



October 20, 2022

## **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 Petition for Approval to Recover Reagent Costs through the Fuel and Purchased Energy Rider Docket No. E015/M-22-TBD Initial Petition

Dear Mr. Seuffert:

Minnesota Power respectfully submits to the Minnesota Public Utilities Commission a Petition for approval to shift the recovery of all allowed reagent costs in accordance with Minn. Stat. § 216B.16, subd.7(4) out of base rates and into the Fuel and Purchased Energy Charge Rider.

Please contact me at (218) 355-3455 or <u>hcreurer@allete.com</u> if you have any questions regarding this filing. For all discovery related inquiries please email <u>hcreurer@allete.com</u> and <u>discoverymanager@mnpower.com</u>.

Kind Regards,

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Hillary A. Creurer Regulatory Compliance Administrator

HAC:th Attach.



Together we choose to work safely for our families, each other, and the public. We commit to be injury-free through continuous learning and improvement.

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

In the Matter of Minnesota Power's Petition for Approval to Recover Reagent Costs through the Fuel and Purchased Energy Rider Docket No. E015/M-22-XXX MINNESOTA POWER'S INITIAL PETITION

#### I. SUMMARY

Minnesota Power hereby submits this Petition to the Minnesota Public Utilities Commission ("Commission") for approval to recover reagent costs through the Fuel and Purchased Energy Rider ("FPE Rider" or "Fuel Clause"). Reagents are used by the Company to reduce pollutants from its power plants to comply with federal and state air quality regulations. Minn. Stat. § 216B.16, subd. 7(4) allows the Commission to permit fuel clause recovery of "prudent costs incurred by a public utility for sorbents, reagents, or chemicals used to control emissions from an electric generation facility, provided that these costs are not recovered elsewhere in rates."

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

In the Matter of Minnesota Power's Petition for Approval to Recover Reagent Costs through the Fuel and Purchased Energy Rider Docket No. E015/M-22-XXX MINNESOTA POWER'S INITIAL PETITION

## I. INTRODUCTION

Minnesota Power (or the "Company") hereby submits this Petition to the Minnesota Public Utilities Commission ("Commission") for approval to recover reagent costs through the Fuel and Purchased Energy Rider ("FPE Rider" or "Fuel Clause"). Reagents are used by the Company to reduce pollutants from its power plants to comply with federal and state air quality regulations. Minn. Stat. § 216B.16, subd. 7(4) allows the Commission to permit fuel clause recovery of "prudent costs incurred by a public utility for sorbents, reagents, or chemicals used to control emissions from an electric generation facility, provided that these costs are not recovered elsewhere in rates."

Minnesota Power requested permission to recover reagent costs in its 2016 Rate Case in Docket No. E015/GR-16-664 ("2016 Rate Case")<sup>1</sup>. The Commission's reasoning in denying the request at the time was that limiting recovery of reagent costs to base rates gave Minnesota Power an incentive to minimize these costs between rate cases<sup>2</sup>. However, since the 2016 Rate Case the Fuel Clause Adjustment ("FCA") mechanism has been significantly reformed<sup>3</sup>, the Company's dispatch strategy has moved to increasing reliance on economic dispatch leading to greater variability in reagent costs, and the Company's generation mix continues to evolve. In addition, higher market energy prices observed in 2021 and to-date in 2022 have caused greater than anticipated generation

<sup>&</sup>lt;sup>1</sup> In the Matter of the Application of Minnesota Power for Authority to Increase Rates for Electric Utility Service in Minnesota, Oehlerking-Boes Direct Testimony and Schedules on November 2, 2016, in Docket No. E015/GR-16-664.

<sup>&</sup>lt;sup>2</sup> In the Matter of the Application of Minnesota Power for Authority to Increase Rates for Electric Utility Service in Minnesota, Findings of Fact, Conclusions and Order on March 12, 2018, in Docket No. E015/GR-16-664.

<sup>&</sup>lt;sup>3</sup> In the Matter of an Investigation into the Appropriateness of Continuing to Permit Electric Energy Cost Adjustments, in Docket No. E999/CI-03-802.

at Boswell Energy Center ("BEC" or "Boswell"), resulting in increased variability in reagent use. In addition, in Otter Tail Power Company's ("Otter Tail Power") 2020 rate case<sup>4</sup>, the Commission granted Otter Tail's similar request to recover reagent costs in its fuel clause stating: *"Although the Commission did deny EAR recovery of reagent costs in Otter Tail's last rate case, circumstances have changed; the Company's dispatch model has moved to increasing reliance on economic dispatch, leading to greater variability in reagent costs. Additionally, the Legislature has clearly contemplated the possibility of reagent cost recovery in the EAR and it is appropriate to allow it in this case." For these reasons, Minnesota Power respectfully requests approval to recover reagent costs through the FPE Rider.* 

# II. PROCEDURAL MATTERS

# A. General Filing Information

Pursuant to Minn. Stat. § 216B.16, subd. 1 and Minn. Rule 7829.1300, Minnesota Power provides the following required general filing information.

## 1. Summary of Filing (Minn. Rule 7829.1300, subp. 1)

A one-paragraph summary accompanies this Petition.

## 2. Service on Other Parties (Minn. Rule 7829.1300, subp. 2)

Pursuant to Minn. Stat. § 216.17, subd. 3 and Minn. Rule 7829.1300, subp. 2, Minnesota Power eFiles the Petition on the Department of Commerce - Division of Energy Resources (the "Department") and the Minnesota Office of the Attorney General - Antitrust and Utilities Division. A summary of the filing prepared in accordance with Minn. Rule 7829.1300, subp. 1 is being served on Minnesota Power's general service list.

<sup>&</sup>lt;sup>4</sup> In the Matter of the Application of Otter Tail Power Company for Authority to Increase Rates for Electric Service in the State of Minnesota, in Docket No. E017/GR-20-719.

- 3. Name, Address and Telephone Number of Utility (Minn. Rule 7829.1300, subp. 3 (A)) Minnesota Power 30 West Superior Street Duluth, MN 55802 (218) 722-2641
- 4. Name, Address and Telephone Number of Utility Attorney (Minn. Rule 7829.1300, subp. 3 (B))

Matthew Brodin Senior Attorney Minnesota Power 30 West Superior Street Duluth, MN 55802 (218) 355-3152 mbrodin@allete.com

5. Date of Filing and Date Proposed Rates Take Effect (Minn. Rule 7829.1300, subp. 3 (C))

This Petition is being filed on October 20, 2022. Minnesota Power proposes the effective date be January 1, 2023 pursuant to Commission Order.

# 6. Statute Controlling Schedule for Processing the Petition (Minn. Rule 7829.1300, subp. 4 (D))

No statutorily imposed time frame for a Commission decision applies to this filing. Furthermore, Minnesota Power's Petition 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.

7. Utility Employee Responsible for Filing (Minn. Rule 7829.1300, subp. 4 (E))

Hillary A. Creurer

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

## 8. Impact on Rates and Services (Minn. Rule 7829.1300, subp. 4 (F))

The action requested of the Commission will impact both base rates and the Fuel and Purchased Energy Charge Rider based on shifting the recovery from base rates into the Fuel and Purchased Energy Charge Rider. Minn. Stat. § 216B.16, subd. 7(4) allows the Commission to permit fuel clause recovery of prudent reagent costs.

## 9. Official Service List (Minn. Rule 7829.0700)

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:

Matthew Brodin	Hillary A. Creurer
Senior Attorney	Regulatory Compliance Administrator
Minnesota Power	Minnesota Power
30 West Superior Street	30 West Superior Street
Duluth, MN 55802	Duluth, MN 55802
(218) 355-3152	(218) 355-3455
mbrodin@allete.com	hcreurer@allete.com

#### B. Trade Secret Designation (Minn. Rule 7829.0500)

This petition currently does not contain any Trade Secret Designation pursuant to Minn. Stat. § 13.37 and Minn. Rule 7829.0500.

#### III. REAGENTS UTILIZED

Minnesota Power utilizes reagents such as ammonia, urea, carbon, and lime to reduce emissions while the Boswell units are operating. Typically the reagents are introduced during combustion or post combustion and use kinetics to drive pollutants into forms that can be scrubbed or removed from the flue gas streams. The reagents are used in conjunction with cutting-edge air pollution control technologies as designed and installed to reduce emissions more than 80 percent for NO<sub>x</sub> and greater than 90 percent for SO<sub>2</sub> and mercury. The consumption of reagents is directly correlated to the number of operating hours and generation levels (load) a plant is dispatched in a particular year. When Boswell is operating, it is consuming reagents, just like the plant consumes fuel. The table below provides a summary of the reagents used by BEC3 and BEC4 and the pollutant it is used for.

Reagents	BEC3	BEC4
Ammonia	NO <sub>x</sub> Reduction	
Urea		NO <sub>x</sub> Reduction
Carbon	Mercury Removal	Mercury Removal
Lime	SO <sub>2</sub> Control	SO <sub>2</sub> Control

Table 1: Reagents used to Control Pollutants

In addition, reagent costs are subject to market conditions such as inflation which can cause pricing variability. Minnesota Power has contracts in place for all reagents; lime and carbon are fixed delivered price contracts and ammonia is based on a price index. Due to the current volatility and increase in fuel costs all vendors have added their own fuel surcharge.

In June 2021, the Company transitioned BEC3 to economic operations and continues to evaluate and make progress in addressing the various milestones identified in the Self-Commitment docket<sup>5</sup> in order to transition BEC4 to economic operations. Note that although BEC4 is in must run operations, MISO has the option to dispatch the unit between its minimum and maximum generation level. Given the flexibility and wide dispatch range of BEC4, this can result in material variances in its annual generation depending on market conditions. BEC3 is now full economic dispatch operations, and if economic conditions warrant, can be shut down for a period of time. This type of

<sup>&</sup>lt;sup>5</sup> In the Matter of an Investigation into Self-Commitment and Self-Scheduling of Large Baseload Generation Facilities, Docket No. E999/CI-19-704.

economic operations at BEC3 results in an even wider variance in annual generation than seen at BEC4. With increased reliance on economic operations and an increase in market volatility, with higher energy prices as of recently, Minnesota Power's generation is experiencing greater dispatch levels of its Boswell units than what was anticipated in the 2021 Rate Case. In most cases, it is beyond Minnesota Power's control when the markets dispatch the Boswell units.

#### IV. PROPOSAL

Consistent with the precedent set in the previously mentioned Otter Tail Power rate case, Minnesota Power requests approval to shift the recovery of all allowed reagent costs in accordance with Minn. Stat. § 216B.16, subd.7(4) out of base rates and into the FPE Rider, effective January 1, 2023.

Minn. Stat. § 216B.16, subd.7(4) states that the Commission may permit a public utility to file in rate schedules for automatic adjustment:

"Prudent costs incurred by a public utility for sorbents, reagents, or chemicals used to control emissions from an electric generation facility, provided that these costs are not recovered elsewhere in rates. The utility must track and report annually the volumes and costs of sorbents, reagents, or chemicals using separate accounts by generating plant."

Currently, Minnesota Power is not authorized to recover reagent costs through its FPE Rider per Commission Order in the 2016 Rate Case. However, the FCA mechanism was significantly reformed after a lengthy Commission investigation<sup>6</sup> to explore possible changes to the FCA. Under the reformed FCA mechanism, each utility forecasts its costs for the upcoming year and will charge those forecasted rates unless the utility can show a significant unforeseen impact on those rates during the year. At the end of the forecasted year, each utility compares its forecasted costs with actual fuel costs incurred.

<sup>&</sup>lt;sup>6</sup> In the Matter of an Investigation into the Appropriateness of Continuing to Permit Electric Energy Cost Adjustment, Docket No. E999/CI-03-802.

This reformed FCA mechanism provides the ability to track and report annually the volumes and costs associated with reagents in accordance with the statute and the opportunity for an in-depth and careful review of all costs.

The Company is in the late stages of its current general rate case in Docket No. E015/GR-21-335 with a 2022 test year and is anticipating a Commission hearing in January 2023. As the 2022 test year budget was developed in early 2021, the Company did not consider making a request to move recovery of reagent costs outside of base rates. At that time, the underlying assumptions for the 2022 budget were that it would be "post-COVID" era, with operations and procurement processes returning to more stable and predictable levels. Minnesota Power did not anticipate in the rate case such a strong demand for its generation or volatility of reagent costs. However, it is now clear that 2022 and the nearterm future will continue to see volatility in power markets which will in turn cause unpredictability in the Company's own generation. Additionally, since the Company's general rate case was filed on November 1, 2021, Otter Tail Power has received approval from the Commission to recover reagent costs in their FCA, signaling a shift in the Commission's decisions regarding recovery of these types of costs. These factors, along with a transition toward economic dispatch of Company generation, are driving Minnesota Power to make this request now.

The Company proposes reagent costs incurred on or after January 1, 2023 be incorporated into the FPE Rider and removed from base rates, with any rate design impacts reflected with the implementation of final rates. This request would not change the revenue requirements in Minnesota Power's 2021 Rate Case but rather, if approved, would be worked out in rate design of final general rates as it would shift the recovery from base rates to the FPE Rider. In the 2022 test year Minnesota Power included approximately \$2.6 million (total company) in reagent costs as shown in Attachment 1.

Minnesota Power currently anticipates 2023 reagent costs to be approximately \$6.0 million due to an increase in forecasted generation due to higher market energy prices in the region and inflation. Reagent costs would be allocated similar to Midcontinent

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Independent System Operation costs in the FPE Rider calculation. Attachment 2 includes the 2023 FPE Rider calculation, which shows the projected impact with reagent costs added. While the 2023 projection reflects higher reagent costs than projected for the 2022 test year, future years may see lower costs. Including reagent costs in the FPE Rider will allow customers to benefit when costs are lower and will ensure they are not over- or under-charged in between rate cases.

Including the costs in the FPE Rider will also allow the Company to consider a more complete cost of its generation resources when managing its power supply. This alignment of costs is important as Minnesota Power continues its transformation towards renewable energy as its primary generation source.

# V. CONCLUSION

Minnesota Power believes its proposal to recover reagent costs through the FPE Rider is warranted now as a result of increased variability in operations due to economic dispatch, a changing generation mix, and current market conditions. This proposal will help align the costs and benefits of dispatchable generation and help support the Company's transition away from fossil fuels and towards renewable energy. Finally, utilizing the FPE Rider to recover reagent costs will be consistent with how Otter Tail Power recovers similar costs and will ensure Minnesota Power customers are not over- or under-charged for reagent costs.

Dated: October 20, 2022

Respectfully Submitted,

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

#### 2022 Test Year Budgeted Reagent Costs

#### Boswell Unit 3 - Reagent Costs

	Jan	uary	Feb	ruary	Mai	rch	Apri	I	May	y	Jun	e	July	,	Aug	gust	Sep	tember	Oct	ober	No	/ember	Dec	ember	Total	
Ammonia	\$	30,824	\$	30,824	\$	30,824	\$	15,412	\$	15,412	\$	30,824	\$	30,824	\$	30,824	\$	30,824	\$	30,824	\$	30,824	\$	30,824	\$	339,063
Carbon	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	33,873	\$	33,873
Lime	\$	41,335	\$	41,335	\$	41,335	\$	20,668	\$	20,668	\$	41,335	\$	41,335	\$	41,335	\$	41,335	\$	41,335	\$	41,335	\$	41,335	\$	454,688
Total Boswell Unit 3 - Reagent Costs	\$	72,159	\$	72,159	\$	72,159	\$	36,080	\$	36,080	\$	72,159	\$	72,159	\$	72,159	\$	72,159	\$	72,159	\$	72,159	\$	106,032	\$	827,624
Boswell Unit 4 - Reagent Costs (MP ONLY)																	_						_			
		uary		ruary	Mai		Apri		May	•	Jun		July		-	gust			Oct	ober		/ember		ember	Total	
Lime	Ş	156,904	Ş	156,904	Ş	78,452	Ş	78,452	Ş	156,904	Ş	156,904	Ş	156,904	Ş	156,904	Ş	156,904	Ş	156,904	Ş	156,904	Ş	156,904	Ş	1,725,943
Hydrated Lime	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Carbon	\$	6,764	\$	6,764	\$	3,382	\$	3,382	\$	6,764	\$	6,764	\$	6,764	\$	6,764	\$	6,764	\$	6,764	\$	6,765	\$	6,765	\$	74,410
UREA	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Total Boswell Unit 4 - Reagent Costs (MP ONLY)	\$	163,668	\$	163,668	\$	81,834	\$	81,834	\$	163,668	\$	163,668	\$	163,668	\$	163,668	\$	163,668	\$	163,668	\$	163,668	\$	163,668	\$	1,800,353
Total Boswell Station - Reagent Costs (MP Only)	Ś	235,828	Ś	235,828	ć	153,994	¢	117 01/	ć	100 749	ć	775 070	Ś	235,828	<u>ج</u>	235,828	Ś	235,828	Ś	235,828	Ś	235,828	Ś	269.701	ć	2,627,977

#### Attachment 1

#### A. Summary - Automatic Adjustment Charges:

#### Attachment 2

Ref. Revenue/Accounting Month	Jan 2023	Feb 2023	Mar 2023	Apr 2023	May 2023	Jun 2023	Jul 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023	Dec 2023	Total
Company's Generating Stations	\$16,460,888	\$14,127,694	\$13,769,751	\$10,989,703	\$13,359,972	\$13,301,773	\$16,522,668	\$16,440,329	\$11,975,579	\$5,898,091	\$12,580,392	\$14,628,913	\$160,055,75
Thermal	\$16,460,888	\$14,127,694	\$13,769,751	\$10,989,703	\$13,359,972	\$13,301,773	\$16,522,668	\$16,440,329	\$11,975,579	\$5,898,091	\$12,580,392	\$14,628,913	\$160,055,75
Wind	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Hydro	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	:
2 Plus: Purchased Energy	\$17,604,582	\$15,619,294	\$15,139,100	\$15,644,616	\$18,593,187	\$19,051,810	\$20,949,509	\$16,598,698	\$17,070,022	\$22,403,148	\$15,364,329	\$18,702,814	\$212,741,1
Market	\$11,358,213	\$10,091,059	\$9,317,175	\$9,408,232	\$12,463,646	\$13,645,178	\$15,471,723	\$11,584,752	\$11,244,672	\$16,173,894	\$9,713,559	\$12,707,773	\$143,179,8
Wind	\$2,936,361	\$2,425,285	\$2,783,696	\$2,835,653	\$2,768,992	\$2,132,920	\$1,874,777	\$1,871,069	\$2,452,304	\$2,822,303	\$2,818,623	\$2,706,977	\$30,428,9
Solar	\$103,108	\$149,151	\$242,728	\$277,531	\$313,349	\$330,161	\$373,108	\$325,427	\$249,846	\$164,751	\$108,097	\$72,414	\$2,709,6
Square Butte	\$3,206,900	\$2,953,800	\$2,795,500	\$3,123,200	\$3,047,200	\$2,943,550	\$3,229,900	\$2,817,450	\$3,123,200	\$3,242,200	\$2,724,050	\$3,215,650	\$36,422,6
3 Plus: MISO Charges 1/	\$7,336,042	\$5,780,737	\$4,696,467	\$3,952,852	\$4,223,292	\$10,092,937	\$9,422,378	\$8,600,173	\$11,349,765	\$5,767,042	\$6,806,022	\$6,142,812	\$84,170,5
4 Plus: Reagent Costs	\$541,355	\$495,856	\$549,269	\$451,119	\$548,406	\$530,137	\$547,159	\$548,901	\$494,606	\$237,292	\$531,575	\$549,269	\$6,024,9
5 Less: MISO Schedules 16 &17 & 24 1/	(\$20,243)	(\$15,486)	(\$19,400)	(\$21,753)	(\$36,450)	(\$31,238)	(\$25,614)	(\$20,960)	(\$22,756)	(\$5,898)	(\$22,814)	(\$19,327)	(\$261,9
Schedule 16	\$104,039	\$107,757	\$104,770	\$102,494	\$89,702	\$95,009	\$99,803	\$103,937	\$102,885	\$116,320	\$102,308	\$105,415	\$1,234,43
Schedule 17	\$17,719	\$18,757	\$17,830	\$17,754	\$15,848	\$15,754	\$16,583	\$17,103	\$16,358	\$19,783	\$16,877	\$17,258	\$207,6
Schedule 24	(\$142,000)	(\$142,000)	(\$142,000)	(\$142,000)	(\$142,000)	(\$142,000)	(\$142,000)	(\$142,000)	(\$142,000)	(\$142,000)	(\$142,000)	(\$142,000)	(\$1,704,0
6 Less: Costs Recovered Through Inter-System Sales	\$17,201,595	\$13,066,588	\$12,297,208	\$10,933,507	\$16,429,518	\$14,981,271	\$16,419,913	\$14,101,362	\$12,462,736	\$8,793,698	\$12,216,312	\$14,298,468	\$163,202,1
Customer Inter-System Sales	\$1,526,350	\$1,655,979	\$1,077,859	\$1,199,163	\$1,922,186	\$2,104,928	\$2,722,979	\$2,723,824	\$2,055,152	\$3,479,087	\$1,982,083	\$2,708,523	\$25,158,1
Market Sales	\$8,643,704	\$6,213,106	\$7,170,932	\$7,281,992	\$10,153,745	\$8,017,303	\$9,082,025	\$7,335,272	\$6,943,885	\$4,126,937	\$6,515,182	\$6,662,482	\$88,146,5
Station Service	\$4,760	\$4,760	\$4,760	\$10,144	\$4,760	\$4,760	\$4,760	\$4,760	\$4,760	\$28,987	\$4,760	\$4,760	\$86.7
MISO Costs 1/	\$1,594,368	\$1.059.006	\$1.019.938	\$890.312	\$1,232,556	\$2,476,578	\$1,941,984	\$1,494,706	\$2,372,407	\$419.034	\$1,373,176	\$1.088.250	\$16,962,3
Sales due to Retail Loss of Load	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Reagent Costs	\$135,481	\$109,570	\$134,610	\$117,093	\$191,976	\$168,565	\$155,029	\$139,793	\$131,437	\$38,425	\$141,451	\$134,365	\$1,597,7
Asset Based Sale Margins	\$5,296,932	\$4.024.167	\$2,889,107	\$1,434,803	\$2,924,295	\$2,209,136	\$2,513,136	\$2,403,006	\$955.095	\$701,228	\$2,199,660	\$3,700.087	\$31,250,6
7 Less: Costs Related to Solar	\$95,071	\$137,751	\$226,369	\$258,208	\$291.803	\$308,444	\$347.857	\$303.767	\$233,124	\$153.642	\$100,749	\$65,529	\$2,522,3
8 Plus: Time of Generation and Solar Energy Adjustment	\$59,466	\$72,695	\$117,896	\$128,820	\$150,651	\$146,103	\$186,803	\$159,787	\$127,873	\$101,440	\$55,236	\$37,401	\$1,344,1
9 Total Monthly Cost of Fuel	\$24,725,910	\$22,907,423	\$21,768,305	\$19,997,147	\$20,190,638	\$27,864,281	\$30,886,359	\$27,963,719	\$28,344,740	\$25,465,571	\$23,043,306	\$25,716,539	\$298,873,9
MWh Sales													
0 Total Sales of Electricity	1.175.023	1.018.358	1.132.610	1.068.566	1.214.279	1.122.112	1.123.782	1.090.317	1.063.836	950.880	1.106.226	1.146.649	13.212.6
Residential	117.198	99.041	94.232	80.967	73,772	67,858	83,280	77,836	73,563	75,559	87,556	112,215	1,043,0
Commercial	108,618	102.513	108.868	92.208	94.346	97,724	108.533	112,429	102.928	95.383	96,188	113.022	1,232,70
LP Taconite	345,573	313,183	344,929	328,940	339,996	326,235	342,016	339,439	331,415	334,543	345,793	350,227	4,042,2
LP Paper and Pulp	51,260	46,855	51,157	49.662	50,547	49,419	51,090	51,106	49,173	49,847	49,197	50,791	600,1
LP Pipeline	30,252	30,055	31,500	27.364	23.773	23.824	24,359	22,391	21.010	23,278	24.683	26,992	309,4
Other Misc.	29,751	27.811	28,958	27,304	26,904	27,250	24,339	28,105	26,927	27.871	24,083	28,011	333.7
Municipals	120.264	111.512	115.809	108.191	110.690	101.064	109.087	107,003	98,994	106.181	107.210	115.325	1.311.3
Inter System Sales	372,107	287.388	357,157	353,805	494,251	428,738	377,691	352,008	359,826	238,218	368,616	350,066	4,339,8
1 Less: Inter-System Sales	372,107	287,388	357,157	353,805	494,251	428,738	377,691	352,008	359,826	238,218	368,616	350,066	4,339,8
Customer Inter-System Sales	372,107	39.767	357,157	41.016	494,251	426,736	84.031	83,294	57,142	236,218	68,936	75,488	4,339,6
Customer Inter-System Sales Market Sales	39,826	39,767 247,483	35,493 321,526	41,016 312,503	418.726	350.964	293.522	268.576	57,142 302.547	159.820	299.543	75,488 274,440	755,6 3.581.7
Market Sales Station Service		1	321,526	312,503	- / -	,			302,547	159,820		, .	- / /
	138	138 0	138	287	138	138	138	138 0	138	809	138	138 0	2,4
Sales due to Retail Loss of Load	•	•	-			-	0	-	-	•	0	-	57.3
2 Less: Solar Generation and Purchased MWh	2,434	3,390	5,020	5,748	6,494	6,780	7,568	6,698	5,189	3,873	2,385	1,744	
3 Total Monthly MWh Sales	800,482	727,580	770,433	709,013	713,534	686,594	738,523	731,611	698,821	708,789	735,225	794,839	8,815,44
Fuel Adjustment Charge - Fuel Clause (¢/KWh)				-				•	•				Average
14 1-Month Average Cost of Fuel (¢/kWh)	3.089	3.148	2.825	2.820	2.830	4.058	4.182	3.822	4.056	3.593	3.134	3.235	\$3.400

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

Tiana Heger of the City of Duluth, County of St. Louis, State of Minnesota, says that on the 20<sup>th</sup> day of October, 2022, she served Minnesota Power's Petition to Recover Reagent Costs through the Fuel and Purchased Energy Rider in **Docket No. E015/M-22-TBD** 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