehicle loads including battery charging and accessory usage. Bundled service includes Company installed and provided charging equipment. Pre-Pay Option service is available to customers electing to pay Company for the installed cost of charging equipment prior to beginning service with this tariff. Customers electing Pre-Pay Option service are separately invoiced at the time of installation. The customer must complete Company-approved documentation verifying possession, through ownership or lease, of an electric vehicle as defined in Section 169.011, subdivision 26a of Minnesota law.

#### CONTRACT

Customers must contract for this service through an Electric Vehicle Pilot Electric Service Agreement with the Company. The initial contract period will normally be for 24 months.

#### CHARACTER OF SERVICE

Single-phase 60-Hertz service at approximately 120 or 120/240 volts will be provided hereunder. Three-phase service or other service upgrade requests will be provided in accordance with Company service regulations.

## RENEWABLE ENERGY SUPPLY OPTION

Customers have the option to elect all or a portion of the supply of electricity under this schedule from renewable energy resources. The renewable energy supply option is available subject to the provisions contained in the Voluntary Renewable and High-Efficiency Energy Purchase (Windsource Program) Rider, or other available rate schedule for voluntary renewable energy supply that is applicable.

## **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and /or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Customer Charge per Month

Bundled (A80) \$17.47 Pre-Pay Option (A81) \$7.10

On-Peak Period Energy Charge per kWh

June - September \$0.21096 Other Months \$0.16968

Off-Peak Period Energy Charge per kWh \$0.04260

## **PRE-PAY OPTION**

The Pre-Pay Option Customer Charge per Month applies in place of the Bundled Customer Charge per Month to customers that have paid the installed cost of charging equipment to the Company.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

(Continued on Sheet No. 5-8)

Date Filed: 11-17-17 By: Christopher B. Clark Effective Date: 06-25-18

President, Northern States Power Company, a Minnesota Corporation

Docket No. E002/M-17-817 Order Date: 05-09-18

N |

N

## PUBLIC DOCUMENT Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company , a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL TIME OF DAY SERVICE - UNDERGROUND (Continued)
RATE CODE A04

Section No. 5 2nd Revised Sheet No. 7

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

Docket No. E002/GR-05-1428 Order Date: 09-01-06

 $S: \label{lem:condition} S: \label{lem:condi$ 

NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

N

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL ELECTRIC VEHICLE PILOT SERVICE

(Continued)
RATE CODE A80, A81

Section No. 5

3rd Revised Sheet No. 8

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

#### RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

#### MONTHLY MINIMUM CHARGE

Customer Charge.

#### **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

#### LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

## **DEFINITION OF PEAK PERIODS**

The on-peak period is defined as those hours between 9:00 a.m. and 9:00 p.m. Monday through Friday, except the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. When a designated holiday occurs on Saturday, the preceding Friday will be designated a holiday. When a designated holiday occurs on Sunday, the following Monday will be designated a holiday. The off-peak period is defined as all other hours. Definition of on-peak and off-peak period is subject to change with change in Company's system operating characteristics.

#### **COMMUNICATION COSTS**

The Company will maintain separate accounting of the information, education, advertising and promotion costs associated with electric vehicles as provided in Minn. Stat. §216B.1614, subd.2, paragraph (c) 2 by deferring the costs to a tracker account, and will petition the Minnesota Public Utilities Commission to recover the qualifying costs.

## TERMS AND CONDITIONS OF SERVICE

- 1. Residential Electric Vehicle Pilot Service shall be served through wiring connected to customer's single meter provided for Residential Service. Consumption under this rate schedule will be subtracted from the main meter for purposes of billing customer's non-Electric Vehicle electricity usage.
- 2. The customer shall supply, at no expense to the Company, premises wiring and a suitable location for connection of charging and associated equipment.
- 3. Company may require customer to provide access for Company-owned equipment for the recording and wireless communication of energy usage.
- 4. The rate contemplates that this service will utilize existing facilities with no additional major expenditures. Customer shall reimburse Company for any expenditure for facilities necessary to serve this load which would not otherwise be required to serve customer's load.
- 5. This schedule is also subject to provisions contained in Rules for Application of Residential Rates.
- 6. Customer must execute an Electric Vehicle Pilot Service Agreement with the Company.

Date Filed: 11-17-17 By: Christopher B. Clark Effective Date: 06-25-18

President, Northern States Power Company, a Minnesota Corporation

Docket No. E002/M-17-817 Order Date: 05-09-18

| N

## PUBLIC DOCUMENT Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL TIME OF DAY SERVICE -UNDERGROUND (Continued) RATE CODE A04 Section No. 5 2nd Revised Sheet No. 8

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

Docket No. E002/GR-05-1428 Order Date: 09-01-06

 $S: \label{lem:condition} S: \label{lem:condi$ 

Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis. Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

ENERGY CONTROLLED SERVICE (NON-DEMAND METERED) RATE CODE A05 Section No. 5 30th Revised Sheet No. 9

#### **AVAILABILITY**

Available to residential and commercial customers with permanently connected interruptible loads of up to 50 kW that would be under Company control. The types of loads served would include dual fuel space heating, water heating, and other loads subject to Company approval.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Customer Charge	Residential \$4.95	Commercial & Industrial \$4.95	
Energy Charge per kWh Optional	\$0.04487	\$0.04487	R
June - September	\$0.10301	\$0.09256	R
Other Months	\$0.04487	\$0.04487	R

#### **OPTIONAL ENERGY CHARGE**

This option is available to customers with heat pump installations for non-interruptible service during June through September billing months.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

(Continued on Sheet No. 5-10)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

ENERGY CONTROLLED SERVICE (NON-DEMAND METERED) RATE CODE A05 Section No. 5 29th Revised Sheet No. 9

#### **AVAILABILITY**

Available to residential and commercial customers with permanently connected interruptible loads of up to 50 kW that would be under Company control. The types of loads served would include dual fuel space heating, water heating, and other loads subject to Company approval.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

## **RATE**

Customer Charge	Residential \$4.95	Commercial & Industrial \$4.95	
Energy Charge per kWh Optional	\$0.04711	\$0.04711	R
June - September	\$0.10815	\$0.09728	R
Other Months	\$0.04711	\$0.04711	R

### **OPTIONAL ENERGY CHARGE**

This option is available to customers with heat pump installations for non-interruptible service during June through September billing months.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

## **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

(Continued on Sheet No. 5-10)

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis. Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

ENERGY CONTROLLED SERVICE (NON-DEMAND METERED) RATE CODE A05 Section No. 5 28th Revised Sheet No. 9

#### **AVAILABILITY**

Available to residential and commercial customers with permanently connected interruptible loads of up to 50 kW that would be under Company control. The types of loads served would include dual fuel space heating, water heating, and other loads subject to Company approval.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Customer Charge	Residential \$4.95	Commercial & Industrial \$4.95	
Energy Charge per kWh Optional	\$0.04506	\$0.04506	R
June - September	\$0.10582	\$0.09514	R
Other Months	\$0.04506	\$0.04506	R

#### **OPTIONAL ENERGY CHARGE**

This option is available to customers with heat pump installations for non-interruptible service during June through September billing months.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

D

### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

(Continued on Sheet No. 5-10)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**ENERGY CONTROLLED SERVICE (NON-DEMAND METERED)** Section No. 5 8th Revised Sheet No. 10 (Continued) **RATE CODE A05** 

#### MONTHLY MINIMUM CHARGE

Customer Charge.

## **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

## REVENUE DECOUPLING MECHANISM RIDER

Bills are subject to the adjustments provided for in the Revenue Decoupling Mechanism Rider.

The following are terms and conditions for service under this tariff.

#### LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

#### TERMS AND CONDITIONS OF SERVICE

- The controllable load shall be permanently wired, separately served and metered, and at no time connected to facilities serving customer's firm load.
- The duration and frequency of interruptions shall be at the discretion of Company. Interruption will normally occur at such times:
  - When Company is required to use generation equipment or to purchase power that results in production costs in excess of \$70 per MWh,
  - b. When Company expects to establish an annual system peak demand, or
  - At such times when, in Company's opinion, the reliability of the system is endangered.
- Customer selecting Energy Controlled Service (Non-Demand Metered) must have a Company approved electric space heating system and must remain on this service for a minimum term of one year.
- Customer selecting Energy Controlled Service (Non-Demand Metered) must be prepared for interruptions that will last longer than 12 hours per occurrence. Company shall not be liable for any loss or damage caused by or resulting from any interruption of service.
- Electricity must be the primary source of energy for dual fuel space heating installations. Customer must have available alternative energy sources capable of supplying up to 30% of the annual heating needs during any heating season.
- Customer's water heating system served under this rate must be designed and sized to be capable of providing customer's hot water needs for the full duration of the potential interruption periods.

(Continued on Sheet No. 5-10.1)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

## PUBLIC DOCUMENT NOT PUBLIC DATA EXCISED

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

ENERGY CONTROLLED SERVICE (NON-DEMAND METERED) (Continued)
RATE CODE A05

Section No. 5 5th Revised Sheet No. 10.1

- 7. Customer must furnish and install an NSP approved electric meter socket to accept Energy Controlled Service (Non-Demand Metered). Company reserves the right to inspect and approve the installation.
- 8. The rate contemplates that this service will utilize existing facilities with no additional major expenditures. Customer shall reimburse Company for any expenditures for facilities necessary to serve this load which would not otherwise be required to serve customer's load.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

LIMITED OFF PEAK SERVICE	Section No.	5
RATE CODE A06	33rd Revised Sheet No.	11

#### **AVAILABILITY**

Available to any customers for controlled loads that will be energized only for the time period between 10:00 p.m. to 6:30 a.m. daily.

## **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

## **RATE**

	Residential	Commercial & Industrial	
Customer Charge per Month			
Secondary Voltage			
Single Phase	\$4.95	\$10.00	
Three Phase		\$13.60	
Primary Voltage		\$60.00	
Transmission Transformed		\$60.00	
Transmission		\$60.00	
Energy Charge per kWh			
Secondary Voltage	\$0.03665	\$0.03665	R
Primary Voltage		\$0.03560	R
Transmission Transformed		\$0.03398	R
Transmission		\$0.03388	R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

## **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## (Continued on Sheet No. 5-11.1)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19

Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

LIMITED OFF PEAK SERVICE	Section No.	5
RATE CODE A06	32nd Revised Sheet No.	11

#### **AVAILABILITY**

Available to any customers for controlled loads that will be energized only for the time period between 10:00 p.m. to 6:30 a.m. daily.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

## **RATE**

	Residential	Commercial & Industrial	
Customer Charge per Month			
Secondary Voltage			
Single Phase	\$4.95	\$10.00	
Three Phase		\$13.60	
Primary Voltage		\$60.00	
Transmission Transformed		\$60.00	
Transmission		\$60.00	
Energy Charge per kWh			
Secondary Voltage	\$0.03848	\$0.03848	R
Primary Voltage		\$0.03740	R
Transmission Transformed		\$0.03574	R
Transmission		\$0.03563	R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

## **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## (Continued on Sheet No. 5-11.1)

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

NOT PUBLIC DATA EXCISED

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

LIMITED OFF PEAK SERVICE	Section No.	5
RATE CODE A06	31st Revised Sheet No.	11

#### **AVAILABILITY**

Available to any customers for controlled loads that will be energized only for the time period between 10:00 p.m. to 6:30 a.m. daily.

## **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

## **RATE**

	<u>Residential</u>	Commercial & Industrial	
Customer Charge per Month			
Secondary Voltage			
Single Phase	\$4.95	\$10.00	
Three Phase		\$13.60	
Primary Voltage		\$60.00	
Transmission Transformed		\$60.00	
Transmission		\$60.00	
Energy Charge per kWh			
Secondary Voltage	\$0.03660	\$0.03660	R
Primary Voltage		\$0.03554	R
Transmission Transformed		\$0.03389	R
Transmission		\$0.03379	R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

## **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

#### RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

# (Continued on Sheet No. 5-11.1)

Date Filed: By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17 D

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

LIMITED OFF PEAK SERVICE (Continued)
RATE CODE A06

Section No. 5 8th Revised Sheet No. 11.1

# **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

## **REVENUE DECOUPLING MECHANISM RIDER**

Bills are subject to the adjustments provided for in the Revenue Decoupling Mechanism Rider.

(Continued on Sheet No. 5-12)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

LIMITED OFF PEAK SERVICE (Continued) **RATE CODE A06** 

Section No. 5 8th Revised Sheet No. 12

#### MONTHLY MINIMUM CHARGE

For all customers, the minimum charge shall be the applicable customer charge.

#### **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

#### LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

#### TERMS AND CONDITIONS OF SERVICE

- Limited Off Peak Service shall be separately served and metered and must at no time be connected to facilities serving customer's other loads.
- Company will not be liable for any loss or damage caused by or resulting from any interruption of service.
- Customer selecting Limited Off Peak Service must remain on this service for a minimum term of one year, unless customer transfers to another interruptible service rate.
- Customer has the option of directly controlling own load or allowing Company load control. If customer chooses Company load control, customer must:
  - Provide a load-break switch or circuit breaker equipped with electronic trip and close circuits allowing for remote operation of customer's switch or circuit breaker by Company,
  - Wire the trip and close circuits into a connection point designated by Company to allow installation of remote control equipment by Company, and
  - Provide a continuous 120 volt AC power source at the connection point for operation of Company's remote control equipment.
- A charge of \$0.360 per kWh shall be applied to non-authorized energy used outside of the energized time period specified in this tariff. If this energy use occurs during three or more billing months, the Company reserves the right to remove customer from Limited Off Peak Service.
- The rate contemplates that this service will utilize existing facilities with no additional major expenditures. Customer shall reimburse Company for any expenditures for facilities necessary to serve this load which would not otherwise be required to serve customer's load.

R

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

# PUBLIC DOCUMENT

NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

LIMITED OFF PEAK SERVICE (Continued) **RATE CODE A06** 

Section No. 5 7th Revised Sheet No. 12

#### MONTHLY MINIMUM CHARGE

For all customers, the minimum charge shall be the applicable customer charge.

# **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

#### LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

## TERMS AND CONDITIONS OF SERVICE

- Limited Off Peak Service shall be separately served and metered and must at no time be connected to facilities serving customer's other loads.
- 2. Company will not be liable for any loss or damage caused by or resulting from any interruption of service.
- 3. Customer selecting Limited Off Peak Service must remain on this service for a minimum term of one year, unless customer transfers to another interruptible service rate.
- Customer has the option of directly controlling own load or allowing Company load control. If customer chooses Company load control, customer must:
  - Provide a load-break switch or circuit breaker equipped with electronic trip and close circuits allowing for remote operation of customer's switch or circuit breaker by Company,
  - Wire the trip and close circuits into a connection point designated by Company to allow installation of b. remote control equipment by Company, and
  - Provide a continuous 120 volt AC power source at the connection point for operation of Company's remote control equipment.
- A charge of \$0.340 per kWh shall be applied to non-authorized energy used outside of the energized time period specified in this tariff. If this energy use occurs during three or more billing months, the Company reserves the right to remove customer from Limited Off Peak Service.
- The rate contemplates that this service will utilize existing facilities with no additional major expenditures. Customer shall reimburse Company for any expenditures for facilities necessary to serve this load which would not otherwise be required to serve customer's load.

R

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## **RULES FOR APPLICATION OF RESIDENTIAL RATES**

Section No. 5 7th Revised Sheet No. 13

The Residential Service, Residential Time of Day Service and Residential Time of Use Pilot Program are the only rates available to residential customers for domestic purposes in a single private residence. Energy Controlled Service (Non-Demand Metered), Limited Off Peak Service, Residential Electric Vehicle Service, Residential Electric Vehicle Pilot Service and Automatic Protective Lighting Service rate schedules are also available to qualifying residential customers.

Ν

Normal service under the Residential Service, Residential Time of Day Service and Residential Time of Use Pilot Program rate schedules is single phase service rendered through one meter. Three phase service or service through more than one meter will be provided upon a one-time payment of an amount to reimburse Company for the additional investment. If customer is served through more than one meter, each meter will be separately billed.

Ν Ν

- Electric space heating charges are applicable only when customer's electric space heating equipment is 3. used as customer's primary heating source.
- Underground service charges will apply where the underground facilities are owned by Company, and Company has not been fully reimbursed for the added cost of such underground facilities.
- Standby and Supplementary Service is available for any residential customer subject to the provisions in the General Rules and Regulations, Section 2.4. The Company's meter will be ratcheted to measure the flow of power and energy from Company to customer only.
- A customer using electric service for domestic and non-domestic purposes jointly may combine such use through one meter on such rates as are available to general service customers.
- The Residential Service and Residential Time of Day Service rate schedules are available to farm installations which were served on the separate Farm Service rate schedule prior to its cancellation on November 1, 1988. Residential Service and Residential Time of Day Service to these qualifying farm customers is limited to 120/240 volts single phase service rendered through one meter. Motors and other equipment which interfere with service to neighboring customers and all transformer type welding machines larger than 25 kilovolt-amperes are not permitted as part of this service.

Date Filed: 11-01-17 By: Christopher B. Clark Effective Date: 08-07-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-17-775 Order Date: 08-07-18

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### **RULES FOR APPLICATION OF RESIDENTIAL RATES**

Section No. 5 6th Revised Sheet No. 13

The Residential Service and Residential Time of Day Service are the only rates available to residential customers for domestic purposes in a single private residence. Energy Controlled Service (Non-Demand Metered), Limited Off Peak Service, Residential Electric Vehicle Service, Residential Electric Vehicle Pilot Service and Automatic Protective Lighting Service rate schedules are also available to qualifying residential customers.

Ν

- Normal service under the Residential Service and Residential Time of Day Service rate schedules is single phase service rendered through one meter. Three phase service or service through more than one meter will be provided upon a one-time payment of an amount to reimburse Company for the additional investment. If customer is served through more than one meter, each meter will be separately billed.
- Electric space heating charges are applicable only when customer's electric space heating equipment is used as customer's primary heating source.
- Underground service charges will apply where the underground facilities are owned by Company, and 4. Company has not been fully reimbursed for the added cost of such underground facilities.
- 5. Standby and Supplementary Service is available for any residential customer subject to the provisions in the General Rules and Regulations, Section 2.4. The Company's meter will be ratcheted to measure the flow of power and energy from Company to customer only.
- 6. A customer using electric service for domestic and non-domestic purposes jointly may combine such use through one meter on such rates as are available to general service customers.
- The Residential Service and Residential Time of Day Service rate schedules are available to farm installations which were served on the separate Farm Service rate schedule prior to its cancellation on November 1, 1988. Residential Service and Residential Time of Day Service to these qualifying farm customers is limited to 120/240 volts single phase service rendered through one meter. Motors and other equipment which interfere with service to neighboring customers and all transformer type welding machines larger than 25 kilovolt-amperes are not permitted as part of this service.

Date Filed: 11-17-17 By: Christopher B. Clark Effective Date: 06-25-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M -17-817 Order Date: 05-09-18

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

#### MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## **RULES FOR APPLICATION OF RESIDENTIAL RATES**

Section No. 5 5th Revised Sheet No. 13

- 1. The Residential Service and Residential Time of Day Service are the only rates available to residential customers for domestic purposes in a single private residence. Energy Controlled Service (Non-Demand Metered), Limited Off Peak Service, and Automatic Protective Lighting Service rate schedules are also available to qualifying residential customers.
- Normal service under the Residential Service and Residential Time of Day Service rate schedules is single phase service rendered through one meter. Three phase service or service through more than one meter will be provided upon a one-time payment of an amount to reimburse Company for the additional investment. If customer is served through more than one meter, each meter will be separately billed.
- Electric space heating charges are applicable only when customer's electric space heating equipment is used as customer's primary heating source.
- 4. Underground service charges will apply where the underground facilities are owned by Company, and Company has not been fully reimbursed for the added cost of such underground facilities.
- Standby and Supplementary Service is available for any residential customer subject to the provisions in the General Rules and Regulations, Section 2.4. The Company's meter will be ratcheted to measure the flow of power and energy from Company to customer only.
- A customer using electric service for domestic and non-domestic purposes jointly may combine such use through one meter on such rates as are available to general service customers.
- The Residential Service and Residential Time of Day Service rate schedules are available to farm installations which were served on the separate Farm Service rate schedule prior to its cancellation on November 1, 1988. Residential Service and Residential Time of Day Service to these qualifying farm customers is limited to 120/240 volts single phase service rendered through one meter. Motors and other equipment which interfere with service to neighboring customers and all transformer type welding machines larger than 25 kilovolt-amperes are not permitted as part of this service.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

AUTOMATIC PROTECTIVE LIGHTING SERVICE	Section No.	5
RATE CODE A07	23rd Revised Sheet No.	14

#### **AVAILABILITY**

Available to all types of customers except for municipal street lighting purposes.

## **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

## **RATE**

Designation of Lamp	Monthly Rate Per Unit	
Area Units		
100W High Pressure Sodium	\$7.41	R
175W Mercury (1)	\$7.41	R
250W High Pressure Sodium	\$11.83	R
400W Mercury (1)	\$11.83	R
Directional Units		
250W High Pressure Sodium	\$14.08	R
400W High Pressure Sodium	\$17.62	R
1,000W Mercury (1)	\$27.33	R

<sup>(1)</sup> Available to existing installations only.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

## **SERVICE INCLUDED IN RATE**

Company shall own, operate, and maintain the lighting unit including the fixture, lamp, ballast, photoelectric control, mounting brackets, and all necessary wiring. Company shall furnish all electric energy required for operation of the unit.

# **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

(Continued on Sheet No. 5-15)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19

Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

AUTOMATIC PROTECTIVE LIGHTING SERVICE	Section No.	5
RATE CODE A07	22nd Revised Sheet No.	14

#### **AVAILABILITY**

Available to all types of customers except for municipal street lighting purposes.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

## **RATE**

Monthly Rate Per Unit	
\$7.71	R
\$7.71	R
\$12.30	R
\$12.30	R
\$14.65	R
\$18.33	R
\$28.43	R
	\$7.71 \$7.71 \$12.30 \$12.30 \$14.65 \$18.33

<sup>(1)</sup> Available to existing installations only.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

# **SERVICE INCLUDED IN RATE**

Company shall own, operate, and maintain the lighting unit including the fixture, lamp, ballast, photoelectric control, mounting brackets, and all necessary wiring. Company shall furnish all electric energy required for operation of the unit.

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

(Continued on Sheet No. 5-15)

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

AUTOMATIC PROTECTIVE LIGHTING SERVICE	Section No.	5
RATE CODE A07	21st Revised Sheet No.	14

#### **AVAILABILITY**

Available to all types of customers except for municipal street lighting purposes.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Designation of Lamp	Monthly Rate Per Unit	
Area Units		
100W High Pressure Sodium	\$7.57	R
175W Mercury (1)	\$7.57	R
250W High Pressure Sodium	\$12.07	R
400W Mercury (1)	\$12.07	R
Directional Units		
250W High Pressure Sodium	\$14.37	R
400W High Pressure Sodium	\$17.98	R
1,000W Mercury (1)	\$27.82	R
(1) Available to existing installations only.		

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

# **SERVICE INCLUDED IN RATE**

Company shall own, operate, and maintain the lighting unit including the fixture, lamp, ballast, photoelectric control, mounting brackets, and all necessary wiring. Company shall furnish all electric energy required for operation of the unit.

# **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

(Continued on Sheet No. 5-15)

Date Filed: By: Christopher B. Clark Effective Date: 11-02-15 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17 D

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# **AUTOMATIC PROTECTIVE LIGHTING SERVICE (Continued) RATE CODE A07**

Section No. 5 11th Revised Sheet No. 15

#### RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

#### **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

The following are terms and conditions for service under this tariff.

#### LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

#### **TERM OF AGREEMENT**

Agreement shall be for a term of three years. If not then terminated by at least 30 days' written notice by either party, the agreement shall continue until so terminated.

# TERMS AND CONDITIONS OF SERVICE

- Service available subject to the provisions for Automatic Protective Lighting Service of the General Rules and Regulations, Section 5.4.
- 2. The lamp shall be lighted and extinguished by a photoelectric control furnished by the Company. The hours of burning shall be from approximately one-half hour after sunset until one-half hour before sunrise, every night.
- If illumination of a lamp is interrupted and said illumination is not resumed within 72 hours from the time Company receives notice thereof from customer, one-thirtieth of the monthly compensation for such unit shall be deducted for each night of non-illumination after such notice is received.
- Company reserves the right to discontinue service if equipment is abused.
- Company will convert mercury vapor lighting units to high pressure sodium upon failure of the mercury 5. vapor ballast.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SMALL GENERAL SERVICE RATE CODE A09, A10, A11, A13 Section No. 5 31st Revised Sheet No. 21

#### **AVAILABILITY**

Standard service (i.e., alternating current) is available to any non-residential customer for single or three phase electric service. Direct Current service is only available in Minneapolis and St. Paul to the extent now used.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Customer Charge per Month – Unmetered (A09)		\$8.00	
	<ul><li>Metered (A10)</li></ul>	\$10.00	
	<ul><li>– Water Heating (A11)</li></ul>	\$0.00	
	- Direct Current (A13)	\$10.00	
Energy Charge per kW	h		
June - September	•	\$0.09256	R
Other Months		\$0.07757	R
Demand Charge (Direct per Month per kW of Co	3,	\$3.61	R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

#### RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

(Continued on Sheet No. 5-22)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SMALL GENERAL SERVICE Section No. 5

RATE CODE A09, A10, A11, A13

30th Revised Sheet No. 21

#### **AVAILABILITY**

Standard service (i.e., alternating current) is available to any non-residential customer for single or three phase electric service. Direct Current service is only available in Minneapolis and St. Paul to the extent now used.

## **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Customer Charge per Month – Unmetered (A09)		\$8.00	
	<ul><li>– Metered (A10)</li></ul>	\$10.00	
	<ul><li>– Water Heating (A11)</li></ul>	\$0.00	
	<ul><li>– Direct Current (A13)</li></ul>	\$10.00	
Energy Charge per kV	Vh		
June - Septembe	er	\$0.09728	R
Other Months		\$0.08156	R
Demand Charge (Dire	• • • • • • • • • • • • • • • • • • • •	\$3.80	R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

# **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

#### RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

(Continued on Sheet No. 5-22)

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SMALL GENERAL SERVICE RATE CODE A09, A10, A11, A13 Section No. 5 29th Revised Sheet No. 21

#### **AVAILABILITY**

Standard service (i.e., alternating current) is available to any non-residential customer for single or three phase electric service. Direct Current service is only available in Minneapolis and St. Paul to the extent now used.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Customer Charge per Month – Unmetered (A09)	\$8.00	
- Metered (A10)	\$10.00	
<ul> <li>Water Heating (A11)</li> </ul>	\$0.00	
<ul><li>– Direct Current (A13)</li></ul>	\$10.00	
Energy Charge per kWh		
June - September	\$0.09514	R
Other Months	\$0.07965	R
Demand Charge (Direct Current Only) per Month per kW of Connected Load	\$3.75	R
In addition, customer bills under this rate are subject to the follow	ving adjustments and/or charges.	D

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

#### RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

(Continued on Sheet No. 5-22)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

# PUBLIC DOCUMENT NOT PUBLIC DATA EXCISED

OCUMENT Docket No. E002/RP-19-368
OATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SMALL GENERAL SERVICE (Continued) RATE CODE A9, A10, A11, A13 Section No. 5 8th Revised Sheet No. 22

#### **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

#### **MONTHLY MINIMUM CHARGE**

Customer Charge, or Customer Charge plus Demand Charge if served at Direct Current.

#### **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

## LOW INCOME ENERGY DISCOUNT RIDER

Bills are subject to the adjustment provided for in the Low Income Energy Discount Rider.

#### REVENUE DECOUPLING MECHANISM RIDER

Bills in rate codes A09, A10, and A11 are subject to the adjustments provided for in the Revenue Decoupling Mechanism Rider.

The following are terms and conditions for service under this tariff.

#### **LATE PAYMENT CHARGE**

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

## TERMS AND CONDITIONS OF SERVICE FOR ALTERNATING CURRENT CUSTOMERS

Company shall install a demand meter for a customer when:

- 1. Customer's connected load is estimated to be 20 kW or greater,
- 2. Customer is served single phase and has a service entrance capacity greater than 200 amperes,
- Customer is served three phase at 120/208 or 120/240 volts and has a service entrance capacity greater than 200 amperes,
- 4. Customer is served three phase at 240/480 or 277/480 volts and has a service entrance capacity greater than 100 amperes, or
- 5. Customer's average monthly kWh use for four consecutive months exceeds 3,500 kWh.

If a demand meter is installed in accordance with the above, the customer may remain on the Small General Service schedule as long as customer's maximum demand is less than 25 kW. When the customer achieves an actual maximum demand of 25 kW or greater, the customer will be placed on the General Service schedule in the next billing month. A customer with a billing demand of less than 25 kW for 12 consecutive months will be given the option of returning to the Small General Service schedule.

#### DETERMINATION OF CONNECTED LOAD FOR DIRECT CURRENT SERVICE

The nameplate rating shall be the basis of determining the connected load and shall be assumed to be one kW for each hp of nameplate rating. In any case, where there is reasonable doubt as to correctness of manufacturer's rating or where insufficient or no rating exists, the Company may fix the rating by test. For billing purposes, the demand shall be rounded to the nearest 0.1 kW.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SMALL GENERAL TIME OF DAY SERVICE	Section No.	5
RATE CODE A12, A16, A18, A22	31st Revised Sheet No.	23

#### **AVAILABILITY**

Available to any non-residential customer for single or three phase electric service supplied through one meter.

## **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Customer Charge per Month – Time Of Day Metered (A12)	\$12.00
<ul><li>– kWh Metered (A16)</li></ul>	\$10.00
<ul><li>Unmetered (A18)</li></ul>	\$8.00
<ul><li>Low Wattage (A22)</li></ul>	(Please see page 5-24.1)

Energy Charge per kWh	Oct-May	<u>Jun-Sep</u>	
On Peak Period (A12)	\$0.11723	\$0.14880	R
Off Peak Period (A12)	\$0.04170	\$0.04170	R
Constant Hourly (A16, A18, A22) (= 35% On, 65% Off)	\$0.06814	\$0.07919	R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

# **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

#### **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

# **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

# **MONTHLY MINIMUM CHARGE**

Customer Charge.

# (Continued on Sheet No. 5-24)

Date Filed: 03-15-19 Effective Date: By: Christopher B. Clark 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SMALL GENERAL TIME OF DAY SERVICE	Section No.	5
RATE CODE A12, A16, A18, A22	30th Revised Sheet No.	23

#### **AVAILABILITY**

Available to any non-residential customer for single or three phase electric service supplied through one meter.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Customer Charge per Month – Time Of Day Metered (A12)	\$12.00
<ul><li>– kWh Metered (A16)</li></ul>	\$10.00
<ul><li>– Unmetered (A18)</li></ul>	\$8.00
<ul><li>Low Wattage (A22)</li></ul>	(Please see page 5-24.1)

Energy Charge per kWh	Oct-May	<u>Jun-Sep</u>	
On Peak Period (A12)	\$0.12331	\$0.15644	R
Off Peak Period (A12)	\$0.04378	\$0.04378	R
Constant Hourly (A16, A18, A22) (= 35% On, 65% Off)	\$0.07162	\$0.08321	R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

# **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

#### RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

# **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

#### MONTHLY MINIMUM CHARGE

Customer Charge.

# (Continued on Sheet No. 5-24)

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368

D

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SMALL GENERAL TIME OF DAY SERVICE	Section No.	5
RATE CODE A12, A16, A18, A22	29th Revised Sheet No.	23

#### **AVAILABILITY**

Available to any non-residential customer for single or three phase electric service supplied through one meter.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Customer Charge per Month – Time Of Day Metered (A12)	\$12.00
<ul><li>– kWh Metered (A16)</li></ul>	\$10.00
<ul><li>– Unmetered (A18)</li></ul>	\$8.00
<ul><li>Low Wattage (A22)</li></ul>	(Please see page 5-24.1)

Energy Charge per kWh	Oct-May	<u>Jun-Sep</u>	
On Peak Period (A12)	\$0.12060	\$0.15323	R
Off Peak Period (A12)	\$0.04260	\$0.04260	R
Constant Hourly (A16, A18, A22) (= 35% On, 65% Off)	\$0.06990	\$0.08132	R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

# **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

# **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

#### MONTHLY MINIMUM CHARGE

Customer Charge.

# (Continued on Sheet No. 5-24)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**SMALL GENERAL TIME OF DAY SERVICE (Continued)** Section No. 5 RATE CODE A12, A16, A18, A22 14th Revised Sheet No. 24

#### **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

#### LOW INCOME ENERGY DISCOUNT RIDER

Bills are subject to the adjustment provided for in the Low Income Energy Discount Rider.

#### REVENUE DECOUPLING MECHANISM RIDER

Bills are subject to the adjustments provided for in the Revenue Decoupling Mechanism Rider.

The following are terms and conditions for service under this tariff.

#### LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

#### **DEFINITION OF PEAK PERIODS**

The on peak period is defined as those hours between 9:00 a.m. and 9:00 p.m. Monday through Friday, except the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. When a designated holiday occurs on Saturday, the preceding Friday will be designated a holiday. When a designated holiday occurs on Sunday, the following Monday will be designated a holiday. The off peak period is defined as all other hours. Definition of on peak and off peak period is subject to change with change in Company's system operating characteristics.

#### **OPTIONAL TRIAL SERVICE**

Customers may elect time of day service for a trial period of three months. If a customer chooses to return to non-time of day service after the trial period, the customer will pay a charge of \$25.00 for removal of time of day metering equipment.

# TERMS AND CONDITIONS OF SERVICE

- Customer selecting the above time of day rate schedule will remain on this rate for a period of not less than 12 months. While served under this schedule, the Small General Service rate is unavailable.
- 2. Company shall install a demand meter for a customer when:
  - Customer's connected load is estimated to be 20 kW or greater, a.
  - b. Customer is served single phase and has a service entrance capacity greater than 200 amperes,
  - Customer is served three phase at 120/208 or 120/240 volts and has a service entrance capacity greater than 200 amperes,
  - Customer is served three phase at 240/480 or 277/480 volts and has a service entrance capacity greater than 100 amperes, or
  - Customer's average monthly kWh use for four consecutive months exceeds 3,500 kWh.

If a demand meter is installed in accordance with the above, the customer may remain on the Small General Time of Day Service schedule as long as customer's maximum demand is less than 25 kW. When the customer achieves an actual maximum demand of 25 kW or greater, the customer will be placed on the General Time of Day Service schedule in the next billing month. A customer with a billing

(Continued on Sheet No. 24.1)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**SMALL GENERAL TIME OF DAY SERVICE (Continued)** RATE CODE A12, A16, A18, A22

Section No. 5 12th Revised Sheet No. 24.1

## TERMS AND CONDITIONS OF SERVICE (Continued)

demand of less than 25 kW for 12 consecutive months will be given the option of returning to the Small General Time of Day Service schedule.

- 3. Optional Metering Service: Optional metering is available subject to the provisions in the General Rules and Regulations, Section 1.5, for the following applications:
  - Kilowatt-hour Metered Service: For applications where a non-time of day meter is used, the time of day metering charge will be waived and the applicable lower monthly Customer Charge shall apply.
  - Unmetered Service: For applications where no metering is installed, the applicable lower monthly Customer Charge shall apply. If requested by Company, the customer agrees to receive one or more combined bills for all their unmetered service locations. For purposes of applying the appropriate customer service charge, one customer service charge shall be applied for every point of delivery. A point of delivery shall be any location where a meter would otherwise be required under this schedule.
  - Low Wattage Unmetered Service: For applications where customer owns and operates multiple electronic devices in at least 500 locations within Company's Minnesota electric service area. Such electronic devices are: 1) individually located at each point of delivery, 2) rated at less than 400 Watts, and 3) operated with a continuous and constant load level year round. Each individual electronic device must not in any way interfere with Company operations and service to adjacent customers. This optional metering service is not applicable to electric service for traffic signals, civil defense, or lighting. Company reserves the right to evaluate customer requests for this optional metering service to determine eligibility.

The monthly fixed charge under this optional metering service shall be \$0.30 per device for devices with a rating of 100 Watts or less. For devices with a rating over 100 Watts but less than 400 Watts, the monthly fixed charge shall be \$1.20 per device.

In place of metered usage for each device, customer will be billed for the predetermined energy usage in kWh per device. The energy charge shall equal the sum of the predetermined energy usage for customer's low wattage devices in service for the billing month multiplied by the Constant Hourly Energy Charge applicable for the billing month.

Customer shall contract for this optional metering service through an electric service agreement with Company.

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17 R

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SMALL GENERAL TIME OF DAY SERVICE (Continued) RATE CODE A12, A16, A18, A22

Section No. 5 11th Revised Sheet No. 24.1

#### TERMS AND CONDITIONS OF SERVICE (Continued)

demand of less than 25 kW for 12 consecutive months will be given the option of returning to the Small General Time of Day Service schedule.

- 3. Optional Metering Service: Optional metering is available subject to the provisions in the General Rules and Regulations, Section 1.5, for the following applications:
  - Kilowatt-hour Metered Service: For applications where a non-time of day meter is used, the time of day metering charge will be waived and the applicable lower monthly Customer Charge shall apply.
  - Unmetered Service: For applications where no metering is installed, the applicable lower monthly Customer Charge shall apply. If requested by Company, the customer agrees to receive one or more combined bills for all their unmetered service locations. For purposes of applying the appropriate customer service charge, one customer service charge shall be applied for every point of delivery. A point of delivery shall be any location where a meter would otherwise be required under this schedule.
  - Low Wattage Unmetered Service: For applications where customer owns and operates multiple electronic devices in at least 500 locations within Company's Minnesota electric service area. Such electronic devices are: 1) individually located at each point of delivery, 2) rated at less than 400 Watts, and 3) operated with a continuous and constant load level year round. Each individual electronic device must not in any way interfere with Company operations and service to adjacent customers. This optional metering service is not applicable to electric service for traffic signals, civil defense, or lighting. Company reserves the right to evaluate customer requests for this optional metering service to determine eligibility.

The monthly fixed charge under this optional metering service shall be \$0.29 per device for devices with a rating of 100 Watts or less. For devices with a rating over 100 Watts but less than 400 Watts, the monthly fixed charge shall be \$1.20 per device.

In place of metered usage for each device, customer will be billed for the predetermined energy usage in kWh per device. The energy charge shall equal the sum of the predetermined energy usage for customer's low wattage devices in service for the billing month multiplied by the Constant Hourly Energy Charge applicable for the billing month.

Customer shall contract for this optional metering service through an electric service agreement with Company.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Order Date: Docket No. E002/GR-15-826 06-12-17 R

# PUBLIC DOCUMENT NOT PUBLIC DATA EXCISED

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

DIRECT CURRENT SERVICE (CLOSED)
RATE CODE A13

Section No. 5 13th Revised Sheet No. 25

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

Docket No. E002/GR-05-1428 Order Date: 09-01-06

# PUBLIC DOCUMENT NOT PUBLIC DATA EXCISED

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

DIRECT CURRENT SERVICE (CLOSED) (Continued) RATE CODE A13

Section No. 5 2nd Revised Sheet No. 25.1

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

Docket No. E002/GR05-1428 Order Date: 09-01-06

NOT PUBLIC DATA EXCISED

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

GENERAL SERVICE	Section No.	5
RATE CODE A14	31st Revised Sheet No.	26

#### **AVAILABILITY**

Available to any non-residential customer for general service where customer is not required to be on a time-ofday rate schedule. Once the customer's 15-minute measured demands are equal to or greater than 1,000 kW for at least 4 of the past 12 consecutive months, the customer will be transferred to the General Time of Day service.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Customer Charge per Month	\$25.64		
Service at Secondary Voltage Demand Charge per Month per kW	Oct-May \$10.49	<u>Jun-Sep</u> \$14.79	R
Energy Charge per kWh	\$0.	03407	R
Energy Charge Credit per Month per kWh All kWh in Excess of 400 Hours Times the Billing Demand	\$0.01518		R
	<u>January</u>	<u>r - December</u>	
Voltage Discounts per Month	Per kW	Per kWh	
Primary Voltage	\$0.80	\$0.00105	R
Transmission Transformed Voltage	\$1.55	\$0.00267	R
Transmission Voltage	\$2.35	\$0.00277	R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

# **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## (Continued on Sheet No. 5-27)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19 Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

GENERAL SERVICESection No.5RATE CODE A1430th Revised Sheet No.26

#### **AVAILABILITY**

Available to any non-residential customer for general service where customer is not required to be on a time-of-day rate schedule. Once the customer's 15-minute measured demands are equal to or greater than 1,000 kW for at least 4 of the past 12 consecutive months, the customer will be transferred to the General Time of Day service.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Customer Charge per Month	\$25.64		
Service at Secondary Voltage Demand Charge per Month per kW	Oct-May \$11.00	<u>Jun-Sep</u> \$15.54	R
Energy Charge per kWh	\$0.	03577	R
Energy Charge Credit per Month per kWh All kWh in Excess of 400 Hours Times the Billing Demand	\$0.	01593	R
	<u>January</u>	<u>r - December</u>	
Voltage Discounts per Month	Per kW	Per kWh	
Primary Voltage	\$0.80	\$0.00108	R
Transmission Transformed Voltage	\$1.55	\$0.00274	R
Transmission Voltage	\$2.35	\$0.00285	R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

#### **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

### (Continued on Sheet No. 5-27)

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis. Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

GENERAL SERVICE Section No. 5
RATE CODE A14 Section No. 26

#### **AVAILABILITY**

Available to any non-residential customer for general service where customer is not required to be on a time-of-day rate schedule. Once the customer's 15-minute measured demands are equal to or greater than 1,000 kW for at least 4 of the past 12 consecutive months, the customer will be transferred to the General Time of Day service.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Customer Charge per Month	\$25.64		R
Service at Secondary Voltage Demand Charge per Month per kW	Oct-May \$10.71	<u>Jun-Sep</u> \$15.25	R
Energy Charge per kWh	\$0	.03498	R
Energy Charge Credit per Month per kWh All kWh in Excess of 400 Hours Times the Billing Demand	\$0	.01558	R
	<u>January</u>	y - December	
Voltage Discounts per Month	Per kW	Per kWh	
Primary Voltage	\$0.80	\$0.00106	R
Transmission Transformed Voltage	\$1.55	\$0.00271	R
Transmission Voltage	\$2.35	\$0.00281	R
In addition, customer bills under this rate are subject	to the following adjustn	nents and/or charges.	D

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

# **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## (Continued on Sheet No. 5-27)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

GENERAL SERVICE (Continued)
RATE CODE A14

Section No. 5 8th Revised Sheet No. 27

#### **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

#### **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

#### LOW INCOME ENERGY DISCOUNT RIDER

Bills are subject to the adjustment provided for in the Low Income Energy Discount Rider.

The following are terms and conditions for service under this tariff.

#### LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

#### **DETERMINATION OF DEMAND**

The adjusted demand in kW for billing purposes shall be determined by dividing the maximum actual demand in kW by the power factor expressed in percent but not more than a 90% power factor and multiplying the quotient so obtained by 90% and rounding to the nearest whole kW. In no month shall the demand to be billed be considered as less than current month's adjusted demand in kW or 50% of the greatest monthly adjusted demand in kW during the preceding 11 months. In no month shall the billing demand be greater than the value in kW determined by dividing the kWh sales for the billing month by 100 hours per month.

The greatest monthly adjusted demand in kW during the preceding 11 months shall not include the additional demand which may result from customer's use of standby capacity contracted for under the Standby Service Rider.

## **MAXIMUM DEMAND**

The maximum actual demand in kW shall be the greatest 15 minute load during the month for which bill is rendered.

# **POWER FACTOR**

For three phase customers with services above 200 amperes or above 480 volts, the power factor for the month shall be determined by permanently installed metering equipment. For all single phase customers and three phase customers with services 200 amperes or less, a power factor of 90% will be assumed.

(Continued on Sheet No. 5-28)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

GENERAL SERVICE (Continued)
RATE CODE A14

Section No. 5 7th Revised Sheet No. 28

#### OFF SEASON LOAD SERVICE

The optional Off Season Load Service is available under this schedule subject to the provisions contained in the Off Season Load Rider.

#### STANDBY SERVICE

Standby Service and Supplemental Generation Service are available under this schedule subject to the provisions contained in the Standby Service Rider or Supplemental Generation Service Rider.

#### **COMPETITIVE SERVICE**

Competitive Service is available under this schedule subject to the provisions contained in the Competitive Response Rider.

#### MINIMUM DEMAND TO BE BILLED

The monthly minimum billing demand shall not be less than provided above.

#### SPLIT SERVICE

When approved by Company, customer's service may be split between General Service and General Time of Day Service rates. Only Company approved storage space cooling and storage space heating equipment qualifies for the General Time of Day Service portion of a split service installation. The thermal storage equipment shall be permanently wired, separately served and metered, and at no time connected to the general service portion of the split service installation. Each portion of customer's split service installation will be considered separately for all other rate application purposes.

(Continued on Sheet No. 28.1)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

# PUBLIC DOCUMENT

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**GENERAL SERVICE (Continued) RATE CODE A14** 

Section No. 5 5th Revised Sheet No. 28.1

#### TERMS AND CONDITIONS OF SERVICE

- Alternating current service is provided at the following nominal voltage:
  - Secondary Voltage: Single or three phase from 208 volts up to but not including 2,400 volts,
  - b. Primary Voltage: Three phase from 2,400 volts up to but not including 69,000 volts,
  - Transmission Transformed Voltage: Three phase from 2,400 volts up to but not including 69,000 C. volts, where service is provided at the Company's disconnecting means of a distribution substation transformer, or
  - Transmission Voltage: Three phase at 69,000 volts or higher.

Service voltage available in any given case is dependent upon voltage and capacity of Company lines in vicinity of customer's premises.

- Transmission Transformed Service is available only to customers served by an exclusively dedicated distribution feeder. Customer will be responsible for the cost of all facilities necessary to interconnect at the Company's disconnecting means of a distribution substation transformer.
- Transmission Service is available at transmission voltage, subject to the terms and conditions contained in the Company's General Rules and Regulations, Section 5.1(B).
- 4. Customer selecting General Service will remain on this rate for a period of not less than 12 months.
- 5. If a customer has a billing demand of less than 25 kW for 12 consecutive months, the customer will be given the option of returning to the Small General Service schedule.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

GENERAL TIME OF DAY SERVICE RATE CODE A15, A17, A19

Section No. 5 27th Revised Sheet No. 29

#### **AVAILABILITY-MANDATORY**

Effective November 1, 2007, this rate schedule is mandatory for any non-residential customer for general service having a 15-minute measured demand equal to or greater than 1,000 kW for at least 4 of the past 12 consecutive months. Customer will remain on this rate schedule on a mandatory basis unless their demand remains below 1,000 kW for 12 consecutive months.

#### **AVAILABILITY-OPTIONAL**

This rate schedule is optional for any non-residential customer for general service where customer is not required to be on a time-of-day rate.

## **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### RATE

KAIE		
Customer Charge per Month – Time Of Day Metered (A15) kWh Metered (A17) Unmetered (A19)	\$29.64 \$25.64 \$21.64	
Service at Secondary Voltage  Demand Charge per Month per kW	<u>Oct-May</u>	<u>Jun-Sep</u>
On Peak Period Demand Off Peak Period Demand in Excess of On Peak Period Demand	\$10.49 \$2.35	\$14.79 R \$2.35
Energy Charge per kWh		
On Peak Period Energy Off Peak Period Energy	\$0.04855 \$0.02341	R R
Energy Charge Credit per Month per kWh  All kWh in Excess of 400 Hours Times the On Pea	ak Period	
Billing Demand, Not to Exceed 50% of Total kWh	\$0.01518	R
	<u> January - Decembe</u>	<u> </u>
Voltage Discounts per Month Primary Voltage Transmission Transformed Voltage Transmission Voltage	\$0.80 \$1.55	Per kWh         R           \$0.00105         R           \$0.00267         R           \$0.00277         R
<b>5</b>	•	

#### (Continued on Sheet No. 5-30)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**GENERAL TIME OF DAY SERVICE RATE CODE A15, A17, A19** 

Section No. 5 26th Revised Sheet No. 29

#### **AVAILABILITY-MANDATORY**

Effective November 1, 2007, this rate schedule is mandatory for any non-residential customer for general service having a 15-minute measured demand equal to or greater than 1,000 kW for at least 4 of the past 12 consecutive months. Customer will remain on this rate schedule on a mandatory basis unless their demand remains below 1,000 kW for 12 consecutive months.

#### **AVAILABILITY-OPTIONAL**

This rate schedule is optional for any non-residential customer for general service where customer is not required to be on a time-of-day rate.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Customer Charge per Month – Time Of Day Metered (A15) kWh Metered (A17) Unmetered (A19)	\$	29.64 25.64 21.64	
Service at Secondary Voltage  Demand Charge per Month per kW	Oct-May	<u>Jun-Sep</u>	
On Peak Period Demand Off Peak Period Demand in Excess of On Peak Period Demand	\$11.00 \$2.35	\$15.54 \$2.35	R
Energy Charge per kWh			
On Peak Period Energy Off Peak Period Energy	\$0.050 \$0.024		R R
Energy Charge Credit per Month per kWh  All kWh in Excess of 400 Hours Times the On Peak Period			
Billing Demand, Not to Exceed 50% of Total kWh	\$0.01593		R
	January - De	ecember ecember	
Voltage Discounts per Month	Per kW	Per kWh	
Primary Voltage	\$0.80	\$0.00108	R
Transmission Transformed Voltage	\$1.55	\$0.00274	R
Transmission Voltage	\$2.35	\$0.00285	R

# (Continued on Sheet No. 5-30)

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

GENERAL TIME OF DAY SERVICE RATE CODE A15, A17, A19

Section No. 5 25th Revised Sheet No. 29

#### **AVAILABILITY-MANDATORY**

Effective November 1, 2007, this rate schedule is mandatory for any non-residential customer for general service having a 15-minute measured demand equal to or greater than 1,000 kW for at least 4 of the past 12 consecutive months. Customer will remain on this rate schedule on a mandatory basis unless their demand remains below 1,000 kW for 12 consecutive months.

#### **AVAILABILITY-OPTIONAL**

This rate schedule is optional for any non-residential customer for general service where customer is not required to be on a time-of-day rate.

## **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

MAIL			
Customer Charge per Month – Time Of Day Metered (A15) kWh Metered (A17) Unmetered (A19)	\$	29.64 25.64 21.64	R R R
Service at Secondary Voltage  Demand Charge per Month per kW	Oct-May	<u>Jun-Sep</u>	
On Peak Period Demand Off Peak Period Demand in Excess of On Peak Period Demand	\$10.71 \$2.35	\$15.25 \$2.35	R R
Energy Charge per kWh			
On Peak Period Energy	\$0.04986		R
Off Peak Period Energy	\$0.024	104	R
Energy Charge Credit per Month per kWh  All kWh in Excess of 400 Hours Times the On Peak Period			
Billing Demand, Not to Exceed 50% of Total kWh	\$0.01558		R
	January - Do	<u>ecember</u>	
Voltage Discounts per Month Primary Voltage Transmission Transformed Voltage	<u>Per kW</u> \$0.80 \$1.55	<u>Per kWh</u> \$0.00106 \$0.00271	R R
Transmission Voltage	\$2.35	\$0.00281	R

(Continued on Sheet No. 5-30)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17

D

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**GENERAL TIME OF DAY SERVICE (Continued) RATE CODE A15, A17, A19** 

Section No. 5 15th Revised Sheet No. 30

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

#### **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

#### LOW INCOME ENERGY DISCOUNT RIDER

Bills are subject to the adjustment provided for in the Low Income Energy Discount Rider.

The following are terms and conditions for service under this tariff.

## LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

# **DEFINITION OF PEAK PERIODS**

The on peak period is defined as those hours between 9:00 a.m. and 9:00 p.m. Monday through Friday, except the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. When a designated holiday occurs on Saturday, the preceding Friday will be designated a holiday. When a designated holiday occurs on Sunday, the following Monday will be designated a holiday. The off peak period is defined as all other hours. Definition of on peak and off peak period is subject to change with change in Company's system operating characteristics.

(Continued on Sheet No. 5-31)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

# PUBLIC DOCUMENT

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**GENERAL TIME OF DAY SERVICE (Continued) RATE CODE A15, A17, A19** 

Section No. 5 8th Revised Sheet No. 31

#### **DETERMINATION OF ON PEAK PERIOD DEMAND**

The actual on peak period demand in kW shall be the greatest 15-minute load for the on peak period during the month for which the bill is rendered. The adjusted demand in kW for billing purposes shall be determined by dividing the actual on peak demand by the power factor expressed in percent but not more than 90%, multiplying the quotient so obtained by 90%, and rounding to the nearest whole kW. In no month shall the on peak period demand to be billed be considered as less than the current month's adjusted on peak period demand in kW, or 50% of the greatest monthly adjusted on peak period demand in kW during the preceding 11 months. In no month shall the on peak billing demand be greater than the value in kW determined by dividing the kWh sales for the billing month by 100 hours per month.

The greatest monthly adjusted on peak period demand in kW during the preceding 11 months shall not include the additional demand which may result from customer's use of standby capacity contracted for under the Standby Service Rider.

## DETERMINATION OF OFF PEAK PERIOD DEMAND IN EXCESS OF ON PEAK PERIOD DEMAND

The actual off peak period demand in kilowatts shall be the greatest 15-minute load for the off peak period during the month for which the bill is rendered rounded to the nearest whole kW. In no month shall the off peak period demand for billing purposes be considered as less than the current month's actual off peak period demand in kW, or 50% of the greatest monthly actual off peak period demand in kW during the preceding 11 months.

The greatest monthly adjusted off peak period demand in kW during the preceding 11 months shall not include the additional demand which may result from customer's use of standby capacity contracted for under the Standby Service Rider.

The off peak period demand in excess of on peak period demand in kW to be billed shall be determined by subtracting the billing on peak period demand from the actual off peak period demand as defined above only the off peak period demand is greater.

#### POWER FACTOR

For three phase customers with services above 200 amperes, or above 480 volts, the power factor for the month shall be determined by permanently installed metering equipment. For all single phase customers and three phase customers with services 200 amperes or less, a power factor of 90% will be assumed.

(Continued on Sheet No. 5-32)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

E002/GR-15-826 Order Date: Docket No. 06-12-17

Appendix N1: Annual Report Minnesota Electric

5

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

GENERAL TIME OF DAY SERVICE (Continued)

RATE CODE A15, A17, A19

Section No.

6th Revised Sheet No.

#### **COMPETITIVE SERVICE**

Competitive Service is available under this schedule subject to the provisions contained in the Competitive Response Rider.

#### STANDBY SERVICE

Standby Service is available under this schedule subject to the provisions contained in the Standby Service Rider.

#### MINIMUM DEMAND TO BE BILLED

The monthly minimum on peak period billing demand shall not be less than provided above.

#### SPLIT SERVICE

When approved by Company, customer's service may be split between General Service and General Time of Day Service rates. Only Company approved storage space cooling and storage space heating equipment qualifies for the General Time of Day Service portion of a split service installation. The thermal storage equipment shall be permanently wired, separately served and metered, and at no time connected to the general service portion of the split service installation. Each portion of customer's split service installation will be considered separately for all other rate application purposes.

#### **OPTIONAL TRIAL SERVICE**

Customers may elect time of day service for a trial period of three months. If a customer chooses to return to non-time of day service after the trial period, the customer will pay a charge of \$35.00 for removal of time of day metering equipment.

# TERMS AND CONDITIONS OF SERVICE

- 1. Alternating current service is provided at the following nominal voltages:
  - a. Secondary Voltage: Single or three phase from 208 volts up to but not including 2,400 volts,
  - b. Primary Voltage: Three phase from 2,400 volts up to but not including 69,000 volts,
  - c. Transmission Transformed Voltage: Three phase from 2,400 volts up to but not including 69,000 volts, where service is provided at the Company's disconnecting means of a distribution substation transformer, or
  - d. Transmission Voltage: Three phase at 69,000 volts or higher.

Service voltage available in any given case is dependent upon voltage and capacity of Company lines in vicinity of customer's premises.

(Continued on Sheet No. 5-32.1)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

# PUBLIC DOCUMENT

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

GENERAL TIME OF DAY SERVICE (Continued) **RATE CODE A15, A17, A19** 

Section No. 5 5th Revised Sheet No. 32.1

#### TERMS AND CONDITIONS OF SERVICE (Continued)

- Transmission Transformed Service is available only to customers served by an exclusively dedicated distribution feeder. Customer will be responsible for the cost of all facilities necessary to interconnect at the Company's disconnecting means of a distribution substation transformer.
- 3. Transmission Service is available at transmission voltage, subject to the terms and conditions contained in the Company's General Rules and Regulations, Section 5.1(B).
- Customer selecting the above time of day rate schedule will remain on this rate for a period of not less 4. than 12 months.
- 5. If a customer has a billing demand of less than 25 kW for 12 consecutive months, the customer will be given the option of returning to the Small General Time of Day Service schedule.
- Optional Metering Service: Optional metering is available subject to the provisions in the General Rules and Regulations, Section 1.5, for the following applications:
  - Kilowatt-hour Metered Service: For applications where a non-time of day meter is used, the time of day metering charge will be waived and the applicable lower monthly Customer Charge shall apply.
  - b. Unmetered Service: This rate is for applications where no metering is installed and the applicable lower monthly Customer Charge shall apply. If requested by Company, the customer agrees to receive one or more combined bills for all their unmetered service locations. For purposes of applying the appropriate customer service charge, one customer service charge shall be applied for every point of delivery. A point of delivery shall be any location where a meter would otherwise be required under this schedule.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

# PUBLIC DOCUMENT Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PEAK CONTROLLED SERVICE (CLOSED)
RATE CODE A20

Section No. 5 13th Revised Sheet No. 33

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

# PUBLIC DOCUMENT NOT PUBLIC DATA EXCISED Appendix N

Docket No. E002/RP-19-368

Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PEAK CONTROLLED SERVICE (CLOSED) (Continued) RATE CODE A20

Section No. 5 3rd Revised Sheet No. 34

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

#### PUBLIC DOCUMENT Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

5

Section No.

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PEAK CONTROLLED SERVICE (CLOSED) (Continued) **RATE CODE A20** 2nd Revised Sheet No.

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

Docket No. E002GR-05-1428 Order Date: 09-01-06

S:\General-Offices-GO-01\PSF\RA\Rates\Current\Mn\_elec\Me\_5\_035\_r02.doc

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PEAK CONTROLLED SERVICE (CLOSED) (Continued) **RATE CODE A20** 

5 Section No. 1st Revised Sheet No. 35.1

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PEAK CONTROLLED TIME OF DAY SERVICE (CLOSED) RATE CODE A21

Section No. 5 8th Revised Sheet No. 36

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PEAK CONTROLLED TIME OF DAY SERVICE (CLOSED) (Continued)

Section No. 5 8th Revised Sheet No. 37

**RATE CODE A21** 

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

#### PUBLIC DOCUMENT Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED

Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PEAK CONTROLLED TIME OF DAY SERVICE (CLOSED) (Continued) **RATE CODE A21** 

Section No. 5 2nd Revised Sheet No. 38

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PEAK CONTROLLED TIME OF DAY SERVICE (CLOSED) (Continued)
RATE CODE A21

Section No. 5 1st Revised Sheet No. 39

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PEAK CONTROLLED SERVICE
RATE CODE A23

Section No. 5 22nd Revised Sheet No. 40

### **AVAILABILITY**

Available to any non-residential customer for general service who agrees to control demand to a predetermined level whenever required by Company and where customer is not required to be on a time-of-day rate schedule. Once the customer's total 15-minute measured demands (Firm plus Controllable) are equal to or greater than 1000 kW for at least 4 of the past 12 consecutive months, the customer will be transferred to the Peak Controlled Time of Day service. Availability is restricted to customers with a minimum Controllable demand of 50 kW.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

п	Α.	T	_
к	А		ᆮ
	_		_

Customer Charge per Month		\$55.00	
Service at Secondary Voltage Energy Charge per kWh	\$	50.03407	R
Energy Charge Credit per Month per kWh All kWh in Excess of 400 Hours Times the Sum of All Billing Demands	\$	60.01518	R
Demand Charge per Month per kW Firm Demand	<u>Tier 1</u>	<u>Tier 2</u>	
June - September	\$14.79	\$14.79	R
Other Months	\$10.49	\$10.49	R
Controllable Demand (Jan-Dec)			
Level A: < 65% PF	Not Available	\$8.88	R
Level B: ≥ 65% and < 85% PF	\$7.15	\$7.86	R
Level C: ≥ 85% PF	\$6.56	\$7.34	R
Short Notice Rider	\$6.09	Not Available	R
	<u>Janua</u>	ry – December	
Voltage Discounts per Month	Per kW	Per kWh	
Primary Voltage	\$0.80	\$0.00105	R
Transmission Transformed Voltage	\$1.55	\$0.00267	R
Transmission Voltage	\$2.35	\$0.00277	R

# (Continued on Sheet No. 5-41)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**PEAK CONTROLLED SERVICE** Section No. 5 **RATE CODE A23** 21st Revised Sheet No. 40

#### **AVAILABILITY**

**RATE** 

Available to any non-residential customer for general service who agrees to control demand to a predetermined level whenever required by Company and where customer is not required to be on a time-of-day rate schedule. Once the customer's total 15-minute measured demands (Firm plus Controllable) are equal to or greater than 1000 kW for at least 4 of the past 12 consecutive months, the customer will be transferred to the Peak Controlled Time of Day service. Availability is restricted to customers with a minimum Controllable demand of 50 kW.

### **DETERMINATION OF CUSTOMER BILLS**

Transmission Transformed Voltage

Transmission Voltage

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

Customer Charge per Month		\$55.00	
Service at Secondary Voltage Energy Charge per kWh	5	\$0.03577	R
Energy Charge Credit per Month per kWh All kWh in Excess of 400 Hours Times the Sum of All Billing Demands	\$	\$0.01593	R
Demand Charge per Month per kW Firm Demand	<u>Tier 1</u>	Tier 2	
June - September	\$15.54	\$15.54	R
Other Months	11.00	\$11.00	R
Controllable Demand (Jan-Dec)			
Level A: < 65% PF	Not Available	\$9.32	R
Level B: ≥ 65% and < 85% PF	\$7.51	\$8.25	R
Level C: ≥ 85% PF	\$6.89	\$7.71	R
Short Notice Rider	\$6.39	Not Available	R
	<u>Janua</u>	ary - December	
Voltage Discounts per Month	Per kW	Per kWh	
Primary Voltage	\$0.80	\$0.00108	D
Transmission Transformed Voltage	¢1 55	\$0.00274	R

\$1.55

\$2.35

\$0.00274

\$0.00285

## (Continued on Sheet No. 5-41)

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17 R

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PEAK CONTROLLED SERVICE Section No. 5 **RATE CODE A23** 20th Revised Sheet No. 40

### **AVAILABILITY**

Available to any non-residential customer for general service who agrees to control demand to a predetermined level whenever required by Company and where customer is not required to be on a time-of-day rate schedule. Once the customer's total 15-minute measured demands (Firm plus Controllable) are equal to or greater than 1000 kW for at least 4 of the past 12 consecutive months, the customer will be transferred to the Peak Controlled Time of Day service. Availability is restricted to customers with a minimum Controllable demand of 50 kW.

### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

K/	4	ı	ᆮ
$\sim$			

Customer Charge per Month		\$55.00	
Service at Secondary Voltage Energy Charge per kWh	9	\$0.03498	R
Energy Charge Credit per Month per kWh All kWh in Excess of 400 Hours Times the Sum of All Billing Demands	\$	\$0.01558	R
Demand Charge per Month per kW Firm Demand	<u>Tier 1</u>	Tier 2	
June - September	\$15.25	\$15.25	R
Other Months	\$10.71	\$10.71	R
Controllable Demand (Jan-Dec)			
Level A: < 65% PF	Not Available	\$9.05	R
Level B: ≥ 65% and < 85% PF	\$7.35	\$8.07	R
Level C: ≥ 85% PF	\$6.75	\$7.55	R
Short Notice Rider	\$6.25	Not Available	R
	Janua	ary - December	
Voltage Discounts per Month	Per kW	Per kWh	
Primary Voltage	\$0.80	\$0.00106	R
Transmission Transformed Voltage	\$1.55	\$0.00271	R R
Transmission Voltage	\$2.35	\$0.00281	R

# (Continued on Sheet No. 5-41)

Date Filed:	11-02-15	By: Christopher B. Clark	Effective Date:	10-01-17
President, Northern States Power Company, a Minnesota corporation				
Docket No.	F002/GR-15-826		Order Date:	06-12-17

Docket No. E002/RP-19-368 SED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PEAK CONTROLLED SERVICE (Continued)

Section No. 5

RATE CODE A23

18th Revised Sheet No. 41

D

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

### **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

### LOW INCOME ENERGY DISCOUNT RIDER

Bills are subject to the adjustment provided for in the Low Income Energy Discount Rider.

### LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

## **DEFINITION OF PERFORMANCE FACTOR (PF)**

Performance factor is defined in percentage terms as the average of the July and August calendar month unadjusted maximum Controllable Demand occurring from 1:00 p.m. to 7:00 p.m. on weekdays, or which has been permanently shifted out of normal control period times, divided by the unadjusted maximum annual Controllable Demand. Customers claiming permanent load shifts must provide verification to Company, based on NSP's established criteria.

#### **DETERMINATION OF DEMAND**

Maximum Actual Demand in kW shall be the greatest 15-minute load during the billing month.

<u>Adjusted Demand</u> in kW for billing purposes shall be determined by dividing the Maximum Actual Demand in kW by the power factor expressed in percent but not more than a 90% power factor and multiplying the quotient so obtained by 90% and rounding to the nearest whole kW.

(Continued on Sheet No. 5-42)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17

NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

### MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PEAK CONTROLLED SERVICE (Continued) Section No. 5 **RATE CODE A23** 6th Revised Sheet No. 42

## **DETERMINATION OF DEMAND (Continued)**

Predetermined Demand shall be specified and agreed to by the customer and Company. Customer's Adjusted Demand must not exceed the Predetermined Demand Level (PDL) during a control period.

Standard PDL customers must agree to a fixed demand level and limit load to that level during a control period.

Optional PDL customers must agree to reduce demand by a fixed amount during a control period. Customer's Firm Demand will vary from month-to-month while the Controllable Demand remains fixed each month. The Firm Demand will be the Adjusted Demand (based on the Maximum Actual Demand for the month) less the fixed amount of Controllable Demand. Customer's PDL will be the monthly adjusted demand less the fixed load reduction. Customers selecting the Optional PDL must either be equipped with back-up generation to provide the fixed load reduction or have a specific load that can be separately submetered and has an annual load factor of 90% or greater.

Firm Demand for the billing month shall be the lesser of Predetermined Demand or Adjusted Demand, except in months when customer fails to control load to Predetermined Demand Level when requested by Company. In these months, Firm Demand shall be the adjusted demand established during the control period. For optional PDL customers, Firm Demand shall be Adjusted Demand less Controllable Demand, except in months when customer fails to control the full amount of their fixed Controllable Demand. In these months the Firm Demand shall be the Adjusted Demand less the amount of Demand that was controlled as shown by meter measurement.

Controllable Demand shall be the difference between Adjusted Demand during the billing month and the greater of Predetermined Demand or Firm Demand, but never less than zero.

Minimum Demand to be billed each month as either Firm Demand, Controllable Demand or a combination of both shall not be less than the current month's adjusted demand in kW.

#### **POWER FACTOR**

The power factor for the month shall be determined by permanently installed metering equipment.

# ANNUAL MINIMUM DEMAND CHARGE

The Annual Minimum Demand Charge shall be no less than six times the average monthly Firm Demand Charge per kW times the maximum Predetermined Demand, plus six times the Controllable Demand Charge per kW times the maximum Controllable Demand.

(Continued on Sheet No. 5-43)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PEAK CONTROLLED SERVICE (Continued) **RATE CODE A23** 

Section No. 5

6th Revised Sheet No. 43

### **TIER 1 PEAK CONTROLLED SHORT NOTICE**

Tier 1 Peak Controlled Short Notice is available under this schedule subject to the provisions contained in the Tier 1 Peak Controlled Short Notice Rider.

### **COMPETITIVE SERVICE**

Competitive Service is available under this schedule subject to the provisions contained in the Competitive Response Rider.

#### **OTHER PROVISIONS**

Peak Controlled Service is also subject to provisions contained in Rules for Application of Peak Controlled Services.

### TERMS AND CONDITIONS OF SERVICE

- Alternating current service is provided at the following nominal voltages:
  - Secondary Voltage: Single or three phase from 208 volts up to but not including 2,400 volts,
  - Primary Voltage: Three phase from 2,400 volts up to but not including 69,000 volts, b.
  - Transmission Transformed Voltage: Three phase from 2,400 volts up to but not including 69,000 volts, where service is provided at the Company's disconnecting means of a distribution substation transformer, or
  - Transmission Voltage: Three phase at 69,000 volts or higher.

Service voltage available in any given case is dependent upon voltage and capacity of Company lines in vicinity of customer's premises.

- Transmission Transformed Service is available only to customers served by an exclusively dedicated distribution feeder. Customer will be responsible for the cost of all facilities necessary to interconnect at the Company's disconnecting means of a distribution substation transformer.
- Transmission Service is available at transmission voltage, subject to the terms and conditions contained in the Company's General Rules and Regulations, Section 5.1(B).

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17

Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PEAK CONTROLLED TIME OF DAY SERVICESection No.5RATE CODE A2417th Revised Sheet No.44

### **AVAILABILITY**

Available to any non-residential customer for general service who agrees to control demand to a predetermined level whenever required by Company. Availability is restricted to customers with a minimum controllable demand of 50 kW.

## **AVAILABILITY-MANDATORY**

Effective November 1, 2007, this rate schedule is mandatory for any Peak Controlled customer having a 15-minute measured demand equal to or greater than 1000 kW for at least 4 of the past 12 consecutive months. Customer will remain on this rate schedule on a mandatory basis unless their demand remains below 1000 kW for 12 consecutive months.

### **AVAILABILITY-OPTIONAL**

This rate schedule is optional for any non-residential customer for general service where customer is not required to be on a time-of-day rate.

### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

### **RATE**

Customer Charge per Month	Customer Charge pe	er Month	\$55.00
---------------------------	--------------------	----------	---------

Service at Secondary Voltage

Energy Charge per kWh

On Peak Period Energy \$0.04855 R
Off Peak Period Energy \$0.02341 R

Energy Charge Credit per Month per kWh

All kWh in Excess of 400 Hours Times the \$0.01518

Sum of All On Peak Period Billing Demands,

Not to Exceed 50% of Total kWh

(Continued on Sheet No. 5-45)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PEAK CONTROLLED TIME OF DAY SERVICE Section No. 5 **RATE CODE A24** 16th Revised Sheet No. 44

#### **AVAILABILITY**

Available to any non-residential customer for general service who agrees to control demand to a predetermined level whenever required by Company. Availability is restricted to customers with a minimum controllable demand of 50 kW.

#### **AVAILABILITY-MANDATORY**

Effective November 1, 2007, this rate schedule is mandatory for any Peak Controlled customer having a 15minute measured demand equal to or greater than 1000 kW for at least 4 of the past 12 consecutive months. Customer will remain on this rate schedule on a mandatory basis unless their demand remains below 1000 kW for 12 consecutive months.

#### **AVAILABILITY-OPTIONAL**

This rate schedule is optional for any non-residential customer for general service where customer is not required to be on a time-of-day rate.

## **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Customer Charge per Month	\$55.00

Service at Secondary Voltage

Energy Charge per kWh

On Peak Period Energy \$0.05098 R Off Peak Period Energy \$0.02458 R

Energy Charge Credit per Month per kWh

All kWh in Excess of 400 Hours Times the \$0.01593

Sum of All On Peak Period Billing Demands,

Not to Exceed 50% of Total kWh

(Continued on Sheet No. 5-45)

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PEAK CONTROLLED TIME OF DAY SERVICE
Section No. 5
RATE CODE A24
15th Revised Sheet No. 44

### **AVAILABILITY**

Available to any non-residential customer for general service who agrees to control demand to a predetermined level whenever required by Company. Availability is restricted to customers with a minimum controllable demand of 50 kW.

## **AVAILABILITY-MANDATORY**

Effective November 1, 2007, this rate schedule is mandatory for any Peak Controlled customer having a 15-minute measured demand equal to or greater than 1000 kW for at least 4 of the past 12 consecutive months. Customer will remain on this rate schedule on a mandatory basis unless their demand remains below 1000 kW for 12 consecutive months.

### **AVAILABILITY-OPTIONAL**

This rate schedule is optional for any non-residential customer for general service where customer is not required to be on a time-of-day rate.

### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

### **RATE**

Customer Charge per Month	\$55.00
Cuctomor Charge per month	Ψ00.00

Service at Secondary Voltage

Energy Charge per kWh

On Peak Period Energy \$0.04986 R
Off Peak Period Energy \$0.02404 R

Energy Charge Credit per Month per kWh

All kWh in Excess of 400 Hours Times the \$0.01558

Sum of All On Peak Period Billing Demands,

Not to Exceed 50% of Total kWh

(Continued on Sheet No. 5-45)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PEAK CONTROLLED TIME OF DAY SERVICE (Continued) RATE CODE A24		Section No. 25th Revised Sheet No.	5 45	
RATE (Continued)				
Demand Charge per Month per kW On Peak Period Demand	<u>Tier 1</u>	<u>Tier 2</u>		
Firm Demand June - September Other Months	\$14.79 \$10.49	\$14.79 \$10.49		R R
Controllable Demand (Jan-Dec) Level A: < 65% PF Level B: ≥ 65% and < 85% PF	Not Available \$7.15	\$8.88 \$7.86		R R R
Level C: ≥ 85% PF Short Notice Rider	\$6.56 \$6.09	\$7.34 Not Available		R
Off Peak Period Demand in Excess of On Peak Period Demand (Jan-Dec)	\$2.35	\$2.35 uary - December		
Voltage Discounts per Month Primary Voltage Transmission Transformed Voltage Transmission Voltage	Per kW \$0.80 \$1.55 \$2.35	Per kWh \$0.00105 \$0.00267 \$0.00277		R R R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

## **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

# SURCHARGE

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

## (Continued on Sheet No. 5-46)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PEAK CONTROLLED TIME OF DAY SERVICE (Continued) RATE CODE A24		Section No. 24th Revised Sheet No.	5 45	•
RATE (Continued)				
Demand Charge per Month per kW On Peak Period Demand Firm Demand	<u>Tier 1</u>	<u>Tier 2</u>		
June - September	\$15.54	\$15.54		R
Other Months	\$13.3 <del>4</del> \$11.00	\$13.3 <del>4</del> \$11.00		R
Controllable Demand (Jan-Dec)	Ψ11.00	ψ11.00		
Level A: < 65% PF	Not Available	\$9.32		R
Level B: ≥ 65% and < 85% PF	\$7.51	\$8.25		R
Level C: ≥ 85% PF	\$6.89	\$7.71		R
Short Notice Rider	\$6.39	Not Available		R
Off Peak Period Demand in Excess of On Peak Period Demand (Jan-Dec)	\$2.35	\$2.35		
,	<u>Janu</u>	uary - December		
Voltage Discounts per Month	Per kW	Per kWh		
Primary Voltage	\$0.80	\$0.00108		R
Transmission Transformed Voltage	\$1.55	\$0.00274		R
Transmission Voltage	\$2.35	\$0.00285		R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

## **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

# **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

# (Continued on Sheet No. 5-46)

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

E002/GR-15-826 Docket No. Order Date: 06-12-17

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PEAK CONTROLLED TIME OF DAY SERVICE (Continued) RATE CODE A24		Section No. 23rd Revised Sheet No.	5 45
RATE (Continued)			
Demand Charge per Month per kW On Peak Period Demand Firm Demand	Tier 1	<u>Tier 2</u>	
June - September Other Months	\$15.25 \$10.71	\$15.25 \$10.71	F F
Controllable Demand (Jan-Dec) Level A: < 65% PF Level B: ≥ 65% and < 85% PF Level C: ≥ 85% PF Short Notice Rider	Not Available \$7.35 \$6.75 6.25	\$9.05 \$8.07 \$7.55 Not Available	F F F
Off Peak Period Demand in Excess of On Peak Period Demand (Jan-Dec)	\$2.35	\$2.35	F
	<u>Janı</u>	<u>uary - December</u>	
Voltage Discounts per Month	Per kW	Per kWh	
Primary Voltage	\$0.80	\$0.00106	F
Transmission Transformed Voltage	\$1.55	\$0.00271	F
Transmission Voltage	\$2.35	\$0.00281	F

## **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

## (Continued on Sheet No. 5-46)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17

D

NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PEAK CONTROLLED TIME OF DAY SERVICE (Continued) **RATE CODE A24** 

Section No. 5 12th Revised Sheet No. 46

### LOW INCOME ENERGY DISCOUNT RIDER

Bills are subject to the adjustment provided for in the Low Income Energy Discount Rider.

The following are terms and conditions for service under this tariff.

### LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

### **DEFINITION OF PEAK PERIODS**

The on peak period is defined as those hours between 9:00 a.m. and 9:00 p.m. Monday through Friday, except the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. When a designated holiday occurs on Saturday, the preceding Friday will be designated a holiday. When a designated holiday occurs on Sunday, the following Monday will be designated a holiday. The off peak period is defined as all other hours. Definition of on peak and off peak period is subject to change with change in Company's system operating characteristics.

### **DEFINITION OF PERFORMANCE FACTOR (PF)**

Performance factor is defined in percentage terms as the average of the July and August calendar month unadjusted maximum Controllable Demand occurring from 1 p.m. to 7 p.m. on weekdays, or which has been permanently shifted out of normal control period times, divided by the unadjusted maximum annual Controllable Demand. Customers claiming permanent load shifts must provide verification to Company, based on NSP established criteria.

## **DETERMINATION OF DEMAND**

Maximum Actual On Peak Period Demand in kW shall be the greatest 15-minute load for the on peak period during the billing month.

Adjusted On Peak Period Demand in kW for billing purposes shall be determined by dividing the Maximum Actual on peak demand by the power factor expressed in percent but not more than 90%, multiplying the quotient so obtained by 90%, and rounding to the nearest whole kW.

Maximum Actual Off Peak Period Demand in kW shall be the greatest 15-minute load for the off peak period during the billing month rounded to the nearest whole kW. In no month shall the off peak period demand for billing purposes be considered as less than the current month's actual off peak period demand in kW.

Off Peak Period Demand in Excess of On Peak Period Demand in kW to be billed shall be determined by subtracting the billing on peak period demand from the actual off peak period demand only if the off peak period demand is greater.

(Continued on Sheet No. 5-47)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PEAK CONTROLLED TIME OF DAY SERVICE (Continued) **RATE CODE A24** 

Section No. 5 7th Revised Sheet No. 47

Predetermined Demand shall be specified and agreed to by the customer and Company. Customer's adjusted on peak demand must not exceed the predetermined demand level (PDL) during a control period.

Standard PDL customers must agree to a fixed demand level and limit load to that level during a control period.

Optional PDL customers must agree to reduce demand by a fixed amount during a control period. Customer's Firm Demand will vary from month-to-month while the Controllable Demand remains fixed each month. The Firm Demand will be the Adjusted Demand (based on the Maximum Actual Demand for the month) less the fixed amount of Controllable Demand. Customer's PDL will be the monthly adjusted on peak demand less the fixed load reduction. Customers selecting the Optional PDL must either be equipped with back-up generation to provide the fixed load reduction or have a specific load than can be separately sub-metered and has an annual load factor of 90% or greater.

Firm Demand for the billing month shall be the lesser of Predetermined Demand or Adjusted on Peak Period Demand, except in months when customer fails to control load to Predetermined Demand Level when requested by Company. In these months, Firm Demand shall be the adjusted on peak period demand established during the control period. For Optional PDL customers, Firm Demand shall be Adjusted On Peak Demand less Controllable Demand, except in months when customer fails to control the full amount of their fixed Controllable Demand, In the months the Firm Demand shall be the Adjusted On Peak Period Demand less the amount of Demand that was controlled as shown by meter measurement.

Controllable Demand shall be the difference between Adjusted on Peak Period Demand during the billing month and the greater of Predetermined Demand or firm demand, but never less than zero.

Minimum On Peak Demand to be billed each month as either Firm Demand Controllable Demand or combination of both shall not be less than the current month's Adjusted on Peak Period Demand in kW.

#### POWER FACTOR

The power factor for the month shall be determined by permanently installed metering equipment.

## ANNUAL MINIMUM DEMAND CHARGE

The Annual Minimum Demand Charge shall be no less than six times the average monthly Firm Demand Charge per kW times the predetermined demand, plus six times the Controllable Demand Charge per kW times the maximum Controllable Demand.

(Continued on Sheet No. 47.1)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. Order Date: E002/GR-15-826 06-12-17

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PEAK CONTROLLED TIME OF DAY SERVICE (Continued) **RATE CODE A24** 

Section No. 5 6th Revised Sheet No. 47.1

### **TIER 1 ENERGY CONTROLLED SERVICE**

Tier 1 Energy Controlled Service is available under this schedule subject to the provisions contained in the Tier 1 Energy Controlled Service Rider.

### **TIER 1 PEAK CONTROLLED SHORT NOTICE**

Tier 1 Peak Controlled Short Notice option is available under this schedule subject to the provisions contained in the Tier 1 Peak Controlled Short Notice Rider.

#### **COMPETITIVE SERVICE**

Competitive Service is available under this schedule subject to the provisions contained in the Competitive Response Rider.

### **OTHER PROVISIONS**

Peak Controlled Time of Day Service is also subject to provisions contained in Rules for Application of Peak Controlled Services.

### TERMS AND CONDITIONS OF SERVICE

- Alternating current service is provided at the following nominal voltages:
  - Secondary Voltage: Single or three phase from 208 volts up to but not including 2,400 volts,
  - b. Primary Voltage: Three phase from 2,400 volts up to but not including 69,000 volts,
  - Transmission Transformed Voltage: Three phase from 2,400 volts up to but not including 69,000 volts, where service is provided at the Company's disconnecting means of a distribution substation transformer, or
  - Transmission Voltage: Three phase at 69,000 volts or higher. d.

Service voltage available in any given case is dependent upon voltage and capacity of Company lines in vicinity of customer's premises.

- 2. Transmission Transformed Service is available only to customers served by an exclusively dedicated distribution feeder. Customer will be responsible for the cost of all facilities necessary to interconnect at the Company's disconnecting means of a distribution substation transformer.
- 3. Transmission Service is available at transmission voltage, subject to the terms and conditions contained in the Company's General Rules and Regulations, Section 5.1(B).

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401 MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## RULES FOR APPLICATION OF PEAK CONTROLLED **SERVICES**

Section No. 5

7th Revised Sheet No. 48

- 1. Customer has the responsibility of controlling own load to Predetermined Demand Level.
- 2. Customer must allow Company to inspect and approve the load control installation and equipment provided by customer.
- If controlled demand is 10,000 kW or larger, Company may require customer to:
  - Provide auxiliary contacts for remote indication of position of switch or circuit breaker used to control demand and wire auxiliary contacts into a connection point designated by Company,
  - Install the remote breaker indication equipment provided by Company, and b.
  - Provide a continuous 120 volt AC power source at the connection point for operation of the Company remote breaker indication equipment.
- 4. Company will endeavor to give customer one hour notice of commencement of control period, and as much additional notice as is practical. However, control period may be commenced without notice should Company determine such action is necessary.
- Failure to Control Charge: An additional charge of \$8.00 (\$10.00 for Tier 1) per kW will apply during each Company specified control period to the amount by which customer's Maximum Adjusted Demand or Maximum Adjusted On Peak Period Demand exceeds their predetermined demand level. After three such customer failures to control load to their Predetermined Demand Level, Company reserves the right to increase the Predetermined Demand Level, or transfer customer to General Service or General Time of Day Service and apply the cancellation charge specified in customer's Electric Service Agreement.
- The duration and frequency of control periods shall be at the discretion of Company. Control periods will normally occur when:
  - Company expects a reasonable possibility of system load levels surpassing the level for which NSP has sufficient accredited capacity under the Midwest Reliability Organization (MRO) or any successor organization, including reserve requirements, or
  - In Company's opinion, the reliability of the system is endangered. h.

(Continued on Sheet No. 5-49)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. Order Date: E002/GR-15-826 06-12-17

Docket No. E002/RP-19-368
ED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# RULES FOR APPLICATION OF PEAK CONTROLLED SERVICES (Continued)

Section No. 5 6th Revised Sheet No. 49

7. Customer must execute an Electric Service Agreement with Company which will include:

## Peak Controlled Service - Tier 1

- a. A minimum initial 10 year term of service which includes a one year trial period and a three year cancellation notice effective after the initial term of service,
- b. The Predetermined Demand Level, or the fixed Controllable Demand if Optional PDL is selected which may be revised subject to approval by Company,
- c. Maximum 150 hours of interruption,
- d. Cancellation charge terms, and
- e. Control period notice.

### Peak Controlled Service - Tier 2

- a. A minimum initial five year term of service which includes a one year trial period and a six month cancellation notice effective after the initial term of service,
- b. The Predetermined Demand Level, or the fixed Controllable Demand if Optional PDL is selected which may be revised subject to approval by Company,
- c. Maximum 80 hours of interruption,
- d. Cancellation charge terms, and
- e. Control period notice.
- 8. Peak Controlled Service customers choosing the Tier 1 rate option will be subject to an additional monthly charge for a Company approved and installed two-way communications system. The system equipment allows NSP to determine remotely customer load levels and to notify customers of control periods.
- 9. Minimum Controllable Demand during the Company's peak season shall be 50 kW.
- 10. Company shall not be liable for any loss or damage caused by or resulting from any interruption of service.
- 11. Company will determine, at a service location designated by Company, the number of services supplied. Customers requesting special facilities will be charged the additional costs incurred for such facilities.

## (Continued on Sheet No. 5-50)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17

# PUBLIC DOCUMENT

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## **RULES FOR APPLICATION OF PEAK CONTROLLED SERVICES (Continued)**

Section No. 5 6th Revised Sheet No. 50

- 12. Customers choosing the Predetermined Demand Level option requiring a fixed demand reduction will be subject to an additional charge for metering and billing when additional metering equipment is necessary. The additional charge is \$17.00 per month for an application using a single meter in close proximity to customer's service point. The additional charge for more complex applications will be based on the actual costs of the specific application.
- 13. Company will maintain Firm Demand Charge rates at the General Service and General Time of Day Service levels, whichever is applicable.
- 14. Any customer with generating equipment which is operated in parallel with Company must comply with all requirements associated with parallel operations as specified in the General Rules and Regulations of the Company.
- 15. Any load served by customer generation during Company requested control periods must be served by Company at all other times.
- 16. Customers selecting Peak Controlled Services will normally remain at a specific Performance Factor level for a minimum of one year, subject to the Company's discretion. The Company may transfer customers between Performance Factor levels following verification of a customer's performance, as defined in the applicable rate schedule and as specified in the customer's Electric Service Agreement. This rate contemplates that increases in summer Controllable Demand, which thereby affect a customer's Performance Factor level, will be at sufficient consumption levels to yield a July and August calendar month load factor of 34% or greater. The Company reserves the right to limit the customer's eligibility to be on a higher Performance Factor level due to the above restriction.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

ENERGY CONTROLLED SERVICE (CLOSED) RATE CODE A26

Section No. 5 8th Revised Sheet No. 51

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

# PUBLIC DOCUMENT NOT PUBLIC DATA EXCISED Appendix N

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

ENERGY CONTROLLED SERVICE (CLOSED) (Continued)
RATE CODE A26

Section No. 5 8th Revised Sheet No. 52

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

ENERGY CONTROLLED SERVICE (CLOSED) (Continued)
RATE CODE A26

Section No. 5 1st Revised Sheet No. 53

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

ENERGY CONTROLLED SERVICE (CLOSED) (Continued)
RATE CODE A26

Section No. 5 1st Revised Sheet No. 54

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

ENERGY CONTROLLED SERVICE (CLOSED) (Continued)
RATE CODE A26

Section No. 5 1st Revised Sheet No. 55

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

ENERGY CONTROLLED SERVICE (CLOSED) (Continued)
RATE CODE A26

Section No. 5 1st Revised Sheet No. 56

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

ENERGY CONTROLLED SERVICE (CLOSED) (Continued)

Section No. 5 1st Revised Sheet No. 57

**RATE CODE A26** 

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

EXPERIMENTAL REAL TIME PRICING SERVICE (CLOSED)
RATE CODE A60 (FIRM) AND
RATE CODE A61 (CONTROLLABLE)

Section No. 5 7th Revised Sheet No. 58

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

# PUBLIC DOCUMENT NOT PUBLIC DATA EXCISED Appendix N

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

EXPERIMENTAL REAL TIME PRICING SERVICE (CLOSED) (Continued)
RATE CODE A60 (FIRM) AND
RATE CODE A61 (CONTROLLABLE)

Section No. 5 9th Revised Sheet No. 59

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

# PUBLIC DOCUMENT NOT PUBLIC DATA EXCISED A<sub>I</sub>

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

EXPERIMENTAL REAL TIME PRICING SERVICE (CLOSED) (Continued)
RATE CODE A60 (FIRM) AND
RATE CODE A61 (CONTROLLABLE)

Section No. 5 2nd Revised Sheet No. 60

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

EXPERIMENTAL REAL TIME PRICING SERVICE (CLOSED) (Continued)
RATE CODE A60 (FIRM) AND
RATE CODE A61 (CONTROLLABLE)

Section No. 5 2nd Revised Sheet No. 61

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

EXPERIMENTAL REAL TIME PRICING SERVICE (CLOSED) (Continued)
RATE CODE A60 (FIRM) AND
RATE CODE A61 (CONTROLLABLE)

Section No. 5 2nd Revised Sheet No. 62

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

EXPERIMENTAL REAL TIME PRICING SERVICE (CLOSED) (Continued)
RATE CODE A60 (FIRM) AND
RATE CODE A61 (CONTROLLABLE)

Section No. 5 2nd Revised Sheet No. 63

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**REAL TIME PRICING SERVICE** RATE CODE: A62 (FIRM), A63 (CONTROLLABLE)

Section No. 5 11th Revised Sheet No. 64

## **AVAILABILITY**

Available to customers with a minimum peak demand of 1,000 kW. Availability may be restricted to limit total customer peak demand to a maximum of 150,000 kW. The controllable service option requires a minimum controllable load of 500 kW.

## **RATE**

Customer Charge per Month \$300.00									
Demand Charg Contract [		n per kW			\$9.94				R
Distributio	n Demand I	by Voltage							
	Seco	ndary	Prima	ry Tr	ansmission	Transforme	d Trans	smission	R
	\$1	.97	\$0.97	7	\$0.3	36	\$	0.00	
Energy Charge	per kWh			Da	y-Type				
0, 0 1	1	2	3	4	5	6	7	8	
12 a.m6 a.m.	\$0.03432	\$0.02800	\$0.02552	\$0.02391	\$0.02324	\$0.02189	\$0.02113	\$0.01978	R
6 a.m 9 a.m.		\$0.04925	\$0.03932	\$0.04111	\$0.03977	\$0.03446	\$0.02775	\$0.02243	R
9 a.m12 p.m.	\$0.16995	\$0.09623	\$0.06050	\$0.04817	\$0.03701	\$0.02991	\$0.02471	\$0.02331	
12 p.m 6 p.m.	\$0.28050	\$0.18790	\$0.09735	\$0.05743	\$0.03701	\$0.02991	\$0.02471	\$0.02331	R
6 p.m 9 p.m.	\$0.20679	\$0.13310	\$0.07845	\$0.04959	\$0.03701	\$0.02991	\$0.02471	\$0.02331	
9 p.m12 a.m.	\$0.06181	\$0.04925	\$0.04302	\$0.03724	\$0.03051	\$0.02784	\$0.02425	\$0.02243	R
Day-type e	nergy charg	jes are subj	ect to the S	tability Fact	or Adjustme	nt provision			R
Annual Day-Ty	pe Distributi	on							
Normal	5	5	10	35	60	110	60	80	R
Maximum	8	8	16	50	n/a	n/a	n/a	n/a	
Limited Energy Surcharge per kWh \$0.2000 All kWh during peak period hours in excess of Contract Demand									
Energy Charge	*				\$0.01143				
	excess of 4		ontract Den	nand, not to	*	% of total kV	۷h		R
Energy Charge	Voltage Dis	scount per k	:Wh						
- · · · · ·	-		Primar	y Tr	ansmission	Transforme	d Tran	smission	Б
			\$0.0010	)5	\$0.00	)267	\$0	.00277	R

(Continued on Sheet No. 5-65)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19 R

Transmission Transformed

\$0.46

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

REAL TIME PRICING SERVICE
RATE CODE: A62 (FIRM), A63 (CONTROLLABLE)

Section No. 5 10th Revised Sheet No. 64

Transmission

\$0.00

\$0.02447

\$0.02355

80

n/a

60

n/a

R

R

R

R

R

R

R

#### **AVAILABILITY**

Available to customers with a minimum peak demand of 1,000 kW. Availability may be restricted to limit total customer peak demand to a maximum of 150,000 kW. The controllable service option requires a minimum controllable load of 500 kW.

#### **RATE**

Customer Charge per Month \$300.00

Demand Charge per Month per kW
Contract Demand \$10.43

Distribution Demand by Voltage

Secondary

\$2.07

6 p.m.- 9 p.m. \$0.21708 \$0.13972 \$0.08235

9 p.m.-12 a.m. \$0.06489 \$0.05170 \$0.04516 \$0.03909

Energy Charge per kWh Day-Type 12 a.m.-6 a.m. \$0.03603 \$0.02939 \$0.02679 \$0.02510 \$0.02440 \$0.02298 \$0.02218 \$0.02076 6 a.m.- 9 a.m. \$0.06489 \$0.05170 \$0.04128 \$0.04315 \$0.04175 \$0.03617 \$0.02913 \$0.02355 9 a.m.-12 p.m. \$0.17840 \$0.10102 \$0.06351 \$0.05057 \$0.03885 \$0.03140 \$0.02594 \$0.02447 12 p.m.- 6 p.m. \$0.29445 \$0.19725 \$0.10219 \$0.06029 \$0.03885 \$0.03140 \$0.02594 \$0.02447

\$0.05206

Primary

\$1.07

Day-type energy charges are subject to the Stability Factor Adjustment provision.

Annual Day-Type Distribution

Normal 5 5 10 35 60 110

Maximum 8 8 16 50 n/a n/a

Limited Energy Surcharge per kWh \$0.2100

All kWh during peak period hours in excess of Contract Demand

Energy Charge Credit per Month \$0.0120

All kWh in excess of 400 times Contract Demand, not to exceed 50% of total kWh

Energy Charge Voltage Discount per kWh

Primary Transmission Transformed Transmission \$0.00108 \$0.00274 \$0.00285

\$0.03885 \$0.03140 \$0.02594

\$0.03203 \$0.02922 \$0.02546

(Continued on Sheet No. 5-65)

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**REAL TIME PRICING SERVICE** Section No. 5 RATE CODE: A62 (FIRM), A63 (CONTROLLABLE) 9th Revised Sheet No. 64

## **AVAILABILITY**

Available to customers with a minimum peak demand of 1,000 kW. Availability may be restricted to limit total customer peak demand to a maximum of 150,000 kW. The controllable service option requires a minimum controllable load of 500 kW.

## **RATE**

Customer Char	rge per Mon	th			\$300.00				
Demand Charg Contract I	•	n per kW			\$10.14				R
Distribution Demand by Voltage Secondary \$2.07			Prima \$1.07	,	ansmission \$0.			smission 60.00	
Energy Charge	per kWh			Da	y-Type				
- 37 3- 1	1	2	3	4	5	6	7	8	
12 a.m6 a.m. 6 a.m 9 a.m. 9 a.m12 p.m. 12 p.m 6 p.m. 6 p.m 9 p.m. 9 p.m12 a.m. Day-type e Annual Day-Ty Normal Maximum	\$0.06328 \$0.17355 \$0.28629 \$0.21113 \$0.06328 energy charge	•	\$0.02626 \$0.04033 \$0.06193 \$0.09951 \$0.08023 \$0.04410 ect to the S	\$0.02462 \$0.04215 \$0.04936 \$0.05880 \$0.05081 \$0.03821 tability Fact	\$0.02393 \$0.04080 \$0.03797 \$0.03797 \$0.03797 \$0.03135 or Adjustme	\$0.02255 \$0.03537 \$0.03073 \$0.03073 \$0.03073 \$0.02862 ent provision	\$0.02178 \$0.02853 \$0.02543 \$0.02543 \$0.02543 \$0.02496	\$0.02040 \$0.02311 \$0.02401 \$0.02401 \$0.02401 \$0.02311	R R R R
Limited Energy	_	per kWh			\$0.2100	1,74	1,74	1,,4	R
Energy Charge All kWh ir	e Credit per l		ontract Den	nand, not to	\$0.0120 exceed 50%	% of total kV	Vh		
Energy Charge	Voltage Dis	scount per k	Wh Primar \$0.0010	,	ansmission \$0.00			smission .00281	R

## (Continued on Sheet No. 5-65)

Date Filed: By: Christopher B. Clark 11-02-15 Effective Date: 10-01-17 President, Northern States Power Company, a Minnesota corporation Docket No. E002/GR-15-826 Order Date: 06-12-17

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

REAL TIME PRICING SERVICE (Continued)
RATE CODE: A62 (FIRM), A63 (CONTROLLABLE)

Section No. 5 22nd Revised Sheet No. 65

#### **DAY-TYPE**

Separate energy charges are defined for each of eight day-types. Company will normally designate the applicable day-type for each day by 4:00 p.m. of the preceding day. If Company has not designated the applicable day by 4:00 p.m., the day-type will be the same as the last designated day-type, unless Company later designates a lower cost day-type.

## **CONTRACT**

Customers must contract for this service through an Electric Service Agreement with Company. Contract period will normally be for one year.

## **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

#### RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

#### **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

## LOW INCOME ENERGY DISCOUNT RIDER

Bills are subject to the adjustment provided for in the Low Income Energy Discount Rider.

## **LATE PAYMENT CHARGE**

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

## **PEAK PERIOD HOURS DEFINITION**

Peak period hours are the nine hours between 9:00 a.m. and 6:00 p.m. for day-types 1, 2, 3, 4, 5, and 6. No peak period hours are applicable for day-types 7 and 8.

(Continued on Sheet No. 5-65.1)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

REAL TIME PRICING SERVICE (Continued)
RATE CODE: A62 (FIRM), A63 (CONTROLLABLE)

Section No. 5 5th Revised Sheet No. 65.1

## STABILITY FACTOR ADJUSTMENT

Day-type energy charges will be adjusted by a stability factor to compensate for departures from the normal distribution of day-types. The average day-type energy charge, weighted with system loads, will be determined for actual and normal day-types. Stability factors of no more than five percent will be implemented following an annualized differential that exceeds two percent, and discontinued after the differential for the preceding 12 months is less than one percent. Customers will be notified of the effective date and amount of any stability factor adjustment before that adjustment is implemented, changed or discontinued. No stability factor adjustment will apply to customers receiving this service for fewer months than used to determine the adjustment.

## **POWER FACTOR**

The power factor for the month shall be determined by permanently installed metering equipment. Company may require customer to install Company-approved equipment to maintain a power factor of not less than 90%.

(Continued on Sheet No. 5-66)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**REAL TIME PRICING SERVICE (Continued)** RATE CODE: A62 (FIRM), A63 (CONTROLLABLE)

Section No. 9th Revised Sheet No. 66

## **DETERMINATION OF DEMAND**

Contract Demand in kW is designated by customer and is fixed for no less than 12 months. Customers are allowed a maximum of one opportunity to revise to their contract demand level in any continuous 12-month period. In no month shall the demand to be billed be considered as less than the actual or expected average kW load during peak period hours of the billing month. In all months, the Contract Demand designated by customer shall be used to determine the kWh sales applied to the Limited Energy Surcharge and the Energy Charge Credit.

Distribution Demand in kW shall be the greatest 15 minute load that occurred during the past 12 months, including the current billing month, rounded to the nearest whole kW. Additional demand that may result from customer's use of contracted standby or supplemental capacity is not included in the determination of distribution demand.

#### CONTROLLABLE SERVICE OPTION

The controllable service option is available to customers that agree to control a minimum load of 500 kW to a predetermined level whenever required by Company. The applicable monthly controllable demand credit is applied customer's monthly controllable demand. The applicable limited energy charge per kWh replaces the charge for firm service.

Controllable Demand Credit per Month per kW			Limited Energy Surcharge per kWh
	Jun-Sep	Other Months	
Level A: < 65% PF	\$5.36	\$1.04	\$0.1353
Level B: > 65% and < 85% PF	\$6.16	\$1.84	\$0.0962
Level C: ≥ 85% PF	\$6.67	\$2.34	\$0.0772

Controllable Demand in kW is the difference between Contract Demand for the billing month and Predetermined Demand Level.

Predetermined Demand Level shall be specified and agreed to by the customer and Company, and may not exceed the Contract Demand. Customer's demand must not exceed the predetermined demand level (PDL) during a control period.

Performance Factor (PF) is defined in percentage terms as the average of the July and August calendar month maximum Controllable Demand occurring from 1:00 p.m. to 7:00 p.m. on weekdays, divided by the maximum annual Controllable Demand. Customer's representative load characteristics will be used to determine customer's performance factor. Company reserves the right to determine customer's eligibility for performance factor levels and may transfer customers between levels following verification of a customer's performance.

## (Continued on Sheet No. 5-67)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19 R R R Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**REAL TIME PRICING SERVICE (Continued)** RATE CODE: A62 (FIRM), A63 (CONTROLLABLE)

Section No. 5 8th Revised Sheet No. 66

#### **DETERMINATION OF DEMAND**

Contract Demand in kW is designated by customer and is fixed for no less than 12 months. Customers are allowed a maximum of one opportunity to revise to their contract demand level in any continuous 12-month period. In no month shall the demand to be billed be considered as less than the actual or expected average kW load during peak period hours of the billing month. In all months, the Contract Demand designated by customer shall be used to determine the kWh sales applied to the Limited Energy Surcharge and the Energy Charge Credit.

Distribution Demand in kW shall be the greatest 15 minute load that occurred during the past 12 months, including the current billing month, rounded to the nearest whole kW. Additional demand that may result from customer's use of contracted standby or supplemental capacity is not included in the determination of distribution demand.

#### CONTROLLABLE SERVICE OPTION

The controllable service option is available to customers that agree to control a minimum load of 500 kW to a predetermined level whenever required by Company. The applicable monthly controllable demand credit is applied customer's monthly controllable demand. The applicable limited energy charge per kWh replaces the charge for firm service.

Controllable Demand Credit per Month per kW			Limited Energy Surcharge per kWh
	Jun-Sep	Other Months	
Level A: < 65% PF	\$5.63	\$1.09	\$0.1420
Level B: <u>&gt;</u> 65% and < 85% PF	\$6.47	\$1.93	\$0.1010
Level C: <u>&gt;</u> 85% PF	\$7.00	\$2.46	\$0.0810

Controllable Demand in kW is the difference between Contract Demand for the billing month and Predetermined Demand Level.

Predetermined Demand Level shall be specified and agreed to by the customer and Company, and may not exceed the Contract Demand. Customer's demand must not exceed the predetermined demand level (PDL) during a control period.

Performance Factor (PF) is defined in percentage terms as the average of the July and August calendar month maximum Controllable Demand occurring from 1:00 p.m. to 7:00 p.m. on weekdays, divided by the maximum annual Controllable Demand. Customer's representative load characteristics will be used to determine customer's performance factor. Company reserves the right to determine customer's eligibility for performance factor levels and may transfer customers between levels following verification of a customer's performance.

## (Continued on Sheet No. 5-67)

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17 R R R Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**REAL TIME PRICING SERVICE (Continued)** RATE CODE: A62 (FIRM), A63 (CONTROLLABLE)

## Section No. 7th Revised Sheet No. 66

## **DETERMINATION OF DEMAND**

Contract Demand in kW is designated by customer and is fixed for no less than 12 months. Customers are allowed a maximum of one opportunity to revise to their contract demand level in any continuous 12-month period. In no month shall the demand to be billed be considered as less than the actual or expected average kW load during peak period hours of the billing month. In all months, the Contract Demand designated by customer shall be used to determine the kWh sales applied to the Limited Energy Surcharge and the Energy Charge Credit.

Distribution Demand in kW shall be the greatest 15 minute load that occurred during the past 12 months, including the current billing month, rounded to the nearest whole kW. Additional demand that may result from customer's use of contracted standby or supplemental capacity is not included in the determination of distribution demand.

#### CONTROLLABLE SERVICE OPTION

The controllable service option is available to customers that agree to control a minimum load of 500 kW to a predetermined level whenever required by Company. The applicable monthly controllable demand credit is applied customer's monthly controllable demand. The applicable limited energy charge per kWh replaces the charge for firm service.

Controllable Demand Credit per Month per kW			Limited Energy Surcharge per kWh
	Jun-Sep	Other Months	
Level A: < 65% PF	\$5.63	\$1.09	\$0.1380
Level B: > 65% and < 85% PF	\$6.47	\$1.93	\$0.0980
Level C: ≥ 85% PF	\$7.00	\$2.46	\$0.0780

Controllable Demand in kW is the difference between Contract Demand for the billing month and Predetermined Demand Level.

Predetermined Demand Level shall be specified and agreed to by the customer and Company, and may not exceed the Contract Demand. Customer's demand must not exceed the predetermined demand level (PDL) during a control period.

Performance Factor (PF) is defined in percentage terms as the average of the July and August calendar month maximum Controllable Demand occurring from 1:00 p.m. to 7:00 p.m. on weekdays, divided by the maximum annual Controllable Demand. Customer's representative load characteristics will be used to determine customer's performance factor. Company reserves the right to determine customer's eligibility for performance factor levels and may transfer customers between levels following verification of a customer's performance.

## (Continued on Sheet No. 5-67)

11-02-15 Date Filed: By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. Order Date: E002/GR-15-826 06-12-17 R R R

## PUBLIC DOCUMENT

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

5

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**REAL TIME PRICING SERVICE (Continued)** Section No. RATE CODE: A62 (FIRM), A63 (CONTROLLABLE) 6th Revised Sheet No. 67

## Controllable Service Terms and Conditions

- Company will endeavor to give customer one hour notice of commencement of control period.
- 2. An additional charge of \$8.00 per kW for failure to control will apply during each Company specified control period to the amount that customer's maximum power factor adjusted on peak demand exceeds their predetermined demand level.
- The duration and frequency of control periods shall be at the discretion of Company. Control periods will normally occur when Company expects a reasonable possibility of system load levels surpassing the level for which NSP has sufficient accredited capacity under the Midwest Reliability Organization (MRO) or any successor organization, including reserve requirements, or when in Company's opinion, the reliability of the system is endangered. Customers will be separated into two groups by Company with control periods applicable to one or both groups. Customer groups are determined by geographical location and equivalent total controllable load. Control periods will apply to both customer groups at times of the highest forecast system load levels. Control periods at other high load times may apply to only one of the customer groups. Customer groups will be defined as subject to control periods on either even or odd numbered days.
- 4. Maximum duration of all control periods specified by Company will be 80 hours per year.
- 5. Customer may revise predetermined demand level subject to approval by Company.
- 6. Company shall not be liable for any loss or damage caused by or resulting from any interruption of service.
- 7. Any customer with generating equipment that is operated in parallel with Company must comply with all requirements associated with parallel operations as specified in the General Rules and Regulations of the Company.
- 8. Any load served by customer generation during Company requested control periods must normally be served by Company.

(Continued on Sheet No. 5-68)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

## PUBLIC DOCUMENT

NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**REAL TIME PRICING SERVICE (Continued)** RATE CODE: A62 (FIRM), A63 (CONTROLLABLE)

## Section No. 5 5th Revised Sheet No. 68

#### STANDBY SERVICE

Standby service is available under this schedule subject to the provisions contained in the Standby Service Rider.

#### TERMS AND CONDITIONS OF SERVICE

- Alternating current service is provided at the following nominal voltages:
  - Secondary Voltage: Single or three phase from 208 volts up to but not including 2,400 volts,
  - Primary Voltage: Three phase from 2,400 volts up to but not including 69,000 volts,
  - Transmission Transformed Voltage: Three phase from 2,400 volts up to but not including 69,000 volts, where service is provided at the Company's disconnecting means of a distribution substation transformer, or
  - d. Transmission Voltage: Three phase at 69,000 volts or higher.

Service voltage available in any given case is dependent upon voltage and capacity of Company lines in vicinity of customer's premises.

- 2. Transmission Transformed Service is available only to customers served by an exclusively dedicated distribution feeder. Customer will be responsible for the cost of all facilities necessary to interconnect at the Company's disconnecting means of a distribution substation transformer.
- Transmission Service is available at transmission voltage, subject to the terms and conditions contained in the Company's General Rules and Regulations, Section 5.1(B).
- Company will provide, install, and maintain equipment necessary to communicate real-time prices to 4. customers. Customer will provide for a dedicated telephone line service approved by Company.
- Customer will pay a cancellation charge for contract cancellation prior to the end of a contract period. The cancellation charge is \$1,000.00, plus the difference between customer's bills recalculated using customer's previous rate schedule and this rate schedule if such difference is greater than zero.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

LIGHT RAIL LINE TARIFF Section No. 5
RATE CODE A29 17th Revised Sheet No. 71

#### **AVAILABILITY**

Available to the Metropolitan Council's light rail transit lines for all electric power and energy required by its Traction Station service locations. Traction Stations will be aggregated as lines as they are put into service. Traction Stations common to more than one line will be aggregated with the line with which they were originally put into service.

#### **RATE**

Customer Charge per Month per Traction Station	\$	100.00	
Transmission and Distribution Demand Charge per Month per kW			
All Traction Station On Peak Non-Coincident Billing Demands		\$5.28	R
Off Peak Period Non-Coincident Demand in Excess		\$1.55	
of On Peak Period Non-Coincident Demand			
Generation Demand Charge per Month per kW	OCT-MAY	JUN-SEP	
Rail Line On Peak Coincident Billing Demand	\$4.41	\$8.71	R
Energy Charge per kWh			
On Peak Period Energy	\$0.	04750	
Off Peak Period Energy	\$0.	02236	R
Energy Charge Credit per Month per kWh			
All Energy in Excess of 400 Hours Times the On Peak Period	\$0.	01303	R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

FUEL CLAUSE R

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

Coincident Billing Demand, Not to Exceed 50% of the Energy

## **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

## **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

(Continued on Sheet No. 5-72)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19

5

\$0.02350

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

LIGHT RAIL LINE TARIFF Section No. **RATE CODE A29** 16th Revised Sheet No. 71

#### **AVAILABILITY**

Available to the Metropolitan Council's light rail transit lines for all electric power and energy required by its Traction Station service locations. Traction Stations will be aggregated as lines as they are put into service. Traction Stations common to more than one line will be aggregated with the line with which they were originally put into service.

#### **RATE**

Customer Charge per Month per Traction Station	\$10	0.00	
Transmission and Distribution Demand Charge per Month per kW			
All Traction Station On Peak Non-Coincident Billing Demands	\$	5.54	
Off Peak Period Non-Coincident Demand in Excess	\$	1.55	
of On Peak Period Non-Coincident Demand			
Generation Demand Charge per Month per kW	OCT-MAY	JUN-SEP	
Rail Line On Peak Coincident Billing Demand	\$4.66	\$9.20	R
Energy Charge per kWh			
On Peak Period Energy	\$0.04	1990	R

Energy Charge Credit per Month per kWh

Off Peak Period Energy

R All Energy in Excess of 400 Hours Times the On Peak Period \$0.01370 Coincident Billing Demand, Not to Exceed 50% of the Energy

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

## **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

## SURCHARGE

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

(Continued on Sheet No. 5-72)

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17 R

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

LIGHT RAIL LINE TARIFF Section No. 5 **RATE CODE A29** 15th Revised Sheet No. 71

#### **AVAILABILITY**

Available to the Metropolitan Council's light rail transit lines for all electric power and energy required by its Traction Station service locations. Traction Stations will be aggregated as lines as they are put into service. Traction Stations common to more than one line will be aggregated with the line with which they were originally put into service.

RATE Customer Charge per Month per Traction Station	\$	100.00	
Transmission and Distribution Demand Charge per Month per kW All Traction Station On Peak Non-Coincident Billing Demands Off Peak Period Non-Coincident Demand in Excess of On Peak Period Non-Coincident Demand		\$5.54 \$1.55	R R
Generation Demand Charge per Month per kW Rail Line On Peak Coincident Billing Demand	<b>OCT-MAY</b> \$4.37	<b>JUN-SEP</b> \$8.91	R
Energy Charge per kWh On Peak Period Energy Off Peak Period Energy	•	.04880 .02298	R R
Energy Charge Credit per Month per kWh  All Energy in Excess of 400 Hours Times the On Peak Period Coincident Billing Demand, Not to Exceed 50% of the Energy	\$0	.01340	R
In addition, customer bills under this rate are subject to the following adjus	stments and/or charge	<u>s.</u>	D

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

## **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

(Continued on Sheet No. 5-72)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**LIGHT RAIL LINE TARIFF (Continued) RATE CODE A29** 

Section No. 5 7th Revised Sheet No. 72

## LOW INCOME ENERGY DISCOUNT RIDER

Bills are subject to the adjustment provided for in the Low Income Energy Discount Rider.

The following are terms and conditions for service under this tariff.

#### LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge of \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

## **DEFINITION OF PEAK PERIODS**

The on peak period is defined as those hours between 9:00 a.m. and 9:00 p.m. The on peak period occurs Monday through Friday, except the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. When a designated holiday occurs on Saturday, the preceding Friday will be designated a holiday. When the designated holiday occurs on a Sunday, the following Monday will be designated a holiday. The off peak period is defined as all other hours. Definition of on peak and off peak period is subject to change with change in Company's system operating characteristics.

#### DETERMINATION OF TRACTION STATION ON PEAK PERIOD NON-COINCIDENT DEMAND

The individual Traction Station Actual On Peak Period Non-Coincident Demand in kW shall be the greatest 15minute load during the on peak periods during the month for which the bill is rendered for each and every Traction Station along the Light Rail Line. The individual Traction Station Adjusted On Peak Period Non-Coincident Demand in kW for any one Traction Station for billing purposes shall be determined by dividing the Actual On Peak Period Non-Coincident Demand by the power factor expressed in percent but not more than 90%, multiplying the quotient so obtained by 90%, and rounding to the nearest whole kW. The total Traction Station Adjusted On Peak Period Non-Coincident Demand in kW for billing purposes shall be the sum of the individual Adjusted On Peak Period Non-Coincident Demands from each and every Traction Station.

## DETERMINATION OF TRACTION STATION OFF PEAK PERIOD NON-COINCIDENT DEMAND

The individual Traction Station Actual Off Peak Period Non-Coincident Demand in kW shall be the greatest 15minute load during the off peak periods during the month for which the bill is rendered for each and every Traction Station along the Light Rail Line. The individual Traction Station Adjusted Off Peak Period Non-Coincident Demand in kW for any one Traction Station for billing purposes shall be determined by dividing the Actual Off Peak Period Non-Coincident Demand by the power factor expressed in percent but not more than 90%, multiplying the quotient so obtained by 90%, and rounding to the nearest whole kW. The total Traction Station Adjusted Off Peak Period Non-Coincident Demand in kW for billing purposes shall be the sum of the individual Adjusted Off Peak Period Non-Coincident Demands from each and every Traction Station.

(Continued on Sheet No. 5-73)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

LIGHT RAIL LINE TARIFF (Continued)
RATE CODE A29

Section No. 5 6th Revised Sheet No. 73

## **DETERMINATION OF RAIL LINE ON PEAK PERIOD COINCIDENT DEMAND**

The Rail Line Actual On Peak Period Coincident Demand in kW shall be the greatest simultaneous 15-minute load during the on peak periods during the month for which the bill is rendered for all of the Traction Stations along the Light Rail Line. The Rail Line Adjusted On Peak Period Coincident Demand in kW for billing purposes shall be determined by dividing the Actual On Peak Period Coincident Demand by the power factor expressed in percent but not more that 90%, multiplying the quotient so obtained by 90%, and rounding to the nearest whole kW.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## STREET LIGHTING SYSTEM SERVICE RATE CODE A30

Section No. 5 26th Revised Sheet No. 74

## **AVAILABILITY**

Available for year-round illumination of public streets, parkways, and highways by High Pressure Sodium (HPS), Metal Halide or Light Emitting Diode (LED) luminaires supported on poles, where the facilities for this service are furnished by Company. Underground Service under this schedule is limited to areas having a Company owned underground electric distribution system. Standard Service includes a monthly payment for the lighting system cost. Pre-Pay Option requires customer payment for the lighting system cost before establishing service.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

		Monthly Rate Pe	r Luminaire		
	S	Standard Service		Pre-Pay	
Designation of Lamp (Lumens)	<u>Overhead</u>	<u>Underground</u>	<u>Decorative</u>	<u>Option</u>	
70W High Pressure Sodium	\$9.63	\$19.54		\$5.97	R
100W High Pressure Sodium	\$10.17	\$20.07	\$31.67	\$6.66	
150W High Pressure Sodium	\$10.95	\$20.86	\$32.84	\$7.54	
200W High Pressure Sodium*	\$12.88				
250W High Pressure Sodium	\$13.87	\$23.38	\$34.89	\$9.61	
400W High Pressure Sodium	\$16.85	\$26.06	\$37.38	\$12.42	
175W Metal Halide	\$14.98	\$27.90	\$37.38	\$13.54	
30-40W Light Emitting Diode (4,000)	\$10.32	\$20.22		\$4.90	
50-75W Light Emitting Diode (6,000)	\$11.01	\$20.91		\$5.49	
110-165W Light Emitting Diode (14,000)	\$14.46	\$23.96		\$7.05	
200-250W Light Emitting Diode (25,000)	\$17.98	\$27.19		\$8.93	R

<sup>\*</sup>Closed to new customers

(Continued on Sheet No 5-74.1)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

STREET LIGHTING SYSTEM SERVICE RATE CODE A30

Section No. 5 25th Revised Sheet No. 74

#### **AVAILABILITY**

Available for year-round illumination of public streets, parkways, and highways by High Pressure Sodium (HPS), Metal Halide or Light Emitting Diode (LED) luminaires supported on poles, where the facilities for this service are furnished by Company. Underground Service under this schedule is limited to areas having a Company owned underground electric distribution system. Standard Service includes a monthly payment for the lighting system cost. Pre-Pay Option requires customer payment for the lighting system cost before establishing service.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

		Monthly Rate Pe	r Luminaire		
	5	Pre-Pay			
Designation of Lamp (Lumens)	Overhead	Underground	Decorative	<u>Option</u>	
70W High Pressure Sodium	\$10.02	\$20.32		\$6.21	R
100W High Pressure Sodium	\$10.58	\$20.88	\$32.94	\$6.93	
150W High Pressure Sodium	\$11.39	\$21.70	\$34.16	\$7.84	
200W High Pressure Sodium*	\$13.40				
250W High Pressure Sodium	\$14.43	\$24.32	\$36.29	\$10.00	
400W High Pressure Sodium	\$17.53	\$27.11	\$38.88	\$12.92	
175W Metal Halide	\$15.58	\$29.02	\$38.88	\$14.08	
30-40W Light Emitting Diode (4,000)	\$10.73	\$21.03		\$5.17	
50-75W Light Emitting Diode (6,000)	\$11.45	\$21.75		\$5.79	
110-165W Light Emitting Diode (14,000)	\$15.02	\$24.90		\$7.44	
200-250W Light Emitting Diode (25.000)	\$18.66	\$28.24		\$9.43	R

<sup>\*</sup>Closed to new customers

(Continued on Sheet No 5-74.1)

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## STREET LIGHTING SYSTEM SERVICE RATE CODE A30

Section No. 5 24th Revised Sheet No. 74

## **AVAILABILITY**

Available for year-round illumination of public streets, parkways, and highways by High Pressure Sodium (HPS), Metal Halide or Light Emitting Diode (LED) luminaires supported on poles, where the facilities for this service are furnished by Company. Underground Service under this schedule is limited to areas having a Company owned underground electric distribution system. Standard Service includes a monthly payment for the lighting system cost. Pre-Pay Option requires customer payment for the lighting system cost before establishing service.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

		Monthly Rate Per Luminaire				
		Standard Service				
Designation of Lamp (Lumens	Overhead	<u>Underground</u>	<b>Decorative</b>	<b>Option</b>		
70W High Pressure Sodium	\$9.82	\$20.11		\$6.09	R	
100W High Pressure Sodium	\$10.36	\$20.66	\$32.78	\$6.79		
150W High Pressure Sodium	\$11.16	\$21.45	\$33.96	\$7.68		
200W High Pressure Sodium*	\$13.13					
250W High Pressure Sodium	\$14.14	\$23.96	\$36.03	\$9.78		
400W High Pressure Sodium	\$17.15	\$26.68	\$38.56	\$12.62		
175W Metal Halide	\$15.28	\$28.59	\$38.56	\$13.82		
30-40W Light Emitting Diode (4,000)	\$10.51	\$20.81		\$5.03		
50-75W Light Emitting Diode (6,000)	\$11.22	\$21.50		\$5.63		
110-165W Light Emitting Diode (14,000)	\$14.73	\$24.54		\$7.22		
200-250W Light Emitting Diode (25,000)	\$18.28	\$27.81		\$9.13	R	

<sup>\*</sup>Closed to new customers

D

(Continued on Sheet No 5-74.1)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

ED Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

STREET LIGHTING SYSTEM SERVICE (Continued)
RATE CODE A30

Section No. 5 11th Revised Sheet No. 74.1

#### **PRE-PAY OPTION SURCHARGE**

A monthly surcharge per luminaire of 0.2% applies to the amount the purchase price exceeds \$1,200.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

#### **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

#### **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

#### **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

#### LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

## **OTHER PROVISIONS**

This schedule is also subject to provisions contained in Rules for Application of Street Lighting Rates.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation and wholly owned subsidiary of Xcel Energy Inc. Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

STREET LIGHTING SYSTEM SERVICE (CLOSED)
RATE CODE A31

Section No. 5 11th Revised Sheet No. 75

**CANCELED** 

Date Filed: 11-02-05 By: Cynthia L. Lesher Effective Date: 02-01-07

President and CEO of Northern States Power Company

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

STREET LIGHTING ENERGY SERVICE (CLOSED)	Section No.	5
RATE CODE A32	24th Revised Sheet No.	76

## **AVAILABILITY**

Available for year-round illumination of public streets, parkways, and highways by electric lamps mounted on standards where customer owns a Company approved ornamental street lighting system complete with standards, luminaires with globes, lamps, and other appurtenances, together with all necessary cables extending between standards and to point of connection to Company's facilities as designated by Company. Service is limited to existing lighting systems being served under this schedule.

## **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Designation of Lamp	Monthly Rate per Luminaire	
100W Mercury	\$2.45	R
175W Mercury	\$3.64	
250W Mercury	\$4.94	
400W Mercury	\$7.69	
700W Mercury	\$12.78	
1,000W Mercury	\$17.77	
50W High Pressure Sodium	\$1.37	
70W High Pressure Sodium	\$1.73	
100W High Pressure Sodium	\$2.29	
150W High Pressure Sodium	\$3.14	
200W High Pressure Sodium	\$4.18	
250W High Pressure Sodium	\$5.28	
400W High Pressure Sodium	\$8.03	
750W High Pressure Sodium	\$13.78	Ŕ
F72HO Fluorescent	\$3.61	

## (Continued on Sheet No. 5-77)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

STREET LIGHTING ENERGY SERVICE (CLOSED)	Section No.	5
RATE CODE A32	23rd Revised Sheet No.	76

## **AVAILABILITY**

Available for year-round illumination of public streets, parkways, and highways by electric lamps mounted on standards where customer owns a Company approved ornamental street lighting system complete with standards, luminaires with globes, lamps, and other appurtenances, together with all necessary cables extending between standards and to point of connection to Company's facilities as designated by Company. Service is limited to existing lighting systems being served under this schedule.

## **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

## **RATE**

Designation of Lamp	Monthly Rate per Luminaire	
100W Mercury	\$2.53	R
175W Mercury	\$3.77	
250W Mercury	\$5.12	
400W Mercury	\$7.98	
700W Mercury	\$13.27	
1,000W Mercury	\$18.47	
50W High Pressure Sodium	\$1.40	
70W High Pressure Sodium	\$1.78	
100W High Pressure Sodium	\$2.37	
150W High Pressure Sodium	\$3.25	
200W High Pressure Sodium	\$4.33	
250W High Pressure Sodium	\$5.47	
400W High Pressure Sodium	\$8.33	
750W High Pressure Sodium	\$14.32	Ŕ
F72HO Fluorescent	\$3.61	

(Continued on Sheet No. 5-77)

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

STREET LIGHTING ENERGY SERVICE (CLOSED)	Section No.	5
RATE CODE A32	22nd Revised Sheet No.	76

## **AVAILABILITY**

Available for year-round illumination of public streets, parkways, and highways by electric lamps mounted on standards where customer owns a Company approved ornamental street lighting system complete with standards, luminaires with globes, lamps, and other appurtenances, together with all necessary cables extending between standards and to point of connection to Company's facilities as designated by Company. Service is limited to existing lighting systems being served under this schedule.

## **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Designation of Lamp	Monthly Rate per Luminaire	
100W Mercury	\$2.47	R
175W Mercury	\$3.68	
250W Mercury	\$4.99	
400W Mercury	\$7.77	
700W Mercury	\$12.92	
1,000W Mercury	\$17.98	
50W High Pressure Sodium	\$1.38	
70W High Pressure Sodium	\$1.74	
100W High Pressure Sodium	\$2.32	
150W High Pressure Sodium	\$3.17	
200W High Pressure Sodium	\$4.22	
250W High Pressure Sodium	\$5.34	
400W High Pressure Sodium	\$8.12	
750W High Pressure Sodium	\$13.94	Ŕ
F72HO Fluorescent	\$3.61	

D

(Continued on Sheet No. 5-77)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

## PUBLIC DOCUMENT

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

5

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

STREET LIGHTING ENERGY SERVICE (CLOSED) Section No. 11th Revised Sheet No. 77 (Continued) **RATE CODE A32** 

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

## **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

#### RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

#### **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

#### **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

## **LATE PAYMENT CHARGE**

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

## **OTHER PROVISIONS**

This schedule is also subject to provisions contained in Rules for Application of Street Lighting Rates.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. Order Date: E002/GR-15-826 06-12-17

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

STREET LIGHTING ENERGY SERVICE - METERED RATE CODE A34

Section No. 5 29th Revised Sheet No. 78

## **AVAILABILITY**

Available for year-round illumination of public streets, parkways, and highways by electric lamps mounted on standards where customer owns and maintains an ornamental street lighting system complete with standards, luminaires with globes, lamps, photocells, and other appurtenances, together with all necessary cables extending between standards and to point of connection to Company's meter as designated by Company.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Customer Charge per Meter per Month

\$5.00

Energy Charge per kWh

\$0.04534

R

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

#### **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

#### **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

(Continued on Sheet No. 78.1)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19

2020-2034 Upper Midwest Resource Plan Page 154 of 421

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

STREET LIGHTING ENERGY SERVICE - METERED **RATE CODE A34** 

Section No. 5 28th Revised Sheet No. 78

#### **AVAILABILITY**

Available for year-round illumination of public streets, parkways, and highways by electric lamps mounted on standards where customer owns and maintains an ornamental street lighting system complete with standards, luminaires with globes, lamps, photocells, and other appurtenances, together with all necessary cables extending between standards and to point of connection to Company's meter as designated by Company.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Customer Charge per Meter per Month \$5.00

R Energy Charge per kWh \$0.04716

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

#### SURCHARGE

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

(Continued on Sheet No. 78.1)

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

STREET LIGHTING ENERGY SERVICE - METERED **RATE CODE A34** 

Section No. 5 27th Revised Sheet No. 78

## **AVAILABILITY**

Available for year-round illumination of public streets, parkways, and highways by electric lamps mounted on standards where customer owns and maintains an ornamental street lighting system complete with standards, luminaires with globes, lamps, photocells, and other appurtenances, together with all necessary cables extending between standards and to point of connection to Company's meter as designated by Company.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

R Customer Charge per Meter per Month \$5.00

\$0.04587

D **FUEL CLAUSE** 

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

#### **RESOURCE ADJUSTMENT**

Energy Charge per kWh

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

#### **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

(Continued on Sheet No. 78.1)

11-02-15 Date Filed: By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17 R

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

STREET LIGHTING ENERGY SERVICE – METERED (Continued)

RATE CODE A34

6th Re

Section No. 5 6th Revised Sheet No. 78.1

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

### **CONDITIONS OF SERVICE**

The customer owns and maintains ornamental street lighting system including underground cables, posts, lamps, ballasts, photocells, and glassware. Ballasts shall provide a power factor of at least 90% and photocells shall conform to specified daily operating schedule. Company furnishes energy only at central metered distribution points designated by Company. The daily operating schedule of the lamps shall be from approximately one-half hour after sunset until one-half hour before sunrise.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Section No.

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

STREET LIGHTING SERVICE - CITY OF ST. PAUL **RATE CODE A37** 26th Revised Sheet No. 80

#### **AVAILABILITY**

Available to the City of St. Paul for furnishing, maintaining, and operating certain electrical connections, lines, and appurtenances thereto, and supplying electric current for city street lighting.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

<u>Designation of Lamp</u>	Monthly Rate per Luminaire	
100W High Pressure Sodium	\$5.48	R
150W High Pressure Sodium	\$6.14	R
250W High Pressure Sodium	\$8.60	R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

#### RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

#### **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

The following are terms and conditions for service under this tariff.

## LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

(Continued on Sheet No. 5-81)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19

Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

D

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

STREET LIGHTING SERVICE - CITY OF ST. PAUL RATE CODE A37 Section No. 5

25th Revised Sheet No. 80

#### **AVAILABILITY**

Available to the City of St. Paul for furnishing, maintaining, and operating certain electrical connections, lines, and appurtenances thereto, and supplying electric current for city street lighting.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### RATE

Designation of Lamp	Monthly Rate per Luminaire	
100W High Pressure Sodium	\$5.70	R
150W High Pressure Sodium	\$6.39	R
250W High Pressure Sodium	\$8.95	R

## **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

#### RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

## **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

The following are terms and conditions for service under this tariff.

## **LATE PAYMENT CHARGE**

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

(Continued on Sheet No. 5-81)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

## PUBLIC DOCUMENT

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

STREET LIGHTING SERVICE - CITY OF ST. PAUL Section No. 5 **RATE CODE A37** 14th Revised Sheet No. 81

## **OTHER PROVISIONS**

This schedule is also subject to provisions contained in Rules for Application of Street Lighting Rates.

Date Filed: By: Christopher B. Clark 11-02-15 Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**RULES FOR APPLICATION OF** STREET LIGHTING RATES

Section No. 5 7th Revised Sheet No. 82

## SERVICE INCLUDED IN RATE

#### a. Street Lighting System Service

## Overhead, Underground, and Decorative

Company shall own, operate, and maintain the overhead and underground street lighting systems using Company's standard street lighting equipment.

## Company Property

All poles, other material and equipment that may be used by Company in carrying out street lighting service shall be and remain the property of Company. Company shall have the right to install poles and other materials for street lighting service on or along public streets and alleys of customer and to remove the same upon expiration of term.

## Terms and Conditions:

#### Standard Service

Except for customers choosing the pre-pay option for street lighting system service, the term of service will be a minimum of five (5) years. After the minimum five year service term, service shall continue thereafter for one (1) year terms, unless either party provides written notice at least ninety (90) days prior to the expiration of a term that customer intends to terminate the service. Existing lights that have been in service for more than five years at the time this Tariff provision is approved by the Commission will continue on 1-year terms until either party terminates the service based on the provisions listed above. Company shall furnish all electric energy necessary to operate the street lighting system, shall make all lamp and glassware renewals, clean the glassware, light and extinguish all lamps, make all ballast and starter renewals, and furnish all the materials and labor necessary for these services. Company shall also repair all damaged equipment.

## Pre-Pay Option

Customer shall pay the Company upfront the costs associated with the entire ornamental street lighting system including underground cables, posts, lamps, ballasts, starters, photocells, and glassware. The Company retains ownership of the street lighting system. The street lighting system shall be Company approved and include a lamp type and wattage combination that corresponds to an existing Pre-Pay Option rate. Company shall furnish all electric energy necessary to operate the street lighting system, shall make all lamp and glassware renewals, clean the glassware, light and extinguish all lamps, make all ballast and starter renewals, and furnish all the materials and labor necessary for these services. Company shall also repair all damaged equipment for 25 years from the installation date. After 25 years, Company will repair damaged equipment when the damage is not associated with the age of the street lighting system. These repairs are routine in nature such as lamp, photo control, starter, and fuses.

## (Continued on Sheet No. 5-83)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

E002/GR-15-826 Order Date: Docket No. 06-12-17 Northern States Power Company, a Minnesota corporation

Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RULES FOR APPLICATION OF STREET LIGHTING RATES (Continued)

Section No. 5 6th Revised Sheet No. 83

#### 1. SERVICE INCLUDED IN RATE (Continued)

## Prepay Option (Continued)

If in the Company's opinion, the condition of the street lighting system is such that replacement or significant renovation of the system is necessary (for example, due to underground faults, pole deterioration, ballast outage), the customer shall have two options:

- (1) the customer must either transfer to the Street Lighting Energy Service Metered rate, or
- (2) reimburse Company for the installed cost of a replacement system.

#### Attachments

The Customer may not make any attachments, including but not limited to, banners, flags, signs, or holiday lighting, to the poles without the express written permission of Company. Approval of any such attachments will be at the sole discretion of the Company. In the event that any such attachments are made without written Company authorization, customer shall remove such attachments upon notice from Company. Any damage to Company property or other Company equipment caused by an unauthorized attachment by customer shall, after notice of damage to the customer be repaired by Company at the customer's expense. However, notice to customer prior to repair will not be required in case of an emergency or any other reason that requires immediate repair. In addition, if a street light outage is caused by an unauthorized attachment to Company property, service outage credits will not apply as described in paragraph 3 below.

#### Street Lighting Energy Service

The customer owns and maintains entire ornamental street lighting system including underground cables, posts, lamps, ballasts, photocells, and glassware. Ballasts shall provide a power factor of at least 90% and photocells shall conform to specified daily operating schedule. Company furnishes energy only at central distribution points designated by Company.

## c. City of St. Paul

City owns and maintains lamp units, lamps, photocells, and glassware. Company owns and maintains distribution system, including hangers and furnishes energy at the lamp unit. Ballasts shall provide a power factor of at least 90% and photocells shall conform to specified daily operating schedule.

#### 2. DAILY OPERATING SCHEDULE

The daily operating schedule of lamps shall be from approximately one-half hour after sunset until one-half hour before sunrise.

(Continued on Sheet No. 5-84)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**RULES FOR APPLICATION OF STREET LIGHTING RATES (Continued)** 

Section No. 6th Revised Sheet No. 84

#### 3. **OUTAGES**

If illumination from any non-metered lamp is interrupted and the illumination is not resumed within 2 business days from the time the Company receives notice, 1/30<sup>th</sup> of the applicable monthly metered energy and fuel cost charges for the affected lamp(s) for each night of service outage shall be credited to the customer.

The Company shall apply such credits to all affected customers one time annually in the month of December of each year, together with an itemized list of the street lamps and/or poles associated with the credits.

#### Interruption of Company Performance:

In the event of the total or partial interruption of service where the Company is prevented from providing service, a customer shall not be charged under this tariff for the duration of time service cannot be provided. The Company will proceed with all reasonable diligence to put itself and its works in condition to resume and continue the supply of electric energy and the performance of the service. The Company shall not be responsible for any loss or damage resulting from the interruption or disturbance of service for any cause other than gross negligence of the Company. The Company shall not be liable for any loss of profits or other consequential damages resulting from the use of service or any interruption or disturbance of service.

#### 4. **SPECIAL SERVICES**

#### Street Lighting System Service a.

#### Temporary Disconnection of Service (Street lighting facilities remain in place.)

When requested by the customer, Company will temporarily disconnect service to individual street lighting units provided the customer pays a monthly facilities charge equal to the regular monthly rate less the product of the average monthly kWh for the lighting unit and the energy charge from the Street Lighting Energy Service - Metered rate schedule. The customer must pay a charge of \$25.00 to disconnect or reconnect each lighting unit.

#### Termination of Street Lighting Facilities

When requested by the customer, except for Pre-Pay Option lighting service, Company will remove all or a portion of a street lighting system and cease billing. The customer must pay termination costs for the removal and undepreciated value of facilities, less any salvage value, if the number of lights requested to be removed in any 12 month period exceeds 5% of the municipality's street lighting system.

(Continued on Sheet No. 5-84.1)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17

# PUBLIC DOCUMENT

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**RULES FOR APPLICATION OF** STREET LIGHTING RATES (Continued)

Section No. 4th Revised Sheet No. 84.1

#### 4. **SPECIAL SERVICES (Continued)**

Street Lighting Energy Service b.

# **Daily Operating Schedule Option**

Reduced hours of operation from the standard daily operating schedule is available under the applicable commercial and industrial rate, subject to the following provisions:

- customer must install a meter socket at the service point, and
- (2) customer shall provide all maintenance to lighting units and identify the lighting units with Company approved markings.

# Disconnection of Service

During the period between customer disconnection and reconnection of street lighting units, Company will cease billing provided the disconnection is made on the line side of the lighting unit ballast. Customer disconnection not on the line side will require the customer to pay a charge to compensate for the lighting unit ballast core loss. When requested by the customer, Company will disconnect or reconnect street lighting units provided the customer pays a charge of \$25.00 for the disconnection or reconnection of each lighting unit. The customer must identify all disconnected street lighting units with Company approved markings.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# SMALL MUNICIPAL PUMPING SERVICE **RATE CODE A40**

Section No. 5 30th Revised Sheet No. 85

# **AVAILABILITY**

Available to municipal owned water works and municipal sewage systems for operation of pumping and treatment plants. (Rate schedule is applied separately to each delivery point.)

# **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

	<u>Oct-May</u>	<u>Jun-Sep</u>
Customer Charge per Month	\$10.00	\$10.00
Energy Charge per kWh	\$0.07757	\$0.09256

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

#### RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

#### **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

# **MONTHLY MINIMUM CHARGE**

Customer Charge.

#### **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

# LOW INCOME ENERGY DISCOUNT RIDER

Bills are subject to the adjustment provided for in the Low Income Energy Discount Rider.

(Continued on Sheet No. 5-86)

Date Filed: 03-15-19 Effective Date: By: Christopher B. Clark 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SMALL MUNICIPAL PUMPING SERVICE Section No. 5 RATE CODE A40 29th Revised Sheet No. 85

#### **AVAILABILITY**

Available to municipal owned water works and municipal sewage systems for operation of pumping and treatment plants. (Rate schedule is applied separately to each delivery point.)

# **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### RATE

	<u>Oct-May</u>	<u>Jun-Sep</u>
Customer Charge per Month	\$10.00	\$10.00
Energy Charge per kWh	\$0.08156	\$0.09728

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

# **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

#### **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

#### MONTHLY MINIMUM CHARGE

Customer Charge.

#### SURCHARGE

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

# LOW INCOME ENERGY DISCOUNT RIDER

Bills are subject to the adjustment provided for in the Low Income Energy Discount Rider.

(Continued on Sheet No. 5-86)

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17

R

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SMALL MUNICIPAL PUMPING SERVICE Section No. 5 **RATE CODE A40** 28th Revised Sheet No. 85

# **AVAILABILITY**

Available to municipal owned water works and municipal sewage systems for operation of pumping and treatment plants. (Rate schedule is applied separately to each delivery point.)

# **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

	<u>Oct-May</u>	<u>Jun-Sep</u>
Customer Charge per Month	\$10.00	\$10.00
Energy Charge per kWh	\$0.07965	\$0.09514

In addition, customer bills under this rate are subject to the following adjustments and/or charges. D

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

#### RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

#### **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

# **MONTHLY MINIMUM CHARGE**

Customer Charge.

#### **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

# LOW INCOME ENERGY DISCOUNT RIDER

Bills are subject to the adjustment provided for in the Low Income Energy Discount Rider.

(Continued on Sheet No. 5-86)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17

> 2020-2034 Upper Midwest Resource Plan Page 167 of 421

# PUBLIC DOCUMENT NOT PUBLIC DATA EXCISED

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SMALL MUNICIPAL PUMPING SERVICE (Continued)

RATE CODE A40

Section No. 5

7th Revised Sheet No. 86

The following are terms and conditions for service under this tariff.

#### LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

#### **INSTALLATION OF DEMAND METERS**

The Company shall install a demand meter for a customer when:

- 1. Customer's connected load is estimated to be 20 kW or greater, or
- 2. Customer is served single phase and has a service entrance capacity greater than 200 amperes, or
- Customer is served three phase at 120/208 or 120/240 volts and has a service entrance capacity greater than 200 amperes, or
- 4. Customer is served three phase at 240/480 or 277/480 volts and has a service entrance capacity greater than 100 amperes, or

Customer's average monthly kWh use for four consecutive months exceeds 3,500 kWh.

If a demand meter is installed in accordance with the above, the customer may remain on the Small Municipal Pumping Service schedule as long as customer's maximum demand is less than 25 kW. When the customer achieves an actual maximum demand of 25 kW or greater, the customer will be placed on the Municipal Pumping Service schedule in the next billing month. Customers with a billing demand of less than 25 kW for 12 consecutive months will be given the option of returning to the Small Municipal Pumping Service schedule.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

MUNICIPAL PUMPING SERVICE	Section No. 5
RATE CODE A41	31st Revised Sheet No. 87

#### **AVAILABILITY**

Available to municipal owned water works and municipal sewage systems for operation of pumping and treatment plants. (Rate schedule is applied separately to each delivery point.)

# **RATE**

Customer Charge per Month	\$25.64		
	Oct-May	<u>Jun-Sep</u>	
Service at Secondary Voltage			
Demand Charge per Month per kW	\$10.49	\$14.79	R
Energy Charge per kWh	\$0.	03407	R
Energy Charge Credit per Month per kWh All kWh in Excess of 400 Hours Times the Billing Demand	\$0.	01518	R
	<u>January</u>	- December	
Voltage Discounts per Month Primary Voltage	<u>Per kW</u> \$0.80	<u>Per kWh</u> \$0.00105	R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

# **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

#### **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

# (Continued on Sheet No. 5-88)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

MUNICIPAL PUMPING SERVICE	Section No.	5
RATE CODE A41	30th Revised Sheet No.	87

#### **AVAILABILITY**

Available to municipal owned water works and municipal sewage systems for operation of pumping and treatment plants. (Rate schedule is applied separately to each delivery point.)

#### **RATE**

Customer Charge per Month	\$25.64		
	Oct-May	<u>Jun-Sep</u>	
Service at Secondary Voltage			
Demand Charge per Month per kW	\$11.00	\$15.54	R
Energy Charge per kWh	\$0	.03577	R
Energy Charge Credit per Month per kWh All kWh in Excess of 400 Hours Times the Billing Demand	\$0	.01593	R
	January	<u>y - December</u>	
Voltage Discounts per Month	Per kW	Per kWh	
Primary Voltage	\$0.80	\$0.00108	R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

#### RESOURCE ADJUSTMENT

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

# **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

(Continued on Sheet No. 5-88)

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17

NOT PUBLIC DATA EXCISED

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

MUNICIPAL PUMPING SERVICE	Section No.	5
RATE CODE A41	29th Revised Sheet No. 8	87

#### **AVAILABILITY**

Available to municipal owned water works and municipal sewage systems for operation of pumping and treatment plants. (Rate schedule is applied separately to each delivery point.)

# **RATE**

Customer Charge per Month	\$25.64		R
	Oct-May	<u>Jun-Sep</u>	
Service at Secondary Voltage			
Demand Charge per Month per kW	\$10.71	\$15.25	R
Energy Charge per kWh	\$0	0.03498	R
Energy Charge Credit per Month per kWh All kWh in Excess of 400 Hours Times the Billing Demand	\$0	0.01558	R
	<u>Januar</u>	y - December	
Voltage Discounts per Month	Per kW	<u>Per kWh</u>	
Primary Voltage	\$0.80	\$0.00106	R
In addition, customer bills under this rate are subject to	the following adjustme	ents and/or charges.	D

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

# **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

#### **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

# (Continued on Sheet No. 5-88)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

06-12-17 Docket No. E002/GR-15-826 Order Date:

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**MUNICIPAL PUMPING SERVICE (Continued) RATE CODE A41** 

Section No. 5 8th Revised Sheet No. 88

#### **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

#### LOW INCOME ENERGY DISCOUNT RIDER

Bills are subject to the adjustment provided for in the Low Income Energy Discount Rider.

The following are terms and conditions for service under this tariff.

#### LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

#### **DETERMINATION OF DEMAND**

The adjusted demand in kW for billing purposes shall be determined by dividing the maximum actual demand in kW by the power factor expressed in percent but not more than a 90% power factor and multiplying the quotient so obtained by 90% and rounding to the nearest whole kW. In no month shall the demand to be billed be considered as less than the current month's adjusted demand in kW nor greater than the value in kW determined by dividing the kWh sales for the billing month by 75 hours per month.

#### **MAXIMUM DEMAND**

The maximum actual demand in kW shall be the greatest 15 minute load during the month for which bill is rendered.

# POWER FACTOR

For three phase customers with services above 200 amperes, or above 480 volts, the power factor for the month shall be determined by permanently installed metering equipment. For all single phase customers and three phase customers with services 200 amperes or less, a power factor of 90% will be assumed.

#### MINIMUM DEMAND TO BE BILLED

The monthly minimum billing demand shall not be less than provided above.

# TERMS AND CONDITIONS OF SERVICE

Alternating current service is provided at the following nominal voltages:

- 1. Secondary Voltage: Single or three phase from 208 volts up to but not including 2,400 volts, or
- 2. Primary Voltage: Three phase from 2,400 volts up to but not including 69,000 volts.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. Order Date: E002/GR-15-826 06-12-17

# PUBLIC DOCUMENT NOT PUBLIC DATA EXCISED

Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

FIRE AND CIVIL DEFENSE SIREN SERVICE

RATE CODE A42

Section No. 5

14th Revised Sheet No. 89

#### **AVAILABILITY**

Available for power service for the operation of municipal fire and civil defense warning sirens having a rated capacity not in excess of 25 horsepower.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Per Month per Horsepower of Connected Capacity \$0.76

R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### MONTHLY MINIMUM CHARGE

Net per Month \$3.66

The following are terms and conditions for service under this tariff.

#### LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

# **CONNECTION**

Under the above rate, the Company will make no extension for service other than a normal service span. Where conditions are such that a long service connection or extra transformer capacity, or both, are necessary, the customer shall either pay the entire cost of such extra equipment or pay a monthly facilities charge based on such costs.

The circuit serving the siren must be in conduit from the entrance to the motor with an enclosed entrance switch box, which may be sealed and operated from an external appliance.

# **OPTIONAL**

In case the customer already has a service connection of sufficient capacity to permit operation of the siren without unduly disturbing conditions on the Company's nearby circuits, the siren may be connected at the option of the customer on the load side of the customer's existing meter and the commercial rate applied to the total load.

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19

# PUBLIC DOCUMENT NOT PUBLIC DATA EXCISED

Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# FIRE AND CIVIL DEFENSE SIREN SERVICE RATE CODE A42

Section No. 5 13th Revised Sheet No. 8

#### **AVAILABILITY**

Available for power service for the operation of municipal fire and civil defense warning sirens having a rated capacity not in excess of 25 horsepower.

#### **DETERMINATION OF CUSTOMER BILLS**

Customer bills shall reflect energy charges (if applicable) based on customer's kWh usage, plus a customer charge (if applicable), plus demand charges (if applicable) based on customer's kW billing demand as defined below. Bills may be subject to a minimum charge based on the monthly customer charge and / or certain monthly or annual demand charges. Bills also include applicable riders, adjustments, surcharges, voltage discounts, and energy credits. Details regarding the specific charges applicable to this service are listed below.

#### **RATE**

Per Month per Horsepower of Connected Capacity

\$0.79

R

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### MONTHLY MINIMUM CHARGE

Net per Month

\$3.79

R

The following are terms and conditions for service under this tariff.

D

#### LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

# CONNECTION

Under the above rate, the Company will make no extension for service other than a normal service span. Where conditions are such that a long service connection or extra transformer capacity, or both, are necessary, the customer shall either pay the entire cost of such extra equipment or pay a monthly facilities charge based on such costs.

The circuit serving the siren must be in conduit from the entrance to the motor with an enclosed entrance switch box, which may be sealed and operated from an external appliance.

# **OPTIONAL**

In case the customer already has a service connection of sufficient capacity to permit operation of the siren without unduly disturbing conditions on the Company's nearby circuits, the siren may be connected at the option of the customer on the load side of the customer's existing meter and the commercial rate applied to the total load.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**FUEL CLAUSE RIDER** Section No. 29th Revised Sheet No. 91

#### **FUEL CLAUSE CHARGE**

There shall be added to or deducted from the monthly bill a Fuel Cost Charge calculated by multiplying the applicable monthly billing kilowatt hours (kWh) by the billed Fuel Adjustment Factor (FAF) per kWh. The billed FAF is calculated by prorating each calendar month FAF by the number of customer billing days in each calendar month, and rounding to the nearest \$0.00001 per kWh.

#### **EXEMPTION**

For customers participating in Company's Renewable\*Connect and Renewable\*Connect Government pilot programs, or the Windsource® Program under the Voluntary Renewable and High-Efficiency Energy Purchase Rider, the applicable billing kWh subject to the FAF shall be reduced by the elected Voluntary Renewable Adjustment energy blocks. In the event that a customer's metered energy use is lower than the subscribed energy blocks, the applicable billing kWh for the FAF for that month is zero.

For customer premises recognized by the Company as not being subject to any of the costs of satisfying the solar energy standard under Minn. Stat. § 216B.1691, subd. 2f ("SES Costs"), the SES Costs reflected in the Fuel Clause Charge assessed to the accounts associated with these premises may be credited to these accounts, and the dollar amount of these credits shall be added back into the Current Period Cost of Energy applicable to the time period when the credit is issued.

# **FUEL ADJUSTMENT FACTOR (FAF)**

A separate FAF will be determined for each service category defined by customer class and time-of-day (TOD) period within the Commercial and Industrial - Demand class. The FAF for each service category is the sum of the Current Period Cost of Energy multiplied by the applicable FAF Ratio, and the applicable Energy Cost Trueup Factor. The FAF Ratio is the Class Cost Ratio multiplied by the corresponding TOD Ratio:

Service Category	Class Cost Ratio	TOD Ratio	FAF Ratio
Residential	1.0177	1.0000	1.0177
C&I Non-Demand	1.0305	1.0000	1.0305
C&I Demand	0.9930	1.0054	0.9984
C&I Demand TOD On-Peak	0.9930	1.2574	1.2486
C&I Demand TOD Off-Peak	0.9930	0.8224	0.8166
Outdoor Lighting	0.7976	1.0000	0.7976

# **BASE COST OF ENERGY**

The System Base Cost of Energy is \$0.02680 per kWh. The FAF for each service category includes a Base Cost of Energy, which is the System Base Cost of Energy multiplied by the applicable FAF Ratio.

Service Category	Base Cost of Energy
Residential	\$0.02727
C&I Non-Demand	\$0.02762
C&I Demand Non-TOD	\$0.02676
C&I Demand TOD On-Peak	\$0.03346
C&I Demand TOD Off-Peak	\$0.02188
Outdoor Lighting	\$0.02138

(Continued on Sheet No. 5-91.1)

Date Filed:	05-26-17	By: Christopher B. Clark	Effective Date:	01-26-18
	President, Northe	rn States Power Company, a Minneso	ta corporation	
Docket No.	E002/M-17-425		Order Date:	01-16-18

L

Ν Ν Ν Ν

# PUBLIC DOCUMENT

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**FUEL CLAUSE RIDER (Continued)** 

Section No. 5 16th Revised Sheet No. 91.1

#### **CURRENT PERIOD COST OF ENERGY**

The Current Period Cost of Energy per kWh is defined as the qualifying costs, forecasted to be incurred during the calendar month, divided by the kWh sales forecasted for the same month. Qualifying kWh sales are all kWh sales excluding intersystem, Renewable\*Connect, Renewable\*Connect Government and Windsource® Program kWh sales. Qualifying costs are the sum of the following:

- 1. The cost of fuels consumed in the Company's generating stations as recorded in Federal Energy Regulatory Commission (FERC) Accounts 151 and 518.
- 2. The cost of energy purchases as recorded in FERC Account 555, exclusive of capacity or demand charges, irrespective of the designation assigned to such transaction, when such energy is purchased on an economic dispatch basis.
- 3. All Midwest ISO (MISO) costs and revenues authorized by the Commission to flow through this Fuel Clause Rider and excluding MISO costs and revenues that are recoverable in base rates, as prescribed in applicable Commission Orders.
- 4. All fuel and purchased energy expenses incurred by the Company over the duration of any Commissionapproved contract, as provided for by Minnesota Statutes, Section 216B.1645, except any such expenses recovered in base rates or other riders.
- 5. The energy cost of purchases from a qualifying facility, as that term is defined in 18 C.F.R. Part 292 and Minn. Rule 7835.0100, Subp. 19, as amended, and the net cost of energy (and capacity if purchased on an energy output basis) purchases from any qualifying facility using wind energy conversion systems for the generation of electric energy, whether or not those purchases occur on an economic dispatch basis. Capacity costs associated with such purchased power contracts, which are in excess of 100 kW and commenced after the date of the Commission's final order in Docket No. E002/GR-05-1428, shall be excluded from Fuel Cost Charge recovery.
- 6. Less the fuel-related costs recovered through intersystem sales.
- 7. Less purchased power costs for the Renewable\*Connect and Renewable\*Connect Government pilot programs and for the Windsource® Program as recorded in FERC account 555.
- 8. Less neutrality charge cost recovery for the Renewable\*Connect and Renewable\*Connect Government pilot programs.

(Continued on Sheet No. 5-91.2)

Date Filed: By: Christopher B. Clark Effective Date: 12-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-17-445 Order Date: 12-01-17

# PUBLIC DOCUMENT NOT PUBLIC DATA EXCISED

Docket No. E002/RP-19-368
D Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**FUEL CLAUSE RIDER (Continued)** 

Section No. 5 10th Revised Sheet No. 91.2

# **ENERGY COST TRUE-UP FACTORS**

An Energy Cost True-up Factor per kWh is calculated for each Class and TOD category by dividing the Energy Cost True-up Amount by the qualifying kWh sales forecasted for the calendar month. The Energy Cost True-up Amount is the cumulative balance of the unrecovered and over-recovered actual energy costs and MISO Day 2 expenses from prior months and the retail share of intersystem margins pursuant to the Margin-Sharing program approved by the Commission. The asset based margins are defined as sales revenues less the sum of fuel and energy costs (including costs associated with MISO Day 2 markets that are booked to FERC Account 555) and any additional transmission costs incurred that are required to make such sales. The retail share of intersystem margins is the following:

Asset Based Margins: One hundred percent (100%) of the Minnesota State jurisdiction share of margins from intersystem sales of ancillary services and intersystem sales of excess generation. These margins shall be the actual amounts of such margins recorded and are subject to any MISO resettlements.

(Continued on Sheet No. 5-91.3)

Date Filed: 05-31-17 By: Christopher B. Clark Effective Date: 12-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-17-445 Order Date: 12-01-17

Ν

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**FUEL CLAUSE RIDER (Continued)** 

Section No. 5 14th Revised Sheet No. 91.3

#### RATE SCHEDULES BY SERVICE CATEGORY

Residential Commercial and Industrial Demand – Non-TOD

General (A14)

Peak Controlled (A23)

Residential (A00, A01, A03) Residential TOD (A02, A04) Residential TOU Pilot Program (A72, A74) Energy Controlled (A05)

Limited Off-Peak (A06)

Residential Electric Vehic

Residential Electric Vehicle (A08)

Residential Electric Vehicle Pilot (A80, A81)

Municipal Pumping (A41)

**Commercial and Industrial Non-Demand** 

Energy Controlled (A05) Limited Off Peak (A06) Small General (A09, A10, A11, A13) Small General TOD (A12, A16, A18, A22) Small Municipal Pumping (A40) Fire and Civil Defense Siren (A42) Commercial and Industrial Demand - TOD

General TOD (A15, A17, A19) Peak Controlled TOD (A24) Tier 1 Energy Controlled Rider (A27) Real Time Pricing (A62, A63) Light Rail Line (A29)

**Outdoor Lighting** 

Automatic Protective (A07)
Street Lighting System (A30)
Street Lighting Energy (Closed) (A32)
Street Lighting Energy – Metered (A34)
Street Lighting - City of St. Paul (A37)

#### PROVISION OF FORECAST DATA

To assist commercial and industrial customers in budgeting and managing their energy costs, the Company will annually make available on October 1st a 24-month forecast of the fuel and purchased energy costs applicable to demand billed C&I customers under this Rider. The forecast period begins January 1st of the following year. This forecast will be provided only to customers who have signed a protective agreement with the Company. Quarterly forecasts of the fuel and purchased energy costs will also be available.

Date Filed: 11-01-17 By: Christopher B. Clark Effective Date: 08-07-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-17-775 Order Date: 08-07-18

2020-2034 Upper Midwest Resource Plan Page 178 of 421

Ν

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# **FUEL CLAUSE RIDER (Continued)**

Section No. 5 13th Revised Sheet No. 91.3

#### RATE SCHEDULES BY SERVICE CATEGORY

Residential Commercial and Industrial Demand – Non-TOD

Residential (A00, A01, A03)
Residential TOD (A02, A04)
Energy Controlled (A05)
Limited Off-Peak (A06)

Residential Electric Vehicle (A08)

Residential Electric Vehicle Pilot (A80, A81)

Municipal Pumping (A41)

**Commercial and Industrial Non-Demand** 

Energy Controlled (A05) Limited Off Peak (A06) Small General (A09, A10, A11, A13) Small General TOD (A12, A16, A18, A22) Small Municipal Pumping (A40)

Fire and Civil Defense Siren (A42)

Commercial and Industrial Demand - TOD

General TOD (A15, A17, A19) Peak Controlled TOD (A24) Tier 1 Energy Controlled Rider (A27) Real Time Pricing (A62, A63) Light Rail Line (A29)

**Outdoor Lighting** 

General (A14)

Peak Controlled (A23)

Automatic Protective (A07)
Street Lighting System (A30)
Street Lighting Energy (Closed) (A32)
Street Lighting Energy – Metered (A34)
Street Lighting - City of St. Paul (A37)

# **PROVISION OF FORECAST DATA**

To assist commercial and industrial customers in budgeting and managing their energy costs, the Company will annually make available on October 1st a 24-month forecast of the fuel and purchased energy costs applicable to demand billed C&I customers under this Rider. The forecast period begins January 1st of the following year. This forecast will be provided only to customers who have signed a protective agreement with the Company. Quarterly forecasts of the fuel and purchased energy costs will also be available.

Date Filed: 11-17-17 By: Christopher B. Clark Effective Date: 06-25-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-17-817 Order Date: 05-09-18

2020-2034 Upper Midwest Resource Plan Page 179 of 421

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# **FUEL CLAUSE RIDER (Continued)**

Section No. 5 12th Revised Sheet No. 91.3

#### RATE SCHEDULES BY SERVICE CATEGORY

Residential Commercial and Industrial Demand – Non-TOD

Residential (A00, A01, A03) General (A14)
Residential TOD (A02, A04) Peak Controlled (A23)
Energy Controlled (A05) Municipal Pumping (A41)
Limited Off-Peak (A06)

**Commercial and Industrial Non-Demand** 

Residential Electric Vehicle (A08)

Energy Controlled (A05) Limited Off Peak (A06) Small General (A09, A10, A11, A13) Small General TOD (A12, A16, A18, A22) Small Municipal Pumping (A40) Fire and Civil Defense Siren (A42) Commercial and Industrial Demand - TOD

General TOD (A15, A17, A19) Peak Controlled TOD (A24) Tier 1 Energy Controlled Rider (A27) Real Time Pricing (A62, A63) Light Rail Line (A29)

**Outdoor Lighting** 

Automatic Protective (A07)
Street Lighting System (A30)
Street Lighting Energy (Closed) (A32)
Street Lighting Energy – Metered (A34)
Street Lighting - City of St. Paul (A37)

#### **PROVISION OF FORECAST DATA**

To assist commercial and industrial customers in budgeting and managing their energy costs, the Company will annually make available on October 1st a 24-month forecast of the fuel and purchased energy costs applicable to demand billed C&I customers under this Rider. The forecast period begins January 1st of the following year. This forecast will be provided only to customers who have signed a protective agreement with the Company. Quarterly forecasts of the fuel and purchased energy costs will also be available.

Date Filed: 05-31-17 By: Christopher B. Clark Effective Date: 12-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-17-445 Order Date: 12-01-17

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# CONSERVATION IMPROVEMENT PROGRAM **ADJUSTMENT RIDER**

Section No. 5 19th Revised Sheet No. 92

#### **APPLICABILITY**

Applicable to bills for electric service provided under the Company's retail rate schedules. Exemptions are as follows:

"Large Customer Facility" customers that have been exempted from the Company's Conservation Improvement Program charges pursuant to Minn. Stat. 216B.241 subd. 1a (b) shall receive a monthly exemption from conservation improvement program charges pursuant to Minn. Stat. 216B.16, subd. 6b Energy Conservation Improvement. Such monthly exemption will be effective beginning January 1 of the year following the grant of exemption. Upon exemption from conservation program charges, the "Large Customer Facility" customers can no longer participate in the Company's Energy Conservation Improvement Program.

#### **RIDER**

There shall be included on each non-exempt customer's monthly bill a Conservation Improvement Program (CIP) Adjustment, which shall be calculated by multiplying the monthly applicable billing kilowatt hours (kWh) by the CIP Adjustment Factor.

#### DETERMINATION OF CONSERVATION IMPROVEMENT PROGRAM ADJUSTMENT FACTOR

The CIP Adjustment Factor shall be calculated for each customer class by dividing the Recoverable Conservation Improvement Program Expense by the Projected Retail Sales for a designated recovery period. The factor may be adjusted annually with approval of the Minnesota Public Utilities Commission. The CIP Adjustment Factor for all rate schedules is:

> All Classes \$0.001813 per kWh R

Recoverable Conservation Improvement Program Expense shall be the CIP expense not recovered through base rates as determined from the CIP Tracker account balance for a designated period. All costs appropriately charged to the CIP Tracker Account shall be eligible for recovery through this Rider. All revenues received from the CIP Adjustment Factor shall be credited to the CIP Tracker Account.

Projected Retail Sales shall be the estimated kilowatt-hour sales to all non-exempt customers for the designated recovery period.

(Continued on Sheet No. 5-92.1)

Date Filed: 03-30-18 By: Christopher B. Clark Effective Date: 10-01-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-18-240 Order Date: 09-04-18

2020-2034 Upper Midwest Resource Plan

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# CONSERVATION IMPROVEMENT PROGRAM ADJUSTMENT RIDER

Section No. 5 18th Revised Sheet No. 92

#### **APPLICABILITY**

Applicable to bills for electric service provided under the Company's retail rate schedules. Exemptions are as

"Large Customer Facility" customers that have been exempted from the Company's Conservation Improvement Program charges pursuant to Minn. Stat. 216B.241 subd. 1a (b) shall receive a monthly exemption from conservation improvement program charges pursuant to Minn. Stat. 216B.16, subd. 6b Energy Conservation Improvement. Such monthly exemption will be effective beginning January 1 of the year following the grant of exemption. Upon exemption from conservation program charges, the "Large Customer Facility" customers can no longer participate in the Company's Energy Conservation Improvement Program.

#### **RIDER**

There shall be included on each non-exempt customer's monthly bill a Conservation Improvement Program (CIP) Adjustment, which shall be calculated by multiplying the monthly applicable billing kilowatt hours (kWh) by the CIP Adjustment Factor.

#### DETERMINATION OF CONSERVATION IMPROVEMENT PROGRAM ADJUSTMENT FACTOR

The CIP Adjustment Factor shall be calculated for each customer class by dividing the Recoverable Conservation Improvement Program Expense by the Projected Retail Sales for a designated recovery period. The factor may be adjusted annually with approval of the Minnesota Public Utilities Commission. The CIP Adjustment Factor for all rate schedules is:

> R All Classes \$0.001875 per kWh

Recoverable Conservation Improvement Program Expense shall be the CIP expense not recovered through base rates as determined from the CIP Tracker account balance for a designated period. All costs appropriately charged to the CIP Tracker Account shall be eligible for recovery through this Rider. All revenues received from the CIP Adjustment Factor shall be credited to the CIP Tracker Account.

Projected Retail Sales shall be the estimated kilowatt-hour sales to all non-exempt customers for the designated recovery period.

(Continued on Sheet No. 5-92.1)

Date Filed: 04-03-17 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-17-259 Order Date: 08-16-17

2020-2034 Upper Midwest Resource Plan

# PUBLIC DOCUMENT NOT PUBLIC DATA EXCISED

Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# CONSERVATION IMPROVEMENT PROGRAM ADJUSTMENT RIDER (Continued)

Section No. 5 7th Revised Sheet No. 92.1

# DETERMINATION OF CONSERVATION COST RECOVERY CHARGE (CCRC)

The CCRC is the amount included in base rates dedicated to the recovery of CIP costs as approved by the Minnesota Public Utilities Commission (or successor agency) in the Company's last general rate case. The CCRC is approved and applied on a per kWh basis by dividing the test-year CIP expenses by the test-year sales volumes (net of CIP-exempt volumes). All revenues received from the CCRC shall be credited to the CIP Tracker Account. The CCRC for all rate schedules is:

All Classes

\$0.003133 per kWh

#### **DETERMINATION OF CCRC EXEMPTION ADJUSTMENT FACTOR**

For "Large Customer Facilities", as defined in Minn. Stat. 216B.241 subd. 1, granted exemption by the Commissioner of the Minnesota Department of Commerce, Division of Energy Resources, pursuant to Minn. Stat. 216B.241, the CIP Adjustment Factor shall not apply and monthly bills will include a CCRC Exemption Adjustment credit determined by multiplying total billing kWh by the applicable CCRC Exemption Adjustment Factor. Customers' accounts granted exemption by a decision of the Commissioner after the beginning of a calendar year shall be credited for any CIP collections billed after January 1st of the year following the Commissioner's decision. The CCRC Exemption Adjustment Factor for all rate classes is:

All Classes

\$0.003133 per kWh

#### PROVISION OF FORECAST DATA

To assist commercial and industrial customers in budgeting and managing their energy costs, the Company will annually make available on April 1<sup>st</sup> a 24-month forecast of the CIP Adjustment Factor applicable to demand billed C&I customers under this Rider. The forecast period begins January 1<sup>st</sup> of the following year.

#### **EXEMPTION**

For customer premises recognized by the Company as not being subject to any of the costs of satisfying the solar energy standard under Minn. Stat. § 216B.1691, subd. 2f ("SES Costs"), the SES Costs reflected in the CIP Adjustment assessed to the accounts associated with these premises may be credited to these accounts, and the dollar amount of these credits shall be added as part of the Recoverable Conservation Improvement Program Expense applicable to the time period when the credit is issued.

| | | | | |

Ν

Date Filed: 05-26-17 By: Christopher B. Clark Effective Date: 01-26-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-17-425 Order Date: 01-16-18

# PUBLIC DOCUMENT NOT PUBLIC DATA EXCISED

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SURCHARGE RIDER Section No. 5 8th Revised Sheet No. 93

A surcharge will be included in the monthly customer bills in Minnesota communities in an amount equal to any franchise gross earnings or other fee, permit or usage fee, excise, city sales or other charge or tax now or hereafter imposed upon Company by a community, whether by ordinance, franchise or otherwise, applicable to electric service supplied by Company to a customer.

The Company remits 100% of these fees collected from ratepayers to the local government unit.\*

The Company will notify the Minnesota Public Utilities Commission of any new, renewed, expired, or changed fee, authorized by Minn. Stat. § 216B.36 to raise revenue, at least 60 days prior to its implementation. If the Company receives less than 60 days' notice of a repealed or reduced fee from a city, the Company will notify the Minnesota Public Utilities Commission within 10 business days of receiving notice. Notification to the Minnesota Public Utilities Commission will include a copy of the relevant franchise fee ordinance, or other operative document authorizing imposition of, or change in, the fee.

Affected customers will be notified on the first bill on which a new or modified fee is listed via the standard bill message below:

[The municipality] imposes a [X% of gross revenues/\$X per meter/\$X per kWh/\$X per therm] fee on Xcel Energy collectable through a fee on Xcel Energy [electric/gas] accounts effective [effective date]. The line item appears on your bill as "City Fees." Xcel Energy remits 100% of this fee to [the municipality].

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 Order Date: 06-12-17

<sup>\*</sup>The amount collected for Baker is applied to the community's street lighting bill.

Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### FRANCHISE AND OTHER CITY FEES

Section No. 5 23rd Revised Sheet No. 93.1

Franchise and other city fees, as designated below will be included in the customers' monthly bills computed under the indicated rate classes and effective in the following Minnesota communities:

The Company remits 100% of these fees collected from ratepayers to the local government unit.

Indicates fee is not applied

	Franchise Fees									
City	Residential	Small C&I Non-demand	Small C&I Demand	Large C&I	Public Street Lighting	Municipal Pumping Non-demand	Municipal Pumping Demand	Effective Date	Expiration Date	
Afton	\$2.00	\$2.00	\$5.00	\$5.00	\$1.00	\$1.00	\$1.00	01/2005	08/16/2024	
Albertville	\$2.50	\$5.00	\$10.00	\$50.00	\$2.00	_	_	03/2011	09/07/2029	
Bayport	\$1.50	\$3.00	\$25.00	\$50.00	\$3.00	\$3.00	\$25.00	01/2014	05/04/2028	
Big Lake	\$4.00	\$8.00	\$8.00	\$8.00	_	_	_	10/2014	07/04/2034	
Bloomington	\$3.75	\$7.50	\$40.00	\$115.00	_	_	_	04/2016	12/20/2035	
Brooklyn Center	\$1.60	\$4.00	\$22.00	\$100.00	\$13.00	\$13.00	\$13.00	01/2017	12/08/2023	
Brooklyn Park	\$7.00	\$7.50	\$45.00	\$160.00	_	_	_	03/2016	12/31/2028	
Burnsville	\$1.00	\$3.00	\$10.00	\$45.00	_	_	_	07/2016	02/15/2036	
Centerville	\$4.00	\$8.00	\$8.00	\$8.00	_	_	_	05/2016	01/26/2036	
Champlin	\$3.58	\$9.70	\$40.80	\$142.81	\$17.34	\$17.34	\$17.34	01/2019	11/23/2028	
Chisago City	\$1.30	\$5.00	\$15.00	\$55.00	\$5.00	\$5.00	\$15.00	06/2009	02/28/2029	
Circle Pines	\$2.75	\$3.00	\$35.00	_	\$3.00	_	_	10/2009	08/24/2029	
Clara City	\$2.00	\$2.00	\$15.00	\$68.00	\$2.00	\$2.00	\$15.00	01/2014	10/07/2033	
Clements	\$1.00	\$1.00	\$1.00	\$1.00	_	_	_	07/2012	06/09/2024	
Coon Rapids <sup>1</sup>	4.0%	4.0%	4.0%	4.0%	_	_	_	04/2018	01/13/2032	
Cottage Grove	\$1.65	\$1.65	\$8.25	\$33.00	\$3.30	\$0.75	\$8.25	03/2016	11/04/2023	

(Continued on Sheet No. 5-93.1a)

Date Filed: 10-31-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-09-970 Order Date: 03-23-11

<sup>&</sup>lt;sup>1</sup> Coon Rapids: The franchise fee excludes rate schedules for highway lighting, municipal street lighting, municipal water pumping, municipal fire sirens, and municipal sewage disposal service. For all consumers, the four percent franchise fee is applicable to the first \$950,000 of calendar year gross operating revenues. The franchise fee is reduced to one half percent (0.5%) for the remaining amount of annual gross operating revenues exceeding \$950,000.

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### FRANCHISE AND OTHER CITY FEES

Section No. 5 22nd Revised Sheet No. 93.1

Franchise and other city fees, as designated below will be included in the customers' monthly bills computed under the indicated rate classes and effective in the following Minnesota communities:

The Company remits 100% of these fees collected from ratepayers to the local government unit.

Indicates fee is not applied

	Franchise Fees									
City	Residential	Small C&I Non-demand	Small C&I Demand	Large C&I	Public Street Lighting	Municipal Pumping Non-demand	Municipal Pumping Demand	Effective Date	Expiration Date	
Afton	\$2.00	\$2.00	\$5.00	\$5.00	\$1.00	\$1.00	\$1.00	01/2005	08/16/2024	
Albertville	\$2.50	\$5.00	\$10.00	\$50.00	\$2.00	_		03/2011	09/07/2029	
Bayport	\$1.50	\$3.00	\$25.00	\$50.00	\$3.00	\$3.00	\$25.00	01/2014	05/04/2028	
Big Lake	\$4.00	\$8.00	\$8.00	\$8.00	_	_	_	10/2014	07/04/2034	
Bloomington	\$3.75	\$7.50	\$40.00	\$115.00	_	_	_	04/2016	12/20/2035	
Brooklyn Center	\$1.60	\$4.00	\$22.00	\$100.00	\$13.00	\$13.00	\$13.00	01/2017	12/08/2023	
Brooklyn Park	\$7.00	\$7.50	\$45.00	\$160.00	_	_	_	03/2016	12/31/2028	
Burnsville	\$1.00	\$3.00	\$10.00	\$45.00	_	_	_	07/2016	02/15/2036	
Centerville	\$4.00	\$8.00	\$8.00	\$8.00	_	_	_	05/2016	01/26/2036	
Champlin	\$3.54	\$9.60	\$40.40	\$141.40	\$17.17	\$17.17	\$17.17	01/2018	11/23/2028	
Chisago City	\$1.30	\$5.00	\$15.00	\$55.00	\$5.00	\$5.00	\$15.00	06/2009	02/28/2029	
Circle Pines	\$2.75	\$3.00	\$35.00	_	\$3.00	_	_	10/2009	08/24/2029	
Clara City	\$2.00	\$2.00	\$15.00	\$68.00	\$2.00	\$2.00	\$15.00	01/2014	10/07/2033	
Clements	\$1.00	\$1.00	\$1.00	\$1.00	_	_	_	07/2012	06/09/2024	
Coon Rapids <sup>1</sup>	4.0%	4.0%	4.0%	4.0%	_	_	_	04/2018	01/13/2032	
Cottage Grove	\$1.65	\$1.65	\$8.25	\$33.00	\$3.30	\$0.75	\$8.25	03/2016	11/04/2023	

С

Ν

Ν

Ν

(Continued on Sheet No. 5-93.1a)

Date Filed: 01-29-18 By: Christopher B. Clark Effective Date: 04-01-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-09-970 Order Date: 03-23-11

<sup>&</sup>lt;sup>1</sup> Coon Rapids: The franchise fee excludes rate schedules for highway lighting, municipal street lighting, municipal water pumping, municipal fire sirens, and municipal sewage disposal service. For all consumers, the four percent franchise fee is applicable to the first \$950,000 of calendar year gross operating revenues. The franchise fee is reduced to one half percent (0.5%) for the remaining amount of annual gross operating revenues exceeding \$950,000.

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# FRANCHISE AND OTHER CITY FEES

Section No. 5 7th Revised Sheet No. 93.1a

Franchise and other city fees, as designated below will be included in the customers' monthly bills computed under the indicated rate classes and effective in the following Minnesota communities:

The Company remits 100% of these fees collected from ratepayers to the local government unit.

Indicates fee is not applied

	Franchise Fees									
City	Residential	Small C&I Non-demand	Small C&I Demand	Large C&I	Public Street Lighting	Municipal Pumping Non-demand	Municipal Pumping Demand	Effective Date	Expiration Date	
Deephaven	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	04/2002	11/02/2030	
Dilworth	\$2.60	\$6.00	\$21.00	\$136.50	_	\$6.00	\$21.00	05/2018	02/25/2038	
Eagle Lake	\$0.50	\$0.50	\$0.50	\$0.50	_	_	_	10/2012	05/06/2032	
Eden Prairie	\$4.00	\$5.00	\$12.50	\$55.00	_	_	_	04/2018	06/18/2032	
Edina	\$2.40	\$4.08	\$11.40	\$48.60	_	_	_	07/2018	11/03/2035	
Excelsior	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	11/2012	08/02/2032	
Falcon Heights	\$2.25	\$3.50	\$22.00	\$200.00	\$2.00	_	_	10/2018	06/12/2038	
Faribault <sup>1</sup>	\$1.48	\$1.76	\$35.20	\$308.00	_	_	_	01/2019	12/31/2019	
Faribault <sup>1</sup>	\$1.63	\$1.94	\$38.72	\$338.80	_	_	_	01/2020	11/08/2024	
Forest Lake	\$4.00	\$2.50	\$18.50	\$75.00	\$7.50	\$2.50	\$18.50	05/2013	01/27/2033	
Golden Valley	\$6.00	\$6.00	\$30.00	\$258.00	_	_	_	04/2018	12/17/2027	

<sup>1</sup> Faribault: The franchise fee excludes invoices to the city for street lighting and municipal pumping. (Continued on Sheet No. 5-93.2)

Date Filed: 10-31-18 01-01-19 By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

E,G999/CI-09-970 Docket No. Order Date: 03-23-11 R

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# FRANCHISE AND OTHER CITY FEES

Section No. 5 6th Revised Sheet No. 93.1a

Franchise and other city fees, as designated below will be included in the customers' monthly bills computed under the indicated rate classes and effective in the following Minnesota communities:

The Company remits 100% of these fees collected from ratepayers to the local government unit.

Indicates fee is not applied

	Franchise Fees									
City	Residential	Small C&I Non-demand	Small C&I Demand	Large C&I	Public Street Lighting	Municipal Pumping Non-demand	Municipal Pumping Demand	Effective Date	Expiration Date	
Deephaven	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	04/2002	11/02/2030	
Dilworth	\$2.60	\$6.00	\$21.00	\$136.50	_	\$6.00	\$21.00	05/2018	02/25/2038	
Eagle Lake	\$0.50	\$0.50	\$0.50	\$0.50	_	_	_	10/2012	05/06/2032	
Eden Prairie	\$4.00	\$5.00	\$12.50	\$55.00	_	_	_	04/2018	06/18/2032	
Edina	\$2.40	\$4.08	\$11.40	\$48.60	_	_	_	07/2018	11/03/2035	
Excelsior	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	11/2012	08/02/2032	
Falcon Heights	\$2.25	\$3.50	\$22.00	\$200.00	\$2.00	_	_	10/2018	06/12/2038	
Faribault <sup>1</sup>	\$1.35	\$1.60	\$32.00	\$280.00	_	_	_	01/2006	11/08/2024	
Forest Lake	\$4.00	\$2.50	\$18.50	\$75.00	\$7.50	\$2.50	\$18.50	05/2013	01/27/2033	
Golden Valley	\$6.00	\$6.00	\$30.00	\$258.00	_	_	_	04/2018	12/17/2027	

<sup>1</sup> Faribault: The franchise fee excludes invoices to the city for street lighting and municipal pumping. (Continued on Sheet No. 5-93.2)

Date Filed: 08-29-18 11-01-18 By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

E,G999/CI-09-970 Docket No. Order Date: 03-23-11

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# FRANCHISE AND OTHER CITY FEES

Section No. 5th Revised Sheet No. 93.1a

Franchise and other city fees, as designated below will be included in the customers' monthly bills computed under the indicated rate classes and effective in the following Minnesota communities:

The Company remits 100% of these fees collected from ratepayers to the local government unit.

Indicates fee is not applied

	Franchise Fees									
City	Residential	Small C&I Non-demand	Small C&I Demand	Large C&I	Public Street Lighting	Municipal Pumping Non-demand	Municipal Pumping Demand	Effective Date	Expiration Date	
Deephaven	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	04/2002	11/02/2030	
Dilworth	\$2.60	\$6.00	\$21.00	\$136.50	_	\$6.00	\$21.00	05/2018	02/25/2038	
Eagle Lake	\$0.50	\$0.50	\$0.50	\$0.50	_	_	_	10/2012	05/06/2032	
Eden Prairie	\$4.00	\$5.00	\$12.50	\$55.00	_	_	_	04/2018	06/18/2032	
Edina	\$2.40	\$4.08	\$11.40	\$48.60	_	_	_	07/2018	11/03/2035	
Excelsior	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	11/2012	08/02/2032	
Falcon Heights	\$2.25	\$3.50	\$22.00	\$200.00	\$2.00	_	_	10/2018	06/12/2038	

Ν

(Continued on Sheet No. 5-93.2)

Date Filed: 07-26-18 10-01-18 By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

E,G999/CI-09-970 03-23-11 Docket No. Order Date:

Northern States Power Company, a Minnesota corporation

Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### FRANCHISE AND OTHER CITY FEES

Section No. 5 4th Revised Sheet No. 93.1a

Franchise and other city fees, as designated below will be included in the customers' monthly bills computed under the indicated rate classes and effective in the following Minnesota communities:

The Company remits 100% of these fees collected from ratepayers to the local government unit.

Indicates fee is not applied

	Franchise Fees										
City	Residential	Small C&I Non-demand	Small C&I Demand	Large C&I	Public Street Lighting	Municipal Pumping Non-demand	Municipal Pumping Demand	Effective Date	Expiration Date		
Deephaven	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	04/2002	11/02/2030		
Dilworth	\$2.60	\$6.00	\$21.00	\$136.50	_	\$6.00	\$21.00	05/2018	02/25/2038		
Eagle Lake	\$0.50	\$0.50	\$0.50	\$0.50	_	_	_	10/2012	05/06/2032		
Eden Prairie	\$4.00	\$5.00	\$12.50	\$55.00	_	_	_	04/2018	06/18/2032		
Edina	\$2.40	\$4.08	\$11.40	\$48.60	_	_	_	07/2018	11/03/2035		
Excelsior	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	11/2012	08/02/2032		

R

(Continued on Sheet No. 5-93.2)

Date Filed: 05-01-18 By: Christopher B. Clark Effective Date: 07-01-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-09-970 Order Date: 03-23-11

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# FRANCHISE AND OTHER CITY FEES

Section No. 3rd Revised Sheet No. 93.1a

Franchise and other city fees, as designated below will be included in the customers' monthly bills computed under the indicated rate classes and effective in the following Minnesota communities:

The Company remits 100% of these fees collected from ratepayers to the local government unit.

Indicates fee is not applied

	Franchise Fees										
City	Residential	Small C&I Non-demand	Small C&I Demand	Large C&I	Public Street Lighting	Municipal Pumping Non-demand	Municipal Pumping Demand	Effective Date	Expiration Date		
Deephaven	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	04/2002	11/02/2030		
Dilworth	\$2.60	\$6.00	\$21.00	\$136.50	_	\$6.00	\$21.00	05/2018	02/25/2038		
Eagle Lake	\$0.50	\$0.50	\$0.50	\$0.50	_	_	_	10/2012	05/06/2032		
Eden Prairie	\$4.00	\$5.00	\$12.50	\$55.00	_	_	_	04/2018	06/18/2032		
Edina	\$1.95	\$3.40	\$9.50	\$40.50	_	_	_	03/2016	11/03/2035		
Excelsior	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	11/2012	08/02/2032		

(Continued on Sheet No. 5-93.2)

Date Filed: 02-28-18 05-01-18 By: Christopher B. Clark Effective Date:

President, Northern States Power Company, a Minnesota corporation

E,G999/CI-09-970 03-23-11 Docket No. Order Date:

С

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# FRANCHISE AND OTHER CITY FEES (Continued)

Section No. 5 20th Revised Sheet No. 93.2

Franchise and other city fees, as designated below will be included in the customers' monthly bills computed under the indicated rate classes and effective in the following Minnesota communities:

The Company remits 100% of these fees collected from ratepayers to the local government unit.

Indicates fee is not applied

	Franchise Fees									
City	Residential	Small C&I Non-demand	Small C&I Demand	Large C&I	Public Street Lighting	Municipal Pumping Non-demand	Municipal Pumping Demand	Effective Date	Expiration Date	
Goodview	\$2.75	\$3.00	\$25.00	\$110.00	\$25.00	\$2.50	\$10.00	07/2006	04/30/2026	
Grant	\$2.35	\$2.00	\$14.00	\$75.00	\$2.00	\$2.00	\$2.00	01/2015	12/01/2023	
Hayfield	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	01/2015	04/17/2031	
Henderson	\$3.00	\$3.00	\$3.00	\$3.00	_	_	_	04/2012	08/16/2031	
Hopkins	\$3.50	\$6.15	\$24.70	\$170.50	_	_	_	01/2019	12/31/2023	
Inver Grove Heights	\$2.75	\$3.00	\$25.00	\$95.00	_	_	_	01/2018	06/30/2029	
Landfall Village	\$2.25	\$4.75	\$14.00	\$65.00	\$15.50	_	_	04/2014	12/10/2033	
Lexington	\$4.00	\$6.50	\$40.00	\$170.00	_	_	_	03/2017	10/05/2031	
Lindstrom	\$2.50	\$5.00	\$24.00	\$70.00	\$7.00	\$7.00	\$7.00	04/2016	12/17/2028	
Little Canada	\$2.75	\$5.25	\$40.00	\$230.00	\$15.50	\$2.00	\$3.00	07/2010	08/26/2023	
Madison Lake	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	05/2013	02/03/2033	
Mahtomedi	\$1.30	\$1.38	\$14.40	\$110.28	\$12.71	\$0.63	\$14.84	01/2005	10/18/2024	
Mankato	\$1.00	\$1.55	\$16.50	\$223.00	\$1.00	\$0.25	\$1.00	02/2015	09/21/2034	
Mantorville	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	11/2012	08/12/2032	
Maplewood	\$3.00	\$4.75	\$30.00	\$180.00	\$4.00	\$4.00	\$4.00	11/2018	09/26/2024	

(Continued on Sheet No. 5-93.3)

Date Filed: 10-31-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-09-970 Order Date: 03-23-11

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# FRANCHISE AND OTHER CITY FEES (Continued)

Section No. 5 19th Revised Sheet No. 93.2

Franchise and other city fees, as designated below will be included in the customers' monthly bills computed under the indicated rate classes and effective in the following Minnesota communities:

The Company remits 100% of these fees collected from ratepayers to the local government unit.

Indicates fee is not applied

				Franchise Fees					
City	Residential	Small C&I Non-demand	Small C&I Demand	Large C&I	Public Street Lighting	Municipal Pumping Non-demand	Municipal Pumping Demand	Effective Date	Expiration Date
Goodview	\$2.75	\$3.00	\$25.00	\$110.00	\$25.00	\$2.50	\$10.00	07/2006	04/30/2026
Grant	\$2.35	\$2.00	\$14.00	\$75.00	\$2.00	\$2.00	\$2.00	01/2015	12/01/2023
Hayfield	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	01/2015	04/17/2031
Henderson	\$3.00	\$3.00	\$3.00	\$3.00	_	_		04/2012	08/16/2031
Hopkins	\$2.20	\$3.85	\$15.50	\$105.50	_	_	_	01/2014	12/31/2018
Inver Grove Heights	\$2.75	\$3.00	\$25.00	\$95.00	_	_	_	01/2018	06/30/2029
Landfall Village	\$2.25	\$4.75	\$14.00	\$65.00	\$15.50	_	_	04/2014	12/10/2033
Lexington	\$4.00	\$6.50	\$40.00	\$170.00	_	_	_	03/2017	10/05/2031
Lindstrom	\$2.50	\$5.00	\$24.00	\$70.00	\$7.00	\$7.00	\$7.00	04/2016	12/17/2028
Little Canada	\$2.75	\$5.25	\$40.00	\$230.00	\$15.50	\$2.00	\$3.00	07/2010	08/26/2023
Madison Lake	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	05/2013	02/03/2033
Mahtomedi	\$1.30	\$1.38	\$14.40	\$110.28	\$12.71	\$0.63	\$14.84	01/2005	10/18/2024
Mankato	\$1.00	\$1.55	\$16.50	\$223.00	\$1.00	\$0.25	\$1.00	02/2015	09/21/2034
Mantorville	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	11/2012	08/12/2032
Maplewood	\$3.00	\$4.75	\$30.00	\$180.00	\$4.00	\$4.00	\$4.00	11/2018	09/26/2024

(Continued on Sheet No. 5-93.3)

Date Filed: 08-29-18 By: Christopher B. Clark Effective Date: 11-01-18

President, Northern States Power Company, a Minnesota corporation

E,G999/CI-09-970 Order Date: Docket No. 03-23-11 L

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# FRANCHISE AND OTHER CITY FEES (Continued)

Section No. 5 18th Revised Sheet No. 93.2

Franchise and other city fees, as designated below will be included in the customers' monthly bills computed under the indicated rate classes and effective in the following Minnesota communities:

The Company remits 100% of these fees collected from ratepayers to the local government unit.

Indicates fee is not applied

	Franchise Fees								
City	Residential	Small C&I Non-demand	Small C&I Demand	Large C&I	Public Street Lighting	Municipal Pumping Non-demand	Municipal Pumping Demand	Effective Date	Expiration Date
Faribault <sup>1</sup>	\$1.35	\$1.60	\$32.00	\$280.00	_	_	_	01/2006	11/08/2024
Forest Lake	\$4.00	\$2.50	\$18.50	\$75.00	\$7.50	\$2.50	\$18.50	05/2013	01/27/2033
Golden Valley	\$6.00	\$6.00	\$30.00	\$258.00	_	_	_	04/2018	12/17/2027
Goodview	\$2.75	\$3.00	\$25.00	\$110.00	\$25.00	\$2.50	\$10.00	07/2006	04/30/2026
Grant	\$2.35	\$2.00	\$14.00	\$75.00	\$2.00	\$2.00	\$2.00	01/2015	12/01/2023
Hayfield	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	01/2015	04/17/2031
Henderson	\$3.00	\$3.00	\$3.00	\$3.00	_	_	_	04/2012	08/16/2031
Hopkins	\$2.20	\$3.85	\$15.50	\$105.50	_	_	_	01/2014	12/31/2018
Inver Grove Heights	\$2.75	\$3.00	\$25.00	\$95.00	_	_	_	01/2018	06/30/2029
Landfall Village	\$2.25	\$4.75	\$14.00	\$65.00	\$15.50	_	_	04/2014	12/10/2033
Lexington	\$4.00	\$6.50	\$40.00	\$170.00	_	_	_	03/2017	10/05/2031
Lindstrom	\$2.50	\$5.00	\$24.00	\$70.00	\$7.00	\$7.00	\$7.00	04/2016	12/17/2028
Little Canada	\$2.75	\$5.25	\$40.00	\$230.00	\$15.50	\$2.00	\$3.00	07/2010	08/26/2023
Madison Lake	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	05/2013	02/03/2033
Mahtomedi	\$1.30	\$1.38	\$14.40	\$110.28	\$12.71	\$0.63	\$14.84	01/2005	10/18/2024
Mankato	\$1.00	\$1.55	\$16.50	\$223.00	\$1.00	\$0.25	\$1.00	02/2015	09/21/2034
Mantorville	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	\$2.00	11/2012	08/12/2032
Maplewood	\$1.25	\$2.50	\$15.00	\$112.50	\$1.25	\$1.25	\$1.25	12/2013	09/26/2024

<sup>&</sup>lt;sup>1</sup> Faribault: The franchise fee excludes invoices to the city for street lighting and municipal pumping.

(Continued on Sheet No. 5-93.3)

Date Filed: 01-29-18 By: Christopher B. Clark Effective Date: 04-01-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-09-970 Order Date: 03-23-11

NOT PUBLIC DATA EXCISED

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# FRANCHISE AND OTHER CITY FEES (Continued)

Section No. 5 18th Revised Sheet No. 93.3

Franchise and other city fees, as designated below will be included in the customers' monthly bills computed under the indicated rate classes and effective in the following Minnesota communities:

The Company remits 100% of these fees collected from ratepayers to the local government unit.

Indicates fee is not applied

				Franchise Fees						
City	Residential	Small C&I Non-demand	Small C&I Demand	Large C&I	Public Street Lighting	Municipal Pumping Non-demand	Municipal Pumping Demand	Effective Date	Expiration Date	
Minneapolis	5.0%	5.5% <100 kW	5.5% <100 kW	3.5% ≥100 kW at primary or higher voltage  5.5% ≥100 kW at secondary voltage	5.5%	5.5%	5.5%	03/2018	10/16/2024	
Minnetonka	\$4.50	\$4.50	\$13.50	\$45.00	_	\$4.50	\$4.50	01/2019	05/14/2038	
Monticello	\$1.95	\$5.50	\$31.00	\$190.00	\$12.00	\$12.00	\$31.00	06/2007	05/31/2027	
Mound	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	01/2017	12/31/2020	
Mounds View	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	01/2019	12/31/2021	
New Brighton	\$0.0047 per kWh	\$0.0043 per kWh	\$0.0033 per kWh	\$0.0017 per kWh	\$0.0054 per kWh	\$0.0046 per kWh	\$0.0033 per kWh	03/2016	11/25/2022	
New Hope	\$3.00	\$6.00	\$26.00	\$115.00	_	_	_	01/2017	06/26/2031	
New Richland	\$1.00	\$1.00	\$1.00	\$1.00	_	_	_	02/2013	07/11/2024	
Newport	\$1.00	\$1.50	\$14.00	\$70.00	\$5.00	\$1.00	\$10.00	01/2011	10/18/2026	
North Branch	\$3.50	\$3.50	\$8.75	\$17.50	_	_	_	08/2018	04/09/2038	

(Continued on Sheet No. 5-93.4)

Date Filed: 10-31-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-09-970 Order Date: 03-23-11 R

С

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# FRANCHISE AND OTHER CITY FEES (Continued)

Section No. 5 17th Revised Sheet No. 93.3

Franchise and other city fees, as designated below will be included in the customers' monthly bills computed under the indicated rate classes and effective in the following Minnesota communities:

The Company remits 100% of these fees collected from ratepayers to the local government unit.

Indicates fee is not applied

				Franchise Fees					
City	Residential	Small C&I Non-demand	Small C&I Demand	Large C&I	Public Street Lighting	Municipal Pumping Non-demand	Municipal Pumping Demand	Effective Date	Expiration Date
Minneapolis	5.0%	5.5% <100 kW	5.5% <100 kW	3.5% ≥100 kW at primary or higher voltage  5.5% ≥100 kW at secondary voltage	5.5%	5.5%	5.5%	03/2018	10/16/2024
Minnetonka	\$2.50	\$4.50	\$4.50	\$4.50	_	\$4.50	\$4.50	08/2018	05/14/2038
Monticello	\$1.95	\$5.50	\$31.00	\$190.00	\$12.00	\$12.00	\$31.00	06/2007	05/31/2027
Mound	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	01/2017	12/31/2020
Mounds View	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	01/2018	12/31/2018
New Brighton	\$0.0047 per kWh	\$0.0043 per kWh	\$0.0033 per kWh	\$0.0017 per kWh	\$0.0054 per kWh	\$0.0046 per kWh	\$0.0033 per kWh	03/2016	11/25/2022
New Hope	\$3.00	\$6.00	\$26.00	\$115.00	_	_	_	01/2017	06/26/2031
New Richland	\$1.00	\$1.00	\$1.00	\$1.00	_	_	_	02/2013	07/11/2024
Newport	\$1.00	\$1.50	\$14.00	\$70.00	\$5.00	\$1.00	\$10.00	01/2011	10/18/2026
North Branch	\$3.50	\$3.50	\$8.75	\$17.50	_	_	_	08/2018	04/09/2038

(Continued on Sheet No. 5-93.4)

Date Filed: By: Christopher B. Clark Effective Date: 08-01-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-09-970 Order Date: 03-23-11 С

Ν

2020-2034 Upper Midwest Resource Plan Page 196 of 421 Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# FRANCHISE AND OTHER CITY FEES (Continued)

Section No. 5 16th Revised Sheet No. 93.3

Franchise and other city fees, as designated below will be included in the customers' monthly bills computed under the indicated rate classes and effective in the following Minnesota communities:

The Company remits 100% of these fees collected from ratepayers to the local government unit.

Indicates fee is not applied

Franchise Fees										
City	Residential	Small C&I Non-demand	Small C&I Demand	Large C&I	Public Street Lighting	Municipal Pumping Non-demand	Municipal Pumping Demand	Effective Date	Expiration Date	
Minneapolis	5.0%	5.5% <100 kW	5.5% <100 kW	3.5% ≥100 kW at primary or higher voltage  5.5% ≥100 kW at secondary voltage	5.5%	5.5%	5.5%	03/2018	10/16/2024	
Minnetonka	\$2.50	\$4.50	\$4.50	\$4.50	_	\$4.50	\$4.50	11/2007	08/09/2018	
Monticello	\$1.95	\$5.50	\$31.00	\$190.00	\$12.00	\$12.00	\$31.00	06/2007	05/31/2027	
Mound	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	\$2.75	01/2017	12/31/2020	
Mounds View	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	01/2018	12/31/2018	
New Brighton	\$0.0047 per kWh	\$0.0043 per kWh	\$0.0033 per kWh	\$0.0017 per kWh	\$0.0054 per kWh	\$0.0046 per kWh	\$0.0033 per kWh	03/2016	11/25/2022	
New Hope	\$3.00	\$6.00	\$26.00	\$115.00	_	_	_	01/2017	06/26/2031	
New Richland	\$1.00	\$1.00	\$1.00	\$1.00	_	_	_	02/2013	07/11/2024	
Newport	\$1.00	\$1.50	\$14.00	\$70.00	\$5.00	\$1.00	\$10.00	01/2011	10/18/2026	

(Continued on Sheet No. 5-93.4)

Date Filed: 12-21-17 By: Christopher B. Clark Effective Date: 03-01-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-09-970 Order Date: 03-23-11

R

R R

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# FRANCHISE AND OTHER CITY FEES (Continued)

Section No. 5 21st Revised Sheet No. 93.4

Franchise and other city fees, as designated below will be included in the customers' monthly bills computed under the indicated rate classes and effective in the following Minnesota communities:

The Company remits 100% of these fees collected from ratepayers to the local government unit.

Indicates fee is not applied

Franchise Fees										
City	Residential	Small C&I Non-demand	Small C&I Demand	Large C&I	Public Street Lighting	Municipal Pumping Non-demand	Municipal Pumping Demand	Effective Date	Expiration Date	
North Mankato	\$1.00	\$1.55	\$16.50	\$223.00	\$17.62	\$1.46	\$12.30	04/2015	10/05/2034	
Oakdale	\$1.50	\$3.00	\$10.00	\$8.00	\$6.00	\$2.00	\$8.00	11/2013	10/27/2023	
Osseo	\$1.28	\$2.07	\$17.57	\$102.65	\$6.20	\$0.45	\$2.55	03/2012	10/26/2023	
Owatonna	\$0.0016 per kWh Customer peak demand less than 100 kW in calendar year \$0.0014 per kWh Customer peak demand greater than 100 kW in calendar year							01/2003	04/01/2022	
Plymouth	\$2.12	\$3.18	\$10.61	\$42.44	_	_	_	08/2018	07/09/2027	
Prior Lake	\$1.50	\$5.00	\$10.00	\$50.00	_	_	_	07/2006	03/19/2026	
Richmond	\$1.00	\$1.00	\$1.00	\$1.00	_	_	_	05/2013	05/03/2031	
Richfield	\$4.10	\$12.50	\$30.00	\$185.00	_	_	_	04/2014	03/12/2027	
Robbinsdale	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	06/2019	07/01/2021	
Rogers	\$5.00	\$7.00	\$45.00	\$210.00	\$17.00	\$12.00	\$65.00	01/2016	11/22/2024	
Sartell	\$4.00	\$6.75	\$15.00	\$109.00	_	_	_	01/2017	09/11/2036	
Sauk Rapids	4.0% Customers who purchase \$50,000 or less in calendar year  1.5% That part which exceeds \$50,000 in calendar year							02/2016	06/15/2023	
Shakopee <sup>1</sup>	3.0%	3.0%	3.0%	3.0%	_	_	_	01/2017	08/06/2021	
Shoreview	\$2.50	\$3.00	\$30.00	\$310.00	_	_	_	10/2013	07/17/2031	

<sup>&</sup>lt;sup>1</sup> Shakopee: The fee collected shall total three percent (3%) of the Company's gross revenues from its operations within the City collected from each customer of each class. For customers in the Large C&I class, the three percent franchise fee is applicable to the first \$950,000 of calendar year gross revenues. The franchise fee is reduced to one-half percent (0.5%) for the remaining amount of annual gross revenues exceeding \$950,000.

(Continued on Sheet No. 5-93.5)

Date Filed: 03-26-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-09-970 Order Date: 03-23-11

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# FRANCHISE AND OTHER CITY FEES (Continued)

Section No. 5 20th Revised Sheet No. 93.4

Franchise and other city fees, as designated below will be included in the customers' monthly bills computed under the indicated rate classes and effective in the following Minnesota communities:

The Company remits 100% of these fees collected from ratepayers to the local government unit.

Indicates fee is not applied

Franchise Fees									
City	Residential	Small C&I Non-demand	Small C&I Demand	Large C&I	Public Street Lighting	Municipal Pumping Non-demand	Municipal Pumping Demand	Effective Date	Expiration Date
North Mankato	\$1.00	\$1.55	\$16.50	\$223.00	\$17.62	\$1.46	\$12.30	04/2015	10/05/2034
Oakdale	\$1.50	\$3.00	\$10.00	\$8.00	\$6.00	\$2.00	\$8.00	11/2013	10/27/2023
Osseo	\$1.28	\$2.07	\$17.57	\$102.65	\$6.20	\$0.45	\$2.55	03/2012	10/26/2023
Owatonna	\$0.0016 pc		•	and less than 100 l and greater than 10		•		01/2003	04/01/2022
Plymouth	\$2.12	\$3.18	\$10.61	\$42.44	_	_	_	08/2018	07/09/2027
Prior Lake	\$1.50	\$5.00	\$10.00	\$50.00	_	_	_	07/2006	03/19/2026
Richmond	\$1.00	\$1.00	\$1.00	\$1.00	_	_	_	05/2013	05/03/2031
Richfield	\$4.10	\$12.50	\$30.00	\$185.00	_	_	_	04/2014	03/12/2027
Robbinsdale	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	06/2017	07/01/2019
Rogers	\$5.00	\$7.00	\$45.00	\$210.00	\$17.00	\$12.00	\$65.00	01/2016	11/22/2024
Sartell	\$4.00	\$6.75	\$15.00	\$109.00	_	_	_	01/2017	09/11/2036
Sauk Rapids	4.0% Customers who purchase \$50,000 or less in calendar year 1.5% That part which exceeds \$50,000 in calendar year						02/2016	06/15/2023	
Shakopee <sup>1</sup>	3.0%	3.0%	3.0%	3.0%	_	_	_	01/2017	08/06/2021
Shoreview	\$2.50	\$3.00	\$30.00	\$310.00	_	_	_	10/2013	07/17/2031

<sup>&</sup>lt;sup>1</sup> Shakopee: The fee collected shall total three percent (3%) of the Company's gross revenues from its operations within the City collected from each customer of each class. For customers in the Large C&I class, the three percent franchise fee is applicable to the first \$950,000 of calendar year gross revenues. The franchise fee is reduced to one-half percent (0.5%) for the remaining amount of annual gross revenues exceeding \$950,000.

(Continued on Sheet No. 5-93.5)

Date Filed: 05-31-18 By: Christopher B. Clark Effective Date: 08-01-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-09-970 Order Date: 03-23-11

R

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# FRANCHISE AND OTHER CITY FEES (Continued)

Section No. 5 19th Revised Sheet No. 93.4

Franchise and other city fees, as designated below will be included in the customers' monthly bills computed under the indicated rate classes and effective in the following Minnesota communities:

The Company remits 100% of these fees collected from ratepayers to the local government unit.

Indicates fee is not applied

	Franchise Fees									
City	Residential	Small C&I Non-demand	Small C&I Demand	Large C&I	Public Street Lighting	Municipal Pumping Non-demand	Municipal Pumping Demand	Effective Date	Expiration Date	
North Mankato	\$1.00	\$1.55	\$16.50	\$223.00	\$17.62	\$1.46	\$12.30	04/2015	10/05/2034	
Oakdale	\$1.50	\$3.00	\$10.00	\$8.00	\$6.00	\$2.00	\$8.00	11/2013	10/27/2023	
Osseo	\$1.28	\$2.07	\$17.57	\$102.65	\$6.20	\$0.45	\$2.55	03/2012	10/26/2023	
Owatonna	\$0.0016 pc		•	and less than 100 l and greater than 10		•		01/2003	04/01/2022	
Plymouth	\$2.06	\$3.09	\$10.30	\$41.20	_	_	_	06/2017	07/09/2027	
Prior Lake	\$1.50	\$5.00	\$10.00	\$50.00	_	_	_	07/2006	03/19/2026	
Richmond	\$1.00	\$1.00	\$1.00	\$1.00	_	_	_	05/2013	05/03/2031	
Richfield	\$4.10	\$12.50	\$30.00	\$185.00	_	_	_	04/2014	03/12/2027	
Robbinsdale	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	06/2017	07/01/2019	
Rogers	\$5.00	\$7.00	\$45.00	\$210.00	\$17.00	\$12.00	\$65.00	01/2016	11/22/2024	
Sartell	\$4.00	\$6.75	\$15.00	\$109.00	_	_	_	01/2017	09/11/2036	
Sauk Rapids	4.0% Customers who purchase \$50,000 or less in calendar year 1.5% That part which exceeds \$50,000 in calendar year							02/2016	06/15/2023	
Shakopee <sup>1</sup>	3.0%	3.0%	3.0%	3.0%	_	_		01/2017	08/06/2021	
Shoreview	\$2.50	\$3.00	\$30.00	\$310.00	_			10/2013	07/17/2031	

<sup>&</sup>lt;sup>1</sup> Shakopee: The fee collected shall total three percent (3%) of the Company's gross revenues from its operations within the City collected from each customer of each class. For customers in the Large C&I class, the three percent franchise fee is applicable to the first \$950,000 of calendar year gross revenues. The franchise fee is reduced to one-half percent (0.5%) for the remaining amount of annual gross revenues exceeding \$950,000.

(Continued on Sheet No. 5-93.5)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## FRANCHISE AND OTHER CITY FEES (Continued)

Section No. 5 18th Revised Sheet No. 93.5

Franchise and other city fees, as designated below will be included in the customers' monthly bills computed under the indicated rate classes and effective in the following Minnesota communities:

The Company remits 100% of these fees collected from ratepayers to the local government unit.

Indicates fee is not applied

Franchise Fees									
City	Residential	Small C&I Non-demand	Small C&I Demand	Large C&I	Public Street Lighting	Municipal Pumping Non-demand	Municipal Pumping Demand	Effective Date	Expiration Date
Shorewood	\$4.00	\$8.00	\$10.00	\$25.00	_	_		10/2018	06/24/2038
South St. Paul <sup>1</sup>	5.0%	5.0%	5.0%	5.0%	_	_	_	04/2018	04/05/2030
Spicer	\$1.00	\$1.00	\$8.00	\$8.00	_	_		02/2013	10/01/2032
Spring Lake Park	\$0.80	\$1.20	\$8.50	\$50.00	_	_	_	04/2015	01/04/2035
St. Cloud <sup>2</sup>	4.0%	4.0%	4.0%	4.0%	_	_	_	12/2017	12/31/2024
St. Joseph	\$1.00	\$1.75	\$10.00	2% purchase ≤\$100,000 in calendar year  1.5% that part >\$100,000 in calendar year	\$8.00	\$1.00	\$10.00	02/2004	11/19/2023
St. Louis Park	\$5.50	\$10.00	\$46.50	\$146.50	_	\$10.00	\$46.50	06/2019	09/18/2036
St. Michael	\$3.50	\$2.50	\$2.50	\$10.00	\$10.00	\$2.50	\$10.00	05/2011	11/24/2023
St. Paul <sup>3</sup> See fee schedule in the Notes section on the following sheets.						11/2006	08/31/2026		
St. Paul Park	\$1.50	\$2.00	\$25.00	\$335.00	\$10.00	\$1.00	\$5.00	08/2005	05/15/2025
Stillwater	\$2.00	\$2.50	\$18.00	\$125.00	\$4.00	\$2.00	\$18.00	06/2015	02/16/2035

<sup>&</sup>lt;sup>1</sup> South St. Paul: The franchise fee excludes rate schedules for highway lighting, municipal street lighting, municipal water pumping, municipal traffic signals, municipal fire sirens, and municipal sewage disposal service.

(Continued on Sheet No. 5-93.6)

Date Filed: 03-26-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-09-970 Order Date: 03-23-11

R

<sup>&</sup>lt;sup>2</sup> St. Cloud: The franchise fee for residential heating customers will be 1.5% during the months of November – April.

<sup>&</sup>lt;sup>3</sup> St. Paul: The monthly franchise fee will be as stated on the following sheets. The residential service franchise fee will be as stated except during the months of November - April when there will be no fee. The fee shall not exceed \$620,000 during any calendar year from any large commercial and industrial customer qualifying for service on the Competitive Market Rider. The schedule on the following sheets show the meter, energy, and demand factor for each year of the St. Paul franchise and for each of the customer classifications.

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

#### MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# FRANCHISE AND OTHER CITY FEES (Continued)

Section No. 5 17th Revised Sheet No. 93.5

Franchise and other city fees, as designated below will be included in the customers' monthly bills computed under the indicated rate classes and effective in the following Minnesota communities:

The Company remits 100% of these fees collected from ratepayers to the local government unit.

Indicates fee is not applied

	Franchise Fees										
City	Residential	Small C&I Non-demand	Small C&I Demand	Large C&I	Public Street Lighting	Municipal Pumping Non-demand	Municipal Pumping Demand	Effective Date	Expiration Date		
Shorewood	\$4.00	\$8.00	\$10.00	\$25.00	_	_	_	10/2018	06/24/2038		
South St. Paul <sup>1</sup>	5.0%	5.0%	5.0%	5.0%	_	_	_	04/2018	04/05/2030		
Spicer	\$1.00	\$1.00	\$8.00	\$8.00	_	_	_	02/2013	10/01/2032		
Spring Lake Park	\$0.80	\$1.20	\$8.50	\$50.00	_	_	_	04/2015	01/04/2035		
St. Cloud <sup>2</sup>	4.0%	4.0%	4.0%	4.0%	_	_	_	12/2017	12/31/2024		
St. Joseph	\$1.00	\$1.75	\$10.00	2% purchase ≤\$100,000 in calendar year  1.5% that part >\$100,000 in calendar year	\$8.00	\$1.00	\$10.00	02/2004	11/19/2023		
St. Louis Park	\$4.00	\$8.50	\$45.00	\$145.00	_	\$8.50	\$45.00	02/2017	09/18/2036		
St. Michael	\$3.50	\$2.50	\$2.50	\$10.00	\$10.00	\$2.50	\$10.00	05/2011	11/24/2023		
St. Paul <sup>3</sup> See fee schedule in the Notes section on the following sheets.						11/2006	08/31/2026				
St. Paul Park	\$1.50	\$2.00	\$25.00	\$335.00	\$10.00	\$1.00	\$5.00	08/2005	05/15/2025		
Stillwater	\$2.00	\$2.50	\$18.00	\$125.00	\$4.00	\$2.00	\$18.00	06/2015	02/16/2035		

<sup>&</sup>lt;sup>1</sup> South St. Paul: The franchise fee excludes rate schedules for highway lighting, municipal street lighting, municipal water pumping, municipal traffic signals, municipal fire sirens, and municipal sewage disposal service.

(Continued on Sheet No. 5-93.6)

Date Filed: 07-26-18 By: Christopher B. Clark Effective Date: 10-01-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-09-970 Order Date: 03-23-11

Ν

<sup>&</sup>lt;sup>2</sup> St. Cloud: The franchise fee for residential heating customers will be 1.5% during the months of November – April.

<sup>&</sup>lt;sup>3</sup> St. Paul: The monthly franchise fee will be as stated on the following sheets. The residential service franchise fee will be as stated except during the months of November - April when there will be no fee. The fee shall not exceed \$620,000 during any calendar year from any large commercial and industrial customer qualifying for service on the Competitive Market Rider. The schedule on the following sheets show the meter, energy, and demand factor for each year of the St. Paul franchise and for each of the customer classifications.

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# FRANCHISE AND OTHER CITY FEES (Continued)

Section No. 5 16th Revised Sheet No. 93.5

Franchise and other city fees, as designated below will be included in the customers' monthly bills computed under the indicated rate classes and effective in the following Minnesota communities:

The Company remits 100% of these fees collected from ratepayers to the local government unit.

Indicates fee is not applied

	Franchise Fees										
City	Residential	Small C&I Non-demand	Small C&I Demand	Large C&I	Public Street Lighting	Municipal Pumping Non-demand	Municipal Pumping Demand	Effective Date	Expiration Date		
South St. Paul <sup>1</sup>	5.0%	5.0%	5.0%	5.0%	_	_	_	04/2018	04/05/2030		
Spicer	\$1.00	\$1.00	\$8.00	\$8.00	_	_	_	02/2013	10/01/2032		
Spring Lake Park	\$0.80	\$1.20	\$8.50	\$50.00	_	_	_	04/2015	01/04/2035		
St. Cloud <sup>2</sup>	4.0%	4.0%	4.0%	4.0%	_	_	_	12/2017	12/31/2024		
St. Joseph	\$1.00	\$1.75	\$10.00	2% purchase ≤\$100,000 in calendar year  1.5% that part >\$100,000 in calendar year	\$8.00	\$1.00	\$10.00	02/2004	11/19/2023		
St. Louis Park	\$4.00	\$8.50	\$45.00	\$145.00	_	\$8.50	\$45.00	02/2017	09/18/2036		
St. Michael	\$3.50	\$2.50	\$2.50	\$10.00	\$10.00	\$2.50	\$10.00	05/2011	11/24/2023		
St. Paul <sup>3</sup>	St. Paul <sup>3</sup> See fee schedule in the Notes section on the following sheets.						11/2006	08/31/2026			
St. Paul Park	\$1.50	\$2.00	\$25.00	\$335.00	\$10.00	\$1.00	\$5.00	08/2005	05/15/2025		
Stillwater	\$2.00	\$2.50	\$18.00	\$125.00	\$4.00	\$2.00	\$18.00	06/2015	02/16/2035		

(Continued on Sheet No. 5-93.6)

Date Filed: 01-29-18 By: Christopher B. Clark Effective Date: 04-01-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-09-970 Order Date: 03-23-11

R

<sup>&</sup>lt;sup>1</sup> South St. Paul: The franchise fee excludes rate schedules for highway lighting, municipal street lighting, municipal water pumping, municipal traffic signals, municipal fire sirens, and municipal sewage disposal service.

<sup>&</sup>lt;sup>2</sup> St. Cloud: The franchise fee for residential heating customers will be 1.5% during the months of November – April.

<sup>&</sup>lt;sup>3</sup> St. Paul: The monthly franchise fee will be as stated on the following sheets. The residential service franchise fee will be as stated except during the months of November - April when there will be no fee. The fee shall not exceed \$620,000 during any calendar year from any large commercial and industrial customer qualifying for service on the Competitive Market Rider. The schedule on the following sheets show the meter, energy, and demand factor for each year of the St. Paul franchise and for each of the customer classifications.

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# FRANCHISE AND OTHER CITY FEES (Continued)

Section No. 5 4th Revised Sheet No. 93.6

Notes: <sup>3</sup> St. Paul (continued)

Customer Class		Meter Factor -	· Monthly Charge	per Account	
Start Date	1-Nov-2006	1-Nov-2008	1-Nov-2010	1-Nov-2012	1-Nov-2014
End Date	31-Oct-2008	31-Oct-2010	31-Oct-2012	31-Oct-2014	31-Oct-2016
Residential (May - October)	\$2.63	\$2.70	\$2.77	\$2.84	\$2.91
Small Commercial & Industrial					
Non-Demand	\$2.96	\$3.09	\$3.22	\$3.35	\$3.48
Firm Secondary	\$2.96	\$3.09	\$3.22	\$3.35	\$3.48
Firm Primary	\$2.96	\$3.09	\$3.22	\$3.35	\$3.48
Interruptible Secondary	\$2.96	\$3.09	\$3.22	\$3.35	\$3.48
Interruptible Primary	\$2.96	\$3.09	\$3.22	\$3.35	\$3.48
Large Commercial & Industrial					
Special	\$5.04	\$5.11	\$5.18	\$5.25	\$5.32
Firm Secondary	\$5.04	\$5.11	\$5.18	\$5.25	\$5.32
Firm Primary	\$5.04	\$5.11	\$5.18	\$5.25	\$5.32
Firm Trans. Transf.	\$5.04	\$5.11	\$5.18	\$5.25	\$5.32
Interruptible Secondary	\$5.04	\$5.11	\$5.18	\$5.25	\$5.32
Interruptible Primary	\$5.04	\$5.11	\$5.18	\$5.25	\$5.32
Interruptible TT	\$5.04	\$5.11	\$5.18	\$5.25	\$5.32
Standby Service	None	None	None	None	None
Public Street & Highway Lighting	\$6.74	\$6.81	\$6.88	\$6.95	\$7.02
Small Municipal Pumping					
Non-Demand	\$2.96	\$3.09	\$3.22	\$3.35	\$3.48
Demand Secondary	\$2.96	\$3.09	\$3.22	\$3.35	\$3.48
Demand Primary	\$2.96	\$3.09	\$3.22	\$3.35	\$3.48
Large Municipal Pumping					
Demand Primary (Sec cust)	\$2.96	\$3.09	\$3.22	\$3.35	\$3.48
Fire and Civil Defense Siren Service	\$2.96	\$3.09	\$3.22	\$3.35	\$3.48

(Continued on Sheet No. 5-93.7)

Date Filed: 11-02-15 Effective Date: By: Christopher B. Clark 10-01-17

President, Northern States Power Company, a Minnesota corporation

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# FRANCHISE AND OTHER CITY FEES (Continued)

Section No. 5 4th Revised Sheet No. 93.7

Notes:

<sup>&</sup>lt;sup>3</sup> St. Paul (continued)

Customer Class		Meter Factor -	· Monthly Charge	e per Account	
Start Date	1-Nov-2016	1-Nov-2018	1-Nov-2020	1-Nov-2022	1-Nov-2024
End Date	31-Oct-2018	31-Oct-2020	31-Oct-2022	31-Oct-2024	31-Aug-2026
Residential (May - October)	\$3.03	\$3.15	\$3.27	\$3.40	\$3.54
Small Commercial & Industrial					
Non-Demand	\$3.62	\$3.76	\$3.91	\$4.07	\$4.23
Firm Secondary	\$3.62	\$3.76	\$3.91	\$4.07	\$4.23
Firm Primary	\$3.62	\$3.76	\$3.91	\$4.07	\$4.23
Interruptible Secondary	\$3.62	\$3.76	\$3.91	\$4.07	\$4.23
Interruptible Primary	\$3.62	\$3.76	\$3.91	\$4.07	\$4.23
Large Commercial & Industrial					
Special	\$5.53	\$5.75	\$5.98	\$6.22	\$6.47
Firm Secondary	\$5.53	\$5.75	\$5.98	\$6.22	\$6.47
Firm Primary	\$5.53	\$5.75	\$5.98	\$6.22	\$6.47
Firm Trans. Transf.	\$5.53	\$5.75	\$5.98	\$6.22	\$6.47
Interruptible Secondary	\$5.53	\$5.75	\$5.98	\$6.22	\$6.47
Interruptible Primary	\$5.53	\$5.75	\$5.98	\$6.22	\$6.47
Interruptible TT	\$5.53	\$5.75	\$5.98	\$6.22	\$6.47
Standby Service	None	None	None	None	None
Public Street & Highway Lighting	\$7.30	\$7.59	\$7.90	\$8.21	\$8.54
Small Municipal Pumping					
Non-Demand	\$3.62	\$3.76	\$3.91	\$4.07	\$4.23
Demand Secondary	\$3.62	\$3.76	\$3.91	\$4.07	\$4.23
Demand Primary	\$3.62	\$3.76	\$3.91	\$4.07	\$4.23
Large Municipal Pumping					
Demand Primary (Sec cust)	\$3.62	\$3.76	\$3.91	\$4.07	\$4.23
Fire and Civil Defense Siren Service	\$3.62	\$3.76	\$3.91	\$4.07	\$4.23

(Continued on Sheet No. 5-93.8)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# FRANCHISE AND OTHER CITY FEES (Continued)

Section No. 5 4th Revised Sheet No. 93.8

Notes: <sup>3</sup> St. Paul (continued)

Customer Class		Energy Facto	or - Monthly Cha	rge per kWh	
Start Date	1-Nov-2006	1-Nov-2008	1-Nov-2010	1-Nov-2012	1-Nov-2014
End Date	31-Oct-2008	31-Oct-2010	31-Oct-2012	31-Oct-2014	31-Oct-2016
Residential (May - October)	\$0.0094	\$0.0095	\$0.0096	\$0.0097	\$0.0098
Small Commercial & Industrial					
Non-Demand	\$0.0040	\$0.0040	\$0.0040	\$0.0040	\$0.0040
Firm Secondary	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018
Firm Primary	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018
Interruptible Secondary	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018
Interruptible Primary	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018
Large Commercial & Industrial					
Special	\$0.0028	\$0.0028	\$0.0028	\$0.0028	\$0.0028
Firm Secondary	\$0.0013	\$0.0013	\$0.0013	\$0.0013	\$0.0013
Firm Primary	\$0.0013	\$0.0013	\$0.0013	\$0.0013	\$0.0013
Firm Trans. Transf.	\$0.0013	\$0.0013	\$0.0013	\$0.0013	\$0.0013
Interruptible Secondary	\$0.0013	\$0.0013	\$0.0013	\$0.0013	\$0.0013
Interruptible Primary	\$0.0013	\$0.0013	\$0.0013	\$0.0013	\$0.0013
Interruptible TT	\$0.0013	\$0.0013	\$0.0013	\$0.0013	\$0.0013
Standby Service	None	None	None	None	None
Public Street & Highway Lighting	\$0.0040	\$0.0040	\$0.0040	\$0.0040	\$0.0040
Small Municipal Pumping					
Non-Demand	\$0.0040	\$0.0040	\$0.0040	\$0.0040	\$0.0040
Demand Secondary	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018
Demand Primary	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018
Large Municipal Pumping					
Demand Primary (Sec cust)	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018
Fire and Civil Defense Siren Service	\$0.0018	\$0.0018	\$0.0018	\$0.0018	\$0.0018

(Continued on Sheet No. 5-93.9)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# FRANCHISE AND OTHER CITY FEES (Continued)

Section No. 5 4th Revised Sheet No. 93.9

Notes

<sup>3</sup> St. Paul (continued)

Customer Class		Energy Facto	or - Monthly Cha	rge per kWh	
Start Date	1-Nov-2016	1-Nov-2018	1-Nov-2020	1-Nov-2022	1-Nov-2024
End Date	31-Oct-2018	31-Oct-2020	31-Oct-2022	31-Oct-2024	31-Aug-2026
Residential (May - October)	\$0.0102	\$0.0106	\$0.0110	\$0.0115	\$0.0119
Small Commercial & Industrial					
Non-Demand	\$0.0042	\$0.0043	\$0.0045	\$0.0047	\$0.0049
Firm Secondary	\$0.0019	\$0.0019	\$0.0020	\$0.0021	\$0.0022
Firm Primary	\$0.0019	\$0.0019	\$0.0020	\$0.0021	\$0.0022
Interruptible Secondary	\$0.0019	\$0.0019	\$0.0020	\$0.0021	\$0.0022
Interruptible Primary	\$0.0019	\$0.0019	\$0.0020	\$0.0021	\$0.0022
Large Commercial & Industrial					
Special	\$0.0029	\$0.0030	\$0.0031	\$0.0033	\$0.0034
Firm Secondary	\$0.0014	\$0.0014	\$0.0015	\$0.0015	\$0.0016
Firm Primary	\$0.0014	\$0.0014	\$0.0015	\$0.0015	\$0.0016
Firm Trans. Transf.	\$0.0014	\$0.0014	\$0.0015	\$0.0015	\$0.0016
Interruptible Secondary	\$0.0014	\$0.0014	\$0.0015	\$0.0015	\$0.0016
Interruptible Primary	\$0.0014	\$0.0014	\$0.0015	\$0.0015	\$0.0016
Interruptible TT	\$0.0014	\$0.0014	\$0.0015	\$0.0015	\$0.0016
Standby Service	None	None	None	None	None
Public Street & Highway Lighting	\$0.0042	\$0.0043	\$0.0045	\$0.0047	\$0.0049
Small Municipal Pumping					
Non-Demand	\$0.0042	\$0.0043	\$0.0045	\$0.0047	\$0.0049
Demand Secondary	\$0.0019	\$0.0019	\$0.0020	\$0.0021	\$0.0022
Demand Primary	\$0.0019	\$0.0019	\$0.0020	\$0.0021	\$0.0022
Large Municipal Pumping					
Demand Primary (Sec cust)	\$0.0019	\$0.0019	\$0.0020	\$0.0021	\$0.0022
Fire and Civil Defense Siren Service	\$0.0019	\$0.0019	\$0.0020	\$0.0021	\$0.0022

(Continued on Sheet No. 5-93.10)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# FRANCHISE AND OTHER CITY FEES (Continued)

Section No. 5 4th Revised Sheet No. 93.10

Notes: <sup>3</sup> St. Paul (continued)

Customer Class		Demand Fac	tor - Monthly Ch	arge per kW	
Start Date	1-Nov-2006	1-Nov-2008	1-Nov-2010	1-Nov-2012	1-Nov-2014
End Date	31-Oct-2008	31-Oct-2010	31-Oct-2012	31-Oct-2014	31-Oct-2016
Residential (May - October)	None	None	None	None	None
Small Commercial & Industrial					
Non-Demand	None	None	None	None	None
Firm Secondary	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10
Firm Primary	\$1.06	\$1.06	\$1.06	\$1.06	\$1.06
Interruptible Secondary	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10
Interruptible Primary	\$1.06	\$1.06	\$1.06	\$1.06	\$1.06
Large Commercial & Industrial					
Special	None	None	None	None	None
Firm Secondary	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10
Firm Primary	\$1.06	\$1.06	\$1.06	\$1.06	\$1.06
Firm Trans. Transf.	\$1.06	\$1.06	\$1.06	\$1.06	\$1.06
Interruptible Secondary	\$0.81	\$0.81	\$0.81	\$0.81	\$0.81
Interruptible Primary	\$0.71	\$0.71	\$0.71	\$0.71	\$0.71
Interruptible TT	\$0.51	\$0.54	\$0.57	\$0.60	\$0.63
Standby Service	\$0.30	\$0.33	\$0.36	\$0.39	\$0.42
Public Street & Highway Lighting	None	None	None	None	None
Small Municipal Pumping					
Non-Demand	None	None	None	None	None
Demand Secondary	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10
Demand Primary	\$1.06	\$1.06	\$1.06	\$1.06	\$1.06
Large Municipal Pumping					
Demand Primary (Sec cust)	\$1.06	\$1.06	\$1.06	\$1.06	\$1.06
Fire and Civil Defense Siren Service	\$1.06	\$1.06	\$1.06	\$1.06	\$1.06

(Continued on Sheet No. 5-93.11)

Date Filed: 11-02-15 Effective Date: By: Christopher B. Clark 10-01-17

President, Northern States Power Company, a Minnesota corporation

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# FRANCHISE AND OTHER CITY FEES (Continued)

Section No. 5 4th Revised Sheet No. 93.11

Notes:

<sup>&</sup>lt;sup>3</sup> St. Paul (continued)

Customer Class	Demand Factor - Monthly Charge per kW							
Start Date	1-Nov-2016	1-Nov-2018	1-Nov-2020	1-Nov-2022	1-Nov-2024			
End Date	31-Oct-2018	31-Oct-2020	31-Oct-2022	31-Oct-2024	31-Aug-2026			
Residential (May - October)	None	None	None	None	None			
Small Commercial & Industrial								
Non-Demand	None	None	None	None	None			
Firm Secondary	\$1.14	\$1.19	\$1.24	\$1.29	\$1.34			
Firm Primary	\$1.10	\$1.15	\$1.19	\$1.24	\$1.29			
Interruptible Secondary	\$1.14	\$1.19	\$1.24	\$1.29	\$1.34			
Interruptible Primary	\$1.10	\$1.15	\$1.19	\$1.24	\$1.29			
Large Commercial & Industrial								
Special	None	None	None	None	None			
Firm Secondary	\$1.14	\$1.19	\$1.24	\$1.29	\$1.34			
Firm Primary	\$1.10	\$1.15	\$1.19	\$1.24	\$1.29			
Firm Trans. Transf.	\$1.10	\$1.15	\$1.19	\$1.24	\$1.29			
Interruptible Secondary	\$0.84	\$0.88	\$0.91	\$0.95	\$0.99			
Interruptible Primary	\$0.74	\$0.77	\$0.80	\$0.83	\$0.86			
Interruptible TT	\$0.66	\$0.68	\$0.71	\$0.74	\$0.77			
Standby Service	\$0.44	\$0.45	\$0.47	\$0.49	\$0.51			
Public Street & Highway Lighting	None	None	None	None	None			
Small Municipal Pumping								
Non-Demand	None	None	None	None	None			
Demand Secondary	\$1.14	\$1.19	\$1.24	\$1.29	\$1.34			
Demand Primary	\$1.10	\$1.15	\$1.19	\$1.24	\$1.29			
Large Municipal Pumping								
Demand Primary (Sec cust)	\$1.10	\$1.15	\$1.19	\$1.24	\$1.29			
Fire and Civil Defense Siren Service	\$1.10	\$1.15	\$1.19	\$1.24	\$1.29			

(Continued on Sheet No. 5-93.12)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## FRANCHISE AND OTHER CITY FEES (Continued)

Section No. 5 10th Revised Sheet No. 93.12

Franchise and other city fees, as designated below will be included in the customers' monthly bills computed under the indicated rate classes and effective in the following Minnesota communities:

The Company remits 100% of these fees collected from ratepayers to the local governmental unit.

Indicates fee is not applied

	Franchise Fees									
City	Residential	Small C&I Non-demand	Small C&I Demand	Large C&I	Public Street Lighting	Municipal Pumping Non-demand	Municipal Pumping Demand	Effective Date	Expiration Date	
Vadnais Heights	\$2.00	\$3.00	\$13.00	\$60.00	_	_	_	05/2018	01/01/2038	
Victoria	\$3.00	\$10.00	\$10.00	\$10.00	_	_	_	02/2017	10/09/2036	
Waite Park	\$4.00	\$6.75	\$15.00	\$109.00	_	_	_	01/2019	06/10/2032	
Watertown	\$3.00	\$4.50	\$16.00	\$51.00	_	\$13.50	\$21.00	04/2010	04/10/2027	
Wayzata	\$2.06	\$4.64	\$4.64	\$15.45	\$1.03	\$1.03	\$1.03	03/2011	11/30/2026	
White Bear Lake	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	05/2018	01/08/2038	
Winona	4.0% Customers who purchase \$100,000 or less in calendar year 1.5% That part which exceeds \$100,000 in calendar year  06/2003						06/15/2023			
Winsted	\$2.00	\$2.00	\$2.00	\$2.00	_	_	_	05/2012	12/19/2031	

(Continued on Sheet No. 5-93.13)

Date Filed: 10-31-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-09-970 Order Date: 03-23-11

Ν

NOT PUBLIC DATA EXCISED

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## FRANCHISE AND OTHER CITY FEES (Continued)

Section No. 5
9th Revised Sheet No. 93.12

Franchise and other city fees, as designated below will be included in the customers' monthly bills computed under the indicated rate classes and effective in the following Minnesota communities:

The Company remits 100% of these fees collected from ratepayers to the local governmental unit.

Indicates fee is not applied

Franchise Fees								1		
City	Residential	Small C&I Non-demand	Small C&I Demand	Large C&I	Public Street Lighting	Municipal Pumping Non-demand	Municipal Pumping Demand	Effective Date	Expiration Date	
Vadnais Heights	\$2.00	\$3.00	\$13.00	\$60.00	_	_	_	05/2018	01/01/2038	
Victoria	\$3.00	\$10.00	\$10.00	\$10.00	_	_	_	02/2017	10/09/2036	
Watertown	\$3.00	\$4.50	\$16.00	\$51.00	_	\$13.50	\$21.00	04/2010	04/10/2027	
Wayzata	\$2.06	\$4.64	\$4.64	\$15.45	\$1.03	\$1.03	\$1.03	03/2011	11/30/2026	
White Bear Lake	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	05/2018	01/08/2038	
Winona	4.0% Customers who purchase \$100,000 or less in calendar year 1.5% That part which exceeds \$100,000 in calendar year  06/2003 06/15/2023									
Winsted	\$2.00	\$2.00	\$2.00	\$2.00	_	_	_	05/2012	12/19/2031	

(Continued on Sheet No. 5-93.13)

Date Filed: 02-20-18 By: Christopher B. Clark Effective Date: 05-01-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-09-970 Order Date: 03-23-11

N

С

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401 MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## FRANCHISE AND OTHER CITY FEES

Section No. 5

4th Revised Sheet No. 93.13

Franchise and other city fees, as designated below will be included in the customers' monthly bills computed under the indicated rate classes and effective in the following Minnesota communities:

The Company remits 100% of these fees collected from ratepayers to the local government unit.\*

(U) Indicates unincorporated community

Other City Fees				
City	Description	Effective Date	Expiration Date	
West St. Paul	Pursuant to city code, the Company collects a 6.38% of gross earnings tax derived from the sale of electricity within the City of West St. Paul excluding electric energy supplied to the City for municipal services. The amount collected is remitted to the City of West St. Paul.	07/2018		
FEES NOT REMITTED DIRECTLY TO CITY				
Baker (U)	The Company collects a fee of \$3.25 per residential and small commercial and industrial customer in the community of Baker for energy usage and maintenance on community street lighting. The amount collected is applied to Baker's street lighting bill.	03/1994		

<sup>\*</sup>Except Baker. See above.

Date Filed: 05-01-18 By: Christopher B. Clark Effective Date: 07-01-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-09-970 Order Date: 03-23-11 R

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## FRANCHISE AND OTHER CITY FEES

Section No. 5 3rd Revised Sheet No. 93.13

Franchise and other city fees, as designated below will be included in the customers' monthly bills computed under the indicated rate classes and effective in the following Minnesota communities:

The Company remits 100% of these fees collected from ratepayers to the local government unit.\*

(U) Indicates unincorporated community

Other City Fees					
City	Description	Effective Date	Expiration Date		
West St. Paul	Pursuant to city code, the Company collects a 5.26% of gross earnings tax derived from the sale of electricity within the City of West St. Paul excluding electric energy supplied to the City for municipal services. The amount collected is remitted to the City of West St. Paul.	12/1996			
FEES NOT REMITTED DIRECTLY TO CITY					
Baker (U)	The Company collects a fee of \$3.25 per residential and small commercial and industrial customer in the community of Baker for energy usage and maintenance on community street lighting. The amount collected is applied to Baker's street lighting bill.	03/1994			

<sup>\*</sup>Except Baker. See above.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Xcel Energy

# PUBLIC DOCUMENT Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**INTERIM RATE SURCHARGE RIDER** 

Section No. 5 12th Revised Sheet No. 94

**CANCELED** C

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### LOW INCOME ENERGY DISCOUNT RIDER

Section No. 5 9th Revised Sheet No. 95

#### **DISCOUNT PROGRAM**

D Eligible Senior and / or Disabled customers receive a \$15 discount in each monthly billing period. Customers must be Ν certified annually by an authorized agency as receiving assistance from the Low Income Home Energy Assistance Ν

PowerOn PROGRAM

Program.

Eligible Seniors and / or Disabled, and Customers Under 62 Years of Age with no Disability.

A customer using more than 3% of their annual household income for electric use may be eligible for the Company's PowerOn affordability program. Customers must be certified annually by an authorized agency as receiving assistance from the Low Income Home Energy Assistance Program. The Company will offer customers with the lowest income, and a history of electric consumption that exceeds the residential average of 750 kWh per month, an affordable monthly bill. For a customer to be eligible for a supplemental reduction in their electric bill, the customer must agree to affordable monthly payments.

# **Medical Affordability PROGRAM**

Available to customers with certified medical circumstances and an income level up to 50 percent of the state median income guidelines. Availability will be extended to medically certified customers with income up to 60 percent of the state median income guidelines if funds are available. Availability is on a first-come/first-served basis until the budget is exhausted.

- Affordability Credit: Participating customers will receive an affordability credit limiting their bill to 3% of household income.
- Arrearage Credit: Participating customers will receive an arrearage credit. Receipt of the arrearage forgiveness credit will require a customer copayment that does not exceed 3% of the customer's annual income. The arrearage credit is designed to eliminate customer arrears over a period of 12 to 24 months.
- Customer Payment Requirements: Participating customers that miss two consecutive monthly payments will be removed from the program and subject to regular collection practices, including service disconnection.

# TERMS AND CONDITIONS OF SERVICE

- The company will review current billing information, approved LIHEAP benefits and household income to make payment arrangements with the customer. A mutually agreed to payment plan will be offered to the customer and a payment schedule provided.
- Customer must maintain an active account registered under customer's name with the Company to be eligible for this discount Rider.
- Customers receiving assistance from LIHEAP with electric service through one meter for domestic and non-domestic purposes jointly may be eligible for this Discount Rider subject to Company's verification and approval. The Company shall determine the kWh use that is for domestic purposes. This Discount Rider only applies to kWh use for domestic purposes.

(Continued on Sheet No. 5-96)

Date Filed: 08-24-17 By: Christopher B. Clark Effective Date: 01-01-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-17-629 Order Date: 01-10-18 N

Ν

Ν

Ν

Ν

2020-2034 Upper Midwest Resource Plan Page 215 of 421

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### LOW INCOME ENERGY DISCOUNT RIDER Section No. 5 (Continued) 12th Revised Sheet No. 96

## TERMS AND CONDITIONS OF SERVICE (Continued)

- 4. Qualified customers are only eligible to receive an energy discount under this Rider at one residential location at any one time and the discount only applies to a qualified customer's permanent primary residence. This Rider will not be available when, in the opinion of the Company, the customer's accommodation or occupancy is of temporary nature.
- 5. The discount shall be prospective and may not be applicable to past due bills or non-electric services.
- 6. An annual application and eligibility declaration is required for each request for service under this Rider. Without declaration of continuing eligibility, the discount ends in the September calendar month of each
- 7. It is the customer's responsibility to notify the Company if there is a change of address or eligibility status.
- Discounts will be credited to the eligible customer bills one billing month after Company's receipt of notification of LIHEAP certification. The applicable discount under this Rider will be retroactive to the October billing month during that same LIHEAP fiscal year.
- 9. Refusal or failure of a customer or agencies to provide documentation of eligibility acceptable to the Company may result in removal from this Rider.
- 10. Customers may be rebilled for periods of ineligibility under the applicable rate schedule.
- 11. This Rider shall meet the conditions of Minnesota Statutes, Chapter 216B.16, Subd. 14 on low income discount rates.

# **PROGRAM SURCHARGE**

Rider program costs shall be recovered in the following per month amounts, with the total surcharge as a separate line item on customer billing statements:

			Medical		
Service Category	Base	PowerOn	Affordability	Total	
Residential	\$0.58	\$0.21	\$0.19	\$0.98	R
C&I Non-Demand	\$0.78	\$0.26	\$0.23	\$1.27	R
C&I Demand	\$2.34	\$0.66	\$0.60	\$3.60	R

Xcel Energy customers who receive LIHEAP assistance in the current LIHEAP year (October 1-September 30) and Lighting class service customers are exempt from paying the program surcharge.

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19 President, Northern States Power Company, a Minnesota corporation Docket No. E002/M-04-1956 & E002/GR-15-826 Order Date: 09-26-14 & 06-12-17

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# LOW INCOME ENERGY DISCOUNT RIDER (Continued)

Section No. 5 11th Revised Sheet No. 96

#### TERMS AND CONDITIONS OF SERVICE (Continued)

- 4. Qualified customers are only eligible to receive an energy discount under this Rider at one residential location at any one time and the discount only applies to a qualified customer's permanent primary residence. This Rider will not be available when, in the opinion of the Company, the customer's accommodation or occupancy is of temporary nature.
- 5. The discount shall be prospective and may not be applicable to past due bills or non-electric services.
- An annual application and eligibility declaration is required for each request for service under this Rider. 6. Without declaration of continuing eligibility, the discount ends in the September calendar month of each year.
- 7. It is the customer's responsibility to notify the Company if there is a change of address or eligibility status.
- 8. Discounts will be credited to the eligible customer bills one billing month after Company's receipt of notification of LIHEAP certification. The applicable discount under this Rider will be retroactive to the October billing month during that same LIHEAP fiscal year.
- 9. Refusal or failure of a customer or agencies to provide documentation of eligibility acceptable to the Company may result in removal from this Rider.
- 10. Customers may be rebilled for periods of ineligibility under the applicable rate schedule.
- 11. This Rider shall meet the conditions of Minnesota Statutes, Chapter 216B.16, Subd. 14 on low income discount rates.

## PROGRAM SURCHARGE

Rider program costs shall be recovered in the following per month amounts, with the total surcharge as a separate line item on customer billing statements:

			Medical		N
Service Category	Base	PowerOn	Affordability	Total	TN
Residential	\$0.57	\$0.21	\$0.19	\$0.97	N
C&I Non-Demand	\$0.77	\$0.26	\$0.23	\$1.26	N
C&I Demand	\$2.30	\$0.66	\$0.60	\$3.56	N

Xcel Energy customers who receive LIHEAP assistance in the current LIHEAP year (October 1-September 30) and Lighting class service customers are exempt from paying the program surcharge.

Date Filed: 08-24-17 By: Christopher B. Clark Effective Date: 01-01-18

President, Northern States Power Company, a Minnesota corporation

Order Date: Docket No. E002/M-17-629 01-10-18

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# RESIDENTIAL CONTROLLED AIR CONDITIONING AND **WATER HEATING RIDER**

Section No. 5 8th Revised Sheet No. 97

#### **AVAILABILITY**

Available to Residential Service customers with:

- Company controlled central air conditioning, or
- Company controlled heat pumps receiving Energy Controlled Service (Non-Demand Metered) with optional non-interruptible service during June through September.

Company controlled electric water heating is also available to residential customers with a controlled central air conditioner or heat pump, except electric water heaters served with the Energy Controlled Service (Non-Demand Metered) rate schedule. Availability is limited to customers located in areas which are within the operating range of radio control transmitters.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **RIDER**

Residential Central Air Conditioning. A 15% discount will apply to the energy and fuel cost charges up to a maximum of 4,000 kWh per month during the billing months of June through September.

Residential Electric Water Heating. A 2% discount will apply to the energy and fuel cost charges up to a maximum of 4,000 kWh per month during each billing month provided total energy use is not less than 300 kWh.

## TERMS AND CONDITIONS OF SERVICE

- The duration and frequency of interruptions will be determined by Company. Customer's air conditioning equipment will normally be cycled on a schedule designed to achieve a 50% reduction in the homes air conditioning requirements during load management period. Air conditioning interruptions will normally occur on high demand days during summer months. Water heating interruptions will normally occur on high demand days during summer and winter months. Interruption will normally be based on meeting peak demands and system economic dispatch requirements of Company. However, interruption may also occur at times when, in the Company's opinion, the reliability of the system may be at risk. Air conditioning and water heating interruptions will not normally occur during the observation day of the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. The interruptions as described above, will be made so as to benefit native load and may occur up to a maximum of 300 hours per calendar year.
- Company shall not be liable for any loss or damage caused by or resulting from any interruption of service. 2.
- To be eligible for this service, customer must agree to Company load control for a minimum term of one 3. year.

# (Continued on Sheet No. 5-98)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

E002/GR-15-826 Order Date: Docket No. 06-12-17

# PUBLIC DOCUMENT

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401 MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

RESIDENTIAL CONTROLLED AIR CONDITIONING AND **WATER HEATING RIDER (Continued)** 

Section No. 5 5th Revised Sheet No. 98

#### TERMS AND CONDITIONS OF SERVICE (Continued)

- The storage capacity of the water heater shall be 40 gallons or more in order to be eligible for this service.
- 5. The residential central air conditioning energy charge discount for Energy Controlled Service (Non-Demand Metered) customers will also apply to their standard service energy charge.
- Rider availability for heat pump installations is limited to those sized for summer cooling requirements, as 6. determined by Company.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK – MPUC NO. 2

COMMERCIAL AND INDUSTRIAL CONTROLLED AIR CONDITIONING RIDER

Section No. 5 8th Revised Sheet No. 99

#### **AVAILABILITY**

Available to non-residential customers with Company controlled central air conditioning. Availability is restricted to customers with single and/or dual stage air conditioning units.

#### **RIDER**

A \$5.00 per ton per month credit shall be applied to customer's bill during each of the four summer billing months (June through September).

#### TERMS AND CONDITIONS OF SERVICE

- 1. The duration and frequency of interruptions will be determined by the Company. Customer single and dual stage air conditioners will be cycled on a schedule designed to achieve a 50% reduction in the building air conditioning requirements during a load management period. Dual stage air conditioners will be allowed to have the first stage run without interruption while the second stage will be shut off for the entire load management period. Air conditioning interruptions will normally occur on high demand days during summer months. Interruption will normally be based on meeting peak demands and system economic dispatch requirements of Company. However, interruption may also occur at times when, in the Company's opinion, the reliability of the system may be at risk. Air conditioning interruptions will not normally occur during the observation day of the following holidays: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. The interruptions as described above, will be made so as to benefit native load and may occur up to a maximum of 300 hours per calendar year.
- 2. Company shall not be liable for any loss or damage caused by or resulting from any interruption of service.
- To be eligible for this service, customer must be on Small General Service, Small General Time of Day Service, General Service, or General Time of Day Service and customer must agree to Company load control for no less than one year.
- 4. Rider will not be available to customers that have an air conditioning system which significantly exceeds summer cooling requirements, as determined by Company.
- Company will normally control every air conditioning unit at the customer's building. Subject to Company approval, customers may exclude individual air conditioning units from Company control where those units serve either a sufficiently isolated area within a building or a separate building.
- 6. Availability is limited to customers located within the operating range of radio control transmitters.
- 7. Those air conditioning units that the Company is not able to install equipment on will be excluded.

(Continued on Sheet No. 5-99.1)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

# PUBLIC DOCUMENT

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401 MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**COMMERCIAL AND INDUSTRIAL** CONTROLLED AIR CONDITIONING RIDER (Continued)

Section No. 5 5th Revised Sheet No. 99.1

# TERMS AND CONDITIONS OF SERVICE (Continued)

If the Company determines that its load management equipment on the customer's premises has been rendered ineffective due to tampering by use of mechanical, electrical, or other devices or actions, then the Company may discontinue the customer's participation in the program. The customer would be billed for all expenses involved with the removal of the load management equipment and any charges resulting from the investigation of the device tampering. The Company may rebill all prior load management credits received by the customer to the date the tampering appears to have first occurred or the previous twelve months, which ever is longer. The customer will be removed from the program and is not eligible to participate again for twelve months. The Company will verify installation has been corrected before the customer is permitted to participate in the program.

Date Filed: By: Christopher B. Clark Effective Date: 11-02-15 10-01-17

President, Northern States Power Company, a Minnesota corporation

# PUBLIC DOCUMENT

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401 MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**OFF SEASON LOAD RIDER** 

Section No. 5 5th Revised Sheet No. 100

#### **AVAILABILITY**

Available to any General Service customer whose maximum monthly demand occurs during the usage months of April, May, October, or November. Typical applications would be agricultural grain drying and handling loads.

#### **RATE**

The General Service rate provisions apply except the adjusted demands established during the usage months of April, May, October, and November are not included in determining the 50% demand ratchet contained in the General Service determination of demand provision.

#### TERMS AND CONDITIONS OF SERVICE

- The customer's usage months for this Rider must be contained by the following meter reading schedule. The two month fall season begins no earlier than the billing cycle 11 meter reading date in mid-September and ends no later than the billing cycle 10 meter reading date in mid-December. The two month spring season begins no earlier than the billing cycle 11 meter reading date in mid-March and ends no later than the billing cycle 10 meter reading date in mid-June.
- Customer must compensate Company for the costs associated with local distribution facilities required to serve customer load during the months of April, May, October, and November, which is in excess of customer's base load during the remaining months.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

### STANDBY SERVICE RIDER

Section No. 5 20th Revised Sheet No. 101

#### **AVAILABILITY**

Applicable to customers that use a customer-sited generation source with a capacity greater than 100 kW to serve a defined portion of the customer's total electric energy requirements and where customer chooses to use the Company's electric service to serve that defined load when the customer-sited generation is either partly or wholly unavailable. Customer must select one of the following services types: Firm Unscheduled Maintenance, Firm Scheduled Maintenance, or Non-Firm service. This Rider is not available to solar photovoltaic generation systems and is closed to new wind generation systems.

Under this tariff the Company will provide Standby Service in accordance with the provisions of this tariff as well as those of Section 2.4 of the General Rules and Regulations.

#### **RATE**

	Firm S	Firm Standby		
	Unscheduled Maintenance	Scheduled <u>Maintenance</u>	<u>Standby</u>	
Customer Charge per Month	\$25.64	\$25.64	\$25.64	
Reservation Demand Charge per Month per kW of Contracted Standby Capacity Secondary Voltage Service Primary Voltage Service	\$3.06 \$2.26	\$2.96 \$2.16	\$2.35 \$1.55	R R
Transmission Transformed Voltage Service	\$1.51 \$0.71	\$1.41 \$0.61	\$0.80 \$0.00	R R
Transmission Voltage Service  Peak Period Standby Energy Surcharge per kWh	\$0.71	\$0.61	φ0.00	
June – September Other Months		\$0.06312 \$0.04130		R R

<u>Energy Charge per kWh.</u> All energy used under this Rider will be charged at the applicable energy rate of the base tariff to which this Rider is attached and is not applicable to the base tariff Energy Charge Credit.

## STANDBY ENERGY USAGE

Standby energy usage occurs when the customer-sited generation source output in kW is less than contracted standby kW capacity. Standby energy usage in kWh is measured in 15-minute intervals and is defined as the kWh energy associated with constant operation of customer-sited generation at the contract standby kW capacity level less actual energy production of customer-sited generation, but not less than zero kWh for each 15-minute interval. Actual energy production of customer-sited generation will be measured by Company-owned and installed production metering equipment.

(Continued on Sheet No. 5-101.1)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### STANDBY SERVICE RIDER

Section No. 5 19th Revised Sheet No. 101

#### **AVAILABILITY**

Applicable to customers that use a customer-sited generation source with a capacity greater than 100 kW to serve a defined portion of the customer's total electric energy requirements and where customer chooses to use the Company's electric service to serve that defined load when the customer-sited generation is either partly or wholly unavailable. Customer must select one of the following services types: Firm Unscheduled Maintenance, Firm Scheduled Maintenance, or Non-Firm service. This Rider is not available to solar photovoltaic generation systems and is closed to new wind generation systems.

Under this tariff the Company will provide Standby Service in accordance with the provisions of this tariff as well as those of Section 2.4 of the General Rules and Regulations.

#### **RATE**

	Firm Standby		Non-Firm	
	Unscheduled Maintenance	Scheduled Maintenance	<u>Standby</u>	
Customer Charge per Month	\$25.64	\$25.64	\$25.64	
Reservation Demand Charge per Month per kW of Contracted Standby Capacity				
Secondary Voltage Service	\$3.10	\$3.00	\$2.35	R
Primary Voltage Service	\$2.30	\$2.20	\$1.55	R
Transmission Transformed Voltage Service	\$1.55	\$1.45	\$0.80	R
Transmission Voltage Service	\$0.75	\$0.65	\$0.00	R
Peak Period Standby Energy Surcharge per kWh				
June – September		\$0.06693		R
Other Months		\$0.04389		R

<u>Energy Charge per kWh.</u> All energy used under this Rider will be charged at the applicable energy rate of the base tariff to which this Rider is attached and is not applicable to the base tariff Energy Charge Credit.

## STANDBY ENERGY USAGE

Standby energy usage occurs when the customer-sited generation source output in kW is less than contracted standby kW capacity. Standby energy usage in kWh is measured in 15-minute intervals and is defined as the kWh energy associated with constant operation of customer-sited generation at the contract standby kW capacity level less actual energy production of customer-sited generation, but not less than zero kWh for each 15-minute interval. Actual energy production of customer-sited generation will be measured by Company-owned and installed production metering equipment.

(Continued on Sheet No. 5-101.1)

Date Filed: 10-01-19 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

С

С

С

С

С

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### STANDBY SERVICE RIDER

Section No. 5 18th Revised Sheet No. 101

#### **AVAILABILITY**

Applicable to customers that use a customer-sited generation source with a capacity greater than 100 kW to serve a defined portion of the customer's total electric energy requirements and where customer chooses to use the Company's electric service to serve that defined load when the customer-sited generation is either partly or wholly unavailable. Customer must select one of the following services types: Firm Unscheduled Maintenance, Firm Scheduled Maintenance, or Non-Firm service. This Rider is not available to solar photovoltaic generation systems and is closed to new wind generation systems.

Under this tariff the Company will provide Standby Service in accordance with the provisions of this tariff as well as those of Section 2.4 of the General Rules and Regulations.

**RATE** C

	Firm Standby		Non-Firm	
	Unscheduled Maintenance	Scheduled Maintenance	<u>Standby</u>	
Customer Charge per Month	\$25.64	\$25.64	\$25.64	
Reservation Demand Charge per Month				CL
per kW of Contracted Standby Capacity				L
Secondary Voltage Service	\$3.08	\$2.98	\$2.35	R
Primary Voltage Service	\$2.28	\$2.18	\$1.55	R
Transmission Transformed Voltage Service	\$1.53	\$1.43	\$0.80	R
Transmission Voltage Service	\$0.73	\$0.63	\$0.00	R
<b>G</b>				D
Peak Period Standby Energy Surcharge per kWh				Ν
June – September		\$0.06545		Ν
Other Months		\$0.04242		N

<u>Energy Charge per kWh.</u> All energy used under this Rider will be charged at the applicable energy rate of the base tariff to which this Rider is attached and is not applicable to the base tariff Energy Charge Credit.

# STANDBY ENERGY USAGE

Standby energy usage occurs when the customer-sited generation source output in kW is less than contracted standby kW capacity. Standby energy usage in kWh is measured in 15-minute intervals and is defined as the kWh energy associated with constant operation of customer-sited generation at the contract standby kW capacity level less actual energy production of customer-sited generation, but not less than zero kWh for each 15-minute interval. Actual energy production of customer-sited generation will be measured by Company-owned and installed production metering equipment.

LC

LN

Ν

Ν

Ν

Ν

Ν

Ν

Ν

D L

(Continued on Sheet No. 5-101.1)

Date Filed: 05-19-16 By: Christopher B. Clark Effective Date: 07-19-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-315 & E999/CI-15-115 Order Date: 04-20-18

Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### STANDBY SERVICE RIDER

Section No. 5 17th Revised Sheet No. 101

#### **AVAILABILITY**

Applicable to customers that use an alternative generation source with a capacity greater than 100 kW, where the alternative generation serves all or a portion of customer's electric energy requirements and where customer chooses to use the Company's electric service to serve that load when the alternative generation is either partly or wholly unavailable.

Under this tariff the Company will provide Standby Service in accordance with the provisions of this tariff as well as those of Section 2.4 of the General Rules and Regulations.

#### **RESERVATION RATE**

	Firm Standby		Non-Firm	
	Unscheduled Maintenance	Scheduled <u>Maintenance</u>	<u>Standby</u>	
Customer Charge per Month	\$25.64	\$25.64	\$25.64	R
Demand Charge per Month per kW of Contracted Standby Cap	acity			5
Secondary Voltage Service	\$3.54	\$3.44	\$2.35	R
Primary Voltage Service	\$2.74	\$2.64	\$1.55	R
Transmission Transformed Voltage Service	\$1.99	\$1.89	\$0.80	R
Transmission Voltage Service	\$1.19	\$1.09	\$0.00	R
Hours per kW of Contracted Standby Capacity - Annual Grace Period Use of Unscheduled Standby, Exemption from the Demand Charge Component of the "Usage Rates" below.	964	964	0	

# **USAGE RATES**

<u>Demand Charge per kW of Standby Capacity Used.</u> After the Annual Grace Period hours provided for Unscheduled and Scheduled Service are used up, the Demand Charge of the base tariff, to which this Rider is attached, replaces the above Reservation Rate.

<u>Energy Charge per kWh of Standby Energy Used.</u> All energy used under this Rider will be charged at the applicable energy rate of the base tariff to which this Rider is attached.

## PHOTOVOLTAIC SOLAR CREDIT

A capacity credit of \$5.15 per month per kW is applicable when the alternative generation source used by the customer is photovoltaic solar. This credit shall only be applied to the applicable Demand Charge of the base tariff for the contracted demand component of the Usage Rates outside of the Grace Period.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

## **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

(Continued on Sheet No. 5-102)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# STANDBY SERVICE RIDER (Continued)

Section No. 5 Original Sheet No. 101.1

## PEAK PERIOD STANDBY ENERGY USAGE

Ν Peak period standby energy usage is the amount of Standby Energy Usage occurring during the peak period Ν Ν

that does not occur during a qualifying scheduled maintenance period or is associated with Non-Firm service. Peak period standby energy usage is subject to the Peak Period Standby Energy Surcharge.

## **DEFINITION OF PEAK PERIOD**

Ν

Peak period hours are the six hours between 1:00 p.m. and 7 p.m. for all days.

Ν

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

N

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

## **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

#### **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

# **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

## LOW INCOME ENERGY DISCOUNT RIDER

Bills are subject to the adjustment provided for in the Low Income Energy Discount Rider.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

# **LATE PAYMENT CHARGE**

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

(Continued on Sheet No. 5-102)

Date Filed: 05-19-16 By: Christopher B. Clark Effective Date: 07-19-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-315 & E999/CI-15-115 Order Date: 04-20-18

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# STANDBY SERVICE RIDER (Continued)

5 Section No. 14th Revised Sheet No. 102

## **DETERMINATION OF DEMAND**

The billing demand in kW for application to the Standby Service Reservation Demand Charge rate will be the contracted Standby capacity specified in the customer's Electric Service Agreement, which is the maximum capacity of Standby Service the Company is obligated to supply, and is the amount of load expected to be served by the customer-sited generation source. In no case shall the contracted Standby capacity be established at more than the capacity of the customer-sited generation source. Contracted Standby capacity may be different for the summer and winter seasons or by month.

The metered capacity in kW supplied by Company for Standby Energy Usage by customer will be excluded from the actual demand in kW used to determine any billed demand for the base tariff to which this Rider is attached. This exclusion is determined as the maximum total customer demand, defined as the total of capacity supplied by the customer-sited generation source and the Company measured in 15-minutes intervals, less contracted Standby capacity. All demand measurements will be determined with Company owned and installed meters. The exclusion of capacity supplied by Company for Standby Energy Usage by customer from any base tariff determination of demand calculation is represented by the equation: Base tariff actual demand in kW = Site load (Company supplied capacity in kW measured by the base tariff service meter + Customer supplied capacity in kW measured by production metering of customer-sited generation) - Contracted Standby capacity in kW as determined by the customer nomination in effect for the applicable billing period.

Any billing demand in kW for the base tariff to which this Rider is attached will be calculated using the applicable determination of demand provision defined in the base tariff. For a time of day base tariff, the on-peak and offpeak periods used for billed demand calculations will be based on the definition of peak periods included in the time of day base tariff.

## TERMS AND CONDITIONS OF SERVICE

Standby Service Rider is applicable to any customer who requires greater than 100 kW of Standby capacity. Standby Service may not be used by a customer to serve controllable demand that is subject to interruption as determined by the Company under the Company's controllable service schedules.

(Continued on Sheet No. 5-103)

Date Filed: 05-19-16 By: Christopher B. Clark Effective Date: 07-19-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-315 & E999/CI-15-115 Order Date: 04-20-18 L

С

С

2020-2034 Upper Midwest Resource Plan Page 228 of 421

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## STANDBY SERVICE RIDER (Continued)

Section No. 5 13th Revised Sheet No. 102

#### **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

# **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

#### **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

#### LOW INCOME ENERGY DISCOUNT RIDER

Bills are subject to the adjustment provided for in the Low Income Energy Discount Rider.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

## **LATE PAYMENT CHARGE**

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

## **DETERMINATION OF DEMAND**

The billing demand applicable to this Standby Service Rider is determined separately from the billing demand applicable to the base tariff to which this Rider attaches. The demand associated with actual use of Standby Service will be subtracted from the total metered demand, to determine the demand for standard service, to which the base tariff demand charge applies.

For applying the Standby Service Reservation Rate, the billing demand will be the contracted Standby capacity specified in the customer's Electric Service Agreement, which is the maximum capacity of Standby Service the Company is obligated to supply, and is the amount of load served by the customer's alternative generation. In no case shall the contracted Standby capacity be established at more than the capacity of the customer's generation facility. This contracted Standby capacity may be different for the summer and winter seasons.

For applying the demand component of the Usage Rates, the billing demand shall be the capacity actually used by the customer, when customer's generator is wholly or partly out of service. This amount of Standby capacity actually used shall be the contracted Standby capacity less the actual capacity supplied by the customer's generating facilities (assuming it is operating, but not at full capacity), but not less than zero.

## TERMS AND CONDITIONS OF SERVICE

Standby Service Rider is applicable to any customer who requires greater than 100 kW of Standby capacity. Standby Service may not be used by a customer to serve controllable demand that is subject to interruption as determined by the Company under the Company's controllable service schedules.

(Continued on Sheet No. 5-103)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## STANDBY SERVICE RIDER (Continued)

Section No. 5 7th Revised Sheet No. 103

#### TERMS AND CONDITIONS OF SERVICE (Continued)

- Customer will execute an Electric Service Agreement with the Company which will specify:
  - Type of Standby Service elected by the customer and the base tariff to which this Rider is attached.
  - The total Standby capacity requirements for which Company will be providing Standby power and to h. which the Standby Service reservation rate applies as well as the expected level of standard service the customer will take, even if the standard service level is expected to be zero.
  - The process and requirements for nominating contracted Standby capacity, including seasonal or monthly levels.
- The Company's standard service meter will be detented to measure only the amount of capacity and energy provided by the Company to the customer.
- Company will not be obligated to supply Standby Service to back-up a customer's generator at a level in excess of the Standby capacity for which customer has contracted. This restriction in no way limits the amount of standard service the customer requires from the Company under the standard service tariff to which this Rider is attached. Any limits on standard service are governed by the provisions contained in the standard service tariffs.
- Customer will be liable for all damages allowed by law to the extent caused by customer's use of Standby power in excess of contracted Standby capacity.
- 6. Company will require customer to revise the Electric Service Agreement to contract for additional Standby capacity if the customer exceeds the contract amount in any three of the preceding 12 months.
- 7. Customer will annually furnish documentation to Company confirming the maximum capacity and reliability of the power source for which customer requires Standby Service. The Company and the customer will review the actual output and performance of the power source relative to the capacity nominated for Standby Service in the Electric Service Agreement. If this review shows a significant and consistent shortfall between the power source's actual performance and the nominated capacity due to factors reasonably within the customer's control, the Company will notify the customer of its intent to refuse to provide Standby Service. Upon receipt of such notice, the customer may agree to reduce the Standby Service nomination in its Electric Service Agreement or to take such action as necessary to operate the power source at or reasonably near the nominated Standby Service capacity. If the customer's power source does not operate at or reasonably near that level during the 12 months immediately following the Company's notice, the Company may refuse to provide Standby Service until such time as the customer agrees to reduce its Standby Service nomination or provide the Company with documentation demonstrating the power source's actual performance at or reasonably near the nominated Standby Service capacity for a trial period of three consecutive months.
- Customer will remain on Standby Service for a period of not less than 12 months. 8.

(Continued on Sheet No. 5-104)

Date Filed: 05-19-16 By: Christopher B. Clark Effective Date: 07-19-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-315 & E999/CI-15-115 Order Date: 04-20-18 Т

Ν N

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## STANDBY SERVICE RIDER (Continued)

Section No. 5 6th Revised Sheet No. 103

#### TERMS AND CONDITIONS OF SERVICE (Continued)

- Customer will execute an Electric Service Agreement with the Company which will specify:
  - Type of Standby Service elected by the customer and the base tariff to which this Rider is attached.
  - The total Standby capacity requirements for which Company will be providing Standby power and h. to which the Standby Service reservation rate applies as well as the expected level of standard service the customer will take, even if the standard service level is expected to be zero.
- 3. The Company's standard service meter will be detented to measure only the amount of capacity and energy provided by the Company to the customer.
- 4. Company will not be obligated to supply Standby Service to back-up a customer's generator at a level in excess of the Standby capacity for which customer has contracted. This restriction in no way limits the amount of standard service the customer requires from the Company under the standard service tariff to which this Rider is attached. Any limits on standard service are governed by the provisions contained in the standard service tariffs.
- Customer will be liable for all damages allowed by law to the extent caused by customer's use of Standby 5. power in excess of contracted Standby capacity.
- Company will require customer to revise the Electric Service Agreement to contract for additional Standby capacity if the customer exceeds the contract amount in any three of the preceding 12 months.
- 7. Customer will annually furnish documentation to Company confirming the maximum capacity and reliability of the power source for which customer requires Standby Service. The Company and the customer will review the actual output and performance of the power source relative to the capacity nominated for Standby Service in the Electric Service Agreement. If this review shows a significant and consistent shortfall between the power source's actual performance and the nominated capacity due to factors reasonably within the customer's control, the Company will notify the customer of its intent to refuse to provide Standby Service. Upon receipt of such notice, the customer may agree to reduce the Standby Service nomination in its Electric Service Agreement or to take such action as necessary to operate the power source at or reasonably near the nominated Standby Service capacity. If the customer's power source does not operate at or reasonably near that level during the 12 months immediately following the Company's notice, the Company may refuse to provide Standby Service until such time as the customer agrees to reduce its Standby Service nomination or provide the Company with documentation demonstrating the power source's actual performance at or reasonably near the nominated Standby Service capacity for a trial period of three consecutive months.
- 8. Customer will remain on Standby Service for a period of not less than 12 months.

(Continued on Sheet No. 5-104)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## STANDBY SERVICE RIDER (Continued)

Section No. 5 8th Revised Sheet No. 104

#### TERMS AND CONDITIONS OF SERVICE (Continued)

- In the event Company provides advance notice to customer of expected system peak load conditions for a specified time period and customer uses unscheduled standby backup demand during that time period, the backup demand quantity used will be billed at the firm service demand charge from the base tariff to which this Rider is attached instead of the Reservation Demand charge. The quantity of unscheduled standby backup demand used for this provision will be the maximum 15-minute measured interval of unscheduled standby backup demand used during the specified system peak hours, measured as contracted standby capacity less the capacity provided by the customer-sited generation source. Company notice of expected system peak load conditions for this provision will be provided through the same means Company uses to notify interruptible customers of an interruption requirement.
- 10. Company will install and charge customer for the additional metering necessary, to allow for determining Peak Period Standby Energy usage. In particular, the Company will install a separate meter that measures the flow of power and energy from the customer's own generating facility. Customer shall reimburse the Company for the costs of installing, operating, and maintaining the required additional metering and for any other facilities required to serve the customer's Standby load. If, as a result of the customer's construction and installation of their generating facility, it is more practical for the customer to install some or all of the metering equipment required, the customer may be permitted to do so, subject to Company's approval of such equipment.

(Continued on Sheet No. 5-105)

Date Filed: 05-19-16 By: Christopher B. Clark Effective Date: 07-19-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-315 & E999/CI-15-115 Order Date: 04-20-18 LC С

Ν

Ν

Ν

Ν

Ν

Ν

Ν

Ν

Ν

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

STANDBY SERVICE RIDER (Continued)

Section No. 5 7th Revised Sheet No. 104

## TERMS AND CONDITIONS OF SERVICE (Continued)

Customer will be allowed annually a Grace Period as specified above for use of unscheduled Standby Service without incurring additional demand charges for use of Standby Service. Use of this Grace Period will be measured in terms of Standby energy used by customer with the maximum amount of grace energy being the hours specified above times the contracted Standby capacity. After the Grace Period has been exhausted and customer uses unscheduled Standby Service, the customer shall pay the Demand Charge specified in the Usage Rates instead of the Reservation Fees as listed above. In a billing month, when customer uses Standby Service, the base tariff billing demand and the Standby Service billing demand will be determined individually. The base tariff billing demand will be the greatest 15 minute load determined after separating Standby Service usage from the total metered demands. The time of this determined greatest 15 minute demand for application to the base tariff may or may not occur at the same time when Standby Service is used. Billed demand charges for usage of Standby Service will be in addition to the billed demand charges for the base tariff as just described.

Customers contracting for Standby Service to back up a solar photovoltaic system have the option to move their annual start date and subsequent Grace Periods forward to June 1. However, a customer shall not receive two annual Grace Periods for the same solar photovoltaic system in any rolling 12-month billing period.

- 10. Notwithstanding the Grace Period noted in provision 9 above, in the event customer requires unscheduled Standby Service at the times of Company's system peak hours in which the Company would have insufficient accredited capacity under the Midwest Reliability Organization (MRO) or any successor organization, and the Company incurs additional capacity costs as a result of such unscheduled Standby Service, customer shall pay Peak Demand Charges described below for the month in which such unscheduled Standby Service occurs and for each of the five succeeding months, instead of the above listed demand charges, or the demand charges under Section 9 above. Such Peak Demand Charges shall be based upon the following:
  - If customer has notified Company of an unscheduled outage at least three hours prior to Company's system peak hour, such Peak Demand Charges shall be based on one-sixth of any additional capacity costs incurred by the Company as a result of the unscheduled outage. Such additional capacity costs shall not include any after-the-fact capacity purchase costs incurred by the Company.
  - If customer has not notified the Company of any unscheduled outage at least three hours prior to the Company's system peak hour, such peak demand charges shall be based on one-sixth of any additional capacity costs or after-the-fact purchase costs incurred by the Company as a result of the unscheduled outage. The demand for billing purposes for the succeeding five months shall be equal to the demand placed on the system during the time of the Company's system peak hour in which the said additional capacity costs were incurred.

(Continued on Sheet No. 5-105)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401 MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### STANDBY SERVICE RIDER (Continued)

Section No.

5

8th Revised Sheet No. 105

# ADDITIONAL TERMS AND CONDITIONS OF SERVICE ASSOCIATED WITH THE SCHEDULED MAINTENANCE OPTION

- 1. The optional Scheduled Maintenance rates are available to Standby Service customers who agree to schedule maintenance of their power source during qualifying scheduled maintenance periods.
- 2. Qualifying Scheduled Maintenance Periods

Maintenance may occur within the calendar months of April, May, October, and November without written customer notice to Company prior to the beginning of the maintenance period regardless of the size of the contracted Standby capacity.

In other months for customers with a base time of day tariff to which this Rider is attached, regardless of the size of the contracted Standby capacity, scheduled maintenance may occur, with Company approval, during weekends and holidays as identified in the time of day base tariff, where a documented customer request is provided no less than 48 hours prior to the beginning of the planned maintenance period. Company will endeavor to approve or deny the customer request within 24 hours of receiving the request.

For months other than April, May, October, and November, customers with a minimum contracted Standby capacity of 1,000 kW may schedule maintenance at a time period mutually agreed to by Company and customer, following a documented customer request. These time periods for scheduled maintenance will normally not include those times when Company expects high system seasonal peak load conditions or high energy production costs.

Customer shall provide an annual projection of scheduled maintenance to the Company. Customer shall be allowed changes or additions to this projection upon notice to the Company based on the following schedule:

Outage Length	Required Notice
Less than 72 hours	24 hours
3 days to 30 days	7 days
Over 30 days	90 days

3. The duration of qualifying scheduled maintenance periods may not exceed a total of 56 days in any 12 month period.

(Continued on Sheet No. 5-106)

Date Filed: 05-19-16 Effective Date: 07-19-18 By: Christopher B. Clark

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/ M-13-315 & Order Date: 04-20-18

E999/CI-15-115

С С LC Ν

D

Ν D

С С

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### STANDBY SERVICE RIDER (Continued)

Section No. 5 7th Revised Sheet No. 105

### TERMS AND CONDITIONS OF SERVICE (Continued)

The provisions of this Section 10 shall not apply if appropriate capacity accreditation has been obtained for the customer's generation from the Midwest Reliability Organization (MRO), or any successor organization. Customer must take responsibility for the preparation of the information necessary for the accreditation filing. The Company will advise and assist the Customer in this process but failure of customer in the preparation of the information and/or failure to obtain accreditation of the customer's generation will result in the customer being ineligible for the exemption from the provisions of this Section 10.

- 11. In the event any portion of the capacity obtained by the Company, at additional costs, and which is attributable to the customer's use of Standby Service under Section 10 above, is subsequently also used to satisfy the requirements of the Company's other customers, the Peak Demand Charges under Section 10 above shall be reduced relative to the portion of said capacity used to serve other customers.
- 12. The Company shall provide notice to the Standby customers when peak load conditions are expected to occur through the same means that the Company notifies interruptible customers of the potential interruption.
- 13. Company will install and charge customer for the additional metering necessary, to allow for determination of the separate billing demand applicable to the base tariff and Standby Rider and for determining energy use under the Grace Period identified above. In particular, the Company will install a separate meter that measures the flow of power and energy from the customer's own generating facility. Customer shall reimburse the Company for the costs of installing, operating, and maintaining the required additional metering and for any other facilities required to serve the customer's Standby load. If, as a result of the customer's construction and installation of their generating facility, it is more practical for the customer to install some or all of the metering equipment required, the customer may be permitted to do so, subject to Company's approval of such equipment.

(Continued on Sheet No. 5-106)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

MENT Docket No. E002/RP-19-368 EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**STANDBY SERVICE RIDER (Continued)** 

Section No. 5 8th Revised Sheet No. 106

## ADDITIONAL TERMS AND CONDITIONS OF SERVICE ASSOCIATED WITH THE SCHEDULED MAINTENANCE OPTION (Continued)

- 4. If customer does not comply with all terms and conditions for qualifying scheduled maintenance periods during any billing month, all use of Standby Service for the same month will be subject to the Peak Period Standby Energy charge provision. Company may determine partial non-compliance and limit the quantity of Standby Service usage subject to the Peak Period Standby Energy charge provision. Company reserves the right to remove availability of the Scheduled Maintenance Option for any customer upon a determination of significant and multiple occurrences of failure to comply with all associated terms and conditions.
- 5. The use of Standby Service during qualifying scheduled maintenance periods will not be included in the determination of Peak Period Standby Energy usage.

(Continued on Sheet No. 5-107)

Date Filed: 05-19-16 By: Christopher B. Clark Effective Date: 07-19-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-315 & E999/CI-15-115 Order Date: 04-20-18

T C

С

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

### MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## STANDBY SERVICE RIDER (Continued)

Section No. 5 7th Revised Sheet No. 106

## ADDITIONAL TERMS AND CONDITIONS OF SERVICE ASSOCIATED WITH THE SCHEDULED **MAINTENANCE OPTION**

- The optional Scheduled Maintenance rates are available to Standby Service customers who agree to schedule maintenance of their power source during qualifying scheduled maintenance periods.
- 2. Qualifying Scheduled Maintenance Periods

Customers With Greater Than 100 kW to 10,000 kW of Contracted Standby Capacity. Maintenance must occur within the calendar months of April, May, October, and November. Customer must provide Company with written notice of scheduled maintenance prior to the beginning of the maintenance period.

Customers With Greater Than 10,000 kW of Contracted Standby Capacity. Maintenance must occur at a time period mutually agreed to by Company and customer. These time periods will normally not include those times when Company expects system seasonal peak load conditions to occur, nor at those times when Company is required to use generation or to purchase power, with production costs of \$70 or more per MWh. Customer shall provide an annual projection of scheduled maintenance to the Company. Customer shall be allowed changes or additions to this projection upon notice to the Company based on the following schedule:

> Outage Length Required Notice Less than 48 hours 24 hours 2 days to 30 days 7 days Over 30 days 90 days

- The duration of qualifying scheduled maintenance periods may not exceed a total of six weeks in any 12 month period.
- 4. An additional charge shall apply if customer does not comply with all terms and conditions for qualifying scheduled maintenance periods. The additional charge shall be determined by calculating the additional charges which would have applied if customer were billed on the Unscheduled Maintenance Option for the period extending back to the customer's last scheduled maintenance period.
- 5. The demand charges of the base tariffs shall not apply to use of Standby Service during qualifying scheduled maintenance periods. Also, use of Standby Service during qualifying scheduled maintenance periods, will not count against the grace period.

(Continued on Sheet No. 5-107)

Date Filed: Effective Date: 11-02-15 By: Christopher B. Clark 10-01-17

President, Northern States Power Company, a Minnesota corporation

## PUBLIC DOCUMENT

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

STANDBY SERVICE RIDER (Continued)

Section No. 5 5th Revised Sheet No. 107

#### ADDITIONAL TERMS AND CONDITIONS OF SERVICE FOR NON-FIRM STANDBY OPTION

- Non-firm standby rates are available to customers who agree to use Standby Service only by prearrangement with the Company.
- Company makes no guarantee that Standby Service will be available to Non-Firm Standby Service 2. customers; however, the Company will make reasonable efforts to provide Standby Service whenever possible.
- 3. Customer must request use of Standby Service and receive approval from the Company prior to actually using Standby Service.
- Use of Standby Service without prior approval by the Company shall subject the Non-Firm Standby Service customer to the following:
  - The monthly demand charges from the base tariff applied to the unapproved Standby Service used in the month in which unapproved use of Standby Service occurred, plus
  - Firm Standby Service unscheduled maintenance option reservation fees retroactively applied to the six months prior to the month in which unapproved use of Standby Service occurred.
- If unapproved use of Standby Service occurs twice in any 12 month period, the Company reserves the right to convert the Non-Firm Standby Service customer to Firm Standby Service.
- 6. Non-Firm Standby Service customers will remain on Non-Firm Standby Service for a period of not less than five years which includes a one year trial period.

Date Filed: By: Christopher B. Clark 11-02-15 Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

### SUPPLEMENTAL GENERATION SERVICE RIDER

Section No. 5 12th Revised Sheet No. 108

#### **AVAILABILITY**

Applicability of Supplemental Service is similar to that of Standby Service Rider, where customers with an alternative generation source greater than 60 kW, which serves all or a portion of the customer's electric energy requirements and where customer chooses to use the Company's electric service when the alternative generation is either partly or wholly unavailable.

Specifically, Supplemental Service is targeted at applications where the output of the alternative generation is designed primarily to meet the customer's thermal-load requirements and as such, the generator's electric energy output is variable because it is dependent on the customer's thermal requirements.

The normal expectation of this Rider is that the customer will contract for a firm portion of their backup supply from the Company under the Standby Service Rider and will contract for the variable portion under this Supplemental Generation Service Rider. Each customer request for service under this Rider will be evaluated on a customer specific basis to determine eligibility.

Under this service, the Company will provide Supplemental Generation Service in accordance with the provisions of the General Rules and Regulations, Section 2.4.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### RESERVATION RATES

Customer Charge per Month	\$25.64	
Demand Charge per Month per kW of Contracted Supplemental Service	<b>#0.40</b>	
Secondary Voltage Service Primary Voltage Service	\$3.40 \$2.60	R
Transmission Transformed Voltage Service Transmission Voltage Service	\$1.85 \$1.05	R R
	Ŧ · · · · ·	R

#### **USAGE RATES**

Demand Charge per Month per kW of Supplemental Generation Capacity Used. There will be no Usage Rate demand charge for Supplemental capacity actually used under this Rider except if that capacity is used during one of the Company's energy controlled or peak controlled interrupt periods. In such case, the demand will be charged as described below.

Energy Charge per kWh of Supplemental Generation Energy Used. Energy actually used under this Rider during normal time periods will be charged at the same energy and fuel cost charges as contained in the base tariff to which this Rider is attached. However, if energy is used during one of the Company's energy controlled or peak controlled interrupt periods, the energy will be charged as described below.

## (Continued on Sheet No. 5-109)

Date Filed: Effective Date: 03-15-19 By: Christopher B. Clark 06-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E,G999/CI-17-895 Order Date: 05-10-19

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### SUPPLEMENTAL GENERATION SERVICE RIDER

Section No. 5 11th Revised Sheet No. 108

#### AVAILABILITY

Applicability of Supplemental Service is similar to that of Standby Service Rider, where customers with an alternative generation source greater than 60 kW, which serves all or a portion of the customer's electric energy requirements and where customer chooses to use the Company's electric service when the alternative generation is either partly or wholly unavailable.

Specifically, Supplemental Service is targeted at applications where the output of the alternative generation is designed primarily to meet the customer's thermal-load requirements and as such, the generator's electric energy output is variable because it is dependent on the customer's thermal requirements.

The normal expectation of this Rider is that the customer will contract for a firm portion of their backup supply from the Company under the Standby Service Rider and will contract for the variable portion under this Supplemental Generation Service Rider. Each customer request for service under this Rider will be evaluated on a customer specific basis to determine eligibility.

Under this service, the Company will provide Supplemental Generation Service in accordance with the provisions of the General Rules and Regulations, Section 2.4.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **RESERVATION RATES**

Customer Charge per Month	\$25.64	
Demand Charge per Month per kW of Contracted Supplemental Service		
Secondary Voltage Service	\$3.47	R
Primary Voltage Service	\$2.67	R
Transmission Transformed Voltage Service	\$1.92	R
Transmission Voltage Service	\$1.12	R

### **USAGE RATES**

Demand Charge per Month per kW of Supplemental Generation Capacity Used. There will be no Usage Rate demand charge for Supplemental capacity actually used under this Rider except if that capacity is used during one of the Company's energy controlled or peak controlled interrupt periods. In such case, the demand will be charged as described below.

Energy Charge per kWh of Supplemental Generation Energy Used. Energy actually used under this Rider during normal time periods will be charged at the same energy and fuel cost charges as contained in the base tariff to which this Rider is attached. However, if energy is used during one of the Company's energy controlled or peak controlled interrupt periods, the energy will be charged as described below.

## (Continued on Sheet No. 5-109)

Date Filed:	10-01-18	By: Christopher B. Clark	Effective Date:	01-01-19
	President	, Northern States Power Company, a Minnesota	corporation	
Docket No.	E002/GR-15-826		Order Date:	06-12-17

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

#### MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## SUPPLEMENTAL GENERATION SERVICE RIDER

Section No. 5 10th Revised Sheet No. 108

#### **AVAILABILITY**

Applicability of Supplemental Service is similar to that of Standby Service Rider, where customers with an alternative generation source greater than 60 kW, which serves all or a portion of the customer's electric energy requirements and where customer chooses to use the Company's electric service when the alternative generation is either partly or wholly unavailable.

Specifically, Supplemental Service is targeted at applications where the output of the alternative generation is designed primarily to meet the customer's thermal-load requirements and as such, the generator's electric energy output is variable because it is dependent on the customer's thermal requirements.

The normal expectation of this Rider is that the customer will contract for a firm portion of their backup supply from the Company under the Standby Service Rider and will contract for the variable portion under this Supplemental Generation Service Rider. Each customer request for service under this Rider will be evaluated on a customer specific basis to determine eligibility.

Under this service, the Company will provide Supplemental Generation Service in accordance with the provisions of the General Rules and Regulations, Section 2.4.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

RESERVATION RATES		R
Customer Charge per Month	\$25.64	IX.
Demand Charge per Month per kW		
of Contracted Supplemental Service		
Secondary Voltage Service	\$3.44	R
Primary Voltage Service	\$2.64	R
Transmission Transformed Voltage Service	\$1.89	R
Transmission Voltage Service	\$1.09	R

#### **USAGE RATES**

Demand Charge per Month per kW of Supplemental Generation Capacity Used. There will be no Usage Rate demand charge for Supplemental capacity actually used under this Rider except if that capacity is used during one of the Company's energy controlled or peak controlled interrupt periods. In such case, the demand will be charged as described below.

Energy Charge per kWh of Supplemental Generation Energy Used. Energy actually used under this Rider during normal time periods will be charged at the same energy and fuel cost charges as contained in the base tariff to which this Rider is attached. However, if energy is used during one of the Company's energy controlled or peak controlled interrupt periods, the energy will be charged as described below.

## (Continued on Sheet No. 5-109)

Date Filed:	11-02-15	By: Christopher B. Clark	Effective Date:	10-01-17
	President	r, Northern States Power Company, a Minnesota co	orporation	
Docket No.	E002/GR-15-826		Order Date:	06-12-17

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## SUPPLEMENTAL GENERATION SERVICE RIDER (Continued)

Section No. 5 15th Revised Sheet No. 109

#### **FUEL CLAUSE**

Bills are subject to the adjustments provided for in the Fuel Clause Rider.

### **RESOURCE ADJUSTMENT**

Bills are subject to the adjustments provided for in the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, and the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, the Renewable Energy Standard Rider and the Mercury Cost Recovery Rider.

#### **ENVIRONMENTAL IMPROVEMENT RIDER**

Bills are subject to the adjustments provided for in the Environmental Improvement Rider.

#### **SURCHARGE**

In certain communities, bills are subject to surcharges provided for in a Surcharge Rider.

#### LOW INCOME ENERGY DISCOUNT RIDER

Bills are subject to the adjustment provided for in the Low Income Energy Discount Rider.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### LATE PAYMENT CHARGE

Any unpaid balance over \$10.00 is subject to a 1.5% late payment charge or \$1.00, whichever is greater, after the date due. The charge may be assessed as provided for in the General Rules and Regulations, Section 3.5.

## **DETERMINATION OF SUPPLEMENTAL GENERATION DEMAND**

The billing demand applicable to this Supplemental Generation Service Rider is determined separately from the billing demand applicable to the base tariff to which this Rider is attached. The billing demand for this Rider will be the quantity specified in the customer's Electric Service Agreement which is the maximum capacity of Supplemental Generation Service the Company is obligated to supply. The demand applicable to this Rider may be a different amount specified for each month where it is dependent on the variable thermal load requirements.

The amount of Supplemental Service capacity actually used by the customer, when customer's generator is wholly or partly out of service, will have no effect on the billing demand under the base tariff and will be subtracted from the total metered demand, to determine the demand for standard service, to which the base tariff demand charge applies. The amount of Supplemental Service capacity actually used, is the amount of the Supplemental Service capacity contracted for, less the actual capacity supplied by the customer's generating facilities (assuming it is operating, but not at full capacity) but not less than zero. For applying the Usage Rate, as referenced in Section 10 below of this Rider, the Supplemental Generation Demand will be the maximum actual demand (as adjusted for power factor) that is supplied by the Company to serve that portion of the customer's load, up to the contracted Supplemental Generation Capacity, not served by the customer's alternative source of electric energy supply.

#### (Continued on Sheet No. 5-110)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## SUPPLEMENTAL GENERATION SERVICE RIDER (Continued)

Section No. 5 8th Revised Sheet No. 110

#### **DETERMINATION OF SUPPLEMENTAL GENERATION ENERGY**

Supplemental Generation Energy shall be that portion of the customer's total energy requirements provided by the Company to supplement the customer's generation. Supplemental Generation Energy shall be calculated hourly, and shall be Supplemental Generation Capacity for which the customer has contracted, less generation output above the contracted Standby capacity (as defined in the Standby Service Rider), but not less than zero.

#### TERMS AND CONDITIONS OF SERVICE

This Supplemental Generation Service Rider is applicable to any customer who requires greater than 60 kW of backup capacity from the Company. Supplemental Generation Service may not be used by a customer to serve controllable demand that is subject to interruption as determined by the Company under the Company's controllable service schedules.

The Company and customer will develop and attach to the Electric Service Agreement, a load control procedure for the customer that specifies the customer's demand side load reductions or alternative generation capacity the customer intends to use to avoid Supplemental Generation Demand Usage Rate charges. This attachment will specifically state that when customer has been notified that an energy control or peak control period has been initiated, the customer must reduce the load served by Company by an amount equal to the difference between actual generator output and contracted Supplemental Generation Capacity. Additionally, the customer's demand served under the base tariff to which this rider is attached, shall not increase during any energy control or peak control period. If customer fails at either of these requirements, customer will incur Supplemental Generation usage charges as defined in Section 10 below.

- 2. Customer will execute an Electric Service Agreement with the Company which will specify:
  - Type of Standby Service elected by the customer under the Standby Service Rider and the base tariff to which the Standby and Supplement Service Riders are attached,
  - b. The individual and total capacity requirements for which Company will be providing Standby and Supplemental Generation Service and to which the respective Rider charges apply, and
  - The expected initial level of firm service the customer will take under their base tariff, even if that c. expected level is zero, as well as any expected changes in load over the term of the agreement.

(Continued on Sheet No. 5-111)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## SUPPLEMENTAL GENERATION SERVICE RIDER (Continued)

Section No. 5 7th Revised Sheet No. 111

## TERMS AND CONDITIONS OF SERVICE (Continued)

- The Company's standard service meter will be detented to measure only the amount of capacity and energy provided by the Company to the customer.
- Company will not be obligated to supply Supplemental Generation Service to backup a customer's generator at a level in excess of the Supplemental Generation Capacity for which customer has contracted. This restriction in no way limits the amount of standard service the customer requires from the Company under the base tariff to which this Rider is attached. Any limits on standard service are governed by the provisions contained in the standard service tariffs.
- Customer will be liable for all damages allowed by law to the extent caused by customer's use of Supplemental power in excess of contracted Supplemental Generation Capacity.
- 6. Company will require customer to revise the Electric Service Agreement to contract for additional Supplemental Generation Capacity if the customer exceeds the contract amounts in any three of the preceding 12 months.
- Customer will annually furnish documentation to Company confirming the maximum capacity and reliability of the power source for which customer requires Supplemental Generation Service. Company and customer will review actual output and performance of the power source relative to the capacity nominated for Supplemental Generation Service in the Electric Service Agreement. If this review shows a significant and consistent shortfall between the power source's actual performance and the nominated capacity due to factors reasonably within customer's control, Company will notify customer of its intent to refuse to provide Supplemental Generation Service. Upon receipt of such notice, customer may agree to reduce the Supplemental Generation Service nomination in its Electric Service Agreement or to take such action as necessary to operate the power source at or reasonably near the nominated Supplemental Generation Service Capacity. If customer's power source does not operate at or reasonably near that level during the 12 months immediately following Company's notice, Company may refuse to provide Supplemental Generation Service until such time as customer agrees to reduce its Supplemental Generation Service nomination or provide Company with documentation demonstrating the power source's actual performance at or reasonably near the nominated Supplemental Generation Service for a trial period of three consecutive months.
- Customer will remain on Supplemental Generation Service for a period of not less than 12 months.

(Continued on Sheet No. 5-112)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

## PUBLIC DOCUMENT

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## SUPPLEMENTAL GENERATION SERVICE RIDER (Continued)

Section No. 5 8th Revised Sheet No. 112

### TERMS AND CONDITIONS OF SERVICE (Continued)

- Customer will be allowed to take Supplemental Generation Energy from the Company at any time, up to the maximum contracted level of Supplemental Generation Demand, without incurring any usage demand charges except during the periods listed below.
- 10. In the event customer requires Supplemental Generation Service during one of the Company's energy control periods, customer will pay for the Supplemental Generation Energy used during the energy control period at the applicable control period energy rate as listed in Company's Energy Controlled Service tariff.

In the event customer requires Supplemental Generation Service during one of the Company's peak control periods, as defined in the Rules for Application of Peak Controlled Services, customer will pay for the Supplemental Generation Energy used during the peak control period at twice the applicable control period energy rate as listed in Company's Energy Controlled Service tariff plus a fee of \$10.00 per kW of maximum Supplemental Generation Capacity used during the peak control period.

However, if this use occurs at the times of Company's system peak hours in which the Company would have insufficient Accredited Capacity under the Midwest Reliability Organization (MRO) or any successor organization, and the Company incurs additional capacity costs as a result of such Supplemental Generation Service used by customer, customer shall pay Peak Demand Charges for the month in which such Supplemental Generation Service use occurs and for each of the five succeeding months, instead of the above listed demand charges and/or Reservation Fees. Such Peak Demand Charges shall be based upon the following:

- If customer has notified Company of the need to use Supplemental Generation Service at least three hours prior to Company's system peak hour, such Supplemental Generation Peak Demand charges shall be based on one-sixth of any additional capacity costs incurred by the Company as a result of using Supplemental Generation Service. Such additional capacity costs shall not include any afterthe-fact capacity purchase costs incurred by the Company.
- b. If customer has not notified the Company of any need for Supplemental Generation Service at least three hours prior to the Company's system peak hour, such Supplemental Generation Peak Demand charges shall be based on one-sixth of any additional capacity costs or after-the-fact purchase costs incurred by the Company as a result of using Supplemental Generation Service. The demand for billing purposes for the succeeding five months shall be equal to the Supplemental Generation Demand placed on the system during the time of the Company's system peak hour.

(Continued on Sheet No. 5-113)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-15-826 06-12-17 Order Date:

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SUPPLEMENTAL GENERATION SERVICE RIDER (Continued)

Section No. 5 8th Revised Sheet No. 113

#### TERMS AND CONDITIONS OF SERVICE (Continued)

The potential capacity charge provisions of this Section 10 shall not apply if appropriate capacity accreditation has been obtained for the customer's generation from the Midwest Reliability Organization (MRO), or any successor organization. Customer must take responsibility for the preparation of the information necessary for the accreditation filing. The Company can advise and assist the Customer in this process but failure of customer in the preparation of the information and/or failure to obtain accreditation of the customer's generation will result in the customer being ineligible for the exemption from the capacity charge provisions of this Section 10.

- 11. In the event any portion of the capacity obtained by the Company at additional costs and which is attributable to the customer's use of Supplemental Service under Section 10 above, is subsequently also used to satisfy the requirements of the Company's other customers, the peak demand charges under Section 10 above shall be reduced relative to the portion of said capacity used to serve the other customers.
- 12. The Company shall provide notice to the Supplemental Generation Service customers when energy control or peak control conditions are expected to occur through the same means that the Company notifies interruptible customers of the potential interruption.
- 13. Company will install and charge customer for the additional metering necessary, as determined by the Company, to allow for determination of the separate billing demands applicable to the base tariff, Standby Service Rider and Supplemental Generation Service Rider demands. In particular, the Company will install a separate meter that measures the flow of power and energy from the customer's own generating facility. Customer shall reimburse the Company for the costs of installing, operating, and maintaining the required additional metering and for any other facilities required to serve the customer's Supplemental Generation load. If, as a result of the customer's construction and installation of their generating facility, it is more practical for the customer to install some or all of the metering equipment required, customer may be permitted to do so subject to Company's approval of such equipment.

(Continued on Sheet No. 5-114)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

SUPPLEMENTAL GENERATION SERVICE RIDER (Continued)

Section No. 5 7th Revised Sheet No. 114

Supplemental Generation Service customers shall schedule maintenance of their power source during qualifying scheduled maintenance periods.

ADDITIONAL TERMS AND CONDITIONS ASSOCIATED WITH SCHEDULING MAINTENANCE

2. Qualifying Scheduled Maintenance Periods

> Customers With Greater than 60 kW up to 10,000 kW of Contracted Standby and Supplemental Generation Capacity. Maintenance must occur within the calendar months of April, May, October, and November. Customer must provide Company with written notice of scheduled maintenance prior to the beginning of the maintenance period.

Customers With Greater Than 10,000 kW of Contracted Standby and Supplemental Generation Capacity. Maintenance must occur at a time period mutually agreed to by Company and customer. These time periods will normally not include those times when Company expects system seasonal peak load conditions to occur, nor at those times when Company is required to use generation equipment or to purchase power that results in production costs of \$70 or more per MWh. Customer shall provide an annual projection of scheduled maintenance to the Company. Customer shall be allowed changes or additions to this projection upon notice to the Company based on the following schedule:

> Outage Length Required Notice Less than 48 hours 24 hours 2 days to 30 days 7 days Over 30 days 90 days

- The duration of qualifying scheduled maintenance periods may not exceed a total of six weeks in any 12 month period.
- An additional charge shall apply if customer does not comply with all terms and conditions for qualifying scheduled maintenance periods. The additional charge shall be determined by calculating the additional charges which would have applied if customer were billed on the Unscheduled Maintenance Option for the period extending back to the customer's last scheduled maintenance period.
- 5. The demand charges of the base tariffs of General Service or General Time of Day Service shall not apply to use of Supplemental Service during qualifying scheduled maintenance periods.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## TIER 1 ENERGY CONTROLLED SERVICE RIDER **RATE CODE A27**

Section No. 5 13th Revised Sheet No. 115

#### **AVAILABILITY**

Availability is restricted to customers who are taking service on the Tier 1 option of the Peak Controlled Time of Day Service.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **RATE**

The rates and provisions of Tier 1 of the Peak Controlled Time of Day Service schedule shall apply except that the on peak and off peak energy charges for secondary voltage are replaced as follows:

#### Energy Charge per kWh

Firm On Peak Period Energy	\$0.04855	R
Firm Off Peak Period Energy	\$0.02341	R
Controllable On Peak Period Energy	\$0.04647	R
Controllable Off Peak Period Energy	\$0.02280	R
Control Period Energy	\$0.09000	1

#### TERMS AND CONDITIONS OF SERVICE

- Failure to Control Charge: Except as provided for under Control Period Energy Service described below, the following charges will apply in any month customer fails to control load to Predetermined Demand Level or fails to control the full amount of their fixed Controllable Demand under the Optional PDL:
  - An additional charge of \$10.00 per kW will apply during each Company specified control period to the amount by which customer's Maximum Adjusted Demand exceeds their Predetermined Demand Level, and
  - The Control Period Energy charge will apply to the energy used during the control period that is associated with the customer's Controllable Demand.

After three such customer failures to control load to their Predetermined Demand Level, Company reserves the right to increase the Predetermined Demand Level or remove customer from Tier 1 Energy Controlled Service Rider and apply the cancellation charge specified in customer's Electric Service Agreement.

(Continued on Sheet No. 5-116)

Date Filed: 03-15-19 By: Christopher B. Clark Effective Date: 06-01-19

President, Northern States Power Company, a Minnesota corporation

E,G999/CI-17-895 Docket No. Order Date: 05-10-19 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

### MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

TIER 1 ENERGY CONTROLLED SERVICE RIDER	Section No.	5
RATE CODE A27	12th Revised Sheet No.	115

#### **AVAILABILITY**

Availability is restricted to customers who are taking service on the Tier 1 option of the Peak Controlled Time of Day Service.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **RATE**

The rates and provisions of Tier 1 of the Peak Controlled Time of Day Service schedule shall apply except that the on peak and off peak energy charges for secondary voltage are replaced as follows:

#### Energy Charge per kWh

Firm On Peak Period Energy	\$0.05098	R
Firm Off Peak Period Energy	\$0.02458	R
Controllable On Peak Period Energy	\$0.04878	R
Controllable Off Peak Period Energy	\$0.02393	R
Control Period Energy	\$0.09000	1

## TERMS AND CONDITIONS OF SERVICE

- Failure to Control Charge: Except as provided for under Control Period Energy Service described below. the following charges will apply in any month customer fails to control load to Predetermined Demand Level or fails to control the full amount of their fixed Controllable Demand under the Optional PDL:
  - An additional charge of \$10.00 per kW will apply during each Company specified control period to the amount by which customer's Maximum Adjusted Demand exceeds their Predetermined Demand Level, and
  - The Control Period Energy charge will apply to the energy used during the control period that is b. associated with the customer's Controllable Demand.

After three such customer failures to control load to their Predetermined Demand Level, Company reserves the right to increase the Predetermined Demand Level or remove customer from Tier 1 Energy Controlled Service Rider and apply the cancellation charge specified in customer's Electric Service Agreement.

(Continued on Sheet No. 5-116)

Date Filed: 10-01-18 Effective Date: By: Christopher B. Clark 01-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## TIER 1 ENERGY CONTROLLED SERVICE RIDER RATE CODE A27

Section No. 5 11th Revised Sheet No. 115

#### **AVAILABILITY**

Availability is restricted to customers who are taking service on the Tier 1 option of the Peak Controlled Time of Day Service.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **RATE**

The rates and provisions of Tier 1 of the Peak Controlled Time of Day Service schedule shall apply except that the on peak and off peak energy charges for secondary voltage are replaced as follows:

#### Energy Charge per kWh

Firm On Peak Period Energy	\$0.04986	R
Firm Off Peak Period Energy	\$0.02404	R
Controllable On Peak Period Energy	\$0.04767	R
Controllable Off Peak Period Energy	\$0.02340	R
Control Period Energy	\$0.09000	TX.

#### TERMS AND CONDITIONS OF SERVICE

- Failure to Control Charge: Except as provided for under Control Period Energy Service described below, the following charges will apply in any month customer fails to control load to Predetermined Demand Level or fails to control the full amount of their fixed Controllable Demand under the Optional PDL:
  - An additional charge of \$10.00 per kW will apply during each Company specified control period to the amount by which customer's Maximum Adjusted Demand exceeds their Predetermined Demand Level, and
  - b. The Control Period Energy charge will apply to the energy used during the control period that is associated with the customer's Controllable Demand.

After three such customer failures to control load to their Predetermined Demand Level, Company reserves the right to increase the Predetermined Demand Level or remove customer from Tier 1 Energy Controlled Service Rider and apply the cancellation charge specified in customer's Electric Service Agreement.

(Continued on Sheet No. 5-116)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

#### MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

TIER 1 ENERGY CONTROLLED SERVICE RIDER (Continued)
RATE CODE A27

Section No. 5 8th Revised Sheet No. 116

## TERMS AND CONDITIONS OF SERVICE (Continued)

- 2. The duration and frequency of interruption periods shall be at the discretion of Company. Interruption periods will normally occur at such times when:
  - a. Company is required to use generation equipment or to purchase power that results in production costs in excess of \$70 per MWH,
  - b. Company expects a reasonable possibility of system load levels surpassing the level for which NSP has sufficient accredited capacity under the Midwest Reliability Organization (MRO) or any successor organization, including reserve requirements, or
  - c. In Company's opinion, the reliability of the system is endangered.
- 3. Customer's Electric Service Agreement with Company will include a maximum of 300 hours of interruption per year.
- 4. All other provisions of Tier 1 of the Peak Controlled Time of Day Service schedule not in conflict with the Tier 1 Energy Controlled Service Rider shall apply.

#### **CONTROL PERIOD ENERGY SERVICE**

#### **AVAILABILITY**

Available to Tier 1 Energy Controlled Service Rider customers for supply of Controllable Demand related energy during control periods. The Control Period Energy charge will apply when the Company is required to use generation equipment or to purchase power that results in production costs in excess of \$70 per MWh. Control Period Energy Service will not be available when Company expects system peak load conditions or during system emergencies.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

## RATE

The control period energy charge will apply to all Controllable Demand related energy used during the control period.

## TERMS AND CONDITIONS OF SERVICE

- Control Period Energy Service will be available provided such service will not adversely affect firm service to any customer.
- 2. Company reserves the right to refuse or control the supply of Control Period Energy Service if its capacity is not adequate to furnish such service.

(Continued on Sheet No. 116.1)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

## PUBLIC DOCUMENT

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401 MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**TIER 1 ENERGY CONTROLLED SERVICE RIDER** 

(Continued) **RATE CODE A27** 

Section No. 5 5th Revised Sheet No. 116.1

## TERMS AND CONDITIONS OF SERVICE (Continued)

- All other provisions of the Tier 1 Energy Controlled Service Rider not in conflict with Control Period Energy Service shall apply.
- Company notice of commencement of control period will include notice of availability of Control Period Energy Service.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

REVENUE DECOUPLING MECHANISM RIDERSection No.5PILOT PROGRAM5th Revised Sheet No.117

#### **APPLICABILITY**

Applicable to bills for electric service provided under the Company's Residential and non-demand-metered Small General Service schedules, excluding lighting services.

#### **RIDER**

For customers subject to this rider, there shall be included on each customer's monthly bill a Revenue Decoupling Mechanism Rider (RDM Rider) which shall be the applicable Revenue Decoupling Mechanism Rider factor multiplied by the customer's monthly kWh electric consumption.

#### **DETERMINATION OF RDM RIDER FACTORS**

## Annual RDM Rider Factor

Each year during the term of this rider the Company will calculate an RDM Rider factor for each applicable class. These factors will be based on revenues billed through December 31 and applied to bills from April 1 through the March 31 of the following year. The RDM Rider factors are:

Residential without Space Heating (A01, A02, A03, A04, A05, A06)	\$0.001625 per kWh credit	R
Residential with Space Heating (A00, A01, A02, A03, A04, A05, A06)	\$0.001056 per kWh credit	R
Small General Service (non-demand) (A05, A06, A09, A10, A11, A12, A16, A18, A22)	\$0.000213 per kWh credit	R

The calculation for the RDM Rider factor is:

Annual RDM Rider factor = RDM Rider Deferral / Forecasted Sales

For purposes of this section the following definitions apply:

RDM Rider Deferral Annual RDM Rider Deferral = the sum of the 12 monthly RDM Rider Deferrals plus any

under- or over-recovery of the previous Annual RDM Rider Deferral as described in item 3

of the RDM Rider Deferral Account on tariff sheet 5-118.

Forecasted Sales Forecasted Usage = forecasted use in kWh for the timeframe the RDM Rider factor to be

in place.

The Annual RDM Rider factor to collect under-recovered revenues shall be capped at +3% of the total customer group base revenue for each of the rate classes, unless the Company is granted approval from the Minnesota Public Utilities Commission (Commission) to recover revenues in excess of the 3% cap. The RDM Rider factor to return over-recovered revenues shall not be capped.

### (Continued on Sheet No. 5-118)

Date Filed: 02-01-19 By: Christopher B. Clark Effective Date: 04-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-13-868 & E002/GR-15-826 & Order Date: 08-31-15 &

E002/M-19-127 06-12-17

Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

### MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

REVENUE DECOUPLING MECHANISM RIDER Section No. 5
PILOT PROGRAM 4th Revised Sheet No. 117

#### **APPLICABILITY**

Applicable to bills for electric service provided under the Company's Residential and non-demand-metered Small General Service schedules, excluding lighting services.

#### **RIDER**

For customers subject to this rider, there shall be included on each customer's monthly bill a Revenue Decoupling Mechanism Rider (RDM Rider) which shall be the applicable Revenue Decoupling Mechanism Rider factor multiplied by the customer's monthly kWh electric consumption.

#### **DETERMINATION OF RDM RIDER FACTORS**

#### Annual RDM Rider Factor

Each year during the term of this rider the Company will calculate an RDM Rider factor for each applicable class. These factors will be based on revenues billed through December 31 and applied to bills from April 1 through the March 31 of the following year. The RDM Rider factors are:

Residential without Space Heating (A01, A02, A03, A04, A05, A06)	\$0.003064 per kWh surcharge	R
Residential with Space Heating (A00, A01, A02, A03, A04, A05, A06)	\$0.002361 per kWh surcharge	R
Small General Service (non-demand) (A05, A06, A09, A10, A11, A12, A16, A18, A22)	\$0.001245 per kWh surcharge	R

The calculation for the RDM Rider factor is:

Annual RDM Rider factor = RDM Rider Deferral / Forecasted Sales

For purposes of this section the following definitions apply:

RDM Rider Deferral Annual RDM Rider Deferral = the sum of the 12 monthly RDM Rider Deferrals plus any

under- or over-recovery of the previous Annual RDM Rider Deferral as described in item 3

of the RDM Rider Deferral Account on tariff sheet 5-118.

Forecasted Sales Forecasted Usage = forecasted use in kWh for the timeframe the RDM Rider factor to be

in place.

The Annual RDM Rider factor to collect under-recovered revenues shall be capped at +3% of the total customer group base revenue for each of the rate classes, unless the Company is granted approval from the Minnesota Public Utilities Commission (Commission) to recover revenues in excess of the 3% cap. The RDM Rider factor to return over-recovered revenues shall not be capped.

## (Continued on Sheet No. 5-118)

Date Filed: 02-01-18 By: Christopher B. Clark Effective Date: 04-01-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-13-868 & E002/GR-15-826 Order Date: 08-31-15 &

06-12-17

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

REVENUE DECOUPLING MECHANISM RIDER (Continued)
PILOT PROGRAM

Section No. 5
3rd Revised Sheet No. 118

## **DETERMINATION OF RDM RIDER FACTORS (Continued)**

**RDM Rider Deferral Account** 

1. Each month the Company will calculate the Monthly RDM Rider Deferral, which will be entered in the RDM Rider Deferral Account. Separate deferrals will be calculated for Residential Standard, Residential with Electric Space Heating, and non-demand-metered Small General services.

Monthly RDM Rider Deferral = (FRC x C) - (FEC x Sales)

For purposes of this section, the following definitions apply:

FRC <u>Fixed Revenue per Customer</u> = Energy charge revenues divided by customer count,

calculated monthly from test year data. Expressed in dollars per customer

C Customer Count = Actual customer count for deferral month.

FEC <u>Fixed Energy Charge</u> = Average energy charge for each month of test year. Expressed in

dollars per kWh

Sales Actual Sales = Actual billed sales for deferral month. Expressed in kWh.

- 2. The Company will defer and amortize the Monthly RDM Deferrals in Account 182.3 or 254.
- 3. Any under- or over-recovery of the Annual RDM Rider Deferral will be included as a deferral in the RDM Rider Deferral Account and reflected in the calculation of the following year's Annual RDM Rider factor.

#### **TERM**

The Company will begin calculating Monthly RDM Rider Deferrals in the first full month after receiving a Final Order from the Commission in Docket No. E002/GR-13-868, but not before January 1, 2016.

The Company will file its proposed Annual RDM Rider factor surcharge or credit with the Commission annually on February 1, beginning on February 1, 2017. The proposed rate will become effective on April 1 each year and remain in effect for the next 12 months, or until April 1 of the following year. In the event the Company files a rate case during the pilot program, the RDM rider factors from deferrals in a test year will not be applied to bills until final rates in that proceeding have been approved by the Commission.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### AREA DEVELOPMENT RIDER

Section No. 5 5th Revised Sheet No. 119

#### **AVAILABILITY**

Available to new or existing demand metered customers located in Area Development Zones whose proper Standard Industrial Classification (SIC) is manufacturing or wholesale trade and who qualify for other development incentives offered by local government entities. The availability of this Rider is limited to specific Area Development Zones that meet the criteria listed below as set forth by the Commission.

#### **ZONE DESIGNATION**

Area Development Zones in the seven county Twin Cities' metropolitan area (Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties) must be located within one of the cities lying within the "Fully Developed Area" as classified by the Metropolitan Council in the document entitled "Metropolitan Development and Investment Framework (December 1988)" that has experienced a decline in combined employment in manufacturing and wholesale trade between 1980 and the most recent year for which data are available as published by the Minnesota Department of Economic Security. Eligible communities are Bloomington, Columbia Heights/Hilltop, Crystal, Fridley, Golden Valley, Hopkins, Minneapolis, New Brighton, Roseville, South St. Paul, St. Louis Park, and St. Paul. Area Development Zones in cities located outside the seven county Twin Cities' metropolitan area must be located in a city with a minimum population of 25,000 based on the most recent U.S. Census of Population and must be located in a county (or counties) that have experienced a decline in combined employment in manufacturing and wholesale trade between 1987 and the most recent year for which data are available as published by the Minnesota Department of Economic Security. The Area Development Zone must be an existing or proposed industrial park with a minimum size of ten acres. The maximum total number of active zones at any time is 18; the maximum number of active zones in the seven county Twin Cities' metropolitan area is 15. The maximum number of active zones in any community is three. A zone can be "decertified" and a new Area Development Zone established at any time as long as there are no more than three Area Development Zones in a community at any point in time.

## **RATE**

The rates and provisions of the customer's regular rate schedule shall apply except monthly demand charges for customer's Qualified Billing Demand shall be reduced as follows:

<u>Years</u>	Percent Reduction
1 - 3	50%
4	30%
5	20%
6	0%

(Continued on Sheet No. 5-120)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401 MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## AREA DEVELOPMENT RIDER (Continued)

Section No. 5 5th Revised Sheet No. 120

#### **QUALIFIED BILLING DEMAND**

The portion of the customer's billing demand that qualifies for reduced demand charges.

New Customers. The total billing demand of new customers shall be defined as Qualified Billing Demand.

Existing Customers. The billing demand in excess of customer's base billing demand shall be defined as qualified billing demand. The base billing demand for each month will be calculated by averaging the monthly billing demands from the two-year period immediately preceding the customer's application for this Rider.

#### **NEW CUSTOMERS**

To be considered a new customer for the purpose of this Rider, an applicant must demonstrate one of the following:

- That business has not been conducted at the premises for at least three monthly billing periods prior to application.
- That the predecessor customer is in bankruptcy and the applicant has obtained the business in a 2. liquidation of assets sale,
- Customer's activities are largely or entirely different in nature from that of the previous customer, or 3.
- If the activities are not so different, that the owner(s), operator(s), or manager(s) are substantially different.

#### **EXISTING CUSTOMERS**

Existing customers who materially increase their use of electric service may qualify for service under this Rider, provided such material increase is the result of the addition of equipment, or expansion of the customer's facility or operations. The customer shall notify the Company in writing and document the basis for the material increase in its use of electric service. Following such notification, the Company will review the customer's monthly billing demands. If the billing demands for each of the next three consecutive months exceed that from the comparable monthly period of the preceding year by at least 25%, the customer will be eligible thereafter to receive service under this Rider.

#### **RIGHT TO REFUSE SERVICE**

The Company reserves the right to refuse applicants for service under this Rider if it determines that significant additional capital expenditures will be required to provide service to that applicant. In such cases, an applicant may be able to qualify for service by making a non-refundable contribution to compensate for the significant additional capital costs incurred by the Company to supply service to the applicant.

(Continued on Sheet No. 5-121)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Order Date: Docket No. E002/GR-15-826 06-12-17

## PUBLIC DOCUMENT

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

### **AREA DEVELOPMENT RIDER (Continued)**

Section No. 5 5th Revised Sheet No. 121

#### **ENERGY EFFICIENCY**

For service taken on this Rider, the Company will conduct an energy audit and inform the customer of the conservation programs available from the Company.

### **ELECTRIC SERVICE AGREEMENT**

Any customer taking service under this Area Development Rider shall execute an Electric Service Agreement, or amend their existing Electric Service Agreement, with the Company for a period of six years beginning on the effective date on which the customer commences taking service under this Rider; however, customers who began service under the Pilot Area Development Rider before June 28, 1995, with Electric Service Agreement terms of five years, will not be required to amend or modify those agreements. Such Electric Service Agreements (new or amended) shall state the increased or new load level of the customer as well as the customer's obligation to continue to purchase all of their electric power and electric energy from the Company during the term of the agreement.

Date Filed: By: Christopher B. Clark 11-02-15 Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368
D Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### **COMPETITIVE RESPONSE RIDER**

Section No. 5 5th Revised Sheet No. 122

### **AVAILABILITY**

Available at Company's discretion to demand-metered commercial and industrial customers that are subject to effective competition.

Effective competition exists if a customer is located in Company's service territory and has the ability to obtain its energy requirements from an energy supplier not rate regulated by the Minnesota Public Utilities Commission.

#### **RATE**

Standard service rates and provisions, including controllable service provisions, apply except the level of the demand charges, energy charges, or both may be reduced for each customer as described below.

#### TERMS AND CONDITIONS OF SERVICE

- 1. Customer must provide Company with information that documents that service to the customer is subject to effective competition. The Company will treat information provided by the customer to the Company concerning load or effective competition that meets the definition of trade secret information under the Minnesota Government Data Practices Act ("Act") as trade secret information and, if provided to the Commission or other state agency, will request that the Commission or any other state agency treat the information as trade secret under the Act...
- 2. Minimum load served under this Rider is 2 MW. Any rate offered under this Rider shall not be available for any month in which the load served under this Rider falls below 2 MW.
- 3. Customer must execute an Electric Service Agreement with Company, or amend its existing Electric Service Agreement with the Company, to include:
  - a. The rate under this Rider, which:
    - i) must recover at least the incremental cost of providing service, including the cost of incremental capacity that is to be added while the rate is in effect and any applicable on peak or off peak differential;
    - ii) must not exceed the difference between the standard tariff and the cost to the customer of the lowest cost competitive energy supply; and
    - iii) includes an annual minimum charge to fully recover distribution costs.

(Continued on Sheet No. 5-123)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

#### MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

### **COMPETITIVE RESPONSE RIDER (Continued)**

Section No. 5 6th Revised Sheet No. 123

#### TERMS AND CONDITIONS OF SERVICE

- Customer must execute an Electric Service Agreement with Company, or amend its existing Electric (Continued)
  - b. The term of service under this Rider, which must be no less than one year and no longer than seven years, beginning on the date the customer begins taking service under this rider,
  - c. The size of the load served under this Rider,
  - d. Verification that customer has been fully informed of the availability of energy audits. If no energy audit is performed for customer, an explanation of why an energy audit was not necessary will be included.
  - Establishing the effective date of the rate, which must be at least 60 days after the date upon which the Company files its petition for Commission approval of the Electric Service Agreement,
  - f. If the Customer requests that the rate be implemented on an interim rate basis, a statement that the rate will be treated as an interim rate as of the effective date and until Commission approval, modification or disapproval is received. If a modified rate is approved and accepted by the customer and Company, or if the rate is disapproved, the Company will recover the difference between the interim rate and the approved rate (modified or base) from the customer, and
  - g. Requirements for a bond or other security acceptable to the Company to provide full recovery of any portion of any interim rate discount disallowed by the Commission.
- 4. For existing customers receiving a discount, the Company, within a general rate case, is allowed to seek recovery of the difference between the applicable commercial and industrial tariff and this Rider times the usage level during the test year period.
- 5. A rate under this Rider shall meet the conditions of Minnesota Statutes, Section 216B.03, Reasonable Rate, for other customers in this same customer class.
- Unless the Commission determines that it would be in the public interest, a rate under this Rider shall not compete with district heating or cooling provided by a district heating utility defined by Minnesota Statutes, Section 216B.166, Subdivision 2, Paragraph (c).
- 7. A rate offered under this Rider may not be offered to a customer in which the Company has a financial interest greater than 50%.

(Continued on Sheet No. 5-124)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368

Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK – MPUC NO. 2

### **COMPETITIVE RESPONSE RIDER (Continued)**

Section No. 5 6th Revised Sheet No. 124

#### **REGULATORY REVIEW**

If the Customer requests that the rate be implemented on an interim rate basis, the rate offered under this Rider will be effective on an interim basis after filing by Company of the proposed rate with the Commission and upon the date specified in the Electric Service Agreement. If the Commission does not approve the rate, Company may seek to recover the difference in revenues between the interim competitive rate and the modified rate or the standard tariff rate, as applicable, from the customer who was offered the competitive rate.

The Commission has the authority to approve, modify, or reject a rate under this Rider. If the Commission approves the rate, it is effective as agreed to by the Company and customer. If the rate is modified by the Commission, the Commission shall issue an order modifying the rate subject to the approval of the Company and the customer. Each party has ten days in which to reject the proposed modification. If no party rejects the proposed modifications, the Commission's order becomes final. If either party rejects the Commission's proposed modifications, the Company on its behalf or on the behalf of the customer, may submit to the Commission a modified version of the Commission's proposal, which modified rate shall become an interim rate. The Commission shall accept or reject the modified version within 30 days. If the Commission rejects the rate, it shall issue an order indicating the reasons for the rejection.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

#### MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

PHOTOVOLTAIC DEMAND CREDIT RIDER RATE CODE A85 (CLOSED) RATE CODE A86

Section No. 5 4th Revised Sheet No. 125

#### **AVAILABILITY - GENERAL**

Applicable by customer request to demand-metered commercial and industrial customers that use Solar Photovoltaic as a customer-sited generation source with a capacity greater than 40 kW (AC) with a single production meter to serve all or a portion of customer's electric energy requirements. Not available to customer-sited generation that is the subject of another incentive program such as Solar\*Rewards.

#### **AVAILABILITY - CLOSED RATE**

Availability of the closed rate is limited to qualifying customer account locations that: 1) are receiving Standby Service Rider tariff service with the Photovoltaic Solar Credit on the date this Rider is originally approved by the Commission, or 2) have enrolled for the Rider before the date the credit rate in this Rider is revised by the Commission. The closed rate will remain fixed for a six year period beginning with the original Commission order date approving this Rider, expiring April 20, 2024. After expiration of the closed rate, the applicable standard rate will replace the closed rate.

The standard rate will apply to customer account locations that do not qualify for the closed rate. The standard rate may be revised at any time subject to approval by the Commission.

#### **RATE**

Customer Charge per Month \$25.75

Credit per kWh of Peak Period Solar Photovoltaic Generation (A85 - Closed) \$0.07139 Credit per kWh of Peak Period Solar Photovoltaic Generation (A86 - Standard) \$0.07139

#### **CREDIT KWH LIMIT**

The maximum kWh applied to the Rider credit per kWh each billing period is the Peak Period maximum 15-minute Solar Photovoltaic kW output for the billing period times 100 hours for billing periods ending in the months of June, July, August or September and 75 hours for billing periods ending in other months.

#### **CREDIT LIMIT**

The maximum credit for each billing period is the applicable standard or on-peak billed demand charge from the base tariff associated with this Rider. For Peak-Controlled Service and Peak-Controlled Time of Day Service customers, the maximum credit for each billing period is the billed demand charge for Firm Demand.

### **DEFINITION OF PEAK PERIOD**

Peak period hours are the six hours between 1:00 p.m. and 7 p.m. for all days.

### TERMS AND CONDITIONS OF SERVICE

- 1. Customer will execute an Electric Service Agreement with the Company that will specify:
  - a) The base tariff associated with this Rider, and
  - b) The installed capacity (AC) of customer's Solar Photovoltaic generation.
- 2. Company will install, own, and maintain the metering to measure the electric power and energy supplied by customer generation to allow for proper billing of the customer under this Rider. If, as a result of the customer's construction and installation of their generating facility, it is more practical for the customer to install some or all of the metering equipment required, the customer may be permitted to do so, subject to Company's approval of such equipment.
- 3. Company reserves the right to limit availability of this Rider to customer situations where the Solar Photovoltaic generation used by customer does not significantly affect the monthly peak demand of customer.
- 4. For Solar Photovoltaic generation, this Rider supersedes other Standby Service tariff provisions.

Date Filed: 05-19-16 By: Christopher B. Clark Effective Date: 06-01-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-13-315 & E999/CI-15-115 Order Date: 04-20-18

D N

Ν

NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

### TIER 1 PEAK CONTROLLED SHORT NOTICE RIDER

Section No. 11th Revised Sheet No. 126

#### **AVAILABILITY**

Availability is restricted to customers who are taking service on the Tier 1 option of Peak Controlled Service or Peak Controlled Time of Day Service. Customers choosing service under this rider shall agree to allow the Company to interrupt customer's load to a predetermined level within 10 minutes notice of a control period. Availability is restricted to customers with a minimum certified controllable load of 3,000 kW. Participation is limited to 100,000 kW of controllable demand, which may be exceeded if part of a customer's controllable load is within the participation limit, subject to Company approval.

#### CONTRACT

Customers must contract for this service rider through an Electric Service Agreement with Company. Contract period will normally be for 24 months.

#### **RATE**

The rates and provisions of Tier 1 of the applicable Peak Controlled Service schedule shall apply with the customer's Controllable Demand billed at the Short Notice Controllable Demand charge.

#### TERMS AND CONDITIONS OF SERVICE

- 1. Within 10-minutes of notification from the Company, customer's controllable load shall be curtailed by Company-initiated automatic control for the duration of the control period as determined by the Company.
- 2. Customers taking service under this rider will be required to certify their interruptible load as described below under Certification of Interruptible Load. Customer will cooperate fully with and assist in the required certification process. Failure of customer to assist in the certification process and/or failure to obtain certification of the Controllable Demand level will result in the customer being ineligible for this tariff.
- 3. Certification of Interruptible Load: To be eligible, the customer's interruptible load must complete an annual control test, prior to the beginning of the Company's summer peak load season. The control test must:
  - Demonstrate that the load is controlled by the Company from its control center;
  - That the load is curtailed within ten minutes of a Company declared control period.
  - The controlled load must remain off for at least four (4) hours in the first year of application and at least one (1) hour in subsequent years.
  - The timing of the control test will be coordinated with the customer but must be conducted at a time when the customer's load is at or near the level expected during actual control periods.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

TIER 1 PEAK CONTROLLED SCHEDULE L INTERRUPTION RIDER (Continued)

Section No. 5 10th Revised Sheet No. 127

> D T

**CANCELED** 

(Continued on Sheet No. 5-128)

Date Filed: 11-03-08 By: Judy M. Poferl Effective Date: 04-01-10

President and CEO of Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-08-1065 Order Date: 10-23-09

 $S: \label{lem:condition} S: \label{lem:condi$ 

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

TIER 1 PEAK CONTROLLED SCHEDULE L INTERRUPTION RIDER (Continued)

Section No. 5 4th Revised Sheet No. 128

DL

**CANCELED** T

Date Filed: 11-03-08 By: Judy M. Poferl Effective Date: 04-01-10

President and CEO of Northern States Power Company, a Minnesota corporation

Docket No. E002/GR-08-1065 Order Date: 10-23-09

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

## MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## CITY REQUESTED FACILITIES SURCHARGE RIDER

Section No. 5 7th Revised Sheet No. 131

#### **APPLICABILITY**

Applicable to bills for electric service provided under the Company's retail rate schedules in a City ordering the installation of non-standard underground Distribution Facilities. The Excess Expenditure costs for these Special Facilities are to be collected from customers located within such City in accordance with the provisions in the General Rules and Regulations, Section 5.3, SPECIAL FACILITIES.

The Company will provide notice to the affected City of any miscellaneous rate filing by Company under Minn. Stat. §216.B16, Subd. 1 to establish a Special Facilities surcharge applicable to customers in such City.

#### **RATE**

In each applicable City, there shall be included in the monthly minimum billing on each customer's bill a separately itemized surcharge line item determined in accordance with this Rider entitled "City Req Fac Srchg". The City Requested Special Facilities Surcharge shall not be subject to current month billing adjustments or City surcharges and shall be subject to any applicable sales taxes.

## **DETERMINATION OF CITY REQUESTED FACILITIES SURCHARGE**

The City Requested Special Facilities Surcharge for each applicable City project shall be calculated by determining a Class Facilities Surcharge to be applied to the Average Monthly Customers in the designated City such that the total Excess Expenditure plus carrying charges in the City Project Tracker Account are recovered over the designated Recovery Period.

Average Monthly Customers shall be the projected average number of active customers in each applicable customer classification located in the City for the designated Recovery Period.

Class Facilities Surcharge shall be the surcharge amount for each applicable customer classification determined in accordance with the Rules for Application.

City Project Tracker Account is a regulatory asset account representing the sum of the following:

- (1) The total Excess Expenditures for each Distribution Facilities undergrounding project in such City,
- (2) Monthly carrying charges on the under recovered or over recovered monthly balance in the City Project Tracker Account based on the overall rate of return from the Company's most recent electric general rate case decision,
- (3) Less the recovered project costs collected to date through the applicable City's Facilities Surcharge.

Recovery Period is the number of months the City Requested Special Facilities Surcharge shall be applied to bills for a designated City project determined in accordance with the Rules for Application.

Excess Expenditures shall be determined in accordance with the provisions in the General Rules and Regulations, Section 5.3.

(Continued on Sheet No. 5-132)

By: Christopher B. Clark Date Filed: 11-02-15 Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

## CITY REQUESTED FACILITIES SURCHARGE RIDER (Continued)

Section No. 5 6th Revised Sheet No. 132

#### **RULES FOR APPLICATION**

- 1. The Recovery Period shall not commence until the City Requested Facilities Surcharge to be applied to bills is at least \$0.25 per customer per month. A surcharge of \$0.25 up to and including \$1.00 per customer regardless of customer class may be applied for a Recovery Period of exactly one month (e.g., a one-time surcharge).
- 2. For a Recovery Period greater than one month, the Class Facilities Surcharge per month per customer in each non-residential customer class for any month in which a Residential Class Facilities Surcharge is applicable shall be as follows:
  - a. Commercial & Industrial (C&I), Street Lighting and Municipal Non-Demand Billed: Equal to the Residential Class Facilities Surcharge.
  - b. Small C&I and Small Municipal Demand Billed: Three times the Residential Class Facilities Surcharge.
  - c. Large C&I Demand Billed (actual demand greater than 100 kW): Four times the Residential Class Facilities Surcharge.

However, whenever the Non-residential Class Facilities Surcharges to be billed exceed the Customer Charge applicable on a customer account, the Class Facilities Surcharge for that account shall be equal to such Customer Charge.

- 3. A Residential Class Facilities Surcharge of \$0.25 up to and including \$1.00 per Residential customer per month will be applied each month whenever the City Project Tracker Account balance to be collected allows for a Recovery Period of 36 months or less.
- 4. A Residential Class Facilities Surcharge of over \$1.00, up to and including \$5.00, per Residential customer per month will be applied each month for a Recovery Period of 36 months whenever the City Project Tracker Account balance is uncollectable at a Residential Class Facilities Surcharge level of \$1.00 or less, provided that the surcharge amount for any Residential class customer account receiving a Low Income Energy Discount shall not exceed \$1.00 per month.
- 5. A Residential Class Facilities Surcharge of \$5.00 per Residential customer per month for a Recovery Period of 36 months up to and including 60 months will be applied only when necessary to recover the City Project Tracker Account balance, provided a surcharge of \$5.00 may be collected pending Commission action on a Company petition or City complaint to modify the design of the rate surcharge for a specific project which cannot be recovered in 60 months.

(Continued on Sheet No. 5-133)

By: Christopher B. Clark Date Filed: 11-02-15 Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

E002/GR-15-826 Order Date: Docket No. 06-12-17

Docket No. E002/RP-19-368

Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

CITY REQUESTED FACILITIES SURCHARGE RIDER Section No. 5
(Continued) 6th Revised Sheet No. 133

### **RULES FOR APPLICATION (Continued)**

- 6. The Class Facilities Surcharges may be adjusted annually and in the last 6 months of the Recovery Period to more closely recover the balance remaining in the City Project Tracker Account.
- 7. Subject to the limits on monthly surcharge amounts set forth above, the Class Facilities Surcharges may also be increased at any time and the Recovery Period may be updated, with notice as provided in Section 5.3 of the General Rules and Regulations, in order to recover Excess Expenditures associated with additional Distribution Facilities undergrounding projects requested or ordered by City.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**VOLUNTARY RENEWABLE AND HIGH-EFFICIENCY ENERGY PURCHASE (WINDSOURCE PROGRAM) RIDER** 

Section No. 5 7th Revised Sheet No. 134

#### **AVAILABILITY**

Available to any customer who elects to apply an adjustment to the customer's electric energy usage to contribute to the development of renewable and high-efficiency energy resources as defined by Minn. Stat. §216B.169.

In addition, customer bills under this rate are subject to the following adjustments and/or charges.

#### **RIDER**

A Voluntary Renewable Adjustment ("Adjustment") may be elected in blocks of 100 kWh or for the customer's entire monthly usage or for a single event. Each month the Adjustment will add \$3.53 per 100 kWh block of renewable usage and will be prorated on a kWh basis based on the customer's actual metered energy usage for the billing period not to exceed their subscription level. The Adjustment shall be applied to the customer's bill under the standard retail tariff each billing month according to the number of energy block(s) or total amount purchased. The Adjustment is not subject to the Fuel Clause Rider but is subject to any other applicable adjustments and surcharges, including city surcharge or sales tax. The Voluntary Renewable Adjustment will appear on the bill as "Windsource Program." Amounts collected pursuant to the Adjustment will be expended on a program, filed with the Commission, to develop renewable and high efficiency energy resources.

#### **DETERMINATION OF VOLUNTARY RENEWABLE ADJUSTMENT**

The Voluntary Renewable Adjustment shall be calculated by dividing the recoverable program expenses and annual tracker balance by the forecasted renewable energy for a designated recovery period. The recoverable program expenses include renewable energy purchases, marketing, other costs and true up of tracker balance for this program. The Adjustment may be revised annually with approval of the Minnesota Public Utilities Commission.

## FORECASTED RENEWABLE ENERGY

Forecasted renewable energy sales shall be the estimated total Windsource MWh sales for the designated annual tracker recovery period.

#### TRACKER ACCOUNT

Due to the variability of renewable resources, the Windsource program may have an excess or shortage of supply in any given hour but will approximately balance out during the year. The Company will maintain accounting of the monthly balance of total revenues collected under the Adjustment and the expenses associated with offering this Adjustment, including the renewable energy purchases, marketing and other costs for this program. The Company may petition the Commission annually to true up the tracker balance in its November 1<sup>st</sup> report.

(Continued on Sheet No. 134.1)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Order Date: Docket No. E002/GR-15-826 06-12-17

## PUBLIC DOCUMENT

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**VOLUNTARY RENEWABLE AND HIGH-EFFICIENCY ENERGY** PURCHASE (WINDSOURCE PROGRAM) RIDER (Continued)

Section No. 5 6th Revised Sheet No. 134.1

#### TERMS AND CONDITIONS OF SERVICE

- A customer may elect to subscribe either by purchasing a specified number of 100 kWh blocks or the customer's entire usage. The minimum subscription to be billed each month is one 100 kWh block. In the event a customer's metered energy usage results in the partial consumption of a 100 kWh block, the charge on that block will be prorated accordingly.
- 2. The minimum subscription periods are one year for residential customers and three years for nonresidential customers. After the minimum period, a customer may continue to subscribe on a month to month basis and may terminate the customer's subscription with a 30-day notice.
- The Company will submit reports to the Commission each May 1 and November 1, or as otherwise ordered in relation to the tracker accounting.
- 4. For customers on time of day tariffs, their Windsource usage and any excess, non-Windsource usage shall both be assigned to the on-peak and off-peak periods in proportion to the customer's total billing period on-peak and off-peak usage.
- Xcel Energy may in its discretion allow a non-Windsource customer a limited subscription to Windsource to 5. apply the Adjustment to the energy used by a single event or series of events without making a long-term purchase commitment.
- The discounts under Residential Controlled Air Conditioning and Water Heating Rider and Commercial and Industrial Controlled Air Conditioning Riders are not applicable to the charges under this Rider.
- 7. This Rider is provided to satisfy the conditions of Minn. Stat. §216B.169, subd.2 related to renewable and high-efficiency energy rate options. The sales arrangements of renewable energy from the Windsource program supplies are such that the power supply is sold only once to retail customers.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

### MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### **WAPA BILL CREDITING PROGRAM RIDER**

Section No. 5 5th Revised Sheet No. 135

#### **AVAILABILITY**

This rider is available on a voluntary basis and is limited to customers who are eligible for the Western Area Power Administration ("Western" or "WAPA") Bill Crediting Program.

#### **TERM OF SERVICE**

Service under this rider shall be for a period not less than 90 days.

#### PRICING METHODOLOGY

The WAPA Bill Credit shall be calculated as specified in the Commission approved Bill Crediting Agreement between the customer and the Company.

#### **BILL DETERMINATION**

The WAPA Bill Credit will be applied to the customer's standard monthly bill rendered after each monthly billing period.

#### **SPECIAL PROVISIONS**

- 1. Eligibility for the Program, and thus this Rider, is determined by the customer and Western, and not by Xcel Energy.
- If there is a change in the legal identity of the customer receiving service under this Rider, credit under this Rider shall be terminated unless Xcel Energy, Western and the customer determine otherwise.
- 3. Changes are subject to the Agreement for Bill Crediting arrangements between Xcel Energy, Western and the customer, a copy of which is contained in Section 7 of this Electric Rate Book.

### **RULES AND REGULATIONS**

Service under this Rider is subject to orders of the Minnesota Public Utilities Commission and to the General Rules and Regulations section of this Electric Rate Book.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### MERCURY COST RECOVERY RIDER

Section No. 5

8th Revised Sheet No. 136

#### **APPLICATION**

Applicable to bills for electric service provided under the Company's retail rate schedules.

#### **RIDER**

There shall be included on each customer's monthly bill a Mercury Cost Recovery (MCR) Rider adjustment which will be the MCR Adjustment Factor multiplied by the customer's monthly billing kWh for electric service. This MCR adjustment shall be calculated before city charges and sales tax.

#### **DETERMINATION OF MERCURY COST RECOVERY FACTOR**

The MCR Adjustment Factor shall be the average retail cost per kWh. The average retail cost per kWh shall be determined by the forecasted balance of the MCR Tracker Account plus the Mercury Costs divided by the forecast retail sales for the designated period. The MCR Adjustment Factor shall be rounded to the nearest \$0.00001 per kWh.

The MCR Adjustment Factor may be adjusted with the approval of the Minnesota Public Utilities Commission (Commission). The MCR Adjustment Factor for each rate schedule is:

All Classes

\$0.000000 per kWh

#### **MERCURY COSTS**

Recoverable mercury costs shall be the revenue requirements for the designated period including operation and maintenance (O&M) expenses associated with projects eligible for recovery under Minnesota Statute Sections 216B.68 to 216B.688 that are determined by the Commission to be eligible for recovery under this Mercury Cost Recovery Rider. A standard model will be used to calculate the total forecasted revenue requirements for eligible projects for the designated period that is determined by the Commission to be eligible for recovery under this MCR Rider.

#### **FORECASTED RETAIL SALES**

Forecasted Retail Sales shall be the estimated total retail electric sales for the designated recovery period.

#### MCR TRACKER ACCOUNT

For each designated true-up period, a true-up adjustment to the MCR Tracker Account will be calculated reflecting the difference between the MCR Adjustment recoveries and the actual expenditures for such period. The true-up adjustment shall be included in calculating the MCR Adjustment Factor effective with the start of the next designated recovery period.

The MCR Adjustment Factor includes a true-up of actuals as available for the previous recovery period and forecast information for the remainder of the recovery period. The Final true-up adjustment for a previous recovery period will be determined by October 1 of the following year, at which time the Company will record a Final adjustment to the MCR Tracker Account. All costs appropriately charged to the MCR Tracker Account shall be eligible for recovery through this rider.

(Continued on Sheet No. 5-136.1)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MNNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**MERCURY COST RECOVERY RIDER (Continued)** 

Section No. 5 7th Revised Sheet No. 136.1

#### **PROVISION OF FORECAST DATA**

To assist commercial and industrial customers in budgeting and managing their energy costs, the Company will annually make available on October 1<sup>st</sup> a 24-month forecast of the MCR Adjustment Factor applicable to demand billed C&I customers under this Rider. The forecast period begins January 1<sup>st</sup> of the following year. This forecast will be provided only to customers who have signed a protective agreement with the Company.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### **ENVIRONMENTAL IMPROVEMENT RIDER**

Section No. 5 12th Revised Sheet No. 137

#### **APPLICATION**

Applicable to bills for electric service provided under the Company's retail rate schedules.

#### **RIDER**

There shall be included on each customer's monthly bill an Environmental Improvement Rider (EIR) adjustment. For all but demand-billed customers, the adjustment shall be the Full EIR Energy Adjustment Factor multiplied by the customer's monthly billing kWh for electric service. For demand-billed customers, the adjustment shall be the Reduced EIR Energy Adjustment Factor multiplied by the customer's monthly billing kWh for electric service, plus the EIR Demand Adjustment Factor multiplied by the customer's monthly kW billing demand. These EIR adjustments shall be calculated before city surcharge and sales tax.

#### **DETERMINATION OF EIR ADJUSTMENT FACTORS**

The Full EIR Energy Adjustment Factor shall be the quotient obtained by dividing the forecasted balance of the EIR Tracker Account by the forecasted retail sales for the calendar year. The Reduced EIR Energy Adjustment Factor shall be the Full EIR Energy Adjustment Factor multiplied by 50%. The EIR Demand Adjustment Factor shall be the difference between the Full and Reduced factors, multiplied by the class load factor of 53.27% and multiplied by 730 hours in an average month. All factors shall be rounded to the nearest \$0.000001 per kWh. The EIR Adjustment Factors may be adjusted annually with approval of the Minnesota Public Utilities Commission (Commission). The EIR Adjustment Factors shall apply to bills rendered on and after January 1st of the year.

The EIR Adjustment Factor for each customer group may be adjusted annually. Each EIR Adjustment Factor shall apply to bills rendered on and after January 1 of the year. The EIR factor for each rate schedule is:

> Non-Demand Customers \$0.000000 per kWh **Demand Customers** \$0.000000 per kWh and

> > \$0.00 per kW

Recoverable EIR Costs shall be the annual revenue requirements associated with emissions reduction projects (a) not recovered through base rates, (b) recorded in the EIR Tracker Account for the designated period, and (c) determined by the Commission to be eligible for recovery under this Rider pursuant to the terms of the Settlement Agreement approved by the Commission on March 8, 2004. A standard model will be used to calculate the total forecasted revenue requirements for eligible projects for the designated period. All costs appropriately charged to the EIR Tracker Account shall be eligible for recovery through this Rider, and all revenues recovered from the EIR Adjustment shall be credited to the EIR Tracker Account.

Forecasted retail sales shall be the estimated retail electric sales for the designated recovery period.

(Continued on Sheet No. 5-138)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

### **ENVIRONMENTAL IMPROVEMENT RIDER (Continued)**

Section No. 5 5th Revised Sheet No. 138

#### TRUE-UP

For each 12-month period ending December 31, a true-up adjustment to the EIR Tracker Account will be calculated reflecting the difference between the EIR Adjustment recoveries and the revenue requirements for such period. The true-up adjustment shall be calculated and recorded by no later than May 1 of the following calendar year and will be included in calculating the EIR Adjustment Factor for each customer group effective with the start of the next designated recovery period. No carrying cost shall be applied.

#### **PROVISION OF FORECAST DATA**

To assist commercial and industrial customers in budgeting and managing their energy costs, the Company will annually make available on October 1st a 24-month forecast of the EIR Adjustment Factors applicable to demand billed C&I customers under this Rider. The forecast period begins January 1st of the following year. This forecast will be provided only to customers who have signed a protective agreement with the Company.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### **BUSINESS INCENTIVE AND SUSTAINABILITY RIDER**

Section No. 5 2nd Revised Sheet No. 139

#### **AVAILABILITY**

Available to new or existing demand-metered commercial and industrial customers with significant new Qualified Billing Demand. Service under the Rider is limited to customers whose application for service under the Rider is approved by the Company.

#### **RATE**

The rates and provisions of the customer's regular demand-metered rate schedule shall apply except monthly demand charges for customer's Qualified Billing Demand, before the application of voltage discounts, shall be reduced as follows:

Years:	1 - 3	4	5	6
Percent Reduction:	40%	20%	10%	0%

#### **QUALIFIED BILLING DEMAND**

The portion of the customer's billing demand that qualifies for reduced demand charges. Qualified billing demand includes billing demands for standard demand, on-peak period demand, firm demand and controllable demand. Qualified billing demand does not include billing demands for off-peak period demand, distribution demand, transmission and distribution demand, contracted standby demand or contracted supplemental demand.

New Customers. This Rider is available for new load that is associated with initial permanent service. For new Customers, the Qualified Billing Demand under this Rider must be a minimum of 350 kW at a single delivery point. The demand charge reduction shall not apply during any month in which the Qualified Billing Demand is below 350 kW; provided, however, the demand charge reduction shall apply during any month in which the Qualified Billing Demand is below 350 kW as a consequence of new conservation or load control by the customer.

Existing Customers. For existing customers, Qualified Billing Demand is the new load of 350 kW or greater at a single delivery point incremental to that existing prior to approval for service under this Rider. The demand charge reduction shall not apply during any month in which the Qualified Billing Demand is below 350 kW; provided, however, the demand charge reduction shall apply during any month in which the Qualified Billing Demand is below 350 kW as a consequence of new conservation or load control by the customer.

#### **NEW CUSTOMERS**

To be considered a new customer for the purpose of this Rider, an applicant must demonstrate one of the following:

- That business has not been conducted at the premises for at least three monthly billing periods prior to application,
- That the predecessor customer is in bankruptcy and the applicant has obtained the business in a liquidation of assets sale; or
- 3. Customer's activities are largely or entirely different in nature from that of the previous customer.

(Continued on Sheet No. 5-140)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**BUSINESS INCENTIVE AND SUSTAINABILITY RIDER** (Continued)

Section No. 5 2nd Revised Sheet No. 140

#### **EXISTING CUSTOMERS**

Existing customers who materially increase their use of electric service may qualify for service under this Rider, provided such material increase is the result of the addition of equipment, or expansion of the customer's facility or operations. The customer shall notify the Company in writing and document the basis for the material increase in its use of electric service. Following such notification, the Company will review the customer's monthly billing demands. If the billing demands for each of the next three consecutive months exceed that from the comparable monthly period of the preceding year by at least 350 kW at one delivery point, the customer will be eligible thereafter to receive service under this Rider. If a customer's activities are very similar to the customer's previous activities, then the customer is considered to be an existing customer whether or not the owner(s) operator(s), or manager(s) are substantially different.

#### **APPLICATION**

As a condition of qualifying for a discount, Customer must make an application on a Commission approved form demonstrating that it meets the Qualified Billing Demand requirement. Information related to the Qualified Billing Demand and Investment is trade secret information under the Minnesota Government Data Practices Act ("Act").

#### **RIGHT TO REFUSE SERVICE**

The Company reserves the right to refuse applicants for service under this Rider if it determines that significant additional capital expenditures will be required to provide service to that applicant. In such cases, an applicant may be able to qualify for service by making a non-refundable contribution to compensate for the significant additional capital costs incurred by the Company to supply service to the applicant.

#### **ENERGY EFFICIENCY**

For service taken on this Rider, the Company will conduct an energy audit and inform the customer of the conservation programs available from the Company. Customer will be responsible for some portion of the cost of the energy audit. Customer must also participate in the Company's Energy Assistance Design program or other energy efficiency program.

#### **ELECTRIC SERVICE AGREEMENT**

Any customer taking service under this Stimulation Rider shall execute an Electric Service Agreement, or amend their existing Electric Service Agreement, with the Company for a period of six years beginning on the effective date on which the customer commences taking service under this Rider. Such Electric Service Agreements (new or amended) shall state the increased or new load level of the customer as well as the customer's obligation to continue to purchase all of their electric power and electric energy from the Company during the term of the agreement. The effective date of service under this rider will be set forth in the Electric Service Agreement but not before three months of qualified billing demand has occurred after the application. The Electric Service Agreement entered into pursuant to this Agreement and provision of the discount is not subject to Commission Approval.

(Continued on Sheet No. 5-141)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. Order Date: 06-12-17 E002/GR-15-826

# PUBLIC DOCUMENT

Docket No. E002/RP-19-368 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**BUSINESS INCENTIVE AND SUSTAINABILITY RIDER** (Continued)

Section No. 5 2nd Revised Sheet No. 141

#### REPORTING REQUIREMENT

No later than 30 days after the Company signs a new ESA with a customer to be served under the BIS Rider, the Company must file with the Commission a report showing the incremental revenues and the incremental costs associated with the new ESA. If no party objects to the ESA within 30 days of the filing date, the ESA is deemed to be approved. One year from the effective date of this tariff, and annually thereafter, the Company shall file a report with the Commission identifying the number of customers receiving service under this Rider and the associated incremental additional revenues received by the Company and the incremental additional costs experienced by the Company.

#### **REVENUE RECOVERY**

The Company, within a general rate case, is allowed to seek recovery of the difference between the applicable commercial and industrial tariff and this Rider times the usage level during the test year period.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

#### MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### STATE ENERGY POLICY RATE RIDER

Section No. 5 15th Revised Sheet No. 142

#### **APPLICATION**

Applicable to bills for electric service provided under the Company's retail rate schedules.

#### **RIDER**

There shall be included on each customer's monthly bill a State Energy Policy Rate Rider which shall be the applicable State Energy Policy Rate Rider factor multiplied by the customer's monthly kWh electric consumption.

#### **DETERMINATION OF STATE ENERGY POLICY RATE FACTOR**

The applicable State Energy Policy Rate Rider shall be the quotient obtained by dividing the annual State Energy Policy Tracker amount by the annual forecasted kWh sales. The factor may be adjusted annually with approval of the Minnesota Public Utilities Commission.

Residential \$0.000000 per kWh
Commercial \$0.000000 per kWh

#### Recoverable State Energy Policy Rate Expense

All costs appropriately charged to the State Energy Policy Tracker account shall be eligible for recovery through this Rider, and all revenues received from the State Energy Policy adjustment portion of the Resource Adjustment shall be credited to the State Energy Policy Tracker account.

#### **PROVISION OF FORECAST DATA**

To assist commercial and industrial customers in budgeting and managing their energy costs, the Company will annually make available on March 1<sup>st</sup> a 24-month forecast of the State Energy Policy Rate Factor applicable to demand billed C&I customers under this Rider. The forecast period begins January 1<sup>st</sup> of the following year. This forecast will be provided only to customers who have signed a protective agreement with the Company.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### RENEWABLE DEVELOPMENT FUND RIDER

Section No. 5 22nd Revised Sheet No. 143

#### **APPLICATION**

Applicable to bills for electric service provided under the Company's retail rate schedules.

#### **RIDER**

There shall be included on each customer's monthly bill a Renewable Development Fund charge that shall be the applicable Renewable Development Fund factor multiplied by the customer's monthly kWh electric consumption.

#### **DETERMINATION OF RENEWABLE DEVELOPMENT FUND FACTOR**

The applicable Renewable Development Fund factor shall be the quotient obtained by dividing the annual Renewable Development Fund Tracker amount by the annual forecasted kWh sales. The factor may be adjusted annually with approval of the Minnesota Public Utilities Commission.

R Residential \$0.001357 per kWh R Commercial \$0.001357 per kWh

#### Recoverable Renewable Development Fund Expense

All costs appropriately charged to the Renewable Development Fund Tracker account shall be eligible for recovery through this Rider, and all revenues received from the Renewable Development Fund portion of the Resource Adjustment shall be credited to the Renewable Development Fund Tracker account.

#### PROVISION OF FORECAST DATA

To assist commercial and industrial customers in budgeting and managing their energy costs, the Company will annually make available on October 1st a 24-month forecast of the Renewable Development Fund Factor applicable to demand billed C&I customers under this Rider. The forecast period begins January 1st of the following year. This forecast will be provided only to customers who have signed a protective agreement with the Company.

#### **EXEMPTION**

For customer premises recognized by the Company as not being subject to any of the costs of satisfying the solar energy standard under Minn. Stat. § 216B.1691, subd. 2f ("SES Costs"), the SES Costs reflected in the Renewable Development Fund charge assessed to the accounts associated with these premises may be credited to these accounts, and the dollar amount of these credits shall be added as part of the annual Renewable Development Fund Tracker applicable to the time period when the credit is issued.

Date Filed: 03-21-19 By: Christopher B. Clark Effective Date: 05-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-18-628 Order Date: 04-09-19

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### RENEWABLE DEVELOPMENT FUND RIDER

Section No. 5 21st Revised Sheet No. 143

#### **APPLICATION**

Applicable to bills for electric service provided under the Company's retail rate schedules.

#### **RIDER**

There shall be included on each customer's monthly bill a Renewable Development Fund charge that shall be the applicable Renewable Development Fund factor multiplied by the customer's monthly kWh electric consumption.

#### **DETERMINATION OF RENEWABLE DEVELOPMENT FUND FACTOR**

The applicable Renewable Development Fund factor shall be the quotient obtained by dividing the annual Renewable Development Fund Tracker amount by the annual forecasted kWh sales. The factor may be adjusted annually with approval of the Minnesota Public Utilities Commission.

R Residential \$0.001417 per kWh R Commercial \$0.001417 per kWh

#### Recoverable Renewable Development Fund Expense

All costs appropriately charged to the Renewable Development Fund Tracker account shall be eligible for recovery through this Rider, and all revenues received from the Renewable Development Fund portion of the Resource Adjustment shall be credited to the Renewable Development Fund Tracker account.

#### PROVISION OF FORECAST DATA

To assist commercial and industrial customers in budgeting and managing their energy costs, the Company will annually make available on October 1st a 24-month forecast of the Renewable Development Fund Factor applicable to demand billed C&I customers under this Rider. The forecast period begins January 1st of the following year. This forecast will be provided only to customers who have signed a protective agreement with the Company.

#### **EXEMPTION**

For customer premises recognized by the Company as not being subject to any of the costs of satisfying the solar energy standard under Minn. Stat. § 216B.1691, subd. 2f ("SES Costs"), the SES Costs reflected in the Renewable Development Fund charge assessed to the accounts associated with these premises may be credited to these accounts, and the dollar amount of these credits shall be added as part of the annual Renewable Development Fund Tracker applicable to the time period when the credit is issued.

Date Filed: 10-01-18 By: Christopher B. Clark Effective Date: 01-01-19

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-18-628 Order Date: 12-21-18 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

# MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### RENEWABLE DEVELOPMENT FUND RIDER

Section No. 5 20th Revised Sheet No. 143

#### **APPLICATION**

Applicable to bills for electric service provided under the Company's retail rate schedules.

#### **RIDER**

There shall be included on each customer's monthly bill a Renewable Development Fund charge that shall be the applicable Renewable Development Fund factor multiplied by the customer's monthly kWh electric consumption.

#### **DETERMINATION OF RENEWABLE DEVELOPMENT FUND FACTOR**

The applicable Renewable Development Fund factor shall be the quotient obtained by dividing the annual Renewable Development Fund Tracker amount by the annual forecasted kWh sales. The factor may be adjusted annually with approval of the Minnesota Public Utilities Commission.

R Residential \$0.001318 per kWh R Commercial \$0.001318 per kWh

#### Recoverable Renewable Development Fund Expense

All costs appropriately charged to the Renewable Development Fund Tracker account shall be eligible for recovery through this Rider, and all revenues received from the Renewable Development Fund portion of the Resource Adjustment shall be credited to the Renewable Development Fund Tracker account.

#### PROVISION OF FORECAST DATA

To assist commercial and industrial customers in budgeting and managing their energy costs, the Company will annually make available on October 1st a 24-month forecast of the Renewable Development Fund Factor applicable to demand billed C&I customers under this Rider. The forecast period begins January 1st of the following year. This forecast will be provided only to customers who have signed a protective agreement with the Company.

#### **EXEMPTION**

For customer premises recognized by the Company as not being subject to any of the costs of satisfying the solar energy standard under Minn. Stat. § 216B.1691, subd. 2f ("SES Costs"), the SES Costs reflected in the Renewable Development Fund charge assessed to the accounts associated with these premises may be credited to these accounts, and the dollar amount of these credits shall be added as part of the annual Renewable Development Fund Tracker applicable to the time period when the credit is issued.

Date Filed: 09-28-18 By: Christopher B. Clark Effective Date: 10-01-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-17-712 Order Date: 09-25-18 NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### RENEWABLE DEVELOPMENT FUND RIDER

Section No. 5 19th Revised Sheet No. 143

#### **APPLICATION**

Applicable to bills for electric service provided under the Company's retail rate schedules.

#### **RIDER**

There shall be included on each customer's monthly bill a Renewable Development Fund charge that shall be the applicable Renewable Development Fund factor multiplied by the customer's monthly kWh electric consumption.

#### DETERMINATION OF RENEWABLE DEVELOPMENT FUND FACTOR

The applicable Renewable Development Fund factor shall be the quotient obtained by dividing the annual Renewable Development Fund Tracker amount by the annual forecasted kWh sales. The factor may be adjusted annually with approval of the Minnesota Public Utilities Commission.

Residential \$0.001034 per kWh Commercial \$0.001034 per kWh

#### Recoverable Renewable Development Fund Expense

All costs appropriately charged to the Renewable Development Fund Tracker account shall be eligible for recovery through this Rider, and all revenues received from the Renewable Development Fund portion of the Resource Adjustment shall be credited to the Renewable Development Fund Tracker account.

#### PROVISION OF FORECAST DATA

To assist commercial and industrial customers in budgeting and managing their energy costs, the Company will annually make available on October 1st a 24-month forecast of the Renewable Development Fund Factor applicable to demand billed C&I customers under this Rider. The forecast period begins January 1st of the following year. This forecast will be provided only to customers who have signed a protective agreement with the Company.

**EXEMPTION** 

For customer premises recognized by the Company as not being subject to any of the costs of satisfying the solar energy standard under Minn. Stat. § 216B.1691, subd. 2f ("SES Costs"), the SES Costs reflected in the Renewable Development Fund charge assessed to the accounts associated with these premises may be credited to these accounts, and the dollar amount of these credits shall be added as part of the annual Renewable Development Fund Tracker applicable to the time period when the credit is issued.

Date Filed: 05-26-17 By: Christopher B. Clark Effective Date: 01-26-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-17-425 Order Date: 01-16-18 Ν

Ν

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### TRANSMISSION COST RECOVERY RIDER

Section No. 5 13th Revised Sheet No. 144

#### **APPLICATION**

Applicable to bills for electric service provided under the Company's retail rate schedules.

#### **RIDER**

There shall be included on each customer's monthly bill a Transmission Cost Recovery (TCR) adjustment, which shall be the TCR Adjustment Factor multiplied by the customer's monthly billing energy or demand for electric service as described below. This TCR Adjustment shall be calculated before city surcharge and sales tax.

#### **DETERMINATION OF TCR ADJUSTMENT FACTORS**

A separate TCR Adjustment Factor shall be calculated for the following four customer groups: (1) Residential, (2) Commercial Non-Demand, (3) Demand Billed, and (4) Street Lighting. The TCR Adjustment Factor for each group shall be the value obtained by multiplying each group's weighting factor by the average retail cost per kWh. The average retail cost per kWh shall be determined by the forecasted balance of the TCR Tracker Account, divided by the forecasted retail sales for the calendar year. The Demand Billed customers' TCR Adjustment Factor is calculated similarly, but the resulting per kWh charge is converted to a per kW charge for application to billed kW rather than billed kWh. TCR Adjustment Factors shall be rounded to the nearest \$0.000001 per kWh or \$0.001 per kW.

The TCR Adjustment Factor for each customer group may be adjusted annually with approval of the Minnesota Public Utilities Commission (Commission). Each TCR Adjustment Factor shall apply to bills rendered subsequent to approval by the Minnesota Public Utilities Commission. The TCR factor for each rate schedule is:

Residential \$0.003503 per kWh
Commercial (Non-Demand) \$0.003384 per kWh
Demand Billed \$1.017 per kW

Recoverable Transmission Costs shall be the annual revenue requirements for transmission costs associated with transmission projects eligible for recovery under Minnesota Statute Sections 216B.1645 or 216B.16, subd. 7b that are determined by the Commission to be eligible for recovery under this Transmission Cost Recovery Rider. A standard model will be used to calculate the total forecasted revenue requirements for eligible projects for the designated period. All costs appropriately charged to the Transmission Tracker Account shall be eligible for recovery through this Rider, and all revenues recovered from the TCR Adjustment shall be credited to the Transmission Tracker Account.

Forecasted retail kWh sales and kW demands shall be those for the designated recovery period.

(Continued on Sheet No. 5-145)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368 D Appendix N1: Annual Report Minnesota Electric

5

145

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MNNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

**TRANSMISSION COST RECOVERY RIDER**Section No. **(Continued)**5th Revised Sheet No.

#### **TRUE-UP**

For each 12-month period ending December 31, a true-up adjustment to the Tracker Account will be calculated reflecting the difference between the TCR Adjustment recoveries and the revenue requirements for such period. The total retail true-up adjustment shall be calculated and recorded by no later than May 1 of the following calendar year and will be included in average retail cost used to calculate the TCR Adjustment Factor for each customer group effective with the start of the next designated recovery period.

For example, the Year 1 revenue requirements versus TCR Adjustment recoveries would be determined by May 1 of Year 2, at which time the Company would record an adjustment to the Tracker Account. The difference between the Year 1 revenue requirements and Year 1 TCR Adjustment recoveries would be included in the calculation of the TCR Adjustment factors filed on September 1 of Year 2 to be effective January 1 of Year 3.

#### **PROVISION OF FORECAST DATA**

To assist commercial and industrial customers in budgeting and managing their energy costs, the Company will annually make available on September 1<sup>st</sup> a 24-month forecast of the TCR Adjustment Factor applicable to demand billed C&I customers under this Rider. The forecast period begins January 1<sup>st</sup> of the following year. This forecast will be provided only to customers who have signed a protective agreement with the Company.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

#### MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### RENEWABLE ENERGY STANDARD RIDER

Section No. 5 10th Revised Sheet No. 146

#### **APPLICATION**

Applicable to bills for electric service provided under the Company's retail rate schedules.

#### **RIDER**

There shall be included on each customer's monthly bill a Renewable Energy Standard (RES) adjustment which will be the RES Adjustment Factor applied to:

- 1. Customer, Energy, Demand and Minimum Charges
- 2. Energy Charge Credits
- 3. Limited Energy Surcharges
- 4. Controllable Demand Credits
- 5. Voltage Discounts
- 6. Lighting Rates per Luminaire and Lighting Rates per Unit
- 7. Siren Service Rate per Horsepower
- 8. Residential Controlled Air Conditioning and Water Heating Discounts (Energy and Fuel Cost Charges)
- 9. Commercial and Industrial Controlled Air Conditioning Credits
- 10. Standby Service Rider
- 11. Supplemental Service Rider
- 12. Tier 1 Energy Controlled Service Rider
- 13. Tier 1 Peak Controlled Short Notice Rider
- 14. Area Development Rider
- 15. Fixed Charges for Low Wattage Unmetered Devices

# The RES Adjustment Factor does not apply to:

- 1. Fuel Clause Rider
- 2. Conservation Improvement Program Rider
- 3. Off Season Load Rider
- 4. Revenue Decoupling Mechanism Rider
- 5. Competitive Response Rider
- 6. City Requested Facilities Surcharge Rider
- 7. Windsource Program Rider
- 8. WAPA Bill Credit Program Rider
- 9. Mercury Cost Recovery Rider
- 10. Environmental Improvement Rider
- 11. Business Incentive and Sustainability Rider
- 12. State Energy Policy Rate Rider
- 13. Renewable Development Fund Rider
- 14. Transmission Cost Recovery Rider
- 15. Renewable Energy Standard Rider
- 16. Net Energy Billing Service
- 17. Late Payment Charge
- 18. Any currently applicable Interim Rate Surcharge Rider
- 19. Low Income Program Surcharge
- 20. Low Income Discounts

This RES adjustment shall be calculated before city surcharge and sales tax.

(Continued on Sheet No. 5-147)

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

#### MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# **RENEWABLE ENERGY STANDARD RIDER (Continued)**

Section No. 5 12th Revised Sheet No. 147

#### **DETERMINATION OF RES ADJUSTMENT FACTOR**

The Renewable Energy Standard ("RES") Adjustment Factor shall be the RES annual forecasted revenue requirement as a percentage of "base" revenues. The RES annual forecasted revenue requirement shall be the sum of the Renewable Energy Standard Costs for the forecast period and any residual Tracker balance in the RES Tracker Account.

The RES Adjustment Factor may be adjusted with the approval of the Minnesota Public Utilities Commission (Commission). The RES Factor is:

All Classes 0.497%

#### **RENEWABLE ENERGY STANDARD COSTS**

The RES Costs shall be the annual revenue requirements including operation and maintenance (O&M) expenses for Company owned Renewable Energy Project costs and capacity related renewable energy purchased power costs not recoverable through the FCR, that are eligible for recovery under Minnesota Statute Section 216B.1645. A standard model will be used to calculate the total forecasted revenue requirements for each annual period that is determined by the Commission to be eligible for recovery under this Renewable Energy Standard Rider.

#### **RES TRACKER ACCOUNT**

For each annual true-up period, a true-up adjustment to the RES Tracker Account (residual Tracker balance) will be calculated reflecting the difference between the RES Adjustment recoveries and the actual expenditures for such period. The true-up adjustment shall be included in calculating the RES Adjustment Factor effective with the start of the next annual recovery period.

The RES Adjustment Factor includes a true-up of actuals as available for the previous recovery period and forecast information for the remainder of the recovery period. The Final true-up adjustment for a previous recovery period will be determined by September 1 of the following year, at which time the Company will record a Final adjustment to the RES Tracker Account.

All costs appropriately charged to the RES Tracker Account shall be eligible for recovery through this rider.

#### **PROVISION OF FORECAST DATA**

To assist commercial and industrial customers in budgeting and managing their energy costs, the Company will annually make available on September 1<sup>st</sup> a 24-month forecast of the RES Adjustment Factor applicable to demand billed C&I customers under this Rider. The forecast period begins January 1<sup>st</sup> of the following year. This forecast will be provided only to customers who have signed a protective agreement with the Company.

Date Filed: 11-02-15 By: Christopher B. Clark Effective Date: 10-01-17

President, Northern States Power Company, a Minnesota corporation

NOT PUBLIC DATA EXCISED Appendix N1: Annual Report Minnesota Electric

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### **VOLUNTARY RENEWABLE\*CONNECT PILOT PROGRAM RIDER**

Section No. 5 Original Sheet No. 149

#### **AVAILABILITY**

Ν

The Voluntary Renewable\*Connect<sup>TM</sup> ("R\*C") Pilot program will be available, subject to capacity made available within the program, to any customer who elects to participate in the program that would otherwise receive service under a rate schedule that is subject to the adjustments provided for in the Fuel Clause Rider.

#### **DEFINITIONS**

The following definitions apply:

"Applicable Retail Electric Usage" means the measured retail electric usage of the Customer on the account(s) during the monthly billing cycle for the Customer's premises identified in the Service Agreement as being associated with the Customer's subscription to the R\*C Service.

"R\*C Adjustment" means the product resulting from the multiplication of the R\*C Price by the Subscription Level.

"R\*C Price" means the price as shown in the Rate section below.

"R\*C Resources" for this pilot program means portions of renewable sources applicable to the R\*C Service.

"R\*C Service" means the service offered under this Voluntary Renewable\*Connect Pilot Program Rider.

"Service Agreement" means the tariffed service agreement associated with the R\*C Service which the Customer signs.

"Subscription Level" means the Customer's allocated share set forth in the Service Agreement, in kWh, of the energy from the R\*C Resources. The Subscription Level is a blend of renewable resources.

#### **RIDER**

Customer may elect to receive R\*C Service. The following types of R\*C Service are available ("R\*C Service Type") in the following billing methods ("R\*C Billing Method"):

> R\*C Service Types R\*C Billing Methods Month-to-Month 100 kWh Blocks 5 Years **Entire Monthly Usage** 10 Years Single Event Usage Single Event

Each billing month the R\*C Price associated with the R\*C Service Type chosen by the Customer will be applied to the Subscription Level chosen by the Customer, the product of the R\*C Price and Subscription Level being the R\*C Adjustment. Customers receiving R\*C Service shall not be subject to the Minnesota Electric Fuel Clause Rider for the portion of its Applicable Retail Electric Usage that is less than or equal to the Customer's Subscription Level. All usage shall be subject to any other applicable adjustments and surcharges, including city surcharge or sales tax. The cost to the Customer for participating in the R\*C Service will appear on the Customer's retail electric bill.

#### **DETERMINATION OF R\*C PRICE**

The R\*C Price shall be calculated as follows: for the month-to-month and single event R\*C Service Type, pricing will be based on the partially levelized delivered cost of the R\*C Resources, adjusted for capacity credits and neutrality charges, plus recoverable program expenses. For the 5-year and 10-year R\*C Service Types, pricing shall be based on the actual delivered cost of the R\*C Resources, adjusted for capacity credits and neutrality charges, plus recoverable program expenses. Recoverable program expenses include renewable energy purchases, marketing, and other costs approved by the Minnesota Public Utilities Commission ("Commission"). The R\*C Price for the month-to-month R\*C Service Type may be revised annually with approval of the Commission.

(Continued on Sheet No. 5-150)

Date Filed: 11-12-15 By: Christopher B. Clark Effective Date: 02-27-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-15-985 Order Date: 02-27-17 Ν

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### **VOLUNTARY RENEWABLE\*CONNECT PILOT PROGRAM** RIDER (Continued)

Section No. 5 3rd Revised Sheet No. 150

#### **RATE**

The R\*C Price for the pilot phase R\*C Resources of each R\*C Service Type shall be as follows based on year of production, unless otherwise provided for in this tariff:

Month-To-Month R*C or Single Event R*C Service Type				
Year number	\$/kWh			
2 (2018)	\$0.03577			
3 (2019)	\$0.03599			

DI LN

### 5-Year and 10-Year R\*C Service Type

Year	5-Year Contract	10-Year Contract
	(\$/kWh)	(\$/kWh)
2017	\$0.03243	\$0.03193
2018	\$0.03280	\$0.03230
2019	\$0.03317	\$0.03267
2020	\$0.03330	\$0.03280
2021	\$0.03345	\$0.03295
2022	\$0.03361	\$0.03349
2023	\$0.03429	\$0.03404
2024	\$0.03497	\$0.03460
2025	\$0.03569	\$0.03519
2026	\$0.03642	\$0.03580

#### **NEUTRALITY CHARGE**

The R\*C Price includes a neutrality charge to mitigate the impact of the R\*C Pilot program on non-participating customers. The standard neutrality charge is as follows:

Year number	\$/kWh
2 (2018)	\$0.00477
3 (2019)	\$0.00483

DL ΙN

Customers receiving service under the Company's Business Incentive and Sustainability Rider. Competitive Response Rider, Residential Electric Vehicle Service (Rate Code A08), or Residential Electric Vehicle Pilot Service (Rate Code A80, A81) shall not be subject to the neutrality charge portion of the R\*C Price.

# TRACKER ACCOUNT

Due to the variability of renewable resources, the Renewable\*Connect program tracker account may have an excess or shortage of supply in any given hour or month. The Company will balance Renewable\*Connect program usage at the end of the program year in accordance with the expected resource blend. As a result, the program may require more or less of a share of the expected program allocation. Energy produced by the R\*C Resources that is not associated with any R\*C Service subscription and therefore not allocated to an R\*C Customer will be sold to all customers at the delivered cost through the Fuel Clause Adjustment. The Company will maintain accounting of the monthly balance of total R\*C Resources production, total program usage, total revenues collected under the program and the expenses associated with offering the R\*C Service, including the renewable energy purchases, marketing and other costs for this program. The Company may petition the Commission annually to true up the marketing and administrative cost tracker balance and apply the resulting true-up factors to the Month-To-Month R\*C Price.

(Continued on Sheet No. 5-151)

Date Filed: 04-02-18 By: Christopher B. Clark Effective Date: 08-13-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-18-252 Order Date: 08-13-18

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# VOLUNTARY RENEWABLE\*CONNECT PILOT PROGRAM RIDER (Continued)

Section No. 5 2nd Revised Sheet No. 150

#### **RATE**

The R\*C Price for the pilot phase R\*C Resources of each R\*C Service Type shall be as follows based on year of production, unless otherwise provided for in this tariff:

Month-To-Month R*C or Single Event R*C Service Type				
Year num	ber	\$/kWh		
1 (2017)		\$0.03555		
2 (2018	)	\$0.03577		

### 5-Year and 10-Year R\*C Service Type

5-Year Contract	10-Year Contract
(\$/KVVh)	(\$/kWh)
\$0.03243	\$0.03193
\$0.03280	\$0.03230
\$0.03317	\$0.03267
\$0.03330	\$0.03280
\$0.03345	\$0.03295
\$0.03361	\$0.03349
\$0.03429	\$0.03404
\$0.03497	\$0.03460
\$0.03569	\$0.03519
\$0.03642	\$0.03580
	(\$/kWh) \$0.03243 \$0.03280 \$0.03317 \$0.03330 \$0.03345 \$0.03361 \$0.03429 \$0.03497 \$0.03569

#### **NEUTRALITY CHARGE**

The R\*C Price includes a neutrality charge to mitigate the impact of the R\*C Pilot program on non-participating customers. The standard neutrality charge is as follows:

Year number	\$/kWh
1 (2017)	\$0.00472
2 (2018)	\$0.00477

Customers receiving service under the Company's Business Incentive and Sustainability Rider, Competitive Response Rider, Residential Electric Vehicle Service (Rate Code A08), or Residential Electric Vehicle Pilot Service (Rate Code A80, A81) shall not be subject to the neutrality charge portion of the R\*C Price.

### TRACKER ACCOUNT

Due to the variability of renewable resources, the Renewable\*Connect program tracker account may have an excess or shortage of supply in any given hour or month. The Company will balance Renewable\*Connect program usage at the end of the program year in accordance with the expected resource blend. As a result, the program may require more or less of a share of the expected program allocation. Energy produced by the R\*C Resources that is not associated with any R\*C Service subscription and therefore not allocated to an R\*C Customer will be sold to all customers at the delivered cost through the Fuel Clause Adjustment. The Company will maintain accounting of the monthly balance of total R\*C Resources production, total program usage, total revenues collected under the program and the expenses associated with offering the R\*C Service, including the renewable energy purchases, marketing and other costs for this program. The Company may petition the Commission annually to true up the marketing and administrative cost tracker balance and apply the resulting true-up factors to the Month-To-Month R\*C Price.

(Continued on Sheet No. 5-151)

Date Filed: 11-17-17 By: Christopher B. Clark Effective Date: 06-25-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-17-817 Order Date: 05-09-18

N N

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis. Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# VOLUNTARY RENEWABLE\*CONNECT PILOT PROGRAM RIDER (Continued)

Section No. 5 1st Revised Sheet No. 150

#### **RATE**

The R\*C Price for the pilot phase R\*C Resources of each R\*C Service Type shall be as follows based on year of production, unless otherwise provided for in this tariff:

Month-To-Month R*C or Single Event R*C Service Type			
Year number	\$/kWh		
1 (2017)	\$0.03555		
2 (2018)	\$0.03577		

### 5-Year and 10-Year R\*C Service Type

Year	5-Year Contract	10-Year Contract
	(\$/kWh)	(\$/kWh)
2017	\$0.03243	\$0.03193
2018	\$0.03280	\$0.03230
2019	\$0.03317	\$0.03267
2020	\$0.03330	\$0.03280
2021	\$0.03345	\$0.03295
2022	\$0.03361	\$0.03349
2023	\$0.03429	\$0.03404
2024	\$0.03497	\$0.03460
2025	\$0.03569	\$0.03519
2026	\$0.03642	\$0.03580

#### **NEUTRALITY CHARGE**

The R\*C Price includes a neutrality charge to mitigate the impact of the R\*C Pilot program on non-participating customers. The standard neutrality charge is as follows:

Year number	\$/kWh	
1 (2017)	\$0.00472	
2 (2018)	\$0.00477	

Customers receiving service under the Company's Business Incentive and Sustainability Rider, Competitive Response Rider, or Residential Electric Vehicle Service (Rate Code A08) shall not be subject to the neutrality charge portion of the R\*C Price.

### TRACKER ACCOUNT

Due to the variability of renewable resources, the Renewable\*Connect program tracker account may have an excess or shortage of supply in any given hour or month. The Company will balance Renewable\*Connect program usage at the end of the program year in accordance with the expected resource blend. As a result, the program may require more or less of a share of the expected program allocation. Energy produced by the R\*C Resources that is not associated with any R\*C Service subscription and therefore not allocated to an R\*C Customer will be sold to all customers at the delivered cost through the Fuel Clause Adjustment. The Company will maintain accounting of the monthly balance of total R\*C Resources production, total program usage, total revenues collected under the program and the expenses associated with offering the R\*C Service, including the renewable energy purchases, marketing and other costs for this program. The Company may petition the Commission annually to true up the marketing and administrative cost tracker balance and apply the resulting true-up factors to the Month-To-Month R\*C Price.

(Continued on Sheet No. 5-151)

Date Filed: 09-21-17 By: Christopher B. Clark Effective Date: 02-21-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-17-695 Order Date: 02-21-18

т

T T T N

Т

T T N

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

#### **VOLUNTARY RENEWABLE\* CONNECT PILOT PROGRAM** RIDER (Continued)

#### Section No. 5 1st Revised Sheet No. 151

#### TERMS AND CONDITIONS OF SERVICE

- 1. Any Customer enrolling in this R\*C Service shall execute the Service Agreement with the Company. The effective date of such service, and the Customer's Subscription Level, will be set forth in the Service Agreement. A Customer's ability to continue receiving this R\*C Service terminates upon the termination of the Service Agreement.
- 2. A Customer may elect to subscribe by: (i) purchasing a specified number of 100 kWh blocks; (ii) the Customer's entire Applicable Retail Electric Usage; or (iii) the Customer's entire Retail Electric Usage for a special event; provided, however, that in no event shall the customer's total Subscription Level exceed 10% of the total expected average output of the available R\*C Resources.
- 2a. Limited Exception to Subscription Level. Customers who subscribe to the first tranche of resources approved for the Renewable\*Connect Pilot Program may purchase a total Subscription Level from the first tranche without limitation.
- 3. Unless otherwise agreed to by the Company, for a Customer electing to receive the R\*C Service by the 100 kWh Blocks R\*C Billing Method, the Subscription Level shall be set so that when combined with other distributed generation resources serving the premises designated in the Service Agreement the subscription size does not exceed one hundred (100) percent of the previous annual (12-month) consumption of electric energy by Customer at Premises. If twelve (12) months of historical electric energy consumption data is not available for a particular Customer Premise, the Companywill calculate the estimated annual electric energy consumption as follows: if there is less than twelve (12) months but four (4) months or more of consumption history, the average monthly consumption is multiplied by twelve (12) to figure the yearly consumption. In cases where there is less than four (4) months of consumption history, home usage is estimated based on the historical average energy use of homes of a similar size. Homes are assumed to have central A/C, electric appliances, and natural gas water and space heating. For commercial properties and all properties over 4,500 square feet with less than four (4) months of consumption history, the Customer must submit an energy audit (HERS Rating or similar) or load calculations for the property stating the estimated annual consumption. Load calculations must be documented and sent to the Renewable\*Connect Program Manager for approval. The compliance check by the Companywith this 100% rule will be performed once at the beginning of a subscription and later only if the Customer changes his or her subscription size or relocates to a new premise. In the event a customer's Applicable Retail Electric Usage in a given billing month results in the partial consumption of a 100 kWh Block, the charge on that partial block will be prorated accordingly.
- For a Customer electing to receive its entire Applicable Retail Electric Usage pursuant to the R\*C Service, Xcel Energy reserves the right to provide system energy in any given billing month for any portion of the Customer's Applicable Retail Electric Usage that exceeds its monthly average usage (calculated as the actual or estimated 12-month annual electric energy consumption described in paragraph 3, divided by 12).

(Continued on Sheet No. 5-152)

Date Filed: 09-21-17 By: Christopher B. Clark 02-21-18 Effective Date:

President, Northern States Power Company, a Minnesota corporation

02-21-18 Docket No. E002/M-17-695 Order Date:

Ν Ν N

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis. Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# **VOLUNTARY RENEWABLE\*CONNECT PILOT PROGRAM**RIDER (Continued)

Section No. 5
1st Revised Sheet No. 152

#### **TERMS AND CONDITIONS OF SERVICE (Continued)**

- 5. A Customer's subscription period becomes effective on the first day of Customer's billing period immediately following the Company counter-signing the Service Agreement (but not before January 1, 2017). Subscription periods are month-to-month, 5 years and 10 years, or are for a designated Special Event. Any termination by the Customer ahead of the 5 year, 10 year or Special Event term shall be provided by notice by the Customer to the Company at least 30 days prior to the Termination Date. The Termination Date is the last day of the billing month following 30 days from Company receipt of the termination notice provided by the Customer. Month-to-month subscriptions shall continue until terminated by the customer, and shall end on the last day of the billing month following 30 days from Company receipt of the termination notice provided by the Customer. A Customer that terminates a 5-Year or 10-Year R\*C Service prior to the completion of that 5-Year or 10-Year term shall be subject to an Early Termination Fee. The Early Termination Fee shall be equal to the customer's actual R\*C Service usage for the 12-month billing period ending on the Termination Date multiplied by a per MWh amount of \$10 (R\*C Early Termination Fee Rate). If the Customer does not have at least 12 billing months of R\*C Service usage, the anticipated 12-month R\*C Service usage will be calculated as follows:
  - a. For Customers choosing the 100 kWh Blocks R\*C Billing Method, the number of 100 kWh Blocks subscribed will be multiplied by twelve (12).
  - b. For Customers choosing the Entire Monthly Usage R\*C Billing Method, the estimated annual (12-month) usage for the Customer using the methodology described in paragraph 3.

This anticipated 12-month R\*C Service usage will then be multiplied by the R\*C Early Termination Fee Rate to determine the value of the Early Termination Fee.

- 6. Xcel Energy may cancel this R\*C Service and any Service Agreement applicable to the R\*C Service on written order from the Commission based on good cause shown. Additionally, Xcel Energy may, upon reasonable notice to a Customer, cancel any Service Agreement applicable to the R\*C Service to assure that the Service Agreement does not extend beyond the term of this R\*C Pilot Program. The term of this R\*C Pilot Program ends on December 31, 2026.
- 7. The Company will submit reports to the Commission each April 1, or as otherwise ordered in relation to the tracker accounting.
- 8. For customers on time of day tariffs, their usage met by R\*C Service and any excess usage not met by R\*C Service shall both be assigned to the on-peak and off-peak periods in proportion to the Customer's total billing period on-peak and off-peak usage.
- Xcel Energy may, in its discretion, allow customers to subscribe to the R\*C Program on a limited basis
  for the energy used by a single event or series of events without making a long-term purchase
  commitment.
- The discounts under Residential Controlled Air Conditioning and Water Heating Rider and Commercial and Industrial Controlled Air Conditioning Riders are not applicable to the charges under this Rider.

(Continued on Sheet No. 5-153)

Date Filed: 09-21-17 By: Christopher B. Clark Effective Date: 02-21-18

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-17-695 Order Date: 02-21-18

N N N

Docket No. E002/RP-19-368 SED Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# **VOLUNTARY RENEWABLE\*CONNECT PILOT PROGRAM RIDER (Continued)**

Section No. 5 Original Sheet No. 153

#### TERMS AND CONDITIONS OF SERVICE (Continued)

Ν

- 11. This Rider is provided to satisfy the conditions of Minn. Stat. §216B.169, subd. 2 related to renewable and high-efficiency energy rate options. The sales arrangements of renewable energy from the Renewable\*Connect program supplies are such that the power supply is sold only once to retail customers.
- 12. The R\*C Service shall only apply to the Applicable Retail Electric Usage of a Customer in excess of other renewable or other energy self-supplied by the Customer or supplied to the Customer by a different entity.
- 13. Any customer taking service under this Rider shall execute a Renewable\*Connect Service Agreement. The effective date of service under this Rider will be set forth in the Service Agreement.
- 14. All R\*C Resources are located in Minnesota. The Company shall assign to Customer, or retire on Customer's behalf, all renewable energy credits (RECs) associated with the Customer's Subscription Level for which the Customer has paid to the Company the applicable R\*C Price. RECs assigned to Customer or retired on the Customer's behalf will not also be claimed by the Company as its renewable energy for other purposes.

Date Filed: 11-12-15 By: Christopher B. Clark Effective Date: 02-27-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-15-985 Order Date: 02-27-17

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# VOLUNTARY RENEWABLE\*CONNECT GOVERNMENT PILOT PROGRAM RIDER

Section No. 5 Original Sheet No. 154

#### **AVAILABILITY**

The Voluntary Renewable\*Connect<sup>TM</sup> Government ("R\*CG") Pilot Program will be available, subject to capacity made available within the program, to any political subdivision or agency customer that: (i) elects to participate in the program; (ii) would otherwise receive service under a rate schedule that is subject to the adjustments provided for in the Minnesota Electric Fuel Clause Rider; and (iii) has the equivalent of an Investment Grade Credit Rating or, if such rating is unavailable, has satisfactory creditworthiness as determined by Northern States Power Company in its reasonably exercised discretion. For purposes of this Rider, a political subdivision or agency means a regional, territorial, or local authority, such as a county or municipality (including a municipal corporation) that is created or recognized by statute or other authority to exercise sovereign powers and that has governing officers appointed by officials of a recognized political subdivision or that are publicly elected. As used in this Pilot Program, a political subdivision or agency includes the Minnesota Department of Administration and those State of Minnesota agencies it assists in administering. Investment Grade Credit Rating, for the purposes of this Rider, means a senior unsecured bond rating (unenhanced by third party support) assigned by Standard & Poors Rating Group (or its successor) of BBB- or higher and/or Moody's Investor Service Inc. (or its successor) of Baa3 or higher; provided, however, that if any senior unsecured bond rating (unenhanced by third party support) is exactly equivalent to BBB-/Baa3, the rated entity shall not be on credit watch by such rating agency, and, provided further, that if the ratings of S&P and Moody's are not equivalent, the lower rating shall apply.

#### **DEFINITIONS**

The following definitions apply:

- (i) "Applicable Retail Electric Usage" means the measured retail electric usage of the Customer on the account(s) during the monthly billing cycle for the Customer's premises identified in the Service Agreement as being associated with the Customer's subscription to the R\*CG Service.
- (ii) "R\*CG Adjustment" means the product resulting from the multiplication of the R\*CG Price by the R\*CG Energy.
- (iii) "R\*CG Energy" means the electric power, in kWh, from the R\*CG Resources associated with the Customer's Subscription Level.
- (iv) "R\*CG Price" means the price as shown in the Rate section below.
- (v) "R\*CG Resources" for this pilot program means portions of renewable sources applicable to the R\*CG Service.
- (vi) "R\*CG Service" means the service offered under this Voluntary Renewable\*Connect-Government Pilot Program Rider.
- (vii) "Service Agreement" means the tariffed service agreement associated with the R\*CG Service which the Customer signs.
- (viii) "Subscription Level" means the Customer's allocated share set forth in the Service Agreement, in MW, of the capacity from the R\*CG Resources. The Subscription Level is a blend of renewable resources.

(Continued on Sheet No. 5-155)

Date Filed: 11-12-15 By: Christopher B. Clark Effective Date: 02-27-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-15-985 Order Date: 02-27-17

N

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# VOLUNTARY RENEWABLE\*CONNECT GOVERNMENT PILOT PROGRAM RIDER (Continued)

Section No. 5 Original Sheet No. 155

#### **RIDER**

Customer may elect to receive R\*CG Service. Under the R\*CG Service, the Customer shall subscribe for a fixed amount of the capacity of the R\*CG Resources. Each billing month, the R\*CG Price will be applied to the Customer's R\*CG Energy, the product being the R\*CG Adjustment.

If the Customer's Applicable Retail Electric Usage is less than the R\*CG Energy in any given billing month, then:

- 1. The Company will bill the Customer for the Customer's Applicable Retail Electric Usage based on the R\*CG Price for that billing month;
- 2. The kWh surplus shall be carried over and applied to a subsequent billing month for the Customer.
- 3. Any such surplus may be carried over up to the day before the yearly anniversary of the Customer's Subscription Term as defined in the Service Agreement. If there is a positive kWh carry-over balance at the end of that day, the Customer shall incur a charge on its retail bill for that balance in kWh multiplied by the then-current R\*CG Price along with a credit for the balance in kWh multiplied by the Net Resources Cost (defined as the resource cost less the current capacity credit). The accumulated Customer surplus then will be reduced to zero.

Customer receiving R\*CG Service shall only be subject to the Minnesota Electric Fuel Clause Rider for the portion of its Applicable Retail Electric Usage that is greater than the Customer's R\*CG Energy plus any applicable applied kWh surplus. All usage shall be subject to any other applicable adjustments and surcharges, including city surcharge or sales tax. The cost to the Customer for participating in the R\*CG Service will appear on the Customer's retail electric bill.

#### **DETERMINATION OF R\*CG PRICE**

The R\*CG Price is based on the actual delivered cost of the R\*CG Resources adjusted for capacity credits and neutrality charges, plus recoverable program expenses. Recoverable program expenses include renewable energy purchases, marketing, and other costs approved by the Minnesota Public Utilities Commission ("Commission").

Ν

Ν

(Continued on Sheet No. 5-156)

Date Filed: 11-12-15 By: Christopher B. Clark Effective Date: 02-27-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-15-985 Order Date: 02-27-17

Docket No. E002/RP-19-368

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

### **VOLUNTARY RENEWABLE\*CONNECT GOVERNMENT PILOT PROGRAM RIDER (Continued)**

Section No. 5 Original Sheet No. 156

#### **RATE**

The R\*CG Price for the pilot phase R\*CG Resources shall be as follows based on year of production, unless otherwise provided for in this tariff:

Year	R*CG Price
Teal	(\$/kWh)
2017	\$0.03093
2018	\$0.03130
2019	\$0.03167
2020	\$0.03230
2021	\$0.03295
2022	\$0.03349
2023	\$0.03404
2024	\$0.03460
2025	\$0.03519
2026	\$0.03580
2027	\$0.03617
2028	\$0.03680
2029	\$0.03745
2030	\$0.03813
2031	\$0.03881
2032	\$0.03951
2033	\$0.04025
2034	\$0.04100
2035	\$0.04176
2036	\$0.04224

# RENEWABLE\*CONNECT GOVERNMENT RESOURCES

The Renewable\*Connect Government program will be supplied by R\*CG Resources, which produce renewable energy as set forth in Minn. Stat. § 216B.169 (as the same may be amended or revised from time to time). The Customer's share of the output of the R\*CG Resources is the "R\*CG Energy".

The Company shall not be liable to the Customer in the event that the R\*CG Energy is greater than or less than the Customer's Applicable Retail Electric Usage. The Customer assumes all production risk of the R\*CG Resources.

To the extent the Company is not required to pay the operator of the R\*CG Service because R\*CG Resources are unavailable, then on a pro-rata basis the R\*CG Energy level of the Customer shall be reduced while such resources are unavailable.

Ν

(Continued on Sheet No. 5-157)

Date Filed: 11-12-15 By: Christopher B. Clark Effective Date: 02-27-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-15-985 Order Date: 02-27-17

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# VOLUNTARY RENEWABLE\*CONNECT GOVERNMENT PILOT PROGRAM RIDER (Continued)

Section No. 5 Original Sheet No. 157

#### TRACKER ACCOUNT

Customers enrolled in the R\*CG Service subscribe to a fixed amount of the capacity of the R\*CG Resources, which is the Customer's Subscription Level. The R\*CG Resources are variable in nature and may produce more or less energy than the Customer's Applicable Retail Electric Usage. The Company shall apply the R\*CG Price to the Customer's Applicable Retail Electric Usage up to the level of the R\*CG Energy plus any applied kWh surplus from previous months. If the Customer's Applicable Retail Electric Usage in a given billing month is greater than the R\*CG Energy plus unused kWh surplus, then to that extent the Customer's electric usage will be subject to the Minnesota Electric Fuel Clause Rider. The Company will balance the usage of R\*CG Service Customers at the end of the program month and year with the actual output of the R\*CG Resources over the same periods in accordance with the expected resource blend. Energy produced by the R\*CG Resources that is not associated with any R\*CG Service subscription and therefore not allocated to an R\*CG Customer will be sold to all customers at the delivered cost through the Fuel Clause Adjustment.

The Company will maintain accounting of the monthly balance of total program production, total program usage, total revenues collected under the program and the expenses associated with offering the R\*CG Service, including the renewable energy purchases, marketing and other costs for this program.

#### TERMS AND CONDITIONS OF SERVICE

- Any Customer enrolling in this R\*CG Service shall execute the Service Agreement with the Company.
  The effective date of such service, and the Customer's Subscription Level, will be set forth in the
  Service Agreement. A Customer's ability to continue receiving this R\*CG Service terminates upon the
  termination of the Service Agreement.
- 2. Unless otherwise agreed to by the Company, a Customer's Subscription Level initially shall be set so that when combined with other distributed generation resources serving the premises designated in the Service Agreement the subscription size does not exceed one hundred (100) percent of the previous annual (12month) consumption of electric energy by Customer at Premises to which the subscription is attributed (using a conversion factor based on expected production from the R\*CG Resources). If twelve (12) months of historical electric energy consumption data is not available for a particular Customer premise, the Company will calculate the estimated annual electric energy consumption as follows: if there is less than twelve (12) months but four (4) months or more of consumption history, the average monthly consumption is multiplied by twelve (12) to figure the yearly consumption. In cases where there is less than four (4) months of consumption history, for commercial properties and all properties over 4,500 square feet with less than four (4) months of consumption history, the Customer must submit an energy audit (HERS Rating or similar) or load calculations for the property stating the estimated annual consumption. Load calculations must be documented and sent to the Renewable\*Connect Government Program Manager for approval. The compliance check by the Company with this 100% rule will be performed once at the beginning of a subscription and later only if the Customer changes the Premise(s) associated with the Customer's Subscription Level.

(Continued on Sheet No. 5-158)

Date Filed: 11-12-15 By: Christopher B. Clark Effective Date: 02-27-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-15-985 Order Date: 02-27-17

Ņ

Docket No. E002/RP-19-368

Appendix N1: Annual Report Minnesota Electric

Northern States Power Company, a Minnesota corporation Minneapolis, Minnesota 55401

MINNESOTA ELECTRIC RATE BOOK - MPUC NO. 2

# VOLUNTARY RENEWABLE\*CONNECT GOVERNMENT PILOT PROGRAM RIDER (Continued)

- Section No. 5 Original Sheet No. 158
- 3. Subscription periods become effective on the first day of Customer's billing period immediately following the Company counter-signing the Service Agreement (but not before January 1, 2017), and shall expire on December 31, 2035. Customers that terminate R\*CG Service prior to the termination date in the Service Agreement shall be subject to an early termination fee (the "Early Termination Fee"). The Early Termination Fee shall be equal to the Subscription Level in kW multiplied by \$20/kW.
- 4. A Customer may assign all or part of its Subscription Level to one or more other accounts associated with other premises where it receives retail electric service from the Company and which otherwise qualify under this program under a process which the Company establishes for this.
- 5. Xcel Energy may cancel this R\*CG Service and any Service Agreement applicable to the R\*CG Service on written order from the Commission based on good cause shown.
- 6. The Company will submit reports to the Commission each April 1, for the prior calendar year, or as otherwise ordered in relation to the tracker accounting.
- 7. For Customers on time of day tariffs, their usage met by R\*CG Service and any excess usage not met by R\*CG Service shall both be assigned to the on-peak and off-peak periods in proportion to the Customer's total billing period on-peak and off-peak usage.
- 8. The discounts under Residential Controlled Air Conditioning and Water Heating Rider and Commercial and Industrial Controlled Air Conditioning Riders are not applicable to the charges under this Rider.
- This R\*CG Service shall only apply to the Applicable Retail Electric Usage of a Customer in excess of net metering or other renewable energy supplied by or for the Customer for the premises designated in the Service Agreement.
- 10. All R\*CG Resources are located in Minnesota.
- 11. The Company shall assign to Customer, or retire on Customer's behalf, all renewable energy credits (RECs) associated with the Customer's R\*CG Energy for which the Customer has paid to the Company the applicable R\*CG Price. RECs assigned to Customer or retired on the Customer's behalf will not also be claimed by the Company as its renewable energy for other purposes.

Ν

Ν

Date Filed: 11-12-15 By: Christopher B. Clark Effective Date: 02-27-17

President, Northern States Power Company, a Minnesota corporation

Docket No. E002/M-15-985 Order Date: 02-27-17

# Northern States Power Company, a Minnesota corporation

# 7610.0600E Minnesota Retail Electric Fuel Cost Charges Table (\$/kWh)

	FUEL COST CHARGE					
June 2018-	C&I Demand				0.11	
June 2019 R	Residential	C&I Non-Demand	Non-TOD	TOD		Outdoor Lighting
		Tron Benfana	Non-10D	On-Peak	Off-Peak	Lighting
June 2018	\$0.02919	\$0.02956	\$0.02864	\$0.03581	\$0.02342	\$0.02288
Julie 2016 July	\$0.02917	\$0.02930	\$0.02754	\$0.03444	\$0.02342	\$0.02201
August	\$0.02280	\$0.02309	\$0.02734	\$0.02798	\$0.02232	\$0.02201
September	\$0.03080	\$0.02309	\$0.03022	\$0.02770	\$0.01027	\$0.01788
October	\$0.02737	\$0.02772	\$0.02686	\$0.03358	\$0.02196	\$0.02146
November	\$0.02602	\$0.02635	\$0.02553	\$0.03192	\$0.02088	\$0.02040
December	\$0.02776	\$0.02812	\$0.02724	\$0.03406	\$0.02227	\$0.02176
January 2019	\$0.02702	\$0.02736	\$0.02651	\$0.03315	\$0.02168	\$0.02118
February	\$0.02003	\$0.02029	\$0.01966	\$0.02458	\$0.01607	\$0.01571
March	\$0.02661	\$0.02695	\$0.02612	\$0.03265	\$0.02135	\$0.02087
April	\$0.02642	\$0.02676	\$0.02593	\$0.03242	\$0.02120	\$0.02072
May	\$0.02947	\$0.02985	\$0.02892	\$0.03616	\$0.02365	\$0.02311
June	\$0.02416	\$0.02447	\$0.02371	\$0.02964	\$0.01938	\$0.01894

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

7610.0600 F

Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	OMB No. 1905-0129 Approved Expires 03/31/2020		
	SCHEDULE 1. IDENTIFICATION			
SURVEY CONTACTS: Persons to contact with question about	out this form RESPONSE DUE	DATE: Please submit by April 30th following the close of calendar year		
Contact Beth Osman  Title: Senior Financial Analyst-External R	REPORT FOR: REPORTING PERIO	Northern States Power Co - Minnesota 13781 OD: 2018		
Phone: (612) 215-4641 FAX:	Email: beth.a.osman@xcelenergy.com			
Supervisor Jolene Stephens Title: Manager, External Reporting  FAX: (612) 330-6335 Email: jolene.j.stephens@xcelenergy.com  Logged By / Date: Logged In: Logged In: Receipt Date (mm/dd/yyyy):  Receipt Date (mm/dd/yyyy):				
1 Legal Name of Industry Participant	Northern States Power Co - Submission Status/Date: Minnesota	Submitted 05/03/2019		
2 Current Address of Principal Business Office	414 Nicollet Mall  Minneapolis MN 55401 0000			
Preparer's Legal Name Operator (if different than line 1)				
4 Current Address of Preparer's Office (if different than line 2)				
5 Respondent Type (Check One)	Federal  Political Subdivision  Municipal  Municipal Marketing Authority  Investor-Owned  Cooperative  Retail Power Marketer (or Ener Service Provider)  Independent Power Producer or Qualifying Facility  Community Choice Aggregator	DSM Administrator		
For questions or additional information about the Form EIA-861 contact the Survey Manager: Fax: (202) 287 - 1938 Email: EIA-861@eia.gov  Stephen Scott Phone: (202) 586-5140 Email: stephen.scott@eia.gov				

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

7610.0600 F

IS Department of Energy Inergy Information Administration orm EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
REPORT FOR: Northern States Power Co - Minne REPORT PERIOD ENDING: 2018	esota 13781	
S	SCHEDULE 2. PART A. GENERAL INFORMATION	
LINE NO.		
Regional North American Electric Reliability Council (Not applicable for power marketers)	TRE (formerly ERCOT)  FRCC  RFC (formerly ECAL  X MRO SERC	SPP  R, MAIN. MAAC) WECC
	x MRO SERC	
2 Name of RTO or ISO	California ISO Electric Reliability Council of Texas PJM Interconnection New York ISO	Southwest Power Pool  X Midwest ISO  ISO New England  None
3 (For EIA Use Only) Identify the North American Elect Reliability Council where you are physically located	tric MRO	
Did Your Company Operate Generating Plants(s)?	x Yes No	
Identify The Activities Your Company Was Engaged In During The Year (Check appropriate activities)	x Generation from company owned plant x Transmission x Buying transmission services on other electrical system x Distribution using owned/leased electric wires	Buying distribution on other electrical system  X Wholesale power marketing  Retail power marketing  X Bundled Services (electricity plus other services such as gas, water, etc. in addition to electric service))
6 Highest Hourly Electrical Peak System Demand		or Year 7,371.0 ior Year 5,379.0
7 Did Your Company Operate Alternative-Fueled Vehicl During the Year? Does Your Company Plan to Operate Such Vehicles During the Coming Year?		
If "Yes", Please Provide Additional Contact Informatio	Name: Victoria Earnest  Title: Fleet Systems Analyst  Telephone: 612 - 630 - 4457 Fax: 612 - 573 - 942	7 Email: victoria.j.earnest@xcelenergy.com

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

7610.0600 F

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
--	---------------------------------------	---

REPORT FOR: North

Northern States Power Co - Minnesota

13781

REPORT PERIOD ENDING: 2018

SCHEDULE 2. PART B. ENERGY SOURCES AND DISPOSITION					
	SOURCE OF ENERGY	MEGAWATTHOURS		DISPOSITION OF ENERGY	MEGAWATTHOURS
1	Net Generation	37,100,627	11	Sales to Ultimate Consumers	34,908,071
2	Purchases from Electricity Suppliers	12,972,506	12	Sales For Resale	14,024,754
3	Exchanged Received (In)		13	Energy Furnished Without Charge	380
4	Exchanged Delivered (Out)		14	Energy Consumed By Respondent Without Charge	52,248
5	Exchanged Net				
6	Wheeled Received (In)				
7	Wheeled Delivered (Out)		15	Total Energy Losses (positive number)	1,087,680
8	Wheeled Net				
9	Transmission by Others Losses (Negative Number)				
10	Total Sources (sum of lines 1, 2, 5, 8 & 9)	50,073,133	16	Total Disposition (sum of lines 11, 12, 13, 14, & 15)	50,073,133

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

7610.0600 F

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
--	---------------------------------------	---

REPORT FOR: Northern States Power Co - Minnesota

13781

REPORT PERIOD ENDING: 2018

#### SCHEDULE 2. PART C. ELECTRIC OPERATING REVENUE

LINE NO.	TYPE OF OPERATING REVENUE	(THOUSAND DOLLARS to the nearest 0.1)
1	Electrical Operating Revenue From Sales to Ultimate Customers (Schedule 4: Parts A, B, and D)	3,773,915.5
2	Revenue From Unbundled (Delivery) Customers (Schedule 4: Part C)	
3	Electric Operating Revenue from Sales for Resale	515,277.0
4	Electric Credits/Other Adjustments	-2,879.3
5	Revenue from Transmission \$	285,383.0
6	Other Electric Operating Revenue \$	-76,236.3
7	Total Electric Operating Revenue (sum of lines 1, 2, 3, 4, 5 and 6)	4,495,459.9

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

# 7610.0600 F

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
--	---------------------------------------	---

REPORT FOR: Northern States Power Co - Minnesota 13781

REPORT PERIOD ENDING: 2018

# SCHEDULE 3. PART A. DISTRIBUTION SYSTEM RELIABILITY DATA

INSTRUCTIONS: For the purpose of this schedule, a distribution circuit is any circuit with a voltage of 34kV or below that emanate from a substation and that serves end use customers.

State/	Territory MN	
1	Total Number of Distribution Circuits	1,045.0
2	Number of Distribution Circuits that employ voltage/VAR optimization (VVO)	

03 May 2019

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

# 7610.0600 F

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
--	---------------------------------------	---

REPORT FOR: Northern States Power Co - Minnesota

13781

REPORT PERIOD ENDING: 2018

# SCHEDULE 3. PART A. DISTRIBUTION SYSTEM RELIABILITY DATA

INSTRUCTIONS: For the purpose of this schedule, a distribution circuit is any circuit with a voltage of 34kV or below that emanate from a substation and that serves end use customers.

State/	Territory ND	
1	Total Number of Distribution Circuits	63.0
2	Number of Distribution Circuits that employ voltage/VAR optimization (VVO)	

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

# 7610.0600 F

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
--	---------------------------------------	---

REPORT FOR: Northern States Power Co - Minnesota 13781

REPORT PERIOD ENDING: 2018

SCHEDULE 3. PART A.
DISTRIBUTION SYSTEM RELIABILITY DATA

INSTRUCTIONS: For the purpose of this schedule, a distribution circuit is any circuit with a voltage of 34kV or below that emanate from a substation and that serves end use customers.

State/	Territory SD	
1	Total Number of Distribution Circuits	70.0
2	Number of Distribution Circuits that employ voltage/VAR optimization (VVO)	

03 May 2019 Page 7 of 35

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	OMB No. 1905-0129 Approved Expires 03/31	/2020				
REPORT FOR: Northern States Power Co - Minnesota	13781						
REPORT PERIOD ENDING: 2018							
SCHEDULE 3. PART B. DISTRIBUTION SYSTEM RELIABILITY DATA							
Who is required to complete this schedule?							
	This schedule collects System Average Interruption Frequency Index (SAIFI) and System Average Interruption Duration Index (SAIDI) statistics. If your organization does not compute these indexes, answer 'no' to Question 1 and then skip to Schedule 4A. You do not have to complete any other part of this schedule 3B or 3C.						
Should you complete Part B or Part C?							
If your organization computes the SAIFI and SAIDI indexes and deter complete Part B. Then skip to Schedule 4A. (You do not complete Sc	mines Major Event Days using the IEEE 1366-2003 or the IEEE 1366-201 hedule 3, Part $C$ .)	2 standard, answer 'YES' to Question	ons 1 and 2, and				
If your organization does not use the IEEE 1366-2003 or the IEEE 136 complete Part C. Then go to Schedule $4A$ .	66-2012 standard but calculates SAIDI and SAIFI indexes via other method	l, answer 'yes' to question 1 and 'no'	to question 2 and				
1 Do you calculate SAIDI and SAIFI by any method? If Yes, go to Question 2. If No, go to Schedule 4, Part A.  x Yes N							
2 Do you calculate SAIDI and SAIFI and determine Major Event Days using the IEEE1366-2003 standard or IEEEE-2012 standard? If Yes, complete Part B. If No, go to complete Part C.							
Part B: SAIDI and SAIFI in accordance with IEEE 1366-2003 standard or IEEE 1366-2012 standard							
	State	MN					
3a. SAIDI value including Major Event days		124.950					
3b. SAIDI value excluding Major Event days		95.020					
4 SAIDI value including Major Event days minus loss of supply		118.780					
5a. SAIFI value including Major Event days		0.950					
5b. SAIFI value excluding Major Event days		0.880					
6. SAIFI value including Major Event days minus loss of supply							
or state morating ration from early minute 1888 or supply		0.890					
7. Total number of customers used in these calculations		1,265,163.0					
	tion system, as opposed to the supply system? (kV)						
7. Total number of customers used in these calculations		1,265,163.0  34.5  x Yes No					

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

US Department of Energy Energy Information Administration	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129				
Form EIA-861	I W COLLET THE CALL	Approved Expires 03/31/2	2020			
REPORT FOR: Northern States Power Co - Minnesota	13781					
REPORT PERIOD ENDING: 2018						
	SCHEDULE 3. PART B.					
	DISTRIBUTION SYSTEM RELIABILITY DATA					
This schedule collects System Average Interruption Frequency Index (	Who is required to complete this schedule?  This schedule collects System Average Interruption Frequency Index (SAIFI) and System Average Interruption Duration Index (SAIDI) statistics. If your organization does not compute these indexes, answer 'no' to Question 1 and then skip to Schedule 4A. You do not have to complete any other part of this schedule 3B or 3C.					
Should you complete Part B or Part C?						
If your organization computes the SAIFI and SAIDI indexes and detern complete Part B. Then skip to Schedule 4A. (You do not complete Sch	mines Major Event Days using the IEEE 1366-2003 or the IEEE 1366-2012 nedule 3, Part C.)	standard, answer 'YES' to Question	s 1 and 2, and			
If your organization does not use the IEEE 1366-2003 or the IEEE 136 complete Part C. Then go to Schedule $4A$ .	6-2012 standard but calculates SAIDI and SAIFI indexes via other method,	answer 'yes' to question 1 and 'no' to	o question 2 and			
1 Do you calculate SAIDI and SAIFI by any method? If Yes, go to Q	Question 2. If No, go to Schedule 4, Part A.		x Yes No			
2 Do you calculate SAIDI and SAIFI and determine Major Event Da complete Part C.	sys using the IEEE1366-2003 standard or IEEEE-2012 standard? If Yes, con	mplete Part B. If No, go to	x Yes No			
Part B: SAIDI and SAIFI in accordance with IEEE 1366-2003 standard or IEEE 1366-2012 standard						
	State	SD				
0 01707 1 1 1 1 1 1 1 1 1 1						
3a. SAIDI value including Major Event days		76.520				
SAIDI value including Major Event days      SAIDI value excluding Major Event days		76.520 58.570				
3b. SAIDI value excluding Major Event days		58.570				
SAIDI value excluding Major Event days     SAIDI value including Major Event days minus loss of supply		58.570 66.670				
SAIDI value excluding Major Event days     SAIDI value including Major Event days minus loss of supply     SAIFI value including Major Event days		58.570 66.670 0.680				
3b. SAIDI value excluding Major Event days  4 SAIDI value including Major Event days minus loss of supply  5a. SAIFI value including Major Event days  5b. SAIFI value excluding Major Event days		58.570 66.670 0.680 0.480				
3b. SAIDI value excluding Major Event days  4 SAIDI value including Major Event days minus loss of supply  5a. SAIFI value including Major Event days  5b. SAIFI value excluding Major Event days  6. SAIFI value including Major Event days minus loss of supply	tion system, as opposed to the supply system? (kV)	58.570 66.670 0.680 0.480 0.540				
3b. SAIDI value excluding Major Event days  4 SAIDI value including Major Event days minus loss of supply  5a. SAIFI value including Major Event days  5b. SAIFI value excluding Major Event days  6. SAIFI value including Major Event days minus loss of supply  7. Total number of customers used in these calculations		58.570 66.670 0.680 0.480 0.540				

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

US Department of Energy Energy Information Administration	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129					
Form EIA-861		Approved Expires 03/31/2	2020				
REPORT FOR: Northern States Power Co - Minnesota	13781						
REPORT PERIOD ENDING: 2018							
	SCHEDULE 3. PART B.						
	DISTRIBUTION SYSTEM RELIABILITY DATA						
This schedule collects System Average Interruption Frequency Index (	Who is required to complete this schedule?  This schedule collects System Average Interruption Frequency Index (SAIFI) and System Average Interruption Duration Index (SAIDI) statistics. If your organization does not compute these indexes, answer 'no' to Question 1 and then skip to Schedule 4A. You do not have to complete any other part of this schedule 3B or 3C.						
Should you complete Part B or Part C?							
If your organization computes the SAIFI and SAIDI indexes and detern complete Part B. Then skip to Schedule 4A. (You do not complete Sch	mines Major Event Days using the IEEE 1366-2003 or the IEEE 1366-2012 s nedule 3, Part C.)	tandard, answer 'YES' to Question	as 1 and 2, and				
If your organization does not use the IEEE 1366-2003 or the IEEE 136 complete Part C. Then go to Schedule 4A.	6-2012 standard but calculates SAIDI and SAIFI indexes via other method, a	nswer 'yes' to question 1 and 'no' to	o question 2 and				
1 Do you calculate SAIDI and SAIFI by any method? If Yes, go to (	Question 2. If No, go to Schedule 4, Part A.		x Yes No				
2 Do you calculate SAIDI and SAIFI and determine Major Event Da complete Part C.	sys using the IEEE1366-2003 standard or IEEEE-2012 standard? If Yes, compared to the IEEE1366-2003 standard or IEEEE-2012 standard?	plete Part B. If No, go to	x Yes No				
Part B: SAIDI and SAIFI in accordance with IEEE 1366-2003 standard or IEEE 1366-2012 standard							
	State	ND					
3a. SAIDI value including Major Event days		68.190					
3b. SAIDI value excluding Major Event days 52.360							
3b. SAIDI value excluding Major Event days		52.360					
SAIDI value excluding Major Event days     SAIDI value including Major Event days minus loss of supply		52.360 61.890					
4 SAIDI value including Major Event days minus loss of supply		61.890					
4 SAIDI value including Major Event days minus loss of supply  5a. SAIFI value including Major Event days		61.890 0.560					
<ul> <li>SAIDI value including Major Event days minus loss of supply</li> <li>SAIFI value including Major Event days</li> <li>SAIFI value excluding Major Event days</li> </ul>		61.890 0.560 0.490					
4 SAIDI value including Major Event days minus loss of supply  5a. SAIFI value including Major Event days  5b. SAIFI value excluding Major Event days  6. SAIFI value including Major Event days minus loss of supply	tion system, as opposed to the supply system? (kV)	0.560 0.490 0.500					
<ol> <li>SAIDI value including Major Event days minus loss of supply</li> <li>SAIFI value including Major Event days</li> <li>SAIFI value excluding Major Event days</li> <li>SAIFI value including Major Event days minus loss of supply</li> <li>Total number of customers used in these calculations</li> </ol>		61.890 0.560 0.490 0.500 92,389.0					

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

7610.0600 F

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
--	---------------------------------------	---

REPORT FOR: Northern States Power Co - Minnesota

13781

REPORT PERIOD ENDING: 2018

Part C: SAIDI and SAIFI calculated by other methods				
	State			
10a. SAIDI value including Major Events				
10b. SAIDI value excluding Major Events				
11a. SAIFI value including Major Events				
11b. SAIFI value excluding Major Events				
12. Total number of customers used in these calculations				
13. Do you include inactive accounts?	Yes No			
14. How do you define momentary interruptions	Less than 1 min. Less than 5 min. Other			
15. What is the highest voltage that you consider part of the distribution system, as opposed to the supply system?	kv			
16. Is information about customer outages recorded automatically?	Yes No			

7610.0600 F

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
--	---------------------------------------	---

REPORT FOR: Northern States Power Co - Minnesota

13781

REPORT PERIOD ENDING: 2018

	HEDULE 4. PAKI A. SAL		OMERS. FULL SERVICE -		, ,	
		RESIDENTIAL (a)	COMMERCIAL (b)	INDUSTRIAL (c)	TRANSPORTATION (d)	TOTAL (e)
State	MN Balancing Authority	56669				
Revenue (thousand dollars)		1,259,859.4	1,412,579.2	661,416.1	2,474.8	3,336,329
Megawatthours		8,905,592	13,390,272	8,127,676	25,832	30,449,37
Number of Customers		1,149,958	139,539	506	1	1,290,00
Are your rates decoupled?		x Yes No	x Yes No	Yes x No	Yes x No	
f the answer is YES, is the revenue djustment automatic or does it require		N automatic	N automatic	N automatic	N automatic	
rate-making proceeding?		N proceeding	N proceeding	N proceeding	N proceeding	
Cents/Kwh		14.147	10.549	8.138	9.580	10.95
State	ND Balancing Authority	56669				
Revenue (thousand dollars)		82,604.4	101,127.4	26,819.8		210,551
Megawatthours		794,324	1,098,791	371,963		2,265,07
Number of Customers		80,998	13,191	23		94,21
Are your rates decoupled?		Yes x No	Yes x No	Yes x No	Yes xNo	
		N automatic	N automatic	N automatic	N automatic	
If the answer is YES, is the revenue adjustment automatic or does it require					<u> </u>	
		N proceeding	N proceeding	N proceeding	N proceeding	

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

7610.0600 F

US Department of Energy Form Approved ANNUAL ELECTRIC POWER **Energy Information Administration** OMB No. 1905-0129 INDUSTRY REPORT Form EIA-861 Approved Expires 03/31/2020

REPORT FOR: Northern States Power Co - Minnesota

13781

		RESIDENTIAL	OMERS. FULL SERVICE - COMMERCIAL	INDUSTRIAL	TRANSPORTATION	TOTAL
		(a)	(b)	(c)	(d)	(e)
State	SD Balancing Authority	56669				
Revenue (thousand dollars)		95,263.1	102,067.0	29,704.3		227,034.
Megawatthours		776,420	1,039,733	377,468		2,193,62
Number of Customers		82,144	12,160	24		94,32
Are your rates decoupled?		Yes x No	Yes X No	Yes x No	Yes xNo	
f the answer is YES, is the revenue djustment automatic or does it require		N automatic	N automatic	N automatic	N automatic	
rate-making proceeding?		N proceeding	N proceeding	N proceeding	N proceeding	
Cents/Kwh		12.270	9.817	7.869		10.35
State						
Revenue (thousand dollars)						
Megawatthours						
Number of Customers						
Are your rates decoupled?						
If the answer is YES, is the revenue adjustment automatic or does it require a rate-making proceeding?						
Cents/Kwh						
Total Revenue (thousand dollars)		1,437,726.9	1,615,773.6	717,940.2	2,474.8	3,773,915.5
Megawatthours		10,476,336	15,528,796	8,877,107	25,832	34,908,071
Number of Customers		1,313,100	164,890	553	1	1,478,54

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

7610.0600 F

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
--	---------------------------------------	---

REPORT FOR: Northern States Power Co - Minnesota

13781

REPORT PERIOD ENDING: 2018

KEFOKT FEKIO	DENDING.	2016					
	SCHEDULE 4. PART B. SALES TO ULTIMATE CUSTOMERS. ENERGY ONLY SERVICE (WITHOUT DELIVERY SERVICE)						
		RESIDENTIAL (a)	COMMERCIAL (b)	INDUSTRIAL (c)	TRANSPORTATION (d)	TOTAL (e)	
	State	<b>Balancing Authority</b>					
Revenue (thousand dollars)							
Megawatthours							
Number of Customers							
Cents/Kwh							
	State						
Revenue (thousand dollars)							
Megawatthours							
Number of Customers							
Cents/Kwh							
Total							
Revenue (thousand dollar	s)						
Megawatthours							
Number of Customers							

03 May 2019

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

7610.0600 F

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
--	---------------------------------------	---

REPORT FOR: Northern States Power Co - Minnesota 13781

REPORT PERIOD ENDING:	2018				
	SCHEDULE 4. PART C. SALES T	TO ULTIMATE CUSTOMERS	S. DELIVERY ONLY SEI	RVICE (AND OTHER RELATED C	HARGES)
	RESIDENTIAL	COMMERCIAL (b)	INDUSTRIAL (c)	TRANSPORTATION (d)	TOTAL (e)
State	(a)  Balancing Authority	(0)	(C)	(u)	(c)
Revenue (thousand dollars)					
Megawatthours					
Number of Customers					
Cents/Kwh					
Cents/ Kwiii					
State					
Revenue (thousand dollars)					
Megawatthours					
Number of Customers					
Cents/Kwh					
Total					
Revenue (thousand dollars)					
Megawatthours					
Number of Customers					

03 May 2019

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

7610.0600 F

03 May 2019

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
--	---------------------------------------	---

13781

REPORT FOR: Northern States Power Co - Minnesota

REPORT PERIOD ENDING: 2018

		SCHEDULE 4. PART D. BUN	DLED SERVICE BY RETAIL	L ENERGY PROVIDERS A	ND POWER MARKETERS	
		RESIDENTIAL (a)	COMMERCIAL (b)	INDUSTRIAL (c)	TRANSPORTATION (d)	TOTAL (e)
	State	<b>Balancing Authority</b>				
Revenue (thousand dollars)						
Megawatthours						
Number of Customers						
Cents/Kwh						
	State					
Revenue (thousand dollars)						
Megawatthours						
Number of Customers						
Cents/Kwh						
Total						
Revenue (thousand dollars)	)					
Megawatthours						
Number of Customers						

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

7610.0600 F

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
--	---------------------------------------	---

REPORT FOR: Northern States Power Co - Minnesota 13781

REPORTING PERIOD ENDING: 2018

#### SCHEDULE 5. MERGERS and/or ACQUISITIONS

Mergers and/or acquisitions during the reporting month

If Yes, Provide:

**Date of Merger or Acquisition** 

Company merged with or acquired

Name of new parent company

Address

City

State, Zip

**New Contact Name** 

Telephone No.

Email address

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

7610.0600 F

US Department of Energy
Energy Information Administration
Form EIA-861

ANNUAL ELECTRIC POWER
INDUSTRY REPORT
FORM Approved
OMB No. 1905-0129
Approved Expires 03/31/2020

REPORT FOR: Northern States Power Co - Minnesota

13781

REPORT PERIOD ENDING: 2018

#### SCHEDULE 6. PART A. ENERGY EFFICIENCY PROGRAMS Adjusted Gross Energy and Demand Savings -- Energy Efficiency

If you have a non utility DSM administrator that reports your DSM activity for you please select them from the list

State/Territory	MN	<b>Balancing Authority</b>	56669					
		RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANS	Total		
		(a)	(b)	(c)	(d)	(e)		
	Reporting Year Incremental Annual Savings							
1 Energy Savings (MWh)		185,418.428	379,316.999	67,278.587	0.000	632,014.014		
2 Peak Demand Savings (M	MW)	30.807	62.249	7.698	0.000	100.754		
			Increment Life Cycle S	Savings				
3 Energy Savings (MWh)		1232501.215	5,967,875.992	1,128,873.154	0.000	8,329,250.361		
4 Peake Demand Savings (	(MW)	30.807	62.249	7.698	0.000	100.754		
			Reporting Year Increme	ntal Costs				
5 Customer Incentives		14,312.040	39,190.754	4,765.265	0.000	58,268.059		
6 All other costs		10,267.469	26,350.916	3,307.063	0.000	39,925.448		
			Incremental Life Sycl	e Costs				
7 Customer Incentives		14,312.040	39,190.754	4,765.265	0.000	58,268.059		
8 All other costs		10,267.469	26,350.916	3,307.063	0.000	39,925.448		
	Weighted Average Life for Portfolio (Years) - Use Spreadsheet to Calculate							
9 Weighted Average Life		6.647	15.733	16.779		39.000		

Please provide website address to your energy efficiency program reports:

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

7610.0600 F

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
--	---------------------------------------	---

REPORT FOR: Northern States Power Co - Minnesota

13781

REPORT PERIOD ENDING: 2018

#### SCHEDULE 6. PART A. ENERGY EFFICIENCY PROGRAMS Adjusted Gross Energy and Demand Savings -- Energy Efficiency

State/Territory	SD	<b>Balancing Authority</b>	56669				
		RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANS	Total	
		(a)	(b)	(c)	(d)	(e)	
Reporting Year Incremental Annual Savings							
1 Energy Savings (MWh)	)	2,426.884	3,332.874			5,759.758	
Peak Demand Savings	(MW)	0.258	0.469			0.727	
			Increment Life Cycle Sa	avings			
Energy Savings (MWh)	)	12768.236	56,069.636			68,837.872	
Peake Demand Savings	s (MW)	0.258	0.469			0.727	
			Reporting Year Incremen	tal Costs			
Customer Incentives		71.587	331.051			402.638	
All other costs		68.959	71.494			140.453	
			Incremental Life Sycle	Costs			
Customer Incentives		71.587	331.051			402.638	
8 All other costs		68.959	71.494			140.453	
		Weighted Average	Life for Portfolio (Years) - U	Use Spreadsheet to Calculate			
9 Weighted Average Life	·	5.261	16.823			22.000	

Please provide website address to your energy efficiency program reports:

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

7610.0600 F

JS Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020			
REPORT FOR: Northern States Power Co - Minnesota 13781  REPORT PERIOD ENDING: 2018					
SCHEDULE 6. PART A. ENERGY EFFICIENCY PROGRAMS					
DMS Administration only. List all utilities that you provide servi	e for.				
State Utility Name					

Page 20 of 35 03 May 2019

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

7610.0600 F

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
--	---------------------------------------	---

REPORT FOR: Northern States Power Co - Minnesota

13781

REPORT PERIOD ENDING: 2018

Schedule 6. Part B. Yearly Energy and Demand Savings - Demand Response						
	Reporting Y	ear Savings				
	(a) Residential	(b) Commercial	(c) Industrial	(d) Transportation	(e) Total	
State/Territory MN Balancing Authority 56669						
1 Number of Customers Enrolled	424,571	18,503	218		443,292	
2 Energy Savings (Mwh)	655.000	434.494	92.690		1,182.184	
3 Potential Peak Demand Savings (MW)	274.546	326.567	94.045		695.158	
4 Actual Peak Demand Savings (MW)	0.000	0.000	0.000		0.000	
Schedule 6. Part B. Program Cost Demand Response (Thousand Dollars) Reporting Year Costs						

Reporting Year Costs

 5
 Customer Incentives
 28,450.910
 25,642.093
 1,252.901
 55,345.904

 6
 All other costs
 6,414.000
 2,064.255
 525.103
 9,003.358

If you have a demand side management (DMS) program for grid-interactive water heaters (as defined by DOE), how many grid interactive water heaters were added to your program this year?

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

7610.0600 F

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
--	---------------------------------------	---

REPORT FOR: Northern States Power Co - Minnesota

13781

REPORT PERIOD ENDING: 2018

	Schedule 6. Part B. Yearly Energy and Demand Savings - Demand Response							
				Reporting Y	ear Savings			
				(a) Residential	(b) Commercial	(c) Industrial	(d) Transportation	(e) Total
State/T	erritory N	D Balancing Authority	56669					
1	Number of 0	Customers Enrolled		12,397	695	11		13,103
2	Energy Savi	ings (Mwh)		16.426	15.000	0.000		31.426
3	Potential Pe	eak Demand Savings (MW)		7.365	15.000	46.000		68.365
4	Actual Peak	Demand Savings (MW)		0.000	0.000	0.000		0.000
Schedule 6. Part B. Program Cost Demand Response (Thousand Dollars) Reporting Year Costs								
5	Customer I	ncentives		871.474	1,053.600	2,458.400		4,383.474
6	All other co	osts		23.160	27.792	64.848		115.800

27.792

115.800

If you have a demand side management (DMS) program for grid-interactive water heaters (as defined by DOE), how many grid interactive water heaters were added to your program this year?

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

7610.0600 F

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
--	---------------------------------------	---

REPORT FOR: Northern States Power Co - Minnesota

13781

REPORT PERIOD ENDING: 2018

	Schedule 6. Part B. Yearly Energy and Demand Savings - Demand Response							
				Reporting Y	ear Savings			
				(a) Residential	(b) Commercial	(c) Industrial	(d) Transportation	(e) Total
State/Terr	ritory	SD Balancing Author	ority 56669					
1 1	Number	of Customers Enrolled		20,057	685	3		20,745
2 I	Energy S	avings (Mwh)		22.118	16.050	0.000		38.168
3 I	Potential	Peak Demand Savings (MW)		10.844	16.050	6.010		32.904
4 /	Actual Pe	eak Demand Savings (MW)		0.000	0.000	0.000		0.000
Schedule 6. Part B. Program Cost Demand Response (Thousand Dollars) Reporting Year Costs								
5	Custome	er Incentives		1,521.316	910.695	384.610		2,816.621
6	All other	r costs		185.090	48.725	3.876		237.691

48.725

237.691

If you have a demand side management (DMS) program for grid-interactive water heaters (as defined by DOE), how many grid interactive water heaters were added to your program this year?

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

	artment of Energy Information Administration A-861	ANNUAL ELECTRIC F INDUSTRY REF		oroved 1905-0129 Expires 03/31/2020		
	REPORT FOR: Northern States Power Co - Minnesota  REPORT PERIOD ENDING: 2018	13781				
		SCHEDULE 6. PART C. DYNAN Number of Cus		MS		
	INSTRUCTIONS: Report the number of customers participate  State/Territory SD Balancing Authority	ing in dynamic pricing programs, e.g. Tim 56669	ne-of-Use-Pricing, Real-Time	e-Pricing, Variable Peak F	Pricing, Critical Peak Pricing	Programs.
		Residentia (a)	al Commercial (b)	Industrial (c)	Transportatio (d)	Total (e)
1	Number of Customers enrolled in dynamic pricing program class	s, by customer 9	675	0		684
			amic Pricing Programs			
	INSTRUCTIONS: For each customer class, mark the types of	f dynamic pricing programs in which the c	customers are participating.			
		Residential (a)	Commercial (b)	Industrial (c)	Transportatio (d)	
2	Time-of-Use Pricing	x Yes No	x Yes No	x Yes No	Yes X No	
3	Real-Time Pricing	Yes x No	Yes X No	Yes x No	Yes x No	
4	Variable Peak Pricing	Yes X No	Yes No	Yes x No	Yes X No	
5	Critical Peak Pricing	Yes x No	Yes X No	Yes x No	Yes x No	
6	Critical Peak Rebate	Yes x No	Yes x No	Yes x No	Yes x No	

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Form Approved

7610.0600 F

US Department of Energy

Energy	nergy Information Administration  orm EIA-861  ANNUAL ELECTRIC POWE INDUSTRY REPORT				Form App OMB No. Approved		
	REPORT FOR: Northern States Power Co - Minnesota REPORT PERIOD ENDING: 2018	1:	3781				
			RT C. DYNAMIC	PRICING PROGRAM	S		
	INSTRUCTIONS: Report the number of customers participat  State/Territory MN Balancing Authority	ing in dynamic pricing pros	grams, e.g. Time-of-	Use-Pricing, Real-Time-	Pricing, Variable Peak F	ricing, Critical Peak Pricing	Programs.
			Residential (a)	Commercial (b)	Industrial (c)	Transportatio (d)	Total (e)
1	Number of Customers enrolled in dynamic pricing program class	s, by customer	1,021	15,647	26	1	16,695
			Types of Dynamic	Pricing Programs			
	INSTRUCTIONS: For each customer class, mark the types of	f dynamic pricing programs	in which the custor	mers are participating.			
		Residenti (a)	al	Commercial (b)	Industrial (c)	Transportatio (d)	
2	Time-of-Use Pricing	x Yes	No	x Yes No	x Yes No	X Yes No	
3	Real-Time Pricing	Yes	x No	x Yes No	x Yes No	Yes X No	
4	Variable Peak Pricing	Yes	x No	Yes x No	Yes x No	Yes X No	
5	Critical Peak Pricing	Yes	x No	Yes x No	Yes X No	Yes X No	
6	Critical Peak Rebate	Yes	x No	Yes x No	Yes x No	Yes x No	

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

Form Approved

7610.0600 F

US Department of Energy

Energy I	Energy Information Administration  Form EIA-861  ANNUAL ELECTRIC POWER INDUSTRY REPORT			R		oroved 1905-0129 Expires 03/31/2020	
	REPORT FOR: Northern States Power Co - Minnesota REPORT PERIOD ENDING: 2018	13781					
		SCHEDULE 6. PART C	C. DYNAMIC For of Customer		IS		
	INSTRUCTIONS: Report the number of customers participat State/Territory ND Balancing Authority	ing in dynamic pricing programs 56669	, e.g. Time-of-U	Jse-Pricing, Real-Time-	-Pricing, Variable Peak P	ricing, Critical Peak Pricing	Programs.
		:	Residential (a)	Commercial (b)	Industrial (c)	Transportatio (d)	Total (e)
1	Number of Customers enrolled in dynamic pricing program class	s, by customer	35	831			866
		Туро	es of Dynamic	Pricing Programs			
	INSTRUCTIONS: For each customer class, mark the types o	f dynamic pricing programs in w	hich the custom	ers are participating.			
		Residential (a)	(	Commercial (b)	Industrial (c)	Transportatio (d)	
2	Time-of-Use Pricing	x Yes N	О	X Yes No	x Yes No	Yes X No	
3	Real-Time Pricing	Yes x N	o	Yes x No	Yes x No	Yes X No	
4	Variable Peak Pricing	Yes x N	О	Yes x No	Yes x No	Yes X No	
5	Critical Peak Pricing	Yes X N	0	Yes x No	Yes X No	Yes x No	
6	Critical Peak Rebate	Yes x N	0	Yes x No	Yes x No	Yes x No	

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

7610.0600 F

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
--	---------------------------------------	---

REPORT FOR: Northern States Power Co - Minnesota

REPORT PERIOD ENDING: 2018

# SCHEDULE 6. PART D. ADVANCED METERING

Only customers from schedule 4A and 4C need to be reported on this schedule.

13781

AMR- data transmitted one-way, to the utility.

AMI- data transmitted in both directions, to the utility and customer

State MN Balancing Au	thority 56669				
	Residential (a)	Commercial (b)	Industrial (c)	Transportation (d)	Total (e)
1 Number of AMR Meters	1,170,629	127,918	11,451	15	1,310,013
2 Number of AMI Meters					
3 Number of AMI Meters with home area network (HAN) gateway enabled					
4 Number of non AMR/AMI Meters	22	1,596	278	1	1,897
5 Total Number of Meters (All Types), line 1+2+4	1,170,651	129,514	11,729	16	1,311,910
6 Energy Served Through AMI					
Number of Customers able to access 7 daily energy usage through a webportal or other electronic means					0
8 Number of customers with direct load control	391,361	13,916	1,395		406,672

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

7610.0600 F

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
--	---------------------------------------	---

REPORT FOR: Northern States Power Co - Minnesota

REPORT PERIOD ENDING: 2018

#### SCHEDULE 6. PART D. ADVANCED METERING

Only customers from schedule 4A and 4C need to be reported on this schedule.

13781

AMR- data transmitted one-way, to the utility.

AMI- data transmitted in both directions, to the utility and customer

State ND Balancing Aut	thority 56669				
	Residential (a)	Commercial (b)	Industrial (c)	Transportation (d)	Total (e)
1 Number of AMR Meters	82,526	13,001	542		96,069
2 Number of AMI Meters					
3 Number of AMI Meters with home area network (HAN) gateway enabled					
4 Number of non AMR/AMI Meters	0	33	4		37
5 Total Number of Meters (All Types), line 1+2+4	82,526	13,034	546		96,106
6 Energy Served Through AMI					
Number of Customers able to access 7 daily energy usage through a webportal or other electronic means					0
8 Number of customers with direct load control	12,359	516	20		12,895

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

7610.0600 F

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
--	---------------------------------------	---

REPORT FOR: Northern States Power Co - Minnesota

REPORT PERIOD ENDING: 2018

# SCHEDULE 6. PART D. ADVANCED METERING

Only customers from schedule 4A and 4C need to be reported on this schedule.

AMR- data transmitted one-way, to the utility.

13781

AMI- data transmitted in both directions, to the utility and customer

State SD Balancing Aut	thority 56669				
	Residential (a)	Commercial (b)	Industrial (c)	Transportation (d)	Total (e)
1 Number of AMR Meters	83,892	12,093	398		96,383
2 Number of AMI Meters					0
3 Number of AMI Meters with home area network (HAN) gateway enabled					
4 Number of non AMR/AMI Meters	0	2	0		2
5 Total Number of Meters (All Types), line 1+2+4	83,892	12,095	398		96,385
5 Energy Served Through AMI					
Number of Customers able to access 7 daily energy usage through a webportal or other electronic means					0
8 Number of customers with direct load control	19,771	514	32		20,317

#### 7610.0600 F

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
--	---------------------------------------	---

REPORT FOR: Northern States Power Co - Minnesota 13781

REPORT PERIOD ENDING: 2018

#### SCHEDULE 7. PART A. NET METERING

Net Metering programs allow customers to sell excess power they generated back to the electrical grid to offset consumption. Provide the information about programs by State balancing authority, customer class, and technology for all net metering applications.

State	MN Balancing Authority 56669	Residential (a)	Commercial (b)	Industrial (c)	Transportation (d)	Total (e)
	Net Metering Installed Capacity (MW)	19.087	16.966	8.121		44.174
	Net Metering Installations	2,595	632	168		3,395
	Storage Installed Capacity (MW)					
	Storage Installations					
Photovolta	icVirtual NM Installed Capacity (1 MW and greater)					
	Virtual NM Customers (1 MW and greater)					
	Virtual NM Installed Capacity (less than 1MW)					
	Virtual NM Customers (less than 1MW) If Available, Enter the Electric Energy Sold Back to the Utility (MWh)					0.000
	Installed Net Metering Capacity (MW)					0.000
Wind	Number of Net Metering Customers					0
	If Available, Enter the Electric Energy Sold Back to the Utility (MWh)					0.000
	Installed Net Metering Capacity (MW)					0.000
Other	Number of Net Metering Customers					0
	If Available, Enter the Electric Energy Sold Back to the Utility (MWh)					0.000
	Installed Net Metering Capacity (MW)	19.087	16.966	8.121	0.000	44.174
Total	Number of Net Metering Customers If Available, Enter the Electric Energy Sold	2,595	632	168	0	3,395
	Back to the Utility (MWh)	0.000	0.000	0.000	0.000	0.000
	Net Metering Installed Capacity (MW)	19.087	16.966	8.121	0	44.174
Grand Total	Net Metering Installations/customers	2595	632	168	0	3395
All States	If Available, Enter the Electric Energy Sold Back to the Utility (MWh)	0	0	0	0	0

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

7610.0600 F

13. Other

14. Total

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
--	---------------------------------------	---

REPORT FOR Northern States Power Co - Minnesota

REPORT PERIOD ENDING:

#### SCHEDULE 7. PART B. NON NET-METERED DISTRIBUTED GENERATORS

If your company owns and/or operates a distribution system, please report information on known distributed generation (grid connected/synchronized) capacity on the system. Such capacity must be utility or customer-owned

#### NUMBER AND CAPACITY

State	Balancing Authority	< 1MW		
1. Number of generators		3. Capacity that consists of backup-only units		
2. Total combined capacity (MW	7)	4. Capacity owned by respondent		
Capacity by Technology and Sector (MW)				

	Residential	Commercial	Industrial	Transportation	<b>Direct Connected</b>	Total
5. Internal combustion						
6. Combustion turbine(s)						
7. Steam turbine(s)						
8. Fuel Cell(s)						
9. Hydroelectric						
10, Photovoltaic						
11. Storage						
12. Wind turbine(s)						

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

7610.0600 F

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
--	---------------------------------------	---

REPORT FOR: Northern States Power Co - Minnesota 13781

REPORT PERIOD ENDING: 2018

#### SCHEDULE 8. DISTRIBUTION SYSTEM INFORMATION

If your company owns a distribution system	a places identify the names of t	the counties (narish etc.) by	. Stata in which the electric w	rivo/ognipment are legated
II YUUI CUIIDAIIY UWIIS A UISH IDUUUII SYSICII	i. Diease identity the names of t	me counties (barish, etc./ by	State in which the electric w	ni e/euundinient are iocateu.

LINE NO.	STATE (US Postal Abbreviation) (a)	COUNTY (Parish, Etc.) (b)	LINE NO.	STATE (US Postal Abbreviation) (a)	COUNTY (Parish, Etc.) (b)
1	MN - Anoka		21	MN - Lyon	
2	MN - Benton		22	MN - McLeod	
3	MN - Blue Earth		23	MN - Meeker	
4	MN - Brown		24	MN - Mower	
5	MN - Carver		25	MN - Murray	
6	MN - Chippewa		26	MN - Nicollet	
7	MN - Chisago		27	MN - Nobles	
8	MN - Clay		28	MN - Norman	
9	MN - Dakota		29	MN - Olmsted	
10	MN - Dodge		30	MN - Pine	
11	MN - Douglas		31	MN - Pipestone	
12	MN - Faribault		32	MN - Polk	
13	MN - Freeborn		33	MN - Pope	
14	MN - Goodhue		34	MN - Ramsey	
15	MN - Hennepin		35	MN - Redwood	
16	MN - Houston		36	MN - Renville	
17	MN - Kandiyohi		37	MN - Rice	
18	MN - Lac Qui Parle		38	MN - Rock	
19	MN - Le Sueur		39	MN - Scott	
20	MN - Lincoln		40	MN - Sherburne	

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

7610.0600 F

REPORT FOR: Northern States Power Co - Minnesota 13781

REPORT PERIOD ENDING: 2018

#### SCHEDULE 8. DISTRIBUTION SYSTEM INFORMATION

If your company owns a distribution system		

LINE NO.	STATE (US Postal Abbreviation) (a)	COUNTY (Parish, Etc.) (b)	LINE NO.	STATE (US Postal Abbreviation) (a)	COUNTY (Parish, Etc.) (b)
41	MN - Sibley		61	SD - Lincoln	
42	MN - Stearns		62	SD - McCook	
43	MN - Steele		63	SD - Miner	
44	MN - Todd		64	SD - Minnehaha	
45	MN - Wabasha		65	SD - Moody	
46	MN - Waseca		66	SD - Sanborn	
47	MN - Washington		67	SD - Turner	
48	MN - Watonwan				
49	MN - Wilkin				
50	MN - Winona				
51	MN - Wright				
52	MN - Yellow Medicine				
53	ND - Cass				
54	ND - Grand Forks				
55	ND - McHenry				
56	ND - Traill				
57	ND - Ward				
58	SD - Hanson				
59	SD - Hutchinson				
60	SD - Lake				

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

7610.0600 F

03 May 2019

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
--	---------------------------------------	---

REPORT FOR: Northern States Power Co - Minnesota

13781

REPORT PERIOD ENDING: 2018

	SCHEDULE 9. COMMENTS											
SCHEDULE	PART	LINE NO.	COLUMN	NOTES								
(a)	(b)	(c)	(d)	(e)								

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

# 7610.0600 F

US Department of Energy Energy Information Administration Form EIA-861	ANNUAL ELECTRIC POWER INDUSTRY REPORT	Form Approved OMB No. 1905-0129 Approved Expires 03/31/2020
--	---------------------------------------	---

REPORT FOR: Northern States Power Co - Minnesota

13781

REPORT PERIOD ENDING: 2018

					EIA861 ERROR LOG		
Pa	art	State	BA ID	Error No.	Error Description/Override Comment	Type	Override
6	D	MN	56669	6045	Commercial Meter counts (Line 5) cannot be less than Commercial Customers (4A+4C). Advanced Meters (AMR/AMI) or non-AMR/AMI - "Standard Meters" (Line 4) maybe be missing. Please provide revised data.	W	
					The difference between meter count data by customer class on Schedule 6 of the Form 861 and customer count data by customer class on Schedule 4 of the Form 861 is due to reporting differences between the metering departments and the department that handles the customer count information. The metering departments have their information disaggregated with more detail by customer class (which also would encompass premise locations), whereas the department that handles customer count has the information only available by residential and C&I. In preparation of the Form 861, we do our best to split out commercial and industrial customer count data from the `C&I? bucket, but due to the fact that this customer count reporting is designed for our billing and FERC reporting and the metering data is at a much different level of detail, there are differences between the two.		
6	D	SD	0	6111	The number of Industrial customers with direct load control on line 8 cannot be greater than number of Industrial customers on 4A plus 4C. Please provide revised data.	W	
					The difference between meter count data by customer class on Schedule 6 of the Form 861 and customer count data by customer class on Schedule 4 of the Form 861 is due to reporting differences between the metering departments and the department that handles the customer count information. The metering departments have their information disaggregated with more detail by customer class (which also would encompass premise locations), whereas the department that handles customer count has the information only available by residential and C&I. In preparation of the Form 861, we do our best to split out commercial and industrial customer count data from the `C&I? bucket, but due to the fact that this customer count reporting is designed for our billing and FERC reporting and the metering data is at a much different level of detail, there are differences between the two.		
6	D	MN	0	6111	The number of Industrial customers with direct load control on line 8 cannot be greater than number of Industrial customers on 4A plus 4C. Please provide revised data.	W	
					The difference between meter count data by customer class on Schedule 6 of the Form 861 and customer count data by customer class on Schedule 4 of the Form 861 is due to reporting differences between the metering departments and the department that handles the customer count information. The metering departments have their information disaggregated with more detail by customer class (which also would encompass premise locations), whereas the department that handles customer count has the information only available by residential and C&I. In preparation of the Form 861, we do our best to split out commercial and industrial customer count data from the `C&I? bucket, but due to the fact that this customer count reporting is designed for our billing and FERC reporting and the metering data is at a much different level of detail, there are differences between the two.		

#### **INSTRUCTIONS**

These worksheet tabs correspond closely to the tables in the forecast instructions received by the utility.

The forecast instructions pertain to the data to be entered in each of the worksheet tabs.

PLEASE DO NOT CHANGE THE NAME OR ORDER OF ANY OF THE WORKSHEET TABS OR CHANGE THE NAME OF THIS WORKBOOK.

In general, the following color scheme is used on each worksheet:

Cells shown with a light green background correspond to headings for sections, columns, row, or individual fields on each worksheet tab.

Cells shown with a light yellow background require data to be entered by the utility.

Cells shown with a light brown background generally correspond to fields that are calculated from the data entered, or correspond to fields that are informational and not to be modified by the utility.

Each worksheet tab contains a section labeled "Comments" below the main data entry area. You may enter any comments in that section to provide an explaination or clarification on the data entered; OR why data IS NOT being entered on the worksheet tab (for example: cells left blank).

Cells with automatic calculations (typically totals) are provided on some worksheets to assist with the accuracy of the data provided by the utility. It is recognized that there may be circumstances in which the data entered by the utility is more appropriate or accurate than the value in the corresponding automatically-calculated cell. If the value in the automatically-calculated cell does not match the value that your utility entered, please provide an explanation in the Comments area at the bottom of the worksheet tab.

Please complete the required worksheet tabs and save the completed workbook to your local computer.

Then attach the completed workbook to an email message, include your contact information, and send it to the following email address:

rule7610.reports@state.mn.us

If you have any questions please contact:

Anne Sell MN Department of Commerce rule7610.reports@state.mn.us (651) 539-1851

# MINNESOTA ELECTRIC UTILITY ANNUAL REPORT - FORECAST SECTION

# **7610.0120 REGISTRATION**

ENTITY ID#	85		RILS ID#	
REPORT YEAR	2018			
KEI OKI TEAK	2010	L		
UTILITY DETAILS			CONTACT INFORMATION	
UTILITY NAME	Xcel Energy		CONTACT NAME	Jim G. Erickson
STREET ADDRESS	414 Nicollet Mall		CONTACT TITLE	Regulatory Administrator
CITY	Minneapolis		CONTACT STREET ADDRESS	414 Nicollet Mall
STATE	MN		CITY	Minneapolis
ZIP CODE	55401		STATE	MN
TELEPHONE	612-330-5500		ZIP CODE	55401
So	croll down to see allowable UTILITY TYPES		TELEPHONE	612-330-5821
* UTILITY TYPE	PRIVATE		CONTACT E-MAIL	regulatory.records@xcelenergy.com
COMMENTS			PREPARER INFORMATION	(do not type "Same as Above")
			PERSON PREPARING FORMS	Jim G. Erickson
			PREPARER'S TITLE	Regulatory Administrator
			DATE	7/1/2019
			PREPARER'S EMAIL ADDRESS	jim.g.erickson@xcelenergy.com

# **ALLOWABLE UTILITY TYPES**

Code

Private

Public

Co-op

#### 7610.0310 Item A. SYSTEM FORECAST OF ANNUAL ELECTRIC CONSUMPTION BY ULTIMATE CONSUMERS

Provide actual data for your entire system for the past year, your estimate for the present year and all future forecast years.

Please remember that the number of customers should reflect the **number of customers** at year's end, **not the number of meters**.

								STREET &			Calculated
				NON-FARM				HIGHWAY		SYSTEM	System
			FARM	RESIDENTIAL	COMMERCIAL	MINING *	INDUSTRIAL	LIGHTING	OTHER	TOTALS	Totals
Past Year	2018	No. of Customers	NA	1,536,955	197,854	NA	684	6703	2,630	1,744,826	1,744,826
i asi i cai	2010	MWH	NA	12,434,988	18,293,536	NA	10,905,955	157,682	103,874	41,896,034	41,896,034
Present Year	2019	No. of Customers	NA	1,547,758	198,048	NA	672	6717	2,646	1,755,841	1,755,841
1 103CHt 1 Cai	2013	MWH	NA	11,942,905	18,038,023	NA	10,330,543	143655.4094	100,165	40,555,291	40,555,291
1st Forecast	2020	No. of Customers	NA	1,558,697	199,068	NA	669	6842	2,644	1,767,920	1,767,920
Year	2020	MWH	NA	11,985,316	18,014,457	NA	10,361,957	145080.1597	100,228	40,607,039	40,607,039
2nd Forecast	2021	No. of Customers	NA	1,569,632	200,148	NA	666	6970	2,643	1,780,059	1,780,059
Year	2021	MWH	NA	11,983,172	17,866,313	NA	10,222,132	146280.825	100,268	40,318,165	40,318,165
3rd Forecast	2022	No. of Customers	NA	1,580,700	201,208	NA	665	7097	2,640	1,792,310	1,792,310
Year	2022	MWH	NA	12,061,607	17,797,968	NA	10,176,075	147534.9319	100,359	40,283,544	40,283,544
4th Forecast	2023	No. of Customers	NA	1,591,407	202,249	NA	661	7210	2,638	1,804,165	1,804,165
Year	2023	MWH	NA	12,157,892	17,671,921	NA	10,072,026	148708.587	100,372	40,150,920	40,150,920
5th Forecast	2024	No. of Customers	NA	1,601,803	203,275	NA	660	7322	2,635	1,815,695	1,815,695
Year	2024	MWH	NA	12,261,830	17,594,660	NA	10,064,492	149913.4386	100,386	40,171,281	40,171,281
6th Forecast	2025	No. of Customers	NA	1,611,985	204,284	NA	657	7431	2,635	1,826,992	1,826,992
Year	2025	MWH	NA	12,262,809	17,465,133	NA	10,030,437	150935.2908	100,390	40,009,704	40,009,704
7th Forecast	2026	No. of Customers	NA	1,622,287	205,270	NA	656	7538	2,632	1,838,383	1,838,383
Year	2020	MWH	NA	12,312,077	17,412,745	NA	10,046,935	152017.7383	100,457	40,024,232	40,024,232
8th Forecast	2027	No. of Customers	NA	1,632,517	206,227	NA	655	7644	2,630	1,849,673	1,849,673
Year	2021	MWH	NA	12,372,901	17,465,722	NA	10,121,723	153079.8681	100,454	40,213,881	40,213,881
9th Forecast	2028	No. of Customers	NA	1,642,629	207,148	NA	653	7744	2,627	1,860,801	1,860,801
Year	2020	MWH	NA	12,535,991	17,673,405	NA	10,294,362	154207.4711	100,457	40,758,422	40,758,422
10th Forecast	2029	No. of Customers	NA	1,651,718	208,046	NA	651	7842	2,626	1,870,883	1,870,883
Year	2029	MWH	NA	12,462,524	17,621,591	NA	10,304,757	155138.5235	100,454	40,644,464	40,644,464
11th Forecast	2030	No. of Customers	NA	1,660,922	208,925	NA	650	7936	2,623	1,881,056	1,881,056
Year	2030	MWH	NA	12,448,614	17,692,261	NA	10,386,909	156128.1351	100,517	40,784,429	40,784,429
12th Forecast	2031	No. of Customers	NA	1,670,942	209,781	NA	647	8028	2,621	1,892,019	1,892,019
Year	2031	MWH	NA	12,449,720	17,694,527	NA	10,414,625	157092.1712	100,510	40,816,475	40,816,475
13th Forecast	2032	No. of Customers	NA	1,681,204	210,621	NA	647	8116	2,618	1,903,206	1,903,206
Year	2032	MWH	NA	12,619,658	17,847,807	NA	10,536,100	158123.6264	100,511	41,262,200	41,262,200
14th Forecast	2033	No. of Customers	NA	1,691,977	211,445	NA	645	8202	2,617	1,914,886	1,914,886
Year	2033	MWH	NA	12,710,020	17,891,801	NA	10,595,363	158952.593	100,508	41,456,643	41,456,643

<sup>\*</sup> MINING needs to be reported as a separate category only if annual sales are greater than 1,000 GWH. Otherwise, include MINING in the INDUSTRIAL category.

COMMENTS			

#### 7610.0310 Item A. MINNESOTA-ONLY FORECAST OF ANNUAL ELECTRIC CONSUMPTION BY ULTIMATE CONSUMERS

Provide actual data for your Minnesota service area only, for the past year, your best estimate for the present year and all future forecast years.

Please remember that the number of customers should reflect the actual number of customers the utility has in that category at year's end, not the number of meters.

								STREET &			Calculated
				NON-FARM				HIGHWAY		MN-ONLY	MN-Only
			FARM	RESIDENTIAL	COMMERCIAL	MINING *	INDUSTRIAL	LIGHTING	OTHER	TOTALS	Totals
		No. of Customore	NA	1,154,330	132.981	NA	511	5207	2.039	1,295,068	1,295,068
Past Year	2018	No. of Customers MWH	NA NA	, ,	- ,	NA NA	8,127,676		,		
			NA NA	8,905,592 1,162,246	13,225,312 133,069	NA NA	500	5232	76,819 2,047	30,449,373 1,303,094	30,449,373 1,303,094
Present Year	2019	No. of Customers MWH	NA NA			NA NA	7,596,799	98755.20742	<del>-</del>	, , , , , , , , , , , , , , , , , , ,	
1st Forecast			NA NA	8,549,795 1,170,594	13,033,694 133,617	NA NA	7,596,799 496	5342	73,873 2,048	29,352,916 1,312,097	29,352,916
Year	2020	No. of Customers MWH						99779.33861	<del>-</del>	, , , , , , , , , , , , , , , , , , ,	1,312,097 29,385,717
2nd Forecast			NA	8,580,360	13,009,693	NA NA	7,621,983 493		73,901	29,385,717	, ,
Year	2021	No. of Customers MWH	NA NA	1,178,991	134,235	NA NA		5455	2,048	1,321,222	1,321,222
			NA	8,582,413	12,880,831	NA	7,492,870	100738.2331	73,958	29,130,810	29,130,810
3rd Forecast	2022	No. of Customers	NA	1,187,544	134,842	NA	490	5566	2,048	1,330,490	1,330,490
Year		MWH	NA	8,645,744	12,823,852	NA	7,451,720	101673.0095	74,040	29,097,030	29,097,030
4th Forecast	2023	No. of Customers	NA	1,195,742	135,438	NA	486	5664	2,048	1,339,378	1,339,378
Year		MWH	NA	8,719,027	12,704,464	NA	7,350,305	102526.8213	74,043	28,950,367	28,950,367
5th Forecast	2024	No. of Customers	NA	1,203,592	136,023	NA	484	5761	2,048	1,347,908	1,347,908
Year		MWH	NA	8,794,994	12,624,021	NA	7,337,448	103325.206	74,020	28,933,808	28,933,808
6th Forecast	2025	No. of Customers	NA	1,211,250	136,597	NA	481	5855	2,049	1,356,232	1,356,232
Year		MWH	NA	8,803,159	12,515,616	NA	7,315,019	104106.1487	74,041	28,811,941	28,811,941
7th Forecast	2026	No. of Customers	NA	1,219,069	137,159	NA	479	5947	2,049	1,364,703	1,364,703
Year	2020	MWH	NA	8,845,220	12,475,960	NA	7,337,342	104867.4499	74,098	28,837,488	28,837,488
8th Forecast	2027	No. of Customers	NA	1,226,941	137,711	NA	477	6037	2,049	1,373,215	1,373,215
Year	2021	MWH	NA	8,895,092	12,536,567	NA	7,415,682	105608.0914	74,084	29,027,034	29,027,034
9th Forecast	2028	No. of Customers	NA	1,234,690	138,250	NA	474	6123	2,049	1,381,586	1,381,586
Year	2020	MWH	NA	9,036,101	12,740,176	NA	7,583,928	106324.3488	74,048	29,540,578	29,540,578
10th Forecast	2029	No. of Customers	NA	1,241,548	138,778	NA	472	6206	2,049	1,389,053	1,389,053
Year	2029	MWH	NA	8,964,190	12,692,816	NA	7,604,160	107016.1623	74,061	29,442,242	29,442,242
11th Forecast	2030	No. of Customers	NA	1,248,568	139,294	NA	470	6286	2,049	1,396,667	1,396,667
Year	2030	MWH	NA	8,940,379	12,756,096	NA	7,689,234	107683.1893	74,112	29,567,504	29,567,504
12th Forecast	2031	No. of Customers	NA	1,256,323	139,798	NA	467	6363	2,049	1,405,000	1,405,000
Year	2031	MWH	NA	8,929,843	12,740,474	NA	7,716,456	108324.4846	74,093	29,569,190	29,569,190
13th Forecast	0000	No. of Customers	NA	1,264,195	140,289	NA	465	6437	2,049	1,413,435	1,413,435
Year	2032	MWH	NA	9,077,282	12,864,085	NA	7,829,084	108940.0421	74,055	29,953,445	29,953,445
14th Forecast		No. of Customers	NA	1,272,602	140,769	NA	463	6508	2,049	1,422,391	1,422,391
Year	2033	MWH	NA NA	9.169.642	12,906,129	NA	7.897.299	109532.5882	74,065	30,156,668	30,156,668
			1471	0,100,04Z	12,000,120	1473	1,001,200	100002.0002	7 1,500	00,100,000	00,100,000

<sup>\*</sup> MINING needs to be reported as a separate category only if annual sales are greater than 1,000 GWH. Otherwise, include MINING in the INDUSTRIAL category.

COMMENTS		

7610.0310 Item B. FORECAST OF ANNUAL SYSTEM CONSUMPTION AND GENERATION DATA

(Express in MWH)

PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED)

DATA HAS BEEN EXCISED

NOTE: (Column 1 + Column 2) = (Column 3 + Column 5) - (Column 4 + Column 6)

It is recognized that there may be circumstances in which the data entered by the utility is more appropriate or accurate than the value in the corresponding automatically-calculated cell. If the value in the automatically-calculated cell does not match the value that your utility entered, please provide an explanation in the Comments area at the bottom of the worksheet tab.

		Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	CALCULATED
							TRANSMISSION			(GENERATION +
			CONSUMPTION				LINE			RECEIVED)
		CONSUMPTION	BY ULTIMATE				SUBSTATION			MINUS
		BY ULTIMATE	CONSUMERS	RECEIVED		TOTAL ANNUAL	AND			(RESALE + LOSSES)
		CONSUMERS IN	OUTSIDE OF	FROM OTHER	DELIVERED FOR		DISTRIBUTION		TOTAL SUMMER	MINUS
		MINNESOTA	MINNESOTA	UTILITIES	RESALE	GENERATION	LOSSES		CONSUMPTION	(CONSUMPTION)
		MWH	MWH	MWH	MWH	MWH	MWH	MWH	MWH	
		[7610.0310 B(1)]	[7610.0310 B(2)]		[7610.0310 B(4)]	[7610.0310 B(5)]	[7610.0310 B(6)]	[7610.0310 B(7)]	[7610.0310 B(7)]	SHOULD EQUAL ZERO
				[TRADE SECRE	T DATA BEGINS					
Past Year	2018	30,449,373	11,446,661			39,923,909	3,091,456	19,898,550	21,997,484	0
Present Year	2019	29,352,916	11,202,375			36,624,555	3,167,790	19,538,273	21,017,018	0
1st Forecast Year	2020	29,385,717	11,221,322			38,296,862	3,173,676	19,621,722	20,985,317	0
2nd Forecast Year	2021	29,130,810	11,187,355			37,258,715	3,149,511	19,422,459	20,895,706	0
3rd Forecast Year	2022	29,097,030	11,186,514			37,595,824	3,146,689	19,404,758	20,878,786	0
4th Forecast Year	2023	28,950,367	11,200,553			38,613,171	3,136,475	19,339,502	20,811,418	0
5th Forecast Year	2024	28,933,808	11,237,473			37,098,272	3,139,909	19,411,224	20,760,058	0
6th Forecast Year	2025	28,811,941	11,197,764			38,561,145	3,125,444	19,272,714	20,736,991	0
7th Forecast Year	2026	28,837,488	11,186,744			38,579,947	3,126,313	19,278,780	20,745,452	0
8th Forecast Year	2027	29,027,034	11,186,847			37,356,187	3,140,575	19,370,617	20,843,263	0
9th Forecast Year	2028	29,540,578	11,217,844			37,162,324	3,183,763	19,694,912	21,063,510	0
10th Forecast Year	2029	29,442,242	11,202,222			36,564,217	3,172,830	19,579,080	21,065,384	0
11th Forecast Year	2030	29,567,504	11,216,925			36,746,696	3,183,129	19,647,074	21,137,354	0
12th Forecast Year	2031	29,569,190	11,247,285			37,484,504	3,185,237	19,662,702	21,153,772	0
13th Forecast Year	2032	29,953,445	11,308,754			37,952,071	3,220,712	19,939,747	21,322,453	0
14th Forecast Year	2033	30,156,668	11,299,975			38,158,838	3,233,036	19,971,422	21,485,221	0

TRADE SECRET DATA ENDS]

COMMENTS

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

# MINNESOTA ELECTRIC UTILITY INFORMATION REPORTING - FORECAST SECTION (Continued)

#### 7610.0310 Item C. PEAK DEMAND BY ULTIMATE CONSUMERS AT THE TIME OF ANNUAL SYSTEM PEAK (in MW)

						STREET &			
		NON-FARM				HIGHWAY		SYSTEM	Calculated
	FARM	RESIDENTIAL	COMMERCIAL	MINING	INDUSTRIAL	LIGHTING	OTHER	TOTALS	System Totals
Last Year Peak Day 2018	NA	2,875	3,831	NA	2,219	-	20	8,944	8944.0

#### 7610.0310 Item D. PEAK DEMAND BY MONTH FOR THE LAST CALENDAR YEAR (in MW)

		JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
Last Year	2018	6,536	6,267	5,717	5,675	8,246	8,944	8,835	8,527	7,500	5,738	6,058	6,104

COMMENTS			



### MINNESOTA ELECTRIC U

PUBLIC (OR PRIVILEGED)
7610.0310 Item E. PART 1: FIRM PUDATA HAS BEEN EXCISED

NAME O	F OTHE	ER UTILITY =>	
Past Year	2018	Summer Winter	 
Present Year	2019	Summer Winter	
1st Forecast Year	2020	Summer Winter	
2nd Forecast Year	2021	Summer Winter	 
3rd Forecast Year	2022	Summer Winter	
4th Forecast Year	2023	Summer Winter	 
5th Forecast Year	2024	Summer Winter	 
6th Forecast Year	2025	Summer Winter	 
7th Forecast Year	2026	Summer Winter	 
8th Forecast Year	2027	Summer Winter	 
9th Forecast Year	2028	Summer Winter	 
10th Forecast Year	2029	Summer Winter	 
11th Forecast Year	2030	Summer Winter	
12th Forecast Year	2031	Summer Winter	 
13th Forecast Year	2032	Summer Winter	 
14th Forecast Year	2033	Summer Winter	





PROTECTED DATA ENDS

## MINNESOTA ELECTRIC U

'RIVILEGED)

7610.0310 Item E. PART 2: FIRM SAIEN EXCISED

NAME O			
Past Year	2018	Summer Winter	
Present Year	2019	Summer Winter	
1st Forecast Year	2020	Summer Winter	
2nd Forecast Year	2021	Summer Winter	
3rd Forecast Year	2022	Summer Winter	
4th Forecast Year	2023	Summer Winter	
5th Forecast Year	2024	Summer Winter	
6th Forecast Year	2025	Summer Winter	
7th Forecast Year	2026	Summer Winter	
8th Forecast Year	2027	Summer Winter	
9th Forecast Year	2028	Summer Winter	
10th Forecast Year	2029	Summer Winter	
11th Forecast Year	2030	Summer Winter	
12th Forecast Year	2031	Summer Winter	
13th Forecast Year	2032	Summer Winter	
14th Forecast Year	2033	Summer Winter	



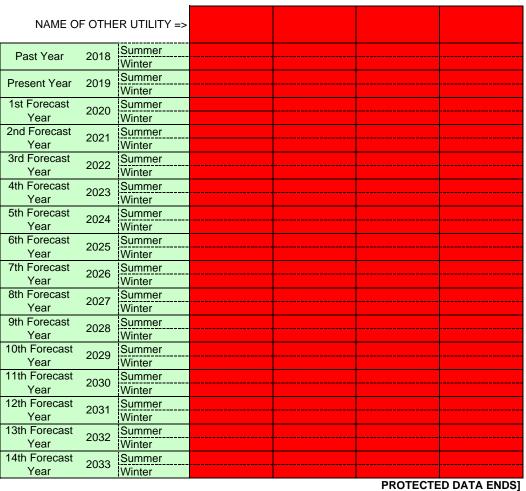




[PROTECTED DATA BEGINS	_
COMMENTS	
	PROTECTED DATA ENDS

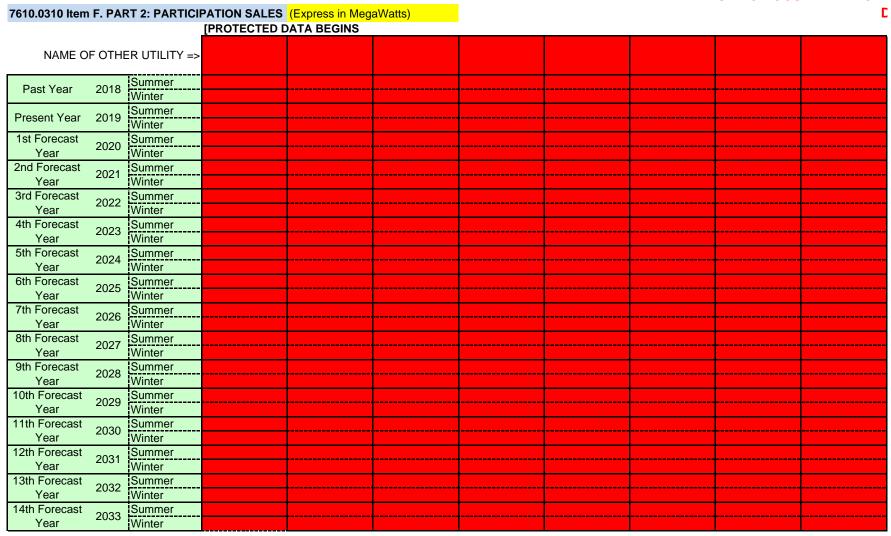
# MINNESOTA ELECTRIC WBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED

#### 7610.0310 Item F. PART 1: PARTICIF



[PROTECTED DATA I

**PUBLIC DOCUMENT - NOT |** 

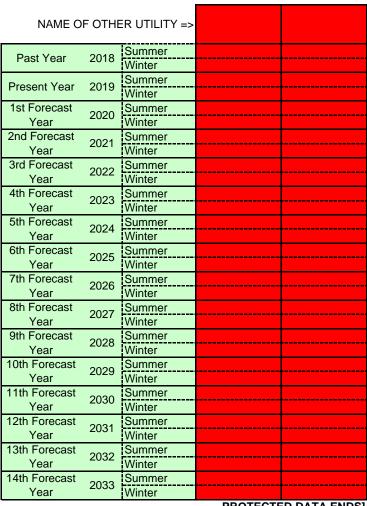


CC	71	M	FΝ	TS

The sales values on this worksheet are accounted for in column 4 of the Load & Gen Cap worksheet.

### MINNESOTA ELECTRIC U

### **PUBLIC (OR PRIVILEGED)** 7610.0310 Item F. PART 2: PARTICIPATA HAS BEEN EXCISED



PROTECTED DATA ENDS]

COMMENTS The sales values on th

PUBLIC DC

7610.0310 Item G.	LOAD A	ND GENERAT	ION CAPACITY	(Express in MW)										
			Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10	Column 11	Column 12
			Generation Zonal Resource Credits (ZRCs)	Demand Response ZRCs	ZRC Purchases	ZRC Sales	Total ZRCs [1 + 2 + 3 - 4]	Forecasted Non- Coincident Peak Demand for NSP System	Energy Efficiency Adjustment to Base Demand Forecast	Adjusted Forecasted Non- Coincident Summer Peak Demand for NSP System [6	Coincidence Factor with MISO Peak Demand	Forecasted Demand Coincident with MISO Peak [Summer: 8 x 9] [Winter: 6 x 9]	Firm Purchases	Firm Sales
		Summer	[FROTEOTED DA	TA DEGINO										
Past Year	2018	Winter												
Present Year	2040	Summer												
Present Year	2019	Winter												
1st Forecast	2020	Summer												
Year	2020	Winter												
2nd Forecast	2021	Summer												
Year		Winter												
3rd Forecast Year	2022	Summer Winter												
4th Forecast		Summer												
Year	2023	Winter												
5th Forecast		Summer												
Year	2024	Winter												
6th Forecast	2025	Summer												
Year	2023	Winter												
7th Forecast	2026	Summer												
Year		Winter												
8th Forecast Year	2027	Summer Winter												
9th Forecast		Summer												
Year	2028	Winter												
10th Forecast		Summer												
Year	2029	Winter												
11th Forecast	2030	Summer												
Year	2030	Winter												
12th Forecast	2031	Summer												
Year		Winter												
13th Forecast	2032	Summer												
Year 14th Forecast		Winter												
Year	2033	Summer Winter												
i cai		AAUUGI	l	J			L							

[PROTECTED DATA BEGINS		
COMMENTS		

# MINNESOTA ELECTRIC UTIDCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED

7610.0310 Item G. LOAD AND GENERATI

			Column 13	Column 14	Column 14
			Total Load Serving Obligation [10 - 11 + 12]	Capacity Obligation (Column 13 plus planning reserves: 8.4% in 2018, and 7.9% in 2019 and beyond)	Total System Surplus/Deficit [5 - 14]
Past Year	2018	Summer Winter			
Present Year	2019	Summer Winter			
1st Forecast Year	2020	Summer Winter			
2nd Forecast Year	2021	Summer Winter			
3rd Forecast Year	2022	Summer Winter			
4th Forecast Year	2023	Summer Winter			
5th Forecast Year	2024	Summer Winter			
6th Forecast Year	2025	Summer Winter			
7th Forecast Year	2026	Summer Winter			
8th Forecast Year	2027	Summer Winter			
9th Forecast Year	2028	Summer Winter			
10th Forecast Year	2029	Summer Winter			
11th Forecast Year	2030	Summer Winter			
12th Forecast Year	2031	Summer Winter			
13th Forecast Year	2032	Summer Winter			
14th Forecast Year	2033	Summer Winter			
				PROTECT	ED DATA ENDS]

PROTECTED DATA BI
COMMENTS

PROTECTED DATA ENDS

### PUBLIC DOCUMENT NOT PUBLIC DATA EXCISED

#### MINNESOTA ELECTRIC UTILITY INFORMATION REPORTING - FORECAST SECTION (Continued

7610.0310 Item H. ADDITIONS AND RETIREMENTS (Express in MW)								
		ADDITIONS	RETIREMENTS					
Past Year	2018							
Present Year	2019	654	76					
1st Forecast Year	2020	222	76					
2nd Forecast Year	2021	181	2					
3rd Forecast Year	2022	4	8					
4th Forecast Year	2023	451	50					
5th Forecast Year	2024	4	847					
6th Forecast Year	2025	4	1,165					
7th Forecast Year	2026	4	211					
8th Forecast Year	2027	1,053	1,185					
9th Forecast Year	2028	4	36					
10th Forecast Year	2029	4	15					
11th Forecast Year	2030	646	610					
12th Forecast Year	2031	204	47					
13th Forecast Year	2032	325	273					
14th Forecast Year	2033	848	508					

Addition year reflect the first	summer with accredited generation	
Year of Addition:		MW
	2019 Black Dog 6 (230 MW)	216
	2019 Calpine MEC2 (375 MW)	358
	2019 Solar - CSG	80
	2020 Wind (1300 MW)	201
	2020 Solar - CSG	21 122
	2021 Manitoba Hydro (125 MW) 2021 Solar - CSG	4
	2021 Wind (350 MW)	55
	2022 Solar - CSG	4
	2023 Demand Response (400 MW)	400
	2023 Solar - CSG	4
	2023 Wind (300 MW)	47
	2024 Solar - CSG	4
	2025 Solar - CSG	4
	2026 Solar - CSG	4
	2027 CT's (350 MW)	321
	2027 Sherco CC (786 MW) 2027 Solar - CSG	728 4
	2027 Solar - CSG 2028 Solar - CSG	4
	2029 Solar - CSG 2029 Solar - CSG	4
	2030 CT's (700 MW)	642
	2030 Solar - CSG	4
	2031 Solar - CSG	4
	2031 CT's (225 MW)	200
	2032 Solar - CSG	4
	2032 CT's (350 MW)	321
	2033 Solar - CSG	4 844
	2033 CC's (900 MW)	044
First Year Followin	rst summer without accredited generation	MW
i ii st i cai i oilowii	2019 Granite City	51
	2019 Bayfront (Unit 4)	3
	2019 Renewable PPAs	22
	2020 Manitoba Hydro (75 MW)	73
	2020 Renewable PPAs	3
	2021 Renewable PPAs	2
	2022 Renewable PPAs	8
	2022 Renewable PPAs 2023 St. Paul CoGen	8 24
	2022 Renewable PPAs 2023 St. Paul CoGen 2023 Renewable PPAs	8 24 26
	2022 Renewable PPAs 2023 St. Paul CoGen 2023 Renewable PPAs 2024 Blue Lake	8 24 26 156
	2022 Renewable PPAs 2023 St. Paul CoGen 2023 Renewable PPAs 2024 Blue Lake 2024 Sherco 2	8 24 26 156 691
	2022 Renewable PPAs 2023 St. Paul CoGen 2023 Renewable PPAs 2024 Blue Lake 2024 Sherco 2 2025 Invenergy	8 24 26 156 691 312
	2022 Renewable PPAs 2023 St. Paul CoGen 2023 Renewable PPAs 2024 Blue Lake 2024 Sherco 2 2025 Invenergy 2025 Manitoba Hydro (350 MW)	8 24 26 156 691
	2022 Renewable PPAs 2023 St. Paul CoGen 2023 Renewable PPAs 2024 Blue Lake 2024 Shero 2 2025 Invenergy 2025 Manitoba Hydro (350 MW) 2025 Manitoba Hydro (500 MW)	8 24 26 156 691 312 342
	2022 Renewable PPAs 2023 St. Paul CoGen 2023 Renewable PPAs 2024 Blue Lake 2024 Sherco 2 2025 Invenergy 2025 Manitoba Hydro (350 MW)	8 24 26 156 691 312 342 485
	2022 Renewable PPAs 2023 St. Paul CoGen 2023 Renewable PPAs 2024 Blue Lake 2024 Sherco 2 2025 Invenergy 2025 Manitoba Hydro (350 MW) 2025 Manitoba Hydro (500 MW) 2025 Renewable PPAs 2026 Wheation 2026 Renewable PPAs	8 24 26 156 691 312 342 485 26 206 5
	2022 Renewable PPAs 2023 St. Paul CoGen 2023 Renewable PPAs 2024 Blue Lake 2024 Shero 2 2025 Invenergy 2025 Manitoba Hydro (350 MW) 2025 Manitoba Hydro (500 MW) 2025 Renewable PPAs 2026 Wheaton 2026 Renewable PPAs 2026 Wheaton 2026 Renewable PPAs 2027 Shero 1	8 24 26 156 691 312 342 485 26 206 5 681
	2022 Renewable PPAs 2023 St. Paul CoGen 2023 Renewable PPAs 2024 Blue Lake 2024 Shero 2 2025 Invenergy 2025 Manitoba Hydro (350 MW) 2025 Manitoba Hydro (500 MW) 2025 Renewable PPAs 2026 Wheaton 2026 Renewable PPAs 2027 Shero 1 2027 Renewable PPAs	8 24 26 156 691 312 342 485 26 206 5 681 16
	2022 Renewable PPAs 2023 St. Paul CoGen 2023 Renewable PPAs 2024 Blue Lake 2024 Shero 2 2025 Invenergy 2025 Manitoba Hydro (350 MW) 2025 Manitoba Hydro (500 MW) 2025 Renewable PPAs 2026 Wheaton 2026 Renewable PPAs 2027 Shero 1 2027 Renewable PPAs 2027 Shero 1 2027 Renewable PPAs 2027 Chemolite-LSPower	8 24 26 156 691 312 342 485 26 206 5 681 16 233
	2022 Renewable PPAs 2023 St. Paul CoGen 2023 Renewable PPAs 2024 Blue Lake 2024 Shero 2 2025 Invenergy 2025 Manitoba Hydro (350 MW) 2025 Manitoba Hydro (500 MW) 2025 Renewable PPAs 2026 Wheaton 2026 Renewable PPAs 2027 Sherco 1 2027 Renewable PPAs 2027 Chemolite-LSPower 2027 Inver Hillis	8 24 26 156 691 312 342 485 26 206 5 681 16 233 255
	2022 Renewable PPAs 2023 St. Paul CoGen 2023 Renewable PPAs 2024 Blue Lake 2024 Sheroo 2 2025 Invenergy 2025 Manitoba Hydro (350 MW) 2025 Manitoba Hydro (500 MW) 2025 Renewable PPAs 2026 Wheaton 2026 Renewable PPAs 2027 Sheroo 1 2027 Renewable PPAs 2027 Inver Hills 2027 Inver Hills 2028 Red Wing	8 24 26 156 691 312 342 485 26 206 5 681 16 233 255 16
	2022 Renewable PPAs 2023 St. Paul CoGen 2023 Renewable PPAs 2024 Blue Lake 2024 Shero 2 2025 Invenergy 2025 Manitoba Hydro (350 MW) 2025 Manitoba Hydro (500 MW) 2025 Renewable PPAs 2026 Wheaton 2026 Renewable PPAs 2027 Shero 1 2027 Renewable PPAs 2027 Chemolite-LSPower 2027 Inver Hills 2028 Red Wing 2028 Wilmarth	8 24 26 156 691 312 342 485 26 206 5 681 16 233 255 16 6
	2022 Renewable PPAs 2023 St. Paul CoGen 2023 Renewable PPAs 2024 Blue Lake 2024 Shero 2 2025 Invenergy 2025 Manitoba Hydro (350 MW) 2025 Manitoba Hydro (500 MW) 2025 Renewable PPAs 2026 Wheaton 2026 Renewable PPAs 2027 Shero 1 2027 Renewable PPAs 2027 Chemolite-LSPower 2027 Inver Hills 2028 Red Wing 2028 Red Wing 2028 Renewable PPAs	8 24 26 156 691 312 342 485 26 6 5 681 16 233 255 16
	2022 Renewable PPAs 2023 St. Paul CoGen 2023 Renewable PPAs 2024 Blue Lake 2024 Shero 2 2025 Invenergy 2025 Manitoba Hydro (350 MW) 2025 Manitoba Hydro (500 MW) 2025 Manitoba Hydro (500 MW) 2025 Renewable PPAs 2026 Wheaton 2026 Renewable PPAs 2027 Shero 1 2027 Renewable PPAs 2027 Chemolite-LSPower 2027 Inver Hills 2028 Red Wing 2028 Wilmarth 2028 Renewable PPAs 2028 Renewable PPAs 2029 Renewable PPAs	8 24 26 156 691 312 342 485 26 206 5 681 16 233 255 16 16
	2022 Renewable PPAs 2023 St. Paul CoGen 2023 Renewable PPAs 2024 Blue Lake 2024 Shero 2 2025 Invenergy 2025 Manitoba Hydro (350 MW) 2025 Manitoba Hydro (500 MW) 2026 Renewable PPAs 2026 Wheaton 2026 Renewable PPAs 2027 Shero 1 2027 Renewable PPAs 2027 Chemolite-LSPower 2027 Inver Hills 2028 Red Wing 2028 Wilmarth 2028 Renewable PPAs 2029 Renewable PPAs 2029 Renewable PPAs 2029 Renewable PPAs 2029 Renewable PPAs 2029 Renewable PPAs	8 24 26 691 312 342 485 26 206 5 681 16 6 233 255 16 4 4 15 610
	2022 Renewable PPAs 2023 St. Paul CoGen 2023 Renewable PPAs 2024 Blue Lake 2024 Shero 2 2025 Invenergy 2025 Manitoba Hydro (350 MW) 2025 Manitoba Hydro (500 MW) 2025 Renewable PPAs 2026 Wheaton 2026 Renewable PPAs 2027 Shero 1 2027 Renewable PPAs 2027 Chemolite-LSPower 2027 Inver Hills 2028 Red Wing 2028 Wilmarth 2028 Renewable PPAs 2029 Renewable PPAs 2030 Monticello 2031 Renewable PPAs	8 24 26 156 691 312 342 485 26 206 5 681 16 233 255 16 16
	2022 Renewable PPAs 2023 St. Paul CoGen 2023 Renewable PPAs 2024 Blue Lake 2024 Shero 2 2025 Invenergy 2025 Manitoba Hydro (350 MW) 2025 Manitoba Hydro (500 MW) 2026 Renewable PPAs 2026 Wheaton 2026 Renewable PPAs 2027 Shero 1 2027 Renewable PPAs 2027 Chemolite-LSPower 2027 Inver Hills 2028 Red Wing 2028 Wilmarth 2028 Renewable PPAs 2029 Renewable PPAs 2029 Renewable PPAs 2029 Renewable PPAs 2029 Renewable PPAs 2029 Renewable PPAs	8 24 26 691 312 342 485 26 206 5 681 16 233 255 16 4 15 610 47

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

Please use the appropriate code for the fuel type as shown in the list at the bottom of the worksheet.

		riease use the appropriate code for the roet type as shown in the list at the bottom of the worksheet.								
		FUEL 1	YPE 1	FUEL 1	EL TYPE 2 F		YPE 3	FUEL 1	YPE 4	
		Name of Fuel	Coal	Name of Fuel	NUC	Name of Fuel	REF	Name of Fuel	NG	
		Unit of Measure	mmBtu	Unit of Measure	mmBtu	Unit of Measure	mmBtu	Unit of Measure	mmBtu	
		QUANTITY OF	NET GWH	QUANTITY OF	NET GWH	QUANTITY OF	NET GWH	QUANTITY OF	NET GWH	
		FUEL USED	GENERATED	FUEL USED	GENERATED	FUEL USED	GENERATED	FUEL USED	GENERATED	
		[PROTECTED DAT	A BEGINS							
Past Year	2018									
Present Year	2019									
1st Forecast Year	2020									
2nd Forecast Year	2021									
3rd Forecast Year	2022									
4th Forecast Year	2023									
5th Forecast Year	2024									
6th Forecast Year	2025									
7th Forecast Year	2026									
8th Forecast Year	2027									
9th Forecast Year	2028									
10th Forecast Year	2029									
11th Forecast Year	2030									
12th Forecast Year	2031									
13th Forecast Year	2032									
14th Forecast Year	2033									
			1.1	CT OF FUEL TYPE	^					

#### LIST OF FUEL TYPES

BIT - Bituminous Coal LPG - Liquefied Propane Gas HYD - Hydro (water)
COAL - Coal (general) NG - Natural Gas WIND - Wind
DIESEL - Diesel NUC - Nuclear WOOD - Wood
FO2 - Fuel Oil #2 (Mid-distillate) REF - Refuse, Bagasse, Peat, Non-wo SOLAR - Solar

FO6 - Fuel Oil #6 (Residual fuel oil) STM - Steam

LIG - Lignite SUB - Sub-bituminous coal

#### COMMENTS

Energy Production is in GWh not MWh, NG Energy Production and Fuel Consumption includes tolling units.

Data Source: Business as Usual Scenario of the 2020-2034 IRP (filed 7/1/2019) Note, this forecast reflects approved and existing resources, with solar and natural gas additions.

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

### MINNESOTA ELECTR

# PUBLIC DOCUMENT - NOT PUBLIC (OR PRIVILEGED) DATA HAS BEEN EXCISED

### 7610.0430 FUEL REQUIREMEN

		FUEL 1	TYPE 5	FUEL T	YPE 6	FUEL 1	YPE 7	FUEL 7	TYPE 7
		Name of Fuel	Oil	Name of Fuel	HYD	Name of Fuel	Wind	Name of Fuel	Solar
		Unit of Measure	mmBtu	Unit of Measure	mmBtu	Unit of Measure	mmBtu	Unit of Measure	mmBtu
		QUANTITY OF	NET GWH	QUANTITY OF	NET GWH	QUANTITY OF	NET GWH	QUANTITY OF	NET GWH
		FUEL USED	GENERATED	FUEL USED	GENERATED	FUEL USED	GENERATED	FUEL USED	GENERATED
Past Year	2018								
Present Year	2019								
1st Forecast Year	2020								
2nd Forecast Year	2021								
3rd Forecast Year	2022								
4th Forecast Year	2023								
5th Forecast Year	2024								
6th Forecast Year	2025								
7th Forecast Year	2026								
8th Forecast Year	2027								
9th Forecast Year	2028								
10th Forecast Year	2029								
11th Forecast Year	2030								
12th Forecast Year	2031								
13th Forecast Year	2032								
14th Forecast Year	2033								
·								PROTEC	TED DATA ENDS]

COMMEN Energy P Data Sou gas addit

#### 7610.0500 TRANSMISSION LINES

Subpart 1. Existing transmission lines. Each utility shall report the following information in regard to each transmission line of 200 kilovolts now in existence:

- A. a map showing the location of each line;
- B. the design voltage of each line;
- C. the size and type of conductor;
- D. the approximate location of d.c. terminals or a.c. substations; and
- E. the approximate length of each line in Minnesota.

Subpart 2. **Transmission line additions**. Each generating and transmission utility, as defined in part 7610.0100, shall report the information required in subpart 1 for all future transmission lines over 200 kilovolts that the utility plans to build within the next 15 years.

Subpart 3. **Transmission line retirements**. Each generating and transmission utility, as defined in part 7610.0100, shall identify all present transmission lines over 200 kilovolts that the utility plans to retire within the next 15 years.

In Use (enter X for selection)	To Be Built (enter X for selection)	To Be Retired (enter X for selection)	DESIGN VOLTAGE	SIZE OF CONDUCTOR	TYPE OF CONDUCTOR	D.C. OR A.C. (specify)	LOCATION OF D.C. TERMINALS OR A.C. SUBSTATIONS	INDICATE YEAR IF "TO BE BUILT" OR "RETIRED"	LENGTH IN MINNESOTA (miles)
Х			500 kV	3-1192 kcmil	ACSR	A.C.	Forbes - Chisago North		139.20
Х			500 kV	3-1192 kcmil	ACSR	A.C.	Forbes - Roseau County South		192.70
Х			500 kV	3-1192 kcmil	ACSR	A.C.	Riel(Manitoba Hyd) - Roseau Co N		10.20
Х			500 kV	3-1192 kcmil	ACSR	A.C.	Roseau Middle - Roseau Co N		0.10
Х			500 kV	3-1192 kcmil	ACSR	A.C.	Roseau Middle - Roseau Co S		0.10
Х			345 kV	2-795 kcmil	ACSR	A.C.	Adams - Mitchell Co (ITC)		78.60
Х			345 kV	2-795 kcmil	ACSR	A.C.	Adams - Pleasant Valley		16.90
Х			345 kV	2-795 kcmil	ACSR	A.C.	Arpin (WP&L) - Eau Claire		80.00
Х			345 kV	2-795 kcmil	ACSR	A.C.	A.S. King - Chisago County		38.00
Х			345 kV	2-795 kcmil	ACSR	A.C.	A.S. King - Eau Claire		63.00
Х			345 kV	2-795 kcmil	ACSR	A.C.	A.S. King - Kohlman Lake		12.70
Х			345 kV	2-795 kcmil	ACSR	A.C.	A.S. King - Red Rock		25.81
Х			345 kV	1192 kcmil	ACSR	A.C.	Benton Co (GRE) - Sherburne Co		20.70
Х			345 kV	2-954 kcmil	ACSS/TW	A.C.	Briggs Road - North Rochester		43.50
Х			345 kV	2-954 kcmil	ACSS/TW	A.C.	Bison - Alexandria Switching Stat.		77.50
Х			345 kV	2-795 kcmil	ACSR	A.C.	Blue Lake - Eden Prairie		5.50
Х			345 kV	2-795 kcmil	ACSR	A.C.	Blue Lake - Parkers Lake		14.90
Х			345 kV	2-795 kcmil	ACSR	A.C.	Blue Lake - Scott County		27.50
Х			345 kV	2-795 kcmil	ACSS	A.C.	Brookings Co - White (WAPA)		0.43
Х			345 kV	2-795 kcmil	ACSS	A.C.	Brookings Co - White (WAPA) (2)		0.43
Х			345 kV	2-954 kcmil	ACSR	A.C.	Bunker Lake (GRE) - Coon Creek		6.80
Х			345 kV	2-795 kcmil	ACSR	A.C.	Byron - North Rochester		13.60
Х			345 kV	2-795 kcmil	ACSR	A.C.	Byron - Pleasant Valley		16.30
Х			345 kV	2-795 kcmil	ACSR	A.C.	Crandal - Fieldon South		19.70
Х			345 kV	2-795 kcmil	ACSR	A.C.	Crandal - Lakefield Gen SW		5.01
Х			345 kV	2-795 kcmil	ACSR	A.C.	Chisago Co - Kohlman Lake		37.70
Х			345 kV	2-954 kcmil	ACSR	A.C.	Coon Creek - Dickinson (GRE)		26.70
Х			345 kV	2-795 kcmil	ACSR	A.C.	Coon Creek - Kohlman Lake		8.30
Х			345 kV	2-954 kcmil	ACSR	A.C.	Coon Creek - Sherburne Co (1)		41.40
Х			345 kV	2-954 kcmil	ACSR	A.C.	Coon Creek - Sherburne Co (3)		43.40
Х			345 kV	2-795 kcmil	ACSR	A.C.	Coon Creek - Terminal		13.70
Х			345 kV	2-954 kcmil	ACSR	A.C.	Dickinson (GRE) - Parkers Lake		28.40
Х			345 kV	2-954 kcmil	ACSR	A.C.	Elm Creek - Monticello		39.0
Х			345 kV	2-954 kcmil	ACSR	A.C.	Elm Creek - Parkers Lake		11.00
Х			345 kV	2-795 kcmil	ACSR	A.C.	Eden Prairie - Parkers Lake		9.50

PUBLIC DOCUMENT Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric NOT PUBLIC DATA EXCISED

	T. 5	I		NO	T PUBLIC DATA	LEACISEL	Appendix	N1: Annual Rep	ort minnesota E
In Use (enter X for selection)	To Be Built (enter X for selection)	To Be Retired (enter X for selection)	DESIGN VOLTAGE	SIZE OF CONDUCTOR	TYPE OF CONDUCTOR	D.C. OR A.C. (specify)	LOCATION OF D.C. TERMINALS OR A.C. SUBSTATIONS	INDICATE YEAR IF "TO BE BUILT" OR "RETIRED"	LENGTH IN MINNESOTA (miles)
Х			345 kV	2-795 kcmil	ACSR	A.C.	Fieldon North - Wilmarth		32.10
X			345 kV	2-954 kcmil	ACSR	A.C.	Hampton Corners - Blue Lake		5.83
Х			345 kV	2-954 kcmil	ACSS TW	A.C.	Hampton Corners - Chub Lake (GRE)		18.40
Х			345 kV	2-795 kcmil	TACSR/VR2	A.C.	Hampton Corners - North Rochester		77.50
Х			345 kV	2-954 kcmil	ACSR	A.C.	Hampton Corners - Prairie Island		19.60
Х			345 kV	2-954 kcmil	ACSS TW	A.C.	Helena - Chub Lake (GRE)		20.63
Х			345 kV	2-954 kcmil	ACSS TW	A.C.	Helena - Cedar Mountain (GRE) (1)		72.97
Х			345 kV	2-954 kcmil	ACSS TW	A.C.	Helena - Cedar Mountain (GRE) (2)		72.97
Х			345 kV	2-795 kcmil	ACSR	A.C.	Helena - Sheas Lake		54.80
Х			345 kV	2-795 kcmil	ACSR	A.C.	Inver Hills - Blue Lake		24.50
Х			345 kV	2-795 kcmil	ACSR	A.C.	Kohlman Lake - Terminal		10.30
Х			345 kV	2-795 kcmil	ACSR	A.C.	Lakefield Jct - Lakefield Gen SW		18.80
Х			345 kV	2-954 kcmil	ACSS/TW	A.C.	Lakefield Jct - Nobles County		35.96
Х			345 kV	2-954 kcmil	ACSS/TW	A.C.	Lyon Co - Cedar Mountain (GRE) (1)		49.49
Х			345 kV	2-954 kcmil	ACSS/TW	A.C.	Lyon Co - Cedar Mountain (GRE) (2)		49.49
Х			345 kV	2-954 kcmil	ACSS	A.C.	Lyon Co - Hazel Creek		24.32
Х			345 kV	2-795 kcmil	ACSR	A.C.	Mankato Energy Center - Wilmarth		0.22
Х			345 kV	2-954 kcmil	ACSR	A.C.	Monticello - Sherburne Co		5.80
Х			345 kV	2-954 kcmil	ACSS/TW	A.C.	Nobles County - Split Rock		5.10
Х			345 kV	2-795 kcmil	ACSR	A.C.	North Rochester - Prairie Island		49.50
Х			345 kV	2-795 kcmil	ACSR	A.C.	Prairie Island - Red Rock (1)		32.30
Х			345 kV	2-795 kcmil	ACSR	A.C.	Prairie Island - Red Rock (2)		32.20
Х			345 kV	2-954 kcmil	ACSS/TW	A.C.	Quarry - Alexandria Switching Station		77.50
Х			345 kV	2-954 kcmil	ACSS/TW	A.C.	Quarry - Monticello		28.80
Х			345 kV	2-795 kcmil	ACSR	A.C.	Red Rock - Inver Hills		8.50
Х			345 kV	2-795 kcmil	ACSR	A.C.	Scott County - Helena		27.50
X			345 kV	2-954 kcmil	ACSR	A.C.	Sherburne Co - Bunker Lake (GRE)		36.90
X			345 kV	2-954 kcmil	ACSS/TW	A.C.	Sioux City (WAPA) - Split Rock		5.10
Х			345 kV	2-954 kcmil	ACSR	A.C.	Split Rock - White (WAPA)		5.10
X			345 kV	2-795 kcmil	ACSR	A.C.	Sheas Lake - Wilmarth		54.80
X			230 kV	795 kcmil	ACSR	A.C.	Auduban (OTP) - Hubbard		49.90
X			230 kV	795 kcmil	ACSR	A.C.	Lake Park - Sheyenne		43.50
X			230 kV	795 kcmil	ACSR	A.C.	Benton Co (GRE) - Monticello		21.60
X			230 kV	795 kcmil	ACSR	A.C.	Blue Lake - McLeod (GRE)		14.10
X			230 kV	795 kcmil	ACSS	A.C.	Boswell (MP) - Zemple (MP)		7.32
X			230 kV	795 kcmil	ACSS	A.C.	Cass Lake (OTP) - Wilton (MPC)		19.30
X			230 kV	795 kcmil	ACSR	A.C.	Drayton(MPC) - Letellier(Manitoba Hyd)		23.00
X			230 kV	795 kcmil	ACSR	A.C.	Fargo Tap (OTP) - Sheyenne		4.20
X			230 kV 230 kV	795 kcmil	ACSR	A.C.	Frontier - Maple River		53.60
			230 kV 230 kV	795 kcmil	ACSR	A.C.	Frontier - Wapie River Frontier - Wahpeton		10.00
X							Glenborough - Peace Garden		
X			230 kV	954 kcmil	ACSR	A.C.	Ü		51.50
X			230 kV	954 kcmil	ACSR	A.C.	Grand Forks (WAPA) - Prairie		6.80
X			230 kV	954 kcmil	ACSR	A.C.	Granite Falls (WAPA) - Minn Valley		2.60
X			230 kV	795 kcmil	ACSR	A.C.	Granite Falls (WAPA) - Minn Valley Tap		2.50
X			230 kV	795 kcmil	ACSR	A.C.	McLeod (GRE) - Panther (GRE)		28.50
X			230 kV	2-954 kcmil	ACSR	A.C.	Minn Valley - Hazel Creek		5.10
X			230 kV	795 kcmil	ACSR	A.C.	Minn Valley - Minn Valley Tap		0.20
Х			230 kV	795 kcmil	ACSR	A.C.	Minn Valley Tap - Panther (GRE)		30.20
Х			230 kV	795 kcmil	ACSR	A.C.	Maple River - Sheyenne		6.60
Х			230 kV	795 kcmil	ACSR	A.C.	Paynesville Tran - Willmar		29.70
X			230 kV	954 kcmil	ACSR	A.C.	Peace Garden - Borders Wind Farm		1.00
Χ			230 kV	954 kcmil	ACSR	A.C.	Peace Garden - Rugby		54.40
Х			230 kV	795 kcmil	ACSR	A.C.	Rock Creek - Bear Creek (GRE)		24.40

In Use (enter X for selection)	To Be Built (enter X for selection)	To Be Retired (enter X for selection)	DESIGN VOLTAGE	SIZE OF CONDUCTOR	TYPE OF CONDUCTOR	D.C. OR A.C. (specify)	LOCATION OF D.C. TERMINALS OR A.C. SUBSTATIONS	INDICATE YEAR IF "TO BE BUILT" OR "RETIRED"	LENGTH IN MINNESOTA (miles)
Х			230 kV	795 kcmil	ACSR	A.C.	Rock Creek - Rush City (GRE)		8.80
Х			230 kV	795 kcmil	ACSR	A.C.	Red Rock - Rush City (GRE)		59.60
X			230 kV	795 kcmil	ACSS	A.C.	Sioux Falls Mun (WAPA) - Split Rock		0.80
X			230 kV	795 kcmil	ACSS	A.C.	Zemple (MP) - Cass Lake (OTP)		44.10
Х			345 kV	2-954 kcmil	ACSS	A.C.	Brookings-Big Stone		32
Х			345 kV	2-954 kcmil	ACSS	A.C.	Lacrosse-Madison	2018	55
	Х		345 kV	Bundled 954 kcmil Hawk	ACSR/T2	A.C.	Huntley - Wilmarth *	2022	40-50

COMMENTS
COMMENTS
Huntley - Wilmarth is a MTEP16 Approved Market Efficiency project in which the line mileage is estimated and may change depending on the routing process.
indifices - will naturally a writer to Approved Market Efficiency project in which the fille fille age is estimated and may change depending on the routing process.

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

## MINNESOTA ELECTRIC UTILITY INFORMATION REPORTING - FORECAST SECTION (Continue

#### 7610.0600, item A. 24 - HOUR PEAK DAY DEMAND

Each utility shall provide the following information for the last calendar year:

A table of the demand in megawatts by the hour over a 24-hour period for:

- 1. the 24-hour period during the summer season when the megawatt demand on the system was the greatest; and
- 2. the 24-hour period during the winter season when the megawatt demand on the system was the greatest.

	DATE OF PEAK	DATE OF PEAK	
	DAY DEMAND	DAY DEMAND	
	6/29/18	1/2/18	<= ENTER DATES
TIN 45	MW USED ON	MW USED ON	
TIME	SUMMER PEAK	WINTER PEAK	
OF DAY	DAY	DAY	
0100	5676	4831	
0200	5400	4746	
0300	5191	4728	
0400	5077	4726	
0500	5139	4866	
0600	5411	5189	
0700	5937	5715	
0800	6506	6082	
0900	7043	6139	
1000	7498	6154	
1100	7945	6221	
1200	8260	6208	
1300	8519	6183	
1400	8746	6166	
1500	8876	6157	
1600	8918	6156	
1700	8944	6331	
1800	8782	6536	
1900	8528	6455	
2000	8198	6268	
2100	7940	6080	
2200	7727	5831	
2300	7307	5469	
2400	6748	5128	

COMMENTS			

### REMEMBER TO SEND/UPLOAD THE FOLLOWING ATTACHMENTS:

### **DO NOT INSERT** THE ATTACHMENT INTO THIS WORKBOOK

- Each utility shall report the following information in regard to each transmission line of 200 kilovolts now in existence:
  - a. a map showing the location of each line;
  - b. the design voltage of each line;
  - c. the size and type of conductor;
  - d. the approximate location of d.c. terminals or a.c. substations; and
  - e. the approximate length of each line in Minnesota. (pursuant to MN Rules Chapter 7610.0500 Subpart 1, Existing transmission lines)

When submitting this workbook and attachments, please following the file naming format of:

ELEC\_###\_2018 Forecast Report (this workbook)

ELEC\_###\_2018 TL Map

NOTE: ### is your Utility Entity number found in Cell C5 on the Registration Tab

Docket No. E002/RP-19-368 Appendix N1: Annual Report Minnesota Electric

**PUBLIC DOCUMENT - NOT PUBLIC** 

### MINNESOTA ELECTRIC UTILITY ANNUAL REPORT - LARGEST CUSTOMER LIST

# WHEN E-FILING THIS FORM, IT SHOULD BE UPLOADED AS TRADE SECRET DATA HAS BEEN EXCISED

ENTITY ID# 85
REPORT YEAR 2018

UTILITY DETAILS

UTILITY NAME Xcel Energy
STREET ADDRESS 414 Nicollet Mall
CITY Minneapolis
STATE MN
ZIP CODE 55401
TELEPHONE 612-330-5500

#### 7610.0600 OTHER INFORMATION REPORTED ANNUALLY

B LARGEST CUSTOMER LIST - ATTACHMENT ELEC-1

PLEASE PROVIDE THE FOLLOWING INFORMATION FOR THOSE CUSTOMERS USING IN EXCESS OF 10,000 MWH. BE SURE TO INCLUDE YOUR LARGE CUSTOMERS LOCATED IN AND OUTSIDE MINNESOTA.

AME	ADDRESS	CITY	STATE	ZIP	2018 MWH
AME	ADDRESS	CITY	STATE	ZIP	2018 MWH
AME	ADDRESS	CITY	STATE	ZIP	2018 MWH

ID#	CUSTOMER NAME	ADDRESS	CITY	STATE	ZIP	2018 MWH

ID#	CUSTOMER NAME	ADDRESS	CITY	STATE	ZIP	2018 MWH

ID#	CUSTOMER NAME	ADDRESS	CITY	STATE	ZIP	2018 MWH

ID#	CUSTOMER NAME	ADDRESS	CITY	STATE	ZIP	2018 MWH

TRADE SECRET DATA ENDS]

CO	NΛ	N٨	F	N٦	ΓS
-	IVI	IVI		I VI	ıo

\* These include on-site generation. A supplement will be filed in docket 19-11.

## MINNESOTA ELECTRIC UTILITY ANNUAL REPORT

### **7610.0120 REGISTRATION**

UTILITY NAME STREET ADDRESS

CITY

STATE ZIP CODE

**UTILITY DETAILS** 

ENTITY ID#	85
REPORT YEAR	2018

MN

55401

**Xcel Energy** 

414 Nicollet Mall Minneapolis

. ,
CONTAC
CONT

TELEPHONE	612-330-5500
Scr	oll down to see allowable UTILITY TYPES
* UTILITY TYPE	PRIVATE

UTILITY OFFICERS	
NAME	TITLE
	Chairman of the Board, President, and
Benjamin G.S. Fowke III	CEO
Robert C. Frenzel	Executive Vice President and Chief
Robert C. Frenzei	Financial Officer
Kent T. Larson	Executive Vice President and Group
Rent 1. Larson	President, Operations
Scott M. Wilensky	Executive Vice President and General
Scott W. Wilerisky	Counsel
Judy M. Poferl	Senior Vice President, Corporate
	Secretary and Executive Services
Timothy J. O'Connor	Chief Nuclear Officer
Jeffrey S. Savage	Senior Vice President and Controller
Christopher B. Clark	President, Xcel Energy - Minnesota,
•	South Dakota, North Dakota
Alice K. Jackson	President, Xcel Energy - Colorado
David T. Hudson	President, Xcel Energy - New Mexico,
David 1. Hddsoll	Texas
Mark E. Stoering	President, Xcel Energy - Michigan,
Wark E. Stoering	Wisconsin
	Executive Vice President and Chief
Brett C. Carter	Customer and Innovation Officer
Sarah W. Soong	Vice President and Treasurer
	Senior Vice President, Human
	Resources & Employee Services, Chief
Darla Figoli	Human Resources Officer
	Executive Vice President, Group
David L Eves	President - Utilities

Number of Power Plants	45

CONTACT INFORMATION	
CONTACT NAME	Jim G. Erickson
CONTACT TITLE	Regulatory Administrator
CONTACT STREET ADDRESS	414 Nicollet Mall
CITY	Minneapolis
STATE	MN
ZIP CODE	55401
TELEPHONE	612-330-5821
CONTACT EMAIL ADDRESS	regulatory.records@xcelenergy.com

PREPARER INFORMATION	(do not type "Same as Above")
PERSON PREPARING FORMS	Jim G. Erickson
PREPARER'S TITLE	Regulatory Administrator
DATE	7/1/2019
PREPARER'S EMAIL ADDRESS	jim.g.erickson@xcelenergy.com

COMMENTS		

## **ALLOWABLE UTILITY TYPES**

Code\*

Private

Public

Co-op

## 7610.0150 FEDERAL OR STATE DATA SUBSTITUTION

				ILING CYCL	
FEDERAL AGENCY	FORM NUMBER	FORM TITLE	(enter	r an "X" in the YEARLY	e cell) OTHER
Department of Energy	EIA-411	Coordinated Bulk Power Supply Report		Х	
Department of Energy	EIA-457A	Residential Energy Consumption Survey			Х
Department of Energy	EIA-860	Annual Electric Generator Report		Х	
Department of Energy	EIA-860M	Monthly Update to Annual Electric Generator Report	Х		
Department of Energy	EIA-861	Annual Electric Utility Report		Х	
Department of Energy	EIA-861M	Monthly Electric Sales & Revenue Report with State Distributions	Х		
Department of Energy	EIA-871A/I	Commercial Building Energy Consumption Survey	- 7.		Х
Department of Energy	EIA-923	Power Plant Operations Report		Х	,,
Department of Energy	GC-859	Nuclear Fuel Data		,	Х
Federal Energy Regulatory Commission	FERC 537	Annual Report of 311 Facility Activities		X	7.
Federal Energy Regulatory Commission	FERC 549B	Peak Day Capacity Report Under Section 284.13		Х	
Federal Energy Regulatory Commission	FERC 549B	Quarterly Index of Customers			X
Federal Energy Regulatory Commission	FERC 549D	Quarterly Transportation and Storage Report for Intrastate Natural Gas and Hinshaw Pipelines			X
Federal Energy Regulatory Commission	FERC 576	Report by natural gas pipeline companies for damage or serious service interruptions occurring on the pipeline system		Х	7.
Federal Energy Regulatory Commission	FERC 577	Annual Report of Replacement of Certificated Facilities		X	
Federal Energy Regulatory Commission	Form 1	Annual Report of Major Electric Utilities, Licensees and Others		X	
Federal Energy Regulatory Commission	Form 3Q	Quarterly Report of Major Electric Utilities, Licensees and Others		Λ	Χ
Federal Energy Regulatory Commission	Form 516	Electronic Quarterly Report			X
Federal Energy Regulatory Commission	Form 552	Annual Report of Natural Gas Transactions		Х	
Federal Energy Regulatory Commission	Form 561	Interlocking Directorships or Conflict of Interest		X	
Federal Energy Regulatory Commission	Form 566	Twenty Largest Electric Customers		X	
Federal Energy Regulatory Commission	Form 580	Interrogatory on Fuel and Energy Purchases Practices		^	X
	Form 60			V	^
Federal Energy Regulatory Commission	Form 652	Annual Report of Centralized Service Companies  Change in Status Penert/Changes in Central of Inputs to Floatric Pewer Braduation (market neuror test)		X	
Federal Energy Regulatory Commission		Change in Status Report/Changes in Control of Inputs to Electric Power Production (market power test)		^	X
Federal Energy Regulatory Commission	Form 652	Triennial Market Power Review		V	Λ
Federal Energy Regulatory Commission	Form 714	Annual Electric Control and Planning Area Report		X	
Federal Energy Regulatory Commission	Form 715	Annual Transmission Planning and Evaluation Report		X	
Federal Energy Regulatory Commission	Form 730	Report of Transmission Investment Activity		Х	
Federal Energy Regulatory Commission	Form 80	Licensed Hydropower Development Recreation Report			X
Federal Energy Regulatory Commission	Reporting Requirement 582	Annual Charges Report		X	
Federal Energy Regulatory Commission		Interchange Agreement between NSPM/NSPW		X	
Internal Revenue Service	Form 1120	Corporate Income Tax Return		X	
Internal Revenue Service	Form 5500	Annual Return/Report of Employee Benefit Plan		X	
Internal Revenue Service	Form 990	Return of Organization Exempt from Income Tax		X	
Nuclear Regulatory Commission		Annual Nuclear Decommissioning Trust Report			X
Securities Exchange Commission	Form 10-K	Annual Financial Statements		X	
Securities Exchange Commission	Form 10-Q	Quarterly Financial Statements			X
Securities Exchange Commission	Form 11-K	401(k) Benefit Plan		X	
Securities Exchange Commission	Form 3	Initial Disclosures for Statement of Changes in Beneficial Ownership of Securities		X	
Securities Exchange Commission	Form 4	Statement of Changes in Beneficial Ownership of Securities		X	
Securities Exchange Commission	Form 8-K	Disclosure of Interim Events			X
Securities Exchange Commission	Form S	Registration Statements			X
Securities Exchange Commission	Form S	Registration Statements			X
Securities Exchange Commission	Schedule 14A	Proxy Statement		X	
Securities Exchange Commission	Schedule 14A	Proxy Statement		X	
U.S. Department of Commerce	NWPA-830R	Standard Contract for Disposal of Spent Nuclear Fuel and/or High Level Radioactive Waste			X
U.S. Department of Commerce	NWPA-830R	Standard Contract for Disposal of Spent Nuclear Fuel and/or High Level Radioactive Waste			X
U.S. Energy Information Administration	EIA 64A	Annual Report of the Origin of Natural Gas Liquids Production.		X	
U.S. Energy Information Administration	EIA 64A	Annual Report of the Origin of Natural Gas Liquids Production.		X	
U.S. Energy Information Administration	EIA 757	Survey of Natural Gas Processing Plants			X
U.S. Energy Information Administration	EIA 757	Survey of Natural Gas Processing Plants			X
U.S. Energy Information Administration	EIA 886	EIA-886 Alternative Fuel Vehicles		Х	
U.S. Energy Information Administration	EIA 886	EIA-886 Alternative Fuel Vehicles		X	
U.S. Energy Information Administration	EIA 923S	EIA 923S - Power Plant Operations Report Supplement to Schedule 8a-f		Х	
U.S. Energy Information Administration	EIA 923S	EIA 923S - Power Plant Operations Report Supplement to Schedule 8a-f		Х	
	EIA-861M	Monthly Electric Power Industry Report	Х		
U.S. Effergy information Administration					
U.S. Energy Information Administration U.S. Energy Information Administration	EIA-861M	Monthly Electric Sales and Revenue with State Distributions Report	X		

COMMENTS

#### 7610.0600 OTHER INFORMATION REPORTED ANNUALLY

A utility shall provide the following information for the last calendar year:

### **B. LARGEST CUSTOMER LIST - ATTACHMENT ELEC-1**

If applicable, the Largest Customer List must be submitted in electronic format. If information is Trade Secret, note it as such.

See "LargestCustomers" worksheet for data entry.

#### C. MINNESOTA SERVICE AREA MAP

The referenced map must be submitted in electronic format.

See Instructions for details of the information required on the Minnesota Service Area Map.

D. PURCHASES AND SALES FOR RESALE			<b>RESALE ONLY</b>
UTILITY NAME	INTERCONNECTED UTILITY	MWH	MWH
(please spell out acronyms)	(please spell out acronyms)	PURCHASED	SOLD FOR RESALE
Adams Wind Generations, LLC		52,099	
Agassiz Beach		4,357	
American Electric Power		3,339	
Aurora Distributed Solar, LLC		-34	
Aurora Distributed Solar, LLC		188,886	
Benson Power, LLC		150,262	
Best Power International LLC		1,759	
Big Blue		118,512	
Bisson Windfarm, LLC		4,119	
Boeve Windfarm, LLC		5,346	
BP Energy Company			24,400
Byllesby		13,153	
Cannon Falls Energy Center		114,046	
Carleton College		3,897	
CG Windfarm, LLC		2,298	
Chanarambie Power Partners, LLC		211,136	
Cisco Wind Energy, LLC		23,205	
Citigroup Energy, Inc.		8,400	
City of Ada			6,547
City of Ada			36
City of Kasota			4,239
City of Kasota			34
Covanta Hennepin Energy Resource Co LP		203,431	
Dahlberg Light and Power			5,596
Dahlberg Light and Power			112,537
Dairyland Electric Cooperative Incorpd		17,200	
Danielson Wind Farms, LLC		46,149	
Diamond K Dairy		-43	

Direct Energy Buisness Marketing, LLC		41,600
Dragonfly Solar, LLC	197	,
East Ridge	23,978	
ERCOT	-23,200	
ETC Endure Energy, LLC	,	1,600
Ewington Energy System, LLC	58,779	•
Fenton Power Partners I, LLC	645,208	
Fey Windfarm, LLC	5,229	
FPL Energy Mower County, LLC	262,300	
Garwin McNeilus	74,762	
Grant County Wind, LLC	54,123	
Hastings Lock & Dam	13,592	
Hilltop Power, LLC	3,004	
ICE NGX Canada, Inc		41,200
Jeffers Wind Energy Center	159,825	
JJN Windfarm, LLC	4,082	
Kas Brothers Windfarm, LLC	3,178	
K-Brink Windfarm, LLC	5,629	
KODA Energy, LLC	100,021	
Lake Benton Power Partners, LLC	455,115	
Laurentian Energy Authority, LLC	138,398	
LCO Hydro	12,302	
Lincoln Heights Wind Holdings	15,170	
Lower Colorado River Authority	33,600	
LSP Cottage Grove Incorporated	258,522	
Luminant Energy Company LLC		17,600
Manitoba Hydro	1,637,153	
Mankato Energy Center, LLC	486,324	
Marshall Solar	107,319	
Metro Wind, LLC	759	
Midcontinent ISO		6,729,664
Midcontinent ISO		13,097
Midcontinental ISO	-9,181	
Midcontinental ISO	2,769,281	
MinnDakota	494,144	
Miscellaneous	114,676	
Moraine Wind, LLC	307,348	
NAE Lakota Ridge, LLC	6,257	
NAE Lakota Ridge, LLC	22,306	
NAE Shaokatan, LLC	24,951	
NAE Shaokatan Hills, LLC	7,214	
NAE Shaokatan Hills, LLC	30,345	
Natural Gas Exchange Inc.	31,200	

Neshkoro (Neshonoc)	1,767	
NextEra Energy Power Marketing, LLC	.,,	24,400
NextEra Energy Power Marketing, LLC		800
North Central Power Company, Inc.		13,868
North Central Power Company, Inc.		12,840
North Community Turbines, LLC	45,340	12,010
North Star Solar	195,387	
North Wind Turbines LLC	43,551	
Northwestern Wisconsin Electric Company	10,001	54,876
Northwestern Wisconsin Electric Company		125,520
Northwestern Wisconsin Electric Company		-360
NSP-Wisconsin		6,367,949
NSP-M Solar Gardens	595,562	0,307,949
Odell Wind Farm, LLC	759,749	
Ohio Power Company	100,140	406,681
Olsen Wind Farm	1,975	400,081
Pine Bend	9,496	
Pipestone Pipestone	·	
	22,156	20.020
PJM Interconnection, LLC	204.044	20,030
PJM Interconnection, LLC	381,814	
Prairie Rose Wind LLC	623,329	
Rapidan Hydroelectric Facility	18,820	
Ridgewind Power Partners, LLC	80,230	
Rock County Energy	22,889	
Rock Ridge Power Partners, LLC	5,105	
Ruthton Ridge, LLC	40,234	
SAF Hydroelectric LLC	51,374	
Shane's Wind Machine LLC	6,236	
Slayton Solar, LLC	2,622	
South Ridge	3,798	
Southern Minnesota Municipal Power Agy	9,671	
Southwest Power Pool Electric Energy	-58	
Southwest Power Pool Electric Energy	4,500	
St. Cloud	51,166	
St. Olaf College	3	
St. Olaf College	24	
St. Paul Cogeneration	161,318	
TG Windfarm, LLC	4,637	
Tholen	41,484	
Tofteland Windfarm, LLC	4,253	
Uilk Wind Farm, LLC	12,074	
University of Minnesota	2,736	
Valley View Transmission	27,443	

Velva Windfarm, LLC	25,878	
Viking Wind Partners	33,267	
Western Area Power Administration	11,785	
Westridge Windfarm, LLC	2,497	
Windcurrent Farms, LLC	5,759	
Windvest	1,824	
Winona County Wind, LLC	-1	
Winona County Wind, LLC	-31	
WM Renewable Energy, LLC	35,536	
Woodstock Hills, LLC	6,401	
Woodstock Municipal Wind, LLC	957	
Zephyr Wind	112,522	

#### 7610.0600 OTHER INFORMATION REPORTED ANNUALLY (continued)

A utility shall provide the following information for the last calendar year:

The rate schedule and monthly power cost adjustment information must **E. RATE SCHEDULES** be submitted in electronic format.

See Instructions for details of the information required on the Rate Schedules and Monthly Power Cost Adjustments.

A copy of report form EIA-861 filed with the US Department of Energy F. REPORT FORM EIA-861 must be submitted in electronic format.

A copy of the report form EIA-861 filed with the Energy Information Administration of the US Department of Energy must be submitted.

If applicable, a copy of the Financial and Statistical Report filed with the **G. FINANCIAL AND STATISTICAL REPORT US** Department of Agriculture must be submitted in electronic format.

For rural electric cooperatives, a copy of the Financial and Statistical Report to the US Department of Agriculture must be submitted.

#### H. GENERATION DATA

If the utility has Minnesota power plants, enter the fuel requirements and generation data on the Plant1, Plant2, etc. worksheets.

I. ELECTRIC USE BY MINNESOTA RESIDENTIAL SPACE HEATING USERS									
See Instructions for details of the information required for residential space heating users.									
COLUMN 1	COLUMN. 2	COLUMN 3							
NUMBER OF RESIDENTIAL	TOTAL MWH								
ELECTRICAL SPACE	SERVED WITH ELECTRICAL	USED BY THESE							
HEATING CUSTOMERS	SPACE HEATING	CUSTOMERS AND UNITS							
35,430	NA	417,199							

COMMENTS				

# 7610.0600 OTHER INFORMATION REPORTED ANNUALLY (continued)

J. ITS DEL	IVERIES TO ULTIMAT	E CONSUMERS BY C	OUNTY FOR	THE LAST CALENDA	AR YEAR
ENERGY D	DELIVERED TO ULTIM	ATE CONSUMERS BY	COUNTY IN	2018	
COUNTY	COUNTY	MWH	COUNTY	COUNTY	MWH
CODE	NAME	DELIVERED	CODE	NAME	DELIVERED
1	Aitkin		46	Martin	
2	Anoka	982,156	47	Meeker	38,901
3	Becker	552,155	48	Mille Lacs	
4	Beltrami		49	Morrison	0
5	Benton	252,631	50	Mower	1,763
6	Big Stone		51	Murray	43,090
7	Blue Earth	683,013	52	Nicollet	99,856
8	Brown	1,915	53	Nobles	00,000
9	Carlton	1,010	54	Norman	1,430
10	Carver	503,933	5 <del>5</del>	Olmstead	42,689
11	Cass	303,933	56	Otter Tail	42,009
12		108,937	57		
13	Chippewa Chisago	213,044	57 58	Pennington Pine	
14	•		56 59	-	74,060
	Clay Clearwater	56,878		Pipestone	
15			60	Polk	70.070
16	Cook		61	Pope	79,272
17	Cottonwood		62	Ramsey	4,937,214
18	Crow Wing	0.070.000	63	Red Lake	07.045
19	Dakota	3,270,992	64	Redwood	37,645
20	Dodge	110,741	65	Renville	64,492
21	Douglas	12,200	66	Rice	548,068
22	Faribault	5,229	67	Rock	1,641
23	Fillmore		68	Roseau	
24	Freeborn	9,641	69	St. Louis	
25	Goodhue	378,492	70	Scott	440,350
26	Grant		71	Sherburne	229,982
27	Hennepin	11,872,483	72	Sibley	74,682
28	Houston	33,882	73	Stearns	1,241,305
29	Hubbard		74	Steele	21,837
30	Isanti	14	75	Stevens	
31	Itasca		76	Swift	
32	Jackson		77	Todd	1,723
33	Kanabec		78	Traverse	
34	Kandiyohi	114,513	79	Wabasha	72,140
35	Kittson		80	Wadena	
36	Koochiching		81	Waseca	182,100
37	Lac Qui Parle	838	82	Washington	2,346,800
38	Lake		83	Watonwan	6,760
39	Lake of the Woods		84	Wilkin	1,046
40	Le Sueur	96,570	85	Winona	451,037
41	Lincoln	553	86	Wright	534,785
42	Lyon	39,912	87	Yellow Medicine	25,308
43	McLeod	100,829		-	
44	Mahnomen	11,000	GR	AND TOTAL (Entered)	30,449,373
45	Marshall		2	( == ==)	
			GRAN	ID TOTAL (Calculated)	30449373.08

CC	OMMENTS			

## 7610.0600 OTHER INFORMATION REPORTED ANNUALLY (continued)

J. ITS DELIV	VERIES TO ULTIMAT	E CONSUMERS	BY MONTH FOR	R THE LAST CAL	ENDAR YEAR					
	ons for details of the i					more				
See msuucu	ions for details of the i	mormation requir	ed concerning ele	culcity delivered	to ultimate consu	ilieis.				
		۸	В	С	D	E	F	G	Н	
		Α		C		_	•			T-4-1
5 11		=	Residential		Small		Large	Street &	Other	Total
Past Year	<b>- -</b> .	Non-Farm	With	_	Commercial		Commercial	Highway	(Include	(Columns A
(2018)	Entire System	Residential	Space Heat	Farm	& Industrial	Irrigation	& Industrial	Lighting	Municipals)	through H)
January	No. of Customers	1,110,459	34,976	n/a	132,345	n/a	505	4,925	2,049	1,285,259
	MWH	757,252	59,488	n/a	1,120,269	n/a	634,598	16,403	5,485	2,593,495
February	No. of Customers	1,111,368	35,081	n/a	132,276	n/a	505	4,957	2,047	1,286,234
	MWH	615,469	50,827	n/a	961,949	n/a	597,145	9,390	5,052	2,239,833
March	No. of Customers	1,112,844	35,174	n/a	132,345	n/a	504	4,969	2,048	1,287,884
	MWH	617,897	38,693	n/a	1,096,398	n/a	665,679	10,381	6,270	2,435,318
April	No. of Customers	1,113,827	35,187	n/a	132,315	n/a	504	4,971	2,046	1,288,850
	MWH	547,242	31,043	n/a	983,347	n/a	637,803	8,283	5,397	2,213,114
May	No. of Customers	1,114,679	35,148	n/a	132,370	n/a	504	4,986	2,044	1,289,731
	MWH	648,186	24,822	n/a	1,117,747	n/a	680,738	7,386	6,352	2,485,231
June	No. of Customers	1,114,542	35,099	n/a	132,319	n/a	505	5,020	2,041	1,289,526
	MWH	865,940	23,826	n/a	1,214,653	n/a	694,955	6,907	7,336	2,813,617
July	No. of Customers	1,114,657	35,176	n/a	132,333	n/a	506	5,027	2,047	1,289,746
-	MWH	906,688	23,820	n/a	1,265,909	n/a	765,633	5,082	7,504	2,974,637
August	No. of Customers	1,115,473	35,164	n/a	132,410	n/a	505	5,066	2,046	1,290,664
	MWH	944,258	26,453	n/a	1,261,861	n/a	774,244	6,747	7,673	3,021,236
September	No. of Customers	1,115,525	35,137	n/a	132,393	n/a	506	5,085	2,048	1,290,694
i i	MWH	681,802	19,997	n/a	1,093,413	n/a	723,431	9,608	8,192	2,536,443
October	No. of Customers	1,117,187	35,273	n/a	132,573	n/a	505	5,142	2,046	1,292,726
	MWH	584,463	27,765	n/a	1,024,315	n/a	672,424	8,270	6,190	2,323,427
November	No. of Customers	1,117,863	35,326	n/a	132,792	n/a	506	5,186	2,041	1,293,714
	MWH	620,981	44,212	n/a	989,176	n/a	628,510	12,698	5,395	2,300,971
December	No. of Customers	1,118,900	35,430	n/a	132,981	n/a	511	5,207	2,039	1,295,068
	MWH	698,216	46,254	n/a	1,096,275	n/a	652,517	12,819	5,971	2,512,052
	Total MWH	8,488,393	417,199	#VALUE!	13,225,312	#VALUE!	8,127,676	113,974	76,819	30,449,373

COMMENTS			

## 7610.0600 OTHER INFORMATION REPORTED ANNUALLY (continued)

ELECTRICITY DELIVERED TO	ULTIMATE CONSUMERS IN M	INNESOTA SERVICE AREA IN	LAST CALENDAR YEAR
	e information required concerning		
	losses, and unaccounted for ene		
Exclude station use, distribution	iosses, and unaccounted for ene	rgy 103363 from this table altogeth	ici.
	This column reports the number of farms, residences, commercial establishments, etc., and not the number of meters, where different.	This column total should equal the grand total in the worksheet labeled "ElectricityByCounty" which provides deliveries by county.	This column total will be used for the Alternative Energy Assessment and should NOT include revenues from sales for resale (Minnesota Statutes, Section 216B.62, Subd. 5).
Classification of Energy		•	,
Delivered to Ultimate			
Consumers (include energy			
used during the year for			
irrigation and drainage	Number of Customers	Megawatt hours	Revenue
pumping)	at End of Year	(round to nearest MWH)	(\$)
Farm	NA	NA	NA
Non-Farm Residential	1,154,330	8,905,592	1,259,859,426
Commercial	132,981	13,225,312	1,381,657,732
Industrial	511	8,127,676	661,416,078
Street & Highway Lighting	5,207	113,974	24,029,120
All other	2,039	76,819	8,674,796
Entered Total	1,295,068	30,449,373	3,335,637,152
CALCULATED TOTAL	1,295,068	30,449,373	3,335,637,152
COMMENTS			

## REMEMBER TO SEND/UPLOAD THE FOLLOWING ATTACHMENTS: **DO NOT INSERT** THE ATTACHMENT INTO THIS WORKBOOK If applicable, the Largest Customer List (Attachment ELEC-1), if the separate LargestCustomers workbook was not used (pursuant to MN Rules Chapter 7610.0600 B) 2 Minnesota Service Area Map (pursuant to MN Rules Chapter 7610.0600 C) 3 Rate Schedules and Monthly Power Cost Adjustments (pursuant to MN Rules Chapter 7610.0600 E) Report form EIA-861 filed with US Department of Energy 4 (pursuant to MN Rules Chapter 7610.0600 F) 5 If applicable, for rural electric cooperatives, the Financial and Statistical Report filed with US Department of Agriculture (pursuant to MN Rules Chapter 7610.0600 G)

When submitting this workbook and attachments, please following the file naming format of:

ELEC\_###\_2018 Annual Report (this workbook)

ELEC ### 2018 Largest Customer List

ELEC ### 2018 MN Service Area Map

ELEC ### 2018 Rate Schedules

ELEC\_###\_2018 Monthly Power Cost Adjustments

ELEC ### 2018 USDOE EIA-861

ELEC\_###\_2018 USDOA Financial and Statistical Report

NOTE: ### is your Utility Entity number found in Cell C5 on the Registration Tab

## 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

Complete one worksheet for each power plant INSTRUCTIONS:

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

Scroll down below the ALLOWABLE CODES to see DEFINITIONS for Capacity Factor, Operating Factor and Forced Outage Rate.

A. PLANT DATA		
PLANT NAME	PLANT ID	(leave this cell blank)
STREET ADDRESS		
CITY	_	
STATE	NUMBER OF UNITS	
ZIP CODE		
COUNTY		
CONTACT PERSON		
TELEPHONE		

B. INDIVIDUAL GENERATING UNIT	Γ DATA						
	Unit ID#	Unit Status *	Unit Type **	Year Installed	Energy Source ***	Net Generation (mwh)	Comments
					DI ANIT TOTAL	0	
. UNIT CAPABILITY DATA		CAPACITY (	MEGAWATTS)	Consolty Footon	PLANT TOTAL	0	

C. UNIT CAPABILITY DATA		CAPACITY (	(MEGAWATTS)	0 " 5 1	O " F '	F 10 / D /	
	Unit ID#	Summer	Winter	Capacity Factor (%)	Operating Factor (%)	Forced Outage Rate (%)	Comments
				, ,		, ,	
	PLANT TOTAL	0.0	0.0				

	PLANT TOTAL	0.0	0.0						
D. UNIT FUEL USED			PRIMARY	FUEL USE			SECONDARY FUEL	USE	
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type	Quantity	Unit of Measure ****	(for coal only)

ALLOWABLE CODES								
Cell Heading	Code	Code Definition	Cell Heading	Code	Code Definition			
* Unit Status	USE	In-use	** Unit Type	CS	Combined Cycle			
	STB	Stand-by		IC	Internal Combustion (Diese			
	RET	Retired		GT	Combustion (Gas) Turbine			
	FUT	Future		HC	Hydro			
	OTHER	Other - provide description		ST	Steam Turbine (Boiler)			
				NC	Nuclear			
*** Energy Source	BIT	Bituminous Coal		WI	Wind			
& Fuel Type	COAL	Coal (general)		OTHER	Other - provide description			
	DIESEL	Diesel						
	FO2	Fuel Oil #2 (Mid Distillate)	**** Unit of Measure	GAL	Gallons			
	FO6	Fuel Oil #6 (Residual Fuel Oil)		MCF	Thousand cubic feet			
	LIG	Lignite		MMCF	Million cubic feet			
	LPG	Liquefied Propane Gas		TONS	Tons			
	NG	Natural Gas		BBL	Barrels			
	NUC	Nuclear		THERMS	Therms			
	REF	Refuse, Bagasse, Peat, Non-wood waste						
	STM	Steam						
	SUB	Sub-Bituminous Coal						
	HYD	Hydro (Water)						
	WIND	Wind						
	WOOD	Wood						
	SOLAR	Solar						
	OTHER	Other - provide description						

DEFINITIONS								
Forced Outage Rate = (percentage)	Hours Unit Failed to be Available X 100  Hours Unit Called Upon to Produce	Note:						
Operating Availability = (percentage)	100 - Maintenance percentage - Forced Outage percentage	Note:						
Capacity Factor = (percentage)	Total Annual MWH of Production X 100  Accredited Capacity Rating (MW) of the Unit X 8,760							

te: Failure of a unit to be available does not include down time for scheduled maintenance.

te: Maintenance percentage is the number of hours of scheduled maintenance divided by 8,760.

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

Scroll down below the ALLOWABLE CODES to see DEFINITIONS for Capacity Factor, Operating Factor and Forced Outage Rate.

A. PLANT DATA			
PLANT NAME	United Hospital	PLANT ID	85083
STREET ADDRESS			
CITY	St. Paul		
STATE	MN	NUMBER OF UNITS	3
ZIP CODE	55102	_	
COUNTY	Ramsey		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1	OTHER	IC	1992	F02		Sold
	2	OTHER	IC	1992	F02		Sold
	3	OTHER	IC	1992	F02		Sold
					Dlant Total	0.00	

C. UNIT CAPABILITY DATA		CAPACITY (	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	4.80	4.80				Sold
	2	4.80	4.80				Sold
	3	4.80	4.80				Sold
	Plant Total	14.40	14.40				

D. UNIT FUEL USED	PRIMARY FUEL USE						SECONDAR	Y FUEL USE	
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	FO2		GAL					
	2	FO2		GAL					
	3	FO2		GAL					

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

Scroll down below the ALLOWABLE CODES to see DEFINITIONS for Capacity Factor, Operating Factor and Forced Outage Rate.

A. PLANT DATA			
PLANT NAME	Grand Meadow Generating Statior	PLANT ID	85084
STREET ADDRESS			
CITY	Dexter		
STATE	MN	NUMBER OF UNITS	1
ZIP CODE	55926	=	
COUNTY	Mower		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	GMWF01-67	USE	WI	2010	WIND	270,861.75	Up to 100 Megawatts from 67 GE wind turbines
					Diant Total	270 964 75	

C. UNIT CAPABILITY DATA		CAPACITY (N	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	GMWF01-67	16.00	16.00	30.77	100.00	0.00	Up to 100 Megawatts from 67 GE wind turbines
	Plant Total	16.00	16.00				

D. UNIT FUEL USED				SECONDAR	Y FUEL USE				
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	GMWF01-67	WIND							
					•				•
					•				•

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Alliant Tech Systems	PLANT ID	85080
STREET ADDRESS			
CITY	Hopkins		
STATE	MN	NUMBER OF UNITS	1
ZIP CODE	55343	_	
COUNTY	Hennepin		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
	Unit ID #	Unit Ctatura *	Hait Toma **	Vaar laatallad	F	Net Generation	C
	Unit ID#	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1	OTHER	IC	1993	FO2		Sold
					Plant Total	0.00	,

					i idili i otal	0.00	
C. UNIT CAPABILITY DATA		CAPACITY (I	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	1.60	1.60				Sold
•	Plant Total	1.60	1.60				

D. UNIT FUEL USED			PRIMARY	FUEL USE		SECONDARY FUEL USE			
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	FO2		GAL					

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Bay Front Generating Station	PLANT ID	85004
STREET ADDRESS			
CITY	Ashland		
STATE	WI	NUMBER OF UNITS	3
ZIP CODE	54806	-	
COUNTY	Ashland		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

ATA						
					Net Generation	
Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
4	USE	ST	1948	COAL	29.57	Uses more wood than coal
5	USE	ST	1950		87,501.33	Uses more wood than coal
6	USE	ST	1956		79,383.38	Uses more wood than coal
		Unit ID # Unit Status *  4 USE 5 USE	Unit ID #         Unit Status *         Unit Type **           4         USE         ST           5         USE         ST	Unit ID #         Unit Status *         Unit Type **         Year Installed           4         USE         ST         1948           5         USE         ST         1950	Unit ID #         Unit Status *         Unit Type **         Year Installed         Energy Source ***           4         USE         ST         1948         COAL           5         USE         ST         1950           6         USE         ST         1956	Unit ID #         Unit Status *         Unit Type **         Year Installed         Energy Source ***         Met Generation (mwh)           4         USE         ST         1948         COAL         29.57           5         USE         ST         1950         87,501.33

C. UNIT CAPABILITY DATA		CAPACITY (	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	4	15.00	15.00	34.03	99.50	0.13	Total plant, no individual stats
	5	18.00	18.00				
	6	23.00	23.00				
· · · · · · · · · · · · · · · · · · ·	Plant Total	56.00	56.00		-	•	· · · · · · · · · · · · · · · · · · ·

	i idili i ota	00.00	00.00						
D. UNIT FUEL USED			PRIMARY	FUEL USE			SECONDAR	Y FUEL USE	
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	4-6	COAL	882.71	TONS	8,419				
		WOOD	245,724.70	TONS					
		NG	35,466.00	MCF					
		Other-Tires	3,342.50	TONS					

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Lake Wissota Hydro Generating Station	PLANT ID	85074
STREET ADDRESS			
CITY	Chippewa Falls		
STATE	WI	NUMBER OF UNITS	6
ZIP CODE	54729	-	
COUNTY	Chippewa		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1	USE	HC	1917	HYD	9,864.00	
	2	USE	HC	1917	HYD	12,390.00	
	3	USE	HC	1917	HYD	21,213.00	
	4	USE	HC	1917	HYD	12,173.00	
	5	USE	HC	1917	HYD	11,579.00	
	6	USE	HC	1917	HYD	9,164.00	
					Diam's Takel	70 000 00	

					i idili i ota	1 0,000.00	
C. UNIT CAPABILITY DATA		CAPACITY (I	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	3.00	3.00	29.63	66.39	2.83	
	2	3.10	3.10	35.36	100.00	22.24	
	3	3.00	3.00	62.09	83.09	0.30	
	4	3.00	3.00	35.63	87.64	0.41	
	5	2.90	2.90	33.89	100.00	0.31	
	6	3.00	3.00	26.15	100.00	0.47	
	Plant Total	18.00	18.00				

D. UNIT FUEL USED			PRIMARY	FUEL USE		SECONDARY FUEL USE			
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	HYD							
	2	HYD							
	3	HYD							
	4	HYD							
	5	HYD							
	6	HYD							

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	White River Hydro Generating Station	PLANT ID	85072
STREET ADDRESS			
CITY	Ashland	_	
STATE	WI	NUMBER OF UNITS	2
ZIP CODE	54806	<u>-</u>	
COUNTY	Ashland		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA					Net Commetica	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	Net Generation (mwh)	Comments
	1	USE	HC	1907	HYD	3,234.00	
	2	USE	HC	1907	HYD	1,522.00	
				1301	New Tree		

C. UNIT CAPABILITY DATA		CAPACITY (	MEGAWATTS)				
		·	•	Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	0.20	0.20	123.06	90.19	9.50	
	2	0.20	0.20	57.91	67.51	34.14	
	Plant Total	0.40	0.40				

D. UNIT FUEL USED			PRIMARY	FUEL USE		SECONDARY FUEL USE			
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	HYD							
	2	HYD							

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NA	ME Wheaton Generating Station	PLANT ID	85071
STREET ADDRE	SS		
С	ITY Wheaton		
STA	ATE WI	NUMBER OF UNITS	6
ZIP CC	DE 54729	_	
COUN	ITY Chippewa		
CONTACT PERS	ON Will Mills		
TELEPHO	NE 303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1	USE	GT	1973	FO2	4,869.90	
	2	USE	GT	1973	FO2	7,807.70	
	3	USE	GT	1973	FO2	4,732.90	
	4	USE	GT	1973	FO2	5,624.50	
	5	RET	GT	1973	FO2	(535.90)	Retired
	6	USE	GT	1973	FO2	491.30	
	3 4 5 6	USE RET	GT GT	1973 1973	FO2 FO2	5,624.50 (535.90)	Retired

C. UNIT CAPABILITY DATA		CAPACITY (	MEGAWATTS)				
		·	•	Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	44.00	56.00	0.99	89.83	14.73	
	2	55.00	70.00	1.27	90.58	45.77	
	3	44.00	56.00	0.96	84.33	65.86	
	4	47.00	61.00	1.05	90.47	30.64	
	5	0.00	0.00	0.00	0.00	0.00	Retired
	6	48.00	70.00	0.08	88.74	94.30	
-	Plant Total	238.00	313.00				

D. UNIT FUEL USED			PRIMARY	FUEL USE		SECONDARY FUEL USE			
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1-6	FO2	107,241.10	GAL		NG	433,505.10	MCF	

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Thornapple Hydro Generating Statior	PLANT ID	85063
STREET ADDRESS			
CITY	Ladysmith		
STATE	WI	NUMBER OF UNITS	2
ZIP CODE	54848	_	
COUNTY	Rusk		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
USE	HC	1929	HYD	4,559.00	
USE	HC	1929	HYD	5,048.00	
	Unit Status * USE USE	USE HC	USE HC 1929	USE HC 1929 HYD USE HC 1929 HYD	USE HC 1929 HYD 4,559.00

C. UNIT CAPABILITY DATA		CAPACITY (I	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	0.40	0.40	65.05	92.90	7.27	
	2	0.40	0.40	64.03	100.00	0.00	
	Plant Total	0.80	0.80			•	

D. UNIT FUEL USED			PRIMARY	FUEL USE		SECONDARY FUEL USE			
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	HYD							
	2	HYD							

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Trego Hydro Generating Station	PLANT ID	85065
STREET ADDRESS			
CITY	Trego		
STATE	WI	NUMBER OF UNITS	2
ZIP CODE	54888	_	
COUNTY	Washburn		
CONTACT PERSON	Will Mills		
TEL EPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1	USE	HC	1927	HYD	6,052.00	
	2	USE	HC	1927	HYD	3,301.00	
					Diant Total	0.252.00	

C. UNIT CAPABILITY DATA		CAPACITY (I	MEGAWATTS)				
		·	•	Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	0.40	0.40	76.76	99.54	0.30	
	2	0.30	0.30	62.80	99.63	0.01	
	Plant Total	0.70	0.70				

D. UNIT FUEL USED			PRIMARY	FUEL USE			SECONDAR	Y FUEL USE	
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	HYD							
	2	HYD							

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Superior Falls Hydro Generating Statior	PLANT ID	85062
STREET ADDRESS			
CITY	Ironwood		
STATE	MI	NUMBER OF UNITS	2
ZIP CODE	49938	<u>-</u>	
COUNTY	Gogebic		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1	USE	HC	1917	HYD	6,474.00	
	2	USE	HC	1917	HYD	5,976.00	
	•				Diant Total	10 450 00	

C. UNIT CAPABILITY DATA		CAPACITY (	MEGAWATTS)				
		·	•	Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	0.50	0.50	92.38	95.71	4.36	
	2	0.50	0.60	97.46	97.02	2.95	
	Plant Total	1.00	1.10				

D. UNIT FUEL USED			PRIMARY	FUEL USE			SECONDAR	Y FUEL USE	
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	HYD							
	2	HYD							

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	St. Croix Falls Hydro Generating Statior	PLANT ID	85060
STREET ADDRESS	·		
CITY	St. Croix Falls		
STATE	WI	NUMBER OF UNITS	8
ZIP CODE	54024	_	
COUNTY	Polk		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1	USE	HC	1905	HYD	10,833.00	
	2	USE	HC	1905	HYD	9,979.00	
	3	USE	HC	1905	HYD	12,326.00	
	4	USE	HC	1905	HYD	11,674.00	
	5	USE	HC	1910	HYD	8,658.00	
	6	USE	HC	1910	HYD	14,060.00	
	7	USE	HC	1923	HYD	24,091.00	
	8	USE	HC	1923	HYD	22,203.00	

					riant rota	113,024.00	
C. UNIT CAPABILITY DATA		CAPACITY (I	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	1.80	1.40	41.22	74.01	0.32	
	2	1.80	1.40	37.97	65.61	22.98	
	3	1.90	1.50	43.97	57.44	14.60	
	4	1.90	1.50	41.65	62.84	0.30	
	5	2.00	1.60	29.07	74.82	0.00	
	6	1.90	1.50	48.64	65.84	0.00	
	7	2.00	1.60	80.89	96.08	0.00	
	8	1.90	1.50	74.55	94.44	0.00	
	Dlant Total	45.00	12.00				

D. UNIT FUEL USED			PRIMARY	FUEL USE		SECONDARY FUEL USE				
					BTU Content				BTU Content	
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	
	1	HYD								
	2	HYD								
	3	HYD								
	4	HYD								
	5	HYD								
	6	HYD								
	7	HYD								
	8	HYD								

7610.0430 FUEL REQUIREMENTS A	AND GENERATION BY FUEL TYPE
-------------------------------	-----------------------------

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Riverdale Hydro Generating Statior	PLANT ID	85053
STREET ADDRESS			
CITY			
STATE	WI	NUMBER OF UNITS	2
ZIP CODE		_	
COUNTY			
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	_
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1	USE	HC	1905	HYD	1,172.00	
	2	USE	HC	1905	HYD	1,316.00	
					Diant Total	2 400 00	

C. UNIT CAPABILITY DATA		CAPACITY (	MEGAWATTS)				
		·	•	Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	0.20	0.20	44.60	93.13	9.18	
	2	0.10	0.10	50.08	87.24	13.96	
	Plant Total	0.30	0.30				

D. UNIT FUEL USED			PRIMARY	SECONDARY FUEL USE					
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	HYD							
	2	HYD							

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Saxon Falls Hydro Generating Statior	PLANT ID	85057
STREET ADDRESS			
CITY	Saxon		
STATE	WI	NUMBER OF UNITS	2
ZIP CODE	54559	_	
COUNTY	Iron		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1	USE	HC	1913	HYD	6,087.00	
	2	USE	HC	1913	HYD	5,571.00	
•					Plant Total	11 650 00	

					i idili i ota	1 1,000.00	
C. UNIT CAPABILITY DATA		CAPACITY (	MEGAWATTS)		•		
		·	•	Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	0.50	0.50	115.81	98.95	0.08	
	2	0.50	0.60	90.85	95.66	4.02	
	Plant Total	1.00	1.10			•	·

D. UNIT FUEL USED			PRIMARY	SECONDARY FUEL USE					
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	HYD							
	2	HYD							

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Big Falls Hydro Generating Station	PLANT ID	85006
STREET ADDRESS			
CITY	Big Falls		
STATE	WI	NUMBER OF UNITS	3
ZIP CODE	54926	<u>-</u>	
COUNTY	Rusk		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1	USE	HC	1922	HYD	16,172.00	
	2	USE	HC	1922	HYD	11,917.00	
	3	USE	HC	1925	HYD	15,334.00	
					Diant Total	42 422 00	

C. UNIT CAPABILITY DATA		CAPACITY (	MEGAWATTS)				
		·	•	Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	1.10	1.00	61.54	98.52	0.00	
	2	1.10	1.00	45.35	95.81	3.89	
	3	1.10	1.00	70.02	98.52	0.00	
	Plant Total	3.30	3.00		-		

D. UNIT FUEL USED			PRIMARY	FUEL USE		SECONDARY FUEL USE			
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	HYD							
	2	HYD							
	3	HYD							

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Angus Anson Generating Station	PLANT ID	85076
STREET ADDRESS			
CITY	Sioux Falls		
STATE	SD	NUMBER OF UNITS	3
ZIP CODE		=	
COUNTY	Minnehaha		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	2	USE	GT	1994	NG	16,942.57	
	3	USE	GT	1994	NG	1,877.94	
	4	USE	GT	2005	NG	101,476.94	
					Diant Total	120 207 45	

C. UNIT CAPABILITY DATA		CAPACITY (I	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	2	90.00	109.00	1.77	87.56	0.00	
	3	90.00	109.00	0.20	35.51	98.07	
	4	147.00	168.00	6.90	70.46	19.93	
·	Plant Total	327.00	386.00		·	·	

D. UNIT FUEL USED			PRIMARY	FUEL USE		SECONDARY FUEL USE			
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	2-4	NG	1,325,454.00	MCF		FO2	107,221.40	GAL	

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Nobles Wind Farm	PLANT ID	85085
STREET ADDRESS			
CITY	Reading		
STATE	MN	NUMBER OF UNITS	2
ZIP CODE		_	
COUNTY	Nobles		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

	Unit Type **	Year Installed	Energy Source ***		Comments
USE	WI	2010	WIND	651,204.15	Up to 201 Megawatts from 134 GE wind turbine
	Unit Status * USE			USE WI 2010 WIND	

C. UNIT CAPABILITY DATA		CAPACITY (N	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	NWF01-134	32.00	32.00	37.17	100.00	0.00	Up to 201 Megawatts from 134 GE wind turbine
	Plant Total	32.00	32.00				

D. UNIT FUEL USED			PRIMARY	FUEL USE		SECONDARY FUEL USE			
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	NWF01-67	WIND							
	NWF68-134								

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Menomonie Hydro Generating Statior	PLANT ID	85043
STREET ADDRESS			
CITY	Menomonie		
STATE	WI	NUMBER OF UNITS	2
ZIP CODE	54751	<del>-</del>	
COUNTY	Dunn		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1	USE	HC	1958	HYD	14,513.00	
	2	USE	HC	1958	HYD	12,212.00	
	•				Diant Total	26 725 00	

C. UNIT CAPABILITY DATA		CAPACITY (I	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	1.10	1.20	61.36	100.00	0.00	
	2	1.10	1.20	51.63	100.00	0.00	
	Plant Total	2.20	2.40				<u> </u>

D. UNIT FUEL USED			PRIMARY	SECONDARY FUEL USE					
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	HYD							
	2	HYD							

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Ladysmith Hydro Generating Statior	PLANT ID	85039
STREET ADDRESS			
CITY	Ladysmith		
STATE	WI	NUMBER OF UNITS	3
ZIP CODE	54848	_	
COUNTY	Rusk		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1	USE	HC	1940	HYD	3,862.00	
	2	USE	HC	1940	HYD	5,052.00	
	3	USE	HC	1983	HYD	4,094.00	
<b>L</b>					Diant Total	12 000 00	

C. UNIT CAPABILITY DATA		CAPACITY (	MEGAWATTS)		•		
		·	•	Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	0.30	0.30	48.99	100.00	0.00	
	2	0.30	0.20	64.08	100.00	0.00	
	3	0.40	0.30	42.49	100.00	0.00	
	Plant Total	1.00	0.80				

D. UNIT FUEL USED			PRIMARY			SECONDAR	SECONDARY FUEL USE			
					BTU Content				BTU Content	
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	
	1	HYD								
	2	HYD								
	3	HYD								

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Jim Falls Hydro Generating Station	PLANT ID	85035
STREET ADDRESS			
CITY	Jim Falls		
STATE	WI	NUMBER OF UNITS	3
ZIP CODE	54748	_	
COUNTY	Chippewa		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1	USE	HC	1988	HYD	72,799.00	
	2	USE	HC	1988	HYD	73,769.00	
	3	USE	HC	1986	HYD	1,409.97	
					Plant Total	147 077 07	

C. UNIT CAPABILITY DATA		CAPACITY (N	MEGAWATTS)				
		•	•	Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	12.30	12.30	28.08	100.00	0.00	
	2	12.50	12.50	28.45	99.71	0.60	
	3	0.20	0.20	26.83	34.27	0.00	
-	Plant Total	25.00	25.00		•		

D. UNIT FUEL USED			PRIMARY	FUEL USE		SECONDARY FUEL USE			
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	HYD							
	2	HYD							
	3	HYD							

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Holcombe Hydro Generating Statior	PLANT ID	85032
STREET ADDRESS			
CITY	Holcombe		
STATE	WI	NUMBER OF UNITS	3
ZIP CODE	54745	<u>-</u>	
COUNTY	Chippewa		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1	USE	HC	1950	HYD	30,858.00	
	2	USE	HC	1950	HYD	42,074.00	
	3	USE	HC	1950	HYD	37,895.00	
					Plant Total	110 927 00	

C. UNIT CAPABILITY DATA		CAPACITY (	MEGAWATTS)				
		·	•	Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	7.30	7.30	29.85	78.61	0.00	
	2	7.30	7.30	40.70	96.00	8.82	
	3	7.30	7.30	36.66	97.20	0.00	
<u>-</u>	Plant Total	21.90	21.90		·	·	

D. UNIT FUEL USED	PRIMARY FUEL USE				SECONDARY FUEL USE				
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	HYD							
	2								
	3								

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	French Island Generating Statior	PLANT ID	85021
STREET ADDRESS			
CITY	LaCrosse		
STATE	WI	NUMBER OF UNITS	4
ZIP CODE		_	
COUNTY	LaCrosse		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1	USE	ST	1969	WOOD	21,632.57	
	2	USE	ST	1969	NG	33,061.22	
	3	USE	GT	1974	FO2	(34.10)	
	4	USE	GT	1974	FO2	(409.60)	

C. UNIT CAPABILITY DATA		CAPACITY (N	MEGAWATTS)				
		•		Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	9.00	9.00	27.43	67.85	31.52	
	2	7.00	7.00	53.92	79.20	6.80	
	3	61.00	81.00	0.00	95.92	98.22	
	4	61.00	81.00	-0.06	99.62	72.38	
	Plant Total	138.00	178.00				

D. UNIT FUEL USED		PRIMARY FUEL USE				SECONDARY FUEL USE			
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1-2	WOOD	59,132.00	TONS		REF	52,950.50	TONS	
	1-2	NG	4,321.00	MCF					
	3-4	FO2	82,896.00	GAL					

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Hayward Hydro Generating Statior	PLANT ID	85028
STREET ADDRESS			
CITY	Hayward		
STATE	WI	NUMBER OF UNITS	1
ZIP CODE	54843	=	
COUNTY	Sawyer		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1	USE	HC	1925	HYD	(31.48)	
<u> </u>	•	•		•	Plant Total	(04.40)	

					i idili i ota		
C. UNIT CAPABILITY DATA		CAPACITY (I	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	0.20	0.20	-1.80	0.00	100.00	
<u> </u>	Plant Total	0.20	0.20		•		·

D. UNIT FUEL USED	PRIMARY FUEL USE					SECONDARY FUEL USE			
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	HYD							

7610.0430 FUEL	REQUIREMENTS AND	DIGENERATION BY	/ FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Flambeau	PLANT ID	85020
STREET ADDRESS			
CITY	Park Falls		
STATE	WI	NUMBER OF UNITS	1
ZIP CODE		_	
COUNTY	Price		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1	RET	GT	1969	NG		Retired
					Plant Total	0.00	

					Train Total		
C. UNIT CAPABILITY DATA		CAPACITY (MEGAWATTS)					
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	12.00	16.00				
	Plant Total	12.00	16.00				

D. UNIT FUEL USED		PRIMARY FUEL USE					SECONDARY FUEL USE		
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	NG		MCF		FO2		GAL	

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Dells Hydro Generating Station	PLANT ID	85017
STREET ADDRESS			
CITY	Eau Claire		
STATE	WI	NUMBER OF UNITS	7
ZIP CODE		=	
COUNTY	Eau Claire		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING UNIT DATA						
					Net Generation	
Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
1	USE	HC	1923	HYD	14,306.00	
2	USE	HC	1924	HYD	13,059.00	
3	USE	HC	1930	HYD	13,488.00	
4	USE	HC	1930	HYD	8,015.00	
5	USE	HC	1930	HYD	5,342.00	
6	RET	HC	1916	HYD		Retired
7	RET	HC	1907	HYD		Retired
2 3 4 5 6 7	USE USE USE RET	HC HC HC	1930 1930 1930 1916	HYD HYD HYD HYD	13,488.00 8,015.00 5,342.00	

					Flant Total	34,210.00	
C. UNIT CAPABILITY DATA		CAPACITY (I	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	1.90	1.90	56.31	88.19	9.24	
	2	1.50	1.50	57.34	100.00	0.00	
	3	1.50	1.50	59.22	100.00	0.00	
	4	1.50	1.50	35.19	100.00	0.00	
	5	0.90	0.90	38.11	96.79	3.23	
	6	0.00	0.00				Retired
	7	0.00	0.00				Retired
	Dlast Total	7.20	7.20		•		-

D. UNIT FUEL USED	PRIMARY FUEL USE					SECONDARY FUEL USE			
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	HYD							
	2	HYD							
	3	HYD							
	4	HYD							
	5	HYD							
	6								
	7								

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Black Dog Generating Station	PLANT ID	85008
STREET ADDRESS			
CITY	Burnsville		
STATE	MN	NUMBER OF UNITS	5
ZIP CODE		_	
COUNTY	Dakota		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	2	USE	CS	1954	NG	245,348.72	
	3	RET	ST	1955	SUB		Retired
	4	RET	ST	1960	SUB		Retired
	5	USE	CS	2002	NG	551,363.00	
	6	USE	GT	2018	NG	167,365.78	
					Plant Total	064 077 50	

					r lant i Otal	304,077.30	
C. UNIT CAPABILITY DATA		CAPACITY (N	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	2	117.00	117.00	23.94		1.10	
	3	79.00	79.00				Retired
	4	153.00	153.00				Retired
	5	165.00	181.00	34.77	61.69	1.10	
	6	212.00	228.00	12.45	92.06	9.90	
	Diant Total	706.00	750.00				

D. UNIT FUEL USED		PRIMARY FUEL USE						SECONDARY FUEL USE		
					BTU Content				BTU Content	
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	
	2	NG	93,534.00	MCF						
	5	NG	3,680,108.00	MCF						
	6	NG	1,663,167.00	MCF						

7610.0430 FUE	L REQUIREMENTS	AND GENERATION	BY FUE	L TYPE
---------------	----------------	----------------	--------	--------

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Cedar Falls Hydro Generating Statior	PLANT ID	85010
STREET ADDRESS			
CITY	Menonomie		
STATE	WI	NUMBER OF UNITS	3
ZIP CODE		<del>-</del>	
COUNTY	Dunn		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1	USE	HC	1910	HYD	13,496.00	
	2	USE	HC	1911	HYD	11,450.00	
	3	USE	HC	1915	HYD	11,788.00	
1					Diant Total	26 724 00	

C. UNIT CAPABILITY DATA		CAPACITY (N	MEGAWATTS)				
		•	•	Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	1.30	1.20	59.26	74.18	0.00	
	2	1.10	1.10	56.83	100.00	0.00	
	3	1.20	1.10	57.59	100.00	0.00	
	Plant Total	3.60	3.40		•	•	

D. UNIT FUEL USED			PRIMARY	FUEL USE			SECONDAR	Y FUEL USE	
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	HYD							
	2	HYD							
	3	HYD							

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Chippewa Falls Hydro Generating Statior	PLANT ID	85013
STREET ADDRESS			
CITY	Chippewa Falls		
STATE	WI	NUMBER OF UNITS	6
ZIP CODE	54729	-	
COUNTY	Chippewa		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA					Net Commettee	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	Net Generation (mwh)	Comments
	1	USE	HC	1928	HYD	9,864.00	
	2	USE	HC	1928	HYD	12,390.00	
	3	USE	HC	1928	HYD	21,213.00	
	4	USE	HC	1928	HYD	12,173.00	
	5	USE	HC	1928	HYD	11,579.00	
	6	USE	HC	1928	HYD	9,164.00	

					Plant Total	70,303.00	
C. UNIT CAPABILITY DATA		CAPACITY (I	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	1.90	1.90	29.63	91.08	2.83	
	2	2.10	2.10	35.36	87.34	22.24	
	3	2.00	2.00	62.09	99.79	0.30	
	4	2.00	2.00	35.63	99.79	0.41	
	5	2.00	2.00	33.89	99.79	0.31	
	6	2.10	2.10	26.15	99.79	0.47	
	Plant Total	12.10	12.10			•	

D. UNIT FUEL USED			PRIMARY	FUEL USE			SECONDAR	Y FUEL USE	
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	HYD							
	2								
	3								
	4								
	5								
	6								

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Cornell Hydro Generating Statior	PLANT ID	85015
STREET ADDRESS	-		
CITY	Cornell		
STATE	WI	NUMBER OF UNITS	4
ZIP CODE		_	
COUNTY	Chippewa		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

					Net Generation	
it ID#	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
1	USE	HC	1976	HYD	30,694.00	
2	USE	HC	1976	HYD	31,479.00	
3	USE	HC	1976	HYD	32,239.00	
4	USE	HC	1976	HYD	3,899.00	
	t ID # 1 2 3 4	1 USE 2 USE 3 USE	1 USE HC 2 USE HC 3 USE HC	1         USE         HC         1976           2         USE         HC         1976           3         USE         HC         1976	1 USE HC 1976 HYD 2 USE HC 1976 HYD 3 USE HC 1976 HYD 4 USE HC 1976 HYD HC 1976 HYD HYD HC 1976 HYD	1         USE         HC         1976         HYD         30,694.00           2         USE         HC         1976         HYD         31,479.00           3         USE         HC         1976         HYD         32,239.00

C. UNIT CAPABILITY DATA		CAPACITY (	MEGAWATTS)				
		·	•	Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	6.20	6.20	34.02	100.00	0.00	
	2	6.40	6.40	33.58	99.63	0.00	
	3	6.90	6.90	32.28	99.92	0.00	
	4	0.40	0.40	63.58	98.61	1.65	
	Plant Total	19.90	19.90				

D. UNIT FUEL USED			PRIMARY	FUEL USE			SECONDAR	Y FUEL USE	
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	HYD							
	2	HYD							
	3	HYD							
	4	HYD							

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Apple River Hydro Generating Statior	PLANT ID	85022
STREET ADDRESS			
CITY	Somerset		
STATE	WI	NUMBER OF UNITS	4
ZIP CODE	54025	=	
COUNTY	St. Croix		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1	USE	HC	1900	HYD	2,545.00	
	2	RET	HC	1900	HYD		
	3	USE	HC	1900	HYD	4,183.00	
	4	USE	HC	1900	HYD	5,237.00	
					Diant Total	44 OCE OO	

C. UNIT CAPABILITY DATA		CAPACITY (	MEGAWATTS)				
		·	•	Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	0.40	0.05	29.05	54.24	16.47	
	2	0.00	0.00				Retired
	3	0.50	0.60	43.41	93.69	5.59	
	4	0.50	0.60	54.35	92.61	8.28	
	Plant Total	1.40	1.25				

D. UNIT FUEL USED			PRIMARY	FUEL USE		SECONDARY FUEL USE			
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	HYD							
	2	HYD							
	3	HYD							
	4	HYD							
			•						

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Hennepin Island Hydro Generating Station	PLANT ID	85029
STREET ADDRESS			
CITY	Minneapolis	_	
STATE	MN	NUMBER OF UNITS	5
ZIP CODE		_	
COUNTY	Hennepin		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
	Unit ID #	Unit Status *	Unit Tyme **	Year Installed	Energy Course ***	Net Generation (mwh)	Comments
	Unit iD #		Unit Type **		Energy Source ***		Comments
	1	USE	HC	1954	HYD	12,367.00	
	2	USE	HC	1954	HYD	10,917.00	
	3	USE	HC	1954	HYD	16,137.00	
	4	USE	HC	1954	HYD	14,638.00	
	5	USE	HC	1955	HYD	7,091.00	

					Flatil Tolai	01,130.00	
C. UNIT CAPABILITY DATA		CAPACITY (N	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	1.20	1.40	50.42	73.21	0.00	
	2	1.20	1.40	44.51	63.63	0.00	
	3	1.20	1.40	65.79	94.18	0.00	
	4	1.20	1.40	59.68	94.20	0.00	
	5	1.30	1.50	29.98	54.11	54.88	
	_						
	Dlant Total	6.40	7.40				

D. UNIT FUEL USED		PRIMARY FUEL USE					SECONDARY FUEL USE			
					BTU Content				BTU Content	
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	
	1	HYD								
	2	HYD								
	3	HYD								
	4	HYD								
	5	HYD								

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	High Bridge Generating Station	PLANT ID	85031
STREET ADDRESS	•		
CITY	St. Paul		
STATE	MN	NUMBER OF UNITS	3
ZIP CODE		_	
COUNTY	Ramsey		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	4	RET	ST	1944			Retired
	5	RET	ST	1956	SUB		Retired
	6	RET	ST	1959	SUB		Retired
	7	USE	CS	2008	NG	820,283.51	
	8	USE	CS	2008	NG	674,026.00	
	9	USE	CS	2008	NG	837,187.00	
					Dlant Total	0 004 406 E4	

C. UNIT CAPABILITY DATA		CAPACITY (N	MEGAWATTS)				
		•		Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	4	0.00	0.00				Retired
	5	0.00	0.00				Retired
	6	0.00	0.00				Retired
	7	152.00	185.00	50.62	80.75	0.37	
	8	152.00	185.00	41.59	77.84	2.11	
	9	226.00	236.00	40.50	80.74	0.32	
-	Plant Total	530.00	606.00		•		

D. UNIT FUEL USED			PRIMARY	FUEL USE		SECONDARY FUEL USE			
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	4								
	5	SUB		TONS		NG		MCF	
	6	SUB		TONS		NG		MCF	
	7	NG	8,654,582.37	MCF					
	8	NG	6,402,455.00	MCF					
	9	NG	1,358.57	MCF					

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Key City	PLANT ID	85037
STREET ADDRESS			
CITY	Mankato	_	
STATE	MN	NUMBER OF UNITS	4
ZIP CODE		<u>-</u>	
COUNTY	Blue Earth		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1	RET	GT	1969			Retired
	2	RET	GT	1969	NG		All units retired in 2015
	3	RET	GT	1969	NG		All units retired in 2015
	4	RET	GT	1969	NG		All units retired in 2015
					Diant Total	0.00	

C. UNIT CAPABILITY DATA		CAPACITY (N	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	0.00	0.00				Retired
	2	8.00	9.00				Retired
	3	13.00	16.00				Retired
	4	13.00	16.00				Retired
	Plant Total	34.00	41.00				

D. UNIT FUEL USED		PRIMARY FUEL USE				SECONDARY FUEL USE			
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	NG		MCF					
	2	NG		MCF					
	3	NG		MCF					
	4	NG		MCF					
					•				

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Inver Hills	PLANT ID	85034
STREET ADDRESS			
CITY	Inver Grove Heights		
STATE	MN	NUMBER OF UNITS	8
ZIP CODE		_	
COUNTY	Dakota		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1-6	USE	GT	1972	NG	14,143.00	
	7-8	STB		1994			
		•			Diant Total	1 1 1 1 2 0 0	

C. UNIT CAPABILITY DATA		CAPACITY (N	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	47.00	62.00	0.69	97.22	9.81	
	2	47.00	62.00	0.27	95.61	73.98	
	3	47.00	62.00	0.24	82.28	0.00	
	4	47.00	62.00	0.43	81.76	31.48	
	5	47.00	61.00	0.49	88.18	77.71	
	6	47.00	62.00	0.49	99.24	0.00	
	7	1.80	1.80	0.00	0.00	0.00	
	8	1.80	1.80	0.00	0.00	0.00	
-	Plant Total	285.60	374.60				

D. UNIT FUEL USED		PRIMARY FUEL USE				SECONDARY FUEL USE			
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1-6	NG	241,179.00	MCF		FO2	178,849.00	GAL	

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
	0 1: 01:		
PLANT NAME	Granite City	PLANT ID	85025
STREET ADDRESS			
CITY	Saint Cloud	_	
STATE	MN	NUMBER OF UNITS	4
ZIP CODE		_	
COUNTY	Sherburne		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	_
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1-4	USE	GT	1969	NG	(554.00)	

					Plant Total	(554.00)	
C. UNIT CAPABILITY DATA		CAPACITY (N	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	13.00	16.00	-0.10	85.86	99.68	
	2	13.00	16.00	-0.09	77.79	99.80	
	3	13.00	16.00	-0.10	85.86	99.68	
	4	13.00	16.00	-0.10	85.03	99.71	
	Plant Total	F2 00	64.00				

D. UNIT FUEL USED		PRIMARY FUEL USE					SECONDARY FUEL USE			
					BTU Content				BTU Content	
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	
	1-4	NG	4,551.00	MCF		FO2	2,986.00	GAL		

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Blue Lake	PLANT ID	85009
STREET ADDRESS			
CITY	Shakopee		
STATE	MN	NUMBER OF UNITS	6
ZIP CODE		_	
COUNTY	Scott		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA					Nat Camanatian	
	11-7-15-7	11-2-0	11 'A T 44	Waren Inc. of all a I	F	Net Generation	•
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1-4	USE	GT	1974	FO2	(451.00)	
	7-8	USE	GT	2005	FO2	105,730.00	
-					Diama Tasal	405 070 00	

C. UNIT CAPABILITY DATA		CAPACITY (	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	39.00	50.00	-0.04	47.28	99.89	
	2	39.00	50.00	-0.05	55.11	99.87	
	3	36.00	46.00	0.00	91.67	96.43	
	4	39.00	48.00	-0.02	91.70	91.17	
	7	150.00	174.00	2.91	83.26	47.00	
	8	150.00	177.00	3.96	81.78	54.69	
	Plant Total	453.00	545.00				

D. UNIT FUEL USED			PRIMARY	FUEL USE		SECONDARY FUEL USE			
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1-4, 7-8	FO2	113,779.00	GAL		NG	1,049,313.00	mcf	

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Riverside Generating Station	PLANT ID	85055
STREET ADDRESS			
CITY	Minneapolis		
STATE	MN	NUMBER OF UNITS	5
ZIP CODE		_	
COUNTY	Hennepin		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA					Not Companie	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	Net Generation (mwh)	Comments
	7	RET	ST	1987	SUB	()	Retired
	8	RET	ST	1964	SUB		Retired
	7A	USE	CS	2008	NG	901,917.00	
	9	USE	CS	2008	NG	882,127.00	
	10	USE	CS	2008	NG	849,224.00	
					Diago Tatal	0.000.000.00	

C. UNIT CAPABILITY DATA		CAPACITY (N	MEGAWATTS)				
		•		Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	7	0.00	0.00				Retired
	8	0.00	0.00				Retired
	7A	160.00	158.00	64.35	90.07	1.60	
	9	147.00	171.00	58.89	88.68	2.88	
	10	147.00	171.00	56.69	86.94	4.92	
	Plant Total	454.00	500.00				

D. UNIT FUEL USED			PRIMARY	FUEL USE		SECONDARY FUEL USE			
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	7	SUB		TONS		NG		MCF	
	8	SUB		TONS		FO2		GAL	
	7A	NG	0.00	MCF					
	9	NG	8,917,543.00	MCF					
	10	NG	8,556,205.00	MCF		FO2	335.00	GAL	

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Monticello Nuclear Generating Statior	PLANT ID	85046
STREET ADDRESS			
CITY	Monticello		
STATE	MN	NUMBER OF UNITS	1
ZIP CODE	55362	=	
COUNTY	Wright		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA					N. ( O	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	Net Generation (mwh)	Comments
	1	USE	NC	1971	NUC	5,618,024.00	
					Plant Total	5 618 024 00	

C. UNIT CAPABILITY DATA		CAPACITY (I	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	617.00	646.00	99.28	99.21	0.00	
·	Plant Total	617.00	646.00				

D. UNIT FUEL USED		PRIMARY FUEL USE					SECONDARY FUEL USE			
					BTU Content				BTU Content	
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	
	1	NUC		MBTU						

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Prairie Island Nuclear Generating Statior	PLANT ID	85051
STREET ADDRESS			
CITY	Welch		
STATE	MN	NUMBER OF UNITS	2
ZIP CODE		_	
COUNTY	Goodhue		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

G UNIT DATA					Nat Cananatian	
Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
1	USE	NC	1973	NUC	4,190,471.00	
2	USE	NC	1974	NUC	4,792,834.00	
		Unit ID # Unit Status *  1 USE	Unit ID # Unit Status * Unit Type **  1 USE NC	Unit ID #         Unit Status *         Unit Type **         Year Installed           1         USE         NC         1973	Unit ID #         Unit Status *         Unit Type **         Year Installed         Energy Source ***           1         USE         NC         1973         NUC           2         USE         NC         1974         NUC	Net Generation

					Flant Total	0,303,303.00	
C. UNIT CAPABILITY DATA		CAPACITY (N	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	521.00	546.00	87.61	90.46	0.00	
	2	519.00	546.00	100.21	100.00	0.00	
		•					
	Diant Total	1 040 00	1 000 00				

D. UNIT FUEL USED		PRIMARY FUEL USE					SECONDAR	Y FUEL USE	
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	NUC		MBTU					
	2	NUC		MBTU					

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Red Wing Generating Station	PLANT ID	85052
STREET ADDRESS			
CITY	Red Wing		
STATE	MN	NUMBER OF UNITS	2
ZIP CODE	55066	_	
COUNTY	Goodhue		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA					Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1-2	USE	ST	1949	REF	133,810.00	

C. UNIT CAPABILITY DATA		CAPACITY (N	MEGAWATTS)				
		•		Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	9.00	9.00	89.75	90.58	1.48	
	2	9.00	9.00	64.16	61.06	36.87	
	Plant Total	18.00	18.00				

D. UNIT FUEL USED			PRIMARY	FUEL USE		SECONDARY FUEL USE			
					BTU Content	1			BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	REF	124,765.24	TONS		NG	12,267.70	MCF	
	2	REF	84,991.53	TONS		NG	13,957.50	MCF	

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Allen S. King Generating Statior	PLANT ID	85038
STREET ADDRESS			
CITY	Bayport		
STATE	MN	NUMBER OF UNITS	1
ZIP CODE		_	
COUNTY	Washington		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA					N. ( O	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	Net Generation (mwh)	Comments
	1	USE	ST	1968	SUB	2,698,691.00	
					Plant Total	2 609 601 00	

C. UNIT CAPABILITY DATA		CAPACITY (I	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	511.00	511.00	60.29	70.97	13.20	
-	Plant Total	511.00	511.00		•		

D. UNIT FUEL USED		PRIMARY FUEL USE				SECONDARY FUEL USE			
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	SUB	1,501,255.00	TONS	8,796	NG	53,400.00	MCF	

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Sherburne County (Sherco) Generating Statior	PLANT ID	85058
STREET ADDRESS			
CITY	Becker		
STATE	MN	NUMBER OF UNITS	3
ZIP CODE	55308	_	
COUNTY	Sherburne		
CONTACT PERSON	Will Mills		
TELEPHONE	303-571-7418		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	1	USE	ST	1976	SUB	2,853,704.00	
	2	USE	ST	1977	SUB	4,354,996.00	
	3	USE	ST	1987	SUB	5,238,565.00	

C. UNIT CAPABILITY DATA		CAPACITY (	MEGAWATTS)				
		·	•	Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	680.00	680.00	47.91	69.56	5.54	
	2	682.00	682.00	72.90	97.82	2.18	
	3	876.00	876.00	68.27	93.21	6.79	
-	Plant Total	2.238.00	2.238.00		•		

D. UNIT FUEL USED		PRIMARY FUEL USE					SECONDARY FUEL USE			
					BTU Content				BTU Content	
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	
	1	SUB	1,756,925.00	TONS	8,651	FO2	222,586.48	GAL		
	2	SUB	2,657,125.00	TONS	8,643	FO2	210,584.73	GAL		
	3	SUB	3,113,242.00	TONS	8,555	FO2	683,419.80	GAL		

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT N	IAME Wilmarth Generating Station	PLANT ID	85073
STREET ADD	RESS		
	CITY Mankato		
S <sup>-</sup>	TATE MN	NUMBER OF UNITS	2
ZIP C	CODE		
COL	JNTY Blue Earth		
CONTACT PER	RSON Will Mills		
TELEPH	IONE 303-571-7418		

UNIT DATA						
					Net Generation	
Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
1	USE	ST	1948	REF	60,441.54	
2	USE	ST	1951	REF	39,995.11	
		Unit ID # Unit Status * 1 USE	Unit ID # Unit Status * Unit Type **  1	Unit ID #         Unit Status *         Unit Type **         Year Installed           1         USE         ST         1948	Unit ID #         Unit Status *         Unit Type **         Year Installed         Energy Source ***           1         USE         ST         1948         REF	Net Generation   Unit ID # Unit Status * Unit Type ** Year Installed Energy Source *** (mwh)   1 USE ST 1948 REF 60,441.54

C. UNIT CAPABILITY DATA		CAPACITY (I	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	1	9.00	9.00	76.66	86.4	1.7	
	2	9.00	9.00	50.73	64.7	3.5	
	Plant Total	18.00	18.00			•	

D. UNIT FUEL USED			PRIMARY	FUEL USE		SECONDARY FUEL USE			
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	1	REF	99,880.26	TONS		NG	27,445.00	MCF	
	2	REF	68,160.86	TONS		NG	15,457.50	MCF	

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Pleasant Valley Wind Farm	PLANT ID	85086
STREET ADDRESS	228 Industrila Park Dr		
CITY	Dexter		
STATE	MN	NUMBER OF UNITS	1
ZIP CODE	55926	_	
COUNTY	Mower		
CONTACT PERSON	Chriss Hogg		
TELEPHONE	612-321-3291		

B. INDIVIDUAL GENERATING	G UNIT DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	PVWF01-100	USE	WI	2015	WIND	756,650.32	Up to 200 megawatts from 100 wind turbines
					Diam't Tatal	750,050,00	

C. UNIT CAPABILITY DATA		CAPACITY (I	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	PVWF01-100	29.40	29.40	44.07	100.0	0.0	Up to 200 megawatts from 100 wind turbines
	Plant Total	29.40	29.40				

D. UNIT FUEL USED		PRIMARY FUEL USE					SECONDARY FUEL USE			
					BTU Content				BTU Content	
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	
	PVWF01-100	WIND		0		WIND		0		

7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE	
POWER PLANT AND GENERATING UNIT DATA REPORT	2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Border Wind Farm	PLANT ID	85087
STREET ADDRESS	5190 107th St NE		
CITY	Rolla		
STATE	ND	NUMBER OF UNITS	1
ZIP CODE	58367	-	
COUNTY	Rollette		
CONTACT PERSON	Jayme Orrock		
TELEPHONE	612-321-3275		

B. INDIVIDUAL GENERATING UN	T DATA						
						Net Generation	
	Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
	BWF01-75	USE	WI	2015	WIND	609,517.15	Up to 150 megawatts from 75 wind turbines
					Plant Total	600 517 15	

				Flant Total	009,317.13		
C. UNIT CAPABILITY DATA		CAPACITY (N	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	BWF01-75	22.10	22.10	47.01	100.0	0.0	Up to 150 megawatts from 75 wind turbines

D. UNIT FUEL USED			PRIMARY		SECONDA	RY FUEL USE			
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	BWF01-75	WIND		0		WIND		0	

#### 7610.0430 FUEL REQUIREMENTS AND GENERATION BY FUEL TYPE

POWER PLANT AND GENERATING UNIT DATA REPORT 2018

INSTRUCTIONS: Complete one worksheet for each power plant

Scroll down below the data entry tables to see the ALLOWABLE CODES to be used for Unit Status, Unit Type, Energy Source, Fuel Type, and Unit of Measure fields

A. PLANT DATA			
PLANT NAME	Courtenay Wind Farm	PLANT ID	85088
STREET ADDRESS	1401 Hwy 9 SE		
CITY	Courtenay		
STATE	ND	NUMBER OF UNITS	1
ZIP CODE	58426	_	
COUNTY	Stutsman		
CONTACT PERSON	Jayme Orrock		
TELEPHONE	612-321-3275		

JNIT DATA						
					Net Generation	
Unit ID #	Unit Status *	Unit Type **	Year Installed	Energy Source ***	(mwh)	Comments
CWF01-100	USE	WI	2016	WIND	714,237.32	Up to 200 megawatts from 100 wind turbines
		Unit ID # Unit Status *	Unit ID # Unit Status * Unit Type **	Unit ID # Unit Status * Unit Type ** Year Installed	Unit ID # Unit Status * Unit Type ** Year Installed Energy Source ***  CWF01-100 USE WI 2016 WIND  WIND	Net Generation Unit ID # Unit Status * Unit Type ** Year Installed Energy Source *** (mwh)

C. UNIT CAPABILITY DATA		CAPACITY (I	MEGAWATTS)				
				Capacity Factor	Operating Factor	Forced Outage Rate	
	Unit ID #	Summer	Winter	(%)	(%)	(%)	Comments
	CWF01-100	30.40	30.40	41.81	100.0	0.0	Up to 200 megawatts from 100 wind turbines
	Plant Total	30.40	30.40				

D. UNIT FUEL USED	PRIMARY FUEL USE						SECONDAR	Y FUEL USE	
					BTU Content				BTU Content
	Unit ID #	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)	Fuel Type ***	Quantity	Unit of Measure ****	(for coal only)
	CWF01-100	WIND		0		WIND		0	