minnesota power
AN ALLETE COMPANY

30 West Superior Street
Duluth, MN 55802-2093
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December 2, 2019

VIA E-FILING
Daniel P. Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101-2147

Re: In the Matter of Minnesota Power's Reconnect Pilot Program
Docket No. E015/M-19-TBD

Dear Mr. Wolf:

Minnesota Power respectfully submits, via electronic filing, its proposed Reconnect Pilot Program.

Please contact me at (218) 355-3455 or hcreurer@allete.com if you have any questions regarding this compliance filing.

Yours truly,

Hillary A. Creurer
Regulatory Compliance Administrator

HAC:sr
Attach.

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

In the Matter of Minnesota Power's Reconnect Pilot Program	Docket No. E015/M-19-___ **INITIAL FILING**

SUMMARY

Pursuant to Minn. Rule 7829.1300, subp. 1, Minnesota Power (or the "Company") hereby petitions the Minnesota Public Utilities Commission ("Commission") for approval of its proposed Reconnect Pilot Program ("Pilot"). Under this Pilot, customers would have a more efficient and timelier way to get reconnected using optional technology available with certain advanced metering infrastructure ("AMI"). This proposal is to waive the reconnection fee allowed under Minn. Rule 7820.2600 for customers where remote-capable reconnection technology is installed.

I. INTRODUCTION

In the 2016 rate case[1] Minnesota Power initially introduced a proposed Reconnect Pilot Program and, in accordance with the guidance provided, resubmitted its proposal for a Reconnect Pilot Program in the 2018 Safety, Reliability, and Service-Quality Standards Report (SRSQ). On May 14, 2019, the Commission issued an Order in Minnesota Power's 2018 SRSQ[2] granting the Company's request to withdraw its Reconnect Pilot Program. Order Point 8 of the Commissions May 14, 2019, Order states:

> "The Commission grants Minnesota Power's request to withdraw its Reconnect Pilot Program on the following conditions:
>
> a. Minnesota Power shall file an updated version of the program either as a pilot or as a final program by December 1, 2019. That filing shall include:
>
> - The specific length of the program if it is a pilot;
> - A cost–benefit analysis and customer rate impacts as requested by the Department;
> - The estimated savings of the program on both an annual and a lifetime basis;
> - The number of customers in the program;
> - The overall number and percentage of its ratepayers who receive LIHEAP;
> - The number and percentage of remote-capable customers in the program who receive LIHEAP; and
> - The number of customers who have chosen to opt out of the program.
>
> b. Minnesota Power shall reach out and work with stakeholders in developing the program and shall provide a discussion of the Company's stakeholder-engagement efforts with its revised proposal."

Minnesota Power hereby resubmits its proposal for a Reconnect Pilot Program. This Pilot demonstrates Minnesota Power's dedication to safely and reliably creating and

[1] Docket No. E015/GR-16-664
[2] Docket No. E015/M-18-250

delivering vital energy to enhance security, comfort and quality of life, which includes providing excellent service to all customers and achieving high levels of customer satisfaction. The Company has been carefully working to modernize its grid, with prudent investments that increase automation, improve the quality of information to customers, strengthen cyber security, and deliver savings to customers. The Reconnect Pilot would utilize advanced metering infrastructure ("AMI") with remote technology capability to implement a more efficient and cost-effective reconnection process for customers in the event their service has been disconnected for non-payment. The basis for this proposal is three-fold:

1. Timelier reconnection once terms, consistent with Minnesota rules, statutes, and the Electric Service Regulations of Minnesota Power, have been met by the affected customer.
2. Safety for the customer and Minnesota Power field service personnel.
3. Leveraging available technology to streamline services and decrease costs for the customer and Minnesota Power.

Timeliness in Reconnecting Service

The Reconnect Pilot utilizes advanced metering infrastructure with remote technology capability to implement a more automated reconnection process, making it possible to reconnect customers in a timelier manner. Under this pilot, residential customers with the applicable meter capability will be given the option to be reconnected remotely. A customer service representative would initiate the reconnection and stay on the line with the customer to walk them through the process and affirm the reconnection. By using this process, a truck would not have to be sent for reconnection. Depending on customer location, time of day, and day of week, this could mean the difference between reconnection in minutes versus potentially days.

Safety

Safety is a core value of Minnesota Power and part of its operational and corporate culture. As such, opportunities to leverage technology that will further ensure safety of

customers and employees should be explored in earnest for effectiveness and efficiency. Remote reconnection eliminates the need to send a Minnesota Power employee on site, thus reducing the amount of time needed to complete the reconnection and/or avoiding the potential hazards that may exist on site. For example, personnel trying to access the meters physically encounter issues where the meters are blocked by items stacked around or against the side of houses. Also, in the winter there is often a large amount of snow with no clear path for access and potential slip/trip/fall hazards with the snow and resulting ice from melting and dripping off the roof.

In addition to field hazards, there are equipment wear and tear concerns, particularly where more frequent disconnection activity is observed. Meter sockets, which are the customer's responsibility to maintain and replace, will have a shortened life in instances where disconnections and subsequent reconnections occur more frequently. The costs to replace a meter socket can range from $700 - $2,000, which represents a significant investment, especially for those where energy affordability is already a challenge. As wear and tear occurs, other safety hazards can emerge as well. For instance, wear and tear can result in failing sockets that can present a fire hazard. AMI meters have the capability to detect voltage on the load side of the meter if they are in a disconnected state. They will not reconnect if voltage on the load side is present. This is a safety precaution to ensure the Company is not reconnecting while a generator is running or any other source is energizing the customer's equipment (such as an extension cord from the neighbor's house).

Leveraging Technology

Leveraging the remote access technology capabilities of the advanced metering infrastructure Minnesota Power is able to streamline services and decrease costs for the customer.

If a remote reconnection option is available, Minnesota Power staff would presumably be able to conduct this service from the office or service center using existing staff and without calling in additional resources or rolling a truck to the customer site.

II. PROCEDURAL REQUIREMENTS

In accordance with Minn. Rule 7820.2600, 7825.3500, 7829.1300 and additional Commission Orders, Minnesota Power provides the following required information.

A. Name, Address and Telephone Number of Utility

(Minn. Rule 7825.3500 (A) and 7829.1300, subp. 3(A))

Minnesota Power
30 West Superior Street
Duluth, MN 55802
(218) 722-2641

B. Name, Address and Telephone Number of Utility Attorney

(Minn. Rule 7825.3500 (A) and 7829.1300, subp. 3(B))

David R. Moeller,
Senior Attorney & Director of Regulatory Compliance
Minnesota Power
30 West Superior Street
Duluth, MN 55802
(218) 723-3963
dmoeller@allete.com (email)

C. Date of Filing and Date Proposed Rates Take Effect

(Minn. Rule 7825.3500 (B) and 7829.1300, subp. 3(C))

This petition is being filed on December 2, 2019. Until approval from the Minnesota Public Utilities Commission, the existing reconnection fee structure will remain in effect.

D. Statute Controlling Schedule for Processing the Petition

Minnesota Power's request for approval of its proposed Reconnect Pilot program falls within the definition of a "Miscellaneous Tariff Filing" under Minn. Rules 7829.0100, subp. 11 and 7829.1400, subp. 1 and 4 permitting comments in

response to a miscellaneous filing to be filed within 30 days, and reply comments to be filed no later than 10 days thereafter.

E. Utility Employee Responsible for Filing

(Minn. Rule 7829.1300, subp. 3(E))

Hillary A. Creurer
Regulatory Compliance Administrator
Minnesota Power
30 West Superior Street
Duluth, MN 55802
(218) 355-3455
hcreurer@allete.com (email)

F. Official Service List

Pursuant to Minn. Rule 7829.0700, Minnesota Power respectfully requests the following persons to be included on the Commission's official service list for this proceeding:

David R. Moeller
Senior Attorney
Minnesota Power
30 West Superior Street
Duluth, MN 55802
(218) 723-3963
dmoeller@allete.com

Hillary A. Creurer
Regulatory Compliance Administrator
Minnesota Power
30 West Superior Street
Duluth, MN 55802
(218) 355-3455
hcreurer@allete.com

G. Service on Other Parties

Minnesota Power is eFiling this report and notifying all persons on the Minnesota Power's General Service List that this report has been filed through eDockets. A copy of the service list is included with the filing along with a certificate of service.

H. Filing Summary

As required by Minn. Rule 7829.1300, subp. 1, Minnesota Power is including a summary of this filing on a separate page.

III. RECONNECT PILOT PROGRAM

The Reconnect Pilot Program Minnesota Power proposes would utilize advanced metering infrastructure with remote technology capability to implement a more efficient and timelier way to get reconnected using optional technology available with certain advanced metering infrastructure. This proposal is to waive the reconnection fee allowed under Minn. Rule 7820.2600 for customers, in the event that their service has been disconnected for non-payment and remote-capable reconnection technology is available.

Time	**Reconnection Fee**
8:00 a.m. – 4:30 p.m. M-F	$20
After 4:30 p.m., before 8:00 a.m., Saturdays, Sundays, and legal holidays	$100
Any time (Reconnect Pilot proposal)	Waive

The Company is currently proposing this as a pilot program due to the fact that this type of metering capability is not widely or uniformly deployed throughout its service territory. Proposed tariff language is included in Attachment A.

Currently approximately 60 percent of Minnesota Power‘s meters are AMI. However, of those meters with AMI, not all have the remote reconnect capability. Since infrastructure is not available everywhere it would not be economical to replace all installed AMI technology with this capability, at this time, as there is an increased cost of nearly 31 percent per meter.

Length of Reconnect Pilot

Minnesota Power proposes the length of this pilot program to be three years, starting from the date of approval and forward.

Reconnect Pilot Population

Minnesota Power has over 145,000 customers, of which approximately 122,500 are residential customers. The Company estimates up to 10 percent of its residential customer population would have remote reconnect capable meters and would be eligible for this pilot program. The geographic diversity of the customers identified spans from International Falls down to Sturgeon Lake and over to Little Falls. Further, there are approximately 10,000 (or 8 Percent) residential customers that are eligible for Low Income Home Energy Assistance Program ("LIHEAP"),[3] as determined by the LIHEAP application process and information from the Department of Commerce. Of those that are LIHEAP eligible, based on current meter data, over 550 customers have a remote reconnect capable meter.

The objective criteria used to identify the population for this pilot program is based on multiple inputs including geographic diversity, multiple disconnections (four or more) in a given year, difficult access, hazardous location, and/or threats such as a dog or other potential unsafe condition. This criteria represents the best fit and the greatest savings opportunities for the customers from a waived fee perspective. Also, it is important to select sites where some level of activity is reasonably projected, lest there would be no opportunity to pilot the technology and process. Minnesota Power will work with its customers to describe the Reconnect Pilot Program and will give them the option to be included in the Pilot or, alternatively, follow the standard process.

At this time, there are currently no participants in the Reconnect Pilot; therefore, Minnesota Power is not able to report on the number of customers who have chosen to opt out of the program.

[3] The number of LIHEAP eligible customers varies each year and has ranged from 9,905 to 11,731 since 2014, using the LIHEAP program year.

Cost – Benefit Analysis

A pilot program of this nature is intended to more definitively inform the business case for a broader offering of this program in terms of customer experience, timeliness of reconnection, scalability and effectiveness of solution, operational savings and safety benefits. As technology advances and incremental costs potentially decrease, the availability to offer this capability to other customers will likely expand. Completing this Pilot in advance of that will help ensure systems and processes are in place to scale this offering.

Leveraging the remote access technology, Minnesota Power proposes the reconnection fee be waived for those in the Reconnect Pilot. When the remote reconnection option is available, Minnesota Power staff would presumably be able to conduct this service from the office or service center using existing staff and without calling in additional resources or rolling a truck to the customer site.

Costs for reconnections will vary depending on the type of reconnection, regular business hours (Monday-Friday 8:00 a.m. to 4:30 p.m.) versus after-hours (after 4:30 p.m., before 8:00 a.m., and Saturdays, Sundays and legal holidays) and the travel distance required. Reconnections during regular business hours are performed upon request, often involving interruption to other work being performed, or what is commonly referred to as “break-in work”. There is also variable travel time to the customer’s site from the employee’s current work location. Below are the hourly costs for reconnections during regular business hours versus after-hours as well as the current and proposed reconnection fees.

- Regular Business Hours: $55–$80/hour of Labor and Vehicle Costs
- After Business Hours: $120–$180/2 hour of Labor and Vehicle Costs

The hourly cost varies depending in large part on the labor resources available (i.e., collector versus lineworker) and includes overhead costs. After-hour reconnections are more expensive as they tend to entail labor rates that involve overtime pay.

Time	Reconnection Fee
8:00 a.m. – 4:30 p.m. M-F	$20
After 4:30 p.m., before 8:00 a.m., Saturdays, Sundays, and legal holidays	$100
Any time (Reconnect Pilot proposal)	Waive

In 2018, Minnesota Power had nearly 2,500 residential customers who were disconnected for non-payment. Of those reconnected, 120 customers had AMI meters with remote capabilities. Of those reconnections, about 110 occurred during business hours and about 10 occurred after-hours. Using these figures as a proxy, below is an estimate of avoided costs, using only meters with remote reconnection capability where a disconnection and reconnection occurred. As the number of meters with remote capabilities increases, the estimated avoided costs will also potentially increase significantly, assuming more reconnections occur using this technology.

	During Business Hours	After Business Hours	Total
Reconnections	110	10	120
Average Cost	$6,050 – $8,800	$1,200 – $1,800	$7,250 – $10,600
Fees Collected	$2,200	$1,000	$3,200

These figures do not account for lost productivity or inefficiencies introduced from the nature of reconnections discussed above. Estimated customer cost savings in the way of waived reconnection fees are $2,200 for business hours and $1,000 for after business hours, using these same proxy figures. Again, as the number of meters with remote capabilities increases, the estimated customer cost savings would conceivably increase as well for waived fees.

Disconnection Process

Minnesota Power is not proposing any changes to our current disconnection process or variance from Minn. Rule 7820.2500. It is the Company's intention and obligation to follow the rules for disconnection, which includes a personal visit by a representative.

The Reconnect Pilot program Minnesota Power is proposing is for reconnection purposes only. However, based on how the technology works a remote disconnection signal would be needed because in order for the meter to receive a remote reconnection signal, it must first receive a remote disconnection signal. If a remote disconnection signal were not used, it may suggest a physical change to the meter in the field. Physically changing the state of the disconnect switch under the glass of the meter in the field would require breaking the tamper seals, which are only done in the Company's testing facility due to exposes live electrical parts, causing a safety hazard. Also, if the disconnection state the switch is in doesn't match the last position of the switch in the meter's memory, the meter locks out with an error and the switch is stuck in that state and not operable. This type of event would require an immediate field visit for remediation.

Stakeholder Engagement

Minnesota Power discussed the proposed Reconnect Pilot with stakeholders, including the MPUC Consumer Affairs Office, Energy CENTS Coalition, and Citizens Utility Board. There was general support regarding a reconnection fee waiver under the pilot and a general understanding that this was not changing the disconnection or reconnection process under statute or Minn. Rules, but rather changing how the reconnection is technically accomplished, something that is not specified in statute or Minn. Rules. There was also discussion confirming that Minnesota Power would still follow Minnesota Statutes and Rules regarding the disconnection process, including notices, offers for payment plans, and a personal visit before disconnection, regardless of the type of meter or remote capabilities it may have. There were mixed, but generally receptive, reviews on using remote technology, with particular interest in an automatic reconnection option while retaining consumer protections, all of which Minnesota Power is receptive to and has provided assurances would continue under this pilot. Further, if the pilot is approved, the stakeholder group expressed interest in a separate reporting element in future Safety, Reliability, and Service Quality reports where reconnections

using remote capability would be reported separately from other reconnections, along with the effect on time to restore (i.e. change in average time to restore as compared to the standard reconnection process in existence today). The Company was amenable to this reporting suggestion and indicated so to stakeholders.

IV. CONCLUSION

The Company believes this Reconnect Pilot is an initiative worth exploring. In short, it is a faster, safer, and potentially less expensive way to reconnect the customer after hours, while providing for more timely restoration of service. While the majority of reconnections occur during normal business hours, after-hours reconnections are generally more distressing for customers. Further, a reconnection fee on top of any balance due for reconnection, especially after-hours, creates additional burden for the customer. The Company will be able to leverage technological capability in the field, which provides savings potential for the customer through a waived fee as well as cost savings for the Company because the transaction would not require dispatching a crew to reconnect the customer.

Minnesota Power respectfully requests approval of its proposed Reconnect Pilot, which aims to make service reconnections more efficient, timelier, affordable, and safe.

Dated: December 2, 2019

Respectfully Submitted,

Hillary A. Creurer
Regulatory Compliance Administrator
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MINNESOTA POWER **SECTION** V **PAGE NO.** TBD
ELECTRIC RATE BOOK - VOLUME I **REVISION** Original

PILOT RIDER FOR REMOTE SERVICE RECONNECTION

APPLICATION

Applicable on a voluntary basis to customers taking service under the Residential Service Schedule 20 or 22, Dual Fuel Interruptible Electric Service Schedule 21, Controlled Access Electric Service Schedule 24, or Off-Peak Electric Vehicle Service Schedule 28.

In order to be eligible for this Pilot Rider, Customer must have Advanced Metering Infrastructure (AMI) with remote reconnect capability, and shall have been disconnected following procedures specified in Company's Service Regulations, Section VI, page 3.4, Regulation 19.

RATE MODIFICATION

Remote Service Reconnection is available any time of the day, all year and the Fee shall be as follows:

Remote Service Reconnection Fee: Waive

SERVICE CONDITIONS

1. Customers may choose to be reconnected using remote AMI capability and shall be reconnected for the Remote Service Reconnection Fee specified above after they have met the payment requirement as stipulated in the Company's Service Regulations, Section VI, page 3.5, Regulation 20. This Remote Service Reconnection Fee replaces the Service Reconnection Fee specified in regulation 20.A.

2. Customers who are remotely reconnected will be walked through the process on the phone by a Company representative during the reconnection process to ensure that the connection has taken place and is completed safely.

3. Customers without existing AMI equipment may request participation in this Pilot Rider. The Company will install and commission the equipment at the Customer's residence prior to making the Pilot Rider available.

STATE OF MINNESOTA	)	AFFIDAVIT OF SERVICE VIA ELECTRONIC FILING
	)ss	
COUNTY OF ST. LOUIS	)	

SUSAN ROMANS of the City of Duluth, County of St. Louis, State of Minnesota, says that on the **2nd** day of **December, 2019**, she served Minnesota Power's Petition for Reconnect Pilot Program on the Minnesota Public Utilities Commission and the Office of Energy Security via electronic filing. The persons on Minnesota Power's General Service List attached were served as requested.

Susan Romans

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Christopher	Anderson	canderson@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022191	Electronic Service	Yes	GEN_SL_Minnesota Power_MPs General Service List
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1800 St. Paul, MN 55101	Electronic Service	Yes	GEN_SL_Minnesota Power_MPs General Service List
Riley	Conlin	riley.conlin@stoel.com	Stoel Rives LLP	33 S. 6th Street Suite 4200 Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Minnesota Power_MPs General Service List
Hillary	Creurer	hcreurer@allete.com	Minnesota Power	30 W Superior St Duluth, MN 55802	Electronic Service	No	GEN_SL_Minnesota Power_MPs General Service List
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 280 Saint Paul, MN 551012198	Electronic Service	Yes	GEN_SL_Minnesota Power_MPs General Service List
Kimberly	Hellwig	kimberly.hellwig@stoel.com	Stoel Rives LLP	33 South Sixth Street Suite 4200 Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Minnesota Power_MPs General Service List
Lori	Hoyum	lhoyum@mnpower.com	Minnesota Power	30 West Superior Street Duluth, MN 55802	Electronic Service	No	GEN_SL_Minnesota Power_MPs General Service List
Michael	Krikava	mkrikava@briggs.com	Briggs And Morgan, P.A.	2200 IDS Center 80 S 8th St Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Minnesota Power_MPs General Service List
Douglas	Larson	dlarson@dakotaelectric.com	Dakota Electric Association	4300 220th St W Farmington, MN 55024	Electronic Service	No	GEN_SL_Minnesota Power_MPs General Service List
James D.	Larson	james.larson@avantenergy.com	Avant Energy Services	220 S 6th St Ste 1300 Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Minnesota Power_MPs General Service List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Susan	Ludwig	sludwig@mnpower.com	Minnesota Power	30 West Superior Street Duluth, MN 55802	Electronic Service	No	GEN_SL_Minnesota Power_MPs General Service List
Pam	Marshall	pam@energycents.org	Energy CENTS Coalition	823 7th St E St. Paul, MN 55106	Electronic Service	No	GEN_SL_Minnesota Power_MPs General Service List
David	Moeller	dmoeller@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022093	Electronic Service	Yes	GEN_SL_Minnesota Power_MPs General Service List
Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP	33 South Sixth St Ste 4200 Minneapolis, MN 55402	Electronic Service	No	GEN_SL_Minnesota Power_MPs General Service List
Jennifer	Peterson	jjpeterson@mnpower.com	Minnesota Power	30 West Superior Street Duluth, MN 55802	Electronic Service	No	GEN_SL_Minnesota Power_MPs General Service List
Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	GEN_SL_Minnesota Power_MPs General Service List
Susan	Romans	sromans@allete.com	Minnesota Power	30 West Superior Street Legal Dept Duulth, MN 55802	Electronic Service	No	GEN_SL_Minnesota Power_MPs General Service List
Eric	Swanson	eswanson@winthrop.com	Winthrop & Weinstine	225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Electronic Service	No	GEN_SL_Minnesota Power_MPs General Service List
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	No	GEN_SL_Minnesota Power_MPs General Service List