



30 West Superior Street
Duluth, MN 55802-2093
www.mnpower.com



August 31, 2020

VIA E-FILING

Will Seuffert
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 Revised Petition for a Competitive Rate for Energy Intensive Trade Exposed (EITE) Customers and an EITE Cost Recovery Rider

Docket No. E015/M-16-564

In the Matter of the Application of Minnesota Power for Authority to Increase Rates for Electric Utility Service in Minnesota

Docket No. E015/GR-19-442

In the Matter of the Emergency Petition of Minnesota Power for Approval to Move Asset-based Wholesale Sales Credits to the Fuel Adjustment Clause Resolve Rate Case

Docket No. E015/M-20-429

In the Matter of an Inquiry into Utility Investments that May Assist in Minnesota's Economic Recovery from the COVID-19 Pandemic

Docket No. E,G999/CI-20-492

In the Matter of the Petition for Approval of Minnesota Power Land Sales

Docket No. E015/PA-20-675

Dear Mr. Seuffert:

Minnesota Power (or, "the Company") has moved further and faster than any other utility in the state towards a cleaner energy system, reducing carbon fifty percent since 2005 when the Company's resource mix was ninety-five percent coal-based generation by idling or retiring seven of its nine coal units. After meeting Minnesota's Renewable Energy Standard of twenty-five percent renewable a decade early in 2015, Minnesota Power will be delivering a power supply that is fifty percent renewable by 2021. The Company is decarbonizing its portfolio with meaningful renewable additions (over 500 MW) of solar, wind and hydro.

As unique as Minnesota Power is in its transformation to a cleaner energy system, it is also distinctive in terms of the customers it serves. Minnesota Power, serving the natural resources based economy of northern Minnesota, provides power to some of the

nation's largest industrial customers. These customers operate 24/7 and require reliable and affordable power to compete in their respective global markets. The Company's large industrial customers represent nearly three-quarters of all Minnesota Power's energy sales, unlike more traditional utilities whose industrial customers represent around one-quarter of energy sales. These large users have helped to create an extremely efficient power system, which currently operates at an 85 percent load factor and generates savings for all customers. In fact, Minnesota Power's typical residential customer currently enjoys the lowest residential electric rates in the state.

However, these large energy users continue to experience price pressures in their respective industries and must look at all ways to ensure electricity supply is an affordable input to their operations, particularly in a challenged economic environment like a recession. Through a series of filings in dockets referenced above, Minnesota Power is proposing innovative ways to mitigate rate increases for each of its customer classes at a time when energy affordability is most needed as industries and residents alike attempt to recover from the economic effects of the COVID-19 pandemic. As of the date of this petition, two of Minnesota Power's key large industrial customers remain indefinitely idled – Keewatin Taconite and Verso's Duluth Mill. For context, those two customers used approximately the same amount of energy as Minnesota Power's entire residential customer class in 2019.

Through a series of filings, Minnesota Power will propose an extension of the Energy Intensive Trade Exposed ("EITE") rate from February 1, 2021 until final rates are implemented in the Company's next rate case, expected to be filed no later than November 1, 2021. As an additional and meaningful rate mitigation effort for all customers, the Company will also request approval to begin selling land holdings along traditional hydro reservoirs that are no longer necessary for maintaining hydro operations. Finally, through an update in the Economic Recovery Docket, the Company will outline several new ideas that can be brought forward in either future dockets or the next rate case to further mitigate customer rates. Taken together, these three filings represent Minnesota Power's comprehensive strategy to ensure affordable energy rates for all customers.

Feel free to contact me at (218) 355-3202 or jjpeterson@mnpower.com with any further questions.

Respectfully,



Jennifer J. Peterson
Manager – Regulatory Strategy & Policy
Minnesota Power
30 W. Superior Street
Duluth, MN 55802-2093
jjpeterson@mnpower.com

**STATEMENT REGARDING JUSTIFICATION FOR EXCISING
TRADE SECRET INFORMATION**

Minnesota Power has excised material from the public version of the attached report documents as they identify and contain confidential, competitive information regarding the Company's methods, techniques and process for supplying electric service to its customers. The energy usage by specific customers and generation by fuel type has been consistently treated as trade secret in individual filings before the Commission.

Minnesota Power follows strict internal procedures to maintain the privacy of this information. The public disclosure of this information would have severe competitive implications for customers and Minnesota Power.

Minnesota Power is providing this justification for the information excised from the electronically submitted report and attachments in accordance with Minn. Stat. § 13.37. The Company is submitting both public and non-public versions of this filing.

Date prepared: August 31, 2020.

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

In the Matter of an Inquiry into Utility Investments
That May Assist in Minnesota’s Economic
Recovery from the COVID-19 Pandemic

Docket No. E,G999/CI-20-492
**MINNESOTA POWER’S
SUPPLEMENTAL REPORT**

I. INTRODUCTION

On May 20, 2020, the Minnesota Public Utilities Commission (“Commission”) issued a Notice of Reporting Required by Utilities, requesting all regulated gas and electric utilities provide a list of all ongoing, planned, or possible investments that meet predefined criteria. On June 17, 2020, Minnesota Power (or the “Company”) submitted a thoughtful, comprehensive and community-focused package of activities in this docket that will support previous Commission guidance, Minnesota’s energy policy objectives and aid economic recovery across its service territory. Areas of focus in June 17, 2020 report include: economic development, conservation, electrification, demand response, solar energy programs, and accelerated utility scale solar projects.

In this supplemental report, Minnesota Power will preview a package of rate mitigation ideas to be pursued in other dockets or the Company’s next rate case. The ideas presented in this supplemental report are intended to maintain the affordability of electric rates while Minnesota Power advances decarbonization efforts and customers continue to bear the economic impacts of the COVID-19 pandemic and recession. These ideas include: an extension of the Energy Intensive Trade Exposed (“EITE”) customer rate until final rates of the Company’s next rate case, approval to begin sales of land holdings, innovative solutions to mitigate the rate impact of the Manitoba Hydro contract, demand response offerings for industrial customers, mine truck electrification efforts, the generation of Production Tax Credits (“PTC”) and the extended depreciation on transmission assets. Taken together, these ideas offer a holistic, creative and forward looking approach to attempt to mitigate rate increases as Minnesota Power continues its clean energy transition.

II. SUPPLEMENTAL REPORT OF RATE MITIGATION EFFORTS

As the economic repercussions of the COVID-19 pandemic continue to affect all customers, affordability of electricity must be paired with decarbonization efforts as the Company executes its *EnergyForward* vision for a cleaner energy future. Through this section of the report, Minnesota Power outlines innovative proposals to ensure rates remain competitive for all customers as the Company reaches a power supply that is now half renewable and customers attempt to recover from the economic repercussions of COVID-19.

A. Energy Intensive Trade Exposed (“EITE”) Customer Rate

As an immediate step to assist its largest industrial customers, Minnesota Power proposed extending the EITE rate until final rates are implemented in the Company’s next rate case, expected to be filed no later than November 1, 2021. In its June 20, 2020 Order resolving Minnesota Power’s rate case with conditions¹, the Commission directed the Company to maintain the current EITE customer rider rate discount through February 1, 2021 and work with stakeholders to bring forward a proposal by August 31, 2020, to extend the EITE rider rate discount.

The Company has filed the extension request in the EITE Docket No. E015/M-16-564. As evidenced by comments submitted by the Large Power Intervenor Group (“LP”), the Iron Mining Association (“IMA”) and the Minnesota Forest Industries (“MFI”) in the Company’s rate case resolution proceeding, extension of the EITE rate is critical to supporting the largest industries in northern Minnesota. The underlying economic challenges on EITE industries are unparalleled and ongoing. Additionally, Minn. Stat. § 216B.1696, which authorizes the EITE rate, states, “It is the energy policy of the state of Minnesota to ensure competitive electric rates for energy-intensive trade-exposed customers.”

¹ Docket No. E-015/M-16-564, E-015/GR-19-442, E,G999/M-20-429.

B. Request to Begin Land Sales

Minnesota Power began providing electric service in northern Minnesota 1906² by harnessing the energy of the St Louis River near Duluth, and today operates the largest hydroelectric system in Minnesota. Together, 11 stations produce more than 120 MW of electricity³ for customers in northern Minnesota. All of Minnesota Power's hydro stations are run of river, meaning they rely on the natural flow rate of the rivers to generate electricity, with the exception of Thomson Hydro. A conventional reservoir behind Thomson Dam stores water for later use, allowing the power station to call on it for its turbines as needed. Thomson is part of the St Louis River Project, which also includes five storage reservoirs on Whiteface, Cloquet and Beaver rivers that flow into the St Louis River upstream from four Minnesota Power hydroelectric stations. These reservoirs – Whiteface, Boulder Lake, Island Lake, Fish Lake and Rice Lake – provide water for hydroelectric generation in the winter when there is not enough natural flow in the St Louis River. Minnesota Power releases water from the reservoirs in the winter and in the spring, discharges are reduced, allowing the reservoir to fill again in preparation for the next winter's controlled drawdown. In Lake County, the Winton Hydro Station uses stored water from Garden Lake and associated waterbodies to power the Winton Hydroelectric Station via the Kawishiwi River.

Minnesota Power's commitment to hydroelectric power includes generating clean, renewable energy for customers while also protecting the land and water and providing public recreational opportunities. The Company's professional land and real estate staff manage the land surrounding the 17 reservoirs for public recreation, forest and wildlife stewardship, cultural and historical site protection, environmental education, and residential cabin and home leases.

In Docket No. E015/PA-20-675, Minnesota Power has requested Commission approval to begin selling land holdings along its traditional hydro reservoirs, as well as guidance on land valuation and the ability to defer proceeds from approved land sales

² The immediate predecessor of Minnesota Power was the Duluth Edison Electric Co.

³ The 11 stations include: Blanchard, Little Falls and Grand Rapids on the Mississippi River; Winton on the Kawishiwi River; Pillager and Sylvan on the Crow Wing River; Prairie River Station on the Prairie River; and Fond du Lac, Knife Falls, Scanlon and Thomson on the St Louis River.

into a regulatory liability that would be returned to customers in a future rate case or through the Renewable Resources Rider. Selling land holdings along hydro reservoirs that are no longer necessary for the Company to own while continuing to operate the reservoirs will generate proceeds that can go back to customers to mitigate rate increases. This activity also complements the Company's goal of reducing non-core land holdings for the benefit of utility customers, while simultaneously advancing the potential for economic development via additional lot development by the landowner once they hold full title to the property, providing important construction and other opportunities for the local economy, as well as expansion of the county tax base through additional value created by residential lot development.

C. Manitoba Hydro Agreement Capacity Charge Solutions

Minnesota Power is able to provide a power supply that is 50 percent renewable in large part due to the investments made in the Great Northern Transmission Line ("GNTL") and agreements executed with Manitoba Hydro. The GNTL is the Minnesota portion of a new 500 kV interconnection between Manitoba and Minnesota, with the purpose of efficiently providing Minnesota Power's customers and the Midwest region with clean, emission-free energy. This energy will help meet the region's growing long term energy demands, advance Minnesota Power's *EnergyForward* strategy to increase generation diversity, strengthen system reliability and fulfill the Company's obligation under its power purchase agreements with Manitoba Hydro.

The GNTL will facilitate 883 megawatt ("MW") of incremental Manitoba – United States transfer capability, including 383 MW of hydropower and wind storage energy products to serve Minnesota Power's customers. Minnesota Power's 250 MW Power Purchase Agreement⁴ and 133 MW Renewable Energy Optimization Agreement with Manitoba Hydro both required that new transmission facilities were in-service by June 1, 2020, to facilitate the transactions. The Manitoba hydropower purchases made possible by GNTL will provide Minnesota Power and other utilities in the Upper Midwest access to a predominantly emission-free energy supply that has a unique combination of baseload

⁴ Docket No. E-015/M-11-938.

supply characteristics, price certainty, and resource optimization flexibility not available in comparable alternatives for meeting customer requirements.⁵

Minnesota Power is pleased to report that in addition to construction of GNTL being on schedule, construction costs were also on budget as set in the Certificate of Need (“CON”)⁶. The current estimate is approximately \$658 million (2013 \$), when escalation is factored in using the Handy Whitman Indices, the project costs are \$751.2 million in nominal dollars. Minnesota Power is currently recovering GNTL costs up to 2019 through the Transmission Current Cost Recovery Rider.

As part of the approved 15 year 250 MW Manitoba Hydro Agreement, a monthly capacity price is added to the daily energy price. The energy price related to the 250 MW Manitoba Hydro PPA is currently recovered through the Fuel Adjustment Clause (“FAC”) as of the date the contract went into effect, June 1, 2020. However, the monthly capacity price is not recovered through the FAC and will eventually be recovered through base rates in a future rate case. As an immediate effort to smooth out the cost of the annual capacity charge, the Company negotiated with Manitoba Hydro a two year delay of implementing the capacity charge, which will now begin in 2022 versus 2020, saving customers during the first years of the agreement. The annual cost of the capacity charge, as approved by the Commission⁷, for the Manitoba Hydro PPA totals [TRADE SECRET DATA BEGINS ██████████ TRADE SECRET DATA ENDS] per year beginning in 2022. The additional capacity charge associated with the Manitoba Hydro PPA will be a key component in a future rate case. Understanding that the additional capacity costs represent for customers is significant, Minnesota Power is investigating ways to mitigate the rate impact of the monthly capacity charge in Minnesota Power’s next rate case.

D. Demand Response

As the Company stated in its June 17, 2020 Report, Minnesota Power has a unique opportunity to partner with its large industrial customers to efficiently and effectively

⁵ Minnesota Power’s Transmission Cost Recovery Rider Filing Dated July 9, 2019 in Docket No. E015/M-19-440.

⁶ Docket No. E015/CN-12-1163.

⁷ Docket No. E015/M-11-938.

deliver large quantities of Demand Response (“DR”) for the benefit of the broader utility system. For over twenty years Minnesota Power has leveraged key customer relationships to partner and to implement various DR programs. These programs have been successful in providing benefits to all customers and to the utility system as a way to minimize investment in large generator infrastructure, like peaking plants, to support system resource adequacy requirements. Minnesota Power has continued exploring the use of DR in longer term products in several forms as increasing quantities of variable renewable energy on the utility system have been added. The new variable energy profile will require increasing customer response through new innovative DR products, which can serve as both an opportunity to spur economic recovery and mitigate rates for participating customers.

Minnesota Power will include a placeholder quantity of DR in the next Integrated Resource Plan to recognize the potential for growth of DR as a valid resource option for the Company and its customers. Minnesota Power has also been assessing markets, and those efforts have resulted in development of a specific Product C Demand Response proposal⁸ which the Company is currently exploring with its customers. Should customers express interest in taking part in this proposal, Minnesota Power will then file a petition with the Commission, ideally in late 2020 or early 2021, for approval of the appropriate customer participation in this new Demand Response Product C proposal.

E. Mine Truck Electrification

As also referenced in Minnesota Power’s June 17 Report, electrification of industry is a key interest to Minnesota Power and its unique industrial customers. For example, transitioning the haul trucks at Minnesota’s iron mines from diesel mechanical to electric drive would be an effective means of reducing fossil fuel consumption, carbon emissions, and criteria pollutants, while advancing the electrification of the transportation sector at an industrial scale. Further, mine truck electrification would enable more interruptible load

⁸ Demand Response Product C was approved in the Commission’s November 12, 2019 Order in Docket No. E-015/M-18-735.

which helps integrate additional variable renewable energy and keep costs down for customers.

Minnesota Power is evaluating the feasibility of deploying the technology through a pilot with our partners in the iron mining industry to determine the potential for further improving upon their competitiveness while advancing the environmental profile of our mining industry, which is already home to some of the cleanest steel mining and manufacturing in the world. The goal of this effort is to facilitate the transition from fossil fuels to cleaner electric service. A potential pilot program could include financial support for: a site-specific analysis; replacement or retrofitting of a portion of an existing haul truck fleet; engineering and installation of the catenary system and substations; and service extension to the trolley line. Various factors, including many which are site specific, would determine the economic feasibility of trolley implementation. These factors include the cost of electricity, price of diesel, slope, length and life of haul road, and productivity gains. Minnesota Power looks forward to working with its customers to continue collaboratively evaluating a Mine Truck Electrification Pilot and the identifying economic recovery and rate mitigation benefits it could provide to both the Company's largest industrial customers and region as a whole.

F. Taconite Ridge Wind Energy Facility Production Tax Credits

As another example of how Minnesota Power continues to look for new and innovative ways to bring value to its customers, through 2019, the Company has provided a benefit to its customers with over \$250 million of Production Tax Credits ("PTC") through its Bison and Taconite Ridge wind energy facilities. In recent years, the Internal Revenue Service ("IRS") provided guidance which allows developers to requalify existing wind projects for the PTC through a process known as "repowering". Beginning in 2020, the Company has the opportunity to provide a benefit to customers with over \$12 million in

production tax credits over ten years through the repowering of the 25MW Taconite Ridge Energy Center⁹.

Repowering is achieved through replacing used equipment with new equipment while adhering to the so-called “80/20” rule as defined by the IRS. To meet the requirement, the fair market value of the retained components cannot exceed 20 percent of the property’s value after repower. Alternatively, the repowering costs associated with the replaced components cannot be less than 80 percent of the property’s value after repower. In addition, taxpayers must begin construction on repowering projects by December 31, 2016 to claim 100 percent of the value of the PTCs. Construction initiation requirements are met by commencing physical work or incurring 5 percent of the total cost of the project.

The Taconite Ridge Energy Center project met the requirements to begin construction in 2016 through replacement or repair of pitch bearings, blades or hubs on 5 of the 10 turbines. Additional capital projects in 2017 through 2019 included the aforementioned replacements, as well as power conditioning matrices and gearbox bearing replacements. The final turbine will qualify in the second half of 2020. In 2020, the Company engaged Deloitte to issue a report entitled “Analysis of the Fair Market Value of Certain Assets as of the Repowering Date.” The report also includes an analysis of each repowering scenarios described above.

The additional benefits of the production tax credits resulting from repowering Taconite Ridge Energy Center will be provided to customers through the Minnesota Power’s existing tracker mechanism in the Renewable Resources Rider (“RRR”). Minnesota Power has implemented a true-up procedure to account for differences in PTCs generated by the Company’s wind facilities as compared to what has been included in base rates in our most recent retail rate case¹⁰. The 2020 Renewable Resource Rider has a true-up to adjust for the difference between the amount of PTCs in base rates and actual PTCs as determined based on actual wind generation. Subject to Commission

⁹ Docket E-015/M-07-1064, Order Date March 4, 2008 Approving Taconite Ridge Investments and Expenditures. Due to rate case timing, Taconite Ridge investments and expenditures were recovered in base rates and have not flowed through the Renewable Resources Rider.

¹⁰ This is Order Point No. 37 in the 2016 retail rate case initial order, Docket No. E015/GR-16-664 dated March 12, 2018.

approval, the additional PTCs from repowering Taconite Ridge Energy Center will be added to this tracker mechanism going forward. Minnesota Power will file this request separately under Minn. Stat. § 216B.1645 and if approved, the Company would include the additional Taconite Ridge PTCs in the RRR tracker in the next RRR factor filing.

G. Extended Depreciation of Transmission Assets

Minnesota Power plans to have a study prepared by an outside consultant reviewing the average service lives, net salvage rates, and depreciation rates for all its transmission and distribution plant. Due to the complex and technical nature of preparing a depreciation study, Minnesota Power engages a consulting firm specializing in utility depreciation studies to prepare the study. Once the study is completed and reviewed, Minnesota Power plans to file an updated transmission and distribution plant depreciation petition with the Commission by April 1, 2021. If justified by the analysis and studies, depreciable lives will be extended resulting in lower depreciation rates. This may just be for the modern 500 kV Great Northern Transmission Line but other transmission and distribution assets will be reviewed. If approved by the Commission, the depreciation lives and rates from the transmission and distribution plant depreciation petition will be used to determine depreciation expense for all of Minnesota Power's transmission and distribution assets effective January 1, 2021. These benefits could be passed backed to customers through either a general rate case or the Transmission Rider.

III. CONCLUSION

Minnesota Power has a long history of meeting and often exceeding state energy policy objectives while working to ensure the economic vitality of the unique region it serves. This supplemental report adds ideas to mitigate rate increases to the economic recovery projects brought forward in Minnesota Power's June 17, 2020 Report. Efforts to ensure energy is affordable for customers is especially critical as the majority of Minnesota Power's energy sales go to large industrial customers who are price sensitive and competing globally. Importantly, all of these efforts – both in terms of economic

recovery projects and rate mitigation ideas - complement the customer and employee safety protections that Minnesota Power has taken and will continue to take as the COVID-19 pandemic reality evolves.

Dated: August 31, 2020

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Jennifer J. Peterson". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Jennifer J. Peterson

*Manager –Regulatory Strategy & Policy
Minnesota Power
30 W. Superior Street
Duluth, MN 55802
(218) 355-3202
jjpeterson@mnpower.com*

STATE OF MINNESOTA)
) ss
COUNTY OF ST. LOUIS)

AFFIDAVIT OF SERVICE VIA
ELECTRONIC FILING

Tiana Heger of the City of Duluth, County of St. Louis, State of Minnesota, says that on the 31st day of August, 2020, she served Minnesota Power's Extension Request in **Docket No. E,G999/CI-20-492** on the Minnesota Public Utilities Commission and the Energy Resources Division of the Minnesota Department of Commerce via electronic filing. The persons on E-Docket's Official Service List for this Docket were served as requested.



Tiana Heger