

414 Nicollet Mall Minneapolis, Minnesota 55401

January 7, 2019

### -VIA ELECTRONIC FILING-

Daniel P. Wolf Executive Secretary Minnesota Public Utilities Commission 121 7<sup>th</sup> Place East, Suite 350 St. Paul, Minnesota 55101

DOCKET NO. Е002/М-19-\_\_\_\_

RE: PETITION FOR APPROVAL OF A RENEWABLE\*CONNECT PROGRAM

> PETITION FOR APPROVAL OF A Renewable Energy Rider

Dear Mr. Wolf:

Northern States Power Company, doing business as Xcel Energy, submits the enclosed Petition for approval to expand our Renewable\*Connect Pilot Program into a full-time, permanent product offering.

Please note that certain portions of our Petition have been designated as Trade Secret information pursuant to Minnesota Statute § 13.37, subd. 1(b). In particular, the information designated as Trade Secret derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use.

Pursuant to Minn. Stat. § 216.17, subd. 3, we have electronically filed this document, and served copies on all parties on the attached service lists for Docket Nos. E002/M-15-895 and E002/M-01-1479 as well as our Miscellaneous Electric Service list.

If you have any questions regarding this filing, please contact Amy Liberkowski at (612) 330-6613 or <u>Amy.A.Liberkowski@xcelenergy.com</u>.

Sincerely,

/s/

AAKASH CHANDARANA REGIONAL VICE PRESIDENT, RATES AND REGULATORY AFFAIRS

Enclosures c: Service List

#### STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Nancy Lange Dan Lipschultz Matthew Schuerger Katie J. Sieben John A. Tuma Chair Commissioner Commissioner Commissioner

DOCKET NO. E002/M-19\_\_\_\_\_ Petition

IN THE MATTER OF THE PETITION OF NORTHERN STATES POWER COMPANY FOR APPROVAL OF A RENEWABLE\*CONNECT PROGRAM

IN THE MATTER OF THE PETITION OF NORTHERN STATES POWER COMPANY FOR APPROVAL OF A RENEWABLE ENERGY RIDER

#### INTRODUCTION

Northern States Power Company, doing business as Xcel Energy, submits to the Minnesota Public Utilities Commission this request for approval to expand our Renewable\*Connect Pilot into a full-time, permanent product offering. The Renewable\*Connect Pilot is a great success story for our customers, the State of Minnesota, and our stakeholders. In less than one year the pilot sold out; and today, more than 400 customers are on a waiting list for more program capacity.

The pilot was first designed to meet the corporate buyers' principles set forth by the World Resources Institute (WRI) and the World Wildlife Fund (WWF) and help fulfill the green energy goals of our customers<sup>1</sup>. Because of its design, which ensured

<sup>&</sup>lt;sup>1</sup> "Exponential Power: Corporate Leaders Catalyze the US Transition to Renewable Energy", Laura Paskus, World Wildlife Magazine, Spring 2017.

subscribers could meet their goals with no impact to non-subscribers, the pilot received broad stakeholder support and, at more than 75 MW in size, it is the largest program in the state with nearly 3,200 participants.

The success of the pilot has provided a platform to continue innovating and advancing opportunities to fulfill customer needs. Specifically, since Renewable\*Connect was launched, customers have asked us for more renewablebased products to meet their corporate, lifestyle, financial, or other goals. With the pilot fully subscribed, however, Windsource remains an attractive option for some customers.

While Windsource continues to grow, this legacy program is facing some challenges. First, Windsource operates under an administratively established price from an earlier generation of the wind market. Second, several of the resources that supply energy to Windsource customers are expiring in the next few years. Third, customers subscribing to Windsource have expressed a desire to be served by solar in addition to wind. Finally, we understand some customers are confused about the presence of more than one brand of "green tariff" in the Company's portfolio and are unclear about the distinctions between Windsource and Renewable\*Connect.

With these considerations in mind, we believe now is the time to transition Renewable\*Connect to a standard product offering. This transition will take some time to complete as resources to grow the program must be procured and developed. In the meantime, we will continue to offer customers the subscription opportunities through Windsource, and we will "bridge the gap" until new resources are available for those customers who wish to be served through Renewable\*Connect in the meantime and over a longer term.

Additionally, we are seeking to expand Renewable\*Connect to address the needs of high off-peak usage customers. One learning from the pilot is that commercial and industrial customers and high off-peak usage customers have unique requirements and an appetite for longer term commitments than other customers. Our new Long Term Offer has two components, a "standard" offer and a "high off-peak usage" offer to conveniently serve customers with new renewable resources. We are excited about this offer and we have received significant customer interest in this opportunity. The standard offer will be available to all customers; and to date, we have signed Memoranda of Understanding (MOUs) from 10 customers who wish to subscribe to the program at about 550 GWh per year. At the same time, more than 400 other customers have been added to a waitlist for Renewable\*Connect.

This brings us to where we are today: with a waiting list of customers eager to take service through Renewable\*Connect; with significant operational learnings from

Windsource; and with early learnings from the Renewable\*Connect Pilot. The time is right to bring forward a permanent, expanded product that ensures no one is harmed through exposure to costs, that promotes system efficiency by recognizing customer needs in relation to system peak and avoids stranding resources, and that delivers solutions for customers at the forefront of sustainability leadership.

The Company developed this expansion based on key goals. These goals include:

- Delivering on customer demand for more program capacity;
- Fulfilling our commitment to provide tailored and responsive solutions;
- Adhering to the principles at the foundation of the green tariff movement;
- Leveraging the learnings from the legacy of Windsource and from early stages of our Renewable\*Connect Pilot Program; and
- Resolving the dynamics within and between our programs.

In this Petition, we set forth a plan to achieve these goals by expanding Renewable\*Connect to a second and third offering. The first offering represents the migration of Windsource subscriptions and remaining resources into Renewable\*Connect, along with the addition of new solar resources. This offering is designed as a standing offer for a month-to-month subscription and will grow through time. Throughout this document, we will refer to the first new option as the "Ongoing Month-to-Month" Offer (or "Month-to-Month").

The second new offering will be supplied by a mix of new wind and new solar resources. While it will be open to all customers, it is tailored to the needs of large Commercial and Industrial (C&I) customers. Throughout this document, we will refer to the second new option as the "Long Term" Offer.

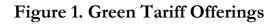
At the outset, we acknowledge that this is a relatively complex plan where we establish a path to a permanent product platform. This path includes the following components:

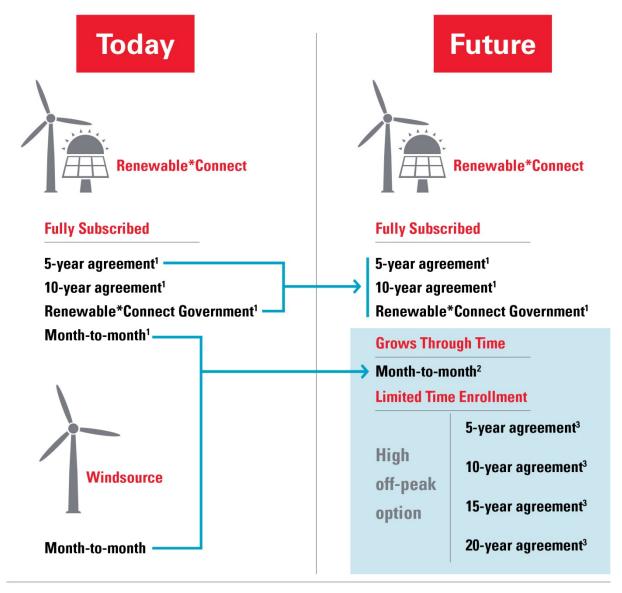
- 1) discontinuation of Windsource;
- 2) the migration of Windsource resources and customers to a new service platform under Renewable\*Connect;
- 3) the introduction of new service options under a permanent program; and
- 4) the introduction of a service option for high off-peak usage customers.

Despite the inherent complexity of this robust package, we have worked to ensure the plan carefully considers the customer's experience throughout the process. We will

provide a seamless transition for current subscribers who are affected, as well as clear communications for new subscribers interested in participating.

To assist with the reader's understanding of the Company's proposal, we present in Figure 1 the voluntary renewable offers as they are available currently and in forward years.





<sup>1</sup> Renewable\*Connect Pilot

<sup>2</sup> Ongoing Month-to-Month Offer

<sup>3</sup> Long-Term Offer

NEW

In this request, we propose expanding our green tariff portfolio with an estimated 30 MW of new solar generation for the Ongoing Month-to-Month Offer and 150 MW of new wind generation and 50 MW of new solar generation for the Long Term Offer.

Concurrently with this request, we are taking steps to procure resources to supply the program, and have therefore included indicative pricing in this Petition. When this acquisition effort is completed, we will then supplement the record by updating the indicative pricing in the current filing with the final negotiated PPA prices.<sup>2</sup> We believe this approach is appropriate because it provides parties with an opportunity to review and comment on our proposal while we are in the process of securing the additional wind and solar resources needed for this package. This approach is also consistent with Commission precedent.<sup>3</sup>

Specifically, in this Petition we request Commission approval of:

- The program structure, pricing methodology (Attachments F through I-2), and terms and conditions of the new offerings;
- The Tariff sheets for the new Long Term Offer (Attachment D);
- The content of the Tariff sheets for the Ongoing Month-to-Month Offer (Attachment C), the current revision to the Tariff sheets for Windsource removing minimum subscription periods (Attachment E) and the revisions to the Tariff sheets for Windsource (Attachment E1) and the pilot (Attachment B), with permission to file these Tariff sheets with approved pricing at or near the time the resources are in place;
- The transition of Windsource Program customers to the Ongoing Month-to-Month Offer of our Renewable\*Connect program;

<sup>&</sup>lt;sup>2</sup> We estimate that PPA contracting will be complete and final pricing will be filed in Spring of 2019. <sup>3</sup> In the Commission's recent consideration of the Company's Electric Vehicle Service Pilot, the Commission approved the Company's Pilot Plan with indicative pricing. See Docket No. E002/M-17-817. ORDER APPROVING PILOT PROGRAM, GRANTING VARIANCE, AND REQUIRING ANNUAL REPORTS, May 9, 2018. See also Docket No, 01-1479, ORDER APPROVING RENEWABLE ENERGY RIDER AS REVISED, CLARIFIED, AND MODIFIED, February 26, 2002. The Commission approved the Company's Windsource pricing methodology and required final pricing to be later filed.

- The transition of month-to-month pilot customers to the Ongoing Month-to-Month Offer of Renewable\*Connect, and the cancellation of the pilot Service Agreements for these customers;
- The ability to utilize energy from a system wind resource during months of low wind production to support the new offerings balanced by excess wind production in months where generation exceeds usage;
- The allocation to the system of any excess energy from existing or new Renewable\*Connect Program resources and the recovery of excess energy costs through the Fuel Clause Rider;
- Use of a negative check-off process for amendments to the customer Service Agreement that may differ from an approved and tariffed version of the Service Agreement for the Long Term Offer of the Renewable\*Connect Program; and
- Our proposed annual reporting components and tracker report template.

The Company includes the following Attachments in support of this Petition:

Attachment A	Customer Survey Results
Attachment B	Pilot Tariff Sheets
Attachment C	Month-to-Month Tariff Sheets
Attachment D	Long Term Tariff Sheets
Attachment E, E-1	Windsource Tariff Sheets
Attachment F, F-1, F-2	Indicative Pricing - Month-to-Month and Long Term
Attachment G, G-1, G-2	Resource Cost – Month-to-Month and Long Term
Attachment H, H-1, H-2	Capacity Credit – Month-to-Month and Long Term
Attachment I, I-1, I-2	Neutrality Charges – Month-to-Month and Long Term
Attachment J, J-0, J-1,	
J-2, J3, J4	Program Balancing – Month-to-Month and Long Term
Attachment K, K-1, K-2	Annual Tracker Report

### SUMMARY OF FILING

A one-paragraph summary is attached to this filing pursuant to Minn. R. 7829.1300, subp. 1.

### SERVICE ON OTHER PARTIES

Pursuant to Minn. R. 7829.1300, subp. 2, the Company has served a copy of this filing on the Office of the Attorney General – Antitrust and Utilities Division. A summary of the filing has been served on all parties on the enclosed service lists.

### II. GENERAL FILING INFORMATION

Pursuant to Minn. R. 7829.1300, subp. 3, the Company provides the following information.

#### A. Name, Address, and Telephone Number of Utility

Northern States Power Company, doing business as: Xcel Energy 414 Nicollet Mall Minneapolis, MN 55401 (612) 330-5500

#### B. Name, Address, and Telephone Number of Utility Attorney

James R. Denniston Assistant General Counsel Xcel Energy 414 Nicollet Mall – 401 8<sup>th</sup> Floor Minneapolis, MN 55401 (612) 215-4656

#### C. Date of Filing

The date of this filing is January 7, 2019.

### D. Statute Controlling Schedule for Processing the Filing

Minn. Stat. § 216B.16 subd. 1 requires 60-days of notice to the Commission of a proposed tariff change. Under the Commission's rules, the proposed tariff change discussed in this Petition falls within the definition of a miscellaneous filing under Minn. R. 7829.0100, subp. 11, since no determination of Xcel Energy's general revenue requirement is necessary.

 Utility Employee Responsible for Filing Aakash Chandarana
 Regional Vice President, Rates and Regulatory Affairs Xcel Energy
 401 Nicollet Mall – 401 7<sup>th</sup> Floor
 Minneapolis, MN 55401
 (612) 215-4663

### **III. MISCELLANEOUS INFORMATION**

Pursuant to Minn. R. 7829.0700, the Company requests that the following persons be placed on the Commission's official service list for this proceeding:

James R. Denniston	Lynnette Sweet
Assistant General Counsel	Regulatory Administrator
Xcel Energy	Xcel Energy
414 Nicollet Mall – 401 8 <sup>th</sup> Floor	414 Nicollet Mall – 401 7 <sup>th</sup> Floor
Minneapolis, MN 55401	Minneapolis, MN 55401
James.R.Denniston@xcelenergy.com	regulatory.records@xcelenergy.com

Any information requests in this proceeding should be submitted to Ms. Sweet at the Regulatory Records email address above.

### IV. EFFECT OF CHANGE UPON XCEL ENERGY REVENUE

Company revenues will increase by the amount of subscription revenues and administrative fees collected from Xcel Energy Renewable\*Connect subscribers to recover the cost of the resource Purchase Power Agreements (PPAs), marketing, and administration expenses associated with the program. The revenue increase would be net of any associated decrease in system fuel revenues resulting from customers migrating to Renewable\*Connect resources.

# V. DESCRIPTION AND PURPOSE OF FILING

The balance of this filing is organized as follows:

• *Background* — we describe the history and status of Windsource and provide background on the Renewable\*Connect Pilot;

- *Statutory Authority and Public Interest* Renewable\*Connect and this petition meet the requirements of the Green Pricing Statute and we describe how this petition is consistent with the public interest;
- Learnings from Windsource and the Renewable\*Connect Pilot—we discuss key learnings from our early green tariff products that have informed the development of this petition;
- *Common Features for all Renewable Connect Offers* the core service profile and customer value proposition from the successful Renewable\*Connect pilot is maintained as we transition to a full program;
- Ongoing Month-to-Month Offer we provide the key features of a new offering of Renewable\*Connect, which represents the migration of Windsource under the Renewable\*Connect brand, the inclusion of solar energy, and an always-open offer for all customers;
- Long Term Offer we provide the key features of this new opportunity, which includes longer term lengths and options for standard and "high off-peak" service; and
- *Annual* Reporting we provide a sample template and components for the Renewable\*Connect annual report.

We provide Table 1, which illustrates the basic components of the current programs, the transition, and the future state as presented in this Petition.

	Table 1 Proposed Programs and Transition Plan				
	Windsource	Pilot	Month-to- Month	Long Term	
Current					
Terms	Month-to-month + Special Event	5 Year, 10 Year, Month- to-Month + Special Events			
Resources	Windsource PPAs + small percent of Moraine II + Wind RECs	Portions of Odell Wind and North Star Solar			
Program Management	Open	Fully Subscribed			
Transition Per	riod 2019-2021				
Terms	Month-to-month + Special Event	5 Year, 10 Year, Month- to-Month + Special Events		Optional short-term R*C Bridge	
Resources	Windsource PPAs + Moraine II + Wind RECS + Solar RECs	Portions of Odell Wind and North Star Solar		Purchased RECs	
Program Management	Open	Fully Subscribed			
2021 and Beyo	nd	1			
Terms		5 Year, 10 Year	Month-to- Month + Special Events	5, 10, 15 & 20 Year	
Resources		Portions of Odell Wind and North Star Solar	Windsource PPAs + Moraine II + New Solar	New Wind + New Solar	
Program Management	Closed when Month-to- Month opens	Fully Subscribed	Enrollment grows through time	Limited Enrollment	

### Table 1 Proposed Programs and Transition Plan

### A. Background

Minn Stat 216B.169, subd. 2, passed in 2001, requires electric utilities to offer customers the option to buy electricity generated or purchased from renewable energy or energy generated by high-efficiency low-emissions distributed generation. Also in 2001, the Company filed a voluntary renewable energy rider, Windsource.

The Commission approved the program in 2002 and it launched in 2003, becoming one of the largest such programs in the country. Fifteen years later, the Windsource program continues to grow. In fact, as mentioned in our November 1, 2018 compliance filing (Docket No. E002/M-01-1479), the number of participants grew by more than two percent compared to the previous reporting period. Customer energy purchases also increased in this reporting period by approximately eleven percent compared to the previous reporting period, demonstrating a demand for green tariff offerings. The program continues to be popular, and we expect more near term growth for Windsource.

In November of 2015 and September of 2016, we proposed the Renewable\*Connect and Renewable\*Connect Government pilots that offered a new choice for customers seeking to source their energy needs from a blend of wind and solar. The Commission approved our pilots on February 27, 2017. Today, the pilot serves more than 3,000 residential premises with 22 GWh annually and nearly 150 commercial and industrial customers with over 150 GWh annually.

The product design for Renewable\*Connect is informed by the Corporate Renewable Energy Buyers' Principles. The Principles are as follows:

- ✓ Greater choice in options to procure renewable energy;
- ✓ Cost competitiveness between traditional and renewable energy rates;
- ✓ Access to longer-term, fixed price renewable energy;
- ✓ Access to projects that are new or help drive new projects in order to reduce energy emissions beyond business as usual:
  - o Access to bundled renewable energy products (energy + RECs),
  - o Ability to prevent double counting, and
  - Renewable energy delivery from sources that are within reasonable proximity to customer facilities;
- ✓ Increased access to third-party financing, as well as standardized and simplified processes, contracts and financing for renewable energy projects;

- ✓ Opportunities to work with utilities and regulators to expand choices for buying renewable energy:
  - o Fairly share costs and benefits of renewable energy procurement, and
  - Apply to new and existing load.

### **B.** Statutory Authority and the Public Interest

The Commission's February 27, 2017 Order approving the pilot affirmed the statutory authority that supported the Company's proposal. Specifically, the Green Pricing Statute, Minn. Stat. § 216B.169, authorizes utilities to offer one or more rate options for utility customers to secure electricity from renewable or high-efficiency, low-emission sources. Under the statute, rates charged to customers must be calculated using the utility's cost of acquiring the energy for the customer and must:

- 1. reflect the difference between the cost of generating or purchasing the additional renewable energy and the cost that would otherwise be attributed to the customer for the same amount of energy based on the utility's mix of renewable and nonrenewable energy sources; and
- 2. be distributed on a per kilowatt-hour basis among all customers who choose to participate in the program.

The Commission in its February 2017 Order was also guided by other statutory provisions encouraging it to authorize rates and make resource planning decisions that promote renewable energy generation and use, such as Minn. Stat. § 216B.03 ("To the maximum reasonable extent, the commission shall set rates to encourage energy conservation and renewable energy use . . . .") and Minn. Stat. § 216B.2422, subd. 4 (prohibiting approval of a new or refurbished nonrenewable energy facility in an integrated resource plan or a certificate of need without a demonstration that a renewable energy facility would not be in the public interest). These statutes similarly apply to the current petition.

When the Company brought forward the pilot, the Commission determined that the pilot is consistent with the key factors that determine whether the public interest test is met, and the Company believes our expanded Renewable\*Connect offerings continue to be in the public interest based on the same rationale.

In prior comments on the pilot, the Department noted that the Renewable\*Connect Pilot Program qualifies under the Green Pricing Statute, Minn. Stat. § 216B.169, Subd. 2. Because of this, it qualifies for cost recovery under Minn. Stat. § 216B.1645, Subd. 1. That subdivision provides for recovery of costs to satisfy the Green Pricing

Statute, and the Company should be authorized to dedicate a portion of recently contracted resources to this program. Further, this program is a reasonable way to test the degree of demand for green pricing.<sup>4</sup> These attributes similarly apply to the proposals in the current petition.

As discussed during the review of our initial Petition, the Commission and Department have also used the following factors to evaluate if a customer agreement is in the public interest:

- Whether the proposed agreement affects the operating costs and rate levels. For example, whether all costs associated with the facilities covered by the agreement are charged to the customer, whether this allows for more effective use of facilities to serve the customer, and whether Xcel Energy is being fairly compensated for use of its system.
- Whether the price is reasonable. For example, are other retail customers paying for the facilities to serve the customer at issue?
- Whether the agreement impairs effective regulation. For example, whether revenue received from a customer would cover the cost of providing the service.<sup>5</sup>

Based on these factors, we believe our expanded Renewable\*Connect program continues to be in the public interest because it is cost-based, the cost and cost components are reasonable, and the participating customers cover the cost of providing the service.

As described later in this Petition, Renewable\*Connect is carefully designed so that it does not negatively impact non-participants, and the expanded Renewable\*Connect offerings clearly align with the public interest of increasing the amount of renewable energy generation. By providing a mechanism for specific customers to be supplied largely or entirely by renewable energy on a voluntary basis, the program facilitates a more rapid transition to renewable energy generation overall.

<sup>&</sup>lt;sup>4</sup> See, Department comments of November 15, 2016 at page 9, and of November 29, 2016 at page 7.

<sup>&</sup>lt;sup>5</sup> See, Docket No. E002/M-03-868, In the Matter of the Petition of Northern States Power Company d/b/a Xcel Energy for Approval of a Substation, Feeder Cable & Ductline Operations and Maintenance Lease Agreement with the University of Minnesota, Comments of the Minnesota Department of Commerce, August 1, 2003 (MPUC order of September 5, 2003 adopted the Department comments); and, Docket No. E002/M-14-615, A request by Northern States Power Company d/b/a Xcel Energy (Xcel Energy or Company) for Commission approval of a Feeder Cable and Ductline Operations and Maintenance Lease Agreement with Seagate Technology, Inc., Comments of the Minnesota Department of Commerce, November 24, 2014 (MPUC order of January 9, 2015 adopted the Department comments).

## C. Learnings from Windsource and the Renewable\*Connect Pilot

We have developed key learnings in our experience administering the Windsource program and in developing and launching the Renewable\*Connect pilot. Our learnings arise from market research, from individual meetings with customers, from key groups of business leaders like the Minnesota Sustainable Growth Coalition, and from our own operational experience and market observations in offering these products. These learnings help inform the development of an expansion of Renewable\*Connect.

# 1. Interest in Renewable Choices is Growing

Across the board, customer interest in renewable energy choices is growing. According to WRI, the number of Companies that have signed on to the Renewable Energy Buyers' Principles has increased from 50 (42 Million MWh) to 78 (69 Million MWH) since 2015.<sup>6</sup>

Further evidence of the growing demand not only for renewable energy choices in general, but specifically for the Company's options, is evident in the current waiting list for more Renewable\*Connect and the sustained growth in Windsource.

With the significant growth in customer interest in voluntary renewable products, we believe it is time to expand the availability of Renewable\*Connect to more customers and to do so with the benefit of refined terms and to realign our legacy green tariff with the structure of the successful pilot.

# 2. Resource Attributes

When the Commission considered the Company's Renewable\*Connect pilot proposal, it approved the use of the newest available wind and solar resources to supply the energy for pilot subscribers. We indicated in our 2015 Petition that we anticipated future offers would likely be supported by incrementally new wind and solar resources. We understand the importance of this feature to some of our commercial and industrial customers and, accordingly, the Long Term Offer delivers energy from new wind and solar resources.

<sup>&</sup>lt;sup>6</sup> https://buyersprinciples.org/wp-content/uploads/Corporate RE buyers guide-2018.pdf

However, we have also learned that a requirement of incremental resources is not commonly understood and is not a critical feature for all customers. We believe many customers value product offerings supported in part or entirely by renewable resources that are already engaged.<sup>7</sup> WRI has addressed the limitations of "additionality" as a term in its recent publication, "Describing Purchaser Impact in U.S. Voluntary Renewable Energy Markets."<sup>8</sup>

The resources currently supporting Windsource were originally procured for a voluntary renewable program, and continued customer engagement in purchasing the power from these long-term contracts is an impactful action. We believe this proposal, which combines these wind resources with new solar, and aligns with the structure of Renewable\*Connect, maintains a service path for legacy Windsource customers and offers a compelling product for those newly interested in a green tariff subscription. Further, by extending the contract of Moraine II, the Company preserves the use of this flexible renewable resource for our customers.

Customers also desire products with different resource mixes for different types of premises. For example, a premise operating continuously 24 hours a day, seven days a week (e.g., a water treatment plant) will use a higher portion of off-peak energy. Thus, we include a high off-peak usage option for qualifying premises in the Long Term Offer that will be supported by a resource mix with a higher wind to solar ratio. This, too, supports overall system efficiency.

### 3. Term Length Options

While a key benefit of Renewable\*Connect is the price certainty that comes with a long-term contract, we have learned that many customers are interested in a subscription option that they can exercise at any time (not just during a limited time enrollment period) to purchase renewable energy on a flexible basis, rather than

<sup>&</sup>lt;sup>7</sup> Further, we have found that many corporate customers may wish to use our increasingly renewable and carbon free electric grid as the baseline to achieve their renewable energy goals but are challenged doing that as the voluntary and compliance renewable markets have traditionally not been linked. The Company is exploring options on how to better support customers in starting their accounting at the renewable energy supply they already receive through the grid, in effect, better aligning voluntary renewable energy products with resource acquisitions on behalf of all customers.

<sup>&</sup>lt;sup>8</sup> "Describing Purchaser Impact in U.S. Voluntary Renewable Energy Markets," "Describing Purchaser Impact in U.S. Voluntary Renewable Energy Markets," April 2018, Authors Letha Tawney, Mary Sotos and Ed Holt. <u>https://www.epa.gov/greenpower/wri-report-describing-purchaser-impact-us-voluntary-renewable-energy-markets</u>

signing a multi-year contract. In response, we seek to retain this feature as we migrate the Windsource program into Renewable\*Connect.

We have also learned that customers want more contract length options overall, which we have included in the new offerings. With this package, customers will find options for term lengths including special events, month-to-month, five-year, tenyear, fifteen-year, and twenty-year contract terms.

# 4. Operational Learnings

In addition to these key learnings, in our April 2, 2018 Renewable\*Connect annual report, we identified other initial learnings from the pilot regarding the operational experience. These include:

- Program resource requirements are difficult to forecast based on customer expressions of interest;
- A robust mix of marketing tactics is needed to yield a large amount of enrollments in a short period of time;
- For the first time, solar resources on our transmission system were subject to curtailment by the Midcontinent Independent System Operator (MISO); and
- Flexibility is key to addressing the unique situations of individual customers.

The Company's experience with Windsource and Renewable\*Connect emphasize the importance of flexibility. This is particularly true of the need for flexibility in resources used to balance generation with sales, and flexible treatment for resources to be allocated according to need. In addition to the operational learnings gained from experience, the Company has used the pilot as an opportunity to seek out feedback and reflect on learnings, and now brings forth this petition that preserves the successful features of the pilot, and refines the terms of service to provide an even more responsive, functional program.

### D. Common Features for Renewable\*Connect

The basic features of the Renewable\*Connect pilot remain unchanged in this proposal. These include the key components of the value proposition for subscribing customers and the protection from impacts for non-subscribers.

#### 1. Transparent Costs and Benefits

Under the program, the customers subscribe to their desired level of energy. When a customer enrolls in Renewable\*Connect, a monthly charge will appear on their bill. The charge consists of the participant's share of the cost of the resource plus program administration costs, less a monthly capacity credit if applicable at the time. The charge also includes an adjustment that ensures that non-participants are minimally impacted by the participants' enrollment in the program. The pricing offered to customers is fixed and known, allowing customers to plan for energy costs.

A fundamental rate design principle is that rates reflect cost causation. This is also core to WRI's buyers' principles. The representative large businesses included in the WRI research on this topic agree that the costs and benefits of renewable energy procurement should be shared fairly and should not impact other ratepayers. We incorporated this principle into the Renewable\*Connect concept by minimizing the cost impact on non-participating customers and recovering from participants the full cost of Renewable\*Connect generation resources and the cost of administering the program.

Our approved mechanism, a "neutrality adjustment," prevents non-participants from experiencing a disproportionate increase in costs as a result of the program. The neutrality adjustment is intended to account for line loss costs, renewable energy integration and system balancing costs, and the potential for stranded resources or adverse economic impacts associated with Renewable\*Connect customers migrating away from resources that were procured for the system and approved or ordered by the Commission. As the Company highlighted in its Renewable\*Connect annual compliance filing, the neutrality charge recovered the line loss, curtailment and balancing costs as it was designed and the company provided those program payments to non-participants as credits in the Fuel Clause.

#### 2. Fully Substantiated Renewable Energy Claims

Just as we have with Windsource and the pilot, we will retire the Renewable Energy Credits (RECs) associated with the customer's portion of the Renewable\*Connect generation on behalf of the customer. Thus, customers with sustainability goals measured in RECs can claim credit for their share of renewable production under the program. By retiring RECs on behalf of participants, the RECs are no longer

available to the Company for purposes of either Renewable Energy Standard (RES) or Solar Energy Standard (SES) compliance.<sup>9</sup> By participating in Renewable\*Connect, customers have substantial assurance that their RECs are fully traceable and incremental to state mandated levels. All program RECs will be registered with the Midwest Renewable Energy Tracking System (M-RETS).<sup>10</sup>

#### E. Ongoing Month-to-Month Offer

### 1. Program Structure, Eligibility, and Terms

The Ongoing Month-to-Month Offer is designed to be a simple way for a customer to participate in a voluntary renewable energy program without entering a long-term contract. Though it is designed primarily to meet the needs of the "mass market" (such as residential and small business customers), it will be available to all customers that would otherwise receive service under a rate schedule that is subject to the Fuel Clause Rider adjustment. This offering will maintain key Windsource features, including being open continuously and made available to customers through autorenewing month-to-month subscriptions. Customers seeking to power their special events from renewable energy can also subscribe. See Attachment C for the tariffs associated with this offering.

We propose to transfer Windsource customers into the Ongoing Month-to-Month Offer on an opt-out basis in 2021, or the time at which the new solar resource is available to be incorporated into the program. In a recent survey sent to current residential Windsource subscribers, 21 percent of respondents indicated that their preference is to be automatically enrolled with notification at the time of transition and 67 percent prefer to be given an opportunity to review the terms and conditions ahead of time with an opportunity to opt out. Only 1 percent of respondents indicated that they do not want to transition to the new program. See Attachment A for the survey methodology and results.

<sup>&</sup>lt;sup>9</sup> Docket No. E002/RP-15-21, 2015 Upper Midwest Resource Plan, January 2, 2015. See the discussion of RES and SES compliance in our "base case" scenario at Appendix E, pages 11-15.

<sup>&</sup>lt;sup>10</sup> Green-e Energy certification requires that voluntary renewable energy comes from facilities that first came online in the last 15 years and that the renewable energy must be generated in the calendar year in which the product is sold, the first three months of the following calendar year, or the last six months of the prior calendar year. It is uncertain whether the Company will seek Green-e certification for Renewable\*Connect, as the 15 year new date requirement does not align with the 20 year PPAs that we enter into for renewable energy purchasing.

In addition to migrating Windsource customers into Renewable\*Connect, the pilot month-to-month subscribers will also be merged into the new Ongoing Month-to-Month Offer. The merging of these programs will streamline our customer offers and result in price benefits for all customers as reflected in Attachment F. We are committed to establishing an Ongoing Month-to-Month price that will be equal to, or less than, the current Windsource program tariff rate and the current pilot monthto-month rate.

### 2. Energy Resources and Subscription Management

Subscriptions will be offered on a month-to-month basis and for special events. In order to do so, we propose the continued use of Moraine II under the same cost allocation method currently in effect. As approved by the Commission, energy production from Moraine II is allocated periodically to Windsource customers and the system. On a semi-annual basis, the Company may adjust the allocation percentage to meet the needs of the program. The energy costs are then allocated based on the established percentages and recovered through the Windsource Program rider and the Fuel Clause Rider, respectively.<sup>11</sup>

**Near term.** Between now and 2021, Windsource will continue being administered as it currently is with two primary modifications. First, in response to the strong customer interest in adding solar to their subscription<sup>12</sup>, the Company will begin incorporating a portion of solar energy into the program through the purchase of solar RECs as part of a transition to fully incorporating new solar resources to the offering<sup>13</sup>.

Second, in recognition of the impending transition to Renewable\*Connect, the minimum term lengths to participate in Windsource will be removed (Attachment E). In order to avoid customer confusion during this transition period the name will remain Windsource, but upon approval of the new offering, the Company will begin

<sup>&</sup>lt;sup>11</sup> Docket No. E002/M-08-1487 *In the Matter of Northern States Power Company d/b/a Xcel Energy's Petition for Approval of a Power Purchase Agreement with Moraine Wind II, LLC*, Commission Order, April 24, 2009, allowing adjustment of Moraine II allocation to meet Windsource program needs in semi-annual compliance reports. <sup>12</sup> Current Windsource customers have expressed strong interest in a program that offers both wind and solar energy. In a recent survey sent to current Windsource customers, 84 percent of respondents provided a response of "very interested" to the following question: "If Xcel Energy offered a program that provides you both wind energy and solar energy, rather than wind only, how interested would you be? Assume that the program has the same terms/conditions as Windsource® at about the same price." (Attachment A)

<sup>&</sup>lt;sup>13</sup> Docket No. E002/M-09-1177 In the Matter of Xcel Energy's Request for Approval of Revisions to its Voluntary Renewable and High Efficiency Purchase Rider, June 21, 2010, Commission Order point 5, allowing addition of solar to Windsource.

communicating with customers regarding the upcoming realignment of Windsource into Renewable\*Connect<sup>14</sup>.

The Company has negotiated a 10-year extension to the current Moraine II PPA at pricing at or near current market prices.<sup>15</sup> An increasing amount of Moraine II can be used to support the Windsource program as the smaller PPAs expire over time and as customer demand for Windsource grows. The semi-annual Windsource compliance filings will be used to inform the Commission of any changes to the Moraine II allocation in the near term<sup>16</sup>.

**Years 2021 and Forward.** Beginning in 2021, the Ongoing Month-to-Month Offer will be supported by the portfolio of resources that are currently utilized by Windsource plus a portion of a newly acquired solar resource. These 20 wind PPAs will expire at different points in time. The 10-year extension of Moraine II and its allocation to Renewable\*Connect through time is a critical component of meeting the demand of program participants.

A feature of Windsource that we sought to preserve in Renewable\*Connect is that it will be a standing offer for new subscribers. The Company will monitor the amount of energy available from Moraine II such that new resource acquisitions could be planned in a coordinated manner to replenish the resource base of the program as needed.

As customer interest in the product necessitates, the Company will request approval from the Commission that resources be added or allocated to this offering. The Company will maintain the feature of Windsource where REC purchases are made to support the program. The Company reserves the right to limit new subscriptions intermittently based on the capacity of the resources available, but the Company is committed to work with customers to secure new resources to meet new Renewable\*Connect demand. The Company would maintain the currently approved treatment of the Renewable\*Connect pilot resources as being shared between the system and Renewable\*Connect.

<sup>&</sup>lt;sup>14</sup> Docket No. E002/ M-09-1177, June 21, 2010, Commission Order point 6, requiring renaming Windsource for inclusion of solar.

<sup>&</sup>lt;sup>15</sup> A Petition for Commission approval is forthcoming with the terms of the Moraine II extension.

<sup>&</sup>lt;sup>16</sup> Docket No. E002/M-08-1487 In the Matter of Northern States Power Company d/b/a Xcel Energy's Petition for Approval of a Power Purchase Agreement with Moraine Wind II, LLC, Commission Order, April 24,2009, allowing adjustment of Moraine II allocation to meet Windsource program needs in semi-annual compliance reports.

## 3. Marketing and Enrollment

Approximately six months prior to launch, enrollment will be open for the Ongoing Month-to-Month Offer. It will be marketed to customers as the month-to-month or special event offering of Renewable\*Connect.

Prior to the opening of program enrollment and prior to broad awareness marketing, Windsource customers will be notified directly by e-mail and direct mail to inform them of the impending transition from Windsource to Renewable\*Connect and of their opportunity to opt out. Customers can opt out of the program without penalty, but there is no option to receive Windsource-branded service after the program is transitioned. Customers' subscription sizes will be unchanged through the transition. The Company intends a seamless experience for customers, without interruption in their renewable energy service or price increase. Upon the program launch date, Renewable\*Connect will appear in place of Windsource on customers' bills and in My Account as applicable.

Also prior to broad awareness marketing, customers who have signed up to be on the wait list for Renewable\*Connect will be notified and provided with a link to the Renewable\*Connect website with more information.

Awareness marketing will commence after the key notifications described above and ahead of the opening of enrollment. It will include channels for reaching a broad audience: radio, search engine optimization, online advisory tools, and public events. Customers will be directed to the Renewable\*Connect website, which will contain information on how to enroll through My Account. Customer care representatives and account managers will be provided with information and tools to build awareness and support enrollments.

Similar to Windsource and the pilot, customers may subscribe to 100 kWh blocks or a percent of their annual load under the Ongoing Month-to-Month option. Subscriptions may not exceed 100 percent of customers' annual load. In addition, a special event option will be available.

New Renewable\*Connect participants not migrated from Windsource will agree to program terms and conditions through an enrollment form. Subscriptions will be specific to a customer premise and customers will have the option to transfer their subscription between their own premises. Agreements with customers that move outside of our service territory are subject to termination.

## 4. Pricing

The pricing methodology for the new offers mirrors the basic elements upon which the pilot was designed and that the Commission previously determined met the statutory requirements. The pricing formula remains the cost of the resource, less a capacity credit, plus administrative costs, plus a neutrality adjustment. The Company requests approval of the pricing methodology and its elements.

### a. Resource Cost

The indicative resource cost included in the pricing structure is an estimate of the costs to acquire the resources under Power Purchase Agreements. Since we have not yet finalized the cost of all the resources that will be used for this offering, we are not including final pricing at this time. We are, however, able to provide indicative pricing. As shown in Attachment F, F-1 and F-2, the Company projects a fixed mix of wind and solar energy for the program.

### b. Capacity Credit

Renewable\*Connect customers will receive a capacity credit that partially offsets participation costs. The Company proposes the same methodology used to determine the capacity credit in the pilot. The capacity credit reflects the value of the additional capacity driven by participation in the program. The capacity credit is calculated based on the capacity value and is divided by expected kWh output of the resource. Specifically, the capacity value is the product of the MISO accreditation percentage and the annual cost of a combustion turbine. The expected output is the product of the expected capacity factor of the resource and an average system resource availability factor and the number of hours in a year. There is one change in the proposed calculation of a capacity credit; the Company does not provide a capacity credit until there is a system need for capacity. Therefore, the Company begins to phase in a capacity credit in 2025 and expands the amount of capacity credits to the program throughout the length of the program. The Company believes the proposed capacity credit continues to reflect current practice, reasonably reflects cost data on CT units and embedded costs attributions.

#### c. Administrative Cost

The Company will incur program administration costs for initial marketing, and program administration labor. These costs will be recovered from participating customers through their per kWh rate. The Company proposes unique administrative unit cost levels for each of the program terms.

#### d. Neutrality Adjustment

Our proposal includes a "neutrality adjustment" component to the Renewable\*Connect pricing to minimize the impact of the program on nonparticipants. The neutrality adjustment includes consideration for line losses, curtailment costs, renewable energy integration, and system balancing costs. If the Company did not include the proposed neutrality charge, the associated costs of the program would default to system customers through the Fuel Clause. Therefore, neutrality adjustment revenues will be credited to the Fuel Clause, minimizing impact to non-participating customers from program-related costs.

Since the Renewable\*Connect pilot was filed, the Company has several learnings related to the neutrality charge components, and has determined these components apply to both existing and new load alike. The Company, through the work it has done to expand wind on the system for the benefit of all customers, has a better understanding of the potential integration costs of wind on the system. The Company has also gained actual production experience with solar via the North Star solar PV facility. With these learnings in hand, the Company has focused the neutrality charge toward operational and integration costs and away from economic impacts of stranded assets. Therefore, the Company is not proposing to allow any exemptions of the neutrality charges for subscribers in either the Ongoing Month-to-Month Offer or the Long Term Offer.

# F. Long Term Offer

This offer is designed specifically around the needs of large commercial, industrial and other customers, such as municipalities and regional governmental authorities, and it is open to any customers that want long-term service contracts or incrementally new resources. It will also serve those customers with high off-peak usage and/or those customers seeking to further increase the mix of renewable energy within the Company's service area. Customers have already expressed significant interest in this new opportunity.

### 1. Program Structure, Eligibility, and Terms

This new opportunity will be supplied by a resource size that is based on subscription interest expressed by customers. The Company is pursuing additional new resources to serve customers with a desire for longer length term options. The Company has also designed this option to more closely match the generation mix to the load profile of premises with high off-peak usage as well as a standard usage profile offer for all customers. The high off-peak usage offering is designed specifically around the needs of large commercial and industrial and other customers such as municipalities and regional governmental authorities, and provides a corresponding benefit to those customers whose usage occurs largely during times of lower demand on the Company's system. Subscriptions will be available for both options on five-year, tenyear, fifteen-year and 20-year contract basis.

A key learning of the Renewable\*Connect pilot is that commercial customers value having a range of options in term lengths, and we seek to be responsive to that feedback. However, in order to strive for continued full subscription, for term lengths shorter than the full length of the PPAs of the supporting resources we will offer auto-renewals in increments of five-year extensions (with notification and the opportunity to opt out).

#### 2. Energy Resources and Subscription Management

This Long Term Offer will be supported entirely by a portfolio of new wind and solar resources acquired specifically for this purpose. The Company is currently in negotiations for new resources and working to bring low-cost resources to this program on an aggressive timeline. The size of the new resources is estimated to be 150 MW of new wind and 50 MW of new solar. The precise size of the resources will be determined by a balance between indications of customer interest through signed MOUs or letters of intent combined with an allowance for additional subscriptions, and understanding the availability of projects that drive the best costs for program participants.

Because this offering of Renewable\*Connect will be available on an energy subscription basis rather than a capacity basis, certain program management tools are needed in order to match the subscription levels with the energy output available from the resources as closely as possible.

Energy output from the Renewable\*Connect resources will vary seasonally (as wind and solar generation are predictably lower in certain months), vary annually (as some years will have lower energy output from wind and solar resources than other years), and decrease through time (as operational efficiency decreases). Subscription levels are similarly dynamic, as they may increase through time if customers enrolled by percentage of their usage increase their energy usage, or may decrease through time if customers enrolled by percentage of their usage decrease their energy usage through improved energy efficiency.

The Company will actively manage the overall subscription level in the program, to the extent possible. We anticipate that some of the shorter-term length subscriptions will not be renewed, which will help manage for the overall decrease in energy generation through time. Alternatively, if enough energy is available from the Renewable\*Connect resources, additional short-term subscriptions may be made available throughout the life of the program.

However, subscription management will not be able to address the seasonal variation in energy generation. One of the challenges that we anticipate is the ability to match annual energy requirement to resource production and fully supply the subscribed program level during months with low wind production, typically in July and August.

The Company proposes to supply a portion of the energy for Renewable\*Connect from a specific system wind resource, **[PROTECTED DATA BEGINS PROTECTED DATA ENDS]** during months of low wind production. However, to ensure system customers are held harmless and receive the benefit of this low cost resource approved for the system, the Company has included a seasonal value differential and PPA cost differential in the neutrality charge and will describe that in more detail below.

Since Renewable\*Connect is designed to meet customers' annual energy requirements, there will be months where excess wind energy is produced to offset program energy requirements for the low wind production months. The Company proposes to deliver this energy to the system and recover the costs through the Fuel Clause Rider. The Company recognizes two potential impacts to non-participants from this balancing arrangement. First, there is a seasonal price differential between energy produced in the summer when Renewable\*Connect requires more energy than can be provided by its dedicated resources and excess energy produced in the winter when Renewable\*Connect usage requirements are lower than the production from its dedicated resources. Second, there is a PPA price difference between the system wind resource and the Renewable\*Connect resource. The Company proposes to compensate non-participants for this value through the balancing component of the neutrality charge which is highlighted in Attachments I-1 and I-2.

This proposal, to balance with a new system wind resource, addresses the operational challenge in two important ways. First, the non-participating customer impact is mitigated as the system will continue to receive the same amount of renewable wind energy and receive the value of the seasonal and PPA price differentials. Second, since PPA pricing is known and predictable, measuring the impact to system customers can be done more accurately and therefore improves the timeliness of compensation for the balancing value. This solution protects the interests of both participating and non-participating customers, a core tenet of the Renewable\*Connect platform.

### 3. Marketing and Enrollment

Customers participating in this offer may subscribe to 100 kWh blocks or a percent of their annual load. Subscribers will sign a Service Agreement that confirms program details and terms of participation.

Upon Commission approval, the Company will set an initial enrollment period which will then be communicated to customers. The Service Agreement will be made available ahead of time for review by potential subscribers, including customers on the wait list for 5- and 10-year subscriptions. The initial enrollment period will be open for a pre-determined number of days and customers may enroll in the program at their desired level, within the subscription sizing rules. Customers enrolled in the Long Term Offer will also have the option to be served by the R\*C Bridge. After the initial enrollment period, subscription requests will be reviewed against remaining program availability.

Provided there is enough energy available from the Renewable\*Connect resources, customers will be granted the full subscription size. In the event that the subscription requests (as verified by customer signed Service Agreements) received during the initial enrollment period exceed the energy available in the program, then subscription sizes may be reduced before the Company counter-signs so that as many customers as possible may participate. Subscription requests will be reviewed according to the following prioritization:

- 1. Current participants in the Renewable\*Connect pilot with 10-year contracts enrolling additional load under the Long Term Offer.
- 2. Customers with a signed MOU (or equivalent letter of intent for an entity not able to enter into an MOU) tendered to the Company on or before January 31, 2019.

- 3. Customers on the wait list for 5- or 10-year Renewable\*Connect subscriptions. Customers within this group will be further prioritized by the date that they were placed on the wait list.
- 4. All other customers. Customers within this group will be further prioritized by the date that they tendered the signed Service Agreement to the Company.

Customers who are participants in the Renewable\*Connect pilot five-year term will have the ability to pre-enroll for an amount up to the equivalent subscription level in the Long Term Offer to take effect at the conclusion of the current pilot subscription contract. These subscription requests are not given priority on their own, but they can be included in an MOU or letter of intent.

In the event that the program is not fully subscribed during the initial enrollment period, a first come, first served open enrollment process will then be initiated. At this point, the level of broad awareness marketing will be calibrated to the amount of subscriptions needed to fully subscribe the Renewable\*Connect resources. The marketing and enrollment process will be similar to the Month-to-Month Offer with the exception that enrollment in the Long Term Offer will require a signed Service Agreement.

# 4. Pricing

As described above, the pricing methodology for the Ongoing Month-to-Month Offer mirrors the basic elements upon which the pilot was designed and that the Commission previously determined met the statutory requirements. The Company's pricing formula for the Long Term Offer is the same as the Ongoing Month-to-Month Offer, consisting of the resource, less a capacity credit, plus administrative costs, plus a neutrality adjustment. These components are not restated here.

Under the Long Term Offer, the Company provides two time-of-use differentiated options to meet customer requirements with varying usage profiles. For customers who have a higher percentage of usage occurring during the off-peak period (i.e. off-peak usage at 62.5 percent or above), the Company created an option that matches this usage profile with a higher proportion of wind energy. The High Off-Peak usage option blends 100MWs of wind and 25MWs of solar energy. The High Off-Peak usage option reflects costs of these resources, which in this case is lower than the standard option. One learning gained from our experience with customers through the pilot is that customers with access to the Company's Time of Day (TOD) fuel pricing will evaluate the value proposition of their renewable options against TOD

fuel rates. The pricing structure of the High Off-Peak usage offer is reasonable because the Company is passing on to subscribers the actual costs of the resources that serve them.

For customers with usage profile more in line with the system average (i.e., off-peak usage of less than 62.5 percent of total usage), the Company provides a standard option that consists of 50MWs of wind and 25MWs of solar similar to the Renewable\*Connect Pilot offering.

In addition, the Company recognizes the solar production for the Long Term Offer may be higher or lower than projected in a specific year, but will decrease over time and the resulting resource cost may be lower than projected. In that instance, the Company proposes to track any excess program cost recovery to potentially offset other increases in program costs such as neutrality or administrative costs.

Also, with respect to administrative costs, the unit cost is highest for the 5-year term length and decreases for each subsequent term as the Company generally expects administrative costs to decrease as term length increases.<sup>17</sup>

# 5. R\*C Bridge

The Long Term Offer is supported by new renewable resources. This means there is inevitable lag time between Commission approval of the program structure and the in-service dates of the new resources. The Company anticipates that such resources will not be available for approximately two years from the time of this filing. We are working to shorten this timeline as much as possible by proceeding to acquire resources concurrently with this filing as noted in the informational letter submitted on July 3, 2018 in Docket Nos. E002/M-15-985 and E002/M-01-1479.

However, some customers wish to make progress toward their sustainability goals and to begin taking renewable energy service sooner than this timeline allows. Customers may continue to enroll in Windsource during this transition time. We also propose to offer customers an opportunity to begin service sooner through a "R\*C Bridge". Customers who exercise this option will receive service under their current non-Renewable\*Connect rate schedule, and will be allocated an amount of RECs equivalent to their energy usage. The Company will retire the RECs on customers' behalf. The RECs will be generated by facilities located within Midcontinent

<sup>&</sup>lt;sup>17</sup> This is consistent with the relative administrative costs embedded in pricing for the Renewable\*Connect Government pilot.

Independent System Operator (MISO) Zone 1. Customers will enter into a shortterm R\*C Bridge obligation that is part of the service agreement, but is effective prior to the 5-, 10-, 15-, or 20-year terms.

The R\*C Bridge will only be available to customers enrolling in the Renewable\*Connect Long Term Offer , and it will be discontinued after the time the Long Term Offer is fully operational and supported by the new resources.<sup>18</sup>

The Company will charge subscribers a single rate for the R\*C Bridge that will include the cost of the RECs, REC registry fees, program administration labor, and other associated costs. All other components of a customer's applicable retail rate will continue to apply, and the rate for the R\*C Bridge will be a separate line on the customer's monthly bill. The R\*C Bridge rate will be included in a supplement along with the updates to the indicative overall program pricing when the new PPA rates are negotiated.

Costs associated with implementing the R\*C Bridge will be tracked, just as all costs associated with Renewable\*Connect are tracked, and we provide a sample of an R\*C Tracker Report as Attachment K-2. If there is a positive balance at the conclusion of the R\*C Bridge, that amount will be directed to the Fuel Clause Adjustment. If a customer cancels service during the R\*C Bridge period, they will be subject to a termination fee, consistent with the terms of the Long Term Offer.

### 6. Assignment

Recognizing that customers may need to manage their subscription among many premises during the length of the subscription, a Long Term Offer subscription may be assigned to a corporate affiliate of the Customer subject to restrictions designed to roughly maintain the overall subscription size. If the Service Agreement is for a number of 100 kWh Blocks, then the premises associated with such Assignment must have sufficient energy usage to be reasonably expected to accommodate this. If the Service Agreement is the Entire Monthly Usage, then the premises associated with the Assignment, based on the last 12 months of data, must be within 85 percent to 115 percent of the energy usage of the premises set forth in the Service Agreement prior

<sup>&</sup>lt;sup>18</sup> The R\*C Bridge service is a predecessor to the Renewable\*Connect term selected by the customer, and the contract 5-, 10-, 15- or 20-year term length that the customer enters into will begin when the resources are available and there is a signed Service Agreement in place between the parties. See Attachment D for the tariffs associated with this offer.

to the assignment in order to keep the Entire Monthly Usage election. If the Service Agreement is the Entire Monthly Usage, but the premises associated with the Assignment, based on the last 12 months of data, is greater than 115 percent of the energy usage of the premises set forth in the Service Agreement prior to the assignment, then a roughly equivalent number of 100 kWh blocks may be substituted as part of the Assignment so that the actual subscription amount is roughly the same.

### 7. Negative Check-Off Provision

Another new feature of this request is the use of a streamlined mechanism for Agreement revisions. In order to minimize the regulatory and administrative burden on the Commission and involved parties, we propose a 30-day negative check-off process if a revision to the Long Term Offer Service Agreement becomes necessary for a specific customer. Under this process, the Company would file for approval of a Service Agreement amendment, and if no objection or letter stating an intent to object is filed within 30 days of the Company's filing, the amendment would be deemed approved. If an objection or letter stating an intent to object is filed within this 30day period, the Commission would then consider the matter at a hearing and rule on whether the amendment is appropriate. This is similar to the process established by the Commission in several other proceedings, including the Solar\*Reward program, the Community Solar Gardens program, and the State of Minnesota Distributed Energy Resources Interconnection Process (MN DIP).<sup>19</sup>

#### 8. Enrollment Option for Pilot Subscribers

We are aware that some pilot subscribers who entered into the five-year contract option did so based on the possibility that the Company may offer in the near future a new Renewable\*Connect opportunity that more closely meets their renewable energy goals. Also, the drop in renewable prices in the last few years are anticipated to result in lower Long Term offerings than previous pilot offerings. While this is mainly a

<sup>&</sup>lt;sup>19</sup> In the Matter of the Petition of Northern States Power Company for Approval of an Amendment to A Solar\*Rewards Customer Contract with Addendum to Solar\*Rewards Contract Addressing Minnesota Bonus Rebate with Murphy Warehouse, Docket No. E002/M-15-650, Order of September 25, 2015. In the Matter of the Petition of Northern States Power Company, dba Xcel Energy, for Approval of Its Proposed Community Solar Garden Program, Docket No. E-002/M-13-867, Order of April 7, 2014. In the Matter of Updating the Generic Standards for the Interconnection and Operation of Distributed Generation Facilities Established Under Minn. Stat. 216B.1611, Docket No. E999/CI-16-521, Order of August 13, 2018.

result of market forces we have taken some steps to minimize concerns from current pilot customers. For example, we will offer pilot 5-year subscribers the opportunity to pre-enroll in the Long Term Offer.

We will procure and reserve sufficient energy to meet subscribers' requirements up to the amount of their pilot 5-year contract and they will enter into a new subscription at the conclusion of their pilot subscription. In addition, for customers who entered into a 10-year contract under the pilot, in the event that program interest is greater than available energy from the Renewable\*Connect resources, we will provide such customers with a priority to enroll new premises and subscribe to additional energy through the Long Term Offer. The Company would maintain the currently approved treatment of the Renewable\*Connect pilot resources as being shared between the system and Renewable\*Connect.

### G. Annual Compliance Reporting

The Company has reviewed the current reporting requirements associated with both the Renewable\*Connect Pilot Program and the Windsource Program. We propose to update and enhance these reporting requirements going forward for this expansion into a permanent Renewable\*Connect Program. Our program tracker account report will be provided on an annual basis on April 1 after the first full year of operation and will include the annual reporting requirements enumerated in the Commission's prior Order, and other relevant program narratives<sup>20</sup>.

Please see Attachment K, K-1, and K-2 for examples of our tracker reports. We propose to file this tracker and supporting narrative annually by April 1 after the first

<sup>&</sup>lt;sup>20</sup> See Docket No. E002/M-15-985, February 27, 2017, Order Approving Pilot Programs and Requiring Filings. Order Point 5 requires that the report contain: a. Total number of participants broken down by customer class, and by length of contract (including "special events"); b. Total wind production; c. Total solar production; d. Total Renewable\*Connect expenses; e. Total Renewable\*Connect Government expenses; f. Total Amount collected in Renewable\*Connect charges; g. Total Amount collected in Renewable\*Connect Government charges; h. The Tracker balances as shown in Attachment H of Xcel's filing; i. Monthly comparisons of Renewable\*Connect Pricing for participants with the Fuel Charge for nonparticipant customers; j. Impact of Renewable\*Connect pilots on all nonparticipant customers; k. Impact on all Xcel Ratepayers through updates in base rates; l. Information on the number of terminations and an accounting of termination fees.

full year of new resource operations for the full scope of Renewable\*Connect offerings.

## CONCLUSION

We are pleased to propose this expansion of the successful Renewable\*Connect Pilot Program and to offer it as a full-time, permanent program. We look forward to being able to reopen the sold out program to serve more customers, and to grow the Renewable\*Connect platform in a way that meets customer needs, protects nonparticipants, and promotes system efficiency.

Xcel Energy respectfully requests that the Commission approve:

- The program structure, pricing methodology (Attachments F through I-2), and terms and conditions of the new offerings;
- The Tariff sheets for the new Long Term Offer (Attachment D);
- The content of the Tariff sheets for the Ongoing Month-to-Month Offer (Attachment C), the current revision to the Tariff sheets for Windsource removing minimum subscription periods (Attachment E) and the revisions to the Tariff sheets for Windsource (Attachment E1) and the pilot (Attachment B), with permission to file these Tariff sheets with approved pricing at or near the time the resources are in place;
- The transition of Windsource Program customers to the Ongoing Month-to-Month Offer of our Renewable\*Connect program;
- The transition of month-to-month pilot customers to the Ongoing Month-to-Month Offer of Renewable\*Connect, and the cancellation of the pilot Service Agreements for these customers;
- The ability to utilize energy from a system wind resource during months of low wind production to support the new offerings balanced by excess wind production in months where generation exceeds usage;
- The allocation to the system of any excess energy from existing or new Renewable\*Connect Program resources and the recovery of excess energy costs through the Fuel Clause Rider;

- Use of a negative check-off process for amendments to the customer Service Agreement that may differ from an approved and tariffed version of the Service Agreement for the Long Term Offer of the Renewable\*Connect Program; and
- Our proposed annual reporting components and tracker report template.

Dated: January 7, 2019

Northern States Power Company

STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Nancy Lange Dan Lipschultz Matthew Schuerger Katie J. Sieben John A. Tuma Chair Commissioner Commissioner Commissioner

DOCKET NO. E002/M-19\_\_\_\_ Petition

IN THE MATTER OF THE PETITION OF NORTHERN STATES POWER COMPANY FOR APPROVAL OF RENEWABLE\*CONNECT PROGRAM

IN THE MATTER OF THE PETITION OF NORTHERN STATES POWER COMPANY FOR APPROVAL OF A RENEWABLE ENERGY RIDER

#### SUMMARY OF FILING

Please take notice that on January 7, 2019, Northern States Power Company, doing business as Xcel Energy, filed with the Minnesota Public Utilities Commission a Petition for approval of a Renewable\*Connect program. The Company proposes to expand our Renewable\*Connect Pilot Program to a permanent program with two new customer offerings. As part of this expansion, we propose to realign the current Windsource Program under the Renewable\*Connect brand and we request Commission approval to transfer customers' Windsource subscriptions to Renewable\*Connect. We also propose to procure new resources to serve more customers through Renewable\*Connect.

Docket No. E002/M-19\_\_\_\_ Renewable\*Connect Attachment A, Page 1 of 13



## 2018 Minnesota Windsource ® Customers

Interest in Renewable\*Connect®



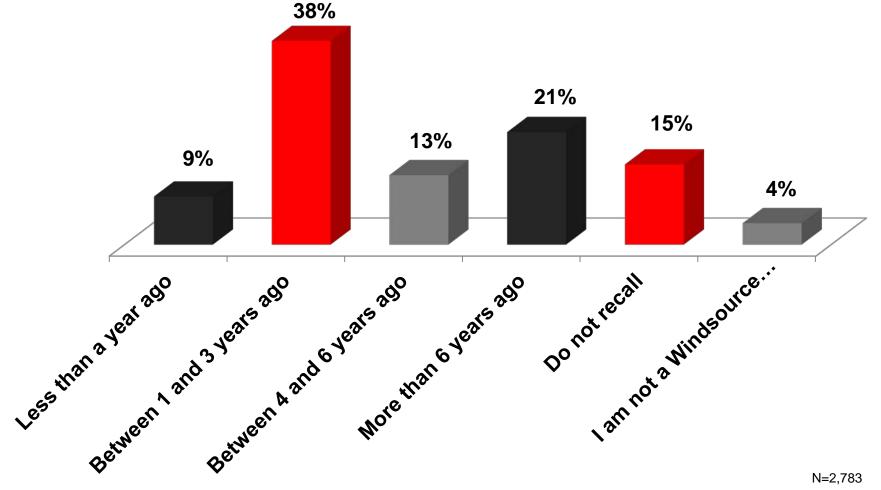
## Methodology: Online Survey



## Minnesota Residential Windsource® Customers

Launch survey	August, 2018
Close survey	September 28, 2018
Number of email invitations sent	25,929
Number of completes	2,783
Response rate	10.8%
Incentive	No

## Forty Seven Percent of Respondents are **Recent Windsource® Customers**



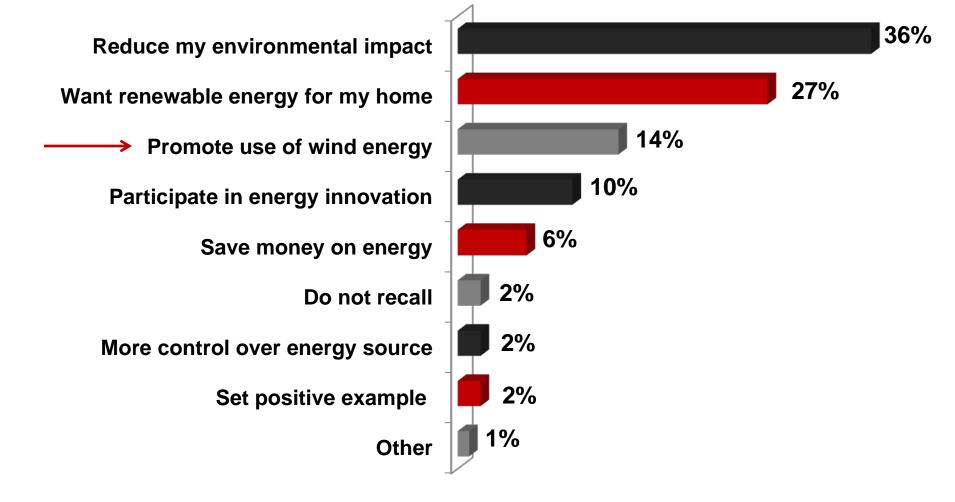
Approximately when did you sign up for the Windsource® program?



N=2,783

Environmental Impact and Desire for Renewable Connect Energy are Top Drivers for Windsource® Customers

Docket No. E002/M-19

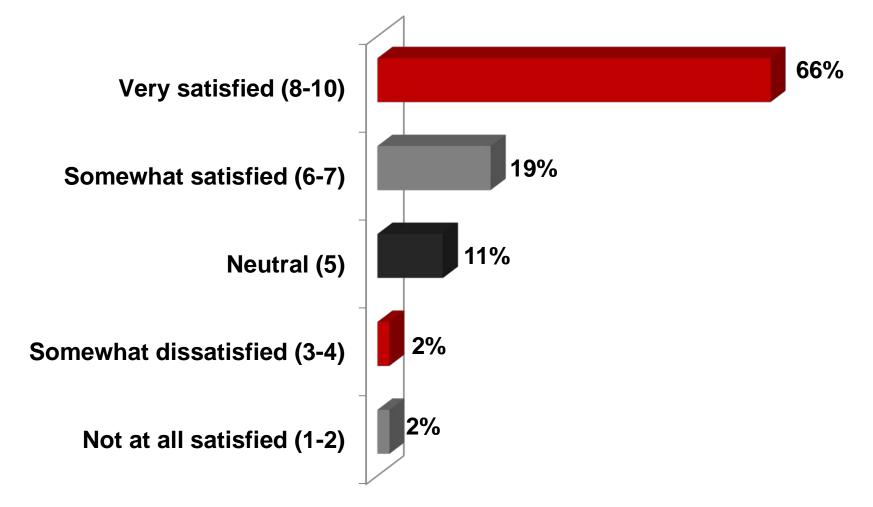


In thinking about your decision to participate in Xcel Energy's Windsource® program, what were the most important reasons for why you selected Windsource®? Select up to two.

4

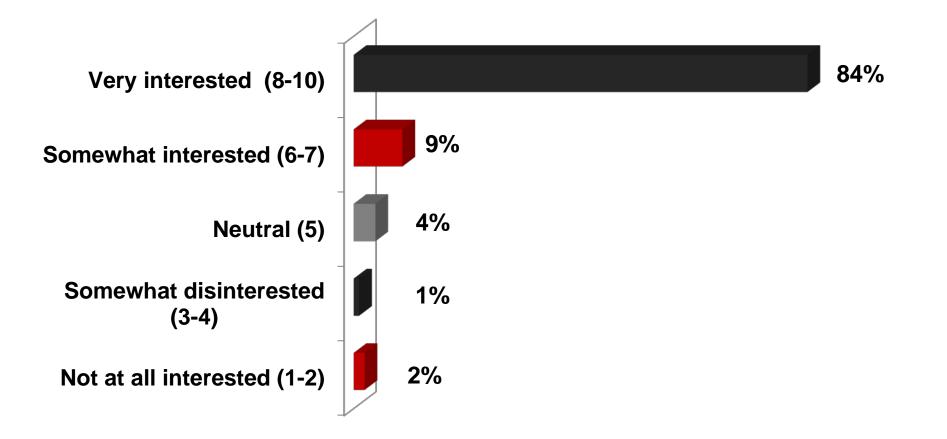


# Two Thirds of Windsource® Customers are Very Satisfied with Current Program



5 Overall, how satisfied are you with the Windsource ® program?

## Strong Interest in Wind + Solar Program



If Xcel Energy offered a program that provides you both wind energy and solar energy, rather than wind only, how interested would you be? Assume that the program has the same terms/conditions as Windsource® at about the same price.

Renewable\*Connect

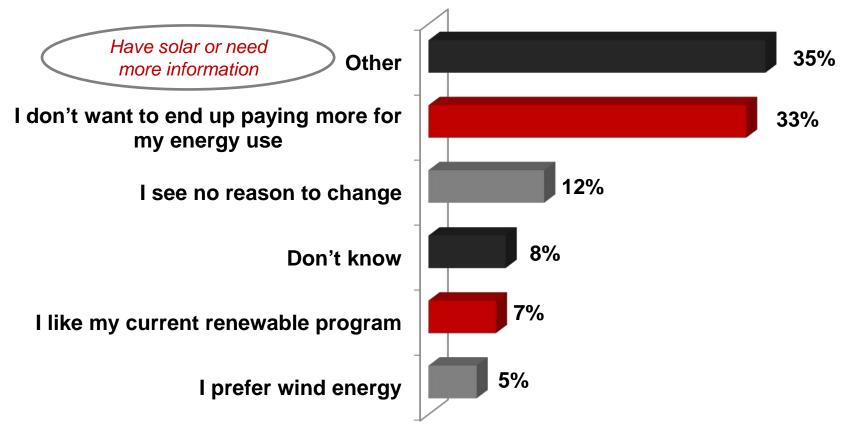
Attacingen Xcel Energy?

# Lack of Interest Due to Concerns about Cost and from Customers Who Already Have Solar

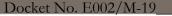
Docket No. E002/M-19

Renewable\*Connect

This question was only presented to the 3% of respondents who answered "somewhat disinterested" or "not at all interested" to the previous question.

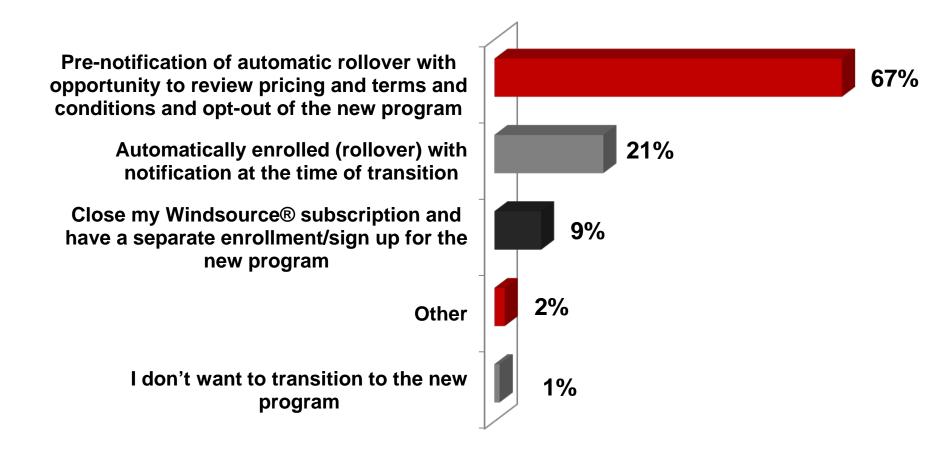


Why aren't you interested in a program that provides you with both wind energy and solar energy? Select all that apply.



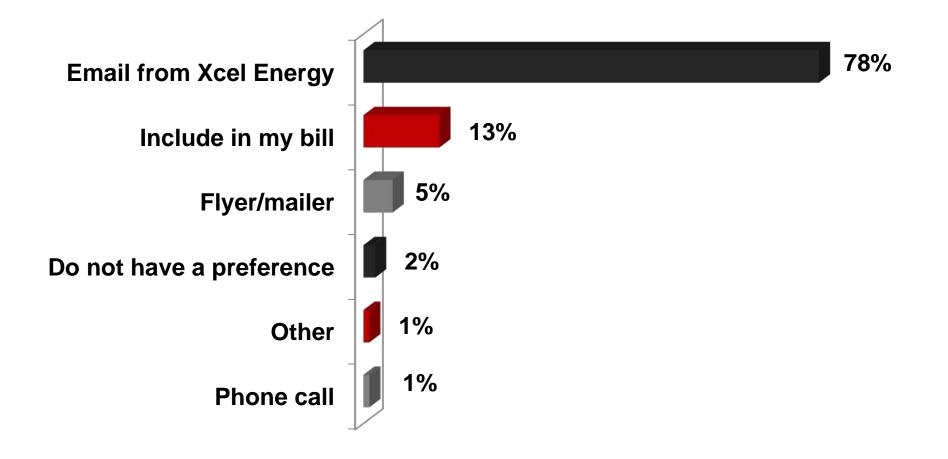


# Respondents Want Opportunity to Review Plan and Pricing



In the event that the Windsource® program ended, and the new wind energy and solar energy program became available to you, how would you like to be transitioned?

# An Email Notice from Xcel Energy is Preferred by Majority of Respondents



How do you prefer to hear from Xcel Energy about new renewable programs?

#### Docket No. E002/M-19

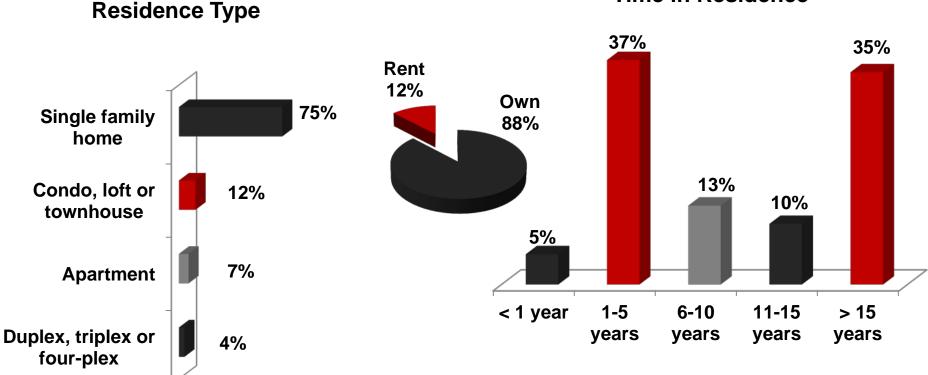
Renewable\*Connect



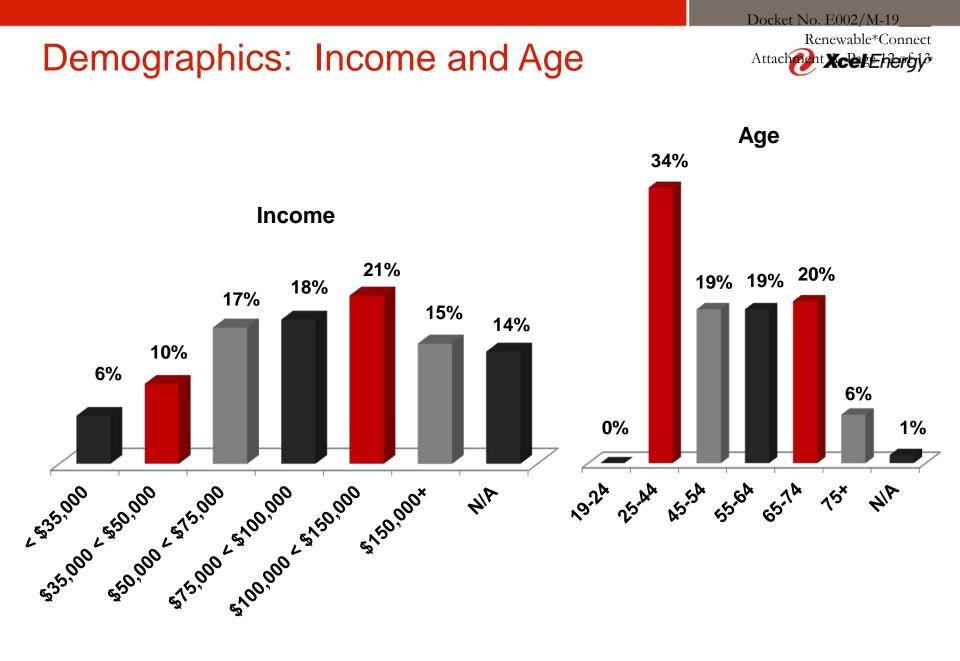
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## **Demographics:** Residence

Docket No. E002/M-19 Renewable\*Connect Attachment Xcette herei?



**Time in Residence** 



Docket No. E002/M-19

Renewable\*Connect Attachment A, Page 13 of 13



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## Redline

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Section

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Sheet No.

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ļ	Docket No.	E002/M- <del>16-222<u>15-985</u></del>		Order Date:	<del>05-22-17</del>

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#### VOLUNTARY RENEWABLE\*CONNECT PILOT PROGRAM RIDER

#### AVAILABILITY

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. <u>Month-to-Month</u> and Single Event R\*C Service Types under this Rider are no longer available as of <u>All customers</u> receiving Month-to-Month and Single Event R\*C Service Types under this Rider are no longer available as of <u>All customers</u> under the Voluntary Renewable\*Connect Program Rider (Month-to-Month). Service under this Voluntary Renewable\*Connect Program Rider (Month-to-Month) will be at the Customer's same Subscription Level unless if the Customer cancels the service or changes the Subscription Level.

#### 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 (Continued on Sheet No. 5-150)

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### VOLUNTARY RENEWABLE\*CONNECT PILOT PROGRAM RIDER

Section No. 5 Original<u>1st Revised</u> Sheet No. 149

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)					
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#### 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	<del>\$/kWh</del>			
<del>2 (2018)</del>	<del>\$0.03577</del>			
<del>3 (2019)</del>	<del>\$0.03599</del>			

#### 5-Year and 10-Year R\*C Service Type

Year	5-Year Contract (\$/kWh)	10-Year Contract (\$/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

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)			
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Section No. 5 <u>1st2nd</u> Revised Sheet No. 151

#### TERMS AND CONDITIONS OF SERVICE

- 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.
- A Customer may elect to subscribe by: (i) purchasing a specified number of 100 kWh blocks; or (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 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, 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 Company with 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.
- 4. 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)				
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- 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, or 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 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. 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:
  - 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.
- 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.

10.9. 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)					
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#### TERMS AND CONDITIONS OF SERVICE (Continued)

- 10. 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.
- 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.
- 12. 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.
- 13. 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.

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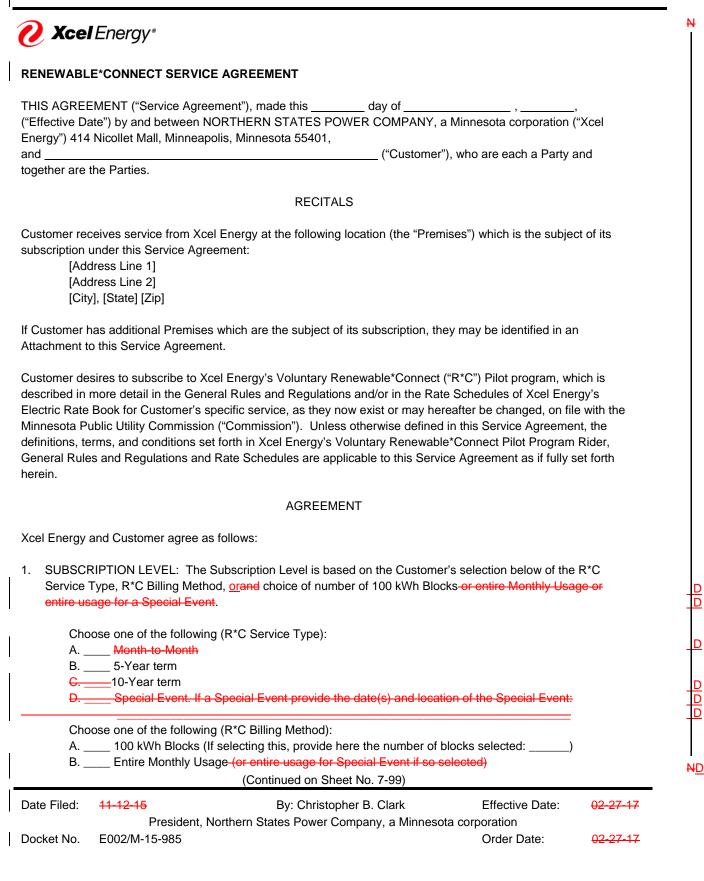
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#### VOLUNTARY RENEWABLE\*CONNECT PILOT PROGRAM RIDER SERVICE AGREEMENT

Section No. 7 Original<u>1st Revised</u> Sheet No. 98



#### VOLUNTARY RENEWABLE\*CONNECT PILOT PROGRAM RIDER SERVICE AGREEMENT (Continued)

Section No. 7 1st2nd Revised Sheet No. 99

- SUBSCRIPTION TERM: The Subscription Term under this Service Agreement shall begin on the first day of the next billing cycle for each account for the Premises of the Customer identified in this Service Agreement immediately following Xcel Energy counter-signing this Service Agreement (but not before January 1, 2017). The Subscription Term shall continue until the earlier of the following (the "Termination Date"):
  - A. The last day of a billing cycle following 30 days from the termination notice from customer;
  - B. The last day of the 5-Year of 10-Year term where a 5-Year or 10-Year term is selected by the Customer;
  - C. The last day of the Special Event, where the subscription is for a Special Event;
  - D.C. The date the Customer ceases to receive service at the Premises without beginning to take service at another location in Xcel Energy's Minnesota service area; or
  - E.D. The last day of the R\*C Pilot Program, which is December 31, 2026.

After the Termination Date, Customer shall receive service as provided in the General Rules and Regulations and/or in the Rate Schedules of Xcel Energy's Electric Rate Book for Customer's specific service, as they now exist or may hereafter be changed, on file with the Commission.

- 3. SUPPLY RISK: Customer hereby acknowledges, understands, and agrees that Customer has subscribed for an allocated share in kWh of a portion of the energy from the capacity of the R\*C Resources. Xcel Energy shall not be liable to the Customer in the event that the R\*C Resources are unavailable. Customer expressly acknowledges and agrees to assume any and all risks associated with Xcel Energy's purchase of renewable energy for Customer's benefit from the R\*C Resources, including the risk that the operator of R\*C Resources will be unable to perform under the terms of the power purchase agreement between it and Xcel Energy. To the extent that the operator(s) of the R\*C Resources is unable to perform under the terms of its power purchase agreement with Xcel Energy, Xcel Energy will be under no obligation to continue to provide R\*C Service to Customer at the rates specified in the tariff for the R\*C Service or under this Service Agreement.
- 4. EARLY TERMINATION: Customer may elect to terminate this agreement on the Termination Date. If Customer so elects, and Customer's R\*C-Service Type was not month-to-month nor a Special Event, and the Termination Date is less than the full 5-Year or 10-Year term designated in Paragraph 1, Customer shall pay to Xcel Energy an Early Termination Fee, as detailed in the tariff for the R\*C Service as identified in the Voluntary Renewable\*Connect Pilot Program Rider contained in Xcel Energy's Electric Rate Book as it now exists or may hereafter be changed, on file with the Commission. Further, if Customer elects to terminate this Service Agreement prior to the completion of the designated 5-Year or 10-Year term, Customer may not prospectively subscribe the same Premises in a different Renewable\*Connect or Renewable\*Connect Government tranche until the end of what would have been the full 5-Year or 10-Year term. Xcel Energy may cancel the R\*C Service and this Service Agreement on written order from the Commission based on good cause shown.
- CHANGE OF PREMISES: If Customer ceases to receive service at the Premises and begins taking service at another location in Xcel Energy's Minnesota service area, then Xcel Energy will automatically transfer Customer's Renewable\*Connect subscription to the new service location.

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#### VOLUNTARY RENEWABLE\*CONNECT PILOT PROGRAM RIDER

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#### AVAILABILITY

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. Month-to-Month and Single Event R\*C Service Types under this Rider are no longer available as of \_\_\_\_\_\_. All customers receiving Month-to-Month and Single Event R\*C Service Types under this Rider are no longer available as of this date will receive service under the Voluntary Renewable\*Connect Program Rider (Month-to-Month). Service under this Voluntary Renewable\*Connect Program Rider (Month-to-Month) will be at the Customer's same Subscription Level unless if the Customer cancels the service or changes the Subscription Level.

#### 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"):

<u>*C Service Types</u>	R*C Billing Methods	
Years	100 kWh Blocks	D
0 Years	Entire Monthly Usage	D
0 Years	Entire Monthly Usage	

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 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").

		(Continued on Sheet No. 5-150)		
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#### 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:

#### 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

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.

(Continued on Sheet No. 5-151)			
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## TERMS AND CONDITIONS OF SERVICE

- Any Customer enrolling in this 1 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.
- A Customer may elect to subscribe to by: (i) purchasing a specified number of 100 kWh blocks; or (ii) the Customer's entire Applicable Retail Electric Usage; <u>provided</u>, 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 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, 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 Company with 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.
- 4. 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 N	0. 5-152)	
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## 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 5 years and 10 years. Any termination by the Customer ahead of the 5 year or 10 year 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. 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.
- The Company will submit reports to the Commission each April 1, or as otherwise ordered in relation to the tracker accounting.
- 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.
- 9. 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)			
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Section No. 5 1st Revised Sheet No. 153

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## TERMS AND CONDITIONS OF SERVICE (Continued)

- 10. 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.
- 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.
- 12. 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.
- 13. 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.

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#### VOLUNTARY RENEWABLE\*CONNECT PILOT PROGRAM RIDER SERVICE AGREEMENT

## **? Xcel** Energy®

## **RENEWABLE\*CONNECT SERVICE AGREEMENT**

THIS AGREEMENT ("Service Agreement"), made this \_\_\_\_\_\_ day of \_\_\_\_\_\_, ("Effective Date") by and between NORTHERN STATES POWER COMPANY, a Minnesota corporation ("Xcel Energy") 414 Nicollet Mall, Minneapolis, Minnesota 55401, and \_\_\_\_\_\_ ("Customer"), who are each a Party and

together are the Parties.

## RECITALS

Customer receives service from Xcel Energy at the following location (the "Premises") which is the subject of its subscription under this Service Agreement:

[Address Line 1] [Address Line 2] [City], [State] [Zip]

If Customer has additional Premises which are the subject of its subscription, they may be identified in an Attachment to this Service Agreement.

Customer desires to subscribe to Xcel Energy's Voluntary Renewable\*Connect ("R\*C") Pilot program, which is described in more detail in the General Rules and Regulations and/or in the Rate Schedules of Xcel Energy's Electric Rate Book for Customer's specific service, as they now exist or may hereafter be changed, on file with the Minnesota Public Utility Commission ("Commission"). Unless otherwise defined in this Service Agreement, the definitions, terms, and conditions set forth in Xcel Energy's Voluntary Renewable\*Connect Pilot Program Rider, General Rules and Regulations and Rate Schedules are applicable to this Service Agreement as if fully set forth herein.

#### AGREEMENT

Xcel Energy and Customer agree as follows:

 1. SUBSCRIPTION LEVEL: The Subscription Level is based on the Customer's selection below of the R\*C Service Type, R\*C Billing Method, or choice of number of 100 kWh Blocks.
 D

 Choose one of the following (R\*C Service Type):
 A. \_\_\_\_\_ 5-Year term
 D

 B. \_\_\_\_\_ 10-Year term
 D

 Choose one of the following (R\*C Billing Method):
 D

 A. \_\_\_\_\_ 100 kWh Blocks (If selecting this, provide here the number of blocks selected: \_\_\_\_\_)
 D

 B. \_\_\_\_\_ 100 kWh Blocks (If selecting this, provide here the number of blocks selected: \_\_\_\_\_)
 D

(Continued on Sheet No. 7-99)			
By: C	Christopher B. Clark	Effective Date:	
President, Northern States Power Company, a Minnesota corporation			
E002/M-15-985		Order Date:	
	By: C	By: Christopher B. Clark President, Northern States Power Company, a Minnesota cor	

#### VOLUNTARY RENEWABLE\*CONNECT PILOT PROGRAM RIDER SERVICE AGREEMENT (Continued)

- SUBSCRIPTION TERM: The Subscription Term under this Service Agreement shall begin on the first day of the next billing cycle for each account for the Premises of the Customer identified in this Service Agreement immediately following Xcel Energy counter-signing this Service Agreement (but not before January 1, 2017). The Subscription Term shall continue until the earlier of the following (the "Termination Date"):
  - A. The last day of a billing cycle following 30 days from the termination notice from customer;
  - B. The last day of the 5-Year of 10-Year term where a 5-Year or 10-Year term is selected by the Customer;
  - C. The date the Customer ceases to receive service at the Premises without beginning to take service at another location in Xcel Energy's Minnesota service area; or
  - D. The last day of the R\*C Pilot Program, which is December 31, 2026.

After the Termination Date, Customer shall receive service as provided in the General Rules and Regulations and/or in the Rate Schedules of Xcel Energy's Electric Rate Book for Customer's specific service, as they now exist or may hereafter be changed, on file with the Commission.

- 3. SUPPLY RISK: Customer hereby acknowledges, understands, and agrees that Customer has subscribed for an allocated share in kWh of a portion of the energy from the capacity of the R\*C Resources. Xcel Energy shall not be liable to the Customer in the event that the R\*C Resources are unavailable. Customer expressly acknowledges and agrees to assume any and all risks associated with Xcel Energy's purchase of renewable energy for Customer's benefit from the R\*C Resources, including the risk that the operator of R\*C Resources will be unable to perform under the terms of the power purchase agreement between it and Xcel Energy. To the extent that the operator(s) of the R\*C Resources is unable to perform under the terms of its power purchase agreement with Xcel Energy, Xcel Energy will be under no obligation to continue to provide R\*C Service to Customer at the rates specified in the tariff for the R\*C Service or under this Service Agreement.
- 4. EARLY TERMINATION: Customer may elect to terminate this agreement on the Termination Date. If Customer so elects and the Termination Date is less than the full 5-Year or 10-Year term designated in Paragraph 1, Customer shall pay to Xcel Energy an Early Termination Fee, as detailed in the tariff for the R\*C Service as identified in the Voluntary Renewable\*Connect Pilot Program Rider contained in Xcel Energy's Electric Rate Book as it now exists or may hereafter be changed, on file with the Commission. Further, if Customer elects to terminate this Service Agreement prior to the completion of the designated 5-Year or 10-Year term, Customer may not prospectively subscribe the same Premises in a different Renewable\*Connect or Renewable\*Connect Government tranche until the end of what would have been the full 5-Year or 10-Year term. Xcel Energy may cancel the R\*C Service and this Service Agreement on written order from the Commission based on good cause shown.
- CHANGE OF PREMISES: If Customer ceases to receive service at the Premises and begins taking service at another location in Xcel Energy's Minnesota service area, then Xcel Energy will automatically transfer Customer's Renewable\*Connect subscription to the new service location.

(Continued on Sheet No. 7-100)			
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President, Northern States Power Company, a Minnesota corporation			
Docket No.	E002/M-15-985	Order Date:	

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Docket No. E002/M-19\_\_\_\_ Renewable\*Connect Attachment C, Page 1 of 10

# Redline

Section No. 5 Original Sheet No. 159

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#### AVAILABILITY

The Voluntary Renewable\*Connect<sup>TM</sup> ("R\*C") program (Month-to-Month) 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, and also will apply to any customer who as of received service under the Windsource Program 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 by the Customer 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 below.

"R\*C Resources" for this program means portions of renewable sources applicable to the R\*C Service.

<u>"R\*C Service" means the service offered under this Voluntary Renewable\*Connect Program Rider (Month-to-Month). This R\*C Service includes both R\*C Service Types identified below.</u>

"Subscription Level" means the Customer's elected block of 100 kWh on a monthly basis, entire monthly usage, or Special Event Usage of the energy from the R\*C Resources. The Subscription Level is a blend of renewable resources.

#### <u>RIDER</u>

Customer may either elect to receive R\*C Service or will be migrated to this service if as of the Customer had been receiving service under the Windsource Program Rider at the same subscription level. The following types of R\*C Service are available ("R\*C Service Type") in the following billing methods ("R\*C Billing <u>Method"):</u>

> <u>R\*C Service Types</u> <u>Month-to-Month</u> <u>Special Event</u>

R\*C Billing Methods 100 kWh Blocks Entire Monthly Usage Special Event Usage

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.

	(Co	ontinued on Sheet No. 5-160)	
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Section No. 5 Original Sheet No. 160

## **DETERMINATION OF R\*C PRICE**

The R\*C Price shall be calculated as follows: for the month-to-month and Special Event R\*C Service Type, pricing will be based on the delivered cost of the R\*C Resources applicable to this R\*C Service, 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 below may be revised with approval of the Commission.

Month-To-Month and Special Event	
R*C Service Types	
<u>\$/kWh</u>	

#### **NEUTRALITY CHARGE**

The neutrality charge is included within the R\*C Price. The neutrality charge mitigates the impact of this R\*C Service on non-participating customers. The neutrality charge is subject to change upon Commission order. The neutrality charge for this R\*C Service is as follows:

<u>\$/kWh</u>

## TRACKER ACCOUNT

Due to the variability of renewable resources, the Renewable\*Connect program tracker account for this R\*C Service 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. 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 Renewable\*Connect tracker account for this R\*C Service will incorporate the tracker account balance of the Windsource Program Rider. The Company may petition the Commission annually to true up the resource cost, the marketing and administrative cost tracker balance and apply the resulting true-up factors to the Month-To-Month and Special Event R\*C Price.

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	(Continued on Sheet No. 5-	161)
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	President, Northern States Power Company,	a Minnesota corporation
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## TERMS AND CONDITIONS OF SERVICE

- A Customer may elect to subscribe to this R\*C Service by selecting: (i) 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. The Company reserves the right to limit new subscriptions based on the capacity of the resources that apply to Renewable\*Connect, for this R\*C Service.
- 2. 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 by the Customer the subscription size does not exceed one hundred (100) percent of the previous annual (12-month) consumption of electric energy by Customer at the Customer premises. 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, 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 Company with 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.
- 3. For a Customer electing to receive its entire Applicable Retail Electric Usage pursuant to this 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 2, divided by 12).
- 4. A Customer's subscription period becomes effective on the following: 1.) if Customer was enrolled in the Windsource Program Rider as of \_\_\_\_\_\_\_, the subscription period under this R\*C Service begins on \_\_\_\_\_\_\_; or, 2.) the first day of Customer's billing period immediately following the date that the Customer elects to participate in this R\*C Service (but not before \_\_\_\_\_\_). Subscription periods are month-to-month or are for a designated Special Event. Any termination by the Customer on a Special Event R\*C Service Type shall be effective provided that the notice of termination is provided at least 30 days prior to the Special Event. Any termination by the Customer on a Month-to-Month R\*C Service Type shall be effective on the last day of the billing month following 30 days from Company receipt of the termination notice provided by the Customer.

(Continued on Sheet No. 5-162)				
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## TERMS AND CONDITIONS OF SERVICE (Continued)

- 5. Xcel Energy may cancel this R\*C Service and any subscription applicable to the R\*C Service on 30 days notice to the Customer. Additionally, Xcel Energy may, upon reasonable notice to a Customer, cancel any subscription applicable to the R\*C Service to assure that the subscription does not extend beyond the term of this R\*C Service. The term of this R\*C Service ends on December 31, 2040, but this date may be modified as allowed by written Commission order.
- 6. The Company will submit reports to the Commission each April 1, or as otherwise ordered in relation to the tracker accounting.
- 7. For customers on time of day tariffs, their usage met by R\*C Service and any excess usage not met by <u>R\*C Service shall both be assigned to the on-peak and off-peak periods in proportion to the Customer's</u> <u>total billing period on-peak and off-peak usage.</u>
- 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.
- 9. 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.
- 10. 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.
- 11. 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.

Docket No. E002/M-19\_\_\_\_ Renewable\*Connect Attachment C, Page 6 of 10

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Section No. 5 Original Sheet No. 159

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#### AVAILABILITY

The Voluntary Renewable\*Connect<sup>TM</sup> ("R\*C") program (Month-to-Month) 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, and also will apply to any customer who as of \_\_\_\_\_\_ received service under the Windsource Program 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 by the Customer 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 below.

"R\*C Resources" for this program means portions of renewable sources applicable to the R\*C Service.

"R\*C Service" means the service offered under this Voluntary Renewable\*Connect Program Rider (Month-to-Month). This R\*C Service includes both R\*C Service Types identified below.

"Subscription Level" means the Customer's elected block of 100 kWh on a monthly basis, entire monthly usage, or Special Event Usage of the energy from the R\*C Resources. The Subscription Level is a blend of renewable resources.

#### RIDER

Customer may either elect to receive R\*C Service or will be migrated to this service if as of \_\_\_\_\_\_ the Customer had been receiving service under the Windsource Program Rider at the same subscription level. The following types of R\*C Service are available ("R\*C Service Type") in the following billing methods ("R\*C Billing Method"):

<u>R\*C Service Types</u> Month-to-Month Special Event <u>R\*C Billing Methods</u> 100 kWh Blocks Entire Monthly Usage Special Event Usage

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.

	(Continued on Sheet No. 5-160)				
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	President, Northern States Power Company, a Minnesota	corporation			
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#### **DETERMINATION OF R\*C PRICE**

The R\*C Price shall be calculated as follows: for the month-to-month and Special Event R\*C Service Type, pricing will be based on the delivered cost of the R\*C Resources applicable to this R\*C Service, 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 below may be revised with approval of the Commission.

Month-To-Month and Special Event		
R*C Service Types		
\$/kWh		

#### NEUTRALITY CHARGE

The neutrality charge is included within the R\*C Price. The neutrality charge mitigates the impact of this R\*C Service on non-participating customers. The neutrality charge is subject to change upon Commission order. The neutrality charge for this R\*C Service is as follows:

ſ	\$/kWh

## TRACKER ACCOUNT

Due to the variability of renewable resources, the Renewable\*Connect program tracker account for this R\*C Service 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. 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 Renewable\*Connect tracker account for this R\*C Service will incorporate the tracker account balance of the Windsource Program Rider. The Company may petition the Commission annually to true up the resource cost, the marketing and administrative cost tracker balance and apply the resulting true-up factors to the Month-To-Month and Special Event R\*C Price.

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(Continued on Sheet No. 5-161)				
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	President, Northern States Power Company, a Mi	nnesota corporation		
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## TERMS AND CONDITIONS OF SERVICE

- A Customer may elect to subscribe to this R\*C Service by selecting: (i) 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. The Company reserves the right to limit new subscriptions based on the capacity of the resources that apply to Renewable\*Connect, for this R\*C Service.
- 2. 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 by the Customer the subscription size does not exceed one hundred (100) percent of the previous annual (12-month) consumption of electric energy by Customer at the Customer premises. 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, 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 Company with 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.
- 3. For a Customer electing to receive its entire Applicable Retail Electric Usage pursuant to this 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 2, divided by 12).
- 4. A Customer's subscription period becomes effective on the following: 1.) if Customer was enrolled in the Windsource Program Rider as of \_\_\_\_\_\_\_, the subscription period under this R\*C Service begins on \_\_\_\_\_\_; or, 2.) the first day of Customer's billing period immediately following the date that the Customer elects to participate in this R\*C Service (but not before \_\_\_\_\_\_). Subscription periods are month-to-month or are for a designated Special Event. Any termination by the Customer on a Special Event R\*C Service Type shall be effective provided that the notice of termination is provided at least 30 days prior to the Special Event. Any termination by the Customer on a Month-to-Month R\*C Service Type shall be effective on the last day of the billing month following 30 days from Company receipt of the termination notice provided by the Customer.

(Continued on Sheet No. 5-162)				
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## TERMS AND CONDITIONS OF SERVICE (Continued)

- 5. Xcel Energy may cancel this R\*C Service and any subscription applicable to the R\*C Service on 30 days notice to the Customer. Additionally, Xcel Energy may, upon reasonable notice to a Customer, cancel any subscription applicable to the R\*C Service to assure that the subscription does not extend beyond the term of this R\*C Service. The term of this R\*C Service ends on December 31, 2040, but this date may be modified as allowed by written Commission order.
- 6. The Company will submit reports to the Commission each April 1, or as otherwise ordered in relation to the tracker accounting.
- 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.
- 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.
- 9. 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.
- 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.
- 11. 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.

Docket No. E002/M-19\_\_\_\_ Renewable\*Connect Attachment D, Page 1 of 28

# Redline

#### VOLUNTARY RENEWABLE\*CONNECT PROGRAM RIDER (LONG TERM)

Section No. 5 Original Sheet No. 163

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## AVAILABILITY

The Voluntary Renewable\*Connect<sup>TM</sup> ("R\*C") program (Long Term), 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.

"High Off-Peak Usage" means that a Customer for the 12 months prior to enrollment has at least 62.5% off-peak usage for a specified premise and has selected the High Off-Peak Usage service for this specified premise in the Service Agreement.

"R\*C Adjustment" means the product resulting from the multiplication of the R\*C Price by the Subscription Level.

<u>"R\*C Bridge" means a time-limited version of this R\*C Service that is available prior to the time that the new</u> resources to support this R\*C Service are in commercial operation and available.

"R\*C Price" means the price as shown in the Rate section below.

<u>"R\*C Resources" for this program means portions of renewable sources applicable to the R\*C Service (Long Term).</u>

"R\*C Service" means the service offered under this Voluntary Renewable\*Connect Program Rider (Long Term).

"Service Agreement" means the tariffed service agreement associated with the R\*C Service which the Customer signs.

"Standard Usage" means any specified premise of the Customer that is not High Off-Peak Usage.

"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, except that the R\*C Bridge may use 100% wind resources.

	(Co	ntinued on Sheet No. 5-164)	
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Docket No.	E002/M-15-985		Order Date:

## VOLUNTARY RENEWABLE\*CONNECT PROGRAM RIDER (LONG TERM)

Section No. 5 Original Sheet No. 164

#### <u>RIDER</u>

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"), and the Customer if it qualifies may elect to participate as a High Off-Peak Usage customer:

R\*C Service Types 5 Years 10 Years 15 Years 20 Years R\*C Billing Methods 100 kWh Blocks Entire Monthly Usage

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.

Additionally, while available, the Customer may elect to participate in the R\*C Bridge. The Company will file a notice in Docket No. E002/M-15-985 as to when the R\*C Bridge period will close. The pricing for the Customer for the R\*C Bridge is an adder to the Customer's retail bill. No neutrality charge is assessed during the Customer's participation in the R\*C Bridge.

#### **DETERMINATION OF R\*C PRICE**

The R\*C Price shall be calculated as follows: For the 5, 10, 15 and 20-year R\*C Service Types, pricing shall be based on the actual delivered cost of the R\*C Resources applicable to this R\*C Service, 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").

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(Continued on Sheet No. 5-165)

By: Christopher B. Clark Effective Date: President, Northern States Power Company, a Minnesota corporation E002/M-15-985 Order Date:

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Docket No.

## <u>RATE</u>

The R\*C Price for the R\*C Resources for each R\*C Service Type shall be as follows based on year of production, unless otherwise provided for in this tariff:

The \$/ kWh rates for the 5, 10, 15 and 20-Year R\*C Service Types are as follows:

	For Customers who are on Standard Usage for Qualifying Premises			For Customers who are on High Off-Peak Usage for Qualifying Premises				
Year	<u>5 Year</u>	<u>10 Year</u>	<u>15 year</u>	<u>20 Year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>15 Year</u>	<u>20 Year</u>
2021								
2022								
2023								
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<u>2040</u>				_				

## R\*C Bridge

The R\*C Bridge is shown below and is applicable to the 5, 10, 15, and 20-Year R\*C Service Types:

Year	<u>\$/kWh</u>
<u>2019</u>	
<u>2020</u>	
<u>2021</u>	

 (Continued on Sheet No. 5-166)

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 President, Northern States Power Company, a Minnesota corporation

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Section No. 5 Original Sheet No. 166

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## **NEUTRALITY CHARGE**

The neutrality charge is included within the R\*C Price. The neutrality charge mitigates the impact of the R\*C program on non-participating customers. The neutrality charge is applicable to the 5, 10, 15, and 20 year Service Types for this R\*C Service and is as follows:

	For Customers who are on Standard Usage for Qualifying Premises	For Customers who are on High Off-Peak Usage for Qualifying Premises
Year	<u>\$/kWh</u>	<u>\$/kWh</u>
<u>2021</u>		
<u>2022</u>		
2023		
2024		
2025		
2026		
2027		
2028		
<u>2029</u>		
<u>2030</u>		
<u>2031</u>		
<u>2032</u>		
<u>2033</u>		
<u>2034</u>		
<u>2035</u>		
<u>2036</u>		
<u>2037</u>		
2038		
2039		
2040		

(Continued on Sheet No. 5-167)

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#### TRACKER ACCOUNT

Due to the variability of renewable resources, the Renewable\*Connect program tracker account for this R\*C Service 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. 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.

#### TERMS AND CONDITIONS OF SERVICE

- Any Customer enrolling in this R\*C Service shall execute the Service Agreement with the Company. <u>The effective date of such service, and the Customer's Subscription Level, will be set forth in the</u> <u>Service Agreement.</u> A Customer's ability to continue receiving this R\*C Service terminates upon the <u>termination of the Service Agreement, subject to the Evergreen Provision in the Service Agreement.</u>
- A Customer may elect to subscribe to this R\*C Service by selecting: (i) a specified number of 100 kWh blocks; or, (ii) the Customer's entire Applicable Retail Electric Usage.
- 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 Customer Premises. 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, 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 Company with 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.
- 4. For a Customer electing to receive its entire Applicable Retail Electric Usage pursuant to this 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. 5-168)				
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## TERMS AND CONDITIONS OF SERVICE (Continued)

5. A Customer's subscription becomes effective on the first day of Customer's billing period immediately following the Company counter-signing the Service Agreement. Subscription periods are 5, 10, 15, or 20 years and are calculated as described in the Service Agreement. Any termination by the Customer ahead of the end of the 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. A Customer that terminates a Service Agreement prior to the completion of that 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) and then multiplied by the following ratio:

Number of months between Termination Date and end the term had there been no early termination

#### Number of months in the term

For purposes of the above equation the word "term" shall mean the number of months in a 5, 20, 15, or 20 year term. Where the Service Agreement is counter-signed before the resources to support this R\*C Service are available, the "term"does not include the number of months associated with that period of time between when the Company has counter-signed the Service Agreement and when the new resources to support this R\*C Service are available. In the event the Customer terminates the Service Agreement prior to when the new resources to support this R\*C Service are available, then the above ratio shall be calculated as being 100% (one hundred percent).

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 and then multiplied by the above ratio 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 Program. The term of this R\*C Service ends on December 31, 2040, but this date may be modified as allowed by written Commission order.

7. The Company will submit reports to the Commission each April 1, or as otherwise ordered in relation to the tracker accounting.

	(Conti	nued on Sheet No. 5-169)	
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TER	MS AND CONDITIONS OF SERVICE (Continued)
<u>8.</u>	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
1	otal billing period on-peak and off-peak usage.
<u>9.</u>	The discounts under Residential Controlled Air Conditioning and Water Heating Rider and Commercial
i	and Industrial Controlled Air Conditioning Riders are not applicable to the charges under this Rider.
<u>10.</u>	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
<u> </u>	Renewable*Connect program supplies are such that the power supply is sold only once to retail
1	customers.
<u>11.</u>	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.
<u>12.</u>	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.
<u>13.</u>	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 alarmed by the Company on its renewable operaty for other purpases

will not also be claimed by the Company as its renewable energy for other purposes.

Agreement as if fully set forth herein.

Section No. 7 Original Sheet No. 105.1

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<b><i>O</i></b> Xcel Energy <sup>®</sup>
RENEWABLE*CONNECT SERVICE AGREEMENT
THIS AGREEMENT ("Service Agreement"), made this       day of         ("Effective Date") by and between NORTHERN STATES POWER COMPANY, a Minnesota corporation ("Xcel         Energy") 414 Nicollet Mall, Minneapolis, Minnesota 55401,         and       ("Customer"), who are each a Party and         together are the Parties.
RECITALS
Customer receives service from Xcel Energy at the following location (the "Premises") which is the subject of its subscription under this Service Agreement: [Address Line 1] [Address Line 2] [City]. [State] [Zip]
If Customer has additional Premises which are the subject of its subscription, they may be identified in an
Attachment to this Service Agreement. Customer may enter into one or more Renewable*Connect Service Agreements governing the same or different Premises.
Customer desires to subscribe to Xcel Energy's Voluntary Renewable*Connect ("R*C") Program (Long Term), which is described in more detail in the General Rules and Regulations and/or in the Rate Schedules of Xcel Energy's Electric Rate Book for Customer's specific service, as they now exist or may hereafter be changed, on
file with the Minnesota Public Utility Commission ("Commission"). Unless otherwise defined in this Service
Agreement, the definitions, terms, and conditions set forth in Xcel Energy's Voluntary Renewable*Connect Program Rider (Long Term), General Rules and Regulations and Rate Schedules are applicable to this Service

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Section No. 7 Original Sheet No. 105.2

AGREEMENT	N
Xcel Energy and Customer agree as follows:	
1. SUBSCRIPTION LEVEL: The Subscription Level is based on the Customer's selection below of the R Service Type, R*C Billing Method; choice of number of 100 kWh Blocks or entire Monthly Usage; whet High Off-Peak Usage is chosen; and, whether R*C Bridge is chosen.	
Choose one of the following (R*C Service Type):	
A5-Year term	
B. 10-Year term	
C. 15-Year term	
D. 20-Year term	
Choose one of the following (R*C Billing Method):	
A100 kWh Blocks (If selecting this, provide here the number of blocks selected:)	
B Entire Monthly Usage	
Designate here with word "YES" is High Off-Peak Usage is chosen:	
Designate here with word "YES" is the R*C Bridge is chosen:	
If "YES" is designated, and if the Customer has designated a number of 100 kWh Blocks as the R*C Billing	
Method, the Customer may designate an equal or lesser number of 100 kWh Blocks for purposes of the R <sup>2</sup>	
Bridge. If this applies to the Customer and the Customer chooses a lesser number of blocks for the R*C B	nage,

(Continued on Sheet No. 7-105.3)

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2. SUBSCRIPTION TERM: The Subscription Term under this Service Agreement shall begin on the first day of
the next billing cycle for each account for the Premises of the Customer identified in this Service Agreement
immediately following Xcel Energy counter-signing this Service Agreement. The Subscription Term shall
continue until the earlier of the following (the "Termination Date"):
A. The last day of a billing cycle following 30 days from the termination notice from customer;
B. The last day of the 5, 10, 15 or 20-Year term where such a term is selected by the Customer, and
where not extended by the Evergreen Provision described below. Where this Service Agreement is
counter-signed by Xcel Energy prior to the time that the new resources to support this R*C Service
are available, Customer may enroll in the R*C Bridge, but for purposes of determining the last day o
the 5, 10, 15 or 20-Year term, the start date of such term begins upon the date set forth in a
Company notice to Customer that the new resources to support this R*C Service will be applicable ;
C. The date the Customer ceases to receive service at the Premises without beginning to take service
at another location in Xcel Energy's Minnesota service area; or
D. The last day that this R*C Service is offered.
After the Termination Date, Customer shall receive service as provided in the General Rules and Regulations
and/or in the Rate Schedules of Xcel Energy's Electric Rate Book for Customer's specific service, as they
now exist or may hereafter be changed, on file with the Commission. The Evergreen Provision is applicable to
a Service Agreement with a 5, 10 and 15 year term, and is as follows: At least 60 days before the end of a 5, 10, or 15 year term of a Service Agreement, the Company may provide notice to the Customer that the end o
this term is approaching and that if the Customer does not provide a notice of cancellation to the Company at
least 10 days prior to the end of the term, the Service Agreement shall continue but be at a 5 year term
commencing at the end of the immediately prior term. The Company may choose to not provide notice to the
Customer that the end of the term is approaching, such as when the resources to support this R*C Service
are not expected to be sufficient or available to reasonably accommodate the Customer's subscription for a 5
year term, and in such a situation the Evergreen Provision will no longer apply to this Customer's Service
Agreement. This Evergreen Provision shall continue to be in effect for successive terms of this Service
Agreement.
2. CLIDDLY DICK. Customer berefy advanded as understands, and surges that Customer has subscribed to
3. SUPPLY RISK: Customer hereby acknowledges, understands, and agrees that Customer has subscribed for
an allocated share in kWh of a portion of the energy from the capacity of the R*C Resources. Xcel Energy
shall not be liable to the Customer in the event that the R*C Resources are unavailable. Customer expressly
acknowledges and agrees to assume any and all risks associated with Xcel Energy's purchase of renewable
energy for Customer's benefit from the R*C Resources, including the risk that the operator of R*C Resources
will be unable to perform under the terms of the power purchase agreement between it and Xcel Energy. To
the extent that the operator(s) of the R*C Resources is unable to perform under the terms of its power
purchase agreement with Xcel Energy, Xcel Energy will be under no obligation to continue to provide R*C
Service to Customer at the rates specified in the tariff for the R*C Service or under this Service Agreement.
4. EARLY TERMINATION: Customer may elect to terminate this agreement on the Termination Date. If
Customer so elects, and the Termination Date pursuant to the above provisions is less than the full term
designated in Paragraph 1 or 5-Year term under the Evergreen Provision in Paragraph 2, Customer shall pay
to Xcel Energy an Early Termination Fee, as detailed in the tariff for the R*C Service as identified in the
Voluntary Renewable*Connect Program Rider for this R*C Service, contained in Xcel Energy's Electric Rate
Book as it now exists or may hereafter be changed, on file with the Commission. Further, if Customer elects
to terminate this Service Agreement prior to the completion of the applicable term, Customer may not

Service and this Service Agreement on written order from the Commission based on good cause shown. (Continued on Sheet No. 7-105.4)

prospectively subscribe the same Premises in a different Renewable\*Connect or Renewable\*Connect Government tranche until the end of what would have been the full term. Xcel Energy may cancel the R\*C

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By: Christopher B. Clark President, Northern States Power Company, a Minnesota corporation

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- 5. CHANGE OF PREMISES: If Customer ceases to receive service at the Premises and begins taking service at another location in Xcel Energy's Minnesota service area, then Xcel Energy will automatically transfer Customer's Renewable\*Connect subscription to the new service location.
- 6. ASSIGNMENT: The only condition under which this Service Agreement may be assigned is if it is assigned to a corporate affiliate of Customer subject to the following conditions: 1.) If the Service Agreement is for a number of 100 kWh Blocks, then the Premises associated such assignment must have sufficient energy usage to be reasonably expected to accommodate this; 2.) If the Service Agreement is the Entire Monthly Usage, then the Premises associated with the Assignment, based on the last 12 months of data, must be within 85% to 115% of the energy usage of the Premises set forth in the Service Agreement is the Entire Monthly Usage, but the Premises associated with the Assignment, based on the last 12 months of data, is greater than 115% of the energy usage of the Premises set forth in the Service Agreement is the Entire Monthly Usage, but the Premises associated with the Assignment, based on the last 12 months of data, is greater than 115% of the energy usage of the Premises set forth in the Service Agreement prior to the assignment, then a roughly equivalent number of 100 kWh blocks may be substituted as part of the Assignment so that the actual subscription amount is roughly the same. 4.) The Company may develop an Assignment form for the Parties to execute in the event that the Company allows an Assignment. No assignment shall be valid unless the Company signs this assignment form.
- 7. FEES, RATES AND CHARGES: All fees, rates and charges applicable to Customer shall be assessed as provided in the General Rules and Regulations and/or in the Rate Schedules of Xcel Energy's Electric Rate Book for Customer's specific service, as they now exist or may hereafter be changed, on file with the Commission. All fees, rates and charges assessed by Xcel Energy under this Service Agreement shall be set forth on a retail electric bill of the Customer and be billed and collected similar to other retail electric charges.
- 8. TERMS AND CONDITIONS: The service hereunder shall be supplied for Customer's use as provided in the General Rules and Regulations and/or in the applicable Rate Schedules of Xcel Energy's Electric Rate Book for Customer's specific service, as they now exist or may hereafter be changed, on file with the Commission. A copy of such Rules and Regulations and applicable Rate Schedules are available from Xcel Energy. Customer will not assign this Agreement except upon written consent of Xcel Energy.
- 9. TRADE SECRET DATA AND PERSONAL DATA: This Service Agreement and any information provided to Xcel Energy in support of this Service Agreement, including but not limited to information or data about the Customer including Customer account information, energy data, Subscription Term and Subscription Level, may be provided to the Commission and/or other Minnesota regulatory agencies. Information related to Subscription Level and Subscription Term may be trade secrets of Customer and will be marked Trade Secret pursuant to Minnesota Government Data Practices Act.
- 10. DISCLAIMER OF THIRD PARTY BENEFICIARY RIGHTS: Nothing in this Service Agreement or the tariff for the R\*C Service shall be construed to create any duty to, or standard of care with reference to, or any liability to, any person not a party to this Service Agreement.

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	(Continued on Sheet No. 7-105.5)	
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11. INDEMNIFICATION AND LIMITATION OF LIABILITY: To the extent permitted by applicable law, Customer agrees to indemnify, defend, and hold harmless Xcel Energy and all of its affiliated companies and each of their officers, directors, employees, and agents, from and against any and all third party liability, damages (direct, indirect and/or special), loss, cost, and expense of any kind (including but not limited to attorneys' fees and litigation costs) arising out of or in association with this Service Agreement or the R\*C Service, including, but not limited to, Xcel Energy's purchasing renewable energy on Customer's behalf at Customer's request and the purchase of renewable energy from the R\*C Program resources under the R\*C Service or this Service Agreement.

Customer acknowledges, understands, accepts, and agrees that Xcel Energy will not be liable to Customer for any consequential, incidental, punitive, exemplary or indirect damages, lost profits, or other business interruption damages, whether by statute, in tort or in contract, under the R\*C Service or this Service Agreement or any transaction thereto, or otherwise. It is the intent of the parties that the limitations herein imposed on remedies and the measure of damages be without regard to the causes related thereto, including the negligence of any party, whether such negligence be sole, joint or concurrent, or active or passive.

Other than those expressly provided herein, Xcel Energy makes no other representation or warranty, written or oral, express or implied, in connection with the purchase of renewable energy under the R\*C Service and this Service Agreement. All warranties of merchantability or of fitness for a particular purpose or arising from a course of dealing or usage of trade are specifically excluded.

- 12. DISPUTE RESOLUTION: Failure of either party to enforce any term or condition of this Service Agreement shall not constitute a waiver of that term or condition or of any other term or condition of this Service Agreement. In the event of any dispute under this Service Agreement or the R\*C Service that cannot be resolved between the Parties, then either Party may refer the dispute for resolution to the Commission, which shall maintain continuing jurisdiction over this Service Agreement and the R\*C Service.
- 13. COUNTERPARTS: This Agreement may be executed in any number of counterparts and by any combination of the parties hereto in separate counterparts, each of which counterparts shall be an original and all of which taken together shall constitute one and the same Agreement.

(Continued on Sheet No. 7-105.6)

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Section No. 7 Original Sheet No. 105.6

14. REPRESENTATION ON AUTHORITY OF SIG	GNATURES: Each person signing this Agreement represents	N			
and warrants that he or she is duly authorized	and has legal capacity to execute and deliver this Agreement.				
Xcel Energy and Customer represent and warrant to the other that the execution and delivery of this					
Agreement and the performance of such party	's obligations hereunder have been duly authorized and that				
this Agreement is a valid and legal agreement	binding on such party and enforceable in accordance with its				
terms.					
NORTHERN STATES POWER COMPANY,					
a Minnesota corporation ("Xcel Energy")					
XCEL ENERGY REPRESENTATIVE	CUSTOMER				
Print Full Name:	Print Full Name:				
Signature:	Signature:				
Title:	Title:				
		I			
Date:	Date:	N			

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## Clean

#### VOLUNTARY RENEWABLE\*CONNECT PROGRAM RIDER (LONG TERM)

Section No. 5 Original Sheet No. 163

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#### AVAILABILITY

The Voluntary Renewable\*Connect<sup>TM</sup> ("R\*C") program (Long Term), 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.

"High Off-Peak Usage" means that a Customer for the 12 months prior to enrollment has at least 62.5% off-peak usage for a specified premise and has selected the High Off-Peak Usage service for this specified premise in the Service Agreement.

"R\*C Adjustment" means the product resulting from the multiplication of the R\*C Price by the Subscription Level.

"R\*C Bridge" means a time-limited version of this R\*C Service that is available prior to the time that the new resources to support this R\*C Service are in commercial operation and available.

"R\*C Price" means the price as shown in the Rate section below.

"R\*C Resources" for this program means portions of renewable sources applicable to the R\*C Service (Long Term).

"R\*C Service" means the service offered under this Voluntary Renewable\*Connect Program Rider (Long Term).

"Service Agreement" means the tariffed service agreement associated with the R\*C Service which the Customer signs.

"Standard Usage" means any specified premise of the Customer that is not High Off-Peak Usage.

"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, except that the R\*C Bridge may use 100% wind resources.

	(Cont	nued on Sheet No. 5-164)	
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## VOLUNTARY RENEWABLE\*CONNECT PROGRAM RIDER (LONG TERM)

Section No. 5 Original Sheet No. 164

#### 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"), and the Customer if it qualifies may elect to participate as a High Off-Peak Usage customer:

R\*C Service Types 5 Years 10 Years 15 Years 20 Years <u>R\*C Billing Methods</u> 100 kWh Blocks Entire Monthly Usage

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.

Additionally, while available, the Customer may elect to participate in the R\*C Bridge. The Company will file a notice in Docket No. E002/M-15-985 as to when the R\*C Bridge period will close. The pricing for the Customer for the R\*C Bridge is an adder to the Customer's retail bill. No neutrality charge is assessed during the Customer's participation in the R\*C Bridge.

#### **DETERMINATION OF R\*C PRICE**

The R\*C Price shall be calculated as follows: For the 5, 10, 15 and 20-year R\*C Service Types, pricing shall be based on the actual delivered cost of the R\*C Resources applicable to this R\*C Service, 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").

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 (Continued on Sheet No. 5-165)

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#### RATE

The R\*C Price for the R\*C Resources for each R\*C Service Type shall be as follows based on year of production, unless otherwise provided for in this tariff:

The \$/ kWh rates for the 5, 10, 15 and 20-Year R\*C Service Types are as follows:

	For Customers who are on Standard Usage for Qualifying Premises			For Customers who are on High Off-Peak Usage for Qualifying Premises				
Year	5 Year	10 Year	15 year	20 Year	5 Year	10 Year	15 Year	20 Year
2021								
2022								
2023								
2024								
2025								
2026								
2027								
2028								
2029								
2030								
2031								
2032								
2033								
2034								
2035								
2036								
2037	1							
2038	1							
2039	1							
2040								

## **R\*C Bridge**

The R\*C Bridge is shown below and is applicable to the 5, 10, 15, and 20-Year R\*C Service Types:

Year	\$/kWh
2019	
2020	
2021	

(Continued on Sheet No. 5-166)				
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## **NEUTRALITY CHARGE**

The neutrality charge is included within the R\*C Price. The neutrality charge mitigates the impact of the R\*C program on non-participating customers. The neutrality charge is applicable to the 5, 10, 15, and 20 year Service Types for this R\*C Service and is as follows:

	For Customers who are on Standard Usage for Qualifying Premises	For Customers who are on High Off-Peak Usage for Qualifying Premises
Year	\$/kWh	\$/kWh
2021		
2022		
2023		
2024		
2025		
2026		
2027		
2028		
2029		
2030		
2031		
2032		
2033		
2034		
2035		
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2038		
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2040		

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#### VOLUNTARY RENEWABLE\*CONNECT PROGRAM RIDER (LONG TERM) (Continued)

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#### TRACKER ACCOUNT

Due to the variability of renewable resources, the Renewable\*Connect program tracker account for this R\*C Service 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. 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.

#### TERMS AND CONDITIONS OF SERVICE

- 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, subject to the Evergreen Provision in the Service Agreement.
- A Customer may elect to subscribe to this R\*C Service by selecting: (i) a specified number of 100 kWh blocks; or, (ii) the Customer's entire Applicable Retail Electric Usage.
- 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 Customer Premises. 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, 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 Company with 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.
- 4. For a Customer electing to receive its entire Applicable Retail Electric Usage pursuant to this 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).

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#### VOLUNTARY RENEWABLE\*CONNECT PROGRAM RIDER (LONG TERM) (Continued)

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#### TERMS AND CONDITIONS OF SERVICE (Continued)

5. A Customer's subscription becomes effective on the first day of Customer's billing period immediately following the Company counter-signing the Service Agreement. Subscription periods are 5, 10, 15, or 20 years and are calculated as described in the Service Agreement. Any termination by the Customer ahead of the end of the 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. A Customer that terminates a Service Agreement prior to the completion of that 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) and then multiplied by the following ratio:

Number of months between Termination Date and end the term had there been no early termination

#### Number of months in the term

For purposes of the above equation the word "term" shall mean the number of months in a 5, 20, 15, or 20 year term. Where the Service Agreement is counter-signed before the resources to support this R\*C Service are available, the "term" does not include the number of months associated with that period of time between when the Company has counter-signed the Service Agreement and when the new resources to support this R\*C Service are available. In the event the Customer terminates the Service Agreement prior to when the new resources to support this R\*C Service as a support this R\*C Service are available. In the event the Customer terminates the Service Agreement prior to when the new resources to support this R\*C Service are available, then the above ratio shall be calculated as being 100% (one hundred percent).

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 and then multiplied by the above ratio to determine the value of the Early Termination Fee.

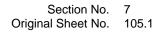
- 6. Xcel Energy may cancel this R\*C Service and any Service Agreement applicable to the R\*C Service on written order from the Commission based on good cause shown. Additionally, Xcel Energy may, upon reasonable notice to a Customer, cancel any Service Agreement applicable to the R\*C Service to assure that the Service Agreement does not extend beyond the term of this R\*C Program. The term of this R\*C Service ends on December 31, 2040, but this date may be modified as allowed by written Commission order.
- 7. The Company will submit reports to the Commission each April 1, or as otherwise ordered in relation to the tracker accounting.

	(Cont	tinued on Sheet No. 5-169)	
Date Filed:		By: Christopher B. Clark	Effective Date:
	President, Northern St	ates Power Company, a Minnesota cor	ooration
Docket No.	E002/M-15-985		Order Date:

#### VOLUNTARY RENEWABLE\*CONNECT PROGRAM RIDER (LONG TERM) (Continued)

TE	RMS AND CONDITIONS OF SERVICE (Continued)
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.

- 9. 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.
- 10. 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.
- 11. 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.
- 12. 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.
- 13. 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.



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<b>2</b> Xcel Energy <sup>®</sup>
RENEWABLE*CONNECT SERVICE AGREEMENT
THIS AGREEMENT ("Service Agreement"), made this day of,, ("Effective Date") by and between NORTHERN STATES POWER COMPANY, a Minnesota corporation ("Xcel Energy") 414 Nicollet Mall, Minneapolis, Minnesota 55401, and ("Customer"), who are each a Party and together are the Parties.
RECITALS
Customer receives service from Xcel Energy at the following location (the "Premises") which is the subject of its subscription under this Service Agreement: [Address Line 1] [Address Line 2] [City], [State] [Zip]
If Customer has additional Premises which are the subject of its subscription, they may be identified in an Attachment to this Service Agreement. Customer may enter into one or more Renewable*Connect Service Agreements governing the same or different Premises.
Customer desires to subscribe to Xcel Energy's Voluntary Renewable*Connect ("R*C") Program (Long Term), which is described in more detail in the General Rules and Regulations and/or in the Rate Schedules of Xcel

which is described in more detail in the General Rules and Regulations and/or in the Rate Schedules of Xcel Energy's Electric Rate Book for Customer's specific service, as they now exist or may hereafter be changed, on file with the Minnesota Public Utility Commission ("Commission"). Unless otherwise defined in this Service Agreement, the definitions, terms, and conditions set forth in Xcel Energy's Voluntary Renewable\*Connect Program Rider (Long Term), General Rules and Regulations and Rate Schedules are applicable to this Service Agreement as if fully set forth herein.

(Continued on Sheet No. 7-105.2)			
Date Filed:		By: Christopher B. Clark	Effective Date:
	President, Northern Sta	ates Power Company, a Minnesota corp	ooration
Docket No.	E002/M-15-985		Order Date:

Section No. 7 Original Sheet No. 105.2

AGREEMENT	N
Xcel Energy and Customer agree as follows:	
<ol> <li>SUBSCRIPTION LEVEL: The Subscription Level is based on the Customer's selection below of the R*C Service Type, R*C Billing Method; choice of number of 100 kWh Blocks or entire Monthly Usage; whether High Off-Peak Usage is chosen; and, whether R*C Bridge is chosen.</li> </ol>	
Choose one of the following (R*C Service Type): A 5-Year term B 10-Year term C 15-Year term D 20-Year term	
Choose one of the following (R*C Billing Method): A 100 kWh Blocks (If selecting this, provide here the number of blocks selected:) B Entire Monthly Usage	
Designate here with word "YES" is High Off-Peak Usage is chosen:	
Designate here with word "YES" is the R*C Bridge is chosen: If "YES" is designated, and if the Customer has designated a number of 100 kWh Blocks as the R*C Billing Method, the Customer may designate an equal or lesser number of 100 kWh Blocks for purposes of the R*C Bridge. If this applies to the Customer and the Customer chooses a lesser number of blocks for the R*C Bridge, designate the number here: 100 kWh Blocks for the R*C Bridge.	N

(Continued on Sheet No. 7-105.3)

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- SUBSCRIPTION TERM: The Subscription Term under this Service Agreement shall begin on the first day of the next billing cycle for each account for the Premises of the Customer identified in this Service Agreement immediately following Xcel Energy counter-signing this Service Agreement. The Subscription Term shall continue until the earlier of the following (the "Termination Date"):
  - A. The last day of a billing cycle following 30 days from the termination notice from customer;
  - B. The last day of the 5, 10, 15 or 20-Year term where such a term is selected by the Customer, and where not extended by the Evergreen Provision described below. Where this Service Agreement is counter-signed by Xcel Energy prior to the time that the new resources to support this R\*C Service are available, Customer may enroll in the R\*C Bridge, but for purposes of determining the last day of the 5, 10, 15 or 20-Year term, the start date of such term begins upon the date set forth in a Company notice to Customer that the new resources to support this R\*C Service will be applicable ;
  - C. The date the Customer ceases to receive service at the Premises without beginning to take service at another location in Xcel Energy's Minnesota service area; or
  - D. The last day that this R\*C Service is offered.

After the Termination Date, Customer shall receive service as provided in the General Rules and Regulations and/or in the Rate Schedules of Xcel Energy's Electric Rate Book for Customer's specific service, as they now exist or may hereafter be changed, on file with the Commission. The Evergreen Provision is applicable to a Service Agreement with a 5, 10 and 15 year term, and is as follows: At least 60 days before the end of a 5, 10, or 15 year term of a Service Agreement, the Company may provide notice to the Customer that the end of this term is approaching and that if the Customer does not provide a notice of cancellation to the Company at least 10 days prior to the end of the term, the Service Agreement shall continue but be at a 5 year term commencing at the end of the term is approaching, such as when the resources to support this R\*C Service are not expected to be sufficient or available to reasonably accommodate the Customer's subscription for a 5 year term, and in such a situation the Evergreen Provision will no longer apply to this Customer's Service Agreement. This Evergreen Provision shall continue to be in effect for successive terms of this Service Agreement.

- 3. SUPPLY RISK: Customer hereby acknowledges, understands, and agrees that Customer has subscribed for an allocated share in kWh of a portion of the energy from the capacity of the R\*C Resources. Xcel Energy shall not be liable to the Customer in the event that the R\*C Resources are unavailable. Customer expressly acknowledges and agrees to assume any and all risks associated with Xcel Energy's purchase of renewable energy for Customer's benefit from the R\*C Resources, including the risk that the operator of R\*C Resources will be unable to perform under the terms of the power purchase agreement between it and Xcel Energy. To the extent that the operator(s) of the R\*C Resources is unable to perform under the terms of its power purchase agreement with Xcel Energy, Xcel Energy will be under no obligation to continue to provide R\*C Service to Customer at the rates specified in the tariff for the R\*C Service or under this Service Agreement.
- 4. EARLY TERMINATION: Customer may elect to terminate this agreement on the Termination Date. If Customer so elects, and the Termination Date pursuant to the above provisions is less than the full term designated in Paragraph 1 or 5-Year term under the Evergreen Provision in Paragraph 2, Customer shall pay to Xcel Energy an Early Termination Fee, as detailed in the tariff for the R\*C Service as identified in the Voluntary Renewable\*Connect Program Rider for this R\*C Service, contained in Xcel Energy's Electric Rate Book as it now exists or may hereafter be changed, on file with the Commission. Further, if Customer elects to terminate this Service Agreement prior to the completion of the applicable term, Customer may not prospectively subscribe the same Premises in a different Renewable\*Connect or Renewable\*Connect Government tranche until the end of what would have been the full term. Xcel Energy may cancel the R\*C Service and this Service Agreement on written order from the Commission based on good cause shown.

(Continued on Sheet No. 7-105.4)

Date Filed:	By: Christopher B. C	lark Eff	ective Date:	
	President, Northern States Power Company, a Minnesota corporation			
Docket No.	E002/M-15-985	Ord	der Date:	

Section No. 7 Original Sheet No. 105.4

- CHANGE OF PREMISES: If Customer ceases to receive service at the Premises and begins taking service at another location in Xcel Energy's Minnesota service area, then Xcel Energy will automatically transfer Customer's Renewable\*Connect subscription to the new service location.
- 6. ASSIGNMENT: The only condition under which this Service Agreement may be assigned is if it is assigned to a corporate affiliate of Customer subject to the following conditions: 1.) If the Service Agreement is for a number of 100 kWh Blocks, then the Premises associated such assignment must have sufficient energy usage to be reasonably expected to accommodate this; 2.) If the Service Agreement is the Entire Monthly Usage, then the Premises associated with the Assignment, based on the last 12 months of data, must be within 85% to 115% of the energy usage of the Premises set forth in the Service Agreement prior to the assignment in order to keep the Entire Monthly Usage election; 3.) If the Service Agreement is the Entire Monthly Usage, but the Premises associated with the Assignment, based on the last 12 months of data, is greater than 115% of the energy usage of the Premises set forth in the Service Agreement prior to the assignment, then a roughly equivalent number of 100 kWh blocks may be substituted as part of the Assignment so that the actual subscription amount is roughly the same. 4.) The Company may develop an Assignment form for the Parties to execute in the event that the Company allows an Assignment. No assignment shall be valid unless the Company signs this assignment form.
- 7. FEES, RATES AND CHARGES: All fees, rates and charges applicable to Customer shall be assessed as provided in the General Rules and Regulations and/or in the Rate Schedules of Xcel Energy's Electric Rate Book for Customer's specific service, as they now exist or may hereafter be changed, on file with the Commission. All fees, rates and charges assessed by Xcel Energy under this Service Agreement shall be set forth on a retail electric bill of the Customer and be billed and collected similar to other retail electric charges.
- 8. TERMS AND CONDITIONS: The service hereunder shall be supplied for Customer's use as provided in the General Rules and Regulations and/or in the applicable Rate Schedules of Xcel Energy's Electric Rate Book for Customer's specific service, as they now exist or may hereafter be changed, on file with the Commission. A copy of such Rules and Regulations and applicable Rate Schedules are available from Xcel Energy. Customer will not assign this Agreement except upon written consent of Xcel Energy.
- 9. TRADE SECRET DATA AND PERSONAL DATA: This Service Agreement and any information provided to Xcel Energy in support of this Service Agreement, including but not limited to information or data about the Customer including Customer account information, energy data, Subscription Term and Subscription Level, may be provided to the Commission and/or other Minnesota regulatory agencies. Information related to Subscription Level and Subscription Term may be trade secrets of Customer and will be marked Trade Secret pursuant to Minnesota Government Data Practices Act.
- DISCLAIMER OF THIRD PARTY BENEFICIARY RIGHTS: Nothing in this Service Agreement or the tariff for the R\*C Service shall be construed to create any duty to, or standard of care with reference to, or any liability to, any person not a party to this Service Agreement.

(Continued on Sheet No. 7-105.5)				
Date Filed:	By: Christopher B. Clark	Effective Date:		
	President, Northern States Power Company, a Minne	sota corporation		
Docket No.	E002/M-15-985	Order Date:		

Section No. 7 105.5 Original Sheet No.

11. INDEMNIFICATION AND LIMITATION OF LIABILITY: To the extent permitted by applicable law, Customer agrees to indemnify, defend, and hold harmless Xcel Energy and all of its affiliated companies and each of their officers, directors, employees, and agents, from and against any and all third party liability, damages (direct, indirect and/or special), loss, cost, and expense of any kind (including but not limited to attorneys' fees and litigation costs) arising out of or in association with this Service Agreement or the R\*C Service, including, but not limited to, Xcel Energy's purchasing renewable energy on Customer's behalf at Customer's request and the purchase of renewable energy from the R\*C Program resources under the R\*C Service or this Service Agreement.

Customer acknowledges, understands, accepts, and agrees that Xcel Energy will not be liable to Customer for any consequential, incidental, punitive, exemplary or indirect damages, lost profits, or other business interruption damages, whether by statute, in tort or in contract, under the R\*C Service or this Service Agreement or any transaction thereto, or otherwise. It is the intent of the parties that the limitations herein imposed on remedies and the measure of damages be without regard to the causes related thereto, including the negligence of any party, whether such negligence be sole, joint or concurrent, or active or passive.

Other than those expressly provided herein, Xcel Energy makes no other representation or warranty, written or oral, express or implied, in connection with the purchase of renewable energy under the R\*C Service and this Service Agreement. All warranties of merchantability or of fitness for a particular purpose or arising from a course of dealing or usage of trade are specifically excluded.

- 12. DISPUTE RESOLUTION: Failure of either party to enforce any term or condition of this Service Agreement shall not constitute a waiver of that term or condition or of any other term or condition of this Service Agreement. In the event of any dispute under this Service Agreement or the R\*C Service that cannot be resolved between the Parties, then either Party may refer the dispute for resolution to the Commission, which shall maintain continuing jurisdiction over this Service Agreement and the R\*C Service.
- 13. COUNTERPARTS: This Agreement may be executed in any number of counterparts and by any combination of the parties hereto in separate counterparts, each of which counterparts shall be an original and all of which taken together shall constitute one and the same Agreement.

	(Conti	nued on Sheet No. 7-105.6)	
Date Filed:		By: Christopher B. Clark	Effective Date:
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Docket No.	E002/M-15-985		Order Date:

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Section No. 7 Original Sheet No. 105.6

14. REPRESENTATION ON AUTHORITY OF SIGNATURI and warrants that he or she is duly authorized and has Xcel Energy and Customer represent and warrant to th Agreement and the performance of such party's obligat this Agreement is a valid and legal agreement binding of terms.	legal capacity to execute and deliver this Agreement. e other that the execution and delivery of this tions hereunder have been duly authorized and that	N
NORTHERN STATES POWER COMPANY, a Minnesota corporation ("Xcel Energy")		
XCEL ENERGY REPRESENTATIVE	CUSTOMER	
Print Full Name:	Print Full Name:	
Signature:	Signature:	
Title:	Title:	
Date:	Date:	I N

Date Filed:		By: Christopher B. Clark	Effective Date:
	President,	Northern States Power Company, a Minnesota	corporation
Docket No.	E002/M-15-985		Order Date:

Docket No. E002/M-19\_\_\_\_ Renewable\*Connect Attachment E, Page 1 of 6

# Redline

#### 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						
Docket No.	E002/GR-15-826		Order Date:	06-12-17		

#### VOLUNTARY RENEWABLE AND HIGH-EFFICIENCY ENERGY PURCHASE (WINDSOURCE PROGRAM) RIDER (Continued)

#### TERMS AND CONDITIONS OF SERVICE

- 1. 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.
- <u>[Intentionally omitted.]</u>The minimum subscription periods are one year for residential customers and three years for non-residential 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.
- 3. 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.
- 5. Xcel Energy may in its discretion allow a non-Windsource customer a limited subscription to Windsource to apply the Adjustment to the energy used by a single event or series of events without making a long-term purchase commitment.
- 6. 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.

Docket No. E002/M-19\_\_\_\_ Renewable\*Connect Attachment E, Page 4 of 6

# Clean

#### 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)		
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	President, No	rthern States Power Company, a Minne	esota corporation	
Docket No.	E002/GR-15-826		Order Date:	06-12-17

#### VOLUNTARY RENEWABLE AND HIGH-EFFICIENCY ENERGY PURCHASE (WINDSOURCE PROGRAM) RIDER (Continued)

Section No. 5 7th Revised Sheet No. 134.1

#### TERMS AND CONDITIONS OF SERVICE

- 1. 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. [Intentionally omitted.]
- 3. 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.
- 5. Xcel Energy may in its discretion allow a non-Windsource customer a limited subscription to Windsource to apply the Adjustment to the energy used by a single event or series of events without making a long-term purchase commitment.
- 6. 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.

Docket No. E002/M-19\_\_\_\_ Renewable\*Connect Attachment E-1, Page 1 of 6

# Redline

#### VOLUNTARY RENEWABLE AND HIGH-EFFICIENCY ENERGY PURCHASE (WINDSOURCE PROGRAM) RIDER (CLOSED)

Section No. 5 <u>7th8th</u> 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. <u>Service</u> under this Rider is no longer available as of \_\_\_\_\_\_. All customers receiving service under this Rider as of this date will receive service under the Voluntary Renewable\*Connect Program Rider (Month-to-Month). Service under this Voluntary Renewable\*Connect Program Rider (Month-to-Month). Service under this unless if the Customer cancels the service or changes the subscription level.

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:	<del>11-02-15</del>	By: Christopher B. Clark	Effective Date:	<del>10-01-17</del>
•	President, North	nern States Power Company, a Minne	esota corporation	
Docket No.	E002/ <del>GR-15-826</del> M-15-9	<u>85</u>	Order Date:	<del>06-12-17</del>

#### VOLUNTARY RENEWABLE AND HIGH-EFFICIENCY ENERGY PURCHASE (WINDSOURCE PROGRAM) RIDER (CLOSED) (Continued)

Section No. 5 7th<u>8th</u> 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. [Intentionally omitted.]
- 3. 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.
- 5. Xcel Energy may in its discretion allow a non-Windsource customer a limited subscription to Windsource to apply the Adjustment to the energy used by a single event or series of events without making a long-term purchase commitment.
- 6. 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.

Docket No. E002/M-19\_\_\_\_ Renewable\*Connect Attachment E-1, Page 4 of 6

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#### VOLUNTARY RENEWABLE AND HIGH-EFFICIENCY ENERGY PURCHASE (WINDSOURCE PROGRAM) RIDER (CLOSED)

Section No. 5 8th 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. Service under this Rider is no longer available as of \_\_\_\_\_\_. All customers receiving service under this Rider as of this date will receive service under the Voluntary Renewable\*Connect Program Rider (Month-to-Month). Service under this Voluntary Renewable\*Connect Program Rider (Month-to-Month) will be at the Customer's same subscription level unless if the Customer cancels the service or changes the subscription level.

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 <u>\$3.53</u> 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:	By: Christopher B. Clark	Effective Date:
	President, Northern States Power Company, a Minr	esota corporation
Docket No.	E002/M-15-985	Order Date:

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#### VOLUNTARY RENEWABLE AND HIGH-EFFICIENCY ENERGY PURCHASE (WINDSOURCE PROGRAM) RIDER (CLOSED) (Continued)

Section No. 5 8th 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. [Intentionally omitted.]
- 3. 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.
- 5. Xcel Energy may in its discretion allow a non-Windsource customer a limited subscription to Windsource to apply the Adjustment to the energy used by a single event or series of events without making a long-term purchase commitment.
- 6. 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.

# Renewable\*Connect Pricing - Month-to-Month

## Cents per kWh

	2021	2022	2023	2024	2025	2026	2027	2028
Renewable*Connect - Month-to-Month	YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8
Blended Indicative Resource Cost	3.403							
(Less) Capacity Credit	0.538							
Net Energy Resources Cost	2.865							
(Add) Neutrality Charge (Line Losses, Curtailment & Other Costs)	0.509							
Delivered Resource Cost	3.374							
(Add) Administrative Cost	0.150							
Total Pricing	3.524							

\*\*\*Indicative Pricing\*\*\*

## Renewable\*Connect High Off-Peak Pricing with Pricing Components - Long Term

5- Year and 10-Year Pricing (in Cents per kWh)

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
5-Year Renewable*Connect - High Off-Peak (2021-30)	YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10
Blended Indicative Resource Cost	1.952	1.991	2.031	2.072	2.113	2.156	2.199	2.243	2.288	2.333
(Less) Capacity Credit	0.000	0.000	0.000	0.000	0.035	0.072	0.110	0.150	0.192	0.216
Net Energy Resources Cost	1.952	1.991	2.031	2.072	2.078	2.084	2.089	2.093	2.096	2.117
(Add) Neutrality Charge (Line Losses, Curtailment & Other Costs)	0.693	0.706	0.721	0.734	0.749	0.764	0.780	0.796	0.811	0.829
Delivered Resource Cost	2.645	2.697	2.752	2.806	2.827	2.848	2.869	2.889	2.907	2.946
(Add) Administrative Cost	0.115	0.115	0.115	0.115	0.115	0.115	0.115	0.115	0.115	0.115
Total Renewable*Connect High Off-Peak Pricing	2.760	2.812	2.867	2.921	2.942	2.963	2.984	3.004	3.022	3.061
	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Continued - 5-Year Renewable*Connect - High Off-Peak (2031-40)	YR11	YR12	YR13	YR14	YR15	YR16	YR17	YR18	YR19	YR20
Blended Indicative Resource Cost	2.380	2.428	2.476	2.526	2.576	2.628	2.680	2.734	2.788	2.827
(Less) Capacity Credit	0.241	0.267	0.294	0.323	0.352	0.383	0.415	0.448	0.483	0.494
Net Energy Resources Cost	2.139	2.161	2.182	2.203	2.224	2.245	2.265	2.286	2.305	2.333
(Add) Neutrality Charge (Line Losses, Curtailment & Other Costs)	0.844	0.859	0.877	0.895	0.913	0.931	0.949	0.968	0.987	1.006
Delivered Resource Cost	2.983	3.020	3.059	3.098	3.137	3.176	3.214	3.254	3.292	3.339
(Add) Administrative Cost	0.115	0.115	0.115	0.115	0.115	0.115	0.115	0.115	0.115	0.115
Total Renewable*Connect High Off-Peak Pricing	3.098	3.135	3.174	3.213	3.252	3.291	3.329	3.369	3.407	3.454
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
10-Year Renewable*Connect - High Off-Peak (2021-30)	YR1	YR2	YR3	2024 YR4	YR5	2020 YR6	YR7	YR8	YR9	2030 YR10
Blended Indicative Resource Cost	1.952	1.991	2.031	2.072	2.113	2.156	2.199	2.243	2.288	2.333
(Less) Capacity Credit	0.000	0.000	0.000	0.000	0.035	0.072	0.110	0.150	0.192	0.216
Net Energy Resources Cost	1.952	1.991	2.031	2.072	2.078	2.084	2.089	2.093	2.096	2.117
(Add) Neutrality Charge (Line Losses, Curtailment & Other Costs)	0.693	0.706	0.721	0.734	0.749	0.764	0.780	0.796	0.811	0.829
Delivered Resource Cost	2.645	2.697	2.752	2.806	2.827	2.848	2.869	2.889	2.907	2.946
(Add) Administrative Cost	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100
Total Renewable*Connect High Off-Peak Pricing	2.745	2.797	2.852	2.906	2.927	2.948	2.969	2.989	3.007	3.046
	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Continued - 10-Year Renewable*Connect - High Off-Peak (2031-40)	YR11	YR12	YR13	YR14	YR15	YR16	YR17	YR18	YR19	YR20
Blended Indicative Resource Cost	2.380	2.428	2.476	2.526	2.576	2.628	2.680	2.734	2.788	2.827
(Less) Capacity Credit	0.241	0.267	0.294	0.323	0.352	0.383	0.415	0.448	0.483	0.494
Net Energy Resources Cost	2.139	2.161	2.182	2.203	2.224	2.245	2.265	2.286	2.305	2.333
(Add) Neutrality Charge (Line Losses, Curtailment & Other Costs)	0.844	0.859	0.877	0.895	0.913	0.931	0.949	0.968	0.987	1.006
Delivered Resource Cost	2.983	3.020	3.059	3.098	3.137	3.176	3.214	3.254	3.292	3.339
	0.100	0.100	0.100							0.100
(Add) Administrative Cost	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100

\*\*\*Indicative Pricing\*\*\*

## Renewable\*Connect High Off-Peak Pricing with Pricing Components - Long Term

15- Year and 20-Year Pricing (in Cents per kWh)

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
15-Year Renewable*Connect - High Off-Peak (2021-30)	YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10
Blended Indicative Resource Cost	1.952	1.991	2.031	2.072	2.113	2.156	2.199	2.243	2.288	2.333
(Less) Capacity Credit	0.000	0.000	0.000	0.000	0.035	0.072	0.110	0.150	0.192	0.216
Net Energy Resources Cost	1.952	1.991	2.031	2.072	2.078	2.084	2.089	2.093	2.096	2.117
(Add) Neutrality Charge (Line Losses, Curtailment & Other Costs)	0.693	0.706	0.721	0.734	0.749	0.764	0.780	0.796	0.811	0.829
Delivered Resource Cost	2.645	2.697	2.752	2.806	2.827	2.848	2.869	2.889	2.907	2.946
(Add) Administrative Cost	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085
Total Renewable*Connect High Off-Peak Pricing	2.730	2.782	2.837	2.891	2.912	2.933	2.954	2.974	2.992	3.031
	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Continued - 15-Year Renewable*Connect - High Off-Peak (2031-40)	YR11	YR12	YR13	YR14	YR15	YR16	YR17	YR18	YR19	YR20
Blended Indicative Resource Cost	2.380	2.428	2.476	2.526	2.576	2.628	2.680	2.734	2.788	2.827
(Less) Capacity Credit	0.241	0.267	0.294	0.323	0.352	0.383	0.415	0.448	0.483	0.494
Net Energy Resources Cost	2.139	2.161	2.182	2.203	2.224	2.245	2.265	2.286	2.305	2.333
(Add) Neutrality Charge (Line Losses, Curtailment & Other Costs)	0.844	0.859	0.877	0.895	0.913	0.931	0.949	0.968	0.987	1.006
Delivered Resource Cost	2.983	3.020	3.059	3.098	3.137	3.176	3.214	3.254	3.292	3.339
(Add) Administrative Cost	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085
Total Renewable*Connect High Off-Peak Pricing	3.068	3.105	3.144	3.183	3.222	3.261	3.299	3.339	3.377	3.424
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
20-Year Renewable*Connect - High Off-Peak (2021-30)	YR1	YR2	YR3	YR4	YR5	2020 YR6	YR7	2020 YR8	2029 YR9	YR10
Blended Indicative Resource Cost	1.952	1.991	2.031	2.072	2.113	2.156	2.199	2.243	2.288	2.333
(Less) Capacity Credit	0.000	0.000	0.000	0.000	0.035	0.072	0.110	0.150	0.192	0.216
Net Energy Resources Cost	1.952	1.991	2.031	2.072	2.078	2.084	2.089	2.093	2.096	2.117
( <i>Add</i> ) Neutrality Charge (Line Losses, Curtailment & Other Costs)	0.693	0.706	0.721	0.734	0.749	0.764	0.780	0.796	0.811	0.829
Delivered Resource Cost	2.645	2.697	2.752	2.806	2.827	2.848	2.869	2.889	2.907	2.946
(Add) Administrative Cost	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075
Total Renewable*Connect High Off-Peak Pricing	2.720	2.772	2.827	2.881	2.902	2.923	2.944	2.964	2.982	3.021
	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Continued - 20-Year Renewable*Connect - High Off-Peak (2031-40)	YR11	YR12	YR13	YR14	YR15	YR16	YR17	YR18	YR19	YR20
Blended Indicative Resource Cost	2.380	2.428	2.476	2.526	2.576	2.628	2.680	2.734	2.788	2.827
(Less) Capacity Credit	0.241	0.267	0.294	0.323	0.352	0.383	0.415	0.448	0.483	0.494
Net Energy Resources Cost	2.139	2.161	2.182	2.203	2.224	2.245	2.265	2.286	2.305	2.333
(Add) Neutrality Charge (Line Losses, Curtailment & Other Costs)	0.844	0.859	0.877	0.895	0.913	0.931	0.949	0.968	0.987	1.006
Delivered Resource Cost	2.983	3.020	3.059	3.098	3.137	3.176	3.214	3.254	3.292	3.339
(Add) Administrative Cost	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075
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## Renewable\*Connect Standard Pricing with Rate Components - Long Term

\*\*\*Indicative Pricing\*\*\*

5- Year and 10-Year Pricing (in Cents per kWh)

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
5-Year Renewable*Connect - Standard (2021-30)	YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10
Blended Indicative Resource Cost	2.175	2.218	2.263	2.308	2.354	2.401	2.449	2.498	2.548	2.599
(Less) Capacity Credit	0.000	0.000	0.000	0.000	0.045	0.092	0.142	0.194	0.248	0.279
Net Energy Resources Cost	2.175	2.218	2.263	2.308	2.309	2.309	2.307	2.304	2.300	2.320
(Add) Neutrality Charge (Line Losses, Curtailment & Other Costs)	0.720	0.734	0.749	0.763	0.779	0.795	0.811	0.828	0.844	0.862
Delivered Resource Cost	2.895	2.952	3.012	3.071	3.088	3.104	3.118	3.132	3.144	3.182
(Add) Administrative Cost	0.115	0.115	0.115	0.115	0.115	0.115	0.115	0.115	0.115	0.115
Total Renewable*Connect Standard Pricing	3.010	3.067	3.127	3.186	3.203	3.219	3.233	3.247	3.259	3.297
	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Continued - 5-Year Renewable*Connect - Standard (2031-40)	YR11	YR12	YR13	YR14	YR15	YR16	YR17	YR18	YR19	YR20
Blended Indicative Resource Cost	2.651	2.704	2.758	2.813	2.870	2.927	2.986	3.045	3.106	3.153
(Less) Capacity Credit	0.312	0.346	0.382	0.419	0.458	0.498	0.540	0.583	0.629	0.644
Net Energy Resources Cost	2.339	2.358	2.376	2.394	2.412	2.429	2.446	2.462	2.477	2.509
(Add) Neutrality Charge (Line Losses, Curtailment & Other Costs)	0.878	0.894	0.912	0.931	0.950	0.969	0.988	1.007	1.028	1.04
Delivered Resource Cost	3.217	3.252	3.288	3.325	3.362	3.398	3.434	3.469	3.505	3.55
(Add) Administrative Cost	0.115	0.115	0.115	0.115	0.115	0.115	0.115	0.115	0.115	0.115
Total Renewable*Connect Standard Pricing	3.332	3.367	3.403	3.440	3.477	3.513	3.549	3.584	3.620	3.671
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
10-Year Renewable*Connect - Standard (2021-30)	YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR1
Blended Indicative Resource Cost	2.175	2.218	2.263	2.308	2.354	2.401	2.449	2.498	2.548	2.599
(Less) Capacity Credit	0.000	0.000	0.000	0.000	0.045	0.092	0.142	0.194	0.248	0.279
Net Energy Resources Cost	2.175	2.218	2.263	2.308	2.309	2.309	2.307	2.304	2.300	2.320
(Add) Neutrality Charge (Line Losses, Curtailment & Other Costs)	0.720	0.734	0.749	0.763	0.779	0.795	0.811	0.828	0.844	0.862
Delivered Resource Cost	2.895	2.952	3.012	3.071	3.088	3.104	3.118	3.132	3.144	3.182
(Add) Administrative Cost	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100
Total Renewable*Connect Standard Pricing	2.995	3.052	3.112	3.171	3.188	3.204	3.218	3.232	3.244	3.282
	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Continued - 10-Year Renewable*Connect - Standard (2031-40)	YR11	YR12	YR13	YR14	YR15	YR16	YR17	YR18	YR19	YR2
Blended Indicative Resource Cost	2.651	2.704	2.758	2.813	2.870	2.927	2.986	3.045	3.106	3.153
(Less) Capacity Credit	0.312	0.346	0.382	0.419	0.458	0.498	0.540	0.583	0.629	0.644
Net Energy Resources Cost	2.339	2.358	2.376	2.394	2.412	2.429	2.446	2.462	2.477	2.50
(Add) Neutrality Charge (Line Losses, Curtailment & Other Costs)	0.878	0.894	0.912	0.931	0.950	0.969	0.988	1.007	1.028	1.047
Delivered Resource Cost	3.217	3.252	3.288	3.325	3.362	3.398	3.434	3.469	3.505	3.55
(Add) Administrative Cost	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.10
Total Renewable*Connect Standard Pricing	3.317	3.352	3.388	3.425	3.462	3.498	3.534	3.569	3.605	3.65

## Renewable\*Connect Standard Pricing with Rate Components - Long Term

\*\*\*Indicative Pricing\*\*\*

15- Year and 20-Year Pricing (in Cents per kWh)

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
15-Year Renewable*Connect - Standard (2021-30)	YR1	YR2	YR3	YR4	YR5	2020 YR6	YR7	YR8	YR9	YR10
Blended Indicative Resource Cost	2.175	2.218	2.263	2.308	2.354	2.401	2.449	2.498	2.548	2.599
(Less) Capacity Credit	0.000	0.000	0.000	0.000	0.045	0.092	0.142	0.194	0.248	0.279
Net Energy Resources Cost	2.175	2.218	2.263	2.308	2.309	2.309	2.307	2.304	2.300	2.320
(Add) Neutrality Charge (Line Losses, Curtailment & Other Costs)	0.720	0.734	0.749	0.763	0.779	0.795	0.811	0.828	0.844	0.862
Delivered Resource Cost	2.895	2.952	3.012	3.071	3.088	3.104	3.118	3.132	3.144	3.182
(Add) Administrative Cost	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085
Total Renewable*Connect Standard Pricing	2.980	3.037	3.097	3.156	3.173	3.189	3.203	3.217	3.229	3.267
	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Continued - 15-Year Renewable*Connect - Standard (2031-40)	YR11	YR12	YR13	YR14	YR15	YR16	YR17	YR18	YR19	YR20
Blended Indicative Resource Cost	2.651	2.704	2.758	2.813	2.870	2.927	2.986	3.045	3.106	3.153
(Less) Capacity Credit	0.312	0.346	0.382	0.419	0.458	0.498	0.540	0.583	0.629	0.644
Net Energy Resources Cost	2.339	2.358	2.376	2.394	2.412	2.429	2.446	2.462	2.477	2.509
(Add) Neutrality Charge (Line Losses, Curtailment & Other Costs)	0.878	0.894	0.912	0.931	0.950	0.969	0.988	1.007	1.028	1.04
Delivered Resource Cost	3.217	3.252	3.288	3.325	3.362	3.398	3.434	3.469	3.505	3.55
(Add) Administrative Cost	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.08
Total Renewable*Connect Standard Pricing	3.302	3.337	3.373	3.410	3.447	3.483	3.519	3.554	3.590	3.641
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
20-Year Renewable*Connect - Standard (2021-30)	YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10
Blended Indicative Resource Cost	2.175	2.218	2.263	2.308	2.354	2.401	2.449	2.498	2.548	2.599
(Less) Capacity Credit	0.000	0.000	0.000	0.000	0.045	0.092	0.142	0.194	0.248	0.279
Net Energy Resources Cost	2.175	2.218	2.263	2.308	2.309	2.309	2.307	2.304	2.300	2.320
(Add) Neutrality Charge (Line Losses, Curtailment & Other Costs)	0.720	0.734	0.749	0.763	0.779	0.795	0.811	0.828	0.844	0.862
Delivered Resource Cost	2.895	2.952	3.012	3.071	3.088	3.104	3.118	3.132	3.144	3.182
(Add) Administrative Cost	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075
Total Renewable*Connect Standard Pricing	2.970	3.027	3.087	3.146	3.163	3.179	3.193	3.207	3.219	3.25
	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Continued - 20-Year Renewable*Connect - Standard (2031-40)	YR11	YR12	YR13	YR14	YR15	YR16	YR17	YR18	YR19	YR2
Blended Indicative Resource Cost	2.651	2.704	2.758	2.813	2.870	2.927	2.986	3.045	3.106	3.153
(Less) Capacity Credit	0.312	0.346	0.382	0.419	0.458	0.498	0.540	0.583	0.629	0.644
Net Energy Resources Cost	2.339	2.358	2.376	2.394	2.412	2.429	2.446	2.462	2.477	2.509
(Add) Neutrality Charge (Line Losses, Curtailment & Other Costs)	0.878	0.894	0.912	0.931	0.950	0.969	0.988	1.007	1.028	1.04
Delivered Resource Cost	3.217	3.252	3.288	3.325	3.362	3.398	3.434	3.469	3.505	3.550
(Add) Administrative Cost	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075
Total Renewable*Connect Standard Pricing	3.292	3.327	3.363	3.400	3.437	3.473	3.509	3.544	3.580	3.631

## Renewable\*Connect Resource Cost - Month-to-Month

Cents per KWH, except where labeled otherwise

	2021	2022	2023	2024	2025	2026	2027	2028	2029
Estimated Program Usage	201,225								
Production (kWh in 000s)	[PROTECTED DAT	A BEGINS:							
Legacy Windsource PPAs									
New Wind									
New Solar									
System Energy + REC									
	Р	ROTECTED DA	TA ENDS]						
Resource Production	201,225								
Indicative PPA Pricing	[PROTECTED DAT	A BEGINS:							
Legacy Windsource PPAs									
New Wind									
New Solar									
System Energy + REC									
	Р	ROTECTED DA	ATA ENDS]						
Resource Costs	[PROTECTED DAT	A BEGINS:							
Legacy Windsource PPAs									
New Wind									
New Solar									
System Energy + REC									
	Р	ROTECTED DA	TA ENDS]						
Total	\$6,848,648								
Resource Cost per kWh	3.403								
Resource Cost per Kwii	5.405								

## PUBLIC DOCUMENT - NOT PUBLIC DATA HAS BEEN EXCISED

# Renewable\*Connect High Off-Peak Resource Cost - Long Term

\*\*\*Indicative Pricing\*\*\*

Attachment G-1, Resource Cost HOP, Page 1 of 1

Docket No. E002/M-19\_

Renewable Connect\_Long Term

Cents per KWH, except where labeled otherwise

	[PROTECTE]	Energy Allocation D DATA BEGINS:	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Indicative Wind Resource Price Indicative Solar Resource Price Indicative Monthly Balancing Wind Price												
										PROTEC	TED DAT	<b>['A ENDS]</b>
Blended Resource Pricing (2021-30)			1.952	1.991	2.031	2.072	2.113	2.156	2.199	2.243	2.288	2.333
	<b>IPROTECTE</b>	Energy Allocation D DATA BEGINS:	2031	2032	2033	2034	2035	2036	2037	2038	2039	<b>2040</b> 1/2 Year
Indicative Wind Resource Price Indicative Solar Resource Price Indicative Monthly Balancing Wind Price	L											,
										PROTEC	TED DAT	<b>['A ENDS]</b>
Blended Resource Pricing (2031-40)			2.380	2.428	2.476	2.526	2.576	2.628	2.680	2.734	2.788	2.827

## PUBLIC DOCUMENT - NOT PUBLIC DATA HAS BEEN EXCISED

# Renewable\*Connect Standard Resource Cost - Long Term

Docket No. E002/M-19\_\_\_\_ Renewable Connect\_Long Term Attachment G-2, Standard, Page 1 of 1 \*\*\*Indicative Pricing\*\*\*

Cents per KWH, except where labeled otherwise

	[PROTECTED	DATA BEGINS:	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Indicative Wind Resource Price Indicative Solar Resource Price Indicative Monthly Balancing Wind Price												
										PROTEC	CTED DA	TA ENDS]
Blended Resource Pricing (2021-30)			2.175	2.218	2.263	2.308	2.354	2.401	2.449	2.498	2.548	2.599
	[PROTECTED	Energy Allocation DATA BEGINS:	2031	2032	2033	2034	2035	2036	2037	2038	2039	<b>2040</b> 1/2 Year
Indicative Wind Resource Price Indicative Solar Resource Price Indicative Monthly Balancing Wind Price	· ·											
										PROTEC	CTED DA	TA ENDS]
Blended Resource Pricing (2031-40)			2.651	2.704	2.758	2.813	2.870	2.927	2.986	3.045	3.106	3.153

# Renewable\*Connect Capacity Credit - Month-to-Month

Win	ad	2021	2022	2023	2024	2025	2026	2027	2028
1 2	Annual CT Resource Cost /kW MISO Accredited Wind Capacity Factor	\$47.50 15.60%							
3	Annual Avoided Capacity Costs ( Line 1 * Line 2 )	\$7.41							
4	Percent Retained	100%							
5	Capacity Credit / kW	\$7.41							
6	Wind Capacity MW (AC)	49.8							
7	Annual Avoided Capacity Costs ( Line 5 * Line 6 )	\$369							
-									
Sola	ar	2021	2022	2023	2024	2025	2026	2027	2028
<b>Sol</b> :	Ar Annual CT Resource Cost /kW	<b>2021</b> \$47.50	2022	2023	2024	2025	2026	2027	2028
			2022	2023	2024	2025	2026	2027	2028
8	Annual CT Resource Cost /kW	<b>\$</b> 47.50	2022	2023	2024	2025	2026	2027	2028
8 9	Annual CT Resource Cost /kW MISO Accredited Solar Capacity	\$47.50 50.00%	2022	2023	2024	2025	2026	2027	2028
8 9	Annual CT Resource Cost /kW MISO Accredited Solar Capacity Annual Avoided Capacity Costs ( Line 8 * Line 9 )	\$47.50 50.00% \$23.75	2022	2023	2024	2025	2026	2027	2028
8 9 10 11	Annual CT Resource Cost /kW MISO Accredited Solar Capacity Annual Avoided Capacity Costs (Line 8 * Line 9) Percent Retained	\$47.50 50.00% \$23.75 100%	2022	2023	2024	2025	2026	2027	2028

# Renewable\*Connect Capacity Credit - Month-to-Month

Total Wind and Solar	2021	2022	2023	2024	2025	2026	2027	2028
	[PROTECT	ED DATA B	EGINS:					
15 Wind Capacity Factor								
16 Solar Capacity Factor								
	PROTI	ECTED DAT	ΓA ENDS]					
17 Renewable*Connect Average Annual Capacity Factor	28.8%							
18 Availability Factor	100.0%							
19 Hours per Year	8,760							
20 Annual Hours of Operation (Line 17 * Line 18 * Line 19)	2,521							
21 Renewable*Connect Capacity MW (AC)	80							
22 Annual Generation Forecast - MWh (Line 20 * Line 21)	201,225							
23 Annual Capacity Value (\$000s) ( Line 7 * Line 14 )	\$1,082							
24 Capacity Credit Cents per kWh (Line 23 / Line 22)	0.538 C							

## Renewable\*Connect High Off-Peak Capacity Credit - Long Term

Wiı	nd	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1	Annual CT Resource Cost /kW	\$47.50	\$48.57	\$49.66	\$50.78	\$51.92	\$53.09	\$54.29	\$55.51	\$56.76	\$58.03
2	MISO Accredited Wind Capacity Factor (0% if No System Need)	15.60%	15.60%	15.60%	15.60%	15.60%	15.60%	15.60%	15.60%	15.60%	15.60%
3	Annual Avoided Capacity Costs (Line 1 * Line 2)	\$7.41	\$7.58	\$7.75	\$7.92	\$8.10	\$8.28	\$8.47	\$8.66	\$8.85	\$9.05
4	Percent Retained	0%	0%	0%	0%	10.0%	20%	30.0%	40%	50.0%	55%
5	Capacity Credit / kW (Line 3 * Line 4)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.81	\$1.66	\$2.54	\$3.46	\$4.43	\$4.98
6	Wind Capacity MW (AC)	100	100	100	100	100	100	100	100	100	100
7	Annual Avoided Capacity Costs (Line 5 * Line 6)	\$0	<b>\$</b> 0	\$0	\$0	\$81	\$166	\$254	\$346	\$443	\$498
		2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
8	Annual CT Resource Cost /kW	\$59.34	\$60.67	\$62.04	\$63.44	\$64.86	\$66.32	\$67.82	\$69.34	\$70.90	\$72.50
9	MISO Accredited Wind Capacity	15.60%	15.60%	15.60%	15.60%	15.60%	15.60%	15.60%	15.60%	15.60%	15.60%
10	Annual Avoided Capacity Costs (Line 8 * Line 9)	\$9.26	\$9.47	\$9.68	\$9.90	\$10.12	\$10.35	\$10.58	\$10.82	\$11.06	\$11.31
11	Percent Retained	60%	65%	70%	75%	80%	85%	90%	95%	100%	100%
12	Capacity Credit / kW (Line 10 * Line 11)	\$5.55	\$6.15	\$6.77	\$7.42	\$8.09	\$8.79	\$9.52	\$10.28	\$11.06	\$11.31
13	Wind Capacity MW (AC)	100	100	100	100	100	100	100	100	100	100
14	Annual Avoided Capacity Costs (Line 12 * Line 13)	\$555	\$615	\$677	\$742	\$809	\$879	\$952	\$1,028	\$1,106	\$1,131
Sol	ar	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
15	Annual CT Resource Cost /kW	\$47.50	\$48.57	\$49.66	\$50.78	\$51.92	\$53.09	\$54.29	\$55.51	\$56.76	\$58.03
16	MISO Accredited Solar Capacity	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
17	Annual Avoided Capacity Costs ( Line 15 * Line 16 )	\$23.75	\$24.29	\$24.83	\$25.39	\$25.96	\$26.55	\$27.14	\$27.75	\$28.38	\$29.02
18	Percent Retained	0%	0%	0%	0%	10.0%	20%	30.0%	40%	50.0%	55%
19	Capacity Credit / kW (Line 17 * Line 18)	\$0.00	\$0.00	\$0.00	\$0.00	\$2.60	\$5.31	\$8.14	\$11.10	\$14.19	\$15.96
20	Solar PV Capacity MW (AC)	25	25	25	25	25	25	25	25	25	25
21	Annual Avoided Capacity Costs ( Line 19 * Line 20 )	<b>\$</b> 0	\$0	<b>\$</b> 0	\$0	\$65	\$133	\$204	\$278	\$355	\$399
		2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
22	Annual CT Resource Cost /kW	\$59.34	\$60.67	\$62.04	\$63.44	\$64.86	\$66.32	\$67.82	\$69.34	\$70.90	\$72.50
23	MISO Accredited Solar Capacity	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
24	Annual Avoided Capacity Costs ( Line 22 * Line 23 )	\$29.67	\$30.34	\$31.02	\$31.72	\$32.43	\$33.16	\$33.91	\$34.67	\$35.45	\$36.25
25	Percent Retained	60%	65%	70%	75%	80%	85%	90%	95%	100%	100%
26	Capacity Credit / kW (Line 24 * Line 25)	\$17.80	\$19.72	\$21.71	\$23.79	\$25.95	<b>\$</b> 28.19	\$30.52	\$32.94	\$35.45	\$36.25
27	Solar PV Capacity MW (AC)	25	25	25	25	25	25	25	25	25	25
28	Annual Avoided Capacity Costs ( Line 26 * Line 27 )	\$445	\$493	\$543	\$595	\$649	\$705	\$763	\$823	\$886	\$906

# Renewable\*Connect High Off-Peak Capacity Credit - Long Term

Tot	al Wind and Solar	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
		[PROTECTED	DATA BEGI	NS:							
29	Wind Capacity Factor										
30	Solar Capacity Factor								PROT	ECTED DAT	
											-
31	Renewable*Connect Average Annual Capacity Factor	38.2%	38.2%	38.2%	38.2%	38.1%	38.1%	38.1%	38.0%	38.0%	38.0%
32	Availability Factor	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
33	Hours per Year	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760
34	Annual Hours of Operation (Line 31 * Line 32 * Line 33)	3,350	3,349	3,346	3,343	3,340	3,338	3,335	3,332	3,329	3,327
35	Renewable*Connect Capacity MW (AC)	125	125	125	125	125	125	125	125	125	125
36	Annual Generation Forecast - MWh (Line 34 * Line 35)	418,795	418,597	418,246	417,896	417,545	417,195	416,845	416,516	416,166	415,837
37	Annual Capacity Value (\$000s) ( Line 7 + Line 21 )	<b>\$</b> 0	<b>\$</b> 0	\$0	<b>\$</b> 0	\$146	\$298	\$458	\$624	<b>\$</b> 797	\$897
38	Capacity Credit Cents per kWh (Line 37 / Line 36)	0.000 C	0.000 C	0.000 C	0.000 C	0.035 C	0.072 C	0.110 C	0.150 C	0.192 C	0.216 C
		2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
		[PROTECTED	DATA BEGI	INS:							
39	Wind Capacity Factor										
40	Solar Capacity Factor										
									PROT	ECTED DA	ſA ENDS]
41	Renewable*Connect Average Annual Capacity Factor	37.9%	37.9%	37.9%	37.9%	37.8%	37.8%	37.8%	37.7%	37.7%	37.7%
42	Availability Factor	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
43	Hours per Year	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760
44	Annual Hours of Operation (Line 41 * Line 42 * Line 43)	3,324	3,321	3,319	3,316	3,313	3,311	3,308	3,306	3,303	3,301
45	Renewable*Connect Capacity MW (AC)	125	125	125	125	125	125	125	125	125	125
46	Annual Generation Forecast - MWh (Line 44 * Line 45)	415,509	415,158	414,830	414,501	414,173	413,866	413,538	413,209	412,903	412,574
47	Annual Capacity Value (\$000s) ( Line 14 + Line 28 )	\$1,000	\$1,108	\$1,220	\$1,337	\$1,458	\$1,584	\$1,715	\$1,851	\$1,992	\$2,037
48	Capacity Credit Cents per kWh (Line 47 / Line 46)	0.241 C	0.267 C	0.294 C	0.323 C	0.352 C	0.383 C	0.415 C	0.448 C	0.483 C	0.494 C

## Renewable\*Connect Standard Capacity Credit - Long Term

Win	nd	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
1	Annual CT Resource Cost /kW	\$47.50	\$48.57	\$49.66	\$50.78	\$51.92	\$53.09	\$54.29	\$55.51	\$56.76	\$58.03
2	MISO Accredited Wind Capacity Factor (0% if No System Need)	15.60%	15.60%	15.60%	15.60%	15.60%	15.60%	15.60%	15.60%	15.60%	15.60%
3	Annual Avoided Capacity Costs (Line 1 * Line 2)	\$7.41	\$7.58	<b>\$</b> 7.75	\$7.92	\$8.10	\$8.28	\$8.47	\$8.66	\$8.85	\$9.05
4	Percent Retained	0%	0%	0%	0%	10.0%	20%	30.0%	40%	50.0%	55%
5	Capacity Credit / kW (Line 3 * Line 4)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.81	\$1.66	\$2.54	\$3.46	\$4.43	\$4.98
6	Wind Capacity MW (AC)	50	50	50	50	50	50	50	50	50	50
7	Annual Avoided Capacity Costs ( Line 5 * Line 6 )	<b>\$</b> 0	\$0	\$0	<b>\$</b> 0	\$41	\$83	\$127	\$173	\$221	\$249
		2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
8	Annual CT Resource Cost /kW	\$59.34	\$60.67	\$62.04	\$63.44	\$64.86	\$66.32	\$67.82	\$69.34	\$70.90	\$72.50
9	MISO Accredited Wind Capacity	15.60%	15.60%	15.60%	15.60%	15.60%	15.60%	15.60%	15.60%	15.60%	15.60%
10	Annual Avoided Capacity Costs (Line 8 * Line 9)	\$9.26	\$9.47	\$9.68	\$9.90	\$10.12	\$10.35	\$10.58	\$10.82	\$11.06	\$11.31
11	Percent Retained	60%	65%	70%	75%	80%	85%	90%	95%	100%	100%
12	Capacity Credit / kW (Line 10 * Line 11)	\$5.55	\$6.15	\$6.77	\$7.42	\$8.09	\$8.79	\$9.52	\$10.28	\$11.06	\$11.31
13	Wind Capacity MW (AC)	50	50	50	50	50	50	50	50	50	50
14	Annual Avoided Capacity Costs (Line 12 * Line 13)	\$278	\$308	\$339	\$371	\$405	<b>\$</b> 440	\$476	\$514	\$553	\$565
Sola	ar	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
15	Annual CT Resource Cost /kW	\$47.50	\$48.57	\$49.66	\$50.78	\$51.92	\$53.09	\$54.29	\$55.51	\$56.76	\$58.03
16	MISO Accredited Solar Capacity	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
17	Annual Avoided Capacity Costs (Line 15 * Line 16)	\$23.75	\$24.29	\$24.83	\$25.39	\$25.96	\$26.55	\$27.14	\$27.75	\$28.38	\$29.02
18	Percent Retained	0%	0%	0%	0%	10.0%	20%	30.0%	40%	50.0%	55%
19	Capacity Credit / kW (Line 17 * Line 18)	\$0.00	\$0.00	\$0.00	\$0.00	\$2.60	\$5.31	\$8.14	\$11.10	\$14.19	\$15.96
20	Solar PV Capacity MW (AC)	25	25	25	25	25	25	25	25	25	25
21	Annual Avoided Capacity Costs (Line 19 * Line 20)	\$0	\$0	\$0	\$0	\$65	<b>\$</b> 133	\$204	\$278	\$355	\$399
		2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
22	Annual CT Resource Cost /kW	\$59.34	\$60.67	\$62.04	<b>\$</b> 63.44	\$64.86	\$66.32	\$67.82	\$69.34	\$70.90	\$72.50
23	MISO Accredited Solar Capacity	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
24	Annual Avoided Capacity Costs (Line 22 * Line 23)	\$29.67	\$30.34	\$31.02	\$31.72	\$32.43	\$33.16	\$33.91	\$34.67	\$35.45	\$36.25
25		60%	65%	70%	75%	80%	85%	90%	95%	100%	100%
26	Capacity Credit / kW (Line 24 * Line 25)	\$17.80	\$19.72	\$21.71	\$23.79	\$25.95	\$28.19	\$30.52	\$32.94	\$35.45	\$36.25
27	Solar PV Capacity MW (AC)	25	25	25	- 25	25	25	25	25	25	25
28		\$445	\$493	\$543	\$595	\$649	\$705	\$763	\$823	\$886	\$906
20	Tante 20 Lane 27 J	CLLS	ųτ <i>i</i> j	φJTJ	4 <i>575</i>	ΨUTΣ	2105	9105	902 <i>5</i>	4000	9200

# Renewable\*Connect Standard Capacity Credit - Long Term

To	tal Wind and Solar	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
		[PROTECTED	DATA BEG	INS:							
29	Wind Capacity Factor										
30	Solar Capacity Factor								PROT	ECTED DAT	ra endsj
31	Renewable*Connect Average Annual Capacity Factor	35.7%	35.7%	35.7%	35.6%	35.6%	35.5%	35.4%	35.4%	35.3%	35.3%
32	0 1 2	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
33	Hours per Year	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760
34	Annual Hours of Operation (Line 31 * Line 32 * Line 33)	3,131	3,128	3,124	3,119	3,114	3,110	3,105	3,101	3,096	3,092
35	Renewable*Connect Capacity MW (AC)	75	75	75	75	75	75	75	75	75	75
36	Annual Generation Forecast - MWh (Line 34 * Line 35)	234,835	234,637	234,286	233,936	233,585	233,235	232,885	232,556	232,206	231,877
37	Annual Capacity Value (\$000s) ( Line 7 + Line 21 )	\$0	<b>\$</b> 0	\$0	<b>\$</b> 0	\$105	\$216	\$331	\$451	\$576	\$648
38		0.000 C	0.000 C	0.000 C	0.000 C	0.045 C	0.092 C	0.142 C	0.194 C	0.248 C	0.279 C
		2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
		[PROTECTED	DATA BEG	INS:							
39	Wind Capacity Factor										
40	Solar Capacity Factor										
									PROT	ECTED DAT	ΓA ENDS]
41	Renewable*Connect Average Annual Capacity Factor	35.2%	35.2%	35.1%	35.1%	35.0%	35.0%	34.9%	34.9%	34.8%	34.8%
42	Availability Factor	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
43	Hours per Year	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760	8,760
44	Annual Hours of Operation (Line 41 * Line 42 * Line 43)	3,087	3,083	3,078	3,074	3,070	3,065	3,061	3,057	3,053	3,048
		75	75	75	75	75	75	75	75	75	75
45	Renewable*Connect Capacity MW (AC)	/3									
45 46	A • • •	231,549	231,198	230,870	230,541	230,213	229,906	229,578	229,249	228,943	228,614
					230,541 \$966	230,213 \$1,053	229,906 \$1,144	229,578 \$1,239	229,249 \$1,337		

# Renewable\*Connect Neutrality Charge Detail - Month-to-Month

<u>Cents per kWh</u>

		2021	2022	2023	2024	2025	2026	2027	2028	2029
	Rate									
Line Losses	7.08%	0.241								
Curtailment	3.8%	0.129								
Balancing		0.015								
Wind Integration		0.044								
Coal Cycling		0.080								
Congestion		0.000								
Total		0.509								

# Renewable\*Connect High Off-Peak Neutrality Charge Detail - Long Term

Cents per KWh

		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
High Off-Peak	Rate										
Line Losses	7.08%	0.138	0.141	0.144	0.147	0.150	0.153	0.156	0.159	0.162	0.165
Curtailment	3.8%	0.064	0.065	0.066	0.068	0.069	0.070	0.072	0.073	0.075	0.076
Monthly Balancing		0.029	0.030	0.030	0.031	0.032	0.032	0.033	0.034	0.034	0.035
Wind Integration		0.046	0.047	0.048	0.049	0.050	0.051	0.052	0.053	0.054	0.055
Coal Cycling		0.139	0.141	0.144	0.147	0.150	0.153	0.156	0.159	0.162	0.166
Congestion		0.277	0.282	0.288	0.293	0.299	0.305	0.311	0.318	0.324	0.331
Total		0.693	0.706	0.721	0.734	0.749	0.764	0.780	0.796	0.811	0.829

		2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
	Rate										
Line Losses	7.08%	0.169	0.172	0.175	0.179	0.182	0.186	0.190	0.194	0.197	0.200
Curtailment	3.8%	0.078	0.079	0.081	0.083	0.084	0.086	0.088	0.089	0.091	0.092
Monthly Balancing		0.036	0.037	0.038	0.038	0.039	0.040	0.041	0.042	0.043	0.044
Wind Integration		0.056	0.055	0.056	0.058	0.059	0.06	0.061	0.062	0.063	0.065
Coal Cycling		0.169	0.172	0.176	0.179	0.183	0.187	0.19	0.194	0.198	0.202
Congestion		0.337	0.344	0.351	0.358	0.365	0.372	0.38	0.387	0.395	0.403
Total		0.844	0.859	0.877	0.895	0.913	0.931	0.949	0.968	0.987	1.006

# Renewable\*Connect Standard Neutrality Charge Detail - Long Term

Cents per KWh

		2024	2022	2023	2024	2025	2026	2027	2028	2020	2030
	Rate	2021	2022	2023	2024	2025	2026	2027	2020	2029	2030
Line Losses	7.08%	0.154	0.157	0.160	0.163	0.167	0.170	0.173	0.177	0.180	0.184
Curtailment	3.8%	0.064	0.065	0.066	0.068	0.069	0.070	0.072	0.073	0.075	0.076
Monthly Balancing	9	0.040	0.041	0.042	0.043	0.044	0.045	0.046	0.047	0.048	0.050
Wind Integration		0.046	0.047	0.048	0.049	0.050	0.051	0.052	0.053	0.054	0.055
Coal Cycling		0.139	0.141	0.144	0.147	0.150	0.153	0.156	0.159	0.162	0.166
Congestion		0.277	0.282	0.288	0.293	0.299	0.305	0.311	0.318	0.324	0.331
Total		0.720	0.734	0.749	0.763	0.779	0.795	0.811	0.828	0.844	0.862
		2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
	Rate										
Line Losses	7.08%	0.188	0.191	0.195	0.199	0 000		0.044	0.216	0.220	0.223
		000	0.101	0.135	0.199	0.203	0.207	0.211	0.210	0.220	00
Curtailment	3.8%	0.078	0.079	0.081	0.083	0.203	0.207 0.086	0.211	0.210	0.220	0.092
Curtailment Monthly Balancing											
		0.078	0.079	0.081	0.083	0.084	0.086	0.088	0.089	0.091	0.092
Monthly Balancing		0.078 0.051	0.079 0.052	0.081 0.053	0.083 0.054	0.084 0.055	0.086 0.057	0.088 0.058	0.089 0.059	0.091 0.061	0.092 0.062
Monthly Balancing Wind Integration		0.078 0.051 0.056	0.079 0.052 0.055	0.081 0.053 0.056	0.083 0.054 0.058	0.084 0.055 0.059	0.086 0.057 0.06	0.088 0.058 0.061	0.089 0.059 0.062	0.091 0.061 0.063	0.092 0.062 0.065

# Renewable\*Connect Monthly Balancing Example - Month-to-Month

Expected Production (MWh)	[PROT	January ECTED DATA	February BEGINS:	March	April	May	June	July	August	September	October	November	December	Total
Wind Solar Total														
Actual MN Sales Billing														
Estimated Program Usage	[PROT	ECTED DATA	BEGINS:										PROT	'ECTED DATA ENDS]
Estimated Program Osage													PROT	ECTED DATA ENDS
Production Over/(Under)		(2,590)	(1,442)	1,406	4,373	6,425	(371)	(1,993)	(5,114)	(2,016)	1,080	2,331	(2,089)	1
		-13.6%	-9.1%	8.3%	28.8%	42.2%	-2.2%	-11.0%	-26.4%	-12.1%	6.4%	15.7%	-13.1%	
Monthly Production Shortfall		2,590	1,442	-	-	-	371	1,993	5,114	2,016	-	-	2,089	15,615
Excess Energy to Fuel Clause		0	0	1,406	4,373	6,425	0	0	0	0	1,080	2,331	0	15,615
Program Usage	[PROT	ECTED DATA	BEGINS:											
New Wind														
New Solar														
Balancing														<u></u>
Total														
													PROT	ECTED DATA ENDS]

# Monthly Balancing Cost Detail - Month-To-Month

Value of Monthly Balancing Energy @ LMP

Seasonal Differential Value of Balancing Energy

	Attachment J-0, Balancino
Net Value of Monthly Balancing Wind Energy @ LMP	

		-										-	-								
	Summer	Winter	Total				Summer	Winter	Total		Summer	Winter	Total								
On-Peak Energy	3,751	2,418	6,169	01	n-Peak Energy		0	6,169	6,169												
Off-Peak Energy	5,743	3,702	9,446	Of	ff-Peak Energy		0	9,446	9,446												
Monthly Balancing Energy Required (000s)	9,494	6,121	15,615	E	xcess Energy Deli	ivered	0	15,615	15,615												
LMP (\$/MWh)				LN	ЛР																
On-Peak Energy	32.95	25.89		01	n-Peak Energy		32.95	25.89													
Off-Peak Energy	20.19	19.65		Of	ff-Peak Energy		20.19	19.65													
Energy Value				Er	nergy Value																
On-Peak Energy	\$123,607	\$62,603	186,210	01	n-Peak Energy		\$0	\$159,716	159,716		\$123,607	(\$97,113)	\$26,494								
Off-Peak Energy	\$115,944	\$72,742	188,686	Ot	ff-Peak Energy		\$0	\$185,581	185,581		\$115,944	(\$112,840)	\$3,104								
Total	\$239,550	\$135,345	\$374,896	Те	otal	_	<b>\$</b> 0	\$345,298	\$345,298	_	\$239,550	(\$209,952)	\$29,598								
Seasonal Differential Value of Balancing Energy		\$29,598	\$30,264	\$30,945	\$31,641	\$32,353	\$33,081	\$33,825	\$34,586	\$35,365	\$36,160	\$36,974	\$37,806	\$38,656	\$39,526	\$40,416	\$41,325	\$42,255	\$43,205	\$44,178	\$45,172
Program Energy		201,225	201,225	201,225	201,225	201,225	201,225	201,225	201,225	201,225	201,225	201,225	201,225	201,225	201,225	201,225	201,225	201,225	201,225	201,225	201,225
Balancing Cost per MWh (in Dollars)	-	0.147	0.150	0.154	0.157	0.161	0.164	0.168	0.172	0.176	0.180	0.184	0.188	0.192	0.196	0.201	0.205	0.210	0.215	0.220	0.224
Balancing Cost per KWh (in Cents)		0.015	0.015	0.015	0.016	0.016	0.016	0.017	0.017	0.018	0.018	0.018	0.019	0.019	0.020	0.020	0.021	0.021	0.021	0.022	0.022

Value of Excess Energy @ LMP

## Renewable\*Connect High Off-Peak Monthly Balancing Example - Long Term

Expected Production (MWh)	Janua [PROTECTED]	ry February DATA BEGINS:	March	April	May	June	July	August	September	October	November	December	Total
Wind Solar													
Total													
												PROT	'ECTED DATA ENDS]
Estimated Program Usage	[PROTECTED]	DATA BEGINS:											
Estimated Program Osage												PROT	ECTED DATA ENDS
Production Over/(Under)		746 (6,808	) 1,529	6,219	11,362	(495)	(946)	(9,703)	(6,028)	4,752	3,194	(3,822)	
		2.0% -18.3%	4.2%	18.6%	35.4%	-1.5%	-3.2%	-28.3%	-16.7%	13.5%	8.5%	-10.5%	
Monthly Production Shortfall		- 6,808	-	-	-	495	946	9,703	6,028	-	-	3,822	27,802
Excess Energy to Fuel Clause		746 0	1,529	6,219	11,362	0	0	0	0	4,752	3,194	0	27,802
Program Usage	IPROTECTED	DATA BEGINS:											
New Wind	[												
New Solar													
Balancing													
Total												PROT	'ECTED DATA ENDS

## Renewable\*Connect Standard Monthly Balancing Example - Long Term

		January	February	March	April	May	June	July	August	September	October	November	December	Total
Expected Production (MWh)	[PROTECTEI	DATA BEGINS	:											
Wind														
Solar	-													
Total													PROT	ECTED DATA ENDOL
Astual MAN Cales Dilling		00/	8%	8%	8%	8%	9%	9%	10%	8%	8%	7%		ECTED DATA ENDS]
Actual MN Sales Billing		9%	8%	8%	8%	8%	9%	9%	10%	8%	8%	770	8%	
	IPROTECTEI	D DATA BEGINS												
Usage	[INOTEOTE	Diffit DECI (0												
Production Over/(Under)														
													PROT	'ECTED DATA ENDS]
Monthly Production Shortfall		2,039	1,566	-	-	-	1,139	3,556	7,297	2,509	-	-	1,409	19,515
Excess Energy to Fuel Clause		-	-	1,544	4,849	7,077	-	-	-	-	2,002	4,042	-	19,515
	IDDOTECTEI	DATA BECING												
Program Usage New Wind	IPROTECTED	D DATA BEGINS	:											
New Solar														
Balancing														
Total														
													PROT	ECTED DATA ENDS]

### Monthly Balancing Cost Detail - High Off-Peak Option - Long Term

In thousands of kWh, except where labeled otherwise

Annual PPA Cost Differential of Balancing Energy - R\*C Wind Resource vs. System Resource

	2021 PROTECTED DA	2022 ATA BEGINS:	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Balancing Energy Required Banancing Energy Cost per MWh Cost of Balancing Energy																				
Cost of balancing Energy Excess R*C Wind Energy Excess R*C Wind Energy Cost per MWh																				
Cost of R*C Wind Energy																		PROTE	ECTED DATA	ENDSI
Annual PPA Balancing Energy Cost Differential	\$0	\$0	\$0	\$0	\$0	<b>\$</b> 0	\$0	<b>\$</b> 0	\$0	\$0	\$0	\$0	<b>\$</b> 0	\$0	\$0	\$0	<b>\$</b> 0	\$0	\$0	\$0

#### Seasonal Differential Value of Balancing Energy

	Value of Monthly	Balancing Energ	gy @ LMP	V	alue of Excess Er	nergy @ LMP				Ν	let Value of M	onthly Balancin	g Wind Energy (	@ LMP						
	Summer	Winter	Total				Summer	Winter	Total		Summer	Winter	Total							
On-Peak Energy	6,323	3,914	10,237	C	Dn-Peak Energy		0	10,237	10,237											
Off-Peak Energy	10,849	6,716	17,564	C	Off-Peak Energy		0	17,564	17,564											
Monthly Balancing Energy Required (000s)	17,172	10,630	27,802	E	Excess Energy Del	ivered	0	27,802	27,802											
LMP (\$/MWh)				I	MP															
On-Peak Energy	32.95	25.89		C	On-Peak Energy		32.95	25.89												
Off-Peak Energy	20.19	19.65		C	Off-Peak Energy		20.19	19.65												
Energy Value				E	inergy Value															
On-Peak Energy	\$208,358	\$101,335	309,693	C	Dn-Peak Energy		\$0	\$265,034	265,034		\$208,358	(\$163,698)	\$44,659							
Off-Peak Energy	\$219,010	\$131,945	350,955	C	Off-Peak Energy		\$0	\$345,092	345,092		\$219,010	(\$213,146)	\$5,863							
Total	\$427,368	\$233,280	\$660,648	Т	otal	_	<b>\$</b> 0	\$610,125	\$610,125		\$427,368	(\$376,845)	\$50,523							
Summary	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Annual PPA Balancing Energy Cost Differential	\$71,009	\$72,429	\$73,878	\$75,357	\$76,864	\$78,401	\$79,966	\$81,568	\$83,197	\$84,862	\$86,561	\$88,290	\$90,056	\$91,857	\$93,695	\$95,569	\$97,479	\$99,428	\$101,418	\$102,591
Seasonal Differential Value of Balancing Energy	\$50,523	\$51,660	\$52,822	\$54,011	\$55,226	\$56,468	\$57,739	\$59,038	\$60,366	\$61,725	\$63,113	\$64,533	\$65,985	\$67,470	\$68,988	\$70,540	\$72,128	\$73,751	\$75,410	\$77,107
Annual Balancing Cost	\$121,531	\$124,089	\$126,700	\$129,367	\$132,089	\$134,869	\$137,705	\$140,606	\$143,563	\$146,587	\$149,674	\$152,824	\$156,041	\$159,327	\$162,683	\$166,109	\$169,606	\$173,178	\$176,828	\$179,698
Program Energy	418,795	418,597	418,246	417,896	417,545	417,195	416,845	416,516	416,166	415,837	415,509	415,158	414,830	414,501	414,173	413,866	413,538	413,209	412,903	412,574
Balancing Cost per MWh (in Dollars)	0.290	0.296	0.303	0.310	0.316	0.323	0.330	0.338	0.345	0.353	0.360	0.368	0.376	0.384	0.393	0.401	0.410	0.419	0.428	0.436
Balancing Cost per KWh (in Cents)	0.029	0.030	0.030	0.031	0.032	0.032	0.033	0.034	0.034	0.035	0.036	0.037	0.038	0.038	0.039	0.040	0.041	0.042	0.043	0.044

## Monthly Balancing Cost Detail - Standard Option - Long Term

#### Annual PPA Cost Differential of Balancing Energy - R\*C Wind Resource vs. System Resource

	2021 [PROTECTED DA	2022 ATA BEGINS:	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Balancing Energy Required Banancing Energy Cost per MWh Cost of Balancing Energy																				
Excess R*C Wind Energy Excess R*C Wind Energy Cost per MWh Cost of R*C Wind Energy																				
Annual PPA Balancing Energy Cost Differential	\$0	\$0	\$0	<b>\$</b> 0	<b>\$</b> 0	<b>\$</b> 0	\$0	\$0	\$0	\$0	\$0	<b>\$</b> 0	<b>PROTE</b> \$0	CTED DATA \$0	ENDS] \$0					

#### Seasonal Differential Value of Balancing Energy

	Value of Monthly	Balancing Energ	y @ LMP	Value of Excess Energy @ LM	ſP			Net Value of Mor	uthly Balancing Wi	nd Energy @ LMP
	Summer	Winter	Total		Summer	Winter	Total	Summer	Winter	Total
On-Peak Energy	5,729	1,981	7,710	On-Peak Energy	0	7,710	7,710			
Off-Peak Energy	8,772	3,033	11,805	Off-Peak Energy	0	11,805	11,805			
Monthly Balancing Energy Required (000s)	14,500	5,014	19,515	Excess Energy Delivered	0	19,515	19,515			
LMP (\$/MWh)				LMP						
On-Peak Energy	\$32.95	\$25.89		On-Peak Energy	\$32.95	\$25.89				
Off-Peak Energy	\$20.19	\$19.65		Off-Peak Energy	\$20.19	\$19.65				
Energy Value				Energy Value						
On-Peak Energy	\$188,779	\$51,290	\$240,069	On-Peak Energy	\$0	\$199,606	\$199,606	\$188,779	(\$148,316)	\$40,463
Off-Peak Energy	\$177,076	\$59,596	\$236,672	Off-Peak Energy	\$0	\$231,931	\$231,931	\$177,076	(\$172,336)	\$4,741
Total	\$365,856	\$110,886	\$476,741	Total	\$0	\$431,538	\$431,538	\$365,856	(\$320,652)	\$45,204

#### Summary

Annual PPA Balancing Energy Cost Differential	\$49,843	\$50,840	\$51,857	\$52,895	\$53,953	\$55,032	\$56,131	\$57,255	\$58,398	\$59,567	\$60,760	\$61,974	\$63,213	\$64,477	\$65,767	\$67,083	\$68,423	\$69,791	\$71,188	\$72,012
Seasonal Differential Value of Balancing Energy	\$45,204	\$46,221	\$47,261	\$48,324	\$49,412	\$50,523	\$51,660	\$52,822	\$54,011	\$55,226	\$56,469	\$57,739	\$59,038	\$60,367	\$61,725	\$63,114	\$64,534	\$65,986	\$67,471	\$68,989
Annual Balancing Cost	\$95,047	\$97,061	\$99,118	\$101,219	\$103,364	\$105,555	\$107,791	\$110,077	\$112,409	\$114,794	\$117,228	\$119,713	\$122,251	\$124,844	\$127,492	\$130,196	\$132,957	\$135,777	\$138,659	\$141,001
Program Energy	234,835	234,637	234,286	233,936	233,585	233,235	232,885	232,556	232,206	231,877	231,549	231,198	230,870	230,541	230,213	229,906	229,578	229,249	228,943	228,614
Balancing Cost per MWh (in Dollars)	0.405	0.414	0.423	0.433	0.443	0.453	0.463	0.473	0.484	0.495	0.506	0.518	0.530	0.542	0.554	0.566	0.579	0.592	0.606	0.617
Balancing Cost per KWh (in Cents)	0.040	0.041	0.042	0.043	0.044	0.045	0.046	0.047	0.048	0.050	0.051	0.052	0.053	0.054	0.055	0.057	0.058	0.059	0.061	0.062

### Renewable\*Connect Sales, Revenue and Expense Tracker - Month-to-Month

kWhs (in 000s), except where labeled differently

Renewable*Connect Sales and Revenue	Type/Detail	January	February	March	April	May	June	July	August	September	October	November	December	Total
Sales		19,050	15,880	16,862	15,174	15,222	17,211	18,136	19,339	16,721	16,837	14,834	15,959	201,225
Price (Cents/kWh)		3.524	3.524	3.524	3.524	3.524	3.524	3.524	3.524	3.524	3.524	3.524	3.524	
Program Participant Payments	Billing Month	\$671,427	\$559,681	\$594,291	\$534,800	\$536,484	\$606,607	\$639,205	\$681,595	\$589,337	\$593,426	\$522,812	\$562,457	\$7,092,124
Capacity Credits	Base Rate Allocation	\$102,491	\$85,434	\$90,717	\$81,636	\$81,893	\$92,597	\$97,573	\$104,043	\$89,961	\$90,585	\$79,806	\$85,857	\$1,082,591
Program Revenue		\$773,919	\$645,114	\$685,007	\$616,436	\$618,377	\$699,204	\$736,778	\$785,639	\$679,298	\$684,011	\$602,618	\$648,314	\$8,174,714
Renewable*Connect Program Expense	(Dollars)													
Renewable Connect Program Expense	(Dollars)	January	February	March	April	Мау	June	July	August	September	October	November	December	Total
		January	-		April	Мау	June	July	August	September	October	November	December	Total
Resource Cost	[F	-	ATA BEGINS:	:	April	May	June	July	August	September	October		December	
	[F	ROTECTED D	ATA BEGINS:	:	April	May	June	July	August	September	October	PRC		ATA ENDS]
Resource Cost	[F	ROTECTED D	ATA BEGINS:	:	April	May	June	July	August	September	October	PRC	DTECTED D	ATA ENDSJ ATA ENDSJ

#### Renewable\*Connect Sales, Revenue and Expense Tracker - Long Term

In 000s of kWh , except where labeled differently

Renewable*Connect Sales and Revenue	e Type/Detail	January	February	March	April	Мау	June	July	August	September	October	November	December	Total
Sales														
High Off-Peak Standard		37,190 22,232	37,292 18,532	36,130 19,678	33,511 17,708	32,115 17,764	32,904 20,086	29,945 21,165	34,340 22,569	36,048 19,514	35,313 19,650	37,472 17,311	36,535 18,624	418,795 234,835
Total		59,422	55,824	55,808	51,219	49,879	52,990	51,110	56,909	55,562	54,963	54,784	55,159	653,629
Price (Cents per kWh) High Off-Peak														
Standard R*C Solar Requirement		2.760 3.010	2.760 3.010	2.760 3.010	2.760 3.010	2.760 3.010	2.760 3.010	2.760 3.010	2.760 3.010	2.760 3.010	2.760 3.010	2.760 3.010	2.760 3.010	
Program Participant Payments High Off-Peak	Billing Month	\$1,026,598	\$1,029,419	\$997,351	\$925,054	\$886,514	\$908,291	\$826,604	\$947,944	\$995,086	\$974,807	\$1,034,405	\$1,008,518	\$11,560,589
Standard Total	Billing Month Billing Month	\$669,218 \$1,695,816	\$557,839 \$1,587,258	\$592,335 \$1,589,686	\$533,041 \$1,458,095	\$534,719 \$1,421,233	\$604,611 \$1,512,902	\$637,102 \$1,463,706	\$679,353 \$1,627,296	\$587,398 \$1,582,484	\$591,473 \$1,566,280	\$521,092 \$1,555,497	\$560,606 \$1,569,124	\$7,068,787 \$18,629,376
, oto,	Dining Month	\$1,000,010	\$1,001,200	\$1,000,000	ф1,100,000	¢1,121,200	\$1,012,002	¢1,100,100	¢1,021,200	¢1,002,101	\$1,000,200	\$ 1,000,101	¢1,000,121	\$10,020,010
Capacity Credits High Off-Peak	Base Rate Allocation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Standard	Base Rate Allocation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	Base Rate Allocation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Program Revenue		<b>64 000 500</b>		0007.054	0005.054	0000 544	<b>*</b> ****		<b>*</b> ****	0005 000	A074 007			<b>6</b> 44 500 500
High Off-Peak Standard		\$1,026,598 \$669.218	\$1,029,419 \$557,839	\$997,351 \$592.335	\$925,054 \$533.041	\$886,514 \$534,719	\$908,291 \$604.611	\$826,604 \$637,102	\$947,944 \$679.353	\$995,086 \$587,398	\$974,807 \$591,473	\$1,034,405 \$521,092	\$1,008,518 \$560.606	\$11,560,589 \$7,068,787
Total		\$1,695,816	\$1,587,258	\$1,589,686	\$1,458,095	\$1,421,233	\$1,512,902	\$1,463,706	\$1,627,296	\$1,582,484	\$1,566,280	\$1,555,497	\$1,569,124	\$18,629,376
Renewable*Connect Program Expense	(Dollars)													
		January	February	March	April	Мау	June	July	August	September	October	November	December	Total
<b>Resource Cost</b> High Off-Peak		[Protected Data B	egins:											
Standard														
Total Resource Cost													Protect	ed Data Ends]
		\$1,109,757	\$1,080,712	\$1,165,603	\$1,117,020	\$1,133,616	\$1,147,381	\$1,143,530	\$1,194,072	\$1,101,704	\$1,077,654	\$1,017,501	Protect \$995,080	ed Data Ends] 13,283,630
		\$1,109,757	\$1,080,712	\$1,165,603	\$1,117,020	\$1,133,616	\$1,147,381	\$1,143,530	\$1,194,072	\$1,101,704	\$1,077,654	\$1,017,501		
Neutrality Charge		\$1,109,757		\$1,165,603	\$1,117,020	\$1,133,616	\$1,147,381	\$1,143,530	\$1,194,072	\$1,101,704	\$1,077,654	\$1,017,501		
High Off-Peak				\$1,165,603	\$1,117,020	\$1,133,616	\$1,147,381	\$1,143,530	\$1,194,072	\$1,101,704	\$1,077,654	\$1,017,501		
				\$1,165,603	\$1,117,020	\$1,133,616	\$1,147,381	\$1,143,530	\$1,194,072	\$1,101,704	\$1,077,654	\$1,017,501	\$995,080	
High Off-Peak Standard				\$1,165,603	\$1,117,020	\$1,133,616	\$1,147,381	\$1,143,530	\$1,194,072	\$1,101,704	\$1,077,654	\$1,017,501	\$995,080	13,283,630
High Off-Peak		[Protected Data B	egins:										\$995,080	13,283,630
High Off-Peak Standard		[Protected Data B	egins: \$391,947										\$995,080	13,283,630
High Off-Peak Standard Total Neutrality Cost Marketing and Administrative		(Protected Data B	egins: \$391,947										\$995,080 Protect \$387,362	13,283,630 ed Data Ends] 4,594,073
High Off-Peak Standard Total Neutrality Cost Marketing and Administrative High Off-Peak		(Protected Data B	egins: \$391,947										\$995,080 Protect \$387,362	13,283,630
High Off-Peak Standard Total Neutrality Cost Marketing and Administrative High Off-Peak		(Protected Data B	egins: \$391,947										\$995,080 Protect \$387,362	13,283,630 ed Data Ends] 4,594,073
High Off-Peak Standard Total Neutrality Cost Marketing and Administrative High Off-Peak Standard		[Protected Data B \$417,891 [Protected Data B	egins: \$391,947 egins: \$64,198	\$392,151	\$359,810	\$350,535	\$372,727	\$359,992	\$400,568	\$390,400	\$386,284	\$384,406	\$995,080 Protect \$387,362 Protect	ed Data Ends]
High Off-Peak Standard Total Neutrality Cost Marketing and Administrative High Off-Peak Standard		[Protected Data B \$417,891 [Protected Data B \$68,335	egins: \$391,947 egins: \$64,198	\$392,151	\$359,810	\$350,535	\$372,727	\$359,992	\$400,568	\$390,400	\$386,284	\$384,406	\$995,080 Protect \$387,362 Protect	ed Data Ends]
High Off-Peak Standard Total Neutrality Cost Marketing and Administrative High Off-Peak Standard Total Marketing Cost		[Protected Data B \$417,891 [Protected Data B \$68,335	egins: \$391,947 egins: \$64,198	\$392,151	\$359,810	\$350,535	\$372,727	\$359,992	\$400,568	\$390,400	\$386,284	\$384,406	\$995,080 Protect \$387,362 Protect \$63,433	ed Data Ends]

\*\*\*Indicative Pricing\*\*\*

### Renewable\*Connect Bridge Sales, Revenue and Expense Tracker

In 000s of kWh , except where labeled differently

Renewable*Connect Bridge Sales and Revenue	January	February	March	April	Мау	June	July	August	September	October	November	December	Total
Sales	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	240,000
Price (Cents per kWh)	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175	
Program Participant Payments	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$420,000
Program Revenue	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000	\$420,000
Renewable*Connect Bridge Program Expense	lonuoru	February	March	April	Мау	luno	lubr	August	Sontombor	October	November	December	Total
	January	February		April		June	July	August	September				lotal
REC Cost (cents per kWh) Total REC Cost	0.15 \$30,000	\$360,000											
Administrative Costs	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$60,000

## **CERTIFICATE OF SERVICE**

I, Lynnette Sweet, hereby certify that I have this day served copies of the foregoing document on the attached list of persons.

- <u>xx</u> by depositing a true and correct copy thereof, properly enveloped with postage paid in the United States mail at Minneapolis, Minnesota
- $\underline{xx}$  electronic filing

## Docket No. E002/M-19\_

## XCEL ENERGY'S MISCELLANEOUS ELECTRIC SERVICE LIST SERVICE LIST DOCKET NO. E002/M-15-985 SERVICE LIST DOCKET NO. E002/M-01-1479

Dated this 7<sup>th</sup> day of January 2019

/s/

Lynnette Sweet

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Lisa	Veith	lisa.veith@ci.stpaul.mn.us	City of St. Paul	400 City Hall and Courthouse 15 West Kellogg Blvd. St. Paul, MN 55102	Electronic Service	No	OFF_SL_15-985_Official
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Cam	Winton	cwinton@mnchamber.com	Minnesota Chamber of Commerce	400 Robert Street North Suite 1500 St. Paul, Minnesota 55101	Electronic Service	No	OFF_SL_15-985_Official

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Generic Notice	Commerce Attorneys	commerce.attorneys@ag.st ate.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1800 St. Paul, MN 55101	Electronic Service	No	OFF_SL_1-1479_1
Robert	Crowell	N/A	Horizon Wind Energy LLC	Suite 700 808 Travis Street Houston, TX 77002	Paper Service	No	OFF_SL_1-1479_1
lan	Dobson	residential.utilities@ag.stat e.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	No	OFF_SL_1-1479_1
John E.	Drawz	jdrawz@fredlaw.com	Fredrikson & Byron, P.A.	Suite 4000 200 South Sixth Stree Minneapolis, MN 554021425	Electronic Service	No	OFF_SL_1-1479_1
John R.	Dunlop, P.E.	JDunlop@RESMinn.com	Renewable Energy Services	Suite 300 448 Morgan Ave. S. Minneapolis, MN 554052030	Electronic Service	No	OFF_SL_1-1479_1
Sharon	Ferguson	sharon.ferguson@state.mn .us	Department of Commerce	85 7th Place E Ste 280 Saint Paul, MN 551012198	Electronic Service	Yes	OFF_SL_1-1479_1
Christopher	Gaudet	N/A	3Degrees	6 Funston Ave San Francisco, CA 94129	Paper Service	No	OFF_SL_1-1479_1
Dan	Juhl	djuhl@juhlenergy.com	Juhl Energy Inc.	1502 17th St SE Pipestone, MN 56164	Electronic Service	No	OFF_SL_1-1479_1
Michael	Loeffler	mike.loeffler@nngco.com	Northern Natural Gas Co.	CORP HQ, 714 1111 So. 103rd Street Omaha, NE 681241000	Electronic Service	No	OFF_SL_1-1479_1

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Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_1-1479_1