minnesota power
AN ALLETE COMPANY

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

March 3, 2025

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 of the Annual Forecasted Rates for its Rider for Fuel and Purchased Energy Charge
Docket No. E015/AA-23-180
Annual True-up Report

Dear Mr. Seuffert:

Minnesota Power respectfully submits to the Minnesota Public Utilities Commission its Annual Automatic Adjustment True-up Report of Forecasted Fuel and Purchased Energy rates for the calendar year 2024 pursuant to the decisions rendered by the Commission in Docket No. E999/CI-03-802 and where applicable, in compliance with Minnesota Rules 7825.2800 to 7825.2840 governing Automatic Adjustment of Charges.

Please contact me at (218) 591-4870 or avang@mnpower.com if you have any questions regarding this compliance filing.

Yours truly,

Ana Vang
Regulatory Compliance Specialist, Senior

AV:th
Attach.

STATEMENT REGARDING JUSTIFICATION FOR EXCISING TRADE SECRET INFORMATION

Minnesota Power has excised material from the Annual Automatic Adjustment of Charges True-Up Report ("Report") because the format of the Report requires Minnesota Power to compile and provide information regarding its methods, techniques and process for obtaining and managing fuel supply resources for its generating facilities, including fuel supply, contract terms and conditions, as well as fuel cost projections. This is highly confidential information: Minnesota Power's competitors, as well as its potential suppliers, would gain a commercial advantage over Minnesota Power if this information was publicly available. As a result of public availability, Minnesota Power and its customers would suffer from corruption of Minnesota Power's negotiating position. Minnesota Power follows strict internal procedures to maintain the secrecy of this information in order to capitalize on economic value of the information to Minnesota Power.

Minnesota Power believes that this statement justifies why the information excised from the attached Report should remain a trade secret under Minn. Stat. §13.37. Minnesota Power respectfully requests the opportunity to provide additional justification in the event of a challenge to the trade secret designation provided herein.

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

In the Matter of Minnesota Power's Petition for Approval of the Annual Automatic Adjustment Charges for the Period of January 2024 through December 2024	Docket No. E015/AA-23-180 **MINNESOTA POWER'S ANNUAL TRUE UP REPORT AND RATE ADJUSTMENT PROPOSAL**

I. INTRODUCTION

On November 9, 2023, the Minnesota Public Utilities Commission ("Commission") authorized Minnesota Power (or the "Company") to implement its calendar year 2024 Fuel and Purchased Energy Rider ("FPE Rider" or Fuel Adjustment Clause "FAC") forecast rates, based on forecasted sales of 8,572,838 MWh and forecasted fuel costs of $263.6 million.

The Company's actual 2024 sales were 8,891,381 MWh and actual fuel costs were $278.7 million. The higher-than-expected actual fuel costs along with an increase in actual sales resulted in a total under collected amount of $4.5 million in fuel costs for 2024.

On July 31, 2023, Minnesota Power received an order in Docket No. E015/AA-21-312 to recover the $13.3 million 2022 under collection over the 12-month period starting September 1, 2023.

Order Point 2

"The Commission authorizes Minnesota Power to recover its 2022 under-collection of $13,267,902."

Order Point 3

"Minnesota Power is permitted to recover the 2022 under-collection over a 12-month period starting the 1st of the next month following issuance of this order."

At the completion of the 12-month recovery period, Minnesota Power over collected $611,726, which is being included in the 2024 FCA true-up filing. See Attachment 2 for support.

Minnesota Power proposes a 2024 FAC True-up amount of approximately $3.9 million to be collected over a 12-month period beginning September 1, 2025.

II. DESCRIPTION AND PURPOSE OF FILING

This filing contains information provided in compliance with Minn. Rules 7825.2800 through 7825.2840,Ordering Paragraph 7 of the June 2019 Order, Order Points 1 and 2 in Docket No. E-015/M-22-501, and Order Points 6, 7, and 8 in the Lessons Learned Report.[1] The Commission's June 2019 Order approved a variance to Minn. Rules 7825.2800 through 7825.2840 and reporting requirements for the annual forecast and true-up filings.

In the June 2019 Order in Docket No. E999/CI-03-802, Order Points 1 and 7 state the following:

Order Point 1

> *"The Commission approves variances to Minn. R. 7825.2800, .2810, .2820, .2830, and .2840 in accordance with the language stated above in Section II."*

Order Point 7

> *"The Commission adopts the reporting changes outlined in Attachments 1, 2, and 3 of the joint comments with the following reporting requirement added to the annual true-up filing: each Electric Utility shall provide a complete analysis and discussion of the consequences of self-commitment and self-scheduling of their generators, including the annual difference between production costs and corresponding prevailing market prices."*

Then as part of the November 13, 2019 Order in Docket No. E999/AA-18-373, Order Point 9 states:

[1] Docket No. E999/CI-03-802. The final Lessons Learned Report Order has not been published yet, but Minnesota Power is including the information from the applicable Order Points from the January 9, 2024 Briefing Papers that were unanimously adopted by the Commission during the January 18, 2024 Commission Agenda Meeting.

> *"The Commission will open an investigation in a separate docket and require Minnesota Power, Otter Tail, and Xcel to report their future self-commitment and self-scheduling analyses using a consistent methodology by including fuel cost and variable O&M costs, matching the offer curve submitted to MISO energy markets."*

Minnesota Power's annual compliance report regarding self-commitment and self-scheduling of large base load generators was filed on March 3, 2025 in Docket No. E999/CI-19-704.

The Lessons Learned Report Order Points 6, 7, and 8 state the following:

Order Point 6

> *"Require Minnesota Power to incorporate a comparison of the actual winter energy purchase amounts to the forecast amounts with an explanation of a variance of five percent or greater into future FCA filings."*

Order Point 7

> *"Approve Minnesota Power's proposed changes to the MISO Costs attachment in the annual FCA forecast filing."*

Order Point 8

> *"Approve Minnesota Power's proposed changes to the ASM Charges attachment in the annual FCA true-up filing."*

At this time, the Company does not make winter energy specific purchases, so Order Point 6 is inapplicable to this filing. The changes to the MISO Costs and ASM Charges Attachments have been incorporated into this filing.

A. Rule 7825.2800 Annual Reports: Policies and Action

Attachment 10 includes information regarding Minnesota Power's fuel and energy source procurement and energy dispatching policies.

B. Rule 7825.2810 Annual Report: Automatic Adjustment Charges

Attachment 2 includes Minnesota Power's forecasted to actual comparison of Automatic Adjustment Charges for the period of January 2024 through December 2024.

On December 23, 2019 in Docket Nos. E015/MR-19-443 and E015/GR-19-442 the Commission approved the Company's proposed changes to the base cost of energy. The Company moved all fuel related costs to the Fuel and Purchased Energy Charge, with zero cost of fuel in the base energy rate, effective January 1, 2020.

C. Rule 7825.2820 Annual Auditor's Report

Attachment 1 includes the Independent Auditor's Report on Minnesota Power's accounting for automatic adjustments during the period of January 2024 through December 2024.

D. Rule 7825.2830 Annual Five-Year Projection

The annual five-year projection is part of the Company's FAC Forecast filing which is filed annually on May 1.

E. Rule 7825.2840 Annual Notice of Reports Availability

Attachment 11 includes the service lists of the interveners in the previous two general rate cases.

F. Other Reports and Information included in the 2024 FAC True-up

- Attachment No. 3 – Monthly MISO Day 2 Charges and Allocation
- Attachment No. 4 – Auction Revenue Rights Process and Information
- Attachment No. 5 – Plant Outage Reporting
- Attachment No. 6 – Annual ASM Charges and Summary
- Attachment No. 7 – Wind Curtailment Reporting
- Attachment No. 8 – Offsetting Revenues and/or Compensation Received by Investor-Owned Utilities (IOUs)
- Attachment No. 9 – Generation Facilities Maintenance Expense Report

III. 2024 FPE FORECAST TO ACTUALS

Minnesota Power proposes a FPE Rider True-up charge of $3.9 million. The primary driver impacting 2024 fuel costs and the under collection was lower than forecasted company generation which was replaced by market purchases. The lower than forecasted thermal generation was due to lower market prices which resulted in generation being dispatched at reduced levels and replaced with lower cost energy from the market. Lower

thermal company generation reduced market sales which resulted in less asset-based margins. Also, there was less wind and hydro generation in 2024 compared to forecast which increased costs. Company wind and hydro generation has a zero-fuel cost which was replaced by higher cost market purchases and company generation which increased total costs for 2024.

The proposed 2024 FPE Rider True-up is in part based on a comparison of the 2024 FAC forecast to actual fuel and purchases as summarized below. Additional information on the 2024 FPE calculation and the under recovered amount of $3.9 million related to 2024 can be found in Attachment 2.

Table 1: Fuel Cost Summary

	2024 Forecast	2024 Actual	Difference
Company's Generating Stations	$116,773,811	$105,641,617	$(11,132,194)
Plus: Purchased Energy	$223,751,172	$251,745,840	$27,994,668
Plus: MISO Charges	$53,475,047	$42,110,145	$(11,364,902)
Less: MISO Schedules 16, 17 & 24	$(211,024)	$(584,180)	$(373,157)
Less: Fuel Cost Recovered through Inter System Sales	$129,639,147	$120,507,648	$(9,131,499)
Less: Costs Related to Solar	$2,474,436	$2,138,863	$(335,572)
Plus: Time of Generation and Solar Energy Adjustment	$1,527,833	$1,271,757	$(256,076)
Forecasted Cost of Fuel /1	$263,625,304		
Total Cost of Fuel	**$263,625,304**	**$278,707,027**	**$15,081,723**
Total Fuel Clause Sales (MWhs)	**8,572.8**	**8,891.4**	**318.5**
Average Cost of Fuel	**$30.75**	**$31.35**	**$0.59**

/1 Approved by Commission Order dated November 9, 2023 in Docket No. E015/AA-23-180.

A. Sales

Customer sales increased by 158,789 MWhs, or 1 percent, over forecasted sales mainly due to increased Large Power Taconite sales. In addition, Inter System sales decreased by 154,520 MWhs mainly due to decreased MISO market sales. Inter System sales are removed from the Total Sales of Electricity as they are non-FAC MWhs. Minnesota Power used the RTSim production cost model to determine the volume and cost of MISO market

sales used in the forecast. Actuals are looked at hourly so there will be hours where Minnesota Power is a net seller and hours when Minnesota Power is a net purchaser which creates market purchases and sales in a month.

Table 2: Sales Comparison

2024 Sales (MWh)	Forecasted Sales	Actual Sales	Difference
Total Sales of Electricity	**12,397,514**	**12,556,303**	**158,789**
Residential	1,045,140	972,995	(72,145)
Commercial	1,230,613	1,145,891	(84,723)
Large Power Taconite	3,794,988	4,264,177	469,189
Large Power Paper and Pulp	599,802	562,745	(37,057)
Large Power Pipeline	310,455	319,797	9,342
Other Miscellaneous	333,861	323,756	(10,105)
Municipals	1,313,471	1,352,278	38,807
Inter System Sales	3,769,185	3,614,664	(154,520)
Less: Inter System Sales	**3,769,185**	**3,614,664**	**(154,520)**
Customer Intersystem Sales	940,132	934,429	(5,703)
Market Sales	2,826,652	2,676,731	(149,921)
Station Service	2,401	3,504	1,103
Sales due to Retail and Resale Loss of Load	-	-	-
Less: Solar Generation & Purchases	**55,492**	**50,258**	**(5,234)**
Total Fuel Clause Sales	**8,572,838**	**8,891,381**	**318,543**

B. Generation

Minnesota Power saw a decrease of **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** of generation during 2024. The lower energy production at Minnesota Power's thermal generation fleet as well as Hibbard Renewable Energy Center ("Hibbard") was due to being called upon by MISO less frequently because of the lower market prices than forecasted. The increased generation at the Company's Laskin facility was due to lower than forecasted natural gas prices which led to the unit being more economical and being dispatched more by MISO. Minnesota Power also saw decreased renewable generation in 2024 specifically in regard to lower North Dakota wind generation and lower hydro production in the region due to the drier conditions in 2024.

Table 3: Generation MWh Comparison

2024 Generation (MWh)	Forecasted Generation	Actual Generation	Difference
	[TRADE SECRET DATA BEGINS		
Boswell Unit 3	[redacted]		
Boswell Unit 4			
Hibbard			
Laskin			
Wind			
Hydro			
Total			
			TRADE SECRET DATA ENDS]

C. MISO Market Pricing and Congestion

The lower priced and less volatile market that was seen in 2023 continued into 2024 as natural gas prices dropped 14 percent as compared to 2023 and 31 percent from what was used in the 2024 forecast. This was a key driver in market prices coming in 23 percent lower than forecast.

Table 4 below compares the average MISO Market price used in the 2024 forecast to actual average MISO Market prices.

Table 4: Average Market Price Comparison

$/MWh	2024 Forecast	2024 Actual	Difference
	[TRADE SECRET DATA BEGINS		
Average Market Price	[redacted]		
			TRADE SECRET DATA ENDS]

D. What is Minnesota Power Doing to Control Congestion Costs

Short Term:

[TRADE SECRET DATA BEGINS [redacted]

[redacted]

[redacted]

TRADE SECRET DATA ENDS]

Minnesota Power will continue to optimize the use of its HVDC transmission line to cost-effectively deliver its 600 MW wind portfolio in North Dakota to customers. Minnesota Power's HVDC line operates like a physical Financial Transmission Right ("FTR"), providing a financial mechanism that reduces congestion cost for customers. The HVDC line is an important congestion mitigation asset that Minnesota Power is using today to manage customer cost. In October 2024 the Company received a Certificate of Need and Route Permit to modernize and upgrade its HVDC terminals and interconnect the upgraded HVDC terminals to the existing alternating-current ("AC") transmission system. The HVDC terminals have been operating successfully for more than 47 years – well beyond its 30-year design life. As the HVDC system continues to experience increased unplanned terminal outages due to failures with aging components, modernizing the HVDC terminals will allow Minnesota Power to continue delivering these cost-savings for customers.

Minnesota Power is taking an "all of the above" approach and has explored options to mitigate cost impacts to customers, by optimizing FTRs, transmission assets (i.e. HVDC), and as discussed below working with other Minnesota utilities and MISO to identify transmission related projects that reduce congestion cost. As part of the "all of the above" strategy, in 2024 Minnesota Power entered into a unique contract with NewGrid, a consulting firm that provides services to identify system congestion events that impact Minnesota Power's generation portfolio and the FAC. The Company worked with NewGrid

on evaluating an opportunity to reduce congestion costs for a wind facility in southwest Minnesota that has a Purchase Power Agreement with Minnesota Power. NewGrid's work showed promise as an approach to reduce congestion with targeted operational reconfiguration of the transmission system and working with other transmission owners in the region. The reconfiguration recommendations are designed to maximize the transmission system capabilities in the near term and are not intended to replace recommendations for long-term transmission studies. The reconfiguration is intended to reduce congestion for serving load while maintaining all transmission planning and operation best practices and standards. Through this work with New Grid the Company developed an understanding on how the New Grid alternative configuration study work could be presented to a transmission owner. The New Grid study work included a congestion savings estimate, which has the challenge of simulating the system congestion with and without the alternative configuration. Minnesota Power participated in a reconfiguration request where the transmission owner didn't take any action due to the complexity of needing to update a system stability study. Minnesota Power recognizes that operating the system safely and reliably is critical and having a third-party propose a reconfiguration solution can be a challenge to make sure there aren't any unintended consequences from the recommended configuration. Another challenge is studying and implementing solutions with adequate lead time prior to a known event occurring (i.e. transmission outage for maintenance) so the congestion savings can be realized. NewGrid has had success working with other utilities on mitigating congestion, although, in 2025 Minnesota Power did not extend the contract due to challenges noted above. Minnesota Power continues to have discussions with New Grid and the Company will continue to evaluate the value of working with NewGrid in the future.

There is currently a misalignment in the cost recovery for NewGrid consulting service fees through base rates and the benefits of reduced congestion costs customers receive through the FAC. At the time of last year's FAC True-Up filing, Minnesota Power was considering a miscellaneous petition requesting to align the consulting cost with the associated benefits. Given Minnesota Power did not extend the contract with New Grid there are no plans to submit a miscellaneous petition. This still remains a cost recovery

concern, and the Company may consider a petition in the future if the Company engages with New Grid again and there are demonstrated benefits through reduced congestion costs.

Medium Term:

In 2023 Minnesota Power participated in a study with neighboring utilities to identify transmission solutions to reduce congestion cost. Grid North Partners, a joint initiative of utilities in Minnesota, Wisconsin, South Dakota, and North Dakota, performed an elective study in 2023 to identify and develop near-term solutions to incrementally resolve congestion. The Grid North Partners Tech Team collectively analyzed both historical and forward-looking congestion, identified physical limiting equipment on every congested element, and forecasted congestion relief for each solution. The Tech Team identified 19 congestion relief solutions with a cost of $130 million, which will provide an expected congestion benefit of more than $300 million, a greater than 2:1 benefit to cost ratio. Expected in-service dates range from 2023-2026 for solutions developed by Grid North Partners. In part, due to the success of the 2023 Grid North Partners congestion study, a legislative requirement by the State of Minnesota was enacted that requires similar study work to be performed by transmission owners within the state. This analysis is being performed by the Grid North Partners group and will be available in 2025.

Two of the identified congestion relief solutions from the 2023 study work were on Minnesota Power facilities, the Blackberry – Riverton 230 kV line and the Forbes – Iron Range 230 kV line. Based on analysis of the historical and projected congestion on these facilities, along with the equipment ratings comprising the facilities, Minnesota Power determined that Ambient-Adjusted Ratings should be developed. Ambient-Adjusted Ratings are facility ratings calculated using actual ambient temperatures, rather than the default seasonal temperature assumptions. Ambient-Adjusted Ratings provide for potential increased ratings and reduced congestion as ambient conditions allow, without capital costs. Minnesota Power developed and implemented both Ambient-Adjusted Ratings sets in March 2023.

Minnesota Power anticipates there will be reduced congestion as part of FERC Order 881 compliance, which requires all transmission providers to use Ambient-Adjusted Ratings as the basis for evaluating near-term transmission service. The order was issued with a compliance date of July 2025, although MISO intends to file an extension request in March 2025 with a final implementation date unknown. When in place, operating and near-term limits will take into account ambient air temperatures as well as solar heating impacts. Minnesota Power anticipates more renewable energy will be allowed to flow across congested transmission corridors resulting in lower congestion cost across the system.

Minnesota Power continues to stay engaged with neighboring utilities on efforts being made to reduce congestion in the medium-term.

Long Term:

Minnesota Power continues to work with MISO on future transmission additions through the Long Range Transmission Plan ("LRTP"). The LRTP Tranche 1 and Tranche 2.1 portfolios have several new transmission projects identified in Minnesota and North Dakota. MISO expects the addition of the LRTP Tranche 1 and 2.1 Portfolios to increase the operational flexibility to better allow timely outage scheduling to maintain the reliability of the system and to reduce the economic impacts due to congestion caused by outages. The new transmission paths also help reduce market price volatility by providing access to a broader pool of generation resources, including dispatchable and renewable generation resources. According to MISO's analysis, the LRTP Tranche 1 Portfolio is expected to provide economic savings more than two times the total cost of the portfolio and the LRTP Tranche 2.1 Portfolio is expected to provide similar economic savings and increased reliability of the grid.

In August 2023, Minnesota Power and Great River Energy filed a combined Certificate of Need and Route Permit Application for the Northland Reliability Project (LRTP Project #3), which was approved at a Commission hearing in January 2025.[2] Analysis produced

[2] Dockets Nos. E015, ET2/CN-22-416 and ET2/TL-22-415

by Minnesota Power and Great River Energy in the application identified that by itself, the Northland Reliability Project is projected to provide approximately $127 million to $2.1 billion in economic savings over the first twenty years of the Project's service by reducing system congestion and providing access to lower cost generation. These economic savings will help offset the capital cost of the Project.

Minnesota Power anticipates that congestion cost will be lower due to the LRTP projects being placed into service in the 2030-2033 timeframe. However, it is important to note that the magnitude of congestion reduction can vary, especially if new wind and solar builds outpace the capability of new transmission in the area. Building new transmission to better distribute energy production from renewable rich regions will be needed to reduce congestion cost as Minnesota moves towards a 100 percent carbon free power supply by 2040.

IV. CONCLUSION

Minnesota Power submits this annual true-up report and proposed FPE Rider True-up collection of $3.9 million pursuant to the Commission's rules regarding Automatic Adjustment of Charges and Docket No. E999/CI-03-802.

Dated: March 3, 2025

Respectfully Submitted,

Analeisha Vang
Regulatory Compliance Specialist, Senior
Minnesota Power
30 W. Superior Street
Duluth, MN 55802

Report of Independent Accountants

Report of Independent Accountants

To the Management of ALLETE, Inc.:

We have performed the procedures enumerated below, which were agreed to by ALLETE, Inc. (the "Company," as the engaging party) and the Minnesota Public Utilities Commission (the "MPUC"), solely to assist you in evaluating compliance with rule 7825.2820 of the Rules of the MPUC governing Automatic Adjustment Charges. The Company is responsible for Section A of Minnesota Power's Annual Report of Automatic Adjustment Charges for the period January 1, 2024 through December 31, 2024 found in Attachment No. 2 (Section A) of the Company's Annual Reports Containing Fuel Information and Data (the "Annual Report") pursuant to MPUC Rules 7825.2800 – 7825.2840 and we have no responsibility for verification of any underlying data.

In an agreed-upon procedures engagement, we perform specific procedures that the Company has agreed to and acknowledged to be appropriate for the intended purpose of the engagement and we report on findings based on the procedures performed. The procedures performed may not address all the items of interest to a user of this report and may not meet the needs of all users of this report and, as such, users are responsible for determining whether the procedures performed are appropriate for their purposes. The parties specified in this report have agreed to and acknowledged that the procedures performed are appropriate for their purposes. This report may not be suitable for any other purpose.

The procedures performed and results thereof are as follows:

1. For the period January 1, 2024 through December 31, 2024, we compared 16 haphazardly selected invoices, received from the Company's energy providers to the amount recorded and paid by the Company and determined they were in agreement.

2. For the period January 1, 2024 through December 31, 2024, we compared the $0 base costs of power approved by the Commission in Docket No. E015/MR-19-443 to the bases used by the Company in the Fuel Adjustment Clause Calculation and found them to be in agreement.

3. We recalculated the billing adjustment charge (credit) per kWh charged to customers for purchased power for the period January 1, 2024 through December 31, 2024 as set forth in the Fuel Adjustment Clause Calculation for the Automatic Retail Fuel Adjustments and Recovery Report for each customer class listed for mathematical accuracy and found all to be calculated accurately.

4. We obtained the accounting records for the revenues billed to customers for energy delivered for the period January 1, 2024 through December 31, 2024. We compared total sales of electric energy to the Company's general ledger and found them to be in agreement.

5. For the period January 1, 2024 through December 31, 2024, we compared 16 haphazardly selected individual billings across all customer classes and compared the automatic adjustment charges and credits included in the bills to the billing adjustment charge (credit) reported by the Company in the Fuel Adjustment Clause Calculation and found them to be in agreement.

6. We compared corrections for fuel adjustment clause charges or other billing errors included within the Fuel Adjustment Clause Calculation for the period January 1, 2024 through December 31, 2024 to the Company's general ledger. No corrections or other billing errors were noted.

7. For the period January 1, 2024 through December 31, 2024, we compared the revenue reconciliations from the CIS (Customer Information System) sub-ledger to the Company's general ledger, for total revenue and found them to be in agreement. For the period January 1, 2024 through December 31, 2024, we compared the cost of power reconciliations, which includes (1) coal burned, (2) total purchase power, (3) MISO non-recoverable cost, and (4) purchased steam, to the Company's general ledger and found them to be in agreement.

8. For the period January 1, 2024 through December 31, 2024, we recalculated true-ups included within the Fuel Adjustment Clause Calculation and traced the related revenue and expense amounts to the Company's accounting records. No true-ups were noted.

This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants (AICPA). We were not engaged to and did not conduct an audit or an examination engagement, the objective of which would be the expression of an opinion, or a review engagement, the objective of which would be the expression of a conclusion, on Section A of Minnesota Power's Annual Report of Automatic Adjustment Changes for the period January 1, 2024 through December 31, 2024 found in Attachment No. 2 of the Company's Annual Report. Accordingly, we do not express such an opinion or conclusion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

In performing this engagement, we are required to be independent of ALLETE, Inc. and to meet our ethical responsibilities, in accordance with the relevant ethical requirements related to our agreed-upon procedures engagement. This report is intended solely for the information and use of Management of ALLETE, Inc. and the MPUC and is not intended to be and should not be used by anyone other than these specified parties.

PricewaterhouseCoopers LLP

Minneapolis, Minnesota
March 3, 2025

Automatic Retail Fuel Adjustment Charges
Forecast to Actual Comparison
January 1, 2024 through December 31, 2024

Docket No. E,G999/AA-04-1279, dated December 7, 2005
Docket No. E999/CI-03-802, dated December 12, 2018
Minn. Rule 7825.2810

A. Summary - Automatic Adjustment Charges:

Ref. No.	Revenue/Accounting Month — Cost of Fuel	YTD 2024 Forecast	YTD 2024 Actual	YTD 2024 Difference Over/(Under)	YTD 2024 % Difference	Jan-24 Forecast	Jan-24 Actual	Jan-24 Difference Over/(Under)	Feb-24 Forecast	Feb-24 Actual	Feb-24 Difference Over/(Under)
1	**Company's Generating Stations**	$116,773,811	$105,641,617	($11,132,194)	-10%	$14,447,018	$16,769,019	$2,322,001	$13,184,794	$10,976,726	($2,208,067)
	Thermal	$116,773,811	$105,641,617	($11,132,194)	-10%	$14,447,018	$16,769,019	$2,322,001	$13,184,794	$10,976,726	($2,208,067)
	Wind	$0	$0	$0	0%	$0	$0	$0	$0	$0	$0
	Hydro	$0	$0	$0	0%	$0	$0	$0	$0	$0	$0
2	**Plus: Purchased Energy**	$223,751,172	$251,745,840	$27,994,668	13%	$20,890,686	$23,060,480	$2,169,795	$18,388,299	$20,946,482	$2,558,183
	Market	$153,996,492	$181,155,533	$27,159,041	18%	$14,680,778	$16,749,150	$2,068,372	$12,537,190	$14,721,755	$2,184,565
	Wind	$29,606,320	$29,032,633	($573,687)	-2%	$2,744,398	$2,251,831	($492,567)	$2,557,065	$2,507,963	($49,102)
	Solar	$2,664,609	$2,363,833	($300,776)	-11%	$101,210	$38,083	($63,127)	$152,093	$146,243	($5,850)
	Square Butte	$37,483,750	$39,193,841	$1,710,091	5%	$3,364,300	$4,021,417	$657,117	$3,141,950	$3,570,520	$428,570
3	**Plus: MISO Charges 1/**	$53,475,047	$42,110,145	($11,364,902)	-21%	$7,807,903	$5,206,702	($2,601,201)	$6,786,869	$2,884,920	($3,901,949)
4	**Less: MISO Schedules 16 &17 & 24 1/**	($211,024)	($584,180)	($373,157)	177%	($24,129)	($88,570)	($64,440)	($24,342)	$14,019	$38,362
	Schedule 16	$1,291,940	$1,671,263	$379,323	29%	$102,465	$112,382	$9,917	$102,245	$174,281	$72,037
	Schedule 17	$225,037	$28,894	($196,142)	-87%	$17,405	$2,155	($15,250)	$17,413	$3,653	($13,760)
	Schedule 24	($1,728,000)	($2,284,338)	($556,338)	32%	($144,000)	($203,107)	($59,107)	($144,000)	($163,915)	($19,915)
5	**Less: Fuel Cost Recovered Through Inter-System Sales**	$129,639,147	$120,507,648	($9,131,499)	-7%	$15,747,664	$18,036,130	$2,288,466	$14,022,134	$10,237,004	($3,785,130)
	Customer Inter-System Sales	$35,634,440	$32,955,317	($2,679,123)	-8%	$4,286,753	$3,199,206	($1,087,547)	$4,003,136	$2,977,088	($1,026,047)
	Market Sales	$71,081,842	$72,264,515	$1,182,673	2%	$7,804,048	$10,924,140	$3,120,092	$7,166,803	$6,669,712	($497,091)
	Station Service	$126,257	$120,473	($5,784)	-5%	$6,608	$5,824	($784)	$6,608	$8,860	$2,252
	MISO Costs 1/	$8,286,184	$2,988,834	($5,297,350)	-64%	$1,528,991	$614,390	($914,601)	$1,287,719	$223,568	($1,064,151)
	Sales due to Retail and Resale Loss of Load	$0	$0	$0	0%	$0	$0	$0	$0	$0	$0
	Asset Based Margins	$14,510,424	$12,178,508	($2,331,915)	-16%	$2,121,263	$3,292,570	$1,171,307	$1,557,867	$357,774	($1,200,093)
6	**Less: Costs Related to Solar**	$2,474,436	$2,138,863	($335,572)	-14%	$93,051	$34,201	($58,850)	$140,521	$132,646	($7,876)
7	**Plus: Time of Generation and Solar Energy Adjustment**	$1,527,833	$1,271,757	($256,076)	-17%	$69,707	$31,195	($38,512)	$109,748	$95,655	($14,093)
8	**Plus: Significant Events Filing- Under Collection**	$0	$0	$0	0%	$0	$0	$0	$0	$0	$0
9	**Total Monthly Cost of Fuel**	$263,625,304	$278,707,027	$15,081,723	6%	$27,398,727	$27,085,634	($313,093)	$24,331,396	$24,520,115	$188,718

Ref. No.	Cost of Fuel	Mar-24 Forecast	Mar-24 Actual	Mar-24 Difference Over/(Under)	Apr-24 Forecast	Apr-24 Actual	Apr-24 Difference Over/(Under)	May-24 Forecast	May-24 Actual	May-24 Difference Over/(Under)	Jun-24 Forecast	Jun-24 Actual	Jun-24 Difference Over/(Under)	Jul-24 Forecast	Jul-24 Actual	Jul-24 Difference Over/(Under)
1	**Company's Generating Stations**	$9,292,937	$7,625,729	($1,667,208)	$8,955,265	$6,967,557	($1,987,708)	$5,730,970	$5,693,732	($37,239)	$6,180,820	$5,190,040	($990,780)	$10,288,404	$7,930,808	($2,357,596)
	Thermal	$9,292,937	$7,625,729	($1,667,208)	$8,955,265	$6,967,557	($1,987,708)	$5,730,970	$5,693,732	($37,239)	$6,180,820	$5,190,040	($990,780)	$10,288,404	$7,930,808	($2,357,596)
	Wind	$0	$0	$0	$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	$0	$0	$0
2	**Plus: Purchased Energy**	$18,466,695	$23,047,463	$4,580,769	$17,651,350	$20,835,730	$3,184,381	$20,803,031	$20,684,867	($118,164)	$19,080,699	$18,563,123	($517,576)	$20,693,753	$26,929,666	$6,235,913
	Market	$12,677,145	$16,440,882	$3,763,737	$11,373,192	$13,647,815	$2,274,623	$14,540,702	$15,650,296	$1,109,594	$14,193,715	$13,781,893	($411,822)	$15,196,709	$21,787,657	$6,590,948
	Wind	$2,723,933	$2,998,109	$274,176	$2,746,919	$3,435,708	$688,789	$2,611,346	$2,220,642	($390,703)	$2,015,547	$2,097,465	$81,918	$1,776,644	$1,424,976	($351,668)
	Solar	$238,167	$226,651	($11,516)	$272,338	$230,192	($42,146)	$307,534	$281,779	($25,755)	$323,937	$276,391	($47,547)	$366,101	$332,997	($33,103)
	Square Butte	$2,827,450	$3,381,822	$554,372	$3,258,900	$3,522,015	$263,115	$3,343,450	$2,532,150	($811,300)	$2,547,500	$2,407,374	($140,126)	$3,354,300	$3,384,037	$29,737
3	**Plus: MISO Charges 1/**	$3,596,592	$2,048,301	($1,548,291)	$3,470,605	$3,986,761	$516,156	$2,960,034	$4,287,627	$1,327,593	$1,802,876	$1,869,887	$67,012	$4,536,091	$1,494,116	($3,041,975)
4	**Less: MISO Schedules 16 &17 & 24 1/**	($14,702)	($39,477)	($24,776)	($23,482)	($25,248)	($1,766)	($11,533)	($59,530)	($47,998)	($12,881)	($85,376)	($72,495)	($17,810)	($72,918)	($55,107)
	Schedule 16	$110,907	$129,964	$19,058	$102,617	$152,404	$49,787	$113,567	$129,607	$16,041	$111,908	$114,602	$2,694	$107,781	$120,795	$13,014
	Schedule 17	$18,392	$2,113	($16,279)	$17,901	$1,993	($15,908)	$18,901	$2,173	($16,727)	$19,211	$2,282	($16,929)	$18,409	$3,803	($14,606)
	Schedule 24	($144,000)	($171,554)	($27,554)	($144,000)	($179,645)	($35,645)	($144,000)	($191,311)	($47,311)	($144,000)	($202,260)	($58,260)	($144,000)	($197,515)	($53,515)
5	**Less: Fuel Cost Recovered Through Inter-System Sales**	$9,524,506	$9,270,996	($253,510)	$10,492,307	$10,400,659	($91,648)	$8,236,665	$7,182,592	($1,054,073)	$8,615,231	$6,910,682	($1,704,549)	$12,668,651	$8,518,530	($4,150,121)
	Customer Inter-System Sales	$2,570,046	$3,292,112	$722,066	$2,198,118	$2,423,795	$225,678	$1,922,013	$2,444,635	$522,622	$2,682,017	$2,122,545	($559,471)	$3,402,129	$3,548,398	$146,269
	Market Sales	$5,262,741	$4,979,177	($283,564)	$6,911,002	$6,955,543	$44,541	$5,666,975	$3,959,999	($1,706,976)	$4,389,745	$3,856,161	($533,584)	$6,159,296	$4,551,806	($1,607,490)
	Station Service	$6,608	$1,692	($4,916)	$30,088	$14,589	($15,498)	$6,608	$3,876	($2,732)	$6,608	($76)	($6,684)	$6,608	$11,889	$5,281
	MISO Costs 1/	$473,337	$93,268	($380,069)	$666,652	$483,199	($183,453)	$364,477	$197,707	($166,770)	$198,181	$60,286	($137,895)	$650,996	$25,142	($625,854)
	Sales due to Retail and Resale Loss of Load	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Asset Based Margins	$1,211,774	$904,748	($307,027)	$686,447	$523,532	($162,915)	$276,593	$576,376	$299,783	$1,338,681	$871,767	($466,914)	$2,449,622	$381,295	($2,068,326)
6	**Less: Costs Related to Solar**	$221,561	$205,385	($16,176)	$252,723	$207,299	($45,424)	$285,605	$255,034	($30,571)	$301,893	$248,921	($52,971)	$340,469	$301,259	($39,210)
7	**Plus: Time of Generation and Solar Energy Adjustment**	$122,208	$108,367	($13,841)	$134,289	$106,188	($28,101)	$182,349	$115,620	($66,729)	$186,098	$150,342	($35,756)	$190,836	$209,800	$18,964
8	**Plus: Significant Events Filing- Under Collection**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
9	**Total Monthly Cost of Fuel**	$21,747,066	$23,392,956	$1,645,890	$19,489,961	$21,313,526	$1,823,566	$21,165,647	$23,403,750	$2,238,102	$18,346,249	$18,699,164	$352,915	$22,717,775	$27,817,519	$5,099,744

Ref. No.	Cost of Fuel	Aug-24 Forecast	Aug-24 Actual	Aug-24 Difference Over/(Under)	Sep-24 Forecast	Sep-24 Actual	Sep-24 Difference Over/(Under)	Oct-24 Forecast	Oct-24 Actual	Oct-24 Difference Over/(Under)	Nov-24 Forecast	Nov-24 Actual	Nov-24 Difference Over/(Under)	Dec-24 Forecast	Dec-24 Actual	Dec-24 Difference Over/(Under)
1	**Company's Generating Stations**	$10,645,505	$8,634,298	($2,011,207)	$7,805,079	$7,506,765	($298,314)	$8,230,153	$6,972,373	($1,257,780)	$9,255,452	$9,503,265	$247,814	$12,757,414	$11,871,304	($886,109)
	Thermal	$10,645,505	$8,634,298	($2,011,207)	$7,805,079	$7,506,765	($298,314)	$8,230,153	$6,972,373	($1,257,780)	$9,255,452	$9,503,265	$247,814	$12,757,414	$11,871,304	($886,109)
	Wind	$0	$0	$0	$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	$0	$0	$0
2	**Plus: Purchased Energy**	$18,444,596	$18,913,388	$468,792	$17,029,206	$19,002,279	$1,973,073	$17,509,006	$21,607,567	$4,098,561	$16,719,568	$18,134,553	$1,414,985	$18,074,283	$20,020,241	$1,945,957
	Market	$12,983,742	$13,452,877	$469,135	$11,562,894	$12,618,366	$1,055,473	$11,181,164	$15,314,748	$4,133,584	$10,649,753	$12,674,100	$2,024,347	$12,419,508	$14,315,995	$1,896,487
	Wind	$1,816,003	$1,908,844	$92,841	$2,401,920	$2,514,559	$112,639	$2,803,488	$2,702,234	($101,254)	$2,746,307	$2,410,101	($336,206)	$2,662,751	$2,560,201	($102,550)
	Solar	$319,301	$269,900	($49,401)	$245,143	$284,139	$38,996	$161,653	$176,723	$15,070	$106,008	$63,198	($42,810)	$71,124	$37,536	($33,588)
	Square Butte	$3,325,550	$3,281,767	($43,783)	$2,819,250	$3,585,214	$765,964	$3,362,700	$3,413,862	$51,162	$3,217,500	$2,987,153	($230,347)	$2,920,900	$3,106,509	$185,609
3	**Plus: MISO Charges 1/**	$4,777,275	$2,827,822	($1,949,453)	$3,477,052	$5,917,290	$2,440,239	$4,078,231	$4,732,789	$654,558	$4,205,679	$2,358,979	($1,846,700)	$5,975,840	$4,494,951	($1,480,889)
4	**Less: MISO Schedules 16 &17 & 24 1/**	($16,417)	($62,981)	($46,564)	($11,447)	($52,441)	($40,994)	($18,076)	($30,252)	($12,176)	($18,105)	($52,968)	($34,864)	($18,099)	($28,438)	($10,339)
	Schedule 16	$108,600	$127,868	$19,268	$112,004	$142,444	$30,440	$106,319	$150,396	$44,076	$106,792	$135,058	$28,266	$106,734	$181,461	$74,727
	Schedule 17	$18,983	$2,911	($16,072)	$20,548	$2,841	($17,708)	$19,605	$2,431	($17,173)	$19,103	$2,020	($17,082)	$19,166	$519	($18,647)
	Schedule 24	($144,000)	($193,761)	($49,761)	($144,000)	($197,726)	($53,726)	($144,000)	($183,079)	($39,079)	($144,000)	($190,047)	($46,047)	($144,000)	($210,418)	($66,418)
5	**Less: Fuel Cost Recovered Through Inter-System Sales**	$10,783,558	$9,600,754	($1,182,804)	$7,952,951	$10,087,767	$2,134,816	$9,689,552	$9,726,052	$36,500	$9,703,141	$9,205,787	($497,353)	$12,202,787	$11,330,694	($872,093)
	Customer Inter-System Sales	$3,343,892	$2,412,593	($931,299)	$2,620,410	$2,524,084	($96,326)	$2,370,344	$2,390,821	$20,477	$2,385,367	$2,338,878	($46,489)	$3,850,217	$3,281,162	($569,056)
	Market Sales	$5,518,631	$5,785,258	$266,627	$4,297,012	$6,083,667	$1,786,655	$6,113,766	$6,451,844	$338,078	$5,948,860	$5,522,796	($426,064)	$5,842,962	$6,524,412	$681,450
	Station Service	$6,608	$471	($6,137)	$30,088	$9,223	($20,865)	$6,608	$21,762	$15,154	$6,608	$1,677	($4,932)	$6,608	$40,686	$34,078
	MISO Costs 1/	$631,798	$163,477	($468,321)	$337,499	$346,392	$8,893	$613,054	$253,052	($360,001)	$649,040	$178,638	($470,402)	$884,440	$349,716	($534,724)
	Sales due to Retail and Resale Loss of Load	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	Asset Based Margins	$1,282,628	$1,238,955	($43,673)	$667,942	$1,124,401	$456,459	$585,780	$608,572	$22,792	$713,266	$1,163,800	$450,533	$1,618,560	$1,134,718	($483,842)
6	**Less: Costs Related to Solar**	$297,314	$244,812	($52,503)	$228,173	$258,024	$29,851	$150,379	$160,318	$9,939	$98,609	$57,268	($41,341)	$64,137	$33,696	($30,441)
7	**Plus: Time of Generation and Solar Energy Adjustment**	$171,400	$131,707	($39,693)	$146,417	$176,756	$30,339	$112,901	$87,575	($25,326)	$52,996	$36,641	($16,355)	$48,886	$21,911	($26,975)
8	**Plus: Significant Events Filing- Under Collection**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
9	**Total Monthly Cost of Fuel**	$22,974,322	$20,724,630	($2,249,691)	$20,288,077	$22,309,741	$2,021,664	$20,108,436	$23,544,187	$3,435,751	$20,450,050	$20,823,351	$373,301	$24,607,598	$25,072,454	$464,857

Ref.	MWh Sales	YTD 2024 Forecast	YTD 2024 Actual	YTD 2024 Difference Over/(Under)	YTD 2024 % Difference	Jan-24 Forecast	Jan-24 Actual	Jan-24 Difference Over/(Under)	Feb-24 Forecast	Feb-24 Actual	Feb-24 Difference Over/(Under)
10	**Total Sales of Electricity**	12,397,514	12,556,303	158,789	1%	1,179,758	1,183,428	3,670	1,084,297	1,067,218	(17,079)
	Residential	1,045,140	972,995	(72,145)	-7%	117,114	100,296	(16,818)	102,473	96,813	(5,660)
	Commercial	1,230,613	1,145,891	(84,723)	-7%	109,031	97,928	(11,103)	105,620	102,344	(3,276)
	LP Taconite	3,794,988	4,264,177	469,189	12%	326,764	371,518	44,754	294,020	359,001	64,981
	LP Paper and Pulp	599,802	562,745	(37,057)	-6%	51,135	48,964	(2,171)	46,759	43,732	(3,027)
	LP Pipeline	310,455	319,797	9,342	3%	30,273	28,000	(2,273)	30,263	29,351	(912)
	Other Misc.	333,861	323,756	(10,105)	-3%	29,613	28,712	(901)	28,366	29,299	933
	Municipals	1,313,471	1,352,278	38,807	3%	116,681	117,293	612	107,091	111,572	4,481
	Inter System Sales	3,769,185	3,614,664	(154,520)	-4%	399,147	390,716	(8,431)	369,705	295,107	(74,597)
11	**Less: Inter-System Sales**	3,769,185	3,614,664	(154,520)	-4%	399,147	390,716	(8,431)	369,705	295,107	(74,597)
	Customer Inter-System Sales	940,132	934,429	(5,703)	-1%	79,040	75,855	(3,185)	80,166	67,943	(12,223)
	Market Sales	2,826,652	2,676,731	(149,921)	-5%	319,990	314,751	(5,240)	289,422	226,780	(62,642)
	Station Service	2,401	3,504	1,103	46%	117	110	(7)	117	384	267
	Sales due to Retail and Resale Loss of Load	0	0	0	0%	0	0	0	0	0	0
12	**Less: Solar Generation and Purchased MWh**	55,492	50,258	(5,234)	-9%	2,357	946	(1,412)	3,372	3,447	75
13	**Total Monthly MWh Sales**	8,572,838	8,891,381	318,543	4%	778,253	791,766	13,513	711,221	768,664	57,443
	Fuel Adjustment Charge - Fuel Clause (¢/KWh)										
14	1-Month Average Cost of Fuel (¢/kWh)	3.075	3.135	0.059	2%	3.521	3.421	(0.100)	3.421	3.190	(0.231)

Ref.	MWh Sales	Mar-24 Forecast	Mar-24 Actual	Mar-24 Difference Over/(Under)	Apr-24 Forecast	Apr-24 Actual	Apr-24 Difference Over/(Under)	May-24 Forecast	May-24 Actual	May-24 Difference Over/(Under)	Jun-24 Forecast	Jun-24 Actual	Jun-24 Difference Over/(Under)	Jul-24 Forecast	Jul-24 Actual	Jul-24 Difference Over/(Under)
10	**Total Sales of Electricity**	1,025,565	1,082,083	56,517	1,026,116	1,059,058	32,942	971,356	945,476	(25,880)	917,804	955,172	37,368	1,037,218	1,010,825	(26,393)
	Residential	94,088	87,922	(6,166)	80,801	83,423	2,621	73,586	69,686	(3,900)	67,670	65,099	(2,571)	83,099	76,922	(6,177)
	Commercial	108,247	94,556	(13,691)	91,503	92,207	704	93,654	88,044	(5,610)	97,124	88,735	(8,389)	107,973	96,474	(11,498)
	LP Taconite	321,980	377,170	55,190	300,703	323,320	22,617	320,675	367,574	46,899	309,032	344,262	35,230	321,160	367,278	46,118
	LP Paper and Pulp	51,310	48,985	(2,325)	49,593	44,250	(5,343)	50,475	47,462	(3,013)	49,396	45,934	(3,462)	51,002	44,040	(6,962)
	LP Pipeline	31,725	30,586	(1,139)	27,479	29,138	1,659	23,935	30,348	6,413	23,945	28,307	4,362	24,337	24,657	320
	Other Misc.	29,012	28,344	(668)	27,398	27,170	(228)	26,794	26,679	(115)	27,408	26,330	(1,078)	27,397	26,281	(1,116)
	Municipals	108,934	115,237	6,303	103,816	107,774	3,958	100,873	112,617	11,744	101,521	111,979	10,458	108,276	116,295	8,019
	Inter System Sales	280,270	299,282	19,012	344,823	351,776	6,953	281,364	203,067	(78,297)	241,709	244,527	2,818	313,975	258,877	(55,097)
11	**Less: Inter-System Sales**	280,270	299,282	19,012	344,823	351,776	6,953	281,364	203,067	(78,297)	241,709	244,527	2,818	313,975	258,877	(55,097)
	Customer Inter-System Sales	77,710	84,437	6,727	72,431	77,155	4,724	61,597	74,256	12,659	81,114	68,469	(12,645)	83,494	79,187	(4,307)
	Market Sales	202,443	214,780	12,337	271,776	273,985	2,209	219,650	128,695	(90,955)	160,478	176,028	15,550	230,364	179,361	(51,003)
	Station Service	117	65	(51)	616	636	20	117	115	(2)	117	30	(87)	117	330	213
	Sales due to Retail and Resale Loss of Load	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	**Less: Solar Generation and Purchased MWh**	4,906	4,910	4	5,551	4,895	(656)	6,260	5,663	(597)	6,561	5,629	(932)	7,300	6,783	(516)
13	**Total Monthly MWh Sales**	740,389	777,890	37,501	675,742	702,386	26,644	683,732	736,746	53,014	669,535	705,016	35,482	715,944	745,164	29,220
	Fuel Adjustment Charge - Fuel Clause (¢/KWh)															
14	1-Month Average Cost of Fuel (¢/kWh)	2.937	3.007	0.070	2.884	3.034	0.150	3.096	3.177	0.081	2.740	2.652	(0.088)	3.173	3.733	0.560

Ref.	MWh Sales	Aug-24 Forecast	Aug-24 Actual	Aug-24 Difference Over/(Under)	Sep-24 Forecast	Sep-24 Actual	Sep-24 Difference Over/(Under)	Oct-24 Forecast	Oct-24 Actual	Oct-24 Difference Over/(Under)	Nov-24 Forecast	Nov-24 Actual	Nov-24 Difference Over/(Under)	Dec-24 Forecast	Dec-24 Actual	Dec-24 Difference Over/(Under)
10	**Total Sales of Electricity**	1,025,889	1,057,225	31,336	943,028	993,129	50,101	1,027,981	1,056,685	28,704	1,044,500	1,045,373	874	1,114,003	1,100,632	(13,371)
	Residential	77,665	85,264	7,599	73,426	76,125	2,699	75,466	68,555	(6,911)	87,522	70,860	(16,661)	112,231	92,030	(20,201)
	Commercial	111,924	104,965	(6,958)	102,433	102,895	463	94,825	96,826	2,001	95,683	86,130	(9,554)	112,598	94,788	(17,811)
	LP Taconite	317,280	332,535	15,255	307,523	333,415	25,892	320,116	357,172	37,056	327,966	362,825	34,859	327,769	368,108	40,339
	LP Paper and Pulp	51,073	48,444	(2,629)	49,168	48,511	(657)	49,786	48,701	(1,085)	49,187	46,556	(2,631)	50,918	47,167	(3,751)
	LP Pipeline	22,307	25,202	2,895	21,169	20,801	(368)	23,449	21,653	(1,796)	24,657	23,672	(985)	26,916	28,083	1,167
	Other Misc.	28,117	26,950	(1,167)	26,902	26,369	(533)	27,632	26,732	(900)	27,118	25,577	(1,541)	28,104	25,312	(2,792)
	Municipals	109,566	113,427	3,861	109,579	103,731	(5,848)	112,146	109,109	(3,037)	112,780	111,461	(1,319)	122,208	121,783	(425)
	Inter System Sales	307,957	320,437	12,480	252,828	281,282	28,454	324,561	327,938	3,377	319,587	318,292	(1,294)	333,258	323,362	(9,896)
11	**Less: Inter-System Sales**	307,957	320,437	12,480	252,828	281,282	28,454	324,561	327,938	3,377	319,587	318,292	(1,294)	333,258	323,362	(9,896)
	Customer Inter-System Sales	83,934	84,474	540	81,650	81,319	(331)	77,034	74,110	(2,924)	75,712	83,322	7,610	86,250	83,900	(2,350)
	Market Sales	223,906	235,941	12,035	170,562	199,686	29,124	247,410	253,020	5,610	243,758	234,898	(8,860)	246,891	238,806	(8,085)
	Station Service	117	21	(96)	616	276	(340)	117	808	691	117	72	(45)	117	656	539
	Sales due to Retail and Resale Loss of Load	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	**Less: Solar Generation and Purchased MWh**	6,457	5,543	(914)	4,995	6,046	1,051	3,727	4,022	295	2,309	1,529	(780)	1,697	845	(853)
13	**Total Monthly MWh Sales**	711,474	731,244	19,770	685,204	705,801	20,597	699,693	724,725	25,032	722,604	725,552	2,948	779,047	776,425	(2,622)
	Fuel Adjustment Charge - Fuel Clause (¢/KWh)															
14	1-Month Average Cost of Fuel (¢/kWh)	3.229	2.834	(0.395)	2.961	3.161	0.200	2.874	3.249	0.375	2.830	2.870	0.040	3.159	3.229	0.071

1-Month Average Cost of Fuel by Energy Type (¢/kWh)
Billing Month:

Ref.	Energy Type	YTD 2024 Forecast	YTD 2024 Actual	YTD 2024 Difference Over/(Under)	YTD 2024 % Difference	Jan-24 Forecast	Jan-24 Actual	Jan-24 Difference Over/(Under)	Feb-24 Forecast	Feb-24 Actual	Feb-24 Difference Over/(Under)
15	Generation - Coal	0.823	0.794	(0.030)	-4%	0.975	1.361	0.386	0.995	0.937	(0.057)
16	Generation - Gas	0.004	0.023	0.019	460%	0.014	0.053	0.039	0.011	0.045	0.034
17	Generation - BioFuel	0.068	0.041	(0.028)	-40%	0.202	0.096	(0.106)	0.175	0.011	(0.164)
18	Purchased Power - Coal	0.025	0.074	0.049	198%	0.017	0.090	0.073	0.017	0.082	0.065
19	Purchased Power - Biomass	0.000	0.000	0.000	0%	0.000	0.000	0.000	0.000	0.000	0.000
20	Purchased Power - Hydro	1.226	1.176	(0.050)	-4%	1.194	1.250	0.055	1.216	1.180	(0.036)
21	Purchased Power - Gas	0.000	0.000	0.000	0%	0.000	0.000	0.000	0.000	0.000	0.000
22	Purchased Power - Wind	0.345	0.327	(0.018)	-5%	0.353	0.284	(0.068)	0.360	0.326	(0.033)
23	Purchased Power - Diesel	0.000	0.000	0.000	0%	0.000	0.000	0.000	0.000	0.000	0.000
24	Purchased Power - Solar	0.029	0.000	(0.029)	-100%	0.012	0.000	(0.012)	0.020	0.000	(0.020)
25	Purchased Power - Unknown	0.547	0.694	0.147	27%	0.754	0.287	(0.467)	0.629	0.609	(0.020)
26	Significant Event Adjustment	0.000	0.000	0.000	0%	0.000	0.000	0.000	0.000	0.000	0.000
27	Total One-Month Average Cost 2/	3.069	3.130	0.061	2%	3.521	3.421	(0.100)	3.421	3.190	(0.231)

Ref.	Energy Type	Mar-24 Forecast	Mar-24 Actual	Mar-24 Difference Over/(Under)	Apr-24 Forecast	Apr-24 Actual	Apr-24 Difference Over/(Under)	May-24 Forecast	May-24 Actual	May-24 Difference Over/(Under)	Jun-24 Forecast	Jun-24 Actual	Jun-24 Difference Over/(Under)	Jul-24 Forecast	Jul-24 Actual	Jul-24 Difference Over/(Under)
15	Generation - Coal	0.783	0.802	0.018	0.695	0.573	(0.122)	0.507	0.575	0.068	0.590	0.559	(0.031)	0.859	0.688	(0.172)
16	Generation - Gas	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.029	0.029	0.003	0.007	0.003	0.022	0.071	0.049
17	Generation - BioFuel	0.086	0.005	(0.080)	0.045	0.002	(0.042)	0.000	0.000	0.000	0.016	0.042	0.026	0.098	0.092	(0.006)
18	Purchased Power - Coal	0.025	0.076	0.052	0.016	0.082	0.066	0.029	0.060	0.031	0.029	0.059	0.030	0.028	0.080	0.052
19	Purchased Power - Biomass	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	Purchased Power - Hydro	1.178	1.241	0.063	1.225	1.303	0.079	1.559	1.316	(0.243)	1.460	1.138	(0.323)	1.510	1.164	(0.346)
21	Purchased Power - Gas	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001
22	Purchased Power - Wind	0.368	0.385	0.018	0.406	0.489	0.083	0.382	0.301	(0.080)	0.301	0.298	(0.004)	0.248	0.191	(0.057)
23	Purchased Power - Diesel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	Purchased Power - Solar	0.030	0.000	(0.030)	0.037	0.000	(0.037)	0.042	0.000	(0.042)	0.045	0.000	(0.045)	0.048	0.000	(0.048)
25	Purchased Power - Unknown	0.468	0.497	0.029	0.461	0.584	0.124	0.578	0.896	0.318	0.295	0.550	0.255	0.360	1.446	1.086
26	Significant Event Adjustment	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	Total One-Month Average Cost 2/	2.937	3.007	0.070	2.884	3.034	0.150	3.096	3.177	0.081	2.740	2.652	(0.088)	3.173	3.733	0.560

Ref.	Energy Type	Aug-24 Forecast	Aug-24 Actual	Aug-24 Difference Over/(Under)	Sep-24 Forecast	Sep-24 Actual	Sep-24 Difference Over/(Under)	Oct-24 Forecast	Oct-24 Actual	Oct-24 Difference Over/(Under)	Nov-24 Forecast	Nov-24 Actual	Nov-24 Difference Over/(Under)	Dec-24 Forecast	Dec-24 Actual	Dec-24 Difference Over/(Under)
15	Generation - Coal	1.077	0.712	(0.364)	0.833	0.599	(0.234)	0.734	0.706	(0.028)	0.808	0.931	0.124	1.025	1.081	0.056
16	Generation - Gas	0.000	0.006	0.006	0.000	0.004	0.004	0.000	0.009	0.009	0.000	0.025	0.025	0.000	0.028	0.028
17	Generation - BioFuel	0.026	0.031	0.006	0.018	0.058	0.040	0.000	0.049	0.049	0.005	0.063	0.058	0.152	0.039	(0.113)
18	Purchased Power - Coal	0.027	0.079	0.051	0.040	0.088	0.048	0.030	0.082	0.052	0.028	0.072	0.044	0.013	0.040	0.027
19	Purchased Power - Biomass	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	Purchased Power - Hydro	1.139	1.155	0.016	1.082	1.125	0.043	1.059	1.143	0.084	1.058	1.069	0.011	1.033	1.031	(0.002)
21	Purchased Power - Gas	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22	Purchased Power - Wind	0.255	0.261	0.006	0.351	0.356	0.006	0.401	0.373	(0.028)	0.380	0.332	(0.048)	0.342	0.330	(0.012)
23	Purchased Power - Diesel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	Purchased Power - Solar	0.042	0.000	(0.042)	0.033	0.000	(0.033)	0.021	0.000	(0.021)	0.014	0.000	(0.014)	0.008	0.000	(0.008)
25	Purchased Power - Unknown	0.664	0.589	(0.075)	0.605	0.930	0.326	0.629	0.887	0.258	0.538	0.377	(0.161)	0.585	0.680	0.095
26	Significant Event Adjustment	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	Total One-Month Average Cost 2/	3.229	2.834	(0.395)	2.961	3.161	0.200	2.874	3.249	0.375	2.830	2.870	0.040	3.159	3.229	0.071

B. Summary - Over/Under Recovery- 2024

Ref.		YTD 2024 Collected	YTD 2024 Actual	YTD 2024 Difference Over/(Under)	YTD 2024 % Difference	Jan-24 Collected	Jan-24 Actual	Jan-24 Difference Over/(Under)	Feb-24 Collected	Feb-24 Actual	Feb-24 Difference Over/(Under)
1	**Revenue Class Over/Under Recovery**	$233,372,066	$237,860,014	($4,487,948)	-1.9%	$23,783,905	$23,108,133	$675,772	$22,609,891	$21,083,229	$1,526,662
	Residential	$30,670,603	$31,138,270	($467,667)	-1.5%	$3,596,884	$3,494,615	$102,269	$3,373,345	$3,145,862	$227,483
	Commercial	$35,928,273	$36,599,567	($671,294)	-1.9%	$3,512,735	$3,412,863	$99,872	$3,570,063	$3,329,350	$240,713
	Industrial	$165,196,603	$168,513,931	($3,317,328)	-2.0%	$16,512,704	$16,043,675	$469,029	$15,509,059	$14,461,206	$1,047,853
	Lighting	$210,924	$214,390	($3,466)	-1.6%	$26,809	$26,043	$766	$23,359	$21,784	$1,575
	Municipal Pumping	$1,365,663	$1,393,856	($28,193)	-2.1%	$134,773	$130,937	$3,836	$134,065	$125,027	$9,038

Ref.		Mar-24 Collected	Mar-24 Actual	Mar-24 Difference Over/(Under)	Apr-24 Collected	Apr-24 Actual	Apr-24 Difference Over/(Under)	May-24 Collected	May-24 Actual	May-24 Difference Over/(Under)	Jun-24 Collected	Jun-24 Actual	Jun-24 Difference Over/(Under)	Jul-24 Collected	Jul-24 Actual	Jul-24 Difference Over/(Under)
1	**Revenue Class Over/Under Recovery**	$19,598,299	$20,068,518	($470,219)	$17,296,277	$18,194,234	($897,957)	$19,479,975	$19,989,107	($509,132)	$16,389,830	$15,863,770	$526,060	$20,160,866	$23,720,293	($3,559,427)
	Residential	$2,630,110	$2,692,534	($62,424)	$2,450,649	$2,578,258	($127,609)	$2,197,986	$2,255,147	($57,161)	$1,817,468	$1,759,458	$58,010	$2,487,402	$2,926,789	($439,387)
	Commercial	$2,831,155	$2,898,778	($67,623)	$2,710,509	$2,851,645	($141,136)	$2,777,224	$2,850,297	($73,073)	$2,477,073	$2,397,224	$79,849	$3,119,779	$3,669,734	($549,955)
	Industrial	$14,009,936	$14,347,066	($337,130)	$12,018,696	$12,641,850	($623,154)	$14,382,176	$14,757,851	($375,675)	$11,984,321	$11,599,701	$384,620	$14,421,707	$16,968,522	($2,546,815)
	Lighting	$18,315	$18,753	($438)	$15,902	$16,728	($826)	$14,539	$14,919	($380)	$11,589	$11,213	$376	$13,285	$15,633	($2,348)
	Municipal Pumping	$108,783	$111,387	($2,604)	$100,521	$105,753	($5,232)	$108,050	$110,893	($2,843)	$99,379	$96,174	$3,205	$118,693	$139,615	($20,922)

Ref.		Aug-24 Collected	Aug-24 Actual	Aug-24 Difference Over/(Under)	Sep-24 Collected	Sep-24 Actual	Sep-24 Difference Over/(Under)	Oct-24 Collected	Oct-24 Actual	Oct-24 Difference Over/(Under)	Nov-24 Collected	Nov-24 Actual	Nov-24 Difference Over/(Under)	Dec-24 Collected	Dec-24 Actual	Dec-24 Difference Over/(Under)
1	**Revenue Class Over/Under Recovery**	$20,141,424	$17,675,621	$2,465,803	$18,007,333	$19,224,221	($1,216,888)	$17,797,175	$20,117,608	($2,320,433)	$17,402,309	$17,649,665	($247,356)	$20,704,782	$21,165,615	($460,833)
	Residential	$2,806,036	$2,463,018	$343,018	$2,297,256	$2,452,603	($155,347)	$2,008,562	$2,270,623	($262,061)	$2,043,523	$2,072,565	($29,042)	$2,961,382	$3,026,798	($65,416)
	Commercial	$3,453,734	$3,031,725	$422,009	$3,104,175	$3,314,065	($209,890)	$2,835,123	$3,204,944	($369,821)	$2,482,838	$2,517,706	($34,868)	$3,053,865	$3,121,236	($67,371)
	Industrial	$13,758,210	$12,072,516	$1,685,694	$12,484,592	$13,328,033	($843,441)	$12,825,872	$14,497,783	($1,671,911)	$12,750,401	$12,932,077	($181,676)	$14,538,929	$14,863,651	($324,722)
	Lighting	$14,332	$12,581	$1,751	$15,117	$16,139	($1,022)	$16,384	$18,520	($2,136)	$17,161	$17,409	($248)	$24,132	$24,668	($536)
	Municipal Pumping	$109,112	$95,781	$13,331	$106,193	$113,381	($7,188)	$111,234	$125,738	($14,504)	$108,386	$109,908	($1,522)	$126,474	$129,262	($2,788)

C. 2022 True Up Recovery- 2023
Docket No. E015/AA-21-312

Ref.		YTD 2023 Collected	YTD 2023 Actual	YTD 2023 Difference Over/(Under)	YTD 2023 % Difference	Jan-23 Collected	Jan-23 Actual	Jan-23 Difference Over/(Under)	Feb-23 Collected	Feb-23 Actual	Feb-23 Difference Over/(Under)
1	**Revenue Class Over/Under Recovery**	$4,559,734	$4,422,634	$137,100	3%						
	Residential	$555,807									
	Commercial	$697,421									
	Industrial	$3,275,800									
	Lighting	$4,166									
	Municipal Pumping	$26,541									

Ref.		Mar-23 Collected	Mar-23 Actual	Mar-23 Difference Over/(Under)	Apr-23 Collected	Apr-23 Actual	Apr-23 Difference Over/(Under)	May-23 Collected	May-23 Actual	May-23 Difference Over/(Under)	Jun-23 Collected	Jun-23 Actual	Jun-23 Difference Over/(Under)	Jul-23 Collected	Jul-23 Actual	Jul-23 Difference Over/(Under)
1	**Revenue Class Over/Under Recovery**															
	Residential															
	Commercial															
	Industrial															
	Lighting															
	Municipal Pumping															

Ref.		Aug-23 Collected	Aug-23 Actual	Aug-23 Difference Over/(Under)	Sep-23 Collected	Sep-23 Actual	Sep-23 Difference Over/(Under)	Oct-23 Collected	Oct-23 Actual	Oct-23 Difference Over/(Under)	Nov-23 Collected	Nov-23 Actual	Nov-23 Difference Over/(Under)	Dec-23 Collected	Dec-23 Actual	Dec-23 Difference Over/(Under)
1	**Revenue Class Over/Under Recovery**				$1,141,966	$1,105,659	$36,307	$1,176,176	$1,105,659	$70,517	$1,142,679	$1,105,659	$37,020	$1,098,914	$1,105,659	($6,745)
	Residential				$143,648			$122,477			$140,253			$149,429		
	Commercial				$196,744			$178,766			$165,365			$156,546		
	Industrial				$793,092			$867,065			$829,928			$785,715		
	Lighting				$915			$988			$1,136			$1,127		
	Municipal Pumping				$7,567			$6,880			$5,996			$6,097		

D. 2022 True Up Recovery- 2024
Docket No. E015/AA-21-312

Ref.		YTD 2024 Collected	YTD 2024 Actual	YTD 2024 Difference Over/(Under)	YTD 2024 % Difference	Jan-24 Collected	Jan-24 Actual	Jan-24 Difference Over/(Under)	Feb-24 Collected	Feb-24 Actual	Feb-24 Difference Over/(Under)
1	**Revenue Class Over/Under Recovery**	$9,319,893	$8,845,268	$474,625	5%	$1,126,290	$1,105,659	$20,631	$1,208,138	$1,105,659	$102,480
	Residential	$1,238,039				$170,490			$180,057		
	Commercial	$1,429,556				$166,621			$191,057		
	Industrial	$6,590,901				$781,534			$828,601		
	Lighting	$7,935				$1,258			$1,253		
	Municipal Pumping	$53,463				$6,387			$7,170		

Ref.		Mar-24 Collected	Mar-24 Actual	Mar-24 Difference Over/(Under)	Apr-24 Collected	Apr-24 Actual	Apr-24 Difference Over/(Under)	May-24 Collected	May-24 Actual	May-24 Difference Over/(Under)	Jun-24 Collected	Jun-24 Actual	Jun-24 Difference Over/(Under)	Jul-24 Collected	Jul-24 Actual	Jul-24 Difference Over/(Under)
1	**Revenue Class Over/Under Recovery**	$1,165,999	$1,105,659	$60,341	$1,156,935	$1,105,659	$51,277	$1,194,888	$1,105,659	$89,230	$1,166,011	$1,105,659	$60,352	$1,155,189	$1,105,659	$49,531
	Residential	$156,499			$164,298			$135,166			$129,551			$142,433		
	Commercial	$168,395			$181,169			$170,351			$176,113			$178,979		
	Industrial	$833,548			$803,694			$881,849			$852,442			$826,215		
	Lighting	$1,084			$1,054			$896			$840			$756		
	Municipal Pumping	$6,473			$6,720			$6,626			$7,064			$6,806		

Ref.		Aug-24 Collected	Aug-24 Actual	Aug-24 Difference Over/(Under)	Sep-24 Collected	Sep-24 Actual	Sep-24 Difference Over/(Under)	Oct-24 Collected	Oct-24 Actual	Oct-24 Difference Over/(Under)	Nov-24 Collected	Nov-24 Actual	Nov-24 Difference Over/(Under)	Dec-24 Collected	Dec-24 Actual	Dec-24 Difference Over/(Under)
1	**Revenue Class Over/Under Recovery**	$1,146,443	$1,105,659	$40,784												
	Residential	$159,544														
	Commercial	$196,870														
	Industrial	$783,018														
	Lighting	$795														
	Municipal Pumping	$6,216														

H. Total Over/Under Recovery

2024 FAC True Up Amount ($3,876,222)

2024 FAC Forecast vs. Actuals- Customer Sales

Residential:

- Residential actuals were 7% lower than the 2024 forecast. The lower residential sales were due to milder temperatures experienced in 2024.

Commercial:

- Commercial actuals were 7% lower than the 2024 forecast. The lower commercial sales were due to milder temperatures experienced in 2024.

Large Power Taconite:

- Large Power Taconite actuals were 12% more than the 2024 forecast. The taconite customers ran above forecasted levels due to a return to pre-COVID demand levels in the iron and steel industries.

Large Power Paper and Pulp:

- Paper and Pulp actuals were 6% less than the 2024 forecast. ST Paper's Duluth mill was acquired by Sofidel America who spent a large portion of 2024 testing their newly acquired mill's capability to produce different paper products which resulted in large fluctuations in load at their facility month-to-month.

Large Power Pipelines:

- Pipeline actuals were 3% more than the 2024 forecast.

Other Misc.:

- Other Misc. actuals were 3% less than the 2024 forecast.

Municipals:

- Municipals came in 3% more than forecast.

Intersystem Sales:

- Please see Attachment 2.3 for the Inter System Sales Breakdown
- Overall, Intersystem Sales came in about 154,000 MWhs less than forecast. Intersystem sales are removed from the Total Sales of Electricity as they are Non FAC MWh's.

Thermal Generation

Generation - Coal		YTD 2024 Forecast	YTD 2024 Actual	YTD 2024 Difference: Over/(Under)	YTD 2024 % Difference	Jan-24 Forecast	Jan-24 Actual	Jan-24 Difference: Over/(Under)	Feb-24 Forecast	Feb-24 Actual	Feb-24 Difference: Over/(Under)	Mar-24 Forecast	Mar-24 Actual	Mar-24 Difference: Over/(Under)	Apr-24 Forecast	Apr-24 Actual	Apr-24 Difference: Over/(Under)	May-24 Forecast	May-24 Actual	May-24 Difference: Over/(Under)	Forecast
		[TRADE SECRET DATA BEGINS				[TRADE SECRET DATA BEGINS															
Boswell 3	MWh				-23%																
	Average Cost				8%																
		TRADE SECRET DATA ENDS]																			
	Total Cost	$ 40,951,276	$ 34,229,658	($6,721,618)	-16%	$ 5,219,835	$ 5,668,229	$448,394	$ 4,834,644	$ 3,751,497	($1,083,147)	$ 3,690,555	$ 2,743,328	($947,227)	$ 3,359,702	$ 3,600,582	$240,880	$ 154,235	$ 86,993	($67,242)	$ 1,002,978
		[TRADE SECRET DATA BEGINS				[TRADE SECRET DATA BEGINS															
Boswell 4	MWh				-17%																
	Average Cost				6%																
		TRADE SECRET DATA ENDS]																			
	Total Cost	$ 68,167,952	$60,000,558	($8,167,394)	-12%	$7,219,591	$7,733,693	$514,102	$6,555,899	$5,027,297	($1,528,602)	$4,966,923	$4,997,647	$30,724	$5,286,966	$3,348,531	($1,938,435)	$5,576,736	$5,217,339	($359,397)	$4,984,576
Total Generation Coal $		$ 109,119,229	$94,230,216	($14,889,013)	-14%	$12,439,426	$13,401,922	$962,496	$11,390,543	$8,778,794	($2,611,749)	$8,657,478	$7,740,975	($916,503)	$8,646,668	$6,949,113	($1,697,555)	$5,730,970	$5,304,332	($426,638)	$5,987,554
Generation - Gas		[TRADE SECRET DATA BEGINS				[TRADE SECRET DATA BEGINS															
Laskin 1	MWh				615%																
	Average Cost				-38%																
		TRADE SECRET DATA ENDS]																			
	Total Cost	$ 848,299	$3,755,977	$2,907,678	343%	$271,768	$1,220,943	$949,175	$311,237	$1,010,863	$699,626	$0	($81,188)	($81,188)	$0	$85	$85	$0	$262,827	$262,827	$39,045
		[TRADE SECRET DATA BEGINS				[TRADE SECRET DATA BEGINS															
Laskin 2	MWh				787%																
	Average Cost				-34%																
		TRADE SECRET DATA ENDS]																			
	Total Cost	$ 614,902	$3,588,721	$2,973,819	484%	$142,366	$1,164,412	$1,022,045	$224,388	$1,097,507	$873,119	$0	($81,188)	($81,188)	$0	$85	$85	$0	$125,852	$125,852	$39,045
Total Generation Gas $		$1,463,201	$7,344,698	$5,881,497	402%	$414,135	$2,385,355	$1,971,220	$535,625	$2,108,370	$1,572,745	$0	($162,375)	($162,375)	$0	$170	$170	$0	$388,679	$388,679	$78,090
Generation - Biofuel		[TRADE SECRET DATA BEGINS				[TRADE SECRET DATA BEGINS															
Hibbard 3	MWh				-33%																
	Average Cost				-10%																
		TRADE SECRET DATA ENDS]																			
	Total Cost	$ 2,547,969	$1,532,644	($1,015,326)	-40%	$665,906	$375,561	($290,345)	$459,271	$36,283	($422,988)	$0	$21,253	$21,253	$263,933	$0	($263,933)	$0	$0	$0	$80,581
		[TRADE SECRET DATA BEGINS				[TRADE SECRET DATA BEGINS															
Hibbard 4	MWh				-35%																
	Average Cost				6%																
		TRADE SECRET DATA ENDS]																			
	Total Cost	$ 3,643,412	$2,534,059	($1,109,353)	-30%	$927,552	$606,181	($321,370)	$799,354	$53,280	($746,074)	$635,459	$25,876	($609,583)	$44,664	$18,274	($26,389)	$0	$721	$721	$34,596
Total Generation Biofuel $		$ 6,191,381	$4,066,703	($2,124,678)	-34%	$ 1,593,457	$981,742	($611,715)	$ 1,258,625	$89,562	($1,169,063)	$ 635,459	$47,129	($588,330)	$ 308,597	$18,274	($290,322)	$ -	$721	$721	$ 115,176
Total Thermal Generation $		$116,773,811	$105,641,617	($11,132,194)	-10%	$14,447,018	$16,769,019	$2,322,001	$13,184,794	$10,976,726	($2,208,067)	$9,292,937	$7,625,729	($1,667,208)	$8,955,265	$6,967,557	($1,987,708)	$5,730,970	$5,693,732	($37,239)	$6,180,820

Wind Generation

		YTD 2024 Forecast	YTD 2024 Actual	YTD 2024 Difference: Over/(Under)	YTD 2024 % Difference	Jan-24 Forecast	Jan-24 Actual	Jan-24 Difference: Over/(Under)	Feb-24 Forecast	Feb-24 Actual	Feb-24 Difference: Over/(Under)	Mar-24 Forecast	Mar-24 Actual	Mar-24 Difference: Over/(Under)	Apr-24 Forecast	Apr-24 Actual	Apr-24 Difference: Over/(Under)	May-24 Forecast	May-24 Actual	May-24 Difference: Over/(Under)	Forecast
		[TRADE SECRET DATA BEGINS				[TRADE SECRET DATA BEGINS															
Bison	MWh				-22%																
	Average Cost				0%																
		TRADE SECRET DATA ENDS]																			
	Total Cost	$0	$0	$0	0%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		[TRADE SECRET DATA BEGINS				[TRADE SECRET DATA BEGINS															
Tac Ridge	MWh				-15%																
	Average Cost				0%																
		TRADE SECRET DATA ENDS]																			
	Total Cost	$0	$0	$0	0%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Wind Generation $		$0	$0	$0	0%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Hydro Generation

		YTD 2024 Forecast	YTD 2024 Actual	YTD 2024 Difference: Over/(Under)	YTD 2024 % Difference	Jan-24 Forecast	Jan-24 Actual	Jan-24 Difference: Over/(Under)	Feb-24 Forecast	Feb-24 Actual	Feb-24 Difference: Over/(Under)	Mar-24 Forecast	Mar-24 Actual	Mar-24 Difference: Over/(Under)	Apr-24 Forecast	Apr-24 Actual	Apr-24 Difference: Over/(Under)	May-24 Forecast	May-24 Actual	May-24 Difference: Over/(Under)	Forecast
		[TRADE SECRET DATA BEGINS				[TRADE SECRET DATA BEGINS															
Hydro	MWh				-3%																
	Average Cost				0%																
		TRADE SECRET DATA ENDS]																			
	Total Cost	$0	$0	$0	0%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Hydro Generation $		$0	$0	$0	0%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Total Generation

	YTD 2024 Forecast	YTD 2024 Actual	YTD 2024 Difference: Over/(Under)	YTD 2024 % Difference	Jan-24 Forecast	Jan-24 Actual	Jan-24 Difference: Over/(Under)	Feb-24 Forecast	Feb-24 Actual	Feb-24 Difference: Over/(Under)	Mar-24 Forecast	Mar-24 Actual	Mar-24 Difference: Over/(Under)	Apr-24 Forecast	Apr-24 Actual	Apr-24 Difference: Over/(Under)	May-24 Forecast	May-24 Actual	May-24 Difference: Over/(Under)	Forecast
Total Company Generation	$116,773,811	$105,641,617	($11,132,194)	-10%	$14,447,018	$16,769,019	$2,322,001	$13,184,794	$10,976,726	($2,208,067)	$9,292,937	$7,625,729	($1,667,208)	$8,955,265	$6,967,557	($1,987,708)	$5,730,970	$5,693,732	($37,239)	$6,180,820

Thermal Generation

Jun-24		Jul-24			Aug-24			Sep-24			Oct-24			Nov-24			Dec-24		
Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
[redacted]																			
																			TRADE SECRET DATA ENDS]
$ -	($1,002,978)	$ 3,676,685	$ 974,118	($2,702,567)	$ 4,424,892	$ 3,212,340	($1,212,552)	$ 3,353,890	$ 2,687,327	($666,563)	$ 2,876,813	$ 2,800,831	($75,982)	$ 3,555,853	$ 3,305,394	($250,459)	$ 4,801,195	$ 5,399,019	$597,824
[redacted]																			
																			TRADE SECRET DATA ENDS]
$4,820,884	($163,692)	$5,458,577	$5,358,590	($99,987)	$6,030,093	$4,820,069	($1,210,024)	$4,325,311	$4,176,334	($148,977)	$5,353,341	$3,603,194	($1,750,147)	$5,661,053	$5,539,378	($121,675)	$6,748,887	$5,357,602	($1,391,285)
$4,820,884	($1,166,670)	$9,135,262	$6,332,708	($2,802,554)	$10,454,984	$8,032,409	($2,422,575)	$7,679,201	$6,863,661	($815,540)	$8,230,153	$6,404,025	($1,826,128)	$9,216,906	$8,844,772	($372,134)	$11,550,082	$10,756,621	($793,461)
[redacted]																			
																			TRADE SECRET DATA ENDS]
$33,000	($6,045)	$226,249	$421,205	$194,957	$0	$188,257	$188,257	$0	$106,643	$106,643	$0	$109,432	$109,432	$0	$96,432	$96,432	$0	$387,477	$387,477
[redacted]																			
																			TRADE SECRET DATA ENDS]
$30,550	($8,495)	$209,103	$423,089	$213,986	$0	$178,451	$178,451	$0	$47,370	$47,370	$0	$100,859	$100,859	$0	$96,343	$96,343	$0	$405,391	$405,391
$63,550	($14,540)	$435,351	$844,294	$408,943	$0	$366,708	$366,708	$0	$154,013	$154,013	$0	$210,291	$210,291	$0	$192,775	$192,775	$0	$792,868	$792,868
[redacted]																			
																			TRADE SECRET DATA ENDS]
$106,155	$25,575	$173,049	$179,737	$6,688	$0	$94,901	$94,901	$0	$258,497	$258,497	$0	$151,695	$151,695	$38,546	$269,922	$231,376	$866,684	$38,638	($828,046)
[redacted]																			
																			TRADE SECRET DATA ENDS]
$199,450	$164,855	$544,742	$574,069	$29,326	$190,521	$140,280	($50,241)	$125,878	$230,593	$104,715	$0	$206,362	$206,362	$0	$195,796	$195,796	$340,647	$283,177	($57,470)
$305,606	$190,429	$ 717,791	$753,806	$36,015	$ 190,521	$235,181	$44,660	$ 125,878	$489,091	$363,213	$ -	$358,057	$358,057	$ 38,546	$465,718	$427,173	$ 1,207,331	$321,815	($885,516)
$5,190,040	($990,780)	$10,288,404	$7,930,808	($2,357,596)	$10,645,505	$8,634,298	($2,011,207)	$7,805,079	$7,506,765	($298,314)	$8,230,153	$6,972,373	($1,257,780)	$9,255,452	$9,503,265	$247,814	$12,757,414	$11,871,304	($886,109)

Wind Generation

Jun-24		Jul-24			Aug-24			Sep-24			Oct-24			Nov-24			Dec-24		
Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
[redacted]																			
																			TRADE SECRET DATA ENDS]
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
[redacted]																			
																			TRADE SECRET DATA ENDS]
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Hydro Generation

Jun-24		Jul-24			Aug-24			Sep-24			Oct-24			Nov-24			Dec-24		
Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
[redacted]																			
																			TRADE SECRET DATA ENDS]
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Total Generation

Jun-24		Jul-24			Aug-24			Sep-24			Oct-24			Nov-24			Dec-24		
Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
$5,190,040	($990,780)	$10,288,404	$7,930,808	($2,357,596)	$10,645,505	$8,634,298	($2,011,207)	$7,805,079	$7,506,765	($298,314)	$8,230,153	$6,972,373	($1,257,780)	$9,255,452	$9,503,265	$247,814	$12,757,414	$11,871,304	($886,109)

2024 FAC Forecast vs. Actual- Generation Costs

Boswell:

- Boswell total costs came in roughly 14% below forecast. MP saw actual market prices come in around 23% lower than forecast and around 10% lower than 2023 which decreased the output of Boswell 3 and 4. With Boswell 3 being economic and market prices lower in 2024, Boswell 3 was cleared by MISO less often than expected in 2024 which decreased their generation by about 23% compared to forecast. Also, Boswell 4 would have been cleared at lower levels by MISO due to the lower than forecasted market prices which decreased their generation by about 17% compared to forecast. Also, Boswell 3 had a 36-day unplanned outage from June- July 2024 which resulted in less generation in those months. See Attachments 5 for an explanation of the outage.

Laskin:

- Total Laskin costs were 402% higher than forecast. Laskin 1 generation was 615% more than forecast and Laskin 2 was 787% more than forecast in 2024. The big driver was the average cost of fuel was 36% lower than forecast for both units. The increased generation and lower fuel costs was due to natural gas prices being 14% lower in 2024 compared to 2023 and 23% lower than forecast. The lower natural gas prices led to Laskin being more economical and led to the increased generation.

Hibbard:

- Total Hibbard costs were about 10% less than forecast due to lower market prices in 2024 than what was forecasted. With lower market prices in 2024, Hibbard was called on less by MISO and had lower generation compared to forecast. Hibbard 3 generation was 33% lower than forecast and Hibbard 4 was 35% lower than forecast.

Wind:

- Wind generation came in about 21% lower than forecast with Bison being 22% below forecast and Tac Ridge coming in 15% below forecast. MP saw the greatest variances between forecast to actual wind generation across North Dakota in January – March 2024 and September – December 2024 which historically are higher wind generation months. Wind generation owned by Minnesota Power has a $0 fuel cost.

Hydro:

- MP saw lower hydro generation in 2024 by about 3% compared to forecast. Hydro generation owned by Minnesota Power has a $0 fuel cost.

Purchase Power Market

		YTD 2024				Jan-24			Feb-24			Mar-24			Apr-24			May-24			Jun-24			Jul-24			Aug-24			Sep-24			Oct-24			Nov-24			Dec-24		
		Forecast	Actual	Difference: Over/(Under)	% Difference	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
Manitoba Hydro	MWh				-2%																																		
	Average Cost				2%																																		
		TRADE SECRET DATA ENDS]																																					
	Total Cost	$107,963,075	$108,194,877	$231,802	0%	$9,324,308	$9,894,443	$570,135	$8,663,561	$9,073,920	$410,359	$8,959,776	$9,653,305	$693,529	$8,765,091	$9,420,880	$655,789	$11,546,318	$9,707,800	($1,838,518)	$10,069,439	$8,522,645	($1,546,794)	$10,939,992	$9,378,349	($1,561,643)	$8,107,406	$9,314,281	$1,206,875	$7,689,524	$8,380,206	$690,682	$8,062,571	$8,843,883	$781,312	$7,690,655	$7,963,153	$272,498	$8,144,435	$8,042,012	($102,422)
		[TRADE SECRET DATA BEGINS																																					
Minnkota Power Cooperation Renewable Source	MWh				-9%																																		
	Average Cost				0%																																		
		TRADE SECRET DATA ENDS]																																					
	Total Cost	$92,336	$84,000	($8,336)	-9%	$9,052	$3,500	($5,552)	$9,290	$3,500	($5,790)	$8,450	$3,500	($4,950)	$7,839	$3,500	($4,339)	$7,538	$3,500	($4,038)	$6,987	$3,500	($3,487)	$7,962	$10,500	$2,538	$8,353	$10,500	$2,147	$7,024	$10,500	$3,476	$6,174	$10,500	$4,326	$5,736	$10,500	$4,764	$7,932	$10,500	$2,568
		[TRADE SECRET DATA BEGINS																																					
Market Purchase	MWh				170%																																		
	Average Cost				-2%																																		
		TRADE SECRET DATA ENDS]																																					
	Total Cost	$19,926,132	$52,914,072	$32,987,940	166%	$2,284,205	$3,824,188	$1,539,983	$1,012,711	$2,904,111	$1,891,401	$1,794,950	$3,881,172	$2,086,222	$978,331	$2,182,847	$1,204,516	$1,594,695	$3,784,830	$2,190,136	$2,112,892	$2,931,417	$818,526	$1,637,336	$11,941,878	$10,304,542	$2,428,389	$3,991,252	$1,562,863	$1,943,645	$4,122,629	$2,178,984	$1,351,768	$4,351,831	$3,000,064	$1,332,200	$2,859,272	$1,527,072	$1,455,010	$6,138,642	$4,683,632
		[TRADE SECRET DATA BEGINS																																					
Minnkota Power Cooperation Station Service	MWh				0%																																		
	Average Cost				0%																																		
		TRADE SECRET DATA ENDS]																																					
	Total Cost	$562,290	$295,541	($266,749)	-47%	$46,857	$26,275	($20,582)	$46,857	$39,969	($6,888)	$46,857	$24,446	($22,412)	$46,857	$25,259	($21,598)	$46,857	$21,954	($24,904)	$46,857	$25,996	($20,862)	$46,857	$18,501	($28,356)	$46,857	$28,195	($18,663)	$46,857	$11,457	($35,400)	$46,857	$16,181	($30,677)	$46,857	$17,339	($29,519)	$46,857	$39,969	($6,888)
		[TRADE SECRET DATA BEGINS																																					
Purchase to Serve Non-Firm Retail Customer	MWh				-100%																																		
	Average Cost				-100%																																		
		TRADE SECRET DATA ENDS]																																					
	Total Cost	$25,452,659	$0	($25,452,659)	-100%	$3,016,356	$0	($3,016,356)	$2,804,772	$0	($2,804,772)	$1,867,112	$0	($1,867,112)	$1,575,074	$0	($1,575,074)	$1,345,294	$0	($1,345,294)	$1,957,539	$0	($1,957,539)	$2,564,562	$0	($2,564,562)	$2,392,736	$0	($2,392,736)	$1,875,843	$0	($1,875,843)	$1,713,794	$0	($1,713,794)	$1,574,304	$0	($1,574,304)	$2,765,274	$0	($2,765,274)
		[TRADE SECRET DATA BEGINS																																					
IMO (Ontario Market Operator)	MWh				0%																																		
	Average Cost				0%																																		
		TRADE SECRET DATA ENDS]																																					
	Total Cost	$0	$309,747	$309,747	0%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$245,991	$245,991	$0	$37,762	$37,762	$0	$0	$0	$0	$0	$0	$0	$0	$12,158	$12,158	$0	$0	$0	$0	$13,835	$13,835
		[TRADE SECRET DATA BEGINS																																					
AEP Energy Partners	MWh				0%																																		
	Average Cost				0%																																		
		TRADE SECRET DATA ENDS]																																					
	Total Cost	$0	$15,753,204	$15,753,204	0%	$0	$2,795,580	$2,795,580	$0	$2,615,220	$2,615,220	$0	$2,795,580	$2,795,580	$0	$1,911,600	$1,911,600	$0	$1,975,320	$1,975,320	$0	$1,911,600	$1,911,600	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,748,304	$1,748,304	$0	$0	$0
		[TRADE SECRET DATA BEGINS																																					
Shell Energy North America	MWh				0%																																		
	Average Cost				0%																																		
		TRADE SECRET DATA ENDS]																																					
	Total Cost	$0	$877,920	$877,920	0%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$877,920	$877,920	$0	$0	$0	$0	$0	$0
		[TRADE SECRET DATA BEGINS																																					
NextEra Energy	MWh				0%																																		
	Average Cost				0%																																		
		TRADE SECRET DATA ENDS]																																					
	Total Cost	$0	$1,269,901	$1,269,901	0%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$172,501	$172,501	$0	$0	$0	$0	$0	$0	$0	$0	$1,097,400	$1,097,400	$0	$0	$0	$0	$0	$0
		[TRADE SECRET DATA BEGINS																																					
Hibbing Public Utilities	MWh				0%																																		
	Average Cost				0%																																		
		TRADE SECRET DATA ENDS]																																					
	Total Cost	$0	$26,723	$26,723	0%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$26,723	$26,723	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
		[TRADE SECRET DATA BEGINS																																					
Other Purchases	MWh				0%																																		
	Average Cost				0%																																		
		TRADE SECRET DATA ENDS]																																					
	Total Cost	$0	$1,429,549	$1,429,549	0%	$0	$205,164	$205,164	$0	$85,034	$85,034	$0	$82,879	$82,879	$0	$103,729	$103,729	$0	$156,892	$156,892	$0	$140,743	$140,743	$0	$201,442	$201,442	$0	$108,648	$108,648	$0	$93,574	$93,574	$0	$104,875	$104,875	$0	$75,532	$75,532	$0	$71,036	$71,036
		[TRADE SECRET DATA BEGINS																																					
Total Purchase Power Market $		$153,996,492	$181,155,533	$27,159,041	18%	$14,680,778	$16,749,150	$2,068,372	$12,537,190	$14,721,755	$2,184,565	$12,677,145	$16,440,882	$3,763,737	$11,373,192	$13,647,815	$2,274,623	$14,540,702	$15,650,296	$1,109,594	$14,193,715	$13,781,893	($411,822)	$15,196,709	$21,787,657	$6,590,948	$12,983,742	$13,452,877	$469,135	$11,562,894	$12,618,366	$1,055,473	$11,181,164	$15,314,748	$4,133,584	$10,649,753	$12,674,100	$2,024,347	$12,419,508	$14,315,995	$1,896,487

Purchase Power Wind

		YTD 2024				Jan-24			Feb-24			Mar-24			Apr-24			May-24			Jun-24			Jul-24			Aug-24			Sep-24			Oct-24			Nov-24			Dec-24		
		Forecast	Actual	Difference: Over/(Under)	% Difference	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
Oliver 1	MWh				10%																																		
	Average Cost				-6%																																		
		TRADE SECRET DATA ENDS]																																					
	Total Cost	$3,479,483	$3,612,260	$132,777	4%	$327,736	$248,747	($78,988)	$287,082	$286,858	($224)	$333,024	$316,173	($16,851)	$306,096	$399,107	$93,011	$266,754	$305,079	$38,325	$204,530	$300,221	$95,691	$211,797	$192,239	($19,558)	$231,393	$308,682	$77,289	$293,544	$323,727	$30,183	$367,294	$277,111	($90,183)	$343,181	$268,599	($74,582)	$307,052	$385,717	$78,665
		[TRADE SECRET DATA BEGINS																																					
Oliver 2	MWh				2%																																		
	Average Cost				-3%																																		
		TRADE SECRET DATA ENDS]																																					
	Total Cost	$5,970,613	$5,947,442	($23,170)	0%	$566,065	$496,243	($69,822)	$503,249	$484,714	($18,535)	$554,083	$527,109	($26,974)	$502,187	$613,684	$111,497	$473,655	$471,576	($2,079)	$376,032	$369,588	($6,444)	$342,260	$343,610	$1,350	$400,245	$541,971	$141,726	$509,152	$537,858	$28,706	$609,820	$468,709	($141,111)	$574,745	$483,591	($91,154)	$559,120	$608,791	$49,672
		[TRADE SECRET DATA BEGINS																																					
Wing River	MWh				-35%																																		
	Average Cost				3%																																		
		TRADE SECRET DATA ENDS]																																					
	Total Cost	$252,342	$170,294	($82,048)	-33%	$23,071	$9,546	($13,525)	$21,645	$21,504	($141)	$22,283	$20,438	($1,845)	$24,476	$22,529	($1,947)	$23,478	$15,655	($7,824)	$17,175	$13,553	($3,622)	$15,177	$9,779	($5,399)	$14,183	$5,633	($8,551)	$20,620	$12,884	($7,736)	$23,532	$9,170	($14,362)	$23,999	$15,365	($8,634)	$22,703	$14,240	($8,462)
		[TRADE SECRET DATA BEGINS																																					
Nobles	MWh				-4%																																		
	Average Cost				1%																																		
		TRADE SECRET DATA ENDS]																																					
	Total Cost	$19,903,883	$19,302,636	($601,247)	-3%	$1,827,526	$1,497,295	($330,231)	$1,745,089	$1,714,888	($30,201)	$1,814,543	$2,134,389	$319,846	$1,914,160	$2,400,388	$486,228	$1,847,458	$1,428,333	($419,125)	$1,417,810	$1,414,103	($3,707)	$1,207,410	$879,348	($328,062)	$1,170,182	$1,052,558	($117,623)	$1,578,604	$1,640,091	$61,487	$1,802,843	$1,947,245	$144,402	$1,804,382	$1,642,547	($161,835)	$1,773,876	$1,551,452	($222,424)
		[TRADE SECRET DATA BEGINS																																					
Total Purchase Power Wind $		$29,606,320	$29,032,633	($573,687)	-2%	$2,744,398	$2,251,831	($492,567)	$2,557,065	$2,507,963	($49,102)	$2,723,933	$2,998,109	$274,176	$2,746,919	$3,435,708	$688,789	$2,611,346	$2,220,642	($390,703)	$2,015,547	$2,097,465	$81,918	$1,776,644	$1,424,976	($351,668)	$1,816,003	$1,908,844	$92,841	$2,401,920	$2,514,559	$112,639	$2,803,488	$2,702,234	($101,254)	$2,746,307	$2,410,101	($336,206)	$2,662,751	$2,560,201	($102,550)

Purchase Power Solar

		YTD 2024				Jan-24			Feb-24			Mar-24			Apr-24			May-24			Jun-24			Jul-24			Aug-24			Sep-24			Oct-24			Nov-24			Dec-24		
		Forecast	Actual	Difference: Over/(Under)	% Difference	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
SES 20MW Solar	MWh				-11%																																		
	Average Cost				-3%																																		
		TRADE SECRET DATA ENDS]																																					
	Total Cost	$2,474,436	$2,138,145	($336,290)	-14%	$93,051	$34,201	($58,850)	$140,521	$132,646	($7,876)	$221,561	$205,385	($16,176)	$252,723	$207,299	($45,424)	$285,605	$255,034	($30,571)	$301,893	$248,498	($53,395)	$340,469	$301,259	($39,210)	$297,314	$244,812	($52,503)	$228,173	$258,024	$29,851	$150,379	$160,318	$9,939	$98,609	$56,974	($41,634)	$64,137	$33,696	($30,441)
		[TRADE SECRET DATA BEGINS																																					
Solar Subscription Cancellations	MWh				0%																																		
	Average Cost				0%																																		
		TRADE SECRET DATA ENDS]																																					
	Total Cost	$0	$718	$718	0%	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$423	$423	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$295	$295	$0	$0	$0
		[TRADE SECRET DATA BEGINS																																					
Purchase to Serve Municipal Solar Energy	MWh				18%																																		
	Average Cost				0%																																		
		TRADE SECRET DATA ENDS]																																					
	Total Cost	$190,174	$224,969	$34,796	18%	$8,158	$3,881	($4,277)	$11,572	$13,598	$2,026	$16,606	$21,266	$4,660	$19,615	$22,893	$3,278	$21,929	$26,745	$4,816	$22,045	$27,469	$5,425	$25,632	$31,738	$6,106	$21,987	$25,088	$3,102	$16,970	$26,115	$9,145	$11,274	$16,406	$5,131	$7,399	$5,930	($1,469)	$6,988	$3,840	($3,147)
		[TRADE SECRET DATA BEGINS																																					
Total Purchase Power Solar $		$2,664,609	$2,363,833	($300,776)	-11%	$101,210	$38,083	($63,127)	$152,093	$146,243	($5,850)	$238,167	$226,651	($11,516)	$272,338	$230,192	($42,146)	$307,534	$281,779	($25,755)	$323,937	$276,391	($47,547)	$366,101	$332,997	($33,103)	$319,301	$269,900	($49,401)	$245,143	$284,139	$38,996	$161,653	$176,723	$15,070	$106,008	$63,198	($42,810)	$71,124	$37,536	($33,588)

Purchase Power- Square Butte

		YTD 2024				Jan-24			Feb-24			Mar-24			Apr-24			May-24			Jun-24			Jul-24			Aug-24			Sep-24			Oct-24			Nov-24			Dec-24		
		Forecast	Actual	Difference: Over/(Under)	% Difference	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
Square Butte	MWh				7%																																		
	Average Cost				-2%																																		
		TRADE SECRET DATA ENDS]																																					
	Total Cost	$37,483,750	$39,193,841	$1,710,091	5%	$3,364,300	$4,021,417	$657,117	$3,141,950	$3,570,520	$428,570	$2,827,450	$3,381,822	$554,372	$3,258,900	$3,522,015	$263,115	$3,343,450	$2,532,150	($811,300)	$2,547,500	$2,407,374	($140,126)	$3,354,300	$3,384,037	$29,737	$3,325,550	$3,281,767	($43,783)	$2,819,250	$3,585,214	$765,964	$3,362,700	$3,413,862	$51,162	$3,217,500	$2,987,153	($230,347)	$2,920,900	$3,106,509	$185,609
		[TRADE SECRET DATA BEGINS																																					
Total Purchase Power Coal $		$37,483,750	$39,193,841	$1,710,091	5%	$3,364,300	$4,021,417	$657,117	$3,141,950	$3,570,520	$428,570	$2,827,450	$3,381,822	$554,372	$3,258,900	$3,522,015	$263,115	$3,343,450	$2,532,150	($811,300)	$2,547,500	$2,407,374	($140,126)	$3,354,300	$3,384,037	$29,737	$3,325,550	$3,281,767	($43,783)	$2,819,250	$3,585,214	$765,964	$3,362,700	$3,413,862	$51,162	$3,217,500	$2,987,153	($230,347)	$2,920,900	$3,106,509	$185,609

Total Purchases

	YTD 2024				Jan-24			Feb-24			Mar-24			Apr-24			May-24			Jun-24			Jul-24			Aug-24			Sep-24			Oct-24			Nov-24			Dec-24		
	Forecast	Actual	Difference: Over/(Under)	% Difference	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
Total Company Purchase Power	$223,751,172	$251,745,840	$27,994,668	13%	$20,890,686	$23,060,480	$2,169,795	$18,388,299	$20,946,482	$2,558,183	$18,466,695	$23,047,463	$4,580,769	$17,651,350	$20,835,730	$3,184,381	$20,803,031	$20,684,867	($118,164)	$19,080,699	$18,563,123	($517,576)	$20,693,753	$26,929,666	$6,235,913	$18,444,596	$18,913,388	$468,792	$17,029,206	$19,002,279	$1,973,073	$17,509,006	$21,607,567	$4,098,561	$16,719,568	$18,134,553	$1,414,985	$18,074,283	$20,020,241	$1,945,957

PUBLIC DOCUMENT – NOT PUBLIC DATA HAS BEEN EXCISED

Purchase Power- Coal

YTD 2024	Forecast	Actual	Difference: Over/(Under)	% Difference
	[TRADE SECRET DATA BEGINS			
Square Butte MWh	[redacted]			7%
Average Cost				-2%
			TRADE SECRET DATA ENDS]	
Total Cost	$37,483,750	$39,193,841	$1,710,091	5%
Total Purchase Power Coal $	$37,483,750	$39,193,841	$1,710,091	5%

	Jan-24 Forecast	Jan-24 Actual	Jan-24 Difference: Over/(Under)	Feb-24 Forecast	Feb-24 Actual	Feb-24 Difference: Over/(Under)	Mar-24 Forecast	Mar-24 Actual	Mar-24 Difference: Over/(Under)	Apr-24 Forecast	Apr-24 Actual	Apr-24 Difference: Over/(Under)	May-24 Forecast	May-24 Actual	May-24 Difference: Over/(Under)	Jun-24 Forecast	Jun-24 Actual	Jun-24 Difference: Over/(Under)	Jul-24 Forecast	Jul-24 Actual	Jul-24 Difference: Over/(Under)	Aug-24 Forecast	Aug-24 Actual	Aug-24 Difference: Over/(Under)	Sep-24 Forecast	Sep-24 Actual	Sep-24 Difference: Over/(Under)	Oct-24 Forecast	Oct-24 Actual	Oct-24 Difference: Over/(Under)	Nov-24 Forecast	Nov-24 Actual	Nov-24 Difference: Over/(Under)	Dec-24 Forecast	Dec-24 Actual	Dec-24 Difference: Over/(Under)
	[TRADE SECRET DATA BEGINS																																			
Square Butte MWh	[redacted]																																			
Average Cost																																				
																																				TRADE SECRET DATA ENDS]
Total Cost	$3,364,300	$4,021,417	$657,117	$3,141,950	$3,570,520	$428,570	$2,827,450	$3,381,822	$554,372	$3,258,900	$3,522,015	$263,115	$3,343,450	$2,532,150	($811,300)	$2,547,500	$2,407,374	($140,126)	$3,354,300	$3,384,037	$29,737	$3,325,550	$3,281,767	($43,783)	$2,819,250	$3,585,214	$765,964	$3,362,700	$3,413,862	$51,162	$3,217,500	$2,987,153	($230,347)	$2,920,900	$3,106,509	$185,609
Total Purchase Power Coal $	$3,364,300	$4,021,417	$657,117	$3,141,950	$3,570,520	$428,570	$2,827,450	$3,381,822	$554,372	$3,258,900	$3,522,015	$263,115	$3,343,450	$2,532,150	($811,300)	$2,547,500	$2,407,374	($140,126)	$3,354,300	$3,384,037	$29,737	$3,325,550	$3,281,767	($43,783)	$2,819,250	$3,585,214	$765,964	$3,362,700	$3,413,862	$51,162	$3,217,500	$2,987,153	($230,347)	$2,920,900	$3,106,509	$185,609

Purchase Power Biomass

YTD 2024	Forecast	Actual	Difference: Over/(Under)	% Difference
	[TRADE SECRET DATA BEGINS			
MWh	[redacted]			0%
Average Cost				0%
			TRADE SECRET DATA ENDS]	
Total Cost	$0	$0	$0	0%
Total Purchase Power Biomass $	$0	$0	$0	0%

	Jan-24 Forecast	Jan-24 Actual	Jan-24 Difference: Over/(Under)	Feb-24 Forecast	Feb-24 Actual	Feb-24 Difference: Over/(Under)	Mar-24 Forecast	Mar-24 Actual	Mar-24 Difference: Over/(Under)	Apr-24 Forecast	Apr-24 Actual	Apr-24 Difference: Over/(Under)	May-24 Forecast	May-24 Actual	May-24 Difference: Over/(Under)	Jun-24 Forecast	Jun-24 Actual	Jun-24 Difference: Over/(Under)	Jul-24 Forecast	Jul-24 Actual	Jul-24 Difference: Over/(Under)	Aug-24 Forecast	Aug-24 Actual	Aug-24 Difference: Over/(Under)	Sep-24 Forecast	Sep-24 Actual	Sep-24 Difference: Over/(Under)	Oct-24 Forecast	Oct-24 Actual	Oct-24 Difference: Over/(Under)	Nov-24 Forecast	Nov-24 Actual	Nov-24 Difference: Over/(Under)	Dec-24 Forecast	Dec-24 Actual	Dec-24 Difference: Over/(Under)
MWh	[redacted]																																			
Average Cost																																				
																																				TRADE SECRET DATA ENDS]
Total Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Purchase Power Biomass $	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Purchase Power Hydro

YTD 2024	Forecast	Actual	Difference: Over/(Under)	% Difference
	[TRADE SECRET DATA BEGINS			
Manitoba Hydro MWh	[redacted]			-2%
Average Cost				2%
			TRADE SECRET DATA ENDS]	
Total Cost	$107,963,075	$108,194,877	$231,802	0%
Total Purchase Power Hydro $	$107,963,075	$108,194,877	$231,802	0%

	Jan-24 Forecast	Jan-24 Actual	Jan-24 Difference: Over/(Under)	Feb-24 Forecast	Feb-24 Actual	Feb-24 Difference: Over/(Under)	Mar-24 Forecast	Mar-24 Actual	Mar-24 Difference: Over/(Under)	Apr-24 Forecast	Apr-24 Actual	Apr-24 Difference: Over/(Under)	May-24 Forecast	May-24 Actual	May-24 Difference: Over/(Under)	Jun-24 Forecast	Jun-24 Actual	Jun-24 Difference: Over/(Under)	Jul-24 Forecast	Jul-24 Actual	Jul-24 Difference: Over/(Under)	Aug-24 Forecast	Aug-24 Actual	Aug-24 Difference: Over/(Under)	Sep-24 Forecast	Sep-24 Actual	Sep-24 Difference: Over/(Under)	Oct-24 Forecast	Oct-24 Actual	Oct-24 Difference: Over/(Under)	Nov-24 Forecast	Nov-24 Actual	Nov-24 Difference: Over/(Under)	Dec-24 Forecast	Dec-24 Actual	Dec-24 Difference: Over/(Under)
	[TRADE SECRET DATA BEGINS																																			
Manitoba Hydro MWh	[redacted]																																			
Average Cost																																				
																																				TRADE SECRET DATA ENDS]
Total Cost	$9,324,308	$9,894,443	$570,135	$8,663,561	$9,073,920	$410,359	$8,959,776	$9,653,305	$693,529	$8,765,091	$9,420,880	$655,789	$11,546,318	$9,707,800	($1,838,518)	$10,069,439	$8,522,645	($1,546,794)	$10,939,992	$9,378,349	($1,561,643)	$8,107,406	$9,314,281	$1,206,875	$7,689,524	$8,380,206	$690,682	$8,062,571	$8,843,883	$781,312	$7,690,655	$7,963,153	$272,498	$8,144,435	$8,042,012	($102,422)
Total Purchase Power Hydro $	$9,324,308	$9,894,443	$570,135	$8,663,561	$9,073,920	$410,359	$8,959,776	$9,653,305	$693,529	$8,765,091	$9,420,880	$655,789	$11,546,318	$9,707,800	($1,838,518)	$10,069,439	$8,522,645	($1,546,794)	$10,939,992	$9,378,349	($1,561,643)	$8,107,406	$9,314,281	$1,206,875	$7,689,524	$8,380,206	$690,682	$8,062,571	$8,843,883	$781,312	$7,690,655	$7,963,153	$272,498	$8,144,435	$8,042,012	($102,422)

Purchase Power Gas

YTD 2024	Forecast	Actual	Difference: Over/(Under)	% Difference
	[TRADE SECRET DATA BEGINS			
MWh	[redacted]			0%
Average Cost				0%
			TRADE SECRET DATA ENDS]	
Total Cost	$0	$0	$0	0%
Total Purchase Power Gas $	$0	$0	$0	0%

	Jan-24 Forecast	Jan-24 Actual	Jan-24 Difference: Over/(Under)	Feb-24 Forecast	Feb-24 Actual	Feb-24 Difference: Over/(Under)	Mar-24 Forecast	Mar-24 Actual	Mar-24 Difference: Over/(Under)	Apr-24 Forecast	Apr-24 Actual	Apr-24 Difference: Over/(Under)	May-24 Forecast	May-24 Actual	May-24 Difference: Over/(Under)	Jun-24 Forecast	Jun-24 Actual	Jun-24 Difference: Over/(Under)	Jul-24 Forecast	Jul-24 Actual	Jul-24 Difference: Over/(Under)	Aug-24 Forecast	Aug-24 Actual	Aug-24 Difference: Over/(Under)	Sep-24 Forecast	Sep-24 Actual	Sep-24 Difference: Over/(Under)	Oct-24 Forecast	Oct-24 Actual	Oct-24 Difference: Over/(Under)	Nov-24 Forecast	Nov-24 Actual	Nov-24 Difference: Over/(Under)	Dec-24 Forecast	Dec-24 Actual	Dec-24 Difference: Over/(Under)
	[TRADE SECRET DATA BEGINS																																			
MWh	[redacted]																																			
Average Cost																																				
																																				TRADE SECRET DATA ENDS]
Total Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Purchase Power Gas $	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Purchase Power Wind

YTD 2024	Forecast	Actual	Difference: Over/(Under)	% Difference
	[TRADE SECRET DATA BEGINS			
Oliver 1 MWh	[redacted]			10%
Average Cost				-6%
			TRADE SECRET DATA ENDS]	
Total Cost	$3,479,483	$3,612,260	$132,777	4%
	[TRADE SECRET DATA BEGINS			
Oliver 2 MWh	[redacted]			3%
Average Cost				-3%
			TRADE SECRET DATA ENDS]	
Total Cost	$5,970,613	$5,947,442	($23,170)	0%
	[TRADE SECRET DATA BEGINS			
Wing River MWh	[redacted]			-35%
Average Cost				3%
			TRADE SECRET DATA ENDS]	
Total Cost	$252,342	$170,294	($82,048)	-33%
	[TRADE SECRET DATA BEGINS			
Nobles MWh	[redacted]			-4%
Average Cost				1%
			TRADE SECRET DATA ENDS]	
Total Cost	$19,903,883	$19,302,636	($601,247)	-3%
	[TRADE SECRET DATA BEGINS			
Minnkota Power Cooperation Renewable Source MWh	[redacted]			-9%
Average Cost				0%
			TRADE SECRET DATA ENDS]	
Total Cost	$92,336	$84,000	($8,336)	-9%
Total Purchase Power Wind $	$29,698,656	$29,116,633	($582,023)	-2%

	Jan-24 Forecast	Jan-24 Actual	Jan-24 Difference: Over/(Under)	Feb-24 Forecast	Feb-24 Actual	Feb-24 Difference: Over/(Under)	Mar-24 Forecast	Mar-24 Actual	Mar-24 Difference: Over/(Under)	Apr-24 Forecast	Apr-24 Actual	Apr-24 Difference: Over/(Under)	May-24 Forecast	May-24 Actual	May-24 Difference: Over/(Under)	Jun-24 Forecast	Jun-24 Actual	Jun-24 Difference: Over/(Under)	Jul-24 Forecast	Jul-24 Actual	Jul-24 Difference: Over/(Under)	Aug-24 Forecast	Aug-24 Actual	Aug-24 Difference: Over/(Under)	Sep-24 Forecast	Sep-24 Actual	Sep-24 Difference: Over/(Under)	Oct-24 Forecast	Oct-24 Actual	Oct-24 Difference: Over/(Under)	Nov-24 Forecast	Nov-24 Actual	Nov-24 Difference: Over/(Under)	Dec-24 Forecast	Dec-24 Actual	Dec-24 Difference: Over/(Under)
Oliver 1 MWh	[redacted]																																			
Average Cost																																				
																																				TRADE SECRET DATA ENDS]
Total Cost	$327,736	$248,747	($78,988)	$287,082	$286,858	($224)	$333,024	$316,173	($16,851)	$306,096	$399,107	$93,011	$266,754	$305,079	$38,325	$204,530	$300,221	$95,691	$211,797	$192,239	($19,558)	$231,393	$308,682	$77,289	$293,544	$323,727	$30,183	$367,294	$277,111	($90,183)	$343,181	$268,599	($74,582)	$307,052	$385,717	$78,665
	[TRADE SECRET DATA BEGINS																																			
Oliver 2 MWh	[redacted]																																			
Average Cost																																				
																																				TRADE SECRET DATA ENDS]
Total Cost	$566,065	$496,243	($69,822)	$503,249	$484,714	($18,535)	$554,083	$527,109	($26,974)	$502,187	$613,684	$111,497	$473,655	$471,576	($2,079)	$376,032	$369,588	($6,444)	$342,260	$343,610	$1,350	$400,245	$541,971	$141,726	$509,152	$537,858	$28,706	$609,820	$468,709	($141,111)	$574,745	$483,591	($91,154)	$559,120	$608,791	$49,672
	[TRADE SECRET DATA BEGINS																																			
Wing River MWh	[redacted]																																			
Average Cost																																				
																																				TRADE SECRET DATA ENDS]
Total Cost	$23,071	$9,546	($13,525)	$21,645	$21,504	($141)	$22,283	$20,438	($1,845)	$24,476	$22,529	($1,947)	$23,478	$15,655	($7,824)	$17,175	$13,553	($3,622)	$15,177	$9,779	($5,399)	$14,183	$5,633	($8,551)	$20,620	$12,884	($7,736)	$23,532	$9,170	($14,362)	$23,999	$15,365	($8,634)	$22,703	$14,240	($8,462)
	[TRADE SECRET DATA BEGINS																																			
Nobles MWh	[redacted]																																			
Average Cost																																				
																																				TRADE SECRET DATA ENDS]
Total Cost	$1,827,526	$1,497,295	($330,231)	$1,745,089	$1,714,888	($30,201)	$1,814,543	$2,134,389	$319,846	$1,914,160	$2,400,388	$486,228	$1,847,458	$1,428,333	($419,125)	$1,417,810	$1,414,103	($3,707)	$1,207,410	$879,348	($328,062)	$1,170,182	$1,052,558	($117,623)	$1,578,604	$1,640,091	$61,487	$1,802,843	$1,947,245	$144,402	$1,804,382	$1,642,547	($161,835)	$1,773,876	$1,551,452	($222,424)
	[TRADE SECRET DATA BEGINS																																			
Minnkota Power Cooperation Renewable Source MWh	[redacted]																																			
Average Cost																																				
																																				TRADE SECRET DATA ENDS]
Total Cost	$9,052	$3,500	($5,552)	$9,290	$3,500	($5,790)	$8,450	$3,500	($4,950)	$7,839	$3,500	($4,339)	$7,538	$3,500	($4,038)	$6,987	$3,500	($3,487)	$7,962	$10,500	$2,538	$8,353	$10,500	$2,147	$7,024	$10,500	$3,476	$6,174	$10,500	$4,326	$5,736	$10,500	$4,764	$7,932	$10,500	$2,568
Total Purchase Power Wind $	$2,753,449	$2,255,331	($498,119)	$2,566,355	$2,511,463	($54,892)	$2,732,382	$3,001,609	$269,227	$2,754,758	$3,439,208	$684,450	$2,618,884	$2,224,142	($394,741)	$2,022,534	$2,100,965	$78,431	$1,784,606	$1,435,476	($349,130)	$1,824,356	$1,919,344	$94,988	$2,408,944	$2,525,059	$116,116	$2,809,662	$2,712,734	($96,929)	$2,752,043	$2,420,601	($331,442)	$2,670,682	$2,570,701	($99,982)

Purchase Power Diesel

YTD 2024	Forecast	Actual	Difference: Over/(Under)	% Difference
	[TRADE SECRET DATA BEGINS			
MWh	[redacted]			0%
Average Cost				0%
			TRADE SECRET DATA ENDS]	
Total Cost	$0	$0	$0	0%
Total Purchase Power Diesel $	$0	$0	$0	0%

	Jan-24 Forecast	Jan-24 Actual	Jan-24 Difference: Over/(Under)	Feb-24 Forecast	Feb-24 Actual	Feb-24 Difference: Over/(Under)	Mar-24 Forecast	Mar-24 Actual	Mar-24 Difference: Over/(Under)	Apr-24 Forecast	Apr-24 Actual	Apr-24 Difference: Over/(Under)	May-24 Forecast	May-24 Actual	May-24 Difference: Over/(Under)	Jun-24 Forecast	Jun-24 Actual	Jun-24 Difference: Over/(Under)	Jul-24 Forecast	Jul-24 Actual	Jul-24 Difference: Over/(Under)	Aug-24 Forecast	Aug-24 Actual	Aug-24 Difference: Over/(Under)	Sep-24 Forecast	Sep-24 Actual	Sep-24 Difference: Over/(Under)	Oct-24 Forecast	Oct-24 Actual	Oct-24 Difference: Over/(Under)	Nov-24 Forecast	Nov-24 Actual	Nov-24 Difference: Over/(Under)	Dec-24 Forecast	Dec-24 Actual	Dec-24 Difference: Over/(Under)
	[TRADE SECRET DATA BEGINS																																			
MWh	[redacted]																																			
Average Cost																																				
																																				TRADE SECRET DATA ENDS]
Total Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Purchase Power Diesel $	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Purchase Power Solar

YTD 2024	Forecast	Actual	Difference: Over/(Under)	% Difference
SES 20MW Solar MWh	[redacted]			-11%
Average Cost				-3%
			TRADE SECRET DATA ENDS]	
Total Cost	$2,474,436	$2,138,145	($336,290)	-14%
	[TRADE SECRET DATA BEGINS			
Solar Subscription Cancellations MWh	[redacted]			0%
Average Cost				0%
			TRADE SECRET DATA ENDS]	
Total Cost	$0	$718	$718	0%
	[TRADE SECRET DATA BEGINS			
Purchase to Serve Municipal Solar Energy MWh	[redacted]			18%
Average Cost				0%
			TRADE SECRET DATA ENDS]	
Total Cost	$190,174	$224,969	$34,796	18%
Total Purchase Power Solar $	$2,664,609	$2,363,833	($300,776)	-11%

	Jan-24 Forecast	Jan-24 Actual	Jan-24 Difference: Over/(Under)	Feb-24 Forecast	Feb-24 Actual	Feb-24 Difference: Over/(Under)	Mar-24 Forecast	Mar-24 Actual	Mar-24 Difference: Over/(Under)	Apr-24 Forecast	Apr-24 Actual	Apr-24 Difference: Over/(Under)	May-24 Forecast	May-24 Actual	May-24 Difference: Over/(Under)	Jun-24 Forecast	Jun-24 Actual	Jun-24 Difference: Over/(Under)	Jul-24 Forecast	Jul-24 Actual	Jul-24 Difference: Over/(Under)	Aug-24 Forecast	Aug-24 Actual	Aug-24 Difference: Over/(Under)	Sep-24 Forecast	Sep-24 Actual	Sep-24 Difference: Over/(Under)	Oct-24 Forecast	Oct-24 Actual	Oct-24 Difference: Over/(Under)	Nov-24 Forecast	Nov-24 Actual	Nov-24 Difference: Over/(Under)	Dec-24 Forecast	Dec-24 Actual	Dec-24 Difference: Over/(Under)
SES 20MW Solar MWh	[redacted]																																			
Average Cost																																				
																																				TRADE SECRET DATA ENDS]
Total Cost	$93,051	$34,201	($58,850)	$140,521	$132,646	($7,876)	$221,561	$205,385	($16,176)	$252,723	$207,299	($45,424)	$285,605	$255,034	($30,571)	$301,893	$248,498	($53,395)	$340,469	$301,259	($39,210)	$297,314	$244,812	($52,503)	$228,173	$258,024	$29,851	$150,379	$160,318	$9,939	$98,609	$56,974	($41,636)	$64,137	$33,696	($30,441)
	[TRADE SECRET DATA BEGINS																																			
Solar Subscription Cancellations MWh	[redacted]																																			
Average Cost																																				
																																				TRADE SECRET DATA ENDS]
Total Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$423	$423	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$295	$295	$0	$0	$0
	[TRADE SECRET DATA BEGINS																																			
Purchase to Serve Municipal Solar Energy MWh	[redacted]																																			
Average Cost																																				
																																				TRADE SECRET DATA ENDS]
Total Cost	$8,158	$3,881	($4,277)	$11,572	$13,598	$2,026	$16,606	$21,266	$4,660	$19,615	$22,893	$3,278	$21,929	$26,745	$4,816	$22,045	$27,469	$5,425	$25,632	$31,738	$6,106	$21,987	$25,088	$3,102	$16,970	$26,115	$9,145	$11,274	$16,406	$5,131	$7,399	$5,930	($1,469)	$6,988	$3,840	($3,147)
Total Purchase Power Solar $	$101,210	$38,083	($63,127)	$152,093	$146,243	($5,850)	$238,167	$226,651	($11,516)	$272,338	$230,192	($42,146)	$307,534	$281,779	($25,755)	$323,937	$276,391	($47,547)	$366,101	$332,997	($33,103)	$319,301	$269,900	($49,401)	$245,143	$284,139	$38,996	$161,653	$176,723	$15,070	$106,008	$63,198	($42,810)	$71,124	$37,536	($33,588)

Purchase Power Unknown

YTD 2024	Forecast	Actual	Difference: Over/(Under)	% Difference
	[TRADE SECRET DATA BEGINS			
Market Purchase MWh	[redacted]			170%
Average Cost				-2%
			TRADE SECRET DATA ENDS]	
Total Cost	$19,926,132	$52,914,072	$32,987,940	166%
	[TRADE SECRET DATA BEGINS			
Minnkota Power Cooperation Station Service MWh	[redacted]			0%
Average Cost				0%
			TRADE SECRET DATA ENDS]	
Total Cost	$562,290	$295,541	($266,749)	-47%
	[TRADE SECRET DATA BEGINS			
Purchase to Serve Non-Firm Retail Customer MWh	[redacted]			-100%
Average Cost				-100%
			TRADE SECRET DATA ENDS]	
Total Cost	$25,452,659	$0	($25,452,659)	-100%
	[TRADE SECRET DATA BEGINS			
IMO (Ontario Market Operator) MWh	[redacted]			0%
Average Cost				0%
			TRADE SECRET DATA ENDS]	
Total Cost	$0	$309,747	$309,747	0%
	[TRADE SECRET DATA BEGINS			
AEP Energy Partners MWh	[redacted]			0%
Average Cost				0%
			TRADE SECRET DATA ENDS]	
Total Cost	$0	$15,753,204	$15,753,204	0%
	[TRADE SECRET DATA BEGINS			
Shell Energy North America MWh	[redacted]			0%
Average Cost				0%
			TRADE SECRET DATA ENDS]	
Total Cost	$0	$877,920	$877,920	0%
	[TRADE SECRET DATA BEGINS			
NextEra Energy MWh	[redacted]			0%
Average Cost				0%
			TRADE SECRET DATA ENDS]	
Total Cost	$0	$1,269,901	$1,269,901	0%
	[TRADE SECRET DATA BEGINS			
Hibbing Public Utilities MWh	[redacted]			0%
Average Cost				0%
			TRADE SECRET DATA ENDS]	
Total Cost	$0	$26,723	$26,723	0%
	[TRADE SECRET DATA BEGINS			
Other Purchases MWh	[redacted]			0%
Average Cost				0%
			TRADE SECRET DATA ENDS]	
Total Cost	$0	$1,429,549	$1,429,549	0%
Total Purchase Power Unknown $	$45,941,081	$72,876,656	$26,935,575	59%

	Jan-24 Forecast	Jan-24 Actual	Jan-24 Difference: Over/(Under)	Feb-24 Forecast	Feb-24 Actual	Feb-24 Difference: Over/(Under)	Mar-24 Forecast	Mar-24 Actual	Mar-24 Difference: Over/(Under)	Apr-24 Forecast	Apr-24 Actual	Apr-24 Difference: Over/(Under)	May-24 Forecast	May-24 Actual	May-24 Difference: Over/(Under)	Jun-24 Forecast	Jun-24 Actual	Jun-24 Difference: Over/(Under)	Jul-24 Forecast	Jul-24 Actual	Jul-24 Difference: Over/(Under)	Aug-24 Forecast	Aug-24 Actual	Aug-24 Difference: Over/(Under)	Sep-24 Forecast	Sep-24 Actual	Sep-24 Difference: Over/(Under)	Oct-24 Forecast	Oct-24 Actual	Oct-24 Difference: Over/(Under)	Nov-24 Forecast	Nov-24 Actual	Nov-24 Difference: Over/(Under)	Dec-24 Forecast	Dec-24 Actual	Dec-24 Difference: Over/(Under)
	[TRADE SECRET DATA BEGINS																																			
Market Purchase MWh	[redacted]																																			
Average Cost																																				
																																				TRADE SECRET DATA ENDS]
Total Cost	$2,284,205	$3,824,188	$1,539,983	$1,012,711	$2,904,111	$1,891,401	$1,794,950	$3,881,172	$2,086,222	$978,331	$2,182,847	$1,204,516	$1,594,695	$3,784,830	$2,190,136	$2,112,892	$2,931,417	$818,526	$1,637,336	$11,941,878	$10,304,542	$2,428,389	$3,991,252	$1,562,863	$1,943,645	$4,122,629	$2,178,984	$1,351,768	$4,351,831	$3,000,064	$1,332,200	$2,859,272	$1,527,072	$1,455,010	$6,138,642	$4,683,632
	[TRADE SECRET DATA BEGINS																																			
Minnkota Power Cooperation Station Service MWh	[redacted]																																			
Average Cost																																				
																																				TRADE SECRET DATA ENDS]
Total Cost	$46,857	$26,275	($20,582)	$46,857	$39,969	($6,888)	$46,857	$24,446	($22,412)	$46,857	$25,259	($21,598)	$46,857	$21,954	($24,904)	$46,857	$25,996	($20,862)	$46,857	$18,501	($28,356)	$46,857	$28,195	($18,663)	$46,857	$11,457	($35,400)	$46,857	$16,181	($30,677)	$46,857	$17,339	($29,519)	$46,857	$39,969	($6,888)
	[TRADE SECRET DATA BEGINS																																			
Purchase to Serve Non-Firm Retail Customer MWh	[redacted]																																			
Average Cost																																				
																																				TRADE SECRET DATA ENDS]
Total Cost	$3,016,356	$0	($3,016,356)	$2,804,772	$0	($2,804,772)	$1,867,112	$0	($1,867,112)	$1,575,074	$0	($1,575,074)	$1,345,294	$0	($1,345,294)	$1,957,539	$0	($1,957,539)	$2,564,562	$0	($2,564,562)	$2,392,736	$0	($2,392,736)	$1,875,843	$0	($1,875,843)	$1,713,794	$0	($1,713,794)	$1,574,304	$0	($1,574,304)	$2,765,274	$0	($2,765,274)
	[TRADE SECRET DATA BEGINS																																			
IMO (Ontario Market Operator) MWh	[redacted]																																			
Average Cost																																				
																																				TRADE SECRET DATA ENDS]
Total Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$245,991	$245,991	$0	$37,762	$37,762	$0	$0	$0	$0	$0	$0	$0	$12,158	$12,158	$0	$0	$0	$0	$13,835	$13,835
	[TRADE SECRET DATA BEGINS																																			
AEP Energy Partners MWh	[redacted]																																			
Average Cost																																				
																																				TRADE SECRET DATA ENDS]
Total Cost	$0	$2,795,580	$2,795,580	$0	$2,615,220	$2,615,220	$0	$2,795,580	$2,795,580	$0	$1,911,600	$1,911,600	$0	$1,975,320	$1,975,320	$0	$1,911,600	$1,911,600	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,748,304	$1,748,304	$0	$0	$0
	[TRADE SECRET DATA BEGINS																																			
Shell Energy North America MWh	[redacted]																																			
Average Cost																																				
																																				TRADE SECRET DATA ENDS]
Total Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$877,920	$877,920	$0	$0	$0	$0	$0	$0
	[TRADE SECRET DATA BEGINS																																			
NextEra Energy MWh	[redacted]																																			
Average Cost																																				
																																				TRADE SECRET DATA ENDS]
Total Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$172,501	$172,501	$0	$0	$0	$0	$0	$0	$0	$1,097,400	$1,097,400	$0	$0	$0	$0	$0	$0
	[TRADE SECRET DATA BEGINS																																			
Hibbing Public Utilities MWh	[redacted]																																			
Average Cost																																				
																																				TRADE SECRET DATA ENDS]
Total Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$26,723	$26,723	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	[TRADE SECRET DATA BEGINS																																			
Other Purchases MWh	[redacted]																																			
Average Cost																																				
																																				TRADE SECRET DATA ENDS]
Total Cost	$0	$205,164	$205,164	$0	$85,034	$85,034	$0	$82,879	$82,879	$0	$103,729	$103,729	$0	$156,892	$156,892	$0	$140,743	$140,743	$0	$201,442	$201,442	$0	$108,648	$108,648	$0	$93,574	$93,574	$0	$104,875	$104,875	$0	$75,532	$75,532	$0	$71,036	$71,036
Total Purchase Power Unknown $	$5,347,419	$6,851,207	$1,503,789	$3,864,340	$5,644,335	$1,779,995	$3,708,919	$6,784,077	$3,075,157	$2,600,262	$4,223,435	$1,623,173	$2,986,846	$5,938,996	$2,952,150	$4,117,288	$5,255,747	$1,138,459	$4,248,755	$12,398,808	$8,150,052	$4,867,982	$4,128,096	($739,887)	$3,866,346	$4,227,660	$361,314	$3,112,419	$6,460,365	$3,347,946	$2,953,362	$4,700,448	$1,747,085	$4,267,142	$6,263,483	$1,996,341

Total Purchase Power

YTD 2024	Forecast	Actual	Difference: Over/(Under)	% Difference
Total Company Purchase Power	$223,751,172	$251,745,840	$27,994,668	13%

	Jan-24 Forecast	Jan-24 Actual	Jan-24 Difference: Over/(Under)	Feb-24 Forecast	Feb-24 Actual	Feb-24 Difference: Over/(Under)	Mar-24 Forecast	Mar-24 Actual	Mar-24 Difference: Over/(Under)	Apr-24 Forecast	Apr-24 Actual	Apr-24 Difference: Over/(Under)	May-24 Forecast	May-24 Actual	May-24 Difference: Over/(Under)	Jun-24 Forecast	Jun-24 Actual	Jun-24 Difference: Over/(Under)	Jul-24 Forecast	Jul-24 Actual	Jul-24 Difference: Over/(Under)	Aug-24 Forecast	Aug-24 Actual	Aug-24 Difference: Over/(Under)	Sep-24 Forecast	Sep-24 Actual	Sep-24 Difference: Over/(Under)	Oct-24 Forecast	Oct-24 Actual	Oct-24 Difference: Over/(Under)	Nov-24 Forecast	Nov-24 Actual	Nov-24 Difference: Over/(Under)	Dec-24 Forecast	Dec-24 Actual	Dec-24 Difference: Over/(Under)
Total Company Purchase Power	$20,890,686	$23,060,480	$2,169,795	$18,388,299	$20,946,482	$2,558,183	$18,466,695	$23,047,463	$4,580,769	$17,651,350	$20,835,730	$3,184,381	$20,803,031	$20,684,867	($118,164)	$19,080,699	$18,563,123	($517,576)	$20,693,753	$26,929,666	$6,235,913	$18,444,596	$18,913,388	$468,792	$17,029,206	$19,002,279	$1,973,073	$17,509,006	$21,607,567	$4,098,561	$16,719,568	$18,134,553	$1,414,985	$18,074,283	$20,020,241	$1,945,957

2024 Forecast vs. Actual- Purchase Costs

Manitoba Hydro:

- The MHEB contract has a variable energy piece (133 Purchase Power Agreement) and throughout 2024, MP procured less energy from Manitoba Hydro than what was forecasted specifically in May – July 2024 but the price was a slight increase compared to forecast coming in 2% above forecast.

Market Purchase:

- With market prices coming in 23% less than forecast in 2024, MP purchased more energy from the market. Also, MP saw a decrease in company generation (thermal, wind, and hydro) which raised the MWhs purchased from the market to cover load.
- The market purchase price per MWh came in 2% less than forecast due to the lower than forecasted MISO market prices in 2024.

Minnkota Power Station Service:

- Costs came in 47% lower than forecasted. The forecast is based on prior year monthly average.

Purchase to serve Non-Firm Retail Customer

- When the forecast was prepared, there was no purchase made so the MWhs were based on customer load
- The purchases to cover this Non-Firm Retail Customer were contracted with different counter parties and are included in the purchase by counterpart and is why actuals are showing 0 MWhs.

Counter Party Purchases:

- Minnkota/AEP/Shell/NextEra/HPU
- Purchases that were not known or under contract at the time of the forecast filing but were procured during times when MP was short and needed to purchase energy to cover load. This can happen when generation is lower than expected, load is high, market prices are lower than expected, or MP has generating units off for outage.
- This section also includes the purchases that were procured to serve a Non-Firm Retail Customer.

Other Purchases:

- The other purchases section includes all customer owned generation purchases that are not forecasted.

Oliver County 1:

- Oliver 1 costs came in 4% more than forecast. This higher cost was due to purchased MWhs coming in 10% higher than forecast even though the price was less than forecast by 6%. The lower price was due to credits received on the Oliver 1 invoices that were not forecasted and lowered the $/MWh.

Oliver County 2:

- Oliver 2 costs came in less than 1% lower than forecast. Purchased MWhs coming in 3% higher than forecast and the price was less than forecast by 3%. The lower price was due to credits received on the Oliver 2 invoices that were not forecasted and lowered the $/MWh.

Wing River:

- Generation came in 35% lower than forecast and costs were 33% lower than forecast. Wing River was below forecast every month in 2024.

Nobles:

- Nobles generation came in 4% less than forecasted in 2024 and the $/MWh was slightly higher than forecasted by 1%. MP saw less wind in southern MN throughout 2024 which decreased Nobles generation. The slightly higher $/MWh was due to compensated curtailments which are not forecasted.

SES 20MW Solar:

- Purchased MWhs were 11% less than forecasted and the $/MWh was 3% less than forecast. The generation and costs go through the SEA (Solar Energy Adjustment)- See Attachment 2.4- SEA

Solar Subscription Cancellations:

- We do not forecast as it is very small. Any customers that have a rolling balance of kWh due to solar garden generation is purchased back by MP when they leave the program and are paid out for their unused solar generation.

Purchase to serve Municipal Solar Energy:

- Purchase to procure solar energy for a municipal customer. Purchase is offset by the sale to the municipal customer on Attachment 2.3- Inter-system Sales

Square Butte:

- Based on generation at Square Butte which was higher in 2024 compared to forecast. Fuel costs came in slightly lower than forecast. Overall costs were within 5% of forecast.

PUBLIC DOCUMENT – NOT PUBLIC DATA HAS BEEN EXCISED

Inter-System Sales- Customer Sales

YTD 2024		Forecast	Actual	Difference: Over/(Under)	% Difference
Incremental Production Service (IPS) and Replacement Firm Power Service (RFPS)	MWh	[TRADE SECRET DATA BEGINS [redacted]			-3%
	Average Fuel Cost			TRADE SECRET DATA ENDS]	24%
	Total Fuel Cost	$1.991.754	$2.387.390	$395.636	20%
Economy and Non Firm Energy	MWh	[TRADE SECRET DATA BEGINS [redacted]			-1%
	Average Fuel Cost			TRADE SECRET DATA ENDS]	-14%
	Total Fuel Cost	$28.764.020	$24.626.419	($4.137.601)	-14%
Excessive Energy	MWh	[TRADE SECRET DATA BEGINS [redacted]			0%
	Average Fuel Cost			TRADE SECRET DATA ENDS]	0%
	Total Fuel Cost	$0	$337	$337	0%
Incremental and Price Recall	MWh	[redacted]			0%
	Average Fuel Cost			TRADE SECRET DATA ENDS]	0%
	Total Fuel Cost	$0	$36.807	$36.807	0%
Municipal Incremental	MWh	[TRADE SECRET DATA BEGINS [redacted]			0%
	Average Fuel Cost			TRADE SECRET DATA ENDS]	22%
	Total Fuel Cost	$4.688.492	$5.679.395	$990.903	21%
Municipal Solar Energy	MWh	[TRADE SECRET DATA BEGINS [redacted]			18%
	Average Fuel Cost			TRADE SECRET DATA ENDS]	0%
	Total Fuel Cost	$190.174	$224.969	$34.796	18%
Total Inter-System Sales- Customer (MWh's)		940.132	934.429	(5.703)	-1%
Total Inter-System Sales- Customer (Dollars)		$35.634.440 1/	$32.955.317 1/	($2.679.123) 1/	-8%

Inter-System Sales- Customer Sales

	Jan-24			Feb-24			Mar-24			Apr-24			May-24			Jun-24		
	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
IPS and RFPS MWh / Average Fuel Cost	[TRADE SECRET DATA BEGINS [redacted]																	
Total Fuel Cost	$295.687	$208.910	($86.777)	$230.430	$249.977	$19.548	$128.558	$279.530	$150.973	$115.517	$165.273	$49.756	$107.593	$239.831	$132.238	$111.893	$73.775	($38.118)
Economy and Non Firm Energy MWh / Average Fuel Cost	[TRADE SECRET DATA BEGINS [redacted]																	
Total Fuel Cost	$3.265.853	$2.222.209	($1.043.644)	$3.147.201	$2.112.722	($1.034.479)	$2.081.999	$2.604.890	$522.892	$1.815.772	$1.913.139	$97.367	$1.599.191	$1.895.381	$296.190	$2.225.573	$1.741.100	($484.472)
Excessive Energy MWh / Average Fuel Cost	[TRADE SECRET DATA BEGINS [redacted]																	
Total Fuel Cost	$0	$0	$0	$0	$16	$16	$0	$88	$88	$0	($88)	($88)	$0	$0	$0	$0	$0	$0
Incremental and Price Recall MWh / Average Fuel Cost	[redacted]																	
Total Fuel Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Municipal Incremental MWh / Average Fuel Cost	[redacted]																	
Total Fuel Cost	$717.055	$764.207	$47.151	$613.933	$600.775	($13.158)	$342.883	$386.337	$43.454	$247.214	$322.579	$75.365	$193.300	$282.678	$89.379	$322.507	$280.201	($42.306)
Municipal Solar Energy MWh / Average Fuel Cost	[TRADE SECRET DATA BEGINS [redacted]																	
Total Fuel Cost	$8.158	$3.881	($4.277)	$11.572	$13.598	$2.026	$16.606	$21.266	$4.660	$19.615	$22.893	$3.278	$21.929	$26.745	$4.816	$22.045	$27.469	$5.425
Total Inter-System Sales- Customer (MWh's)	79.040	75.855	(3.185)	80.166	67.943	(12.223)	77.710	84.437	6.727	72.431	77.155	4.724	61.597	74.256	12.659	81.114	68.469	(12.645)
Total Inter-System Sales- Customer (Dollars)	$4.286.753	$3.199.206	($1.087.547)	$4.003.136	$2.977.088	($1.026.047)	$2.570.046	$3.292.112	$722.066	$2.198.118	$2.423.795	$225.678	$1.922.013	$2.444.635	$522.622	$2.682.017	$2.122.545	($559.471)

	Jul-24			Aug-24			Sep-24			Oct-24			Nov-24			Dec-24		
	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
IPS and RFPS MWh / Average Fuel Cost	[redacted]																	TRADE SECRET DATA ENDS]
Total Fuel Cost	$101.190	$180.795	$79.605	$128.317	$141.898	$13.581	$147.726	$162.461	$14.735	$143.249	$152.824	$9.576	$249.039	$209.710	($39.328)	$232.556	$322.405	$89.850
Economy and Non Firm Energy MWh / Average Fuel Cost	[redacted]																	TRADE SECRET DATA ENDS]
Total Fuel Cost	$2.854.337	$2.363.004	($491.333)	$2.770.964	$1.860.932	($910.032)	$2.228.589	$1.954.340	($274.250)	$1.956.278	$1.922.130	($34.148)	$1.790.327	$1.777.521	($12.806)	$3.027.937	$2.259.051	($768.886)
Excessive Energy MWh / Average Fuel Cost	[redacted]																	TRADE SECRET DATA ENDS]
Total Fuel Cost	$0	$0	$0	$0	$23	$23	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$298	$298
Incremental and Price Recall MWh / Average Fuel Cost	[redacted]																	TRADE SECRET DATA ENDS]
Total Fuel Cost	$0	$1.684	$1.684	$0	$6.420	$6.420	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$28.704	$28.704
Municipal Incremental MWh / Average Fuel Cost	[redacted]																	TRADE SECRET DATA ENDS]
Total Fuel Cost	$420.970	$971.177	$550.207	$422.624	$378.232	($44.392)	$227.124	$381.168	$154.044	$259.543	$299.461	$39.919	$338.602	$345.716	$7.114	$582.737	$666.864	$84.127
Municipal Solar Energy MWh / Average Fuel Cost	[redacted]																	TRADE SECRET DATA ENDS]
Total Fuel Cost	$25.632	$31.738	$6.106	$21.987	$25.088	$3.102	$16.970	$26.115	$9.145	$11.274	$16.406	$5.131	$7.399	$5.930	($1.469)	$6.988	$3.840	($3.147)
Total Inter-System Sales- Customer (MWh's)	83.494	79.187	(4.307)	83.934	84.474	540	81.650	81.319	(331)	77.034	74.110	(2.924)	75.712	83.322	7.610	86.250	83.900	(2.350)
Total Inter-System Sales- Customer (Dollars)	$3.402.129	$3.548.398	$146.269	$3.343.892	$2.412.593	($931.299)	$2.620.410	$2.524.084	($96.326)	$2.370.344	$2.390.821	$20.477	$2.385.367	$2.338.878	($46.489)	$3.850.217	$3.281.162	($569.056)

Inter-System Sales- Market Sales

YTD 2024		Forecast	Actual	Difference: Over/(Under)	% Difference
Oconto	MWh	[TRADE SECRET DATA BEGINS [redacted]			21%
	Average Fuel Cost			TRADE SECRET DATA ENDS]	13%
	Total Fuel Cost	$2.630.551	$3.584.928	$954.377	36%
Hibbing Public Utilities	MWh	[TRADE SECRET DATA BEGINS [redacted]			-1%
	Average Fuel Cost			TRADE SECRET DATA ENDS]	6%
	Total Fuel Cost	$1.225.971	$1.287.298	$61.327	5%
Minnkota Power Cooperation- Renewable Source	MWh	[redacted]			0%
	Average Fuel Cost			TRADE SECRET DATA ENDS]	0%
	Total Fuel Cost	$92.336	$84.000	($8.336)	-9%
Asset Based Sales (Non MISO)	MWh	[TRADE SECRET DATA BEGINS [redacted]			0%
	Average Fuel Cost			TRADE SECRET DATA ENDS]	0%
	Total Fuel Cost	$0	$0	$0	0%
Liquidated Sales (Non MISO)	MWh	[TRADE SECRET DATA BEGINS [redacted]			0%
	Average Fuel Cost			TRADE SECRET DATA ENDS]	0%
	Total Fuel Cost	$0	$924.901	$924.901	0%
MISO Market Sales	MWh	[TRADE SECRET DATA BEGINS [redacted]			-17%
	Average Fuel Cost			TRADE SECRET DATA ENDS]	13%
	Total Fuel Cost	$36.239.777	$34.137.668	($2.102.109)	-6%
Minnkota Power Liquidation	MWh	[TRADE SECRET DATA BEGINS [redacted]			7%
	Average Fuel Cost			TRADE SECRET DATA ENDS]	-2%
	Total Fuel Cost	$30.893.207	$32.245.720	$1.352.513	4%
Total Inter-System Sales- Market (MWh's)		2.826.652	2.676.731	(149.921)	-5%
Total Inter-System Sales- Market (Dollars)		$71.081.842	$72.264.515	$1.182.673	2%

Inter-System Sales- Market Sales

	Jan-24			Feb-24			Mar-24			Apr-24			May-24			Jun-24		
	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
Oconto MWh / Average Fuel Cost	[TRADE SECRET DATA BEGINS [redacted]																	
Total Fuel Cost	$273.737	$329.672	$55.935	$240.486	$272.604	$32.118	$226.630	$283.993	$57.363	$188.657	$218.309	$29.652	$180.987	$234.670	$53.683	$196.404	$272.308	$75.904
Hibbing Public Utilities MWh / Average Fuel Cost	[redacted]																	
Total Fuel Cost	$103.531	$111.012	$7.481	$96.593	$101.605	$5.012	$104.413	$115.339	$10.926	$101.338	$104.618	$3.280	$105.521	$109.620	$4.098	$102.507	$110.327	$7.820
Minnkota Power Cooperation- Renewable Source MWh / Average Fuel Cost	[redacted]																	
Total Fuel Cost	$9.052	$3.500	($5.552)	$9.290	$3.500	($5.790)	$8.450	$3.500	($4.950)	$7.839	$3.500	($4.339)	$7.538	$3.500	($4.038)	$6.987	$3.500	($3.487)
Asset Based Sales (Non MISO) MWh / Average Fuel Cost	[TRADE SECRET DATA BEGINS [redacted]																	
Total Fuel Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Liquidated Sales (Non MISO) MWh / Average Fuel Cost	[redacted]																	
Total Fuel Cost	$0	$657.466	$657.466	$0	($236.491)	($236.491)	$0	($379.036)	($379.036)	$0	$52.158	$52.158	$0	$308.724	$308.724	$0	$134.087	$134.087
MISO Market Sales MWh / Average Fuel Cost	[TRADE SECRET DATA BEGINS [redacted]																	
Total Fuel Cost	$4.644.953	$6.565.037	$1.920.084	$4.230.915	$3.585.757	($645.158)	$2.592.932	$2.168.164	($424.768)	$3.927.261	$3.674.199	($253.062)	$2.617.337	$1.216.548	($1.400.789)	$1.984.258	$1.351.839	($632.419)
Minnkota Power Liquidation MWh / Average Fuel Cost	[TRADE SECRET DATA BEGINS [redacted]																	
Total Fuel Cost	$2.772.775	$3.257.453	$484.678	$2.589.520	$2.942.737	$353.217	$2.330.316	$2.787.216	$456.900	$2.685.907	$2.902.760	$216.853	$2.755.591	$2.086.937	($668.654)	$2.099.588	$1.984.100	($115.488)
Total Inter-System Sales- Market (MWh's)	319.990	314.751	(5.240)	289.422	226.780	(62.642)	202.443	214.780	12.337	271.776	273.985	2.209	219.650	128.695	(90.955)	160.478	176.028	15.550
Total Inter-System Sales- Market (Dollars)	$7.804.048	$10.924.140	$3.120.092	$7.166.803	$6.669.712	($497.091)	$5.262.741	$4.979.177	($283.564)	$6.911.002	$6.955.543	$44.541	$5.666.975	$3.959.999	($1.706.976)	$4.389.745	$3.856.161	($533.584)

	Jul-24			Aug-24			Sep-24			Oct-24			Nov-24			Dec-24		
	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
Oconto MWh / Average Fuel Cost	[redacted]																	TRADE SECRET DATA ENDS]
Total Fuel Cost	$233.736	$556.887	$323.151	$219.268	$321.130	$101.862	$185.910	$270.325	$84.415	$196.034	$253.643	$57.609	$225.475	$269.778	$44.303	$263.228	$301.609	$38.380
Hibbing Public Utilities MWh / Average Fuel Cost	[redacted]																	TRADE SECRET DATA ENDS]
Total Fuel Cost	$103.936	$106.620	$2.684	$102.734	$113.458	$10.725	$100.310	$108.181	$7.871	$103.996	$103.422	($574)	$99.563	$105.085	$5.523	$101.528	$98.010	($3.519)
Minnkota Power Cooperation- Renewable Source MWh / Average Fuel Cost	[redacted]																	TRADE SECRET DATA ENDS]
Total Fuel Cost	$7.962	$10.500	$2.538	$8.353	$10.500	$2.147	$7.024	$10.500	$3.476	$6.174	$10.500	$4.326	$5.736	$10.500	$4.764	$7.932	$10.500	$2.568
Asset Based Sales (Non MISO) MWh / Average Fuel Cost	[redacted]																	TRADE SECRET DATA ENDS]
Total Fuel Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Liquidated Sales (Non MISO) MWh / Average Fuel Cost	[redacted]																	TRADE SECRET DATA ENDS]
Total Fuel Cost	$0	($355.061)	($355.061)	$0	$7.414	$7.414	$0	$433.664	$433.664	$0	($214.431)	($214.431)	$0	$185.032	$185.032	$0	$331.376	$331.376
MISO Market Sales MWh / Average Fuel Cost	[redacted]																	TRADE SECRET DATA ENDS]
Total Fuel Cost	$3.049.129	$1.443.818	($1.605.311)	$2.447.438	$2.609.434	$161.996	$1.680.210	$2.324.716	$644.506	$3.036.105	$3.485.088	$448.982	$2.966.300	$2.490.461	($475.839)	$3.062.938	$3.222.608	$159.670
Minnkota Power Liquidation MWh / Average Fuel Cost	[redacted]																	TRADE SECRET DATA ENDS]
Total Fuel Cost	$2.764.534	$2.789.042	$24.508	$2.740.838	$2.723.321	($17.518)	$2.323.558	$2.936.281	$612.723	$2.771.457	$2.813.623	$42.167	$2.651.786	$2.461.940	($189.846)	$2.407.336	$2.560.310	$152.974
Total Inter-System Sales- Market (MWh's)	230.364	179.361	(51.003)	223.906	235.941	12.035	170.562	199.686	29.124	247.410	253.020	5.610	243.758	234.898	(8.860)	246.891	238.806	(8.085)
Total Inter-System Sales- Market (Dollars)	$6.159.296	$4.551.806	($1.607.490)	$5.518.631	$5.785.258	$266.627	$4.297.012	$6.083.667	$1.786.655	$6.113.766	$6.451.844	$338.078	$5.948.860	$5.522.796	($426.064)	$5.842.962	$6.524.412	$681.450

Inter-System Sales- Station Service

YTD 2024		Forecast	Actual	Difference: Over/(Under)	% Difference
Oliver County 1	MWh	[redacted]			11%
	Average Fuel Cost			TRADE SECRET DATA ENDS]	-33%
	Total Fuel Cost	$16.981	$12.715	($4.266)	-25%
Oliver County 2	MWh	[TRADE SECRET DATA BEGINS [redacted]			21%
	Average Fuel Cost			TRADE SECRET DATA ENDS]	-37%
	Total Fuel Cost	$14.442	$11.063	($3.378)	-23%
WPPI Energy	MWh	[TRADE SECRET DATA BEGINS [redacted]			54%
	Average Fuel Cost			TRADE SECRET DATA ENDS]	-34%
	Total Fuel Cost	$94.834	$96.695	$1.861	2%
Total Inter-System Sales- Station Service (MWh's)		2.401	3.504	1.103	46%
Total Inter-System Sales- Station Service (Dollars)		$126.257	$120.473	($5.784)	-5%

Inter-System Sales- Station Service

	Jan-24			Feb-24			Mar-24			Apr-24			May-24			Jun-24		
	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
Oliver County 1 MWh / Average Fuel Cost	[redacted]																	
Total Fuel Cost	$1.415	$3.361	$1.946	$1.415	$819	($597)	$1.415	$879	($536)	$1.415	$352	($1.063)	$1.415	$576	($839)	$1.415	($36)	($1.451)
Oliver County 2 MWh / Average Fuel Cost	[TRADE SECRET DATA BEGINS [redacted]																	
Total Fuel Cost	$1.203	$2.463	$1.259	$1.203	$640	($564)	$1.203	$708	($496)	$1.203	$356	($848)	$1.203	$579	($624)	$1.203	($40)	($1.244)
WPPI Energy MWh / Average Fuel Cost	[redacted]																	
Total Fuel Cost	$3.990	$0	($3.990)	$3.990	$7.402	$3.413	$3.990	$106	($3.884)	$27.469	$13.882	($13.587)	$3.990	$2.720	($1.269)	$3.990	$0	($3.990)
Total Inter-System Sales- Station Service (MWh's)	117	110	(7)	117	384	267	117	65	(51)	616	636	20	117	115	(2)	117	30	(87)
Total Inter-System Sales- Station Service (Dollars)	$6.608	$5.824	($784)	$6.608	$8.860	$2.252	$6.608	$1.692	($4.916)	$30.088	$14.589	($15.498)	$6.608	$3.876	($2.732)	$6.608	($76)	($6.684)

	Jul-24			Aug-24			Sep-24			Oct-24			Nov-24			Dec-24		
	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
Oliver County 1 MWh / Average Fuel Cost	[redacted]																	TRADE SECRET DATA ENDS]
Total Fuel Cost	$1.415	$1.021	($394)	$1.415	$260	($1.155)	$1.415	$251	($1.165)	$1.415	$1.109	($307)	$1.415	$833	($582)	$1.415	$3.292	$1.877
Oliver County 2 MWh / Average Fuel Cost	[redacted]																	TRADE SECRET DATA ENDS]
Total Fuel Cost	$1.203	$812	($391)	$1.203	$211	($992)	$1.203	$140	($1.064)	$1.203	$939	($265)	$1.203	$844	($360)	$1.203	$3.413	$2.210
WPPI Energy MWh / Average Fuel Cost	[redacted]																	TRADE SECRET DATA ENDS]
Total Fuel Cost	$3.990	$10.056	$6.066	$3.990	$0	($3.990)	$27.469	$8.833	($18.636)	$3.990	$19.715	$15.725	$3.990	$0	($3.990)	$3.990	$33.981	$29.992
Total Inter-System Sales- Station Service (MWh's)	117	330	213	117	21	(96)	616	276	(340)	117	808	691	117	72	(45)	117	656	539
Total Inter-System Sales- Station Service (Dollars)	$6.608	$11.889	$5.281	$6.608	$471	($6.137)	$30.088	$9.223	($20.865)	$6.608	$21.762	$15.154	$6.608	$1.677	($4.932)	$6.608	$40.686	$34.078

Inter-System Sales- MISO Costs

YTD 2024		Forecast	Actual	Difference: Over/(Under)	% Difference
MISO Recovered thru Customer Sales	Total Cost	$0	$0	$0	0%
MISO Recovered thru Market Sales	Total Cost	$8,286,184	$2,988,834	($5,297,350)	-64%
Total Inter-System Sales- MISO Costs (Dollars)		$8,286,184	$2,988,834	($5,297,350)	-64%

Inter-System Sales- MISO Costs

	Jan-24			Feb-24			Mar-24			Apr-24			May-24			Jun-24		
	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
MISO Recovered thru Customer Sales	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
MISO Recovered thru Market Sales	$1,528,991	$614,390	($914,601)	$1,287,719	$223,568	($1,064,151)	$473,337	$93,268	($380,069)	$666,652	$483,199	($183,453)	$364,477	$197,707	($166,770)	$198,181	$60,286	($137,895)
Total Inter-System Sales- MISO Costs (Dollars)	$1,528,991	$614,390	($914,601)	$1,287,719	$223,568	($1,064,151)	$473,337	$93,268	($380,069)	$666,652	$483,199	($183,453)	$364,477	$197,707	($166,770)	$198,181	$60,286	($137,895)

	Jul-24			Aug-24			Sep-24			Oct-24			Nov-24			Dec-24		
	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
MISO Recovered thru Customer Sales	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
MISO Recovered thru Market Sales	$650,996	$25,142	($625,854)	$631,798	$163,477	($468,321)	$337,499	$346,392	$8,893	$613,054	$253,052	($360,001)	$649,040	$178,638	($470,402)	$884,440	$349,716	($534,724)
Total Inter-System Sales- MISO Costs (Dollars)	$650,996	$25,142	($625,854)	$631,798	$163,477	($468,321)	$337,499	$346,392	$8,893	$613,054	$253,052	($360,001)	$649,040	$178,638	($470,402)	$884,440	$349,716	($534,724)

Inter-System Sales-Sales due to Retail and Resale Loss of Load

YTD 2024		Forecast	Actual	Difference: Over/(Under)	% Difference
Sales due to Retail and Resale Loss of Load	MWh	[TRADE SECRET DATA BEGINS [redacted]			0%
	Average Fuel Cost			TRADE SECRET DATA ENDS]	0%
	Total Fuel Cost	$0	$0	$0	0%
MISO Recovered thru Sales due to Retail and Resale Loss of Load	Total Cost	$0	$0	$0	0%
Liquidation for Sales due to Retail and Resale Loss of Load	Total Cost	$0	$0	$0	0%
Total Inter-System Sales- Sales due to Retail and Resale Loss of Load (MWh's)		0	0	0	0%
Total Inter-System Sales- Sales due to Retail and Resale Loss of Load (Dollars)		$0	$0	$0	0%

Inter-System Sales-Sales due to Retail and Resale Loss of Load

	Jan-24			Feb-24			Mar-24			Apr-24			May-24			Jun-24		
	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
Sales due to Retail and Resale Loss of Load MWh / Average Fuel Cost	[TRADE SECRET DATA BEGINS [redacted]																	
Total Fuel Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
MISO Recovered thru Sales due to Retail and Resale Loss of Load	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Liquidation for Sales due to Retail and Resale Loss of Load	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total (MWh's)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total (Dollars)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

	Jul-24			Aug-24			Sep-24			Oct-24			Nov-24			Dec-24		
	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
Sales due to Retail and Resale Loss of Load MWh / Average Fuel Cost	[redacted]																	TRADE SECRET DATA ENDS]
Total Fuel Cost	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
MISO Recovered thru Sales due to Retail and Resale Loss of Load	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Liquidation for Sales due to Retail and Resale Loss of Load	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total (MWh's)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total (Dollars)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Inter-System Sales- Asset Based Margins

YTD 2024		Forecast	Actual	Difference: Over/(Under)	% Difference
Asset Based Margins	Total Margins	$14.510.424	$12.178.508	($2.331.915)	-16%
Total Inter-System Sales- MISO Costs (Dollars)		$14.510.424	$12.178.508	($2.331.915)	-16%

Inter-System Sales- Asset Based Margins

	Jan-24			Feb-24			Mar-24			Apr-24			May-24			Jun-24		
	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
Asset Based Margins	$2.121.263	$3.292.570	$1.171.307	$1.557.867	$357.774	($1.200.093)	$1.211.774	$904.748	($307.027)	$686.447	$523.532	($162.915)	$276.593	$576.376	$299.783	$1.338.681	$871.767	($466.914)
Total Inter-System Sales- MISO Costs (Dollars)	$2.121.263	$3.292.570	$1.171.307	$1.557.867	$357.774	($1.200.093)	$1.211.774	$904.748	($307.027)	$686.447	$523.532	($162.915)	$276.593	$576.376	$299.783	$1.338.681	$871.767	($466.914)

	Jul-24			Aug-24			Sep-24			Oct-24			Nov-24			Dec-24		
	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
Asset Based Margins	$2.449.622	$381.295	($2.068.326)	$1.282.628	$1.238.955	($43.673)	$667.942	$1.124.401	$456.459	$585.780	$608.572	$22.792	$713.266	$1.163.800	$450.533	$1.618.560	$1.134.718	($483.842)
Total Inter-System Sales- MISO Costs (Dollars)	$2.449.622	$381.295	($2.068.326)	$1.282.628	$1.238.955	($43.673)	$667.942	$1.124.401	$456.459	$585.780	$608.572	$22.792	$713.266	$1.163.800	$450.533	$1.618.560	$1.134.718	($483.842)

Total Inter-System Sales

YTD 2024	Forecast	Actual	Difference: Over/(Under)	% Difference
Total Company Inter System Sales MWh's	3.769.185	3.614.664	(154.520)	-4%
Total Company Inter System Sales Dollars	$129.639.147	$120.507.648	($9.131.499)	-7%

Total Inter-System Sales

	Jan-24			Feb-24			Mar-24			Apr-24			May-24			Jun-24		
	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
Total Company Inter System Sales MWh's	399.147	390.716	(8.431)	369.705	295.107	(74.597)	280.270	299.282	19.012	344.823	351.776	6.953	281.364	203.067	(78.297)	241.709	244.527	2.818
Total Company Inter System Sales Dollars	$15.747.664	$18.036.130	$2.288.466	$14.022.134	$10.237.004	($3.785.130)	$9.524.506	$9.270.996	($253.510)	$10.492.307	$10.400.659	($91.648)	$8.236.665	$7.182.592	($1.054.073)	$8.615.231	$6.910.682	($1.704.549)

	Jul-24			Aug-24			Sep-24			Oct-24			Nov-24			Dec-24		
	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
Total Company Inter System Sales MWh's	313.975	258.877	(55.097)	307.957	320.437	12.480	252.828	281.282	28.454	324.561	327.938	3.377	319.587	318.292	(1.294)	333.258	323.362	(9.896)
Total Company Inter System Sales Dollars	$12.668.651	$8.518.530	($4.150.121)	$10.783.558	$9.600.754	($1.182.804)	$7.952.951	$10.087.767	$2.134.816	$9.689.552	$9.726.052	$36.500	$9.703.141	$9.205.787	($497.353)	$12.202.787	$11.330.694	($872.093)

1/ For Inter System Sales- Customer Sales- MISO Costs are Included in the Total Cost

2024 FAC Forecast vs. Actuals- Inter-System Sales

IPS and RFPS:

- IPS and RFPS MWhs were slightly lower than forecast by 3% and the $/MWh was higher by 24% due to due to higher than forecasted fuel costs.

Economy and Non-Firm:

- Economy and Non-Firm MWhs were right on budget coming in within 1% of forecast. The $/MWh was a slight decrease from forecast due to the "Purchase to serve Non-Firm Retail Customer" was procured at a lower cost than forecasted.

Excess Energy:

- Excess Energy is not forecasted as it is usually a small amount.

Incremental and Price Recall:

- Incremental and Price Recall is not forecasted as it is usually a small amount.

Municipal Incremental:

- Municipal Incremental MWhs were less than 1% lower than forecast and costs were 22% higher than forecast. The higher costs were due to higher priced company generation being allocated to the Municipal Incremental sale.

Municipal Solar Energy:

- The Municipal Solar Energy sale is a direct offset of the Municipal Solar Energy purchase. See Attachment 2.2- Purchase Costs for the purchase.

Hibbing Public Utilities:

- MWhs came in slightly lower than forecast by 1% and the $/MWh was 5% more than forecast. The higher $/MWh is due to the slightly higher thermal Boswell fuel costs. See Attachment 2.1- Generation Costs for Boswell fuel costs.

Oconto:

- Loads came in stronger than forecasted in 2024 and the $/MWh was 13% higher than forecast due to the slightly higher thermal Boswell fuel costs. See Attachment 2.1- Generation Costs for Boswell fuel costs.

Asset Based Sales (Non MISO):

- There were no Asset Based Sales (Non MISO) forecasted in the 2024 and no actuals.

Minnkota Power Liquidation:

- There was more generation output and a slightly lower fuel cost at Square Butte in 2024 (See Attachment 2.2- Purchase Costs) which would increase the MWhs and lower the costs of the Minnkota Power Liquidation sale which is based on the output and costs of Square Butte.

Liquidated Sales (Non MISO):

- There were no Liquidated Sales (Non MISO) forecasted in the 2024 forecast. For actuals, there were Liquidated Sales (Non MISO) as various counterparty purchases that were procured throughout the year were liquidated at times when they were not needed to serve load.

MISO Market Sales:

- Variable- Minnesota Power uses the RTSim production cost model to determine the forecasted volume and cost for MISO market sales. When excess energy is available and it's economical, the model will sell the excess energy into the MISO market. There was less company generation in 2024 (See Attachment 2.1- Generation Costs) which would lower the amount of Asset Based sales to the market.

Minnkota Power Cooperation- Renewable Source:

- Sales side of the direct cost pass through of the "Minnkota Power Cooperation Renewable Source" listed on Attachment 2.2- Purchase Costs.

Oliver County 1 Station Service:

- The forecast assumption used last year's average and the current year MWhs came in slightly higher and the costs came in lower.

Oliver County 2 Station Service:

- The forecast assumption used last year's average and the current year MWhs came in slightly higher and the costs came in lower.

WPPI Energy:

- WPPI station service is calculated when Boswell 4 is offline. Boswell 4 outage MWhs was lower by about 39% than forecast.

MISO Costs:

- See Attachment 3 for MISO Costs breakdown and assumptions.
- MISO Costs recovered thru Customer Sales is part of their fuel cost and is reflected in the average cost price in the "Inter-System Sales- Customer Sales" section.
- MISO Costs recovered thru Market Sales were less than forecasted due to the decrease in Market MISO sales in 2024 compared to forecast.

Sales due to Retail Loss of Load:

- None in forecast and actuals

Asset Based Margins:

- The Asset Based Margin Credit came in 16% lower than forecast. This decrease in the credit is mainly due to the lower than forecasted MISO market prices which was close to 23% lower than forecast. Lower market prices resulted in a lower sales price for Asset Bases Sales and resulted in lower MP generation so there was less available generation to sell back to the market. Both the factors listed above lowered the credit to the customer than what was forecasted.

SOLAR ENERGY ADJUSTMENT

Docket No. E015/M-15-773

	YTD 2024			January 2024			February 2024			March 2024			April 2024			May 2024			June 2024			July 2024			August 2024			September 2024			October 2024			November 2024			December 2024		
FUEL COST	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
Total Monthly Fuel Cost	264,571,907	279,574,134	15,002,227	27,422,072	27,088,639	(333,433)	24,362,170	24,557,107	194,937	21,846,419	23,489,974	1,643,555	19,608,396	21,414,638	1,806,242	21,268,903	23,543,165	2,274,261	18,462,044	18,797,744	335,700	22,867,408	27,908,978	5,041,570	23,100,236	20,837,735	(2,262,501)	20,369,833	22,391,008	2,021,175	20,145,914	23,616,930	3,471,016	20,495,663	20,843,978	348,315	24,622,848	25,084,239	461,390
Less: Costs related to Solar	2,474,436	2,138,863	(335,572)	93,051	34,201	(58,850)	140,521	132,646	(7,876)	221,561	205,385	(16,176)	252,723	207,299	(45,424)	285,605	255,034	(30,571)	301,893	248,921	(52,971)	340,469	301,259	(39,210)	297,314	244,812	(52,503)	228,173	258,024	29,851	150,379	160,318	9,939	98,609	57,268	(41,341)	64,137	33,696	(30,441)
Total Non-Solar FAC Costs	262,097,471	277,435,270	15,337,800	27,329,021	27,054,438	(274,583)	24,221,649	24,424,461	202,813	21,624,858	23,284,589	1,659,731	19,355,672	21,207,338	1,851,666	20,983,298	23,288,130	2,304,832	18,160,151	18,548,823	388,672	22,526,940	27,607,719	5,080,779	22,802,921	20,592,923	(2,209,998)	20,141,660	22,132,984	1,991,324	19,995,535	23,456,613	3,461,078	20,397,054	20,786,710	389,656	24,558,712	25,050,543	491,831
Current 2-Month Total Fuel Cost	524,900,464	552,453,393	27,552,929	52,593,255	49,687,833	(2,905,422)	51,550,669	51,478,899	(71,770)	45,846,507	47,709,050	1,862,544	40,980,530	44,491,927	3,511,397	40,338,971	44,495,468	4,156,498	39,143,450	41,836,953	2,693,503	40,687,091	46,156,542	5,469,451	45,329,861	48,200,642	2,870,781	42,944,581	42,725,907	(218,675)	40,137,195	45,589,596	5,452,401	40,392,589	44,243,322	3,850,733	44,955,765	45,837,253	881,487
KWH SALES																																								
Total Monthly KWH Sales	8,628,329,829	8,941,639,122	313,309,293	780,610,383	792,711,665	12,101,281	714,592,579	772,110,575	57,517,997	745,295,585	782,800,658	37,505,073	681,293,027	707,281,563	25,988,535	689,991,630	742,408,993	52,417,363	676,095,358	710,645,190	34,549,833	723,243,518	751,947,616	28,704,098	717,931,338	736,787,706	18,856,368	690,199,322	711,847,285	21,647,963	703,419,599	728,746,924	25,327,324	724,913,107	727,081,085	2,167,978	780,744,383	777,269,862	(3,474,521)
Less: Solar Generation and Purc	55,491,830	50,257,811	(5,234,019)	2,357,493	945,644	(1,411,849)	3,371,782	3,446,987	75,205	4,906,236	4,910,217	3,982	5,550,712	4,895,203	(655,508)	6,259,544	5,662,575	(596,968)	6,560,687	5,628,838	(931,849)	7,299,545	6,783,177	(516,368)	6,457,137	5,543,224	(913,913)	4,995,436	6,046,436	1,050,999	3,726,932	4,021,987	295,056	2,309,017	1,528,779	(780,238)	1,697,308	844,743	(852,565)
Total Non-Solar FAC KWH Sales	8,572,837,999	8,891,381,311	318,543,312	778,252,890	791,766,020	13,513,130	711,220,796	768,663,588	57,442,792	740,389,350	777,890,441	37,501,091	675,742,316	702,386,359	26,644,044	683,732,086	736,746,418	53,014,331	669,534,670	705,016,352	35,481,682	715,943,973	745,164,439	29,220,466	711,474,201	731,244,482	19,770,282	685,203,885	705,800,849	20,596,964	699,692,668	724,724,936	25,032,268	722,604,090	725,552,306	2,948,217	779,047,075	776,425,119	(2,621,956)
Current 2-Month Total KWH Sales	17,161,468,236	17,802,475,647	641,007,411	1,573,092,202	1,587,904,164	14,811,963	1,489,473,686	1,560,429,608	70,955,922	1,451,610,146	1,546,554,029	94,943,883	1,416,131,665	1,480,276,800	64,145,135	1,359,474,402	1,439,132,777	79,658,375	1,353,266,757	1,441,762,770	88,496,013	1,385,478,643	1,450,180,791	64,702,148	1,427,418,174	1,476,408,921	48,990,748	1,396,678,086	1,437,045,332	40,367,246	1,384,896,553	1,430,525,786	45,629,232	1,422,296,757	1,450,277,243	27,980,485	1,501,651,165	1,501,977,426	326,261
Fuel Cost - cents/kWh	**3.059**	**3.103**	**0.044**	**3.343**	**3.129**	**(0.214)**	**3.461**	**3.299**	**(0.162)**	**3.158**	**3.085**	**(0.073)**	**2.894**	**3.006**	**0.112**	**2.967**	**3.092**	**0.125**	**2.893**	**2.902**	**0.009**	**2.937**	**3.183**	**0.246**	**3.176**	**3.265**	**0.089**	**3.075**	**2.973**	**(0.102)**	**2.898**	**3.187**	**0.289**	**2.840**	**3.051**	**0.211**	**2.994**	**3.052**	**0.058**
TOGA Percentage	**90.89%**	**82.62%**	**-8.27%**	**88.45%**	**105.43%**	**16.98%**	**94.04%**	**84.12%**	**-9.93%**	**78.88%**	**71.54%**	**-7.34%**	**83.60%**	**72.16%**	**-11.43%**	**98.18%**	**66.04%**	**-32.15%**	**98.05%**	**92.64%**	**-6.01%**	**89.01%**	**97.17%**	**8.16%**	**83.58%**	**72.77%**	**-10.81%**	**95.32%**	**98.33%**	**3.01%**	**104.53%**	**68.32%**	**-36.21%**	**80.82%**	**78.56%**	**-2.26%**	**96.20%**	**84.99%**	**-11.21%**
Fuel Cost Credit to the SEA - cents/k	**2.780**	**2.564**	**(0.217)**	**2.957**	**3.299**	**0.342**	**3.255**	**2.775**	**(0.480)**	**2.491**	**2.207**	**(0.284)**	**2.419**	**2.169**	**(0.250)**	**2.913**	**2.042**	**(0.871)**	**2.837**	**2.671**	**(0.166)**	**2.614**	**3.093**	**0.479**	**2.654**	**2.376**	**(0.278)**	**2.931**	**2.923**	**(0.008)**	**3.029**	**2.177**	**(0.852)**	**2.295**	**2.397**	**0.102**	**2.880**	**2.594**	**(0.286)**
BILLING MONTH:	**YTD 2024**			**March 2024**			**April 2024**			**May 2024**			**June 2024**			**July 2024**			**August 2024**			**September 2024**			**October 2024**			**November 2024**			**December 2024**			**January 2025**			**February 2025**		
	YTD 2024			January 2024			February 2024			March 2024			April 2024			May 2024			June 2024			July 2024			August 2024			September 2024			October 2024			November 2024			December 2024		
TIME OF GENERATION ADJUSTMENT (TOGA)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
TOGA Percentage	90.89%	82.62%	-8.27%	88.45%	105.43%	16.98%	94.04%	84.12%	-9.93%	78.88%	71.54%	-7.34%	83.60%	72.16%	-11.43%	98.18%	66.04%	-32.15%	98.05%	92.04%	-6.01%	89.01%	97.17%	8.16%	83.58%	72.77%	-10.81%	95.32%	98.33%	3.01%	104.53%	68.32%	-36.21%	80.82%	78.56%	-2.26%	96.20%	84.99%	-11.21%
Less: 100 Percent	100.00%	100.00%	0.00%	100.00%	100.00%		100.00%	100.00%		100.00%	100.00%		100.00%	100.00%		100.00%	100.00%		100.00%	100.00%		100.00%	100.00%		100.00%	100.00%		100.00%	100.00%		100.00%	100.00%		100.00%	100.00%		100.00%	100.00%	
Total TOGA Percentage to the FAC	-9.11%	-17.38%	-8.27%	-11.55%	5.43%	16.98%	-5.96%	-15.88%	-9.93%	-21.12%	-28.46%	-7.34%	-16.40%	-27.84%	-11.43%	-1.82%	-33.96%	-32.15%	-1.95%	-7.96%	-6.01%	-10.99%	-2.83%	8.16%	-16.42%	-27.23%	-10.81%	-4.68%	-1.67%	3.01%	4.53%	-31.68%	-36.21%	-19.18%	-21.44%	-2.26%	-3.80%	-15.01%	-11.21%
TOGA to the FAC (Dollars)	**$ (156,249.19)**	**($285,874.77)**	**($129,625.58)**	**$ (9,104.36)**	**$1,605.88**	**$10,710.24**	**$ (6,949.79)**	**($18,061.15)**	**($11,111.36)**	**$ (32,730.76)**	**($43,113.03)**	**($10,382.26)**	**$ (26,349.01)**	**($40,962.00)**	**($14,612.99)**	**$ (3,371.65)**	**($59,466.96)**	**($56,095.31)**	**$ (3,703.15)**	**($13,007.30)**	**($9,304.16)**	**$ (23,552.02)**	**($6,108.51)**	**$17,443.50**	**$ (33,678.21)**	**($49,278.91)**	**($15,600.70)**	**$ (7,192.96)**	**($3,004.38)**	**$4,188.58**	**$ 4,894.66**	**($40,605.38)**	**($45,500.04)**	**$ (12,580.36)**	**($10,002.35)**	**$2,578.02**	**$ (1,931.59)**	**($3,870.69)**	**($1,939.10)**
	YTD 2024			January 2024			February 2024			March 2024			April 2024			May 2024			June 2024			July 2024			August 2024			September 2024			October 2024			November 2024			December 2024		
SOLAR COSTS	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)	Forecast	Actual	Difference: Over/(Under)
Costs Related to Solar	$ 2,474,435.59	$ 2,138,863.38	($335,572.21)	$ 93,051.31	$34,201.41	($58,849.90)	$ 140,521.34	$132,645.76	($7,875.58)	$ 221,561.13	$205,384.84	($16,176.29)	$ 252,723.48	$207,299.35	($45,424.13)	$ 285,604.97	$255,034.44	($30,570.53)	$ 301,892.63	$248,921.25	($52,971.38)	$ 340,468.59	$301,258.99	($39,209.60)	$ 297,314.47	$244,811.79	($52,502.68)	$ 228,172.67	$258,023.87	$29,851.20	$ 150,378.89	$160,317.56	$9,938.67	$ 98,609.29	$57,268.28	($41,341.01)	$ 64,136.81	$33,695.84	($30,440.97)
Less: Credit from FAC / TOGA	$ 1,527,833.02	$ 1,271,756.91	($256,076.11)	$ 69,706.65	$31,195.09	($38,511.56)	$ 109,747.60	$95,654.97	($14,092.63)	$ 122,208.15	$108,367.18	($13,840.97)	$ 134,288.58	$106,187.81	($28,100.77)	$ 182,349.01	$115,619.87	($66,729.14)	$ 186,097.54	$150,341.58	($35,755.97)	$ 190,835.61	$209,799.99	$18,964.39	$ 171,400.47	$131,707.35	($39,693.12)	$ 146,416.71	$176,756.15	$30,339.44	$ 112,901.14	$87,575.35	($25,325.79)	$ 52,995.73	$36,640.70	($16,355.03)	$ 48,885.82	$21,910.87	($26,974.95)
Net Costs Related to Solar	$946,602.56	$867,106.47	($79,496.10)	$23,344.66	$3,006.32	($20,338.34)	$30,773.74	$36,990.79	$6,217.05	$99,352.97	$97,017.66	($2,335.31)	$118,434.90	$101,111.54	($17,323.36)	$103,255.95	$139,414.57	$36,158.61	$115,795.08	$98,579.67	($17,215.41)	$149,632.99	$91,459.00	($58,173.99)	$125,914.00	$113,104.44	($12,809.56)	$81,755.96	$81,267.72	($488.24)	$37,477.75	$73,742.21	$36,264.46	$45,613.56	$20,627.58	($24,985.98)	$15,250.99	$11,784.97	($3,466.02)
Current 2-Month Net Costs Related to S	$ 1,906,082.03	$ 1,715,660.97	($190,421.06)	$ 51,472.55	($3,760.68)	($55,233.23)	$ 54,118.41	$39,997.12	($14,121.29)	$ 130,126.72	$134,008.45	$3,881.74	$ 217,787.87	$198,129.20	($19,658.68)	$ 221,690.86	$240,526.11	$18,835.25	$ 219,051.04	$237,994.24	$18,943.20	$ 265,428.07	$190,038.67	($75,389.40)	$ 275,546.99	$204,563.43	($70,983.55)	$ 207,669.96	$194,372.16	($13,297.80)	$ 119,233.71	$154,009.93	$34,776.22	$ 83,091.31	$93,369.79	$10,278.48	$ 60,864.55	$32,412.55	($28,452.00)
KWH SALES	**YTD 2024**			**January 2024**			**February 2024**			**March 2024**			**April 2024**			**May 2024**			**June 2024**			**July 2024**			**August 2024**			**September 2024**			**October 2024**			**November 2024**			**December 2024**		
Total Monthly KWH Sales	8,630,968,000	8,944,459,202	313,487,202	780,869,000	792,961,666	12,092,666	714,858,000	772,375,551	57,517,551	745,537,000	783,039,329	37,502,329	681,517,000	707,524,021	26,007,021	690,207,000	742,631,817	52,424,817	676,295,000	710,844,213	34,549,213	723,471,000	752,151,477	28,680,477	718,170,000	737,032,695	18,862,655	690,400,000	712,076,001	21,676,001	703,596,000	728,972,657	25,376,657	725,077,000	727,312,489	2,235,489	780,971,000	777,533,325	(3,437,675)
Less: Retail SES Exempt	4,346,524,916	4,768,165,899	421,640,983	373,605,826	415,632,272	42,026,446	336,803,826	398,078,855	61,275,029	368,824,826	421,236,340	52,411,514	346,168,826	362,723,594	16,554,768	367,501,826	410,350,143	42,848,317	354,506,826	385,396,699	30,889,873	368,037,826	406,250,283	38,212,457	364,147,826	375,792,142	11,644,316	352,936,826	377,283,950	24,347,124	365,988,826	400,617,799	34,628,973	373,369,826	404,491,238	31,121,412	374,631,826	410,312,584	35,680,758
Less: Municipal SES Exempt	1,313,471,000	1,352,278,213	38,807,213	116,681,000	117,293,232	612,232	107,091,000	111,571,654	4,480,654	108,934,000	115,237,468	6,303,468	103,816,000	107,774,428	3,958,428	100,873,000	112,616,698	11,743,698	101,521,000	111,978,865	10,457,865	108,276,000	116,294,780	8,018,780	109,566,000	113,427,140	3,861,140	109,579,000	103,731,220	(5,847,780)	112,146,000	109,108,736	(3,037,264)	112,780,000	111,460,579	(1,319,421)	122,208,000	121,783,413	(424,587)
Total Non-Exempt KWH Sales	2,970,972,084	2,824,011,090	(146,960,994)	290,582,174	260,036,162	(30,546,012)	270,963,174	262,725,042	(8,238,132)	267,778,174	246,565,521	(21,212,653)	231,532,174	237,025,999	5,493,826	221,832,174	219,664,976	(2,167,198)	220,267,174	213,468,649	(6,798,524)	247,157,174	229,606,414	(17,550,759)	244,456,174	247,813,373	3,357,200	227,884,174	231,060,831	3,176,657	225,461,174	219,246,122	(6,215,052)	238,927,174	211,360,671	(27,566,502)	284,131,174	245,437,329	(38,693,845)
Current 2-Month Total Non-Exempt KWH	5,941,955,106	5,648,413,598	(293,541,508)	574,724,286	505,864,908	(68,859,378)	561,545,347	522,761,204	(38,784,143)	538,741,347	509,290,563	(29,450,785)	499,310,347	483,591,520	(15,718,827)	453,364,347	456,690,975	3,326,628	442,099,347	433,133,625	(8,965,722)	467,424,347	443,075,064	(24,349,283)	491,613,347	477,419,788	(14,193,560)	472,340,347	478,874,204	6,533,857	453,345,347	450,306,953	(3,038,394)	464,388,347	430,606,794	(33,781,554)	523,058,347	456,798,000	(66,260,347)
SEA ADJUSTMENT																																							
SEA Adjustment - Dollars per KWH	**$0.00032**	**$0.00030**	**($0.00002)**	**$0.00009**	**($0.00001)**	**($0.00010)**	**$0.00010**	**$0.00008**	**($0.00002)**	**$0.00024**	**$0.00026**	**$0.00002**	**$0.00044**	**$0.00041**	**($0.00003)**	**$0.00049**	**$0.00053**	**$0.00004**	**$0.00050**	**$0.00055**	**$0.00005**	**$0.00057**	**$0.00043**	**($0.00014)**	**$0.00056**	**$0.00043**	**($0.00013)**	**$0.00044**	**$0.00041**	**($0.00003)**	**$0.00026**	**$0.00034**	**$0.00008**	**$0.00018**	**$0.00022**	**$0.00004**	**$0.00012**	**$0.00007**	**($0.00005)**
SEA Adjustment - cents per KWH	**$0.03208**	**$0.03037**	**($0.00170)**	**$0.00896**	**($0.00074)**	**($0.00970)**	**$0.00964**	**$0.00765**	**($0.00199)**	**$0.02415**	**$0.02631**	**$0.00216**	**$0.04362**	**$0.04097**	**($0.00265)**	**$0.04890**	**$0.05267**	**$0.00377**	**$0.04955**	**$0.05495**	**$0.00540**	**$0.05679**	**$0.04289**	**($0.01389)**	**$0.05605**	**$0.04285**	**($0.01320)**	**$0.04397**	**$0.04059**	**($0.00338)**	**$0.02630**	**$0.03420**	**$0.00790**	**$0.01789**	**$0.02168**	**$0.00379**	**$0.01164**	**$0.00710**	**($0.00454)**
BILLING MONTH:	**YTD 2024**			**March 2024**			**April 2024**			**May 2024**			**June 2024**			**July 2024**			**August 2024**			**September 2024**			**October 2024**			**November 2024**			**December 2024**			**January 2025**			**February 2025**		

Minnesota Power's
Monthly MISO Day 2 Charges and Allocation
Docket No. E999/AA-07-1130

2024 FAC Forecast vs. Actuals- MISO Costs

Energy Charges:

- Asset Energy is reflected in MISO market purchases and sales and because of this, Minnesota Power did not include amounts on Attachment 3 of the 2024 forecast. For actuals, Minnesota Power is able break out the Asset Energy between the various charge types and are included in the Energy Charges line on Attachment 3 of the 2024 True Up.

FTRs and ARRs

- The 2024 ARR/FTR charges came in higher than expected due to higher price spreads between generation and load on paths that Minnesota Power had self-scheduled FTRs.

MINNESOTA POWER

MISO MONTHLY ALLOCATION

	January 2024	FPE Retail			FAC Resale			Subtotal FPE and FAC	Other	
		Mwh	Cost	Revenue	Mwh	Cost	Revenue	Cost/(Revenue)	Mwh	Cost/(Revenue)
		674,473			**117,293**				**391,662**	
Energy Charges	(6,327,600.59)		998,866	-		176,271	-	1,175,137.00		(7,502,737.59)
Market Administration Charges	141,403.62		95,525	-		17,181	-	112,705.13		28,698.49
Congestion and Loss Charges	7,081,309.87		5,911,659	(1,024,798)		1,043,234	(180,847)	5,749,248.33		1,332,061.54
FTRs and ARRs	(2,299,355.50)		388,402	(1,971,508)		68,542	(347,913)	(1,862,477.96)		(436,877.55)
RSG and Make Whole Payments	58,446.44		59,074	(18,834)		10,425	(3,324)	47,341.62		11,104.82
RNU Charges	409,853.00		282,184	-		49,797	-	331,980.93		77,872.07
ASM Charge Types	(41,938.51)		170,667	(198,134)		30,118	(34,965)	(32,313.63)		(9,624.88)
Grandfathered Charge Types	-		-	-		-	-	-		-
Miscellaneous Charges	60,089.24		41,371	-		7,301	-	48,672.28		11,416.96
Total	**(917,792.43)**	**674,473**	**7,947,749**	**(3,213,274)**	**117,293**	**1,402,867**	**(567,048)**	**5,570,294**	**391,662**	**(6,488,086)**

Feb24

MINNESOTA POWER

MISO MONTHLY ALLOCATION

	February 2024	FPE Retail			FAC Resale			Subtotal FPE and FAC	Other	
		Mwh	Cost	Revenue	Mwh	Cost	Revenue	Cost/(Revenue)	Mwh	Cost/(Revenue)
		657,092			**111,572**				**298,554**	
Energy Charges	(188,957.14)		1,306,439	-		230,548	-	1,536,987.18		(1,725,944.31)
Market Administration Charges	209,334.39		148,139	-		26,690	-	174,829.36		34,505.03
Congestion and Loss Charges	3,900,296.06		3,148,203	(330,353)		555,565	(58,298)	3,315,117.55		585,178.50
FTRs and ARRs	(474,104.20)		429,852	(772,392)		75,856	(136,305)	(402,988.57)		(71,115.63)
RSG and Make Whole Payments	(2,032.06)		10,820	(12,289)		1,909	(2,169)	(1,727.25)		(304.81)
RNU Charges	113,250.82		81,824	-		14,439	-	96,263.20		16,987.62
ASM Charge Types	9,060.09		80,477	(72,804)		14,202	(12,848)	9,027.08		33.01
Grandfathered Charge Types	-		-	-		-	-	-		-
Miscellaneous Charges	(706,969.94)		48,797	(559,583)		8,611	(98,750)	(600,924.45)		(106,045.49)
Total	**2,859,878.02**	**657,092**	**5,254,552**	**(1,747,421)**	**111,572**	**927,822**	**(308,368)**	**4,126,584**	**298,554**	**(1,266,706)**

MINNESOTA POWER

MISO MONTHLY ALLOCATION

	March 2024	FPE Retail			FAC Resale			Subtotal FPE and FAC	Other	
		Mwh	Cost	Revenue	Mwh	Cost	Revenue	Cost/(Revenue)	Mwh	Cost/(Revenue)
		662,653			**115,237**				**304,193**	
Energy Charges	5,733,482.67		1,968,599	-		347,400	-	2,315,998.38		3,417,484.29
Market Administration Charges	151,812.38		110,469	-		19,812	-	130,281.01		21,531.37
Congestion and Loss Charges	1,983,017.47		2,420,274	(960,407)		427,107	(169,484)	1,717,490.56		265,526.91
FTRs and ARRs	(469,411.09)		774,191	(1,121,321)		136,622	(197,880)	(408,387.65)		(61,023.44)
RSG and Make Whole Payments	38,044.08		37,877	(9,743)		6,684	(1,719)	33,098.35		4,945.73
RNU Charges	662,171.72		489,676	-		86,413	-	576,089.40		86,082.32
ASM Charge Types	50,421.84		105,583	(67,786)		18,632	(11,962)	44,467.68		5,954.16
Grandfathered Charge Types	-		-	-		-	-	-		-
Miscellaneous Charges	(196,201.57)		11,094	(156,185)		1,958	(27,562)	(170,695.37)		(25,506.20)
Total	**7,953,337.50**	**662,653**	**5,917,763**	**(2,315,441)**	**115,237**	**1,044,628**	**(408,607)**	**4,238,342**	**304,193**	**3,714,995**

MINNESOTA POWER

MISO MONTHLY ALLOCATION

	April 2024	FPE Retail			FAC Resale			Subtotal FPE and FAC	Other	
		Mwh	Cost	Revenue	Mwh	Cost	Revenue	Cost/(Revenue)	Mwh	Cost/(Revenue)
		594,612			**107,774**				**356,672**	
Energy Charges	(1,715,980.07)		697,715	-		123,126	-	820,841.37		(2,536,821.44)
Market Administration Charges	192,996.33		129,543	-		23,160	-	152,703.04		40,293.29
Congestion and Loss Charges	4,448,338.17		3,440,670	(420,832)		607,177	(74,264)	3,552,750.92		895,587.26
FTRs and ARRs	(720,065.30)		777,559	(1,267,204)		137,216	(223,624)	(576,052.24)		(144,013.06)
RSG and Make Whole Payments	18,328.35		19,435	(6,972)		3,430	(1,230)	14,662.68		3,665.67
RNU Charges	96,984.90		65,950	-		11,638	-	77,587.92		19,396.98
ASM Charge Types	42,579.97		95,904	(66,713)		16,924	(11,773)	34,342.21		8,237.76
Grandfathered Charge Types	-		-	-		-	-	-		-
Miscellaneous Charges	87,243.62		66,730	(7,404)		11,776	(1,307)	69,794.90		17,448.72
Total	**2,450,425.97**	**594,612**	**5,293,507**	**(1,769,125)**	**107,774**	**934,447**	**(312,199)**	**4,146,631**	**356,672**	**(1,696,205)**

MINNESOTA POWER

MISO MONTHLY ALLOCATION

	May 2024	FPE Retail			FAC Resale			Subtotal FPE and FAC	Other	
		Mwh	Cost	Revenue	Mwh	Cost	Revenue	Cost/(Revenue)	Mwh	Cost/(Revenue)
		624,130			**112,617**				**208,729**	
Energy Charges	2,268,115.46		2,525,745	-		445,720	-	2,971,464.61		(703,349.15)
Market Administration Charges	151,472.19		110,166	-		19,767	-	129,933.33		21,538.86
Congestion and Loss Charges	5,319,806.27		3,969,063	(30,965)		700,423	(5,464)	4,633,055.93		686,750.34
FTRs and ARRs	(612,602.64)		842,393	(1,295,413)		148,658	(228,602)	(532,964.30)		(79,638.34)
RSG and Make Whole Payments	(512,808.20)		18,416	(397,638)		3,250	(70,171)	(446,143.13)		(66,665.07)
RNU Charges	(132,650.47)		-	(98,095)		-	(17,311)	(115,405.91)		(17,244.56)
ASM Charge Types	58,667.38		152,985	(107,998)		26,997	(19,058)	52,925.44		5,741.94
Grandfathered Charge Types	-		-	-		-	-	-		-
Miscellaneous Charges	207,053.80		153,116	-		27,021	-	180,136.81		26,916.99
Total	**6,747,053.79**	**624,130**	**7,771,884**	**(1,930,109)**	**112,617**	**1,371,835**	**(340,607)**	**6,873,003**	**208,729**	**(125,949)**

MINNESOTA POWER

MISO MONTHLY ALLOCATION

	June 2024	FPE Retail			FAC Resale			Subtotal FPE and FAC	Other	
		Mwh	Cost	Revenue	Mwh	Cost	Revenue	Cost/(Revenue)	Mwh	Cost/(Revenue)
		593,037			**111,979**				**250,156**	
Energy Charges	1,450,821.35		2,014,512	-		383,717	-	2,398,228.26		(947,406.91)
Market Administration Charges	131,329.77		96,265	-		18,701	-	114,966.73		16,363.04
Congestion and Loss Charges	2,156,717.12		1,873,652	(263,415)		356,886	(50,174)	1,916,948.30		239,768.82
FTRs and ARRs	(372,885.65)		265,588	(544,357)		50,588	(103,687)	(331,868.23)		(41,017.42)
RSG and Make Whole Payments	(104,878.34)		7,740	(86,147)		1,474	(16,409)	(93,341.72)		(11,536.62)
RNU Charges	225,659.51		168,703	-		32,134	-	200,836.96		24,822.55
ASM Charge Types	9,909.79		82,409	(74,154)		15,697	(14,125)	9,827.14		82.65
Grandfathered Charge Types	-		-	-		-	-	-		-
Miscellaneous Charges	26,295.06		38,515	(18,857)		7,336	(3,592)	23,402.60		2,892.46
Total	**3,522,968.61**	**593,037**	**4,547,384**	**(986,930)**	**111,979**	**866,533**	**(187,987)**	**4,239,000**	**250,156**	**(716,031)**

Jul24

MINNESOTA POWER

MISO MONTHLY ALLOCATION

	July 2024	FPE Retail			FAC Resale			Subtotal FPE and FAC	Other	
		Mwh	Cost	Revenue	Mwh	Cost	Revenue	Cost/(Revenue)	Mwh	Cost/(Revenue)
		628,870			**116,295**				**265,660**	
Energy Charges	10,799,778.61		7,405,319	-		1,410,537	-	8,815,855.65		1,983,922.96
Market Administration Charges	139,997.15		101,468	-		19,936	-	121,403.19		18,593.96
Congestion and Loss Charges	858,987.21		1,111,717	(470,255)		211,756	(89,572)	763,645.99		95,341.22
FTRs and ARRs	336,638.98		645,591	(393,920)		122,970	(75,032)	299,608.69		37,030.29
RSG and Make Whole Payments	(62,445.80)		35,549	(82,233)		6,771	(15,663)	(55,576.76)		(6,869.04)
RNU Charges	254,183.44		190,028	-		36,196	-	226,223.26		27,960.18
ASM Charge Types	100,800.09		229,633	(153,636)		43,740	(29,264)	90,473.44		10,326.65
Grandfathered Charge Types	-		-	-		-	-	-		-
Miscellaneous Charges	63,470.26		47,450	-		9,038	-	56,488.53		6,981.73
Total	**12,491,409.94**	**628,870**	**9,766,755**	**(1,100,044)**	**116,295**	**1,860,943**	**(209,532)**	**10,318,122**	**265,660**	**2,173,288**

MINNESOTA POWER

MISO MONTHLY ALLOCATION

	August 2024	FPE Retail			FAC Resale			Subtotal FPE and FAC	Other	
		Mwh	Cost	Revenue	Mwh	Cost	Revenue	Cost/(Revenue)	Mwh	Cost/(Revenue)
		617,817			**113,427**				**325,981**	
Energy Charges	1,108,823.75		2,239,857	-		426,639	-	2,666,496.55		(1,557,672.80)
Market Administration Charges	153,858.33		107,409	-		20,925	-	128,334.00		25,524.33
Congestion and Loss Charges	3,347,003.51		2,620,125	(230,360)		499,072	(43,878)	2,844,958.93		502,044.58
FTRs and ARRs	(702,807.56)		256,338	(758,142)		48,826	(144,408)	(597,386.43)		(105,421.13)
RSG and Make Whole Payments	(21,733.16)		31,432	(46,949)		5,987	(8,943)	(18,473.19)		(3,259.97)
RNU Charges	167,312.14		119,461	-		22,754	-	142,215.32		25,096.82
ASM Charge Types	51,253.74		151,642	(114,908)		28,884	(21,887)	43,731.50		7,522.24
Grandfathered Charge Types	-		-	-		-	-	-		-
Miscellaneous Charges	26,695.75		35,533	(16,472)		6,768	(3,138)	22,691.39		4,004.36
Total	**4,130,406.50**	**617,817**	**5,561,797**	**(1,166,831)**	**113,427**	**1,059,856**	**(222,254)**	**5,232,568**	**325,981**	**(1,102,162)**

Sep24

MINNESOTA POWER

MISO MONTHLY ALLOCATION

	September 2024	FPE Retail			FAC Resale			Subtotal FPE and FAC	Other	
		Mwh	Cost	Revenue	Mwh	Cost	Revenue	Cost/(Revenue)	Mwh	Cost/(Revenue)
		602,070			**103,731**				**287,328**	
Energy Charges	922,062.54		2,089,153	-		368,674	-	2,457,827.14		(1,535,764.60)
Market Administration Charges	170,923.18		121,077	-		21,793	-	142,870.09		28,053.09
Congestion and Loss Charges	8,788,442.55		6,623,887	(291,499)		1,168,921	(51,441)	7,449,867.52		1,338,575.04
FTRs and ARRs	(3,299,242.81)		1,202,133	(3,585,836)		212,141	(632,795)	(2,804,356.39)		(494,886.42)
RSG and Make Whole Payments	44,962.61		40,428	(7,943)		7,134	(1,402)	38,218.22		6,744.39
RNU Charges	333,224.00		240,754	-		42,486	-	283,240.40		49,983.60
ASM Charge Types	55,235.66		255,677	(214,182)		45,120	(37,797)	48,818.22		6,417.44
Grandfathered Charge Types	-		-	-		-	-	-		-
Miscellaneous Charges	21,470.70		30,386	(14,874)		5,362	(2,625)	18,250.10		3,220.61
Total	**7,037,078.43**	**602,070**	**10,603,497**	**(4,114,334)**	**103,731**	**1,871,631**	**(726,059)**	**7,634,735**	**287,328**	**(597,657)**

Oct24

MINNESOTA POWER

MISO MONTHLY ALLOCATION

	October 2024	FPE Retail			FAC Resale			Subtotal FPE and FAC	Other	
		Mwh	Cost	Revenue	Mwh	Cost	Revenue	Cost/(Revenue)	Mwh	Cost/(Revenue)
		615,616			**109,109**				**331,960**	
Energy Charges	1,054,920.17		1,912,003	-		337,412	-	2,249,415.51		(1,194,495.33)
Market Administration Charges	177,706.15		127,837	-		22,924	-	150,760.63		26,945.52
Congestion and Loss Charges	5,000,524.08		3,873,143	(205,350)		683,496	(36,238)	4,315,051.03		685,473.04
FTRs and ARRs	(438,793.75)		1,211,328	(1,532,087)		213,764	(270,368)	(377,362.63)		(61,431.13)
RSG and Make Whole Payments	(306,441.90)		13,120	(237,129)		2,315	(41,846)	(263,540.03)		(42,901.87)
RNU Charges	437,463.73		319,786	-		56,433	-	376,218.81		61,244.92
ASM Charge Types	26,029.18		207,003	(185,520)		36,530	(32,739)	25,274.71		754.47
Grandfathered Charge Types	-		-	-		-	-	-		-
Miscellaneous Charges	19,380.72		31,063	(16,895)		5,482	(2,982)	16,667.42		2,713.30
Total	**5,970,788.38**	**615,616**	**7,695,283**	**(2,176,981)**	**109,109**	**1,358,356**	**(384,173)**	**6,492,485**	**331,960**	**(521,697)**

MINNESOTA POWER

MISO MONTHLY ALLOCATION

	November 2024	FPE Retail			FAC Resale			Subtotal FPE and FAC	Other	
		Mwh	Cost	Revenue	Mwh	Cost	Revenue	Cost/(Revenue)	Mwh	Cost/(Revenue)
		614,092			**111,461**				**319,820**	
Energy Charges	(137,824.21)		1,445,197	-		255,035	-	1,700,231.56		(1,838,055.77)
Market Administration Charges	163,188.97		114,800	-		20,562	-	135,361.43		27,827.54
Congestion and Loss Charges	3,024,147.64		2,675,315	(517,238)		472,114	(91,277)	2,538,914.56		485,233.08
FTRs and ARRs	(984,535.69)		1,067,811	(1,770,770)		188,437	(312,489)	(827,009.98)		(157,525.71)
RSG and Make Whole Payments	(46,326.02)		16,142	(49,218)		2,849	(8,686)	(38,913.86)		(7,412.16)
RNU Charges	388,263.94		277,220	-		48,921	-	326,141.71		62,122.23
ASM Charge Types	263.74		133,244	(128,933)		23,514	(22,753)	5,071.68		(4,807.94)
Grandfathered Charge Types	-		-	-		-	-	-		-
Miscellaneous Charges	4,023.30		27,910	(25,037)		4,925	(4,418)	3,379.57		643.73
Total	**2,411,201.67**	**614,092**	**5,757,639**	**(2,491,196)**	**111,461**	**1,016,357**	**(439,623)**	**3,843,177**	**319,820**	**(1,431,975)**

Dec24

MINNESOTA POWER

MISO MONTHLY ALLOCATION

	December 2024	FPE Retail			FAC Resale			Subtotal FPE and FAC	Other	
		Mwh	Cost	Revenue	Mwh	Cost	Revenue	Cost/(Revenue)	Mwh	Cost/(Revenue)
		654,642			**121,783**				**324,207**	
Energy Charges	2,190,909.91		2,255,776	-		429,672	-	2,685,447.18		(494,537.26)
Market Administration Charges	216,643.37		152,428	-		29,117	-	181,544.45		35,098.92
Congestion and Loss Charges	6,288,188.16		4,728,162	(275,002)		900,602	(52,381)	5,301,381.54		986,806.62
FTRs and ARRs	(2,160,032.79)		710,362	(2,234,481)		135,307	(425,615)	(1,814,427.54)		(345,605.25)
RSG and Make Whole Payments	39,038.66		37,519	(9,974)		7,147	(1,900)	32,792.47		6,246.19
RNU Charges	195,394.17		137,870	-		26,261	-	164,131.10		31,263.07
ASM Charge Types	36,482.59		153,180	(125,423)		29,177	(23,890)	33,043.63		3,438.96
Grandfathered Charge Types	-		-	-		-	-	-		-
Miscellaneous Charges	89,654.77		74,648	(11,388)		14,219	(2,169)	75,310.01		14,344.76
Total	**6,896,278.84**	**654,642**	**8,249,945**	**(2,656,268)**	**121,783**	**1,571,501**	**(505,956)**	**6,659,223**	**324,207**	**237,056**

YTD Summary

MINNESOTA POWER

MISO MONTHLY ALLOCATION

	January - December 2024	FPE Retail			FAC Resale			Subtotal FPE and FAC	Other	
		Mwh	Cost	Revenue	Mwh	Cost	Revenue	Cost/(Revenue)		Cost/(Revenue)
		7,539,104			1,352,278				3,664,921	
Energy Charges	17,158,552.45		26,859,180.54	-		4,934,749.83	-	31,793,930.38		(14,635,377.93)
Market Administration Charges	2,000,665.83		1,415,126.36	-		260,566.03	-	1,675,692.40		324,973.43
Congestion Charges	52,196,778.11		42,395,870.60	(5,020,473.45)		7,626,353.31	(903,319.29)	44,098,431.17		8,098,346.95
FTRs and ARRs	(12,197,198.00)		8,571,549.97	(17,247,431.47)		1,538,927.28	(3,098,719.00)	(10,235,673.21)		(1,961,524.79)
RSG and Make Whole Payments	(857,845.34)		327,553.55	(965,069.77)		59,375.56	(173,461.94)	(751,602.61)		(106,242.73)
RNU Charges	3,151,110.90		2,373,455.59	(98,095.02)		427,473.42	(17,310.89)	2,685,523.10		465,587.80
ASM Charge Types	398,765.56		1,818,403.52	(1,510,188.54)		329,534.29	(273,060.17)	364,689.11		34,076.45
Grandfathered Charge Types	-		-	-		-	-	-		-
Miscellaneous Charges	(297,794.29)		606,614.42	(826,695.63)		109,796.76	(146,541.77)	(256,826.21)		(40,968.08)
Grand Total	**61,553,035.22**	**7,539,104**	**84,367,755**	**(25,667,954)**	**1,352,278**	**15,286,776**	**(4,612,413)**	**69,374,164**		**(7,821,129)**

Comparison

MINNESOTA POWER
MISO MONTHLY ALLOCATION

	YTD 2024			Jan-24			Feb-24			Mar-24		
	Forecast	**Actual**	**Difference**	**Forecast**	**Actual**	**Difference**	**Forecast**	**Actual**	**Difference**	**Forecast**	**Actual**	**Difference**
Energy Charges	-	17,158,552.45	17,158,552.45	-	(6,327,600.59)	(6,327,600.59)	-	(188,957.14)	(188,957.14)	-	5,733,482.67	5,733,482.67
Market Administration Charges	1,960,800.00	2,000,665.83	39,865.83	163,400.00	141,403.62	(21,996.38)	163,400.00	209,334.39	45,934.39	163,400.00	151,812.38	(11,587.62)
Congestion and Loss Charges	53,622,281.69	52,196,778.11	(1,425,503.58)	7,320,596.83	7,081,309.87	(239,286.95)	6,299,563.10	3,900,296.06	(2,399,267.04)	3,275,007.54	1,983,017.47	(1,291,990.07)
FTRs and ARRs	(4,556,034.87)	(12,197,198.00)	(7,641,163.13)	119,906.10	(2,299,355.50)	(2,419,261.60)	119,906.10	(474,104.20)	(594,010.30)	(45,815.68)	(469,411.09)	(423,595.41)
RSG and Make Whole Payments	576,000.00	(857,845.34)	(1,433,845.34)	48,000.00	58,446.44	10,446.44	48,000.00	(2,032.06)	(50,032.06)	48,000.00	38,044.08	(9,955.92)
RNU Charges	2,640,000.00	3,151,110.90	511,110.90	220,000.00	409,853.00	189,853.00	220,000.00	113,250.82	(106,749.18)	220,000.00	662,171.72	442,171.72
ASM Charge Types	216,000.00	398,765.56	182,765.56	18,000.00	(41,938.51)	(59,938.51)	18,000.00	9,060.09	(8,939.91)	18,000.00	50,421.84	32,421.84
Grandfathered Charge Types	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous Charges	744,000.00	(297,794.29)	(1,041,794.29)	62,000.00	60,089.24	(1,910.76)	62,000.00	(706,969.94)	(768,969.94)	62,000.00	(196,201.57)	(258,201.57)
Grand Total	**55,203,046.82**	**61,553,035.22**	**6,349,988.40**	**7,951,902.93**	**(917,792.43)**	**(8,869,695.36)**	**6,930,869.20**	**2,859,878.02**	**(4,070,991.18)**	**3,740,591.87**	**7,953,337.50**	**4,212,745.63**

Comparison

Apr-24			May-24			Jun-24			Jul-24			Aug-24	
Forecast	**Actual**	**Difference**	**Forecast**	**Actual**	**Difference**	**Forecast**	**Actual**	**Difference**	**Forecast**	**Actual**	**Difference**	**Forecast**	**Actual**
-	(1,715,980.07)	(1,715,980.07)	-	2,268,115.46	2,268,115.46	-	1,450,821.35	1,450,821.35	-	10,799,778.61	10,799,778.61	-	1,108,823.75
163,400.00	192,996.33	29,596.33	163,400.00	151,472.19	(11,927.81)	163,400.00	131,329.77	(32,070.23)	163,400.00	139,997.15	(23,402.85)	163,400.00	153,858.33
3,149,021.05	4,448,338.17	1,299,317.13	2,638,449.94	5,319,806.27	2,681,356.33	2,409,978.63	2,156,717.12	(253,261.50)	5,143,194.03	858,987.21	(4,284,206.82)	5,384,378.32	3,347,003.51
(45,815.68)	(720,065.30)	(674,249.62)	(45,815.68)	(612,602.64)	(566,786.96)	(974,503.08)	(372,885.65)	601,617.43	(974,503.08)	336,638.98	1,311,142.06	(974,503.08)	(702,807.56)
48,000.00	18,328.35	(29,671.65)	48,000.00	(512,808.20)	(560,808.20)	48,000.00	(104,878.34)	(152,878.34)	48,000.00	(62,445.80)	(110,445.80)	48,000.00	(21,733.16)
220,000.00	96,984.90	(123,015.10)	220,000.00	(132,650.47)	(352,650.47)	220,000.00	225,659.51	5,659.51	220,000.00	254,183.44	34,183.44	220,000.00	167,312.14
18,000.00	42,579.97	24,579.97	18,000.00	58,667.38	40,667.38	18,000.00	9,909.79	(8,090.21)	18,000.00	100,800.09	82,800.09	18,000.00	51,253.74
-	-	-	-	-	-	-	-	-	-	-	-	-	-
62,000.00	87,243.62	25,243.62	62,000.00	207,053.80	145,053.80	62,000.00	26,295.06	(35,704.94)	62,000.00	63,470.26	1,470.26	62,000.00	26,695.75
3,614,605.37	**2,450,425.97**	**(1,164,179.40)**	**3,104,034.26**	**6,747,053.79**	**3,643,019.53**	**1,946,875.54**	**3,522,968.61**	**1,576,093.07**	**4,680,090.94**	**12,491,409.94**	**7,811,319.00**	**4,921,275.24**	**4,130,406.50**

Comparison

	Sep-24			Oct-24			Nov-24			Dec-24		
Difference	**Forecast**	**Actual**	**Difference**	**Forecast**	**Actual**	**Difference**	**Forecast**	**Actual**	**Difference**	**Forecast**	**Actual**	**Difference**
1,108,823.75	-	922,062.54	922,062.54	-	1,054,920.17	1,054,920.17	-	(137,824.21)	(137,824.21)	-	2,190,909.91	2,190,909.91
(9,541.67)	163,400.00	170,923.18	7,523.18	163,400.00	177,706.15	14,306.15	163,400.00	163,188.97	(211.03)	163,400.00	216,643.37	53,243.37
(2,037,374.81)	3,727,917.36	8,788,442.55	5,060,525.20	4,329,096.32	5,000,524.08	671,427.75	4,456,544.67	3,024,147.64	(1,432,397.03)	5,488,533.92	6,288,188.16	799,654.24
271,695.52	(618,265.63)	(3,299,242.81)	(2,680,977.18)	(618,265.63)	(438,793.75)	179,471.88	(618,265.63)	(984,535.69)	(366,270.06)	119,906.10	(2,160,032.79)	(2,279,938.89)
(69,733.16)	48,000.00	44,962.61	(3,037.39)	48,000.00	(306,441.90)	(354,441.90)	48,000.00	(46,326.02)	(94,326.02)	48,000.00	39,038.66	(8,961.34)
(52,687.86)	220,000.00	333,224.00	113,224.00	220,000.00	437,463.73	217,463.73	220,000.00	388,263.94	168,263.94	220,000.00	195,394.17	(24,605.83)
33,253.74	18,000.00	55,235.66	37,235.66	18,000.00	26,029.18	8,029.18	18,000.00	263.74	(17,736.26)	18,000.00	36,482.59	18,482.59
-	-	-	-	-	-	-	-	-	-	-	-	-
(35,304.25)	62,000.00	21,470.70	(40,529.30)	62,000.00	19,380.72	(42,619.28)	62,000.00	4,023.30	(57,976.70)	62,000.00	89,654.77	27,654.77
(790,868.74)	**3,621,051.73**	**7,037,078.43**	**3,416,026.70**	**4,222,230.69**	**5,970,788.38**	**1,748,557.69**	**4,349,679.04**	**2,411,201.67**	**(1,938,477.37)**	**6,119,840.02**	**6,896,278.84**	**776,438.82**

Treatment of Auction Revenue Rights (ARRs)

Docket No. E015/M-05-277

Minnesota Power's response to how the ARR process will be treated for retail and wholesale purposes:

[TRADE SECRET DATA BEGINS [redacted]

[redacted]

[redacted] TRADE SECRET DATA ENDS]

Minnesota Power's Self Scheduled FTRs from the Annual Allocation:

		Winter 23/24		Spring 2024		Summer 2024		Fall 2024		Winter 24/25	
Source	Sink	Peak	Off-peak	Peak	Off-peak	Peak	Off-peak	Peak	Off-peak	Peak	Off-peak
[TRADE SECRET DATA BEGINS											
[redacted]											
											TRADE SECRET DATA ENDS]

Minnesota Power's FTRs purchased in the Monthly Auction for the requested time period:

Monthly FTR Purchases						
Source	Sink	Class Period	Month	Awarded FTRs	Clearing ($/MW-Month)	Total Monthly Cost
[TRADE SECRET DATA BEGINS						
						TRADE SECRET DATA ENDS]

Minnesota Power's FTRs purchased in the Annual Auction for the requested time period:

Annual FTR Purchases						
Source	Sink	Class Period	Season	Awarded FTRs	Clearing ($/MW-Season)	Total Seasonal Cost
[TRADE SECRET DATA BEGINS						
						TRADE SECRET DATA ENDS]

Minnesota Power's Total ARR/FTR revenues and costs for the requested time period:

Total ARR / FTR Revenues and Costs		
	Cost to hold FTRS	Revenue Generated from ARR/FTRs
Jan-24	552,337.06	(2,751,763.93)
Feb-24	553,958.90	(916,484.62)
Mar-24	1,018,735.86	(1,440,304.31)
Apr-24	1,060,065.74	(1,819,109.84)
May-24	1,067,858.39	(1,628,151.00)
Jun-24	345,211.70	(721,094.53)
Jul-24	346,871.62	(213,627.65)
Aug-24	346,030.26	(969,693.28)
Sep-24	1,590,017.81	(4,634,265.27)
Oct-24	1,577,141.31	(1,895,303.48)
Nov-24	1,486,230.54	(2,634,975.68)
Dec-24	979,197.44	(3,236,703.44)

Below is monthly detail of different MISO charge type costs included in the ARR/FTR Revenue and Cost Table. Charge types labeled "Cost" are included in the Cost to Hold FTRs calculation and charge types labeled "Revenue" are included in the Revenues Generated from ARRs/FTRs calculation.

Note: Charges/Credits are shown in the month in which they were recorded in Account 55500 of the General Ledger and included in the FAC recovery.

Charge Type		Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Total
Financial Transmission Rights Market Administration Amount	Cost	2,672.96	4,294.80	2,440.32	2,476.00	2,468.56	2,606.40	4,266.32	3,424.96	3,344.80	2,821.68	2,402.40	622.48	33,841.68
Auction Revenue Rights Transaction Amount	Revenue	(393,084.66)	(393,084.66)	(558,099.69)	(558,099.69)	(558,099.69)	(167,294.06)	(167,294.06)	(167,294.06)	(1,136,908.07)	(1,136,908.07)	(1,136,908.07)	(662,683.62)	(7,035,758.40)
Financial Transmission Rights Annual Transaction Amount	Cost	372,267.75	372,267.75	990,689.96	990,689.96	990,689.96	339,138.45	339,138.45	339,138.45	1,156,916.21	1,156,916.21	1,156,916.21	634,360.30	8,839,129.66
Auction Revenue Rights Infeasible Uplift Amount	Cost	13,814.41	13,814.41	20,244.88	20,209.68	20,209.68	3,466.85	3,466.85	3,466.85	45,240.18	45,240.18	45,240.18	24,277.93	258,692.08
Auction Revenue Rights Stage 2 Distribution Amount	Revenue	(244,726.36)	(244,726.36)	(349,449.44)	(349,532.65)	(349,532.65)	(353,871.38)	(353,871.38)	(353,871.38)	(278,137.47)	(278,137.47)	(278,137.23)	(390,782.86)	(3,824,776.63)
Financial Transmission Rights Full Funding Guarantee Amount	Revenue	(125,077.38)	-	(45,342.38)	(82,516.57)	(72,711.95)	-	-	-	(2,024.05)	(1.72)	-	(50,821.73)	(378,495.78)
FTR Guarantee Uplift Amount	Revenue	108,361.36	-	44,699.84	82,482.10	78,968.76	-	-	-	2,476.26	1.72	-	50,821.73	367,811.77
Financial Transmission Rights Monthly Transaction Amount	Cost	163,581.94	163,581.94	5,360.70	46,690.10	54,490.19	-	-	-	384,516.62	372,163.24	281,671.75	319,936.73	1,791,993.21
Financial Transmission Rights Hourly Allocation Amount	Revenue	(2,031,324.10)	(250,154.66)	(524,204.80)	(898,961.95)	(717,196.29)	(195,532.20)	310,670.63	(420,638.55)	(3,119,778.81)	(462,641.75)	(1,194,278.84)	(2,183,236.96)	(11,687,278.28)
Financial Transmission Rights Monthly Allocation Amount	Revenue	(65,912.79)	(28,518.94)	(7,907.84)	(12,481.08)	(9,579.18)	(4,396.89)	(3,132.84)	(27,889.29)	(99,893.13)	(17,616.19)	(25,651.54)	-	(302,979.71)
Financial Transmission Rights Transaction Amount	Cost	-	-	-	-	-	-	-	-	-	-	-	-	-
Financial Transmission Rights Yearly Allocation Amount	Revenue	-	-	-	-	-	-	-	-	-	-	-	-	-
Financial Transmission Rights Yearly Allocation Amount	Revenue	-	-	-	-	-	-	-	-	-	-	-	-	-
Costs of hold FTRs		**552,337.06**	**553,958.90**	**1,018,735.86**	**1,060,065.74**	**1,067,858.39**	**345,211.70**	**346,871.62**	**346,030.26**	**1,590,017.81**	**1,577,141.31**	**1,486,230.54**	**979,197.44**	**10,923,656.63**
Revenue Generated from ARR/FTRs		**(2,751,763.93)**	**(916,484.62)**	**(1,440,304.31)**	**(1,819,109.84)**	**(1,628,151.00)**	**(721,094.53)**	**(213,627.65)**	**(969,693.28)**	**(4,634,265.27)**	**(1,895,303.48)**	**(2,634,975.68)**	**(3,236,703.44)**	**(22,861,477.03)**

Plant Outages:

Identification of Forced Outages, Lessons Learned and Mechanism for Information Sharing

Docket No. E999/AA-10-884

Plant Outage Contingency Plans

Docket No. E999/AA-08-995

Annual Identification of Forced Outages and Lessons Learned

Our maintenance practices and reliability programs are constantly being evaluated to ensure continuous improvement of our employees' skills and work processes to improve equipment reliability. Craftspeople are required to be trained on precision maintenance as part of their apprenticeship. We also require classroom training for all of the operating staff for asset care, preservation and standard operating procedures. Those individuals are taught operational best practices for operating pumps, motors, valves etc. Leadership level maintenance and operations staff have participated in reliability training programs which teach students the best practices of equipment maintenance along with the tools needed to be proactive rather than reactive to ensure equipment reliability. Program elements include condition monitoring, vibration analysis, system and components, troubleshooting, precision equipment installation and assembly, instrument and process variability and root cause failure analysis. Additionally, we have increased our expectations and requirements around specifications of new and rebuilt equipment and parts with enhanced use of overhaul specifications and visits to repair shops by engineers and technicians.

Our Outage Planning process continues to be a focal area. A systematic approach to outage planning with improved tools has resulted in projects safely and efficiently executed while ensuring equipment reliability. Outage duration is set based on project scope with project milestones identified, resources allocated, materials ordered, and safety plans in place. Automated reports allow for better coordination, communication, budget management, and analysis of work required. For example, inspection activities that can only be performed with the unit offline are identified so they can be scheduled as early as possible in an outage to allow time to complete work within the outage window.

We continue to implement a program called Operational Excellence. The focus of Operational Excellence is to teach Human and Organizational Performance tools to employees (3-way communication, Peer Checking, Labeling, Procedure Use and Adherence etc.) resulting in increased elimination of potential errors occurring in the field. In addition to the Human and Organizational Performance tool usage, an "intentional learning" process is completed when an event occurs and those learnings are shared throughout the facilities.

Tube Leaks
Tube leaks are statistically the most common cause of outages in coal fired power plants. The most common causes of tube leaks:

- thermal fatigue
- soot blower erosion
- fly ash erosion
- chemical attack

Thermal fatigue manifests itself as cracking of the boiler tubes - sometimes as very small "micro" cracks and sometimes as large cracks. This occurs as a result of changing boiler temperatures, usually when the boiler swings up or down to follow load and when the boilers start up and shut down. This is a similar effect to bending a paper clip back and forth - after so many cycles it eventually breaks. Minimizing boiler "swings" (base loading) helps minimize the impact of thermal fatigue. However, with the energy markets being what they are with the ever-increasing impacts of intermittent wind generation, we are seeing more and more swings in output.

Soot blower erosion occurs in areas where soot blowers are used to 'blow off' ash or slag which

accumulates on boiler tubes. Soot blowers use high pressure steam or high-pressure air to do the cleaning. The ash removal is necessary to improve heat transfer which improves boiler thermal efficiency. Common practices to mitigate soot blower erosion are to add a weld overlay (commonly called “pad welding”) to existing tubes, add tube shields which are essential sacrificial attachments to the tubes, changing soot blower media pressure (usually not an option) and tube replacement in the affected areas. The use of the soot blowers is essential in keeping the units online. Coal composition can differ from mine to mine or even within the same mine. As we look to find the best low-cost fuel blend for our customers, certain coals may cause more fouling than others. The increased potential of this fouling requires both the frequency and duration of soot blowing to increase, which minimizes the buildup on the boiler tubes. We are increasing using higher alloy weld overlay to provide increased tube longevity.

Fly ash erosion occurs when fly ash and combustion gases pass rapidly across superheated boiler tube surfaces. Because of the abrasiveness of fly ash, the surface of boiler tubes in the high flow areas slowly erode. Many things contribute to the amount of erosion, such a gas path restrictions (plugging - see reasons for soot blowing above), variations in coal quality (higher ash content), other additives which are added to the fuel mix typically for emission control, etc.

Chemical attack is becoming a common source of tube failures due to the corrosiveness of many of the additives being used to control emissions. When these chemicals come in contact with very hot boiler tubes, their normal corrosiveness is significantly increased. Since there tend to be few options for using alternate less corrosive additives, a common solution is to look at tube materials which perform better in the corrosive environment. This is usually a very expensive fix and can have environmental compliance implications.

Minnesota Power has a boiler reliability program which is very effective in proactively identifying areas of the boilers where tube leaks are likely to occur and minimizing that risk with proactive maintenance practices. The program uses a combination of visual inspections, non-destructive testing methods (NDT), tube sample analysis, tube failure history, and industry experiences to avoid forced outages due to unexpected tube leaks. Minnesota Power also has its own Boiler Weld Repair Program that ensures all applicable codes and standards are met when boiler repairs are performed.

To give some perspective on the challenges with any boiler reliability program, consider the following:

- Boswell-3 boiler has 473,891 ft (89.7 miles) of varying diameter boiler tubes
- Boswell-4 boiler has 779,905 ft (147.6 miles) of varying diameter boiler tubes

The boiler tube surface area where a leak can occur is several hundred thousand square feet in either boiler.

A tube leak usually begins as a very small hole (0.10 inch or less) in the tube wall which can expand rapidly due to high temperatures and pressure. Considering the huge surface area in a boiler and the very small size of the hole or microscopic crack which results in a tube leak, it is very difficult to effectively screen the entire boiler to prevent all tube leaks. As part of our boiler reliability program, whenever there is an opportunity to get into the boiler to do an inspection – a forced or schedule outage – critical areas are inspected to evaluate erosion rates and to determine if repairs are needed. This information is used to plan for future capital expenditures to help minimize future tube leaks. During these inspection opportunities, small leaks are sometimes found and repaired. Similar proactive maintenance practices are routinely followed at the other Minnesota Power thermal facilities.

Non Boiler related outages
Minnesota Power has a Generation Reliability Group that is dedicated to monitoring and improving the reliability of not only the boiler but also the rotating equipment. The group is comprised of boiler, turbine and pulverizer engineers/specialists as well as specialists in predictive maintenance technologies. They work on a daily basis with the operating and maintenance groups at all facilities to improve the daily operating practices, planning for work and repairs to occur in future outages and establishing 5 and 10 year maintenance plans.

Rotating equipment that is monitored through various predictive technologies is summarized in a monthly reliability meeting with the specific plant. The manager is provided with a monthly scorecard as to their performance as well as identifying concerns and upcoming needs.

Mechanism for Some Level of Information Sharing
Minnesota Power is open to sharing lessons learned on a generic basis with the other utilities on an annual basis.

However, the concept of sharing lessons learned is more attractive in theory than in practice. Each utility's generating units are unique (manufacturer, date of installation, fuel type and mixture, base loaded vs. cyclic loading etc.), as is each company's operation and maintenance practices. Furthermore, sharing best practices regarding planned outages over and above what companies have already described in public filings borders on releasing confidential information about outage planning and energy marketing. This could work to harm that utility's customers if it were made available to other parties, since those practices provide the utility its best protection in acquiring replacement energy at the lowest cost possible.

Minnesota Power will continue to provide information on forced outages and what steps, if any, could have helped in avoiding or alleviating outages.

Plant Outage Contingency Plans to address the following for the period of January 2024 through December 2024:

1. Identification for the period of January 2024 through December 2024 any and all contractors (and associated contracts) that increased replacement energy costs due to an extension of the plant outage days as a result of delays and/or lack of performance.

   During this period, there were no delays or lack of performance by contractors identified which impacted the length of the outages and/or the replacement energy costs.

2. Please provide a narrative fully explaining the reasons for the delays and/or lack of performance for each of the contracts identified above.

   Not applicable.

3. Please describe the lessons learned and the contingency plans developed by the Company to mitigate against future risk of delays or lack of performance, when contractors perform poorly and increase costs during plant outages.

   Not applicable.

	YTD 2024				Jan-24			Feb-24			Mar-24			Apr-24			May-24		
	Forecast	Actual	Difference Over/(Under)	% Difference	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)
Boswell 3	350	350			350	350		350	350		350	350		350	350		350	350	
Forced Days	24.0	48.9	24.9	**104%**	2 0	2 0	0 0	2 0	1.7	(0.3)	2.0	1 8	(0.2)	2.0	0.0	(2 0)	2 0	0.0	(2 0)
Forced MWh's	169,314	252,248	82,934	**49%**	14,341	17,081	2,740	13,415	12,080	(1,335)	14,341	2,351	(11,990)	13,878	0	(13,878)	14,341	0	(14,341)
Replacement MWh's	122,448	129,200	6,751	**6%**	10,627	5,415	(5,212)	4,653	7,772	3,119	14,341	792	(13,549)	5,161	0	(5,161)	6,138	0	(6,138)
	[TRADE SECRET DATA BEGINS				[TRADE SECRET DATA BEGINS														
Purchase Price	[redacted]			**41%**	[redacted]														
Total Forced Cost				**49%**															
Unit Cost	[redacted]				[redacted]														
			TRADE SECRET DATA ENDS]																
Incremental Cost	**$1,039,625.33**	**$2,389,851.93**	**$1,350,226.60**	**130%**	**$509,429.53**	**$249,983.65**	**($259,445.87)**	**$147,567.80**	**$26,229.89**	**($121,337.91)**	**($41,278.82)**	**$364.55**	**$41,643.38**	**($18,571.36)**	**$0.00**	**$18,571.36**	**$42,567.34**	**$0.00**	**($42,567.34)**
Planned Days	57.0	53.0	(4.0)	**-7%**	0 0	0 0	0 0	0 0	0 0	0.0	0.0	0 0	0.0	0.0	0.0	0 0	30 0	30.1	0.1
Planned MWh's	478,800	252,055	(226,745)	**-47%**	0	0	0	0	0	0	0	0	0	0	0	0	252,000	174,725	(77,275)
Replacement MWh's	274,945	94,524	(180,421)	**-66%**	0	0	0	0	0		0	0	0	0	0	0	107,863	63,127	(44,736)
	[TRADE SECRET DATA BEGINS				[TRADE SECRET DATA BEGINS														
Purchase Price	[redacted]			**-14%**	[redacted]														
Total Planned Cost				**-70%**															
Unit Cost	[redacted]				[redacted]														
			TRADE SECRET DATA ENDS]																
Incremental Cost	**$876,669.75**	**($280,485.87)**	**($1,157,155.62)**	**-132%**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$747,993.11**	**($82,724.21)**	**($830,717.32)**
	[TRADE SECRET DATA BEGINS				[TRADE SECRET DATA BEGINS														
Total Outage Costs	[redacted]			**-29%**	[redacted]														
			TRADE SECRET DATA ENDS]																
Total Incremental Costs	**$1,916,295.08**	**$2,109,366.06**	**$193,070.98**	**10%**	**$509,429.53**	**$249,983.65**	**($259,445.87)**	**$147,567.80**	**$26,229.89**	**($121,337.91)**	**($41,278.82)**	**$364.55**	**$41,643.38**	**($18,571.36)**	**$0.00**	**$18,571.36**	**$790,560.45**	**($82,724.21)**	**($873,284.66)**

	YTD 2024				Jan-24			Feb-24			Mar-24			Apr-24			May-24		
	Forecast	Actual	Difference Over/(Under)	% Difference	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)
Boswell 4	464	464			464	464		464	464		464	464		464	464		464	464	
Forced Days	12.0	13.1	1.1	**9%**	1 0	0 0	(1 0)	1 0	2 8	1.8	1.0	0 0	(1.0)	1.0	0.0	(1 0)	1 0	0.0	(1 0)
Forced MWh's	159,485	117,638	(41,847)	**-26%**	13,508	0	(13,508)	12,637	23,009	10,372	13,508	0	(13,508)	13,073	0	(13,073)	13,508	0	(13,508)
Replacement MWh's	115,340	66,870	(48,470)	**-42%**	10,009	0	(10,009)	4,383	13,104	8,721	13,508	0	(13,508)	4,862	0	(4,862)	5,782	0	(5,782)
	[TRADE SECRET DATA BEGINS				[TRADE SECRET DATA BEGINS														
Purchase Price	[redacted]			**102%**	[redacted]														
Total Cost				**17%**															
Unit Cost	[redacted]				[redacted]														
			TRADE SECRET DATA ENDS]																
Incremental Cost	**$878,034.33**	**$2,620,252.91**	**$1,742,218.58**	**198%**	**$472,235.04**	**$0.00**	**($472,235.04)**	**$135,610.48**	**($38,529.57)**	**($174,140.05)**	**($48,676.23)**	**$0.00**	**$48,676.23**	**($22,554.18)**	**$0.00**	**$22,554.18**	**$32,316.17**	**$0.00**	**($32,316.17)**
Planned Days	14.0	13.0	(1.0)	**-7%**	0 0	0 0	0 0	0 0	0 0	0.0	0.0	0 0	0.0	7.0	7.1	0.1	0 0	0.0	0 0
Planned MWh's	155,904	95,832	(60,072)	**-39%**	0	0	0	0	0	0	0	0	0	77,952	48,018	(29,934)	0	0	0
Replacement MWh's	77,496	27,158	(50,338)	**-65%**	0	0	0	0	0	0	0	0	0	28,990	9,352	(19,638)	0	0	0
	[TRADE SECRET DATA BEGINS				[TRADE SECRET DATA BEGINS														
Purchase Price	[redacted]			**4%**	[redacted]														
Total Cost				**-64%**															
Unit Cost	[redacted]				[redacted]														
			TRADE SECRET DATA ENDS]																
Incremental Cost	**($160,508.62)**	**($40,341.72)**	**$120,166.90**	**-75%**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**($134,486.59)**	**($44,024.25)**	**$90,462.34**	**$0.00**	**$0.00**	**$0.00**
	[TRADE SECRET DATA BEGINS				[TRADE SECRET DATA BEGINS														
Total Outage Costs	[redacted]			**-8%**	[redacted]														
			TRADE SECRET DATA ENDS]																
Total Incremental Costs	**$717,525.71**	**$2,579,911.19**	**$1,862,385.48**	**260%**	**$472,235.04**	**$0.00**	**($472,235.04)**	**$135,610.48**	**($38,529.57)**	**($174,140.05)**	**($48,676.23)**	**$0.00**	**$48,676.23**	**($157,040.76)**	**($44,024.25)**	**$113,016.52**	**$32,316.17**	**$0.00**	**($32,316.17)**

	YTD 2024				Jan-24			Feb-24			Mar-24			Apr-24			May-24		
	Forecast	Actual	Difference Over/(Under)	% Difference	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)
	[TRADE SECRET DATA BEGINS				[TRADE SECRET DATA BEGINS														
Total Outage Costs	[redacted]			**-22%**	[redacted]														
			TRADE SECRET DATA ENDS]																
Total Incremental Costs	**$2,633,820.79**	**$4,689,277.25**	**$2,055,456.46**	**78%**	**$981,664.57**	**$249,983.65**	**($731,680.92)**	**$283,178.28**	**($12,299.68)**	**($295,477.96)**	**($89,955.05)**	**$364.55**	**$90,319.60**	**($175,612.12)**	**($44,024.25)**	**$131,587.87**	**$822,876.62**	**($82,724.21)**	**($905,600.83)**

Jun-24			Jul-24			Aug-24			Sep-24			Oct-24			Nov-24			Dec-24		
Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)
350	350		350	350		350	350		350	350		350	350		350	350		350	350	
20	110	90	20	24.7	22.7	2.0	0.8	(1.3)	20	13	(0.8)	20	13	(0.7)	2.0	4.4	2.4	2.0	00	(2 0)
13,878	53,600	39,722	14,341	137,531	123,190	14,341	0	(14,341)	13,878	7,315	(6,563)	14,341	7,634	(6,707)	13,878	14,656	778	14,341	0	(14,341)
11,009	27,481	16,473	14,341	76,206		14,341	0	(14,341)	8,636	1,618	(7,017)	8,247	2,460	(5,787)	13,878	7,455	(6,423)	11,076	0	(11,076)
$13,277.11	($18,863.22)	($32,140.33)	$92,327.71	$2,124,211.23	$2,031,883.53	$111,922.16	$0.00	($111,922.16)	$4,859.06	($3,890.94)	($8,750.00)	($7,816.65)	$4,552.27	$12,368.93	($32,939.02)	$7,264.49	$40,203.51	$218,280.48	TRADE SECRET DATA ENDS] $0.00	($218,280.48)
20 0	19 0	(1 0)	0 0	0 0	0.0	0.0	0.0	0.0	0 0	0 0	0.0	7 0	4 0	(3.0)	0.0	0.0	0.0	0.0	0 0	0 0
168,000	52,095	(115,905)	0	0	0	0	0	0	0	0	0	58,800	25,235	(33,565)	0	0	0	0	0	0
133,266	20,560	(112,707)	0	0		0	0	0	0	0	0	33,816	10,837	(22,979)	0	0	0	0	0	0
$160,725.95	($252,872.46)	($413,598.41)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	($32,049.32)	$55,110.80	$87,160.11	$0.00	$0.00	$0.00	$0.00	TRADE SECRET DATA ENDS] $0.00	$0.00
$174,003.06	($271,735.67)	($445,738.74)	$92,327.71	$2,124,211.23	$2,031,883.53	$111,922.16	$0.00	($111,922.16)	$4,859.06	($3,890.94)	($8,750.00)	($39,865.97)	$59,663.07	$99,529.04	($32,939.02)	$7,264.49	$40,203.51	$218,280.48	TRADE SECRET DATA ENDS] $0.00	($218,280.48)

Jun-24			Jul-24			Aug-24			Sep-24			Oct-24			Nov-24			Dec-24		
Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)
464	464		464	464		464	464		464	464		464	464		464	464		464	464	
10	00	(1 0)	10	18	0.8	1.0	0.0	(1.0)	10	15	0.5	10	20	1.0	1.0	0.0	(1.0)	1.0	49	39
13,073	0	(13,073)	13,508	15,781	2,273	13,508	0	(13,508)	13,073	12,570	(503)	13,508	12,106	(1,402)	13,073	0	(13,073)	13,508	54,173	40,665
10,370	0	(10,370)	13,508	11,690		13,508	0	(13,508)	8,135	7,938	(197)	7,768	7,785	17	13,073	0	(13,073)	10,433	26,353	15,920
$5,076.64	$0.00	($5,076.64)	$74,208.73	$2,022,184.20	$1,947,975.47	$93,195.55	$0.00	($93,195.55)	($4,364.05)	$10,217.26	$14,581.31	($14,678.06)	($28,725.83)	($14,047.77)	($41,864.70)	$0.00	$41,864.70	$197,528.93	TRADE SECRET DATA ENDS] $655,106.85	$457,577.92
00	00	00	00	00	0.0	0.0	0.0	0.0	70	00	(7.0)	00	58	5.8	0.0	0.0	0.0	0.0	00	00
0	0	0	0	0	0	0	0	0	77,952	0	(77,952)	0	47,813	47,813	0	0	0	0	0	0
0	0	0	0	0		0	0	0	48,506	0	(48,506)	0	17,806	17,806	0	0	0	0	0	0
	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	($26,022.04)	$0.00	$26,022.04	$0.00	$3,682.53	$3,682.53	$0.00	$0.00	$0.00	$0.00	TRADE SECRET DATA ENDS] $0.00	$0.00
$5,076.64	$0.00	($5,076.64)	$74,208.73	$2,022,184.20	$1,947,975.47	$93,195.55	$0.00	($93,195.55)	($30,386.08)	$10,217.26	$40,603.35	($14,678.06)	($25,043.31)	($10,365.24)	($41,864.70)	$0.00	$41,864.70	$197,528.93	TRADE SECRET DATA ENDS] $655,106.85	$457,577.92

Jun-24			Jul-24			Aug-24			Sep-24			Oct-24			Nov-24			Dec-24		
Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)	Forecast	Actual	Difference Over/(Under)
$179,079.71	($271,735.67)	($450,815.38)	$166,536.43	$4,146,395.43	$3,979,858.99	$205,117.72	$0.00	($205,117.72)	($25,527.02)	$6,326.32	$31,853.35	($54,544.03)	$34,619.76	$89,163.79	($74,803.72)	$7,264.49	$82,068.21	$415,809.42	TRADE SECRET DATA ENDS] $655,106.85	$239,297.43

Unit	Event Type	Primary Reason for the Outage	Start Date/Time of Actual Outage	End Date/Time of Actual Outage	Description of Equipment Failure	Description of how Generation was restored	Steps taken to alleviate reoccurrence	Change in Energy
BEC 3	Unplanned Outage	Waterwall Tube Leak	1/7/24 14:25	1/9/24 14:02	Leak occurred where overlay stopped (stress riser).	Pad weld repair was done. Area was ultrasonically tested to inspect for weak spots.	The pad welded area cut out and replaced with a new waterwall panel during the spring 2024 outage.	$ 249,984
BEC 3	Unplanned Outage	Waterwall Tube Leak	2/19/24 23:02	2/21/24 14:37	Waterwall tube leak in the coutant bottom due to high erosion.	Leak was pad welded. Visually inspected with no other issues.	Continue to routinely inspect during outages for signs of fatigue or erosion.	$ 26,230
BEC 4	Unplanned Outage	4C Boiler Circulating Pump Removal	2/22/24 0:30	2/24/24 19:27	Vibration induced wear failure on 4C Boiler Circulating Pump.	The pump was removed and a blank was put in its place.	Additional monitoring, alarm, and permissive set points have been added to allow for earlier detection and possible prevention of cavitation.	$ (38,530)
BEC 3	Unplanned Outage	Waterwall Tube Leak	3/12/24 17:58	3/14/24 12:30	Waterwall tube leak due to thermal fatigue.	Leak was weld repaired due to planned replacement with intent to replace during the planned outage.	During spring 2024 outage, the area was completely replaced with new tubes.	$ 365
BEC 3	Unplanned Outage	Generator Bore Copper Repair	6/19/24 23:59	7/25/24 15:33	See Supplement to Attachment 5	See Supplement to Attachment 5	See Supplement to Attachment 5	$ 2,105,348
BEC 4	Unplanned Outage	ID Fan 4B Trip	7/9/24 15:08	7/11/24 9:48	See Supplement to Attachment 5	See Supplement to Attachment 5	See Supplement to Attachment 5	$ 2,022,184
BEC 3	Unplanned Outage	FD Fan Damper Repair	8/17/24 0:01	8/17/24 17:30	Linkage pin broken or missing for 3A FD fan inlet damper linkage.	Linkage pin was replaced and fan was put back in service.	Continue to follow routine FD fan inlet damper systems PMs during outages.	$ -
BEC 4	Unplanned Outage	Leak on 4A Boiler Feed Pump Recirc Line to Deaerator	9/13/24 10:04	9/14/24 22:50	A pinhole leak developed on the 4A Boiler Feed Pump (BFP) recirculation line.	The leak was padwelded.	Ultrasonically tested both lines. A detailed inspection of the line and two other similar lines was performed to verify there is no immediate risk for other leaks. A project to replace about 8 feet of these lines with a more wear resistant material is planned for a future outage of sufficient length in the next budget year cycle.	$ 10,217
BEC 3	Unplanned Outage	Waterwall Tube Leak	9/19/24 1:46	9/20/24 6:24	Waterwall tube leak due to thermal fatigue.	Tube was sectioned out and repaired externally. Boiler membrane had to be cut out to make repairs.	Corners #1 & #2 were replaced so similar failure could happen in each corner.	$ (3,891)
BEC 4	Unplanned Outage	Reheat Tube Leak	10/13/24 11:57	10/14/24 0:01	Reheat tube leak caused by thermal fatigue.	Cut out section and replaced with new tube. Four other padweld repairs performed due to collateral damage .	A thorough inspection is planned during the next planned outage of sufficient duration to look for any additional damage due to similar failure mode.	$ (14,979)
BEC 3	Unplanned Outage	3A Boiler Circulation Pump Leak	10/15/24 16:21	10/16/24 23:47	3A and 3C leaks on injection water supply nozzle, socket welds.	Repaired both pumps.	To reduce pipe strain due to thermal growth and weld design, an alternative piping design will be implemented on future pump rebuilds/replacements.	$ 4,552
BEC 4	Unplanned Outage	Steam Leak on Main Steam Line Drain	10/19/24 20:50	10/21/24 7:40	Leak developed in the body of a main steam drain valve.	The valve was replaced.	The leak is likely due to the body being washed away (steam cut) because of the seats leaking or the valve not being tightly closed. This drain line goes to the condenser.	$ (13,747)
BEC 3	Unplanned Outage	Superheat Tube Leak	11/6/24 16:49	11/8/24 6:51	Superheat tube thermal fatigue cracking.	Damaged tube area was sectioned out for replacement.	Inspection and repair of this superheat section will occur at next opportunity.	$ 7,526
BEC 3	Unplanned Outage	High Vibration Turbine Bearing #7	11/11/24 3:02	11/13/24 20:53	Inspection of the bearing revealed no damage, however the bearing loading was at 50% of the design load.	Re-shimmed the #7 bearing pedestal to increase the loading.	Bearing loading was increased and vibration levels dropped.	$ (262)
BEC 4	Unplanned Outage	Reheat Tube Leak	12/17/24 9:17	12/20/24 2:08	Thermal fatigue in the primary reheat section.	Tube section cut out and replaced, padwelded collateral damage leaks.	Area to be reinspected during a longer outage.	$ 342,236
BEC 4	Unplanned Outage	Reheat Tube Leak	12/20/24 13:43	12/22/24 15:08	Thermal fatigue in the secondary reheat section.	Tube section cut out and replaced, padwelded collateral damage leaks.	Area to be reinspected during a longer outage.	$ 312,870

Supplement to Attachment 5 – 2024 Unplanned Outages

Boswell Unit 3 Generator Bore Copper Repair
Outage Date: 6/19/24

Equipment or Condition that Resulted in the Outage
The scheduled Unit 3 planned outage scope included performing OEM and insurance recommended inspection of the generator. During the planned generator inspections, the generator bore copper was found damaged. The repairs to the generator bore copper along with replacement of hydrogen seals resulted in the planned outage being extended approximately 5 weeks.

Description of Equipment Failure (including identified root cause)
The damage found to the generator bore copper was normal wear and tear over the last 50 years per the OEM. The inspection performed served its intended purpose by identifying potential failure modes that could have resulted in a longer unplanned outage.

To address safety concerns related to the damage identified and to avoid a catastrophic failure resulting in more damage and a longer unplanned shutdown, the planned outage was extended approximately 2 weeks to make the repairs to the bore copper. Repair rather than replacement expedited the unit's return to service by at least 10-12 weeks (per the OEM) due to lead times on equipment delivery.

During start-up, the unit experienced issues maintaining the appropriate hydrogen pressure. It was discovered that the re-furbished hydrogen seals need to be replaced. This resulted in additional delay of start-up following the scheduled planned outage.

Actions to Prevent Reoccurrence

1. Generator Bore Copper - repairs were made extending the planned outage to prevent a catastrophic failure resulting in a future longer unplanned outage. The scope of repairs included stripping the generator bore copper, fixing the stud threads and holes, adding additional silver plating to the new studs to ensure proper engagement, and reinsulating the bore copper.
2. Hydrogen Seals – The hydrogen seals were replaced. Generator air and gas seal spares were ordered and are now in inventory.

Change in Energy
$2,105,348

Supplement to Attachment 5 – 2024 Unplanned Outages

Boswell 4 ID Fan 4B Trip
Outage Date: 7/9/24

Equipment or Condition that Resulted in the Outage
An external boiler pressure leak due to a flange/gasket failure on the 6" Boiler Drain Line resulted in an emergency shutdown of BEC4 on 7/9/24 at 15:08.

Description of Equipment Failure (including identified root cause)
During a restart of 4B ID Fan on BEC4, a Master Fuel Trip of the BEC4 Boiler occurred due to excessive boiler draft while trying to add the ID Fan into service. The unit lost its ability to control water levels in the boiler due to a 2" drain malfunction. To regain control of the boiler drum and prevent water entrainment into the Turbine, the 6" drain was opened and quickly developed a flange leak due to a failed gasket. Due to the external high-pressure leak, the Turbine was tripped to allow for the boiler to be safely depressurized resulting in the outage. Forced cooling was initiated as soon as the unit came offline. Once the boiler was cool enough to be drained, the lower drum was opened for inspection of the 2" drain. The 2" drain line was found to be plugged with debris/sludge which would not let it drain and therefore created the drum level out of sight high condition.

Actions to Prevent Reoccurrence

- Root cause action
    - The 2" drain line was cleaned and drain valves were replaced. A twice annual preventative maintenance task has been created to ensure any debris in the lower drum is cleaned out to prevent this drain from becoming plugged in the future.
- Contributing cause action
    - An ID Fan Restart Permissive was installed to ensure boiler load and boiler draft are at an acceptable range prior to restart.

Change in Energy
*$2,022,184

Minnesota Power's
Annual Ancillary Services, Market Charges and Summary
January 2024 through December 2024

Overview

Minnesota Power has been participating in Midcontinent ISO's (MISO) Ancillary Service Market (ASM) since it started on January 6, 2009. Since market start, Minnesota Power has not seen any major changes to operation or clearing our units for energy in the market. We have had some additional opportunities in the ASM to optimize generation portfolio revenues by providing regulation and spinning reserve without creating a negative impact on available energy necessary to meet customer needs.

Spinning Reserves

Currently, Minnesota Power has 7 generating resources that are qualified to supply energy, regulation, and spinning reserves service for MISO. Under normal operating conditions Minnesota Power has the potential of carrying approximately 92 MW of spinning reserves above the cruise operating level on these generation facilities without reducing energy available for customers. Prior to the ASM, Minnesota Power's share of the spinning reserves obligation was 21 MW. Under ASM, Minnesota Power can currently clear up to approximately 10 MW of spinning reserves on thermal generation without impacting energy availability. The additional ancillary service revenues reduce overall customer costs because the spinning reserve revenues are allocated to the FAC through our MISO allocation process.

The ASM has also added value for customers when generating units have backed down to minimum generation levels due to low energy prices. The generators can be backed down and still provide spinning reserves at the lower operating levels. MISO could also back down generation to acquire the market's required spinning reserves, however to date Minnesota Power's thermal generators have been almost exclusively selected to supply energy and have not been backed down to supply spinning reserves.

Including ASM charge type impact only, MISO's Spinning Reserves process had a net gain of $189,524.89 for January 2024 through December 2024. The Spinning Reserve costs and revenues are provided in Table 6-A.

Supplemental Reserves

Minnesota Power's cost allocation for supplemental reserves was $73,573.30 for January 2024 through December 2024. Prior to the ASM, Minnesota Power utilized interruptible loads at our large power customers to cover our supplemental reserves requirements. Due to low prices for this product under ASM, Minnesota Power has elected not to offer MISO supplemental reserves from our large industrial customers because the benefit is too small for the risk it provides to our customers. The impact to our customers due to lost production if interrupted for deployment of supplemental reserves greatly exceeds the cost of purchasing supplemental reserves from MISO. Minnesota Power will continue to monitor prices and work with customers as conditions change to see if supplying

additional supplemental reserves is appropriate in the future. The Supplemental Reserve costs and revenues are provided in Table 6-A.

Regulation

Prior to ASM, Minnesota Power scheduled approximately 8 MW of regulation on our system on an hourly basis to meet Balancing Authority control performance criteria requirements. Under ASM, Minnesota Power units are only selected by MISO for regulation when it is cost effective. Most of the time our units are cleared for energy instead of being held back to provide the 8 MW we used to reserve for regulation. Under ASM, due to regulation clearing and our ability to purchase affordable regulation service, we have more economic energy available from our low cost generation facilities to serve our customers. Including ASM charge type impact only, MISO's Regulation process had a net gain of $91,188.81 for January 2024 through December 2024. The Regulation costs and revenues are provided in Table 6-A.

ASM Charge Summary

Operation in the ASM market has been smooth and there continues to be a positive economic benefit for Minnesota Power's customers. We are now able to maximize the capabilities of our units to a greater extent, which ultimately has led to greater operational efficiencies for Minnesota Power. We have developed many tools and reports to track the benefit of the ASM on a unit by unit and day by day basis. Our overall strategy is to continue to develop strategies in the ASM that have a positive impact for our customers.

Minnesota Power reviews all MISO charges and credits including ASM charge types on a daily basis. Table 6-A provides the January 2024 through December 2024 summary of ASM hourly charges which had a net loss of $158,250.29. Minnesota Power allocates all ASM charges in the same manner as it has allocated MISO Day 2 charge types – on a per MWh approach netting costs and benefits of the various charges. During January 2024 through December 2024, a net loss of $308,214.98 was allocated to the Retail FAC.

Table 6-B provides a summary of January 2024 through December 2024 hourly MWh related to ASM products. The table provides Minnesota Power's net position for each of the three ASM products which indicate that Minnesota Power was a net buyer of Supplemental Reserves and a net seller of Regulation and Spin Reserves for January 2024 through December 2024.

Schedule 17 Costs

MISO took on additional responsibilities with the start of the ASM and related to the increased systems responsibilities and analysis; additional costs were incurred at MISO. These costs were recovered from Market Participants including Minnesota Power through increased Schedule 17 charges. Table 6-C provides a summary of the Schedule 17 costs before and after the start of ASM. Prior to the start of ASM, Schedule 17 rates averaged $0.07223 for an average monthly billing of $140,922.50 per month. For January 2024

through December 2024, the Schedule 17 rate averaged $0.08828 for an average monthly billing of $163,903.00.

Contingency Reserve Deployment Failure Charge (CRDFC)

For the period of January 2024 through December 2024, Minnesota Power incurred $1,851.84 of CRDFC. This charge occurred on four operating days as shown in Table 6-E. The shortfall MWhs totaled 65.2 for an average cost of $28.40 per MWh of shortfall.

During all other CRD events, Minnesota Power's generating units responded to the reserve deployments; however, in this instance Minnesota Power fell short of delivering 100 percent of the energy requested.

Real Time Excessive Deficient Energy Deployment Charge Amount (EDEDC)

For the period of January 2024 through December 2024, Minnesota Power incurred $343,920.86 in EDEDC as shown in Table 6-A. The majority of the instances when EDEDC occurs are from Failure Mileage Charge and Flag instances which are when a unit fails a Regulation Mileage Performance Test for 4 consecutive intervals within one hour.

Table 6-A: Summary of ASM Charge Types

	Jan-24	Feb-24	Mar-24	1st Quarter 2024 Total	Apr-24	May-24	Jun-24	2nd Quarter 2024 Total	Jul-24	Aug-24	Sep-24	3rd Quarter 2024 Total	Oct-24	Nov-24	Dec-24	4th Quarter 2024 Total	2024 Total
Day Ahead Regulation Amount	(20,190.16)	(32,216.00)	(56,894.66)	$ (109,300.82)	(64,048.74)	(56,322.41)	(59,629.75)	$ (180,000.90)	(58,029.36)	(104,440.55)	(111,774.34)	$ (274,244.25)	(131,682.46)	(114,514.89)	(112,275.63)	$ (358,472.98)	$ (922,018.95)
Real Time Regulation Amount	(19,481.09)	6,484.42	24,656.23	$ 11,659.56	32,538.98	24,413.36	22,044.87	$ 78,997.21	19,864.71	33,967.35	43,271.94	$ 97,104.00	61,001.77	30,796.83	13,248.23	$ 105,046.83	$ 292,807.60
Regulation Cost Distribution Amount	21,717.62	27,709.73	32,015.75	$ 81,443.10	31,217.90	34,608.67	36,565.29	$ 102,391.86	42,924.59	41,465.20	57,858.03	$ 142,247.82	70,745.29	69,824.97	71,369.50	$ 211,939.76	$ 538,022.54
Regulation SubTotal	**$ (17,953.63)**	**$ 1,978.15**	**$ (222.68)**	**$ (16,198.16)**	**$ (291.86)**	**$ 2,699.62**	**$ (1,019.59)**	**$ 1,388.17**	**$ 4,759.94**	**$ (29,008.00)**	**$ (10,644.37)**	**$ (34,892.43)**	**$ 64.60**	**$ (13,893.09)**	**$ (27,657.90)**	**$ (41,486.39)**	**$ (91,188.81)**
Day Ahead Spinning Reserve Amount	(54,699.31)	(31,461.18)	(26,019.40)	$ (112,179.89)	(29,216.25)	(42,995.00)	(34,638.36)	$ (106,849.61)	(55,249.98)	(34,974.48)	(54,927.87)	$ (145,152.33)	(75,545.20)	(34,998.33)	(46,359.77)	$ (156,903.30)	$ (521,085.13)
Real Time Spinning Reserve Amount	(2,404.86)	(10,144.44)	(8,979.84)	$ (21,529.14)	6,268.92	(784.59)	(6,733.72)	$ (1,249.39)	(4,177.03)	(3,107.20)	2,082.28	$ (5,201.95)	4,871.16	(16,044.03)	(6,590.40)	$ (17,763.27)	$ (45,743.75)
Spinning Reserve Cost Distribution Amount	25,790.71	21,792.20	28,413.69	$ 75,996.60	29,412.67	41,823.58	27,432.36	$ 98,668.61	29,622.24	23,408.87	29,423.11	$ 82,454.22	46,447.08	36,169.40	37,568.08	$ 120,184.56	$ 377,303.99
Spinning Reserve SubTotal	**$ (31,313.46)**	**$ (19,813.42)**	**$ (6,585.55)**	**$ (57,712.43)**	**$ 6,465.34**	**$ (1,956.01)**	**$ (13,939.72)**	**$ (9,430.39)**	**$ (29,804.77)**	**$ (14,672.81)**	**$ (23,422.48)**	**$ (67,900.06)**	**$ (24,226.96)**	**$ (14,872.96)**	**$ (15,382.09)**	**$ (54,482.01)**	**$ (189,524.89)**
Day Ahead Supplemental Reserve Amount	(1,044.42)	(0.02)	(0.13)	$ (1,044.57)	(8.28)	(94.01)	(48.87)	$ (151.16)	(3,983.67)	(3,815.21)	(3,151.35)	$ (10,950.23)	(71.06)	(532.42)	(726.83)	$ (1,330.31)	$ (13,476.27)
Real Time Supplemental Reserve Amount	(193.73)	(14.00)	(27.98)	$ (235.71)	(0.15)	16.43	63.01	$ 79.29	17,107.55	2,814.13	2,041.06	$ 21,962.74	172.36	128.22	530.98	$ 831.56	$ 22,637.88
Supplemental Reserve Cost Distribution Amount	4,072.25	3,109.99	5,891.27	$ 13,073.51	2,996.67	4,062.07	2,761.36	$ 9,820.10	13,794.71	6,661.77	5,201.91	$ 25,658.39	5,953.53	4,337.89	5,568.27	$ 15,859.69	$ 64,411.69
Supplemental Reserve SubTotal	**$ 2,834.10**	**$ 3,095.97**	**$ 5,863.16**	**$ 11,793.23**	**$ 2,988.24**	**$ 3,984.49**	**$ 2,775.50**	**$ 9,748.23**	**$ 26,918.59**	**$ 5,660.69**	**$ 4,091.62**	**$ 36,670.90**	**$ 6,054.83**	**$ 3,933.69**	**$ 5,372.42**	**$ 15,360.94**	**$ 73,573.30**
Contigency Reserve Deployment Failure Charge Amount	1,818.48	10.44	-	$ 1,828.92	-	-	-	$ -	22.92	-	-	$ 22.92	-	-	-	$ -	$ 1,851.84
Real Time Excessive Deficient Energy Deployment Charge Amount	26,422.18	11,371.30	20,841.96	$ 58,635.44	19,954.25	24,089.77	21,545.50	$ 65,589.52	29,120.90	46,251.46	30,475.04	$ 105,847.40	32,805.49	36,637.25	44,405.76	$ 113,848.50	$ 343,920.86
Net Regulation Adjustment Amount	1,094.07	(80.68)	352.05	$ 1,365.44	761.01	(6.71)	1,494.87	$ 2,249.17	2,906.48	3,577.00	3,599.82	$ 10,083.30	2,927.23	1,122.83	1,870.02	$ 5,920.08	$ 19,617.99
Other Charge SubTotal	**$ 29,334.73**	**$ 11,301.06**	**$ 21,194.01**	**$ 61,829.80**	**$ 20,715.26**	**$ 24,083.06**	**$ 23,040.37**	**$ 67,838.69**	**$ 32,050.30**	**$ 49,828.46**	**$ 34,074.86**	**$ 115,953.62**	**$ 35,732.72**	**$ 37,760.08**	**$ 46,275.78**	**$ 119,768.58**	**$ 365,390.69**
Total	**$ (17,098.26)**	**$ (3,438.24)**	**$ 20,248.94**	**$ (287.56)**	**$ 29,876.98**	**$ 28,811.16**	**$ 10,856.56**	**$ 69,544.70**	**$ 33,924.06**	**$ 11,808.34**	**$ 4,099.63**	**$ 49,832.03**	**$ 17,625.19**	**$ 12,927.72**	**$ 8,608.21**	**$ 39,161.12**	**$ 158,250.29**

Table 6-B: Summary of MWh of ASM products Purchased and Supplied

	Jan-24	Feb-24	Mar-24	1st Quarter 2024 Total	Apr-24	May-24	Jun-24	2nd Quarter 2024 Total	Jul-24	Aug-24	Sep-24	3rd Quarter 2024 Total	Oct-24	Nov-24	Dec-24	4th Quarter 2024 Total	2024 Total
Total MISO Reg Procured (MWh)	295,194.71	275,983.09	294,428.43	865,606.23	287,694.14	295,098.41	351,996.04	934,788.59	468,553.73	460,024.35	444,975.84	1,373,553.92	459,810.70	445,064.21	459,923.00	1,364,797.91	4,538,746.65
MP Share of Reg Procured by MISO	4,745.39	4,970.01	5,467.28	15,182.68	4,988.53	4,885.25	5,091.72	14,965.50	6,893.63	6,359.79	6,927.20	20,180.62	7,742.14	7,974.28	8,037.55	23,753.97	74,082.77
MP Supplied Reg Volume	2,620.00	4,398.30	5,996.60	13,014.90	6,156.60	5,246.50	6,185.20	17,588.30	6,350.40	8,926.40	9,470.20	24,747.00	10,866.60	9,403.00	8,288.50	28,558.10	83,908.30
MP Net Buyer or (Seller) of Regulation	**2,125.39**	**571.71**	**(529.32)**	**2,167.78**	**(1,168.07)**	**(361.25)**	**(1,093.48)**	**(2,622.80)**	**543.23**	**(2,566.61)**	**(2,543.00)**	**(4,566.38)**	**(3,124.46)**	**(1,428.72)**	**(250.95)**	**(4,804.13)**	**(9,825.53)**
Total MISO Spin Procured (MWh)	689,143.97	645,233.30	684,965.14	2,019,342.41	666,226.23	682,931.73	658,245.12	2,007,403.08	702,974.08	707,529.99	665,021.66	2,075,525.73	687,923.75	666,971.77	698,711.58	2,053,607.10	8,155,878.32
MP Share of Spin Procured by MISO	11,078.19	11,643.30	12,748.73	35,470.22	11,588.30	11,365.44	9,632.53	32,586.27	10,339.17	9,804.15	10,367.35	30,510.67	11,592.27	11,968.37	12,216.56	35,777.20	134,344.36
MP Supplied Spin Volume	23,686.60	18,771.90	10,818.60	53,277.10	10,900.90	10,965.70	10,377.70	32,244.30	17,899.90	16,709.30	16,865.00	51,474.20	17,329.60	12,787.90	13,842.40	43,959.90	180,955.50
MP Net Buyer or (Seller) of Spinning Reserves	**(12,608.41)**	**(7,128.60)**	**1,930.13**	**(17,806.88)**	**687.40**	**399.74**	**(745.17)**	**341.97**	**(7,560.73)**	**(6,905.15)**	**(6,497.65)**	**(20,963.53)**	**(5,737.33)**	**(819.53)**	**(1,625.84)**	**(8,182.70)**	**(46,611.14)**
Total MISO Supp Procured (MWh)	815,817.21	768,700.46	819,608.73	2,404,126.40	798,963.93	825,285.63	796,596.42	2,420,845.98	804,774.23	806,497.20	796,421.68	2,407,693.11	824,869.09	794,976.13	816,068.31	2,435,913.53	9,668,579.02
MP Share of Supp Procured by MISO	13,149.91	13,873.68	15,259.99	42,283.58	13,894.21	13,720.53	11,650.47	39,265.21	11,851.74	11,152.19	12,408.09	35,412.02	13,900.62	14,259.85	14,290.01	42,450.48	159,411.29
MP Supplied Supp Volume	360.00	-	-	360.00	27.00	6.70	-	33.70	550.60	1,008.40	350.20	1,909.20	-	122.10	117.20	239.30	2,542.20
MP Net Buyer or (Seller) of Supplemental Reserves	**12,789.91**	**13,873.68**	**15,259.99**	**41,923.58**	**13,867.21**	**13,713.83**	**11,650.47**	**39,231.51**	**11,301.14**	**10,143.79**	**12,057.89**	**33,502.82**	**13,900.62**	**14,137.75**	**14,172.81**	**42,211.18**	**156,869.09**

Negative numbers indicate a payment from MISO
Positive numbers indicate a charge from MISO

Table 6-C: Comparison of MISO Schedule 17 Rates and Amounts before and after the start of the ASM Market

Monthly Average Schedule 17	**Amount**	**Rate per MWh**
April 2005 through December 2008	$ 140,922.50	$ 0.07223
January 2024 through December 2024	$ 163,903.00	$ 0.08828
Average Monthly Increase	$ 22,980.50	$ 0.01605

Table 6-E: Contingency Reserve Deployment Events

Date	Day of Week	Node	Contingency Reserve Deployment Failure Charge Amount	HE	Shortfall MW	Event MW Provided	Event MW Requested
1/13/2024	Saturday	MP.HIBBAR4	$ 53.75	8	1.9	8.2	10.1
1/13/2024	Saturday	MP.THOMSON	$ 1,711.80	8	60.0	10.7	70.7
1/20/2024	Saturday	MP.HIBBAR4	$ 52.93	10	1.1	13.0	14.1
2/15/2024	Thursday	MP.HIBBAR3	$ 10.44	4	1.1	5.0	6.1
7/31/2024	Wednesday	MP.HIBBAR4	$ 22.92	2	1.1	11.0	12.1
		Total	**$ 1,851.84**		**65.2**		**$ 28.40**

Wind Curtailment Reporting:

Oliver I and II
Docket No. E015/M-05-975

Bison Wind Energy
Docket No. E015/M-11-234
Docket No. E015/M-11-626

Nobles 2 Wind Energy
Docket No. E015/M-18-545

Minnesota Power
Wind Energy Purchase Agreement with FPL
Docket No. E015/M-05-975
Dated December 20, 2005

	Oliver County I			
	FPL Wind Energy in FAC (MWh)	Curtailments of Wind Energy MWh	Curtailment Payments by MP	Reason Codes
	[TRADE SECRET DATA BEGINS			
January 2024	[redacted]			2
February 2024				2
March 2024				2
April 2024				2
May 2024				2
June 2024				2
July 2024				2
August 2024				2
September 2024				2
October 2024				2
November 2024				2
December 2024				2
Total				

TRADE SECRET DATA END]

1. Minnesota Power's refusal to accept Contract Energy at the Point of Delivery as a result of low load conditions that justify not accepting Contract Energy; or
2. The availability of less expensive energy from another source; or
3. Minnesota Power's election to use non-firm transmission services to deliver Contract Energy.

Minnesota Power
Wind Energy Purchase Agreement with FPL
Docket No. E015/M-05-975
Dated December 20, 2005

	Oliver County II			
	FPL Wind Energy in FAC (MWh)	Curtailments of Wind Energy MWh	Curtailment Payments by MP	Reason Codes
	[TRADE SECRET DATA BEGINS			
January 2024	[redacted]			2
February 2024				2
March 2024				2
April 2024				2
May 2024				2
June 2024				2
July 2024				2
August 2024				2
September 2024				2
October 2024				2
November 2024				2
December 2024				2
Total				

TRADE SECRET DATA END]

1. Minnesota Power's refusal to accept Contract Energy at the Point of Delivery as a result of low load conditions that justify not accepting Contract Energy; or
2. The availability of less expensive energy from another source; or
3. Minnesota Power's election to use non-firm transmission services to deliver Contract Energy.

Minnesota Power
Bison Wind Energy Curtailment Reporting
Docket No. E015/M-09-285; Dated
Docket No. E015/M-11-234; Dated September 8, 2011
Docket No. E015/M-11-626; November 2, 2011

	Bison	
	Delivered MWh	Lost MWh
	[TRADE SECRET DATA BEGINS	
January 2024		
February 2024		
March 2024		
April 2024		
May 2024		
June 2024		
July 2024		
August 2024		
September 2024		
October 2024		
November 2024		
December 2024		
Total		

TRADE SECRET DATA END]

Minnesota Power
Wind Energy Purchase Agreement with Nobles 2
Docket No. E015/M-18-545
Dated January 23, 2019

	Nobles 2		
	Nobles Wind Energy in FAC (MWh)	Curtailments of Wind Energy MWh	Curtailment Payments by MP
	[TRADE SECRET DATA BEGINS		
January 2024			
February 2024			
March 2024			
April 2024			
May 2024			
June 2024			
July 2024			
August 2024			
September 2024			
October 2024			
November 2024			
December 2024			
Total			

TRADE SECRET DATA END]

Offsetting Revenues and/or Compensation Received by Investor-Owned Utilities (IOUs)

Docket No. E999/AA-10-884

Minnesota Power's Offsetting Revenues

For the Reporting Period of January 1, 2024 through December 31, 2024

[TRADE SECRET DATA BEGINS		
Source	**MWh**	**Offsetting Revenues /1**
[redacted]		
		TRADE SECRET DATA ENDS]

/1 The costs associated with the Contract MWh used to support the sales shown above were included in the "Less Fuel Costs Recovered through Inter System Sales" line in the Fuel Clause calculation. The revenues associated with all purchased power contracts except for Wing River, Oliver County I, and Oliver County II, are for the sale of purchases that were no longer needed to cover load. The margins from these sales were passed through to the ratepayers in the Fuel Clause.

Generation Facilities Maintenance Expense

Docket No. E999/AA-06-1208, dated February 6, 2008

Minnesota Power
AAA Compliance Filing
Summary of Generation Maintenance Expenses

Steam Power Generation Maintenance	FERC Acct	Final Rates Test Year 2024 Docket No. E015/GR-23-155 [1]	2024 Actual Expenses [2]
Maintenance Supervision and Engineering	510	$3,345,196	$3,023,574
Maintenance of Structures	511	$564,519	$907,933
Maintenance of Boiler Plant	512	$11,201,851	$9,965,135
Maintenance of Electric Plant	513	$1,910,524	$341,244
Maintenance of Misc. Steam Plant	514	$2,863,860	$4,661,826
Sub-Total Steam Power		$19,885,950	$18,899,712
Hydraulic Power Generation Maintenance			
Maintenance Supervision and Engineering	541	$375,188	$218,600
Maintenance of Structures	542	$12,076	$14,386
Maintenance of Reservoirs, Dams and Waterways	543	$1,182,237	$1,235,761
Maintenance of Electric Plant	544	$905,705	$785,317
Maintenance of Misc. Hydraulic Plant	545	$1,265,144	$975,104
Sub-Total Hydraulic Power		$3,740,350	$3,229,168
Other Power Generation - Wind Maintenance			
Maintenance of Generating and Electric Plant	553	$11,665,405	$11,586,187
Maintenance of Misc. Other Pwr Generation Plt.	554	$3,142,290	-$9,919,041
Sub-Total Other Power - Wind		$14,807,695	$1,667,146
TOTAL		$38,433,995	$23,796,026

[1] Docket E015/GR-23-155
[2] 2024 report run 01/24/2024 by Accounting

Minnesota Power
Docket GR-23-155
FINAL 2024 General Rates

Utility Operating Expense Operations & Maintenance Exp.	FERC Acct No.	Total Company Approved 2024 Cost of Service Model	MN Jurisdiction Approved 2024 Cost of Service Model
Steam Production Demand			
Supervision & Engineering	500	$6,501,221	$5,708,843
Steam Expenses	502	$5,411,982	$4,752,362
Steam Expense - Envir/Ash Systems	502.1	$8,852,113	$7,773,204
Electric Expenses	505	$1,611,363	$1,414,968
Miscellaneous	506	$686,830	$603,118
Allowences	509	$10,763,360	$9,451,506
Maint. Structures	511	$564,519	$495,715
Misc Maint Plant	514	$2,863,860	$2,514,809
Total Demand Steam Production		$37,255,248	$32,714,524
Steam Production Energy:			
Maint. Supervision & Engineering	510	$3,345,196	$2,937,479
Maint. Boiler Plant	512	$5,007,423	$4,397,111
Maint. Boiler Plant - Outage	512.01	$4,399,960	$3,863,686
Maint. Boiler Plant - Envir/Ash Systems	512.1	$1,794,468	$1,575,756
Main. Electric Plant	513	$1,645,444	$1,444,895
Main. Electric Plant - Outage	513.01	$265,080	$232,772
Total Steam Energy		$16,457,571	$14,451,698
Total Steam - Compliance Schedule 7 - Line 13		$53,712,819	$47,166,222

Utility Operating Expense Operations & Maintenance Exp.	FERC Acct No.	Total Company Approved 2024 Cost of Service Model	MN Jurisdiction Approved 2024 Cost of Service Model
Hydro Production:			
Demand			
Operations Supervision & Engineering	535	$1,021,792	$889,532
Hydraulic Expenses	537	$936,982	$815,700
Miscellaneous	539	$62,009	$53,983
Maintenance Supervision & Engineering	541	$375,188	$326,624
Maint. Structures	542	$12,076	$10,513
Total Demand Hydro		$2,408,047	$2,096,352
Energy			
Maintenance of Reservoirs, Dams, and Waterways	543	$1,182,237	$1,029,209
Electric Plant	544	$905,705	$788,471
Maintenance of Misc Hydro Plant	545	$1,030,236	$896,883
Maintenance of Rec Facilities	545.2	$234,908	$204,502
Total Energy Hydro		$3,353,086	$2,919,066
Total Hydro - Compliance Schedule 7 - Line 14		$5,761,133	$5,015,418
Other Power Generation (Wind Production)			
Operation & Engineering	546	$636,286	$564,080
Generation Expenses	548	$208,000	$184,396
Misc. Other Power Generation Expenses	549	$1,419,369	$1,258,299
Rents	550	$3,425,847	$3,037,082
Maintenance of Generating and Electric Plant	553	$11,665,405	$10,341,615
Maintenance of Misc. Other Power Generation Plt.	554	$3,142,290	$2,785,703
Total Wind - Compliance Schedule 7 - Line 15		$20,497,197	$18,171,175
Other Power Supply- Demand			
System Control & Load Dispatching	556	$287,920	$255,247
Other Expenses	557	$1,413,020	$1,252,670
Total OPS - Compliance Schedule 7 - Line 17		$1,700,940	$1,507,917

Utility Operating Expense Operations & Maintenance Exp.	FERC Acct No.	Total Company Approved 2024 Cost of Service Model	MN Jurisdiction Approved 2024 Cost of Service Model
Purchased Power			
Demand	555	$72,141,496	$63,954,879
Energy	555	$286,503,520	$246,135,174
Total Purchased Power - Compliance Schedule 7 - Line 18		$358,645,016	$310,090,053
Fuel			
Fuel	501	$137,790,866	$118,376,133
Total Fuel - Compliance Schedule 7 - Line 19		$137,790,866	$118,376,133
Total Production		$578,107,971	$500,326,918
Compliance Schedule 7 - Line 20		$578,107,971	$500,326,918

Note: Classification of expenses between demand and energy are based on FERC methodology used in prior rate cases. Accounts 501,510,512,513, & 544 are energy related, all others are demand.

Transmission Operation			
Operation Supervision & Engineering	560	$4,586,878	$3,805,743
Load Dispatching -Reliability	561.1	$1,776,233	$1,473,745
Load Disp.-monitoring/operate trans sys.	561.2	$4,937,364	$4,096,542
Scheduling, system control & dispatch	561.4	$2,221,766	$1,843,404
Reliability, Planning & Stds. Develop.	561.5	$847,388	$703,080
Reliability, Planning & Stds. Develop.	561.8	$159,750	$132,545
Station Expenses	562	$120,998	$100,392
Transmission of Electricity by Others	565	$32,955,514	$27,343,266
Miscellaneous Transmission Expenses	566	$714,562	$592,874
Rents	567	$3,166,496	$2,627,249
Total Operation		$51,486,949	$42,718,841
Transmission Maintenance			
Supervision & Engineering	568	$4,418	$3,666
Maint Communications Equip.	569.3	$2,319,774	$1,924,722

Utility Operating Expense	FERC	Total Company Approved 2024 Cost of	MN Jurisdiction Approved 2024 Cost of
Operations & Maintenance Exp.	Acct No.	Service Model	Service Model
Station Equipment	570	$5,004,032	$4,151,857
Overhead Lines	571	$1,687,567	$1,400,178
Overhead Lines - ROW Veg Ctl Only	571.01	$3,617,701	$3,001,615
Total Maintenance		$12,633,492	$10,482,037
Total Transmission - Compliance Schedule 7 - Line 21		$64,120,441	$53,200,878
Distribution Operation			
Supervision & Engineering	580	$1,108,924	$1,046,505
Load Dispatching	581	$525,100	$495,543
Overhead Line Expenses	583	$235,130	$221,895
Underground Line Expenses	584	$77,782	$73,404
Street Lighting & Signal Systems	585	$123,564	$116,609
Meters	586	$1,757,326	$1,736,986
Miscellaneous	588	$5,991,157	$5,653,925
Rents	589	$78,664	$74,236
Total Operation		$9,897,647	$9,419,102
Distribution Maintenance			
Supervision & Engineering	590	$967,344	$912,894
Station Equipment	592	$3,000	$2,831
Overhead Lines	593	$6,662,000	$6,287,008
Overhead Lines - ROW Veg Ctl Only	593.01	$8,652,376	$8,165,349
Underground Lines	594	$1,844,414	$1,740,595
Street Lighting& Signal Systems	596	$32,562	$30,729
Miscellaneous	598	$1,267,340	$1,196,004
Total Maintenance		$19,429,036	$18,335,410
Total Distribution - Compliance Schedule 7 - Line 22		$29,326,683	$27,754,513
Customer Accounts Expenses			
Supervision	901	$55,874	$55,394
Meter Reading Expenses	902	$413,946	$410,389

Utility Operating Expense	FERC	Total Company Approved 2024 Cost of	MN Jurisdiction Approved 2024 Cost of
Operations & Maintenance Exp.	Acct No.	Service Model	Service Model
Customer Records & Collection Exp	903	$5,205,364	$5,160,629
Uncollectible Accounts	904	$1,261,712	$1,250,869
Total Cust Accounts - Compliance Schedule 7 - Line 23		$6,936,896	$6,877,280
Customer Service & Info			
Customer Assistance Expenses	908	$1,790,342	$1,775,295
Informational & Instructional Advertising	909	$18,389	$18,234
Total Cust Service & Info - Compliance Schedule 7 - Line 24		$1,808,731	$1,775,295
Conservation Improvement Program			
Customer Assistance Exp-CIP	908.06	$12,531,684	$12,531,684
Total CIP - Compliance Schedule 7 - Line 25		$12,531,684	$12,531,684
Sales			
Advertising Expenses	913	$24,373	$24,373
Total Sales - Compliance Schedule 7 - Line 26		$24,373	$24,373
Administration & General			
A & G-Compensation & Other Expenses	920	$34,744,406	$30,865,761
Outside Services Employed	923	$20,000	$17,800
Property Insurance	924	$6,849,536	$6,041,426
Injuries and Damages	925	$6,065,864	$5,398,634
Injuries and Damages - Offset	925.99	-$641,862	-$571,259
EP&B - Life Insurance Expense	926.01	$205,523	$182,916
EP&B - Flexible Dollars	926.02	$1,293,897	$1,151,571
EP&B - Tuition Reimbursement	926.03	$84,993	$75,644
EP&B - Dental Plan	926.04	$632,520	$562,944
EP&B - Medical Plan	926.05	$10,507,656	$9,351,839
EP&B - ESOP ($75M)	926.06	$10,464,830	$9,313,724
EP&B - Pension Plan	926.08	$5,762,980	$5,129,066

Utility Operating Expense	FERC	Total Company Approved 2024 Cost of	MN Jurisdiction Approved 2024 Cost of
Operations & Maintenance Exp.	Acct No.	Service Model	Service Model
EP&B - EIP Survivor Benefits	926.09	$85,680	$76,255
EP&B - Other - Misc.	926.1	$67,416	$60,000
EP&B - FAS106-Post Retire. Ben.-Dental	926.11	-$636,607	-$566,582
EP&B - FAS106-Post Retire. Ben.-Life Insur.	926.12	$207,960	$185,085
EP&B - FAS106-Post Retire. Ben.-Medical	926.13	-$8,695,572	-$7,739,081
EP&B - FAS112-Post Employ Benefits	926.14	$1,079,004	$960,316
EP&B - upp. Exec. Retire. Plan	926.15	$299,790	$266,814
EP&B - Transfer Credit #1	926.99	-$24,276,469	-$21,606,116
Franchise Requirements	927	$26,856	$26,856
Regulatory Commission Expenses	928	$5,224,793	$4,527,529
General Advertising Expenses	930.1	-$29,654	-$26,392
Misc General Expenses	930.2	$134,604	$119,798
Stockholders Meetings Expenses	930.23	$3,048	$2,713
Bd of Directors'' Fees and Expenses	930.24	$1,531,642	$1,363,165
Public Notices & Reports-Financial/Other	930.25	$185,434	$165,037
Maint of General Plant	935	$21,571,981	$19,199,115
TEMP - EV PROGRAM	EMP - EV PROGRAM	$204,399	$193,775
Total Admin & Gen - Compliance Schedule 7 - Line 27		$72,974,647	$64,728,354
Charitable Contributions			
Donations	426.10	$257,786	$229,430
Total Sales - Compliance Schedule 7 - Line 28		$257,786	$229,430
Interest on Customer Deposits			
Retail Interest Expense for Customer Deposits	431	$2,520,000	$2,520,000
Total Interest - Compliance Schedule 7 - Line 29		$2,520,000	$2,520,000
Grand Total - Operations & Maintenance Exp.		$768,609,212	$669,968,725
Compliance Schedule 7 - Line 30		**$768,609,212**	**$669,968,725**

Fuel & Energy Source Procurement and Energy Dispatching Policies

Minn. Rule 7825.2800

I. Fuel Source Procurement Policies

Fuel Cost Minimization Activities

Minnesota Power's fuel procurement practices are aimed at strategically minimizing our customers' current energy costs while complying with current environmental regulations and, simultaneously, taking action to assure cost-effective compliance with future environmental requirements. Attaining these objectives requires that purchases and sales of energy, applicable coal and rail contract provisions, current and projected emissions, mine plans of our suppliers, requirements of customers, fuel delivery schedules, fuel inventory, fuel and rail costs, etc., be continuously evaluated. Balancing these parameters requires superimposing long- and short-term planning objectives on near-term operations.

In addition, Minnesota Power uses a multi-discipline fuels procurement and strategy team to achieve fuel cost minimization and environmental compliance objectives. The team meets regularly to coordinate all activities related to fuel procurement. Objectives include:

- Implement strategies for short- and long-term fuel procurement which provide a high-quality, flexible, and reliable fuel supply to Minnesota Power facilities to achieve the lowest attainable electric rates.

- Optimize fuel costs and quality through developing, implementing and managing the short-term strategy for fuel scheduling and deliveries within operating and contract parameters.

- Environmental compliance planning efforts focus on the formulation, implementation and minimization of short- and long-term corporate strategies for fuel quality issues and the impact of fuel on plant performance and compliance with existing and emerging environmental regulations.

Energy Source Procurement and Dispatching Policies

Short Term Activities

The Midcontinent Independent System Operator ("MISO") is a fully integrated regional transmission organization that operates a Day-Ahead Energy and Ancillary Services Market, a Real-Time Energy and Ancillary Services Market, a Financial Transmission Rights ("FTR") Market, and a Planning Resource Auction for capacity.

Minnesota Power's generation resources, load, and transmission assets are located within the MISO footprint and are part of the MISO market. The MISO markets are used to balance generation with load and to hedge congestion between generation and load. There are a variety of tools that Minnesota Power uses to help with analysis and participation in the MISO market. Minnesota Power offers to sell energy and ancillary services sourced from its supply resources and bids to buy energy to serve load in the MISO market each day. MISO procures enough market ancillary service products to meet the needs of the entire footprint and the Company is allocated its load ratio share of the costs to procure the needed ancillary services. If market clearing prices are above Minnesota Power's generator offer prices, Minnesota Power generation will be selected to serve load. If market prices are below the generator offers, other lower cost resources will be selected to serve Minnesota Power's load, and the Company's generation will be backed down. The Company also looks to buy energy in the short-term bilateral market when there is an energy need and purchases can be made below expected MISO day-ahead costs.

Medium Term Activities

Minnesota Power uses a production cost model to determine its forward monthly energy position. Model inputs include forecasted customer loads, generator capabilities, contract energy purchases and sales, forward energy prices, planned generator outages, and forced and maintenance outage rates. Inputs are updated and the model is run periodically to determine Minnesota Power's forward energy position.

Planned generator outages are usually planned two years in advance. When a significant energy deficit is identified, the Company monitors the wholesale market for least cost

supply opportunities and enters into bilateral purchases to maintain volumetric position limits as outlined in Minnesota Power's Power Marketing Risk Management Policy. If forward energy prices drop below forecasted spot market prices the entire short position could be covered with a bilateral purchase prior to the start of the outage. If lower cost energy is available in the areas that border the MISO north region, Minnesota Power may choose to use bilateral purchases from those border areas to cover a generator outage.

II. Summary of Fuel Contracts

Coal Contracts

Kennecott Coal Sales LLC, an Oregon LLC (currently known as Navajo Transitional Energy Company, and formerly known as both Cloud Peak Energy and Rio Tinto Energy), Spring Creek Mine, Decker, Montana.

- Master Coal Purchase Agreement signed on **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** provides general terms and definitions governing purchases and sales of coal.

- An agreement signed on **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** also provides for purchases of a minimum of **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** tons of coal for the period of **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** through **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]**

Arch Coal Sales, Black Thunder Mine, Wright, Wyoming

- Master Coal Purchase Agreement signed on **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** provides general terms and definitions governing purchases and sales of coal.

- An agreement signed on **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** also provides for purchases of a minimum of **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** tons with an option to purchase **[TRADE SECRET DATA BEGINS** [redacted]

TRADE SECRET DATA ENDS] tons of coal for the period of **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** through **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS].**

- An agreement signed on **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** also provides for purchases of a minimum of **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** tons of coal for the period of **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** through **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]**

- An agreement signed on **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** also provides for purchases of a minimum of **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** tons of coal for the period of **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** through **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]**

Peabody CoalSales, LLC., St. Louis, Missouri, Caballo Mine, Campbell County, Wyoming

- Coal Supply Agreement signed on **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** provides general terms and definitions governing purchases and sales of coal.

- An agreement signed on **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** also provides for purchases of a minimum of **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** tons of coal for the period of **[TRADE SECRET DATA BEGINS** [redacted] **[TRADE SECRET DATA ENDS]** to **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS].**

Biomass Contracts

Currently Minnesota Power purchases wood fuel under purchase orders with 15 separate suppliers for use at the Hibbard Renewable Energy Center with varying expiration dates.

Rail Contracts

Burlington Northern Santa Fe (currently known as BNSF Railway)

- An agreement signed on **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** provides for the transportation of coal from **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** through **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** for a minimum of **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** tons per year and a maximum of **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** tons per year.

Supplemental Fuels

Minnesota Power uses natural gas for start-up and flame stabilization at the Boswell Station. Minnesota Power gets daily gas pricing from a supplier for natural gas at the Boswell Station. Minnesota Power also purchases natural gas for start-up, flame stabilization, as well as generation at the Hibbard Station. Minnesota Power purchases natural gas for the Hibbard Station from the City of Duluth Comfort Systems. At the Laskin Station, gas is purchased from BP as part of a gas management service contract. This agreement provides services from **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]** through **[TRADE SECRET DATA BEGINS** [redacted] **TRADE SECRET DATA ENDS]**.

Notice of Reports Availability

minnesota power
AN ALLETE COMPANY

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

Notice of Reports Availability

To: All Interveners in Minnesota Power
Retail Rate Proceedings
Docket Nos. E015/GR-21-335 and E015/GR-23-155

The Minnesota Public Utilities Commission requires Minnesota Power and other Minnesota public utilities to file various forecast reports concerning utility operations with the Commission as specified in Docket No. E999/CI-03-802. The subject matter of the report filed includes the following:

1) Independent Auditor's Report
2) Automatic Fuel Adjustment Clause Forecast to Actual Comparison
3) MISO Day 2 Charges and Allocations
4) ARR Information and Process
5) Plant Outage Reporting
6) Annual and Daily ASM Charges and Summary
7) Wind Curtailment Reporting
8) Offsetting Revenues and/or Compensation Received by Investor-Owned Utilities (IOUs)
9) Generation Facilities Maintenance Expense Report
10) Fuel and Energy Source Procurement and Energy Dispatching Policies

Minnesota Rule 7825.2840 requires Minnesota Power to provide this notice of availability of such reports to all Interveners in the previous two general rate cases. A copy of the above report is available for public inspection at the MPUC offices, 121 East 7th Place, Suite 350, St. Paul, MN 55101-2147, on the Minnesota Department of Commerce edockets website (https://www.edockets.state.mn.us/EFiling), or upon written request to the following:

Minnesota Power
Analeisha Vang
Regulatory Compliance Specialist, Senior
30 West Superior Street
Duluth, MN 55802

Please note that certain information contained in these reports is considered trade secret and is unavailable to the public.

Certificate of Service

It is hereby certified that the foregoing Notice of Report Availability, along with a copy of the report, was delivered to the Minnesota Department of Commerce and the Office of the Attorney General, and the interveners in Minnesota Power's previous two general rate cases.

Minnesota Power

By:

/s/ Analeisha Vang

Analeisha Vang
Regulatory Compliance Specialist, Senior

Dated: March 3, 2025

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

Tiana Heger of the City of Duluth, County of St. Louis, State of Minnesota, says that on the 3rd day of March, 2025, she served Minnesota Power's Annual Automatic Adjustment True-up Report in **Docket No. E015/AA-23-180** 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

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
1	Kevin	Adams	kadams@caprw.org	Community Action Partnership of Ramsey & Washington Counties		450 Syndicate St N Ste 35 Saint Paul MN, 55104 United States	Electronic Service		No	23-180AA-23-180
2	Jorge	Alonso	jorge.alonso@state.mn.us		Public Utilities Commission	121 7th Place East Suite 350 St. Paul MN, 55101 United States	Electronic Service		No	23-180AA-23-180
3	Lori	Andresen	info@sosbluewaters.org	Save Our Sky Blue Waters		P.O. Box 3661 Duluth MN, 55803 United States	Electronic Service		No	23-180AA-23-180
4	Jessica L	Bayles	jessica.bayles@stoel.com	Stoel Rives LLP		1150 18th St NW Ste 325 Washington DC, 20036 United States	Electronic Service		No	23-180AA-23-180
5	Seth	Bichler	sethbichler@fdlrez.com	Fond du Lac Band of Lake Superior Chippewa		1720 Big Lake Rd Cloquet MN, 55720 United States	Electronic Service		No	23-180AA-23-180
6	Jason	Bonnett	jason.bonnett@state.mn.us		Public Utilities Commission	121 East 7th Place suite 350 St. Paul MN, 55101 United States	Electronic Service		No	23-180AA-23-180
7	Elizabeth	Brama	ebrama@taftlaw.com	Taft Stettinius & Hollister LLP		2200 IDS Center 80 South 8th Street Minneapolis MN, 55402 United States	Electronic Service		No	23-180AA-23-180
8	Jon	Brekke	jbrekke@grenergy.com	Great River Energy		12300 Elm Creek Boulevard Maple Grove MN, 55369-4718 United States	Electronic Service		No	23-180AA-23-180
9	Matthew	Brodin	mbrodin@allete.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	23-180AA-23-180
10	Christina	Brusven	cbrusven@fredlaw.com	Fredrikson Byron		60 S 6th St Ste 1500 Minneapolis MN, 55402-4400 United States	Electronic Service		No	23-180AA-23-180
11	Jennifer	Cady	jjcady@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	23-180AA-23-180
12	David	Cartella	david.cartella@cliffsnr.com	Cliffs Natural Resources Inc.		200 Public Square Ste 3300 Cleveland OH, 44114-2315 United States	Electronic Service		No	23-180AA-23-180

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
13	Greg	Chandler	greg.chandler@upm.com	UPM Blandin Paper		115 SW First St Grand Rapids MN, 55744 United States	Electronic Service		No	23-180AA-23-180
14	Steve W.	Chriss	stephen.chriss@walmart.com	Wal-Mart		2001 SE 10th St. Bentonville AR, 72716-5530 United States	Electronic Service		No	23-180AA-23-180
15	Generic	Commerce Attorneys	commerce.attorneys@ag.state.mn.us		Office of the Attorney General - Department of Commerce	445 Minnesota Street Suite 1400 St. Paul MN, 55101 United States	Electronic Service		Yes	23-180AA-23-180
16	MP Regulatory	Compliance	mpregulatorycompliance@mnpower.com	Minnesota Power		30 W Superior St. Duluth MN, 55802 United States	Electronic Service		No	23-180AA-23-180
17	Hillary	Creurer	hcreurer@allete.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	23-180AA-23-180
18	Patrick	Cutshall	pcutshall@allete.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	23-180AA-23-180
19	Lisa	Daniels	lisadaniels@windustry.org	Windustry		201 Ridgewood Ave Minneapolis MN, 55403 United States	Electronic Service		No	23-180AA-23-180
20	Richard	Dornfeld	richard.dornfeld@ag.state.mn.us		Office of the Attorney General - Department of Commerce	Minnesota Attorney General's Office 445 Minnesota Street, Suite 1800 Saint Paul MN, 55101 United States	Electronic Service		No	23-180AA-23-180
21	J.	Drake Hamilton	hamilton@fresh-energy.org	Fresh Energy		408 St Peter St Ste 350 Saint Paul MN, 55101 United States	Electronic Service		No	23-180AA-23-180
22	Brian	Edstrom	briane@cubminnesota.org	Citizens Utility Board of Minnesota		332 Minnesota St Ste W1360 Saint Paul MN, 55101 United States	Electronic Service		No	23-180AA-23-180
23	Ron	Elwood	relwood@mnlsap.org	Legal Services Advocacy Project		970 Raymond Avenue Suite G-40 Saint Paul MN, 55114 United States	Electronic Service		No	23-180AA-23-180
24	Sharon	Ferguson	sharon.ferguson@state.mn.us		Department of Commerce	85 7th Place E Ste 280 Saint Paul MN, 55101-2198 United States	Electronic Service		No	23-180AA-23-180

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
25	Frank	Frederickson	ffrederickson@mnpower.com	Minnesota Power		30 W Superior St. Duluth MN, 55802 United States	Electronic Service		No	23-180AA-23-180
26	Edward	Garvey	garveyed@aol.com	Residence		32 Lawton St Saint Paul MN, 55102 United States	Electronic Service		No	23-180AA-23-180
27	John	Gasele	jgasele@fryberger.com	Fryberger Buchanan Smith & Frederick PA		700 Lonsdale Building 302 W Superior St Ste 700 Duluth MN, 55802 United States	Electronic Service		No	23-180AA-23-180
28	Barbara	Gervais	toftemn@boreal.org	Town of Tofte		P O Box 2293 7240 Tofte Park Road Tofte MN, 55615 United States	Electronic Service		No	23-180AA-23-180
29	Jerome	Hall	hallj@stlouiscountymn.gov	Saint Louis County Property Mgmt Dept		Duluth Courthouse 100 N 5th Ave W Rm 515 Duluth MN, 55802-1209 United States	Electronic Service		No	23-180AA-23-180
30	Adam	Heinen	aheinen@dakotaelectric.com	Dakota Electric Association		4300 220th St W Farmington MN, 55024 United States	Electronic Service		No	23-180AA-23-180
31	Annete	Henkel	mui@mnutilityinvestors.org	Minnesota Utility Investors		413 Wacouta Street #230 St.Paul MN, 55101 United States	Electronic Service		No	23-180AA-23-180
32	Valerie	Herring	vherring@taftlaw.com	Taft Stettinius & Hollister LLP		2200 IDS Center 80 S. Eighth Street Minneapolis MN, 55402 United States	Electronic Service		No	23-180AA-23-180
33	Katherine	Hinderlie	katherine.hinderlie@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	445 Minnesota St Suite 1400 St. Paul MN, 55101-2134 United States	Electronic Service		No	23-180AA-23-180
34	Lori	Hoyum	lhoyum@mnpower.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	23-180AA-23-180
35	James	Jarvi		Minnesota Ore Operations - U S Steel		P O Box 417 Mountain Iron MN, 55768 United States	Paper Service		No	23-180AA-23-180
36	Alan	Jenkins	aj@jenkinsatlaw.com	Jenkins at Law		2950 Yellowtail Ave. Marathon FL, 33050 United States	Electronic Service		No	23-180AA-23-180

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
37	Kelsey	Johnson	kjohnson@taconite.org	Iron Mining Association of Minnesota		1003 Discovery Drive Chisholm MN, 55719 United States	Electronic Service		No	23-180AA-23-180
38	Richard	Johnson	rick.johnson@lawmoss.com	Moss & Barnett		150 S. 5th Street Suite 1200 Minneapolis MN, 55402 United States	Electronic Service		No	23-180AA-23-180
39	Sarah	Johnson Phillips	sjphillips@stoel.com	Stoel Rives LLP		33 South Sixth Street Suite 4200 Minneapolis MN, 55402 United States	Electronic Service		No	23-180AA-23-180
40	Nick	Kaneski	nick.kaneski@enbridge.com	Enbridge Energy Company, Inc.		11 East Superior St Ste 125 Duluth MN, 55802 United States	Electronic Service		No	23-180AA-23-180
41	Nicolas	Kaylor	nkaylor@mojlaw.com			120 South 6th St Ste 2400 Minneapolis MN, 55402 United States	Electronic Service		No	23-180AA-23-180
42	Travis	Kolari		Keetac		PO Box 217 Keewatin MN, 55753 United States	Paper Service		No	23-180AA-23-180
43	Michael	Krikava	mkrikava@taftlaw.com	Taft Stettinius & Hollister LLP		2200 IDS Center 80 S 8th St Minneapolis MN, 55402 United States	Electronic Service		No	23-180AA-23-180
44	Becky	Lammi	cityclerk@ci.aurora.mn.us	City of Aurora		16 W 2nd Ave N PO Box 160 Aurura MN, 55705 United States	Electronic Service		No	23-180AA-23-180
45	Carmel	Laney	carmel.laney@stoel.com	Stoel Rives LLP		33 South Sixth Street Suite 4200 Minneapolis MN, 55402 United States	Electronic Service		No	23-180AA-23-180
46	David	Langmo	david.langmo@sappi.com	Sappi North America		P O Box 511 2201 Avenue B Cloquet MN, 55720 United States	Electronic Service		No	23-180AA-23-180
47	Emily	Larson	elarson@duluthmn.gov	City of Duluth		411 W 1st St Rm 403 Duluth MN, 55802 United States	Electronic Service		No	23-180AA-23-180
48	James D.	Larson	james.larson@avantenergy.com	Avant Energy Services		220 S 6th St Ste 1300 Minneapolis MN, 55402 United States	Electronic Service		No	23-180AA-23-180

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
49	Annie	Levenson Falk	annielf@cubminnesota.org	Citizens Utility Board of Minnesota		332 Minnesota Street, Suite W1360 St. Paul MN, 55101 United States	Electronic Service		No	23-180AA-23-180
50	LeRoger	Lind	llind@yahoo.com	Save Lake Superior Association		P.O. Box 101 Two Harbors MN, 55616 United States	Electronic Service		No	23-180AA-23-180
51	Eric	Lindberg	elindberg@mncenter.org	Minnesota Center for Environmental Advocacy		1919 University Avenue West Suite 515 Saint Paul MN, 55104-3435 United States	Electronic Service		No	23-180AA-23-180
52	Eric	Lipman	eric.lipman@state.mn.us		Office of Administrative Hearings	PO Box 64620 St. Paul MN, 55164-0620 United States	Electronic Service		No	23-180AA-23-180
53	Patrick	Loupin	patrickloupin@packagingcorp.com	Boise Cascade Corporation		PO Box 990050 Boise ID, 83799-0050 United States	Electronic Service		No	23-180AA-23-180
54	Susan	Ludwig	sludwig@mnpower.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	23-180AA-23-180
55	Kavita	Maini	kmaini@wi.rr.com	KM Energy Consulting, LLC		961 N Lost Woods Rd Oconomowoc WI, 53066 United States	Electronic Service		No	23-180AA-23-180
56	Discovery	Manager	discoverymanager@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	23-180AA-23-180
57	Sarah	Manchester	sarah.manchester@sappi.com	Sappi North American		255 State Street Floor 4 Boston MA, 02109-2617 United States	Electronic Service		No	23-180AA-23-180
58	Emily	Marshall	emarshall@lourismarshall.com	Miller O'Brien Jensen, PA		120 S. 6th Street Suite 2400 Minneapolis MN, 55402 United States	Electronic Service		No	23-180AA-23-180
59	Keith	Matzdorf	keith.matzdorf@sappi.com	Sappi Fine Paper North America		PO Box 511 2201 Avenue B Cloquet MN, 55720 United States	Electronic Service		No	23-180AA-23-180
60	Daryl	Maxwell	dmaxwell@hydro.mb.ca	Manitoba Hydro		360 Portage Ave FL 16 PO Box 815, Station Main Winnipeg MB, R3C 2P4 Canada	Electronic Service		No	23-180AA-23-180
61	Matthew	McClincy	mmcclincy@usg.com	USG		35 Arch Street Clouqet MN, 55720 United States	Electronic Service		No	23-180AA-23-180

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
62	Craig	McDonnell	craig.mcdonnell@state.mn.us		Minnesota Pollution Control Agency	520 Lafayette Road St. Paul MN, 55101 United States	Electronic Service		No	23-180AA-23-180
63	Natalie	McIntire	natalie.mcintire@gmail.com	Wind on the Wires		570 Asbury St Ste 201 Saint Paul MN, 55104-1850 United States	Electronic Service		No	23-180AA-23-180
64	David	Moeller	dmoeller@allete.com	Minnesota Power			Electronic Service		No	23-180AA-23-180
65	Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP		33 South Sixth St Ste 4200 Minneapolis MN, 55402 United States	Electronic Service		No	23-180AA-23-180
66	James	Mortenson	james.mortenson@state.mn.us		Office of Administrative Hearings	PO BOX 64620 St. Paul MN, 55164-0620 United States	Electronic Service		No	23-180AA-23-180
67	Evan	Mulholland	emulholland@mncenter.org	Minnesota Center for Environmental Advocacy		1919 University Ave W Ste 515 Saint Paul MN, 55101 United States	Electronic Service		No	23-180AA-23-180
68	Travis	Murray	travis.murray@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	445 Minnesota St Ste 1400 Saint Paul MN, 55101 United States	Electronic Service		No	23-180AA-23-180
69	David	Niles	david.niles@avantenergy.com	Minnesota Municipal Power Agency		220 South Sixth Street Suite 1300 Minneapolis MN, 55402 United States	Electronic Service		No	23-180AA-23-180
70	Michael	Noble	noble@fresh-energy.org	Fresh Energy		408 Saint Peter St Ste 350 Saint Paul MN, 55102 United States	Electronic Service		No	23-180AA-23-180
71	Rolf	Nordstrom	rnordstrom@gpisd.net	Great Plains Institute		2801 21ST AVE S STE 220 Minneapolis MN, 55407-1229 United States	Electronic Service		No	23-180AA-23-180
72	M. William	O'Brien	bobrien@mojlaw.com	Miller O'Brien Jensen, P.A.		120 S 6th St Ste 2400 Minneapolis MN, 55402 United States	Electronic Service		No	23-180AA-23-180
73	Christopher J.	Oppitz		-		PO Box 910 Park Rapids MN, 56470-0910 United States	Paper Service		No	23-180AA-23-180
74	Elanne	Palcich	epalcich@cpinternet.com	Save Our Sky Blue Waters		P.O. Box 3661 Duluth MN, 55803 United States	Electronic Service		No	23-180AA-23-180
75	Max	Peters	maxp@cohasset-mn.com	City of Cohasset		305 NW First Ave Cohasset MN,	Electronic Service		No	23-180AA-23-180

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						55721 United States				
76	Jennifer	Peterson	jjpeterson@mnpower.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	23-180AA-23-180
77	Marcia	Podratz	mpodratz@mnpower.com	Minnesota Power		30 W Superior S Duluth MN, 55802 United States	Electronic Service		No	23-180AA-23-180
78	Tolaver	Rapp	tolaver.rapp@cliffsnr.com	Cliffs Natural Resources		200 Public Square Suite 3400 Cleveland OH, 44114-2318 United States	Electronic Service		No	23-180AA-23-180
79	Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	1400 BRM Tower 445 Minnesota St St. Paul MN, 55101-2131 United States	Electronic Service		Yes	23-180AA-23-180
80	Kevin	Reuther	kreuther@mncenter.org	MN Center for Environmental Advocacy		26 E Exchange St, Ste 206 St. Paul MN, 55101-1667 United States	Electronic Service		No	23-180AA-23-180
81	Ralph	Riberich	rriberich@uss.com	United States Steel Corp		600 Grant St Ste 2028 Pittsburgh PA, 15219 United States	Electronic Service		No	23-180AA-23-180
82	Buddy	Robinson	buddy@citizensfed.org	Minnesota Citizens Federation NE		2110 W. 1st Street Duluth MN, 55806 United States	Electronic Service		No	23-180AA-23-180
83	Santi	Romani		United Taconite		PO Box 180 Eveleth MN, 55734 United States	Paper Service		No	23-180AA-23-180
84	Susan	Romans	sromans@allete.com	Minnesota Power		30 West Superior Street Legal Dept Duulth MN, 55802 United States	Electronic Service		No	23-180AA-23-180
85	Peter	Scholtz	peter.scholtz@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	Suite 1400 445 Minnesota Street St. Paul MN, 55101-2131 United States	Electronic Service		No	23-180AA-23-180
86	Robert H.	Schulte	rhs@schulteassociates.com	Schulte Associates LLC		1742 Patriot Rd Northfield MN, 55057 United States	Electronic Service		No	23-180AA-23-180
87	Christine	Schwartz	regulatory.records@xcelenergy.com	Xcel Energy		414 Nicollet Mall FL 7 Minneapolis MN, 55401-1993 United States	Electronic Service		No	23-180AA-23-180
88	Will	Seuffert	will.seuffert@state.mn.us		Public Utilities Commission	121 7th Pl E Ste 350	Electronic Service		Yes	23-180AA-

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						Saint Paul MN, 55101 United States				23-180
89	Janet	Shaddix Elling	jshaddix@janetshaddix.com	Shaddix And Associates		7400 Lyndale Ave S Ste 190 Richfield MN, 55423 United States	Electronic Service		No	23-180AA-23-180
90	Doug	Shoemaker	dougs@charter.net	Minnesota Renewable Energy		2928 5th Ave S Minneapolis MN, 55408 United States	Electronic Service		No	23-180AA-23-180
91	Brett	Skyles	brett.skyles@co.itasca.mn.us	Itasca County		123 NE Fourth Street Grand Rapids MN, 55744-2600 United States	Electronic Service		No	23-180AA-23-180
92	Richard	Staffon	rcstaffon@msn.com	W. J. McCabe Chapter, Izaak Walton League of America		1405 Lawrence Road Cloquet MN, 55720 United States	Electronic Service		No	23-180AA-23-180
93	James M	Strommen	jstrommen@kennedy-graven.com	Kennedy & Graven, Chartered		150 S 5th St Ste 700 Minneapolis MN, 55402 United States	Electronic Service		No	23-180AA-23-180
94	Eric	Swanson	eswanson@winthrop.com	Winthrop & Weinstine		225 S 6th St Ste 3500 Capella Tower Minneapolis MN, 55402-4629 United States	Electronic Service		No	23-180AA-23-180
95	Robert	Tammen	bobtammen@frontiernet.net			PO Box 398 Soudan MN, 55782 United States	Electronic Service		No	23-180AA-23-180
96	Jim	Tieberg	jtieberg@polymetmining.com	PolyMet Mining, Inc.		PO Box 475 County Highway 666 Hoyt Lakes MN, 55750 United States	Electronic Service		No	23-180AA-23-180
97	Stuart	Tommerdahl	stommerdahl@otpco.com	Otter Tail Power Company		215 S Cascade St PO Box 496 Fergus Falls MN, 56537 United States	Electronic Service		No	23-180AA-23-180
98	Claire	Vatalaro	cvatalaro@allete.com	Allete		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	23-180AA-23-180
99	Kodi	Verhalen	kverhalen@taftlaw.com	Taft Stettinius & Hollister LLP		80 S 8th St Ste 2200 Minneapolis MN, 55402 United States	Electronic Service		No	23-180AA-23-180
100	Kevin	Walli	kwalli@fryberger.com	Fryberger, Buchanan, Smith & Frederick		380 St. Peter St Ste 710 St. Paul MN, 55102 United States	Electronic Service		No	23-180AA-23-180
101	Laurie	Williams	laurie.williams@sierraclub.org	Sierra Club		Environmental Law Program 1536 Wynkoop St Ste 200 Denver CO,	Electronic Service		No	23-180AA-23-180

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						80202 United States				
102	Scott	Zahorik	scott.zahorik@aeoa.org	Arrowhead Economic Opportunity Agency		702 S. 3rd Avenue Virginia MN, 55792 United States	Electronic Service		No	23-180AA-23-180

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
1	Matthew	Brodin	mbrodin@allete.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	Minnesota PowerAAA Serv Lst
2	Jennifer	Cady	jjcady@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	Minnesota PowerAAA Serv Lst
3	Generic	Commerce Attorneys	commerce.attorneys@ag.state.mn.us		Office of the Attorney General - Department of Commerce	445 Minnesota Street Suite 1400 St. Paul MN, 55101 United States	Electronic Service		No	Minnesota PowerAAA Serv Lst
4	MP Regulatory	Compliance	mpregulatorycompliance@mnpower.com	Minnesota Power		30 W Superior St. Duluth MN, 55802 United States	Electronic Service		No	Minnesota PowerAAA Serv Lst
5	Sharon	Ferguson	sharon.ferguson@state.mn.us		Department of Commerce	85 7th Place E Ste 280 Saint Paul MN, 55101-2198 United States	Electronic Service		No	Minnesota PowerAAA Serv Lst
6	Adam	Heinen	aheinen@dakotaelectric.com	Dakota Electric Association		4300 220th St W Farmington MN, 55024 United States	Electronic Service		No	Minnesota PowerAAA Serv Lst
7	Lori	Hoyum	lhoyum@mnpower.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	Minnesota PowerAAA Serv Lst
8	Discovery	Manager	discoverymanager@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	Minnesota PowerAAA Serv Lst
9	Samantha	Norris	samanthanorris@alliantenergy.com	Interstate Power and Light Company		200 1st Street SE PO Box 351 Cedar Rapids IA, 52406-0351 United States	Electronic Service		No	Minnesota PowerAAA Serv Lst
10	Leann	Oehlerking Boes	lboes@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	Minnesota PowerAAA Serv Lst
11	Catherine	Phillips	catherine.phillips@wecenergygroup.com	Minnesota Energy Resources		231 West Michigan St Milwaukee WI, 53203 United States	Electronic Service		No	Minnesota PowerAAA Serv Lst
12	Generic Notice	Residential Utilities	residential.utilities@ag.state.mn.us		Office of the Attorney	1400 BRM Tower	Electronic Service		No	Minnesota PowerAAA

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
		Division			General - Residential Utilities Division	445 Minnesota St St. Paul MN, 55101-2131 United States				Serv Lst
13	Susan	Romans	sromans@allete.com	Minnesota Power		30 West Superior Street Legal Dept Duulth MN, 55802 United States	Electronic Service		No	Minnesota PowerAAA Serv Lst
14	Christine	Schwartz	regulatory.records@xcelenergy.com	Xcel Energy		414 Nicollet Mall FL 7 Minneapolis MN, 55401-1993 United States	Electronic Service		No	Minnesota PowerAAA Serv Lst
15	Will	Seuffert	will.seuffert@state.mn.us		Public Utilities Commission	121 7th Pl E Ste 350 Saint Paul MN, 55101 United States	Electronic Service		No	Minnesota PowerAAA Serv Lst
16	Richard	Stasik	richard.stasik@wecenergygroup.com	Minnesota Energy Resources Corporation (HOLDING)		231 West Michigan St - P321 Milwaukee WI, 53203 United States	Electronic Service		No	Minnesota PowerAAA Serv Lst
17	Kristin	Stastny	kstastny@taftlaw.com	Taft Stettinius & Hollister LLP		2200 IDS Center 80 South 8th Street Minneapolis MN, 55402 United States	Electronic Service		No	Minnesota PowerAAA Serv Lst
18	Stuart	Tommerdahl	stommerdahl@otpco.com	Otter Tail Power Company		215 S Cascade St PO Box 496 Fergus Falls MN, 56537 United States	Electronic Service		No	Minnesota PowerAAA Serv Lst
19	Analeisha	Vang	avang@mnpower.com			30 W Superior St Duluth MN, 55802-2093 United States	Electronic Service		No	Minnesota PowerAAA Serv Lst
20	Robyn	Woeste	robynwoeste@alliantenergy.com	Interstate Power and Light Company		200 First St SE Cedar Rapids IA, 52401 United States	Electronic Service		No	Minnesota PowerAAA Serv Lst

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
1	Kevin	Adams	kadams@caprw.org	Community Action Partnership of Ramsey & Washington Counties		450 Syndicate St N Ste 35 Saint Paul MN, 55104 United States	Electronic Service		No	21-33521-335
2	Lori	Andresen	info@sosbluewaters.org	Save Our Sky Blue Waters		P.O. Box 3661 Duluth MN, 55803 United States	Electronic Service		No	21-33521-335
3	Jessica L	Bayles	jessica.bayles@stoel.com	Stoel Rives LLP		1150 18th St NW Ste 325 Washington DC, 20036 United States	Electronic Service		No	21-33521-335
4	Seth	Bichler	sethbichler@fdlrez.com	Fond du Lac Band of Lake Superior Chippewa		1720 Big Lake Rd Cloquet MN, 55720 United States	Electronic Service		No	21-33521-335
5	Elizabeth	Brama	ebrama@taftlaw.com	Taft Stettinius & Hollister LLP		2200 IDS Center 80 South 8th Street Minneapolis MN, 55402 United States	Electronic Service		No	21-33521-335
6	Jon	Brekke	jbrekke@grenergy.com	Great River Energy		12300 Elm Creek Boulevard Maple Grove MN, 55369-4718 United States	Electronic Service		No	21-33521-335
7	Matthew	Brodin	mbrodin@allete.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	21-33521-335
8	Christina	Brusven	cbrusven@fredlaw.com	Fredrikson Byron		60 S 6th St Ste 1500 Minneapolis MN, 55402-4400 United States	Electronic Service		No	21-33521-335
9	Jennifer	Cady	jjcady@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	21-33521-335
10	David	Cartella	david.cartella@cliffsnr.com	Cliffs Natural Resources Inc.		200 Public Square Ste 3300 Cleveland OH, 44114-2315 United States	Electronic Service		No	21-33521-335
11	Greg	Chandler	greg.chandler@upm.com	UPM Blandin Paper		115 SW First St Grand Rapids MN, 55744 United States	Electronic Service		No	21-33521-335
12	Steve W.	Chriss	stephen.chriss@walmart.com	Wal-Mart		2001 SE 10th St. Bentonville AR, 72716-5530 United States	Electronic Service		No	21-33521-335
13	Generic	Commerce Attorneys	commerce.attorneys@ag.state.mn.us		Office of the Attorney General - Department of Commerce	445 Minnesota Street Suite 1400 St. Paul MN, 55101 United States	Electronic Service		Yes	21-33521-335

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
14	Hillary	Creurer	hcreurer@allete.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	21-33521-335
15	Patrick	Cutshall	pcutshall@allete.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		Yes	21-33521-335
16	Lisa	Daniels	lisadaniels@windustry.org	Windustry		201 Ridgewood Ave Minneapolis MN, 55403 United States	Electronic Service		No	21-33521-335
17	Richard	Dornfeld	richard.dornfeld@ag.state.mn.us		Office of the Attorney General - Department of Commerce	Minnesota Attorney General's Office 445 Minnesota Street, Suite 1800 Saint Paul MN, 55101 United States	Electronic Service		No	21-33521-335
18	J.	Drake Hamilton	hamilton@fresh-energy.org	Fresh Energy		408 St Peter St Ste 350 Saint Paul MN, 55101 United States	Electronic Service		No	21-33521-335
19	Brian	Edstrom	briane@cubminnesota.org	Citizens Utility Board of Minnesota		332 Minnesota St Ste W1360 Saint Paul MN, 55101 United States	Electronic Service		No	21-33521-335
20	Ron	Elwood	relwood@mnlsap.org	Legal Services Advocacy Project		970 Raymond Avenue Suite G-40 Saint Paul MN, 55114 United States	Electronic Service		No	21-33521-335
21	Sharon	Ferguson	sharon.ferguson@state.mn.us		Department of Commerce	85 7th Place E Ste 280 Saint Paul MN, 55101-2198 United States	Electronic Service		No	21-33521-335
22	Frank	Frederickson	ffrederickson@mnpower.com	Minnesota Power		30 W Superior St. Duluth MN, 55802 United States	Electronic Service		Yes	21-33521-335
23	Edward	Garvey	garveyed@aol.com	Residence		32 Lawton St Saint Paul MN, 55102 United States	Electronic Service		No	21-33521-335
24	John	Gasele	jgasele@fryberger.com	Fryberger Buchanan Smith & Frederick PA		700 Lonsdale Building 302 W Superior St Ste 700 Duluth MN, 55802 United States	Electronic Service		No	21-33521-335
25	Barbara	Gervais	toftemn@boreal.org	Town of Tofte		P O Box 2293 7240 Tofte Park Road Tofte MN, 55615 United States	Electronic Service		No	21-33521-335

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
26	Jerome	Hall	hallj@stlouiscountymn.gov	Saint Louis County Property Mgmt Dept		Duluth Courthouse 100 N 5th Ave W Rm 515 Duluth MN, 55802-1209 United States	Electronic Service		No	21-33521-335
27	Adam	Heinen	aheinen@dakotaelectric.com	Dakota Electric Association		4300 220th St W Farmington MN, 55024 United States	Electronic Service		No	21-33521-335
28	Annete	Henkel	mui@mnutilityinvestors.org	Minnesota Utility Investors		413 Wacouta Street #230 St.Paul MN, 55101 United States	Electronic Service		No	21-33521-335
29	Valerie	Herring	vherring@taftlaw.com	Taft Stettinius & Hollister LLP		2200 IDS Center 80 S. Eighth Street Minneapolis MN, 55402 United States	Electronic Service		No	21-33521-335
30	Katherine	Hinderlie	katherine.hinderlie@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	445 Minnesota St Suite 1400 St. Paul MN, 55101-2134 United States	Electronic Service		No	21-33521-335
31	Lori	Hoyum	lhoyum@mnpower.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	21-33521-335
32	James	Jarvi		Minnesota Ore Operations - U S Steel		P O Box 417 Mountain Iron MN, 55768 United States	Paper Service		No	21-33521-335
33	Alan	Jenkins	aj@jenkinsatlaw.com	Jenkins at Law		2950 Yellowtail Ave. Marathon FL, 33050 United States	Electronic Service		No	21-33521-335
34	Kelsey	Johnson	kjohnson@taconite.org	Iron Mining Association of Minnesota		1003 Discovery Drive Chisholm MN, 55719 United States	Electronic Service		No	21-33521-335
35	Richard	Johnson	rick.johnson@lawmoss.com	Moss & Barnett		150 S. 5th Street Suite 1200 Minneapolis MN, 55402 United States	Electronic Service		No	21-33521-335
36	Sarah	Johnson Phillips	sjphillips@stoel.com	Stoel Rives LLP		33 South Sixth Street Suite 4200 Minneapolis MN, 55402 United States	Electronic Service		No	21-33521-335
37	Nick	Kaneski	nick.kaneski@enbridge.com	Enbridge Energy Company, Inc.		11 East Superior St Ste 125 Duluth MN, 55802 United States	Electronic Service		No	21-33521-335
38	Travis	Kolari		Keetac		PO Box 217 Keewatin MN, 55753 United States	Paper Service		No	21-33521-335

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
39	Michael	Krikava	mkrikava@taftlaw.com	Taft Stettinius & Hollister LLP		2200 IDS Center 80 S 8th St Minneapolis MN, 55402 United States	Electronic Service		No	21-33521-335
40	Becky	Lammi	cityclerk@ci.aurora.mn.us	City of Aurora		16 W 2nd Ave N PO Box 160 Aurura MN, 55705 United States	Electronic Service		No	21-33521-335
41	Carmel	Laney	carmel.laney@stoel.com	Stoel Rives LLP		33 South Sixth Street Suite 4200 Minneapolis MN, 55402 United States	Electronic Service		No	21-33521-335
42	David	Langmo	david.langmo@sappi.com	Sappi North America		P O Box 511 2201 Avenue B Cloquet MN, 55720 United States	Electronic Service		No	21-33521-335
43	Emily	Larson	elarson@duluthmn.gov	City of Duluth		411 W 1st St Rm 403 Duluth MN, 55802 United States	Electronic Service		No	21-33521-335
44	James D.	Larson	james.larson@avantenergy.com	Avant Energy Services		220 S 6th St Ste 1300 Minneapolis MN, 55402 United States	Electronic Service		No	21-33521-335
45	Annie	Levenson Falk	anniel@cubminnesota.org	Citizens Utility Board of Minnesota		332 Minnesota Street, Suite W1360 St. Paul MN, 55101 United States	Electronic Service		No	21-33521-335
46	LeRoger	Lind	llind@yahoo.com	Save Lake Superior Association		P.O. Box 101 Two Harbors MN, 55616 United States	Electronic Service		No	21-33521-335
47	Eric	Lindberg	elindberg@mncenter.org	Minnesota Center for Environmental Advocacy		1919 University Avenue West Suite 515 Saint Paul MN, 55104-3435 United States	Electronic Service		No	21-33521-335
48	Patrick	Loupin	patrickloupin@packagingcorp.com	Boise Cascade Corporation		PO Box 990050 Boise ID, 83799-0050 United States	Electronic Service		No	21-33521-335
49	Susan	Ludwig	sludwig@mnpower.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	21-33521-335
50	Kavita	Maini	kmaini@wi.rr.com	KM Energy Consulting, LLC		961 N Lost Woods Rd Oconomowoc WI, 53066 United States	Electronic Service		No	21-33521-335
51	Discovery	Manager	discoverymanager@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	21-33521-335

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
52	Sarah	Manchester	sarah.manchester@sappi.com	Sappi North American		255 State Street Floor 4 Boston MA, 02109-2617 United States	Electronic Service		No	21-33521-335
53	Keith	Matzdorf	keith.matzdorf@sappi.com	Sappi Fine Paper North America		PO Box 511 2201 Avenue B Cloquet MN, 55720 United States	Electronic Service		No	21-33521-335
54	Daryl	Maxwell	dmaxwell@hydro.mb.ca	Manitoba Hydro		360 Portage Ave FL 16 PO Box 815, Station Main Winnipeg MB, R3C 2P4 Canada	Electronic Service		No	21-33521-335
55	Matthew	McClincy	mmcclincy@usg.com	USG		35 Arch Street Clouqet MN, 55720 United States	Electronic Service		No	21-33521-335
56	Craig	McDonnell	craig.mcdonnell@state.mn.us		Minnesota Pollution Control Agency	520 Lafayette Road St. Paul MN, 55101 United States	Electronic Service		No	21-33521-335
57	Natalie	McIntire	natalie.mcintire@gmail.com	Wind on the Wires		570 Asbury St Ste 201 Saint Paul MN, 55104-1850 United States	Electronic Service		No	21-33521-335
58	Joseph	Meyer	joseph.meyer@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	Bremer Tower, Suite 1400 445 Minnesota Street St Paul MN, 55101-2131 United States	Electronic Service		No	21-33521-335
59	David	Moeller	dmoeller@allete.com	Minnesota Power			Electronic Service		No	21-33521-335
60	Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP		33 South Sixth St Ste 4200 Minneapolis MN, 55402 United States	Electronic Service		No	21-33521-335
61	James	Mortenson	james.mortenson@state.mn.us		Office of Administrative Hearings	PO BOX 64620 St. Paul MN, 55164-0620 United States	Electronic Service		No	21-33521-335
62	Evan	Mulholland	emulholland@mncenter.org	Minnesota Center for Environmental Advocacy		1919 University Ave W Ste 515 Saint Paul MN, 55101 United States	Electronic Service		No	21-33521-335
63	Travis	Murray	travis.murray@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	445 Minnesota St Ste 1400 Saint Paul MN, 55101 United States	Electronic Service		No	21-33521-335
64	David	Niles	david.niles@avantenergy.com	Minnesota Municipal Power Agency		220 South Sixth Street Suite 1300 Minneapolis MN, 55402 United States	Electronic Service		No	21-33521-335

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
65	Michael	Noble	noble@fresh-energy.org	Fresh Energy		408 Saint Peter St Ste 350 Saint Paul MN, 55102 United States	Electronic Service		No	21-33521-335
66	Rolf	Nordstrom	rnordstrom@gpisd.net	Great Plains Institute		2801 21ST AVE S STE 220 Minneapolis MN, 55407-1229 United States	Electronic Service		No	21-33521-335
67	Christopher J.	Oppitz		-		PO Box 910 Park Rapids MN, 56470-0910 United States	Paper Service		No	21-33521-335
68	Elanne	Palcich	epalcich@cpinternet.com	Save Our Sky Blue Waters		P.O. Box 3661 Duluth MN, 55803 United States	Electronic Service		No	21-33521-335
69	Max	Peters	maxp@cohasset-mn.com	City of Cohasset		305 NW First Ave Cohasset MN, 55721 United States	Electronic Service		No	21-33521-335
70	Jennifer	Peterson	jjpeterson@mnpower.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	21-33521-335
71	Marcia	Podratz	mpodratz@mnpower.com	Minnesota Power		30 W Superior S Duluth MN, 55802 United States	Electronic Service		No	21-33521-335
72	Tolaver	Rapp	tolaver.rapp@cliffsnr.com	Cliffs Natural Resources		200 Public Square Suite 3400 Cleveland OH, 44114-2318 United States	Electronic Service		No	21-33521-335
73	Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	1400 BRM Tower 445 Minnesota St St. Paul MN, 55101-2131 United States	Electronic Service		Yes	21-33521-335
74	Kevin	Reuther	kreuther@mncenter.org	MN Center for Environmental Advocacy		26 E Exchange St, Ste 206 St. Paul MN, 55101-1667 United States	Electronic Service		No	21-33521-335
75	Ralph	Riberich	rriberich@uss.com	United States Steel Corp		600 Grant St Ste 2028 Pittsburgh PA, 15219 United States	Electronic Service		No	21-33521-335
76	Buddy	Robinson	buddy@citizensfed.org	Minnesota Citizens Federation NE		2110 W. 1st Street Duluth MN, 55806 United States	Electronic Service		No	21-33521-335
77	Santi	Romani		United Taconite		PO Box 180 Eveleth MN, 55734 United States	Paper Service		No	21-33521-335

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
78	Susan	Romans	sromans@allete.com	Minnesota Power		30 West Superior Street Legal Dept Duulth MN, 55802 United States	Electronic Service		No	21-33521-335
79	Peter	Scholtz	peter.scholtz@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	Suite 1400 445 Minnesota Street St. Paul MN, 55101-2131 United States	Electronic Service		No	21-33521-335
80	Robert H.	Schulte	rhs@schulteassociates.com	Schulte Associates LLC		1742 Patriot Rd Northfield MN, 55057 United States	Electronic Service		No	21-33521-335
81	Will	Seuffert	will.seuffert@state.mn.us		Public Utilities Commission	121 7th Pl E Ste 350 Saint Paul MN, 55101 United States	Electronic Service		Yes	21-33521-335
82	Janet	Shaddix Elling	jshaddix@janetshaddix.com	Shaddix And Associates		7400 Lyndale Ave S Ste 190 Richfield MN, 55423 United States	Electronic Service		No	21-33521-335
83	Doug	Shoemaker	dougs@charter.net	Minnesota Renewable Energy		2928 5th Ave S Minneapolis MN, 55408 United States	Electronic Service		No	21-33521-335
84	Brett	Skyles	brett.skyles@co.itasca.mn.us	Itasca County		123 NE Fourth Street Grand Rapids MN, 55744-2600 United States	Electronic Service		No	21-33521-335
85	Richard	Staffon	rcstaffon@msn.com	W. J. McCabe Chapter, Izaak Walton League of America		1405 Lawrence Road Cloquet MN, 55720 United States	Electronic Service		No	21-33521-335
86	James M	Strommen	jstrommen@kennedy-graven.com	Kennedy & Graven, Chartered		150 S 5th St Ste 700 Minneapolis MN, 55402 United States	Electronic Service		No	21-33521-335
87	Eric	Swanson	eswanson@winthrop.com	Winthrop & Weinstine		225 S 6th St Ste 3500 Capella Tower Minneapolis MN, 55402-4629 United States	Electronic Service		No	21-33521-335
88	Robert	Tammen	bobtammen@frontiernet.net			PO Box 398 Soudan MN, 55782 United States	Electronic Service		No	21-33521-335
89	Jim	Tieberg	jtieberg@polymetmining.com	PolyMet Mining, Inc.		PO Box 475 County Highway 666 Hoyt Lakes MN, 55750 United States	Electronic Service		No	21-33521-335
90	Claire	Vatalaro	cvatalaro@allete.com	Allete		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	21-33521-335

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
91	Kodi	Verhalen	kverhalen@taftlaw.com	Taft Stettinius & Hollister LLP		80 S 8th St Ste 2200 Minneapolis MN, 55402 United States	Electronic Service		No	21-33521-335
92	Kevin	Walli	kwalli@fryberger.com	Fryberger, Buchanan, Smith & Frederick		380 St. Peter St Ste 710 St. Paul MN, 55102 United States	Electronic Service		No	21-33521-335
93	Laurie	Williams	laurie.williams@sierraclub.org	Sierra Club		Environmental Law Program 1536 Wynkoop St Ste 200 Denver CO, 80202 United States	Electronic Service		No	21-33521-335
94	Scott	Zahorik	scott.zahorik@aeoa.org	Arrowhead Economic Opportunity Agency		702 S. 3rd Avenue Virginia MN, 55792 United States	Electronic Service		No	21-33521-335

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
1	Kevin	Adams	kadams@caprw.org	Community Action Partnership of Ramsey & Washington Counties		450 Syndicate St N Ste 35 Saint Paul MN, 55104 United States	Electronic Service		No	23-155Official
2	Jorge	Alonso	jorge.alonso@state.mn.us		Public Utilities Commission	121 7th Place East Suite 350 St. Paul MN, 55101 United States	Electronic Service		No	23-155Official
3	Lori	Andresen	info@sosbluewaters.org	Save Our Sky Blue Waters		P.O. Box 3661 Duluth MN, 55803 United States	Electronic Service		No	23-155Official
4	Justin	Andringa	justin.andringa@state.mn.us		Public Utilities Commission	121 7th Place East, Suite 350 St Paul MN, 55101 United States	Electronic Service		No	23-155Official
5	Katherine	Arnold	katherine.arnold@ag.state.mn.us		Office of the Attorney General - Department of Commerce	445 Minnesota Street Suite 1400 St. Paul MN, 55101 United States	Electronic Service		No	23-155Official
6	Jessica L	Bayles	jessica.bayles@stoel.com	Stoel Rives LLP		1150 18th St NW Ste 325 Washington DC, 20036 United States	Electronic Service		No	23-155Official
7	Seth	Bichler	sethbichler@fdlrez.com	Fond du Lac Band of Lake Superior Chippewa		1720 Big Lake Rd Cloquet MN, 55720 United States	Electronic Service		No	23-155Official
8	Jason	Bonnett	jason.bonnett@state.mn.us		Public Utilities Commission	121 East 7th Place suite 350 St. Paul MN, 55101 United States	Electronic Service		No	23-155Official
9	Elizabeth	Brama	ebrama@taftlaw.com	Taft Stettinius & Hollister LLP		2200 IDS Center 80 South 8th Street Minneapolis MN, 55402 United States	Electronic Service		No	23-155Official
10	Jon	Brekke	jbrekke@grenergy.com	Great River Energy		12300 Elm Creek Boulevard Maple Grove MN, 55369-4718 United States	Electronic Service		No	23-155Official
11	Matthew	Brodin	mbrodin@allete.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	23-155Official
12	Christina	Brusven	cbrusven@fredlaw.com	Fredrikson Byron		60 S 6th St Ste 1500 Minneapolis MN, 55402-4400 United States	Electronic Service		No	23-155Official
13	Jennifer	Cady	jjcady@mnpower.com	Minnesota Power		30 W Superior St Duluth MN,	Electronic Service		No	23-155Official

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						55802 United States				
14	David	Cartella	david.cartella@cliffsnr.com	Cliffs Natural Resources Inc.		200 Public Square Ste 3300 Cleveland OH, 44114-2315 United States	Electronic Service		No	23-155Official
15	Greg	Chandler	greg.chandler@upm.com	UPM Blandin Paper		115 SW First St Grand Rapids MN, 55744 United States	Electronic Service		No	23-155Official
16	Steve W.	Chriss	stephen.chriss@walmart.com	Wal-Mart		2001 SE 10th St. Bentonville AR, 72716-5530 United States	Electronic Service		No	23-155Official
17	Generic	Commerce Attorneys	commerce.attorneys@ag.state.mn.us		Office of the Attorney General - Department of Commerce	445 Minnesota Street Suite 1400 St. Paul MN, 55101 United States	Electronic Service		Yes	23-155Official
18	Hillary	Creurer	hcreurer@allete.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	23-155Official
19	Patrick	Cutshall	pcutshall@allete.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	23-155Official
20	Lisa	Daniels	lisadaniels@windustry.org	Windustry		201 Ridgewood Ave Minneapolis MN, 55403 United States	Electronic Service		No	23-155Official
21	Ian M.	Dobson	ian.m.dobson@xcelenergy.com	Xcel Energy		414 Nicollet Mall, 401-8 Minneapolis MN, 55401 United States	Electronic Service		No	23-155Official
22	Richard	Dornfeld	richard.dornfeld@ag.state.mn.us		Office of the Attorney General - Department of Commerce	Minnesota Attorney General's Office 445 Minnesota Street, Suite 1800 Saint Paul MN, 55101 United States	Electronic Service		No	23-155Official
23	J.	Drake Hamilton	hamilton@fresh-energy.org	Fresh Energy		408 St Peter St Ste 350 Saint Paul MN, 55101 United States	Electronic Service		No	23-155Official
24	Brian	Edstrom	briane@cubminnesota.org	Citizens Utility Board of Minnesota		332 Minnesota St Ste W1360 Saint Paul MN, 55101 United States	Electronic Service		No	23-155Official

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
25	Ron	Elwood	relwood@mnlsap.org	Legal Services Advocacy Project		970 Raymond Avenue Suite G-40 Saint Paul MN, 55114 United States	Electronic Service		No	23-155Official
26	Sharon	Ferguson	sharon.ferguson@state.mn.us		Department of Commerce	85 7th Place E Ste 280 Saint Paul MN, 55101-2198 United States	Electronic Service		No	23-155Official
27	Frank	Frederickson	ffrederickson@mnpower.com	Minnesota Power		30 W Superior St. Duluth MN, 55802 United States	Electronic Service		No	23-155Official
28	Edward	Garvey	garveyed@aol.com	Residence		32 Lawton St Saint Paul MN, 55102 United States	Electronic Service		No	23-155Official
29	John	Gasele	jgasele@fryberger.com	Fryberger Buchanan Smith & Frederick PA		700 Lonsdale Building 302 W Superior St Ste 700 Duluth MN, 55802 United States	Electronic Service		No	23-155Official
30	Barbara	Gervais	toftemn@boreal.org	Town of Tofte		P O Box 2293 7240 Tofte Park Road Tofte MN, 55615 United States	Electronic Service		No	23-155Official
31	Jerome	Hall	hallj@stlouiscountymn.gov	Saint Louis County Property Mgmt Dept		Duluth Courthouse 100 N 5th Ave W Rm 515 Duluth MN, 55802-1209 United States	Electronic Service		No	23-155Official
32	Adam	Heinen	aheinen@dakotaelectric.com	Dakota Electric Association		4300 220th St W Farmington MN, 55024 United States	Electronic Service		No	23-155Official
33	Annete	Henkel	mui@mnutilityinvestors.org	Minnesota Utility Investors		413 Wacouta Street #230 St.Paul MN, 55101 United States	Electronic Service		No	23-155Official
34	Valerie	Herring	vherring@taftlaw.com	Taft Stettinius & Hollister LLP		2200 IDS Center 80 S. Eighth Street Minneapolis MN, 55402 United States	Electronic Service		No	23-155Official
35	Katherine	Hinderlie	katherine.hinderlie@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	445 Minnesota St Suite 1400 St. Paul MN, 55101-2134 United States	Electronic Service		Yes	23-155Official
36	Lori	Hoyum	lhoyum@mnpower.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	23-155Official
37	James	Jarvi		Minnesota Ore		P O Box 417 Mountain Iron	Paper Service		No	23-155Official

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
				Operations - U S Steel		MN, 55768 United States				
38	Alan	Jenkins	aj@jenkinsatlaw.com	Jenkins at Law		2950 Yellowtail Ave. Marathon FL, 33050 United States	Electronic Service		No	23-155Official
39	Kelsey	Johnson	kjohnson@taconite.org	Iron Mining Association of Minnesota		1003 Discovery Drive Chisholm MN, 55719 United States	Electronic Service		No	23-155Official
40	Richard	Johnson	rick.johnson@lawmoss.com	Moss & Barnett		150 S. 5th Street Suite 1200 Minneapolis MN, 55402 United States	Electronic Service		No	23-155Official
41	Sarah	Johnson Phillips	sjphillips@stoel.com	Stoel Rives LLP		33 South Sixth Street Suite 4200 Minneapolis MN, 55402 United States	Electronic Service		No	23-155Official
42	Nick	Kaneski	nick.kaneski@enbridge.com	Enbridge Energy Company, Inc.		11 East Superior St Ste 125 Duluth MN, 55802 United States	Electronic Service		No	23-155Official
43	Nicolas	Kaylor	nkaylor@mojlaw.com			120 South 6th St Ste 2400 Minneapolis MN, 55402 United States	Electronic Service		No	23-155Official
44	Travis	Kolari		Keetac		PO Box 217 Keewatin MN, 55753 United States	Paper Service		No	23-155Official
45	Michael	Krikava	mkrikava@taftlaw.com	Taft Stettinius & Hollister LLP		2200 IDS Center 80 S 8th St Minneapolis MN, 55402 United States	Electronic Service		No	23-155Official
46	Becky	Lammi	cityclerk@ci.aurora.mn.us	City of Aurora		16 W 2nd Ave N PO Box 160 Aurura MN, 55705 United States	Electronic Service		No	23-155Official
47	Carmel	Laney	carmel.laney@stoel.com	Stoel Rives LLP		33 South Sixth Street Suite 4200 Minneapolis MN, 55402 United States	Electronic Service		No	23-155Official
48	David	Langmo	david.langmo@sappi.com	Sappi North America		P O Box 511 2201 Avenue B Cloquet MN, 55720 United States	Electronic Service		No	23-155Official
49	Emily	Larson	elarson@duluthmn.gov	City of Duluth		411 W 1st St Rm 403 Duluth MN, 55802 United States	Electronic Service		No	23-155Official
50	James D.	Larson	james.larson@avantenergy.com	Avant Energy Services		220 S 6th St Ste 1300 Minneapolis	Electronic Service		No	23-155Official

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						MN, 55402 United States				
51	Amber	Lee	amber.lee@stoel.com	Stoel Rives LLP		33 S. 6th Street Suite 4200 Minneapolis MN, 55402 United States	Electronic Service		No	23-155Official
52	Annie	Levenson Falk	anniel@cubminnesota.org	Citizens Utility Board of Minnesota		332 Minnesota Street, Suite W1360 St. Paul MN, 55101 United States	Electronic Service		No	23-155Official
53	LeRoger	Lind	llind@yahoo.com	Save Lake Superior Association		P.O. Box 101 Two Harbors MN, 55616 United States	Electronic Service		No	23-155Official
54	Eric	Lindberg	elindberg@mncenter.org	Minnesota Center for Environmental Advocacy		1919 University Avenue West Suite 515 Saint Paul MN, 55104-3435 United States	Electronic Service		No	23-155Official
55	Eric	Lipman	eric.lipman@state.mn.us		Office of Administrative Hearings	PO Box 64620 St. Paul MN, 55164-0620 United States	Electronic Service		Yes	23-155Official
56	Patrick	Loupin	patrickloupin@packagingcorp.com	Boise Cascade Corporation		PO Box 990050 Boise ID, 83799-0050 United States	Electronic Service		No	23-155Official
57	Susan	Ludwig	sludwig@mnpower.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	23-155Official
58	Kavita	Maini	kmaini@wi.rr.com	KM Energy Consulting, LLC		961 N Lost Woods Rd Oconomowoc WI, 53066 United States	Electronic Service		No	23-155Official
59	Discovery	Manager	discoverymanager@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	23-155Official
60	Sarah	Manchester	sarah.manchester@sappi.com	Sappi North American		255 State Street Floor 4 Boston MA, 02109-2617 United States	Electronic Service		No	23-155Official
61	Robert	Manning	robert.manning@state.mn.us		Public Utilities Commission	121 7th Place East Suite 350 Saint Paul MN, 55101 United States	Electronic Service		No	23-155Official
62	Ashley	Marcus	ashley.marcus@state.mn.us		Public Utilities Commission	121 7th Place East Suite 350 St. Paul MN, 55101 United States	Electronic Service		No	23-155Official
63	Emily	Marshall	emarshall@lourismarshall.com	Miller O'Brien Jensen, PA		120 S. 6th Street Suite 2400	Electronic Service		No	23-155Official

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						Minneapolis MN, 55402 United States				
64	Keith	Matzdorf	keith.matzdorf@sappi.com	Sappi Fine Paper North America		PO Box 511 2201 Avenue B Cloquet MN, 55720 United States	Electronic Service		No	23-155Official
65	Daryl	Maxwell	dmaxwell@hydro.mb.ca	Manitoba Hydro		360 Portage Ave FL 16 PO Box 815, Station Main Winnipeg MB, R3C 2P4 Canada	Electronic Service		No	23-155Official
66	Matthew	McClincy	mmcclincy@usg.com	USG		35 Arch Street Clouqet MN, 55720 United States	Electronic Service		No	23-155Official
67	Craig	McDonnell	craig.mcdonnell@state.mn.us		Minnesota Pollution Control Agency	520 Lafayette Road St. Paul MN, 55101 United States	Electronic Service		No	23-155Official
68	Natalie	McIntire	natalie.mcintire@gmail.com	Wind on the Wires		570 Asbury St Ste 201 Saint Paul MN, 55104-1850 United States	Electronic Service		No	23-155Official
69	Stephen	Melchionne	stephen.melchionne@ag.state.mn.us		Office of the Attorney General - Department of Commerce	445 Minnesota Street, Ste. 1400 St. Paul MN, 55101 United States	Electronic Service		No	23-155Official
70	Greg	Merz	greg.merz@ag.state.mn.us		Office of the Attorney General - Department of Commerce	445 Minnesota Street Suite 1400 St. Paul MN, 55101 United States	Electronic Service		No	23-155Official
71	Kimberly	Middendorf	kimberly.middendorf@state.mn.us		Office of Administrative Hearings	PO Box 64620 600 Robert St N Saint Paul MN, 55164-0620 United States	Electronic Service		No	23-155Official
72	David	Moeller	dmoeller@allete.com	Minnesota Power			Electronic Service		No	23-155Official
73	Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP		33 South Sixth St Ste 4200 Minneapolis MN, 55402 United States	Electronic Service		No	23-155Official
74	James	Mortenson	james.mortenson@state.mn.us		Office of Administrative Hearings	PO BOX 64620 St. Paul MN, 55164-0620 United States	Electronic Service		No	23-155Official
75	Evan	Mulholland	emulholland@mncenter.org	Minnesota Center for Environmental Advocacy		1919 University Ave W Ste 515 Saint Paul MN, 55101 United States	Electronic Service		No	23-155Official
76	Travis	Murray	travis.murray@ag.state.mn.us		Office of the Attorney	445 Minnesota St	Electronic Service		Yes	23-155Official

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
					General - Residential Utilities Division	Ste 1400 Saint Paul MN, 55101 United States				
77	David	Niles	david.niles@avantenergy.com	Minnesota Municipal Power Agency		220 South Sixth Street Suite 1300 Minneapolis MN, 55402 United States	Electronic Service		No	23-155Official
78	Michael	Noble	noble@fresh-energy.org	Fresh Energy		408 Saint Peter St Ste 350 Saint Paul MN, 55102 United States	Electronic Service		No	23-155Official
79	Rolf	Nordstrom	rnordstrom@gpisd.net	Great Plains Institute		2801 21ST AVE S STE 220 Minneapolis MN, 55407-1229 United States	Electronic Service		No	23-155Official
80	M. William	O'Brien	bobrien@mojlaw.com	Miller O'Brien Jensen, P.A.		120 S 6th St Ste 2400 Minneapolis MN, 55402 United States	Electronic Service		No	23-155Official
81	Christopher J.	Oppitz		-		PO Box 910 Park Rapids MN, 56470-0910 United States	Paper Service		No	23-155Official
82	Elanne	Palcich	epalcich@cpinternet.com	Save Our Sky Blue Waters		P.O. Box 3661 Duluth MN, 55803 United States	Electronic Service		No	23-155Official
83	Max	Peters	maxp@cohasset-mn.com	City of Cohasset		305 NW First Ave Cohasset MN, 55721 United States	Electronic Service		No	23-155Official
84	Jennifer	Peterson	jjpeterson@mnpower.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	23-155Official
85	Christine	Pham	christine.pham@state.mn.us		Public Utilities Commission	121 7th place E, suite 350 Saint Paul MN, 55101 United States	Electronic Service		No	23-155Official
86	Jeff	Pollock	jcp@jpollockinc.com	J. Pollock Inc.		Suite 335 12655 Olive Boulevard St. Louis MO, 63141 United States	Electronic Service		No	23-155Official
87	Tolaver	Rapp	tolaver.rapp@cliffsnr.com	Cliffs Natural Resources		200 Public Square Suite 3400 Cleveland OH, 44114-2318 United States	Electronic Service		No	23-155Official
88	Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	1400 BRM Tower 445 Minnesota St St. Paul MN, 55101-2131 United States	Electronic Service		Yes	23-155Official

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
89	Kevin	Reuther	kreuther@mncenter.org	MN Center for Environmental Advocacy		26 E Exchange St, Ste 206 St. Paul MN, 55101-1667 United States	Electronic Service		No	23-155Official
90	Ralph	Riberich	rriberich@uss.com	United States Steel Corp		600 Grant St Ste 2028 Pittsburgh PA, 15219 United States	Electronic Service		No	23-155Official
91	Buddy	Robinson	buddy@citizensfed.org	Minnesota Citizens Federation NE		2110 W. 1st Street Duluth MN, 55806 United States	Electronic Service		No	23-155Official
92	Santi	Romani		United Taconite		PO Box 180 Eveleth MN, 55734 United States	Paper Service		No	23-155Official
93	Susan	Romans	sromans@allete.com	Minnesota Power		30 West Superior Street Legal Dept Duulth MN, 55802 United States	Electronic Service		No	23-155Official
94	Peter	Scholtz	peter.scholtz@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	Suite 1400 445 Minnesota Street St. Paul MN, 55101-2131 United States	Electronic Service		No	23-155Official
95	Robert H.	Schulte	rhs@schulteassociates.com	Schulte Associates LLC		1742 Patriot Rd Northfield MN, 55057 United States	Electronic Service		No	23-155Official
96	Christine	Schwartz	regulatory.records@xcelenergy.com	Xcel Energy		414 Nicollet Mall FL 7 Minneapolis MN, 55401-1993 United States	Electronic Service		No	23-155Official
97	Will	Seuffert	will.seuffert@state.mn.us		Public Utilities Commission	121 7th Pl E Ste 350 Saint Paul MN, 55101 United States	Electronic Service		Yes	23-155Official
98	Janet	Shaddix Elling	jshaddix@janetshaddix.com	Shaddix And Associates		7400 Lyndale Ave S Ste 190 Richfield MN, 55423 United States	Electronic Service		No	23-155Official
99	Doug	Shoemaker	dougs@charter.net	Minnesota Renewable Energy		2928 5th Ave S Minneapolis MN, 55408 United States	Electronic Service		No	23-155Official
100	Brett	Skyles	brett.skyles@co.itasca.mn.us	Itasca County		123 NE Fourth Street Grand Rapids MN, 55744-2600 United States	Electronic Service		No	23-155Official
101	Richard	Staffon	rcstaffon@msn.com	W. J. McCabe Chapter, Izaak Walton League of America		1405 Lawrence Road Cloquet MN, 55720 United States	Electronic Service		No	23-155Official

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
102	James M	Strommen	jstrommen@kennedy-graven.com	Kennedy & Graven, Chartered		150 S 5th St Ste 700 Minneapolis MN, 55402 United States	Electronic Service		No	23-155Official
103	Eric	Swanson	eswanson@winthrop.com	Winthrop & Weinstine		225 S 6th St Ste 3500 Capella Tower Minneapolis MN, 55402-4629 United States	Electronic Service		No	23-155Official
104	Robert	Tammen	bobtammen@frontiernet.net			PO Box 398 Soudan MN, 55782 United States	Electronic Service		No	23-155Official
105	Jim	Tieberg	jtieberg@polymetmining.com	PolyMet Mining, Inc.		PO Box 475 County Highway 666 Hoyt Lakes MN, 55750 United States	Electronic Service		No	23-155Official
106	Claire	Vatalaro	cvatalaro@allete.com	Allete		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	23-155Official
107	Kodi	Verhalen	kverhalen@taftlaw.com	Taft Stettinius & Hollister LLP		80 S 8th St Ste 2200 Minneapolis MN, 55402 United States	Electronic Service		No	23-155Official
108	Kevin	Walli	kwalli@fryberger.com	Fryberger, Buchanan, Smith & Frederick		380 St. Peter St Ste 710 St. Paul MN, 55102 United States	Electronic Service		No	23-155Official
109	Laurie	Williams	laurie.williams@sierraclub.org	Sierra Club		Environmental Law Program 1536 Wynkoop St Ste 200 Denver CO, 80202 United States	Electronic Service		No	23-155Official
110	Scott	Zahorik	scott.zahorik@aeoa.org	Arrowhead Economic Opportunity Agency		702 S. 3rd Avenue Virginia MN, 55792 United States	Electronic Service		No	23-155Official