



Minnesota Energy Resources Corporation  
2685 145th Street West  
Rosemount, MN 55068  
[www.minnesotaenergyresources.com](http://www.minnesotaenergyresources.com)

October 31, 2025

**VIA ELECTRONIC FILING**

Sasha Bergman  
Executive Secretary  
Minnesota Public Utilities Commission  
121 Seventh Place East, Suite 350  
St. Paul, MN 55101

Re: In the Matter Minnesota Energy Resources Corporation's Petition for  
Approval of a Change in Demand Entitlement for its Consolidated  
System – November 1 Update

Docket No. G011/M-25-69

Dear Ms. Bergman:

On August 1, 2025, Minnesota Energy Resources Corporation ("MERC" or the "Company") filed its Petition for Change in Demand Entitlement for its MERC-Consolidated purchased gas adjustment ("PGA") area. MERC submits this update to its August 1, 2025 Demand Entitlement filing.

In its April 28, 2016 Order in Docket Nos. G011/M-15-722, G011/M-15-723, and G011/M-15-724, the Minnesota Public Utilities Commission ("Commission") required that MERC explain changes made in its compliance petitions that are different from its original petitions, and provide a redline version of both petitions identifying changes. In accordance with the Commission's Order, MERC provides redlined changes in the attached Petition and has highlighted changes in the affected schedules.

As of the date of this filing, MERC has completed its purchases of future contracts and call options for the 2025-2026 winter period. The final financial hedge volumes and costs are shown in Attachments 5 and 11 (pages 1 and 3). The call option premium costs additionally flow through the spreadsheet in Attachment 4, pages 1 and 2, and in Attachment 8. Additionally, the rate comparisons in Attachment 4, page 1, have been updated to MERC's October 1, 2025, PGA rates, and a minor correction to the Great Lakes Gas Transmission Off Peak design day requirement value shown on Attachment 1, page 2 has been made. This minor correction additionally flows through the spreadsheet in Attachment 3.

Ms. Sasha Bergman  
October 31, 2025  
Page 2

Please contact me at (414) 221-4208 if you have any questions regarding the information in this filing. Thank you for your attention to this matter.

Sincerely yours,

/s/Joylyn Hoffman Malueg  
Joylyn Hoffman Malueg  
Sr. Project Specialist  
Minnesota Energy Resources Corporation

Enclosures  
cc: Service List

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

**Katie J. Sieben  
Hwikwon Ham  
Audrey Partridge  
Joseph K. Sullivan  
John A. Tuma**

**Chair  
Commissioner  
Commissioner  
Commissioner  
Commissioner**

In the Matter of the Petition of Minnesota  
Energy Resources Corporation for Approval of  
a Change in Demand Entitlement for its  
Consolidated System

Docket No. G011/M-25-69

**FILING UPON CHANGE IN DEMAND**

Pursuant to Minnesota Rule 7825.2910, subpart 2 (Filing Upon Change in Demand), Minnesota Energy Resources Corporation – Consolidated (MERC or the Company), a subsidiary of WEC Energy Group, hereby petitions the Minnesota Public Utilities Commission (Commission) for approval of changes in demand entitlements for MERC-Consolidated customers served off Centra Pipeline, Viking Gas Transmission, and Great Lakes Gas Transmission (collectively the “Consolidated” pipelines).<sup>1</sup> MERC requests the Commission approve the requested changes to be recovered in the Purchased Gas Adjustment (PGA) beginning November 1, 2025.

This filing includes the following attachments:

- |                      |   |
|----------------------|---|
| <b>Attachment A:</b> | Notice of Availability.   |
| <b>Attachment B:</b> | One paragraph summary of the filing in accordance with Minn. R. 7829.1300, subp. 1. |
| <b>Attachment C:</b> | Petition for Change in Demand with Attachments.                                     |
| <b>Attachment D:</b> | Certificate of Service and Service List.  |

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<sup>1</sup> MERC also serves certain of its Minnesota customers off the Northern Natural Gas (“NNG”) system. MERC requests approval of a demand entitlement change for the 2025-2026 heating season for its MERC-NNG PGA in a separate docket.

The following information is provided in accordance with Minn. R. 7829.1300:

**I. Summary of Filing**

Pursuant to Minn. R. 7829.1300, subp. 1, a one-paragraph summary of the filing is attached.

**II. Service**

Pursuant to Minn. R. 7829.1300, subp. 2, MERC has served a copy of this filing on the Department of Commerce, Division of Energy Resources and the Office of the Attorney General — Residential Utilities Division. The summary of filing has been served on all parties on the attached service list. Additionally, pursuant to Minn. R. 7825.2910, subp. 3, a Notice of Availability has been sent to all intervenors in the Company's previous two rate cases.

**III. General Filing Information**

**A. Name, Address, and Telephone Number of the Utility**

Minnesota Energy Resources Corporation  
2685 145<sup>th</sup> Street West  
Rosemount, MN 55068  
(651) 322-8901

**B. Name, Address, Electronic Address, and Telephone Number of Attorney for the Utility**

Kristin M. Stastny  
Taft Stettinius & Hollister LLP  
2200 IDS Center  
80 South 8th Street  
Minneapolis, MN 55402  
[KStastny@Taftlaw.com](mailto:KStastny@Taftlaw.com)  
(612) 977-8656


**C. Date of the Filing and Proposed Effective Date**

Date of filing: ~~October 31~~~~August 1~~, 2025  
Proposed Effective Date: November 1, 2025

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

Minnesota Statutes and related rules do not provide an explicit time frame for action by the Commission. Under Minn. R. 7829.1400, initial comments are due within 30 days of filing, with reply comments due 10 days thereafter.

**E. Signature, Electronic Address, and Title of Utility Employee Responsible for the Filing**



Joylyn C. Hoffman Malueg  
Senior Project Specialist  
[Joylyn.HoffmanMalueg@wecenergygroup.com](mailto:Joylyn.HoffmanMalueg@wecenergygroup.com)  
2685 145<sup>th</sup> Street West  
Rosemount, MN 55068  
(414) 221-4208

If additional information is required, please contact Joylyn Hoffman Malueg at (414) 221-4208.

DATED: ~~October 31~~ August  
4, 2025

Respectfully submitted,  
MINNESOTA ENERGY RESOURCES  
CORPORATION

By: /s/ Joylyn C. Hoffman Malueg  
Joylyn C. Hoffman Malueg  
2685 145<sup>th</sup> Street West  
Rosemount, MN 55068  
Telephone: (414) 221-4208

October 31~~August 1~~, 2025

To: Docket No. G011/M-25-69 Service List

RE: Minnesota Energy Resources Corporation-Consolidated Petition for Approval of Change in Demand Entitlement

**Notice of Availability**

Please take notice that Minnesota Energy Resources Corporation has filed a petition with the Minnesota Public Utilities Commission for approval of a change in demand entitlement for its Consolidated Purchased Gas Adjustment system.

To obtain copies, or if you have any questions, please contact:

Joylyn C. Hoffman Malueg  
Minnesota Energy Resources Corporation  
2685 145<sup>th</sup> Street West  
Rosemount, MN 55068  
(414) 221-4208

Please note that this filing is also available through the eDockets system maintained by the Minnesota Department of Commerce and the Minnesota Public Utilities Commission. You can access this document by going to eDockets through the websites of the Department of Commerce or the Public Utilities Commission or going to the eDockets homepage at:

<https://www.edockets.state.mn.us/EFiling/home.jsp>

Once on the eDockets homepage, this document can be accessed through the Search Documents link and by entering Docket Number 25-69.

**ATTACHMENT B**

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

**Katie J. Sieben  
Hwikwon Ham  
Audrey Partridge  
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**Chair  
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In the Matter of the Petition of Minnesota  
Energy Resources Corporation for Approval of  
a Change in Demand Entitlement for its  
Consolidated System

Docket No. G011/M-25-69

**SUMMARY OF FILING**

Pursuant to Minnesota Rule 7825.2910, subpart 2 (Filing Upon Change in Demand), Minnesota Energy Resources Corporation – Consolidated (MERC or the Company), hereby petitions the Minnesota Public Utilities Commission (Commission) for approval of changes in demand entitlements for MERC customers served off of the Consolidated system. MERC requests the Commission approve the requested changes to be recovered in the Purchased Gas Adjustment (PGA) beginning November 1, 2025.

STATE OF MINNESOTA  
BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Katie J. Sieben  
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In the Matter of the Petition of Minnesota  
Energy Resources Corporation for Approval  
of a Change in Demand Entitlement for its  
Consolidated System

Docket No. G011/M-25-69

PETITION OF MINNESOTA ENERGY RESOURCES CORPORATION-CONSOLIDATED FOR  
CHANGE IN DEMAND

I. Introduction

Pursuant to Minnesota Rule 7825.2910, subpart 2 (Filing Upon Change in Demand), Minnesota Energy Resources Corporation - Consolidated (MERC or the Company), a subsidiary of WEC Energy Group, hereby petitions the Minnesota Public Utilities Commission (Commission) for approval of changes in demand entitlements for MERC-Consolidated customers served off Centra Pipeline, Viking Gas Transmission, and Great Lakes Gas Transmission (the “Consolidated” pipelines). MERC requests that the Commission approve the requested changes to be recovered in the Purchased Gas Adjustment (PGA) beginning on November 1, 2025. Included with this filing are the following Attachments:

Attachment 1: Design-Day Demand Summary

Attachment 2: Sales Forecast

Attachment 3: Current and Proposed Entitlement Levels



Attachment 4: Rate Impact of the Proposed Demand Change

Attachment 5: Financial Option Summary

Attachment 6: Winter Plan

Attachment 7: Entitlement History

Attachment 8: Change in Entitlement Levels and Related Demand Costs

Attachment 9: Actual Throughput and Design-Day Forecast Estimated Throughput

Attachment 10: Customer Counts

Attachment 11: Hedging Summary

Attachment 12: Forecast Methodology

Through this filing, MERC also addresses compliance with Order Points 9 and 10 from the Commission's February 17, 2023 Order in Docket Nos. G999/CI-21-135 and G011/CI-21-611.<sup>2</sup>

## **II. Discussion**

### **A. MERC's Consolidated Design-Day Requirements**

Minnesota Rule 7825.2910, subpart 2(b) requires that a filing upon change in demand include the utility's Design-Day demand by customer class and the change in Design-Day demand, if any, necessitating the demand revision. The Consolidated Design-Day requirement has increased by 1,058 dekatherms (dth) since November 1, 2024. This represents a 1.83% increase in Design-Day requirement over the 2024-2025 heating season.

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<sup>2</sup> Order Point 9 requires discussion of how changes to pipeline capacity affects the Company's supply diversity, and if pipeline capacity comes at a cost premium but increases supply diversity, provide a meaningful cost/benefit discussion of the tradeoff, including a comparison with the least-cost capacity option. Order Point 10 requires MERC to include in its relevant, annual forward-looking gas planning or hedging filings: A) its expected supply mix across different load and weather conditions throughout each month of the upcoming winter season, B) the forecasted minimum, average, and maximum day load requirements, and C) the expected mix of baseload, storage, and spot supply on those days.

**Table 1: MERC Proposed Consolidated Reserve Margins  
For the 2025-2026 Heating Season**

	Reserve Margin 2025-2026 Heating Season	Reserve Margin 2024-2025 Heating Season	Change
Consolidated	9.98%	11.59%	-1.61%

For the Demand Entitlement filing effective November 1, 2025, the total Design-Day requirement for MERC – Consolidated is 58,794 dth (Attachment 1). The difference between the total Design-Day requirement and total Design-Day capacity results in a 9.98% reserve margin (Attachment 3). As required by Order Point 9 of the Commission’s Order in Docket No. G011/M-15-722, Attachment 3 reflects separate summer and winter demand entitlements for MERC-Consolidated.

#### **B. Gas Supply**

Minnesota Rule 7825.2910, subpart 2, requires a description of Design-Day gas supply from all sources under the new level, allocation, or form of demand. This information is provided in Attachment 3.

#### **C. Forecast Methodology for MERC Demand Entitlement November 1, 2025**

See Attachment 12.

### **III. Additional Filing Requirements**

#### **A. Daily Design-Day Estimate to Actual Comparison**

In the 2007-2008 demand entitlement dockets,<sup>3</sup> MERC agreed to include a daily estimate utilizing the Design-Day model, which is calculated in Attachment 9. The daily estimate is compared to actual consumption. The actual volumes are total throughput which

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<sup>3</sup> Docket Nos. G007/M-07-1402; G007/M-07-1403; G007/M-07-1404; and G007/M-07-1405.

includes interruptible and transportation volumes that are located behind MERC citygates. The Design-Day model only calculates firm volumes. MERC does not forecast on a daily/monthly basis utilizing the Design-Day model. The Design-Day model is utilized to calculate the theoretical peak day.

## **B. Average Customer Counts**

In the 2007-2008 demand entitlement dockets, MERC agreed to include average customer counts which are provided in Attachment 10.

## **C. Balancing**

Order Point 4 of the Commission's January 21, 2015, Order in MERC's 2010-2011 demand entitlement dockets, Docket Nos. G007/M-10-1166; G007/M-10-1167; G011/M-10-1168; and G011/M-10-1169, required that in future demand entitlement filings, MERC provide a clarification of its statements regarding system balancing and detailed evidence assuring the Commission that the appropriate customer group is paying for any balancing charges or penalties. Additionally, in Docket No. G999/AA-12-756, by Order dated November 14, 2013, the Commission ordered that "prospectively, all regulated natural gas utilities shall recover balancing service costs, and shall credit the utility's penalty revenues and the pipeline's revenue credits, to the commodity portion of the PGA effective with the earliest true-up filing (for revenues) or the earliest monthly PGA (for costs) that can reasonably be implemented."

MERC subsequently revised its monthly PGA filings, beginning November 2013, to recover all balancing costs via the commodity portion of the PGA. MERC's 2014 AAA and true-up filings, as well as the 2014 Demand Entitlement filing, also reflected this change. The current MERC-Consolidated demand entitlement filing includes detailed evidence of the allocation of balancing costs to the commodity portion of the PGA on Attachment 4, page 2 of 2.

## **D. MERC's Proposed Consolidated System Demand-Related Changes**

There are two types of demand entitlement changes. The first type is Design-Day deliverability, which quantifies the amount of firm transportation and storage capacity available to MERC's Consolidated customers during winter peak periods. The second type does not affect Design-Day deliverability levels, but alters the capacity portfolio and the PGA costs recovered from customers.

#### 1. Design-Day Deliverability Changes

As shown in Attachment 3, MERC's Design-Day Deliverability marginally increased by 235 dth/day as compared to 2024-2025. This volume was all on the Centra Pipeline contract. Centra accepted MERC's request to increase the volume to 10,343 Dth/day to reflect the updated peak day estimate plus 5% reserve for the customers served by Centra Pipeline.

The Commission's February 17, 2023 Order in Docket Nos. G-999/CI-21-135 and G-011/CI-21-611 Requiring Actions to Mitigate Impacts from Future Natural Gas Price Spikes, Setting Filing Requirements, and Initiating a Proceeding to Establish Gas Resource Planning Requirements, requires in Order Point 9 that MERC discuss how changes to pipeline capacity affects the Company's supply diversity, and if pipeline capacity comes at a cost premium but increases supply diversity, provide a meaningful cost/benefit discussion of the tradeoff, including a comparison with the least-cost capacity option. The acquired incremental capacity discussed above did not impact MERC's supply diversity, as the Company increased its capacity with supply to be sourced at the Spruce supply basin, which is the only supply option on Centra Pipeline.

#### 2. Other Demand Entitlement Changes

MERC continues to maintain its storage contracts with ANR Pipeline Storage, as detailed in previous demand entitlement filings and reflected in Attachments 4 (page 2 of 2), 7, and 8. MERC extended both of the ANR Pipeline contracts through March 31, 2028. Small

changes to storage volumes and rates will occur to the ANR Storage contract each year as a result of annual fuel rate changes, as reflected in Attachments 4 (page 2 of 2), 7, and 8.

Additionally, MERC notes that ANR Pipeline filed a Section 4 rate case in Docket No. RP25-806 and Great Lakes Gas Transmission filed a Section 4 rate case in Docket No. RP25-855, with the Federal Energy Regulatory Commission (“FERC”) on April 1, 2025 and April 30, 2025, respectively. Both rate case petitions requested that rates to go into effect on November 1, 2025. Since the result of the rate case is unknown at this time, MERC has held rates at current levels for determining its demand rate in this proceeding. In accordance with Minn. R. 7825.2910, MERC will reflect actual rate increases in its monthly PGA filing when those rates go into effect.

#### **E. Financial Option Units and Premiums**

MERC has ~~started~~completed its purchases of future contracts and call options for the 2025-2026 winter period. Financial hedge volumes and costs are shown in Attachments 5 and 11 (page 1 and 3). The physical forward start and call option premium costs additionally flow through the spreadsheet in Attachment 4, pages 1 and 2, and in Attachment 8.

In accordance with the Commission's April 9, 2021, Order in Docket No. G011/M-20-833 approving MERC's variance extension request to recover the costs of financial instruments through the PGA, MERC provides the following information:

- i. a list of all financial instruments purchased for the upcoming heating season (see Attachment 11);
- ii. the cost premium associated with each contract (see Attachment 5);
- iii. the size (in dth) of each contract (see Attachments 5 and 11);
- iv. the contract date (see Attachment 5);
- v. the contract price (see Attachment 11);

- vi. an attachment that details the projected total system sales estimates for the upcoming heating season, including all supporting data and assumptions used when calculating the sales forecast, and the total number of volumes hedged using financial instruments for the upcoming heating season (see Attachment 2 and Attachment 6, page 1 of 2); and
- vii. a detailed discussion of the anticipated benefits to ratepayers related to MERC's financial instrument contracts, discussed below.

The Consolidated 2025-2026 Winter Portfolio Hedging Plans - Minnesota Energy Resources Corporation for Great Lakes Gas Transmission, Viking Gas Transmission, and Centra Pipeline gas supply purchases are shown on Attachment 6. MERC's hedging strategy covers up to 60% of normal winter volumes; up to 30% through physical storage; and 30% through financial instruments (10% futures and 20% options). The weighted average price of purchased futures contracts of natural gas for the 2025-2026 winter is ~~\$4.2446~~~~4.6172~~/dth. Please see Attachment 11, page 1 of 3. As shown in Attachment 11, page 2 of 3, MERC projects the ANR storage WACOG to be ~~\$2.8863~~~~2.9649~~/dth. While MERC still continues with its strategy to purchase call options around a \$0.10/dth premium, the overall gas market volatility has pushed the strike price of the purchased call options up to an average of ~~\$8.0923~~~~11.0355~~/dth. Both the futures and option strike prices are up from winter 2024-2025. If the NYMEX contract(s) settle above that price, the options are exercised and the MERC customer gas cost is capped at the average strike price. Please see Attachment 11, page 3 of 3. The remaining winter volumes are purchased at index or market prices. All numbers reflected are natural gas costs only and do not include any transportation, storage, hedge premium, or margin costs.

The Commission's February 17, 2023 Order in Docket Nos. G-999/CI-21-135 and G-011/CI-21-611 Requiring Actions to Mitigate Impacts from Future Natural Gas Price Spikes,

Setting Filing Requirements, and Initiating a Proceeding to Establish Gas Resource Planning Requirements, requires in Order Point 10 that MERC includes in its relevant, annual forward-looking gas planning or hedging filings: A) its expected supply mix across different load and weather conditions throughout each month of the upcoming winter season, B) the forecasted minimum, average, and maximum day load requirements, and C) the expected mix of baseload, storage, and spot supply on those days. Attachment 6, page 3, provides this information for the November 2025 through March 2026 period. All load estimates are based on the previous three years observed data, except for the December through February months, in which the Design Day (i.e. Peak Day) was used to represent the maximum load. While three years of historical data provide a reasonable estimate, conditions can deviate and provide load requirements different from those in the past.

#### **F. PGA Cost Recovery**

MERC proposes to begin recovering the costs associated with the change in demand-related costs in its monthly PGA effective November 1, 2025. Rate impacts associated with this change can be found in Attachment 4.

#### **G. Impacts of Telemetry**

Throughout the course of the year, a number of customers request to switch from interruptible to firm service. MERC evaluates these requests to determine the impact to its system and upstream entitlement levels. MERC's process requires an evaluation of the system capability before a customer is allowed to switch to firm. As a result, the firm volumes associated with a customer switch fall within the Design-Day parameters and do not impact demand entitlement levels.

### **IV. Conclusion**

MERC respectfully requests that the Commission approve the requested changes to be recovered in the Purchased Gas Adjustment (PGA) beginning November 1, 2025.

DATED: ~~August 1~~October 31, 2025

Respectfully submitted,

MINNESOTA ENERGY RESOURCES  
CORPORATION

By: /s/ Joylyn C. Hoffman Malueg

Joylyn C. Hoffman Malueg

2685 145<sup>th</sup> Street West

Rosemount, MN 55068

Telephone: (414) 221-4208



## **MINNESOTA ENERGY RESOURCES - Consolidated**

### **DESIGN-DAY DEMAND SUMMARY**

**November 1, 2025**

**Consolidated**

Design Day Requirement		58,794
Total Peak Day Entitlement		64,664
2024/25 Firm Peak Day Actual Sendout	1/20/2025	52,834
Firm Annual Throughput - Minnesota		5,663,655
No. of Firm Customers		37,868
Department Load Factor Calculation		29.37%

## MINNESOTA ENERGY RESOURCES - Consolidated

### CONSOLIDATED DESIGN DAY REQUIREMENTS

November 1, 2025

Consolidated

Pipeline Group	2024/25 Customer Count	1/20 Design DDD	Regression Factors		Regression Total	Regression Adjustment	1/20 Requirements Regression Load	Firm/Interruptible Contract Demand Units	Total
			Intercept	Slope					

VGT									
Peak		109	490	136	17,317	1,132	18,448	7	18,456
Off Peak		57	490	136	9,633	1,132	10,764	7	10,772

GLGT									
Peak		105	1,389	236	28,632	1,806	30,438	51	30,489
Off Peak		57	1,389	236	16,172	1,806	17,978	51	18,029

Centra									
Peak		107	465	79	9,314	536	9,850	0	9,850
Off Peak		57	465	79	5,183	536	5,718	0	5,718

Total Consolidated									
Peak	37,868	107	2,344	450	55,263	3,473	58,736	58	58,794
Off Peak	37,868	57	2,344	450	30,988	3,473	34,461	58	34,519

<b>MINNESOTA ENERGY RESOURCES - Consolidated</b>
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**DESIGN-DAY DEMAND PER CUSTOMER**

**November 1, 2025**

<b>Consolidated</b>
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<b><u>Heating Season</u></b>	<b><u>No. of Firm Customers</u></b>	<b><u>Design Day Requirements</u></b>	<b><u>MMBtu /Customer /Day</u></b>
25/26	37,868	58,794	1.55
24/25	37,898	57,736	1.52
23/24	37,428	57,148	1.53
22/23	37,578	56,963	1.52
21/22	37,151	56,403	1.52
20/21	36,580	57,065	1.56
19/20	35,981	56,782	1.58
18/19	35,653	56,470	1.58
17/18	35,965	56,266	1.56
16/17	35,499	55,528	1.56
15/16	34,799	53,075	1.53
14/15	34,397	48,706	1.42
13/14	34,007	50,048	1.47
12/13	33,630	52,289	1.55

<b>MINNESOTA ENERGY RESOURCES - Consolidated</b>
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**SUMMER/WINTER USAGE - Dth**  
**PROJECTED 12 MONTHS ENDING JUNE 2026**

<b>Consolidated</b>
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<u><b>Class</b></u>	<u><b>Summer Apr-Oct</b></u>	<u><b>Winter Nov-Mar</b></u>	<u><b>Total</b></u>
General Service	1,213,508	4,429,143	5,642,651
Interruptible	175,531	359,520	535,051
Firm/Interruptible	6,454	14,551	21,004
<b>Total</b>	<b>1,395,493</b>	<b>4,803,213</b>	<b>6,198,706</b>

## MINNESOTA ENERGY RESOURCES - Consolidated

### ENTITLEMENT LEVELS

November 1, 2025

Consolidated

<u>Capacity Type</u>		<i>Summer</i>			<i>April/October</i>			<i>Winter</i>		
		2024/25	Change	Proposed	2024/25	Change	Proposed	2024/25	Change	Proposed
		<u>MMBtu</u>	<u>MMBtu</u>	<u>MMBtu</u>	<u>MMBtu</u>	<u>MMBtu</u>	<u>MMBtu</u>	<u>MMBtu</u>	<u>MMBtu</u>	<u>MMBtu</u>
FT Western Zone	FT19131	10,130	0	10,130	10,130	0	10,130	0	0	0
FT Western Zone	FT18528	7,600	0	7,600	7,600	0	7,600	7,600	0	7,600
FT Western Zone (5)	FT18528 (5)	0	0	0	0	0	0	3,728	0	3,728
FT Western Zone (5)	FT19129 (5)	0	0	0	0	0	0	20,000	0	20,000
ANR (5) *	130504	0	0	0	0	0	0	20,000	0	20,000
FT Western to Easter Zone	22657	2,202	0	2,202	2,202	0	2,202	2,202	0	2,202
FT-A ZONE 1 - 1	AF0012/AF0537	18,193	0	18,193	18,193	0	18,193	19,291	0	19,291
FT-A ZONE 1 - 1	AF0321	0	0	0	0	0	0	1,500	0	1,500
FT-A ZONE 1 - 1	AF0321	0	0	0	0	0	0	0	0	0
CENTRA FT-1		10,108	235	10,343	10,108	235	10,343	10,108	235	10,343
<b>Total Entitlement</b>		48,233	235	48,468	48,233	235	48,468	64,429	235	64,664
Forecasted Design Day-Adjusted					33,492	1,027	34,519	57,736	1,058	58,794
Forecasted Design Day + 5% Reserve								60,623		61,734
Capacity Surplus/Shortage to Design Day					14,741	(792)	13,949	6,693	(823)	5,870
Capacity Surplus/Shortage to Design Day + 5% Reserve								3,806		2,930
Reserve Margin					44.01%	-3.60%	40.41%	11.59%	-1.61%	9.98%

\* This upstream contract does not contribute to peak day deliverability

Attachment 4  
Page 1 of 2

MINNESOTA ENERGY RESOURCES - CONSOLIDATED								
RATE IMPACT OF THE PROPOSED DEMAND CHANGE								
November 1, 2025								
Consolidated								
All costs in \$/Dth	Base Cost of Gas  G011/MR-22-505 Mar 1, 2024	Demand Charge  Demand Filing Nov 1, 2024	Most Recent PGA  Oct 1, 2025	Proposed Effective  Nov 1, 2025	Result of Proposed Change			
					Change from Last Rate Case	Change from Nov 1, 2024 Demand Filing	Change from Last PGA %	Change from Last PGA \$
1) General Service Residential Avg. Annual Use: 86 Dth								
Commodity Cost	\$3.9880	\$2.3228	\$1.2952	\$2.9987	-24.81%	29.10%	131.52%	\$1.7035
Demand Cost	\$0.7380	\$0.8883	\$0.8883	\$0.9473	28.36%	6.65%	6.64%	\$0.0590
Commodity Margin	\$3.2919	\$3.2919	\$3.2919	\$3.2919	0.00%	0.00%	0.00%	\$0.0000
Total Cost of Gas	\$8.0179	\$6.5030	\$5.4754	\$7.2379	-9.73%	11.30%	32.19%	\$1.7625
Avg Annual Cost	\$691.94	\$561.21	\$472.53	\$624.63	-9.73%	11.30%	32.19%	\$152.10
Effect of proposed commodity change on average annual bills:								\$147.01
Effect of proposed demand change on average annual bills:								\$5.09
2) Small C&I Firm, Class 2: Avg. Annual Use: 694 Dth								
Commodity Cost	\$3.9880	\$2.3228	\$1.2952	\$2.9987	-24.81%	29.10%	131.52%	\$1.7035
Demand Cost	\$0.7380	\$0.8883	\$0.8883	\$0.9473	28.36%	6.65%	6.64%	\$0.0590
Commodity Margin	\$2.5030	\$2.5030	\$2.5030	\$2.5030	0.00%	0.00%	0.00%	\$0.0000
Total Cost of Gas	\$7.2290	\$5.7141	\$4.6865	\$6.4490	-10.79%	12.86%	37.61%	\$1.7625
Avg Annual Cost	\$5,018.37	\$3,966.73	\$3,253.37	\$4,476.87	-10.79%	12.86%	37.61%	\$1,223.50
Effect of proposed commodity change on average annual bills:								\$1,182.54
Effect of proposed demand change on average annual bills:								\$40.97
3) Small C&I Interruptible, Class 2: Avg. Annual Use: 3,586 Dth								
Commodity Cost	\$3.9880	\$2.3228	\$1.2952	\$2.9987	-24.81%	29.10%	131.52%	\$1.7035
Commodity Margin	\$1.5047	\$1.5047	\$1.5047	\$1.5047	0.00%	0.00%	0.00%	\$0.0000
Total Cost of Gas	\$5.4927	\$3.8275	\$2.7999	\$4.5034	-18.01%	17.66%	60.84%	\$1.7035
Avg Annual Cost	\$19,698.47	\$13,726.63	\$10,041.28	\$16,150.37	-18.01%	17.66%	60.84%	\$6,109.09
Effect of proposed commodity change on average annual bills:								\$6,109.09
4) Large C&I Interruptible, Class 3: Avg. Annual Use: 17,572 Dth								
Commodity Cost	\$3.9880	\$2.3228	\$1.2952	\$2.9987	-24.81%	29.10%	131.52%	\$1.7035
Commodity Margin	\$1.2058	\$1.2058	\$1.2058	\$1.2058	0.00%	0.00%	0.00%	\$0.0000
Total Cost of Gas	\$5.1938	\$3.5286	\$2.5010	\$4.2045	-19.05%	19.15%	68.11%	\$1.7035
Avg Annual Cost	\$91,267.53	\$62,006.31	\$43,948.57	\$73,882.33	-19.05%	19.15%	68.11%	\$29,933.75
Effect of proposed commodity change on average annual bills:								\$29,933.75

Note: Average Annual Use based on 2023 MERC Gas Rate Design in Docket GR-22-504  
Note: Rates do not include the ACA adjustment.

## Consolidated

(c) Consolidated-General Service, Interruptible, Firm/Interruptible: Total Commodity Current Cost of Gas/therm  
(I.e. Sum of Costs from Sections B. 2. (a) and (b) )

## MINNESOTA ENERGY RESOURCES - CONSOLIDATED

### Financial Options Heating Season 2025-2026

#### Units - Gas Daily Peaker Packages (Physical)

November		December		January		February		March		Daily Total	Term Total
Contract	Daily	Contract	Daily	Contract	Daily	Contract	Daily	Contract	Daily		
Date	Volume	Date	Volume	Date	Volume	Date	Volume	Date	Volume		
N/A		N/A		N/A		N/A		N/A			

#### Premium - Gas Daily Peaker (Monthly Cost)

November		December		January		February		March		Option Premium	Total Premium Cost
Option	Premium	Option	Premium	Option	Premium	Option	Premium	Option	Premium		
Premium	Cost	Premium	Cost	Premium	Cost	Premium	Cost	Premium	Cost		
N/A		N/A		N/A		N/A		N/A			

#### Units - Futures (Dth)

	November		December		January		February		March		Term Total
	Contract	Daily	Contract	Daily	Contract	Daily	Contract	Daily	Contract	Daily	
	Date	Volume	Date	Volume	Date	Volume	Date	Volume	Date	Volume	
1	05/16/25	343	05/22/25	722	05/16/25	762	05/22/25	247	05/16/25	452	76,786
2	06/13/25	343	06/24/25	662	06/13/25	704	05/22/25	371	06/13/25	395	75,000
3	07/16/25	343	07/24/25	60	07/16/25	645	06/24/25	556	07/16/25	395	60,714
4	08/13/25	343	07/24/25	541	08/13/25	645	07/24/25	556	08/13/25	339	73,214
5	09/08/25	343	08/25/25	601	09/08/25	587	08/25/25	495	09/08/25	339	71,429
6	10/06/25	286	09/15/25	180	10/06/25	528	09/15/25	495	10/06/25	339	55,357
7	01/00/00	-	09/15/25	301	01/00/00	-	10/09/25	495	01/00/00	-	23,214
8	01/00/00	-	10/09/25	481	01/00/00	-	01/00/00	-	01/00/00	-	14,286
9	01/00/00	-	01/00/00	-	01/00/00	-	01/00/00	-	01/00/00	-	-
10	01/00/00	-	01/00/00	-	01/00/00	-	01/00/00	-	01/00/00	-	-
Total		2,000		3,548		3,871		3,214		2,258	450,000

#### Units - Call Options (Dth)

	November		December		January		February		March		Term Total
	Contract	Daily	Contract	Daily	Contract	Daily	Contract	Daily	Contract	Daily	
	Date	Volume	Date	Volume	Date	Volume	Date	Volume	Date	Volume	
1	05/16/25	722	05/22/25	1,133	05/16/25	640	05/22/25	1,088	05/16/25	767	130,895
2	06/13/25	722	06/24/25	1,133	05/22/25	640	06/24/25	1,088	06/13/25	767	130,895
3	07/16/25	722	07/24/25	1,193	06/13/25	640	07/24/25	1,088	07/16/25	767	132,743
4	08/13/25	722	08/13/25	596	06/24/25	640	08/25/25	1,152	08/13/25	826	117,878
5	09/08/25	722	08/25/25	596	07/16/25	640	09/15/25	1,152	09/08/25	826	117,878
6	10/06/25	421	09/08/25	596	07/24/25	640	10/09/25	1,216	10/06/25	885	112,472
7	10/06/25	301	09/15/25	596	08/13/25	640	01/00/00	-	01/00/00	-	47,365
8	01/00/00	-	10/06/25	596	08/25/25	640	01/00/00	-	01/00/00	-	38,337
9	01/00/00	-	10/09/25	656	09/08/25	640	01/00/00	-	01/00/00	-	40,186
10	01/00/00	-	01/00/00	-	09/15/25	640	01/00/00	-	01/00/00	-	19,850
11	01/00/00	-	01/00/00	-	10/06/25	640	01/00/00	-	01/00/00	-	19,850
12	01/00/00	-	01/00/00	-	10/09/25	699	01/00/00	-	01/00/00	-	21,654
Total		4,333		7,097		7,742		6,786		4,839	930,000

#### Premium - Call Option (Monthly Cost)

	November		December		January		February		March		Option Premium	Total Premium Cost
	Option	Premium	Option	Premium	Option	Premium	Option	Premium	Option	Premium		
	Premium	Cost	Premium	Cost	Premium	Cost	Premium	Cost	Premium	Cost		
1	\$ 0.1000	\$ 2,167	\$ 0.0990	\$ 3,477	\$ 0.1000	\$ 1,985	\$ 0.0970	\$ 2,956	\$ 0.1000	\$ 2,378	\$ 0.0990	\$ 12,963
2	\$ 0.1000	\$ 2,167	\$ 0.1000	\$ 3,513	\$ 0.1000	\$ 1,985	\$ 0.0990	\$ 3,017	\$ 0.0980	\$ 2,330	\$ 0.0994	\$ 13,011
3	\$ 0.0990	\$ 2,145	\$ 0.1000	\$ 3,697	\$ 0.1000	\$ 1,985	\$ 0.1000	\$ 3,047	\$ 0.1000	\$ 2,378	\$ 0.0998	\$ 13,253
4	\$ 0.1000	\$ 2,167	\$ 0.0970	\$ 1,793	\$ 0.1000	\$ 1,985	\$ 0.1000	\$ 3,226	\$ 0.1000	\$ 2,561	\$ 0.0995	\$ 11,732
5	\$ 0.0920	\$ 1,993	\$ 0.0970	\$ 1,793	\$ 0.1000	\$ 1,985	\$ 0.1000	\$ 3,226	\$ 0.1000	\$ 2,561	\$ 0.0981	\$ 11,559
6	\$ 0.0850	\$ 1,074	\$ 0.1000	\$ 1,849	\$ 0.1000	\$ 1,985	\$ 0.1000	\$ 3,406	\$ 0.1000	\$ 2,744	\$ 0.0983	\$ 11,058
7	\$ 0.0860	\$ 776	\$ 0.1000	\$ 1,849	\$ 0.1000	\$ 1,985	\$ -	\$ -	\$ -	\$ -	\$ 0.0973	\$ 4,610
8	\$ -	\$ -	\$ 0.0990	\$ 1,830	\$ 0.1000	\$ 1,985	\$ -	\$ -	\$ -	\$ -	\$ 0.0995	\$ 3,815
9	\$ -	\$ -	\$ 0.1000	\$ 2,034	\$ 0.1000	\$ 1,985	\$ -	\$ -	\$ -	\$ -	\$ 0.1000	\$ 4,019
10	\$ -	\$ -	\$ -	\$ -	\$ 0.1000	\$ 1,985	\$ -	\$ -	\$ -	\$ -	\$ 0.1000	\$ 1,985
11	\$ -	\$ -	\$ -	\$ -	\$ 0.1000	\$ 1,985	\$ -	\$ -	\$ -	\$ -	\$ 0.1000	\$ 1,985
12	\$ -	\$ -	\$ -	\$ -	\$ 0.1000	\$ 2,165	\$ -	\$ -	\$ -	\$ -	\$ 0.1000	\$ 2,165
Total	\$ 0.0961	\$ 12,489	\$ 0.0993	\$ 21,835	\$ 0.1000	\$ 24,000	\$ 0.0994	\$ 18,878	\$ 0.0997	\$ 14,952	\$ 0.0991	\$ 92,155

#### Units - Collar Floor (put)

No Puts were purchased.



Attachment 6  
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**MINNESOTA ENERGY RESOURCES - CONSOLIDATED**

**25/26 Winter Portfolio Plan - MERC Hedging Plan**

System	Purchase Month	Nov-25		Dec-25		Jan-26		Feb-26		Mar-26		Total		Percent of Requirements
		Number Contracts	Contract Volume	Number Contracts	Contract Volume	Number Contracts	Contract Volume	Number Contracts	Contract Volume	Number Contracts	Contract Volume	Number Contracts	Contract Volume	
<b>MN Requirements</b>			681,450		1,109,762		1,248,378		966,007		797,616		4,803,213	4,803,213
<b>Daily Average</b>			22,715		35,799		40,270		34,500		25,730		159,014	
<b>10%</b>	Futures		68,145		110,976		124,838		96,601		79,762		480,321	
<b>20%</b>	Call		136,290		221,952		249,676		193,201		159,523		960,643	
<b>30%</b>	Storage		204,435		332,929		374,513		289,802		239,285		1,440,964	
<b>40%</b>	Index		272,580		443,905		499,351		386,403		319,046		1,921,285	
Futures Contracts	May-25	1	10,000	3	30,000	3	30,000	2	20,000	2	20,000	11	110,000	
	Jun-25	1	10,000	2	20,000	2	20,000	2	20,000	1	10,000	8	80,000	
	Jul-25	1	10,000	2	20,000	2	20,000	2	20,000	1	10,000	8	80,000	
	Aug-25	1	10,000	2	20,000	2	20,000	1	10,000	1	10,000	8	80,000	
	Sep-25	1	10,000	1	10,000	2	20,000	1	10,000	1	10,000	6	60,000	
	Oct-25	1	10,000	1	10,000	1	10,000	1	10,000	1	10,000	5	50,000	
	<b>Total</b>	<b>6</b>	<b>60,000</b>	<b>11</b>	<b>110,000</b>	<b>12</b>	<b>120,000</b>	<b>9</b>	<b>90,000</b>	<b>7</b>	<b>70,000</b>	<b>46</b>	<b>460,000</b>	9.58%
Call Options	May-25	3	30,000	3	30,000	4	40,000	3	30,000	2	20,000	15	150,000	
	Jun-25	2	20,000	3	30,000	4	40,000	3	30,000	2	20,000	14	140,000	
	Jul-25	2	20,000	4	40,000	4	40,000	3	30,000	2	20,000	15	150,000	
	Aug-25	2	20,000	4	40,000	4	40,000	3	30,000	3	30,000	16	160,000	
	Sep-25	2	20,000	4	40,000	4	40,000	3	30,000	3	30,000	16	160,000	
	Oct-25	2	20,000	4	40,000	4	40,000	4	40,000	3	30,000	17	170,000	
	<b>Total</b>	<b>13</b>	<b>130,000</b>	<b>22</b>	<b>220,000</b>	<b>24</b>	<b>240,000</b>	<b>19</b>	<b>190,000</b>	<b>15</b>	<b>150,000</b>	<b>93</b>	<b>930,000</b>	19.36%
Collars	May-25	0	0	0	0	0	0	0	0	0	0	0	0	
	Jun-25	0	0	0	0	0	0	0	0	0	0	0	0	
	Jul-25	0	0	0	0	0	0	0	0	0	0	0	0	
	Aug-25	0	0	0	0	0	0	0	0	0	0	0	0	
	Sep-25	0	0	0	0	0	0	0	0	0	0	0	0	
	Oct-25	0	0	0	0	0	0	0	0	0	0	0	0	
	<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	0.00%
Index (back financial)	<b>Total</b>		<b>190,000</b>		<b>330,000</b>		<b>360,000</b>		<b>280,000</b>		<b>220,000</b>		<b>1,390,000</b>	28.94%
Physical Hedges			0		0		0		0		0		0	
Storage			90,000		248,000		310,000		196,000		62,000		906,000	18.86%
Prepaid Obl			0		0		0		0		0		0	0.00%
			41.09%		52.08%		53.67%		49.28%		35.36%		47.80%	47.80%
Term Index	Aug-25	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
	Sep-25	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
	Oct-25	0	0	0	0	0	0	0	0	0	0	0	0	0.00%
<b>Total MN</b>													460,000	9.58%
Contracts													930,000	19.36%
Call Options													0	0.00%
Costing Collar													906,000	18.86%
Storage													0	0.00%
Prepaid Obl													0	0.00%
Term Index													0	0.00%
Month/Daily													2,507,213	52.20%
<b>Total</b>													4,803,213	100.00%

**Attachment 6**  
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**MINNESOTA ENERGY RESOURCES - CONSOLIDATED**

**CONSOLIDATED - WINTER PLAN  
NOVEMBER 2025 THROUGH MARCH 2026**

<b>PHYSICAL FIXED PRICE HEDGES</b>	<b>Deal #</b>	<b>Trigger Locked</b>	<b>Trigger Exercised</b>	<b>Receipt Point</b>	<b>Nov</b>	<b>Dec</b>	<b>Daily Volumes</b>		<b>Mar</b>	<b>Monthly Total</b>
							<b>Jan</b>	<b>Feb</b>		
No Physical Fixed Price Hedges										-
										-
										-
Total Actual Fixed/Option Physical					-	-	-	-	-	-

**INDEX**

<b>Contract Number</b>	<b>Date</b>	<b>Receipt Point</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Total</b>
133303	6/5/2025	VGT Emerson 1	7,000	7,000	7,000	7,000	7,000	1,057,000
133304	6/5/2025	VGT Emerson 1	-	3,000	3,000	3,000	-	270,000
133293	6/5/2025	CTHI-Spruce	4,000	4,000	4,000	4,000	4,000	604,000
133295	6/5/2025	CTHI-Spruce	-	3,000	3,000	3,000	-	270,000
133302	6/5/2025	GLGT Emerson 2	7,000	7,000	7,000	7,000	7,000	1,057,000
133296	6/5/2025	GLGT Emerson 2	-	3,500	3,500	3,500	-	315,000
Total Actual Seasonal Index			18,000	27,500	27,500	27,500	18,000	3,573,000

**GAS DAILY PACKAGES**

Physical Call Option	133325	6/5/2025	VGT Emerson 1	5,000	5,000	5,000	5,000	5,000
Physical Call Option	133327	6/5/2025	VGT Emerson 1	-	3,500	3,500	3,500	-
Physical Call Option	133323	6/5/2025	CTHI-Spruce	1,000	1,000	1,000	1,000	1,000
Physical Call Option	133324	6/5/2025	CTHI-Spruce	-	2,343	2,343	2,343	-

**STORAGE**

<b>Injection Month</b>	<b>ANR Volume Injected</b>	<b>Total Volume Injected</b>
May - balance forward	417,537	417,537
June	94,470	94,470
July	97,619	97,619
August	97,619	97,619
Sept	94,470	94,470
Oct	98,285	98,285
Total	900,000	900,000

**Attachment 6**  
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**MINNESOTA ENERGY RESOURCES - CONSOLIDATED**

**CONSOLIDATED WINTER PLAN - SUPPLY MIX**  
**NOVEMBER 2025 THROUGH MARCH 2026**

**Monthly vs. Daily**

<u>Pricing</u>	<u>Term Deal Type</u>	<u>Index Location</u>	<u>Receipt Point</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>
Monthly Index	Baseload	Nymex LDS	VTG Emerson 1	7,000	7,000	7,000	7,000	7,000
Monthly Index	Baseload	Nymex LDS	VTG Emerson 1	-	3,000	3,000	3,000	-
Monthly Index	Baseload	Nymex LDS	CTHI-Spruce	4,000	4,000	4,000	4,000	4,000
Monthly Index	Baseload	Nymex LDS	CTHI-Spruce	-	3,000	3,000	3,000	-
Monthly Index	Baseload	Nymex LDS	GLGT Emerson 2	7,000	7,000	7,000	7,000	7,000
Monthly Index	Baseload	Nymex LDS	GLGT Emerson 2	-	3,500	3,500	3,500	-
Daily Index	Call/Swing	Emerson	VTG Emerson 1	5,000	5,000	5,000	5,000	5,000
Daily Index	Call/Swing	Emerson	VTG Emerson 1	-	3,500	3,500	3,500	-
Daily Index	Call/Swing	Emerson	CTHI-Spruce	1,000	1,000	1,000	1,000	1,000
Daily Index	Call/Swing	Emerson	CTHI-Spruce	-	2,343	2,343	2,343	-
<b>TOTAL BASELOAD</b>				<b>18,000</b>	<b>27,500</b>	<b>27,500</b>	<b>27,500</b>	<b>18,000</b>
<b>TOTAL CALL/SWING (MONTH INDEX)</b>				<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL CALL/SWING (DAILY INDEX)</b>				<b>6,000</b>	<b>11,843</b>	<b>11,843</b>	<b>11,843</b>	<b>6,000</b>
<b>TOTAL STORAGE WITHDRAWAL</b>				<b>20,000</b>	<b>20,000</b>	<b>20,000</b>	<b>20,000</b>	<b>20,000</b>

<u>SUPPLY MIX - MAX DAY</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>
<b>DEMAND</b>	<b>46,580</b>	<b>58,570</b>	<b>58,570</b>	<b>58,570</b>	<b>44,794</b>
<b>BASELOAD</b>	<b>18,000</b>	<b>27,500</b>	<b>27,500</b>	<b>27,500</b>	<b>18,000</b>
<b>CALL/SWING</b>	<b>6,000</b>	<b>11,070</b>	<b>11,070</b>	<b>11,070</b>	<b>6,000</b>
<b>STORAGE WITHDRAWAL</b>	<b>20,000</b>	<b>20,000</b>	<b>20,000</b>	<b>20,000</b>	<b>20,000</b>
<b>SPOT SUPPLY (DAILY PURCHASE)</b>	<b>2,580</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>794</b>
<b>TOTAL SUPPLY</b>	<b>46,580</b>	<b>58,570</b>	<b>58,570</b>	<b>58,570</b>	<b>44,794</b>
<b>% MONTHLY PRICE</b>	<b>39%</b>	<b>47%</b>	<b>47%</b>	<b>47%</b>	<b>40%</b>
<b>% DAILY PRICE</b>	<b>18%</b>	<b>19%</b>	<b>19%</b>	<b>19%</b>	<b>15%</b>
<b>% STORAGE WACOG</b>	<b>43%</b>	<b>34%</b>	<b>34%</b>	<b>34%</b>	<b>45%</b>

<u>SUPPLY MIX - AVERAGE DAY</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>
<b>DEMAND</b>	<b>22,715</b>	<b>35,799</b>	<b>40,270</b>	<b>34,500</b>	<b>25,730</b>
<b>BASELOAD</b>	<b>18,000</b>	<b>27,500</b>	<b>27,500</b>	<b>27,500</b>	<b>18,000</b>
<b>CALL/SWING</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>STORAGE WITHDRAWAL</b>	<b>4,715</b>	<b>8,299</b>	<b>12,770</b>	<b>7,000</b>	<b>7,730</b>
<b>SPOT SUPPLY (DAILY PURCHASE)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL SUPPLY</b>	<b>22,715</b>	<b>35,799</b>	<b>40,270</b>	<b>34,500</b>	<b>25,730</b>
<b>% MONTHLY PRICE</b>	<b>79%</b>	<b>77%</b>	<b>68%</b>	<b>80%</b>	<b>70%</b>
<b>% DAILY PRICE</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>% STORAGE WACOG</b>	<b>21%</b>	<b>23%</b>	<b>32%</b>	<b>20%</b>	<b>30%</b>

<u>SUPPLY MIX - MINIMUM DAY</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>
<b>DEMAND</b>	<b>3,001</b>	<b>3,001</b>	<b>12,639</b>	<b>11,193</b>	<b>4,336</b>
<b>BASELOAD</b>	<b>18,000</b>	<b>27,500</b>	<b>27,500</b>	<b>27,500</b>	<b>18,000</b>
<b>CALL/SWING</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>STORAGE WITHDRAWAL</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>SPOT SUPPLY (DAILY PURCHASE)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>IMBALANCE ACCOUNT (-)</b>	<b>(900)</b>	<b>(1,375)</b>	<b>(1,375)</b>	<b>(1,375)</b>	<b>(900)</b>
<b>STORAGE INJECT (-)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>REMAINING SUPPLY (LONG GAS)</b>	<b>14,099</b>	<b>23,124</b>	<b>13,486</b>	<b>14,932</b>	<b>12,764</b>
<b>% MONTHLY PRICE</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>% DAILY PRICE</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>% STORAGE WACOG</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>

Attachment 7

## MINNESOTA ENERGY RESOURCES - CONSOLIDATED

	2021-2022 Consolidated	2022-2023 Consolidated	2023-2024 Consolidated	2024-2025 Consolidated	2025-2026 Consolidated	Proposed Change
<b>Viking Gas Transmission (VGT)</b>						
FT-A ZONE 1 - 1	15,093	15,093	18,193	18,193	18,193	0
FT-A ZONE 1 - 1 Winter Only	1,098	1,098	1,098	1,098	1,098	0
FA-A ZONE 1 - 1 Winter Only	1,500	1,500	1,500	1,500	1,500	0
FA-A ZONE 1 - 1 Winter Only	0	1,100	0	0	0	0
<b>Great Lakes Gas Transmission (GLGT)</b>						
FT Western Zone- Summer Only	10,130	10,130	10,130	10,130	10,130	0
FT Western Zone- Annual	12,600	7,600	7,600	7,600	7,600	0
FT Western Zone- Winter Only	3,728	3,728	3,728	3,728	3,728	0
FT Western Zone- Winter Only	15,030	20,000	20,000	20,000	20,000	0
ANR Upstream	15,000	20,000	20,000	20,000	20,000	0
FT Western to Eastern Zone	0	0	0	2,202	2,202	0
<b>Centra Transmission Holding/Centra Minnesota Pipelines (CTHI/CPMI)</b>						
Centra FT-1	9,800	9,900	9,900	10,108	10,343	235
Total VGT Transportation	17,691	18,791	20,791	20,791	20,791	0
Total GLGT Transportation	31,358	31,328	31,328	31,328	31,328	0
Total CTHI/CPMI Transportation	9,800	9,900	9,900	10,108	10,343	235
Total Transportation	58,849	60,019	62,019	62,227	62,462	235
Total Seasonal Transportation	11,226	16,196	16,196	16,196	16,196	0
Total Seasonal Transportation %	19.08%	26.98%	26.11%	26.03%	25.93%	-0.10%
<u>Other Entitlements not included in Peak Day Deliverability</u>						
AECO Storage	0	0	0	0	0	0
AECO/Emerson Swap	0	0	0	0	0	0
ANR Storage	756,100	1,004,300	1,006,350	1,003,600	1,004,700	1,100

## MINNESOTA ENERGY RESOURCES - CONSOLIDATED

### Change in Costs due to November 1, 2025 Change in Entitlement Levels and Related Demand Costs

	2024/25 Entitlements	2025/26 Entitlements	Entitlement Change	2025/26 Rate	Months	2024/25 Total Annual Cost	2025/26 Total Annual Cost	Total Annual Cost Change
<b>Costs Assigned in Demand Charge</b>								
<u>Viking Pipeline</u>								
FT-A ZONE 1 - 1 - AF0012/AF0537	18,193	18,193	0	\$ 5.6200	12	\$1,226,936	\$1,226,936	\$0
FT-A ZONE 1 - 1 - AF0012	1,098	1,098	0	\$ 5.6200	3	\$18,512	\$18,512	\$0
FT-A ZONE 1 - 1 - AF0321	1,500	1,500	0	\$ 5.6200	3	\$25,290	\$25,290	\$0
 <u>GLGTPipeline</u>								
FT Western Zone - FT19131	10,130	10,130	0	\$ 2.7540	7	\$195,286	\$195,286	\$0
FT Western Zone - FT18528	7,600	7,600	0	\$ 2.7540	12	\$251,165	\$251,165	\$0
FT Western Zone - FT18528 (5)	3,728	3,728	0	\$ 2.7540	5	\$51,335	\$51,335	\$0
FT Eastern to Western Zone - FT19129 (5)	20,000	20,000	0	\$ 6.1000	5	\$610,000	\$610,000	\$0
ANR Upstream - 130504	20,000	20,000	0	\$ 0.9110	5	\$91,100	\$91,100	\$0
FT Western to Eastern Zone - 22657	2,202	2,202	0	\$ 8.1860	12	\$216,307	\$216,307	\$0
 <u>CENTRA Pipeline</u>								
CENTRA TRANSMISSION	10,108	10,343	235	\$ 16.2800	12	\$1,711,123	\$2,020,608	\$309,485
CENTRA MINNESOTA PIPELINES	10,108	10,343	235	\$ 3.2990	12	\$400,156	\$409,459	\$9,303
Total Costs Assigned to Demand Charge						<b>\$4,797,219</b>	<b>\$5,115,998</b>	<b>\$318,788</b>
 <b>Costs Assigned in Commodity Charge</b>								
<u>Storage Service</u>								
Open	0	0	0	\$ -	0	\$0	\$0	\$0
Open	0	0	0	\$ -	0	\$0	\$0	\$0
ANR Storage	1,003,600	1,004,700	1,100	\$ 0.7300	12	\$732,628	\$733,431	\$803
 <u>Balancing</u>								
VGT Balancing Agreement	7,465	7,465	0	\$ 1.0000	12	\$89,580	\$89,580	\$0
Union Balancing	10,000	10,000	0	\$ 0.4500	12	\$54,000	\$54,000	\$0
 Physical Forward Start Premium						\$122,160	\$190,019	\$67,859
 Call Options Premium						\$76,181	\$92,155	\$15,974
Total Costs Assigned to Commodity Charge						<b>\$1,074,549</b>	<b>\$1,159,185</b>	<b>\$84,636</b>

Attachment 9

**MINNESOTA ENERGY RESOURCES - Consolidated**

**Daily Total Throughput Data - July 1, 2024 through June 30, 2025  
Consolidated**

Design Day:

Base	2,344
Variable	450

Date	38.14% Bemidji Adjusted HDD	23.16% Cloquet Adjusted HDD	14.84% Fargo Adjusted HDD	23.86% Intl. Falls Adjusted HDD	100.00% Weighted Adjusted HDD	Actual Total Through- Put *	Estimated Firm Through- Put **
7/1/2024	1	1	0	4	2	22,593	3,060
7/2/2024	0	2	0	0	0	19,019	2,513
7/3/2024	1	0	0	2	1	15,457	2,665
7/4/2024	2	2	0	3	2	10,113	3,052
7/5/2024	0	2	0	0	0	14,710	2,506
7/6/2024	0	0	0	0	0	13,505	2,344
7/7/2024	1	0	0	3	1	13,557	2,852
7/8/2024	0	0	0	0	0	24,759	2,344
7/9/2024	0	0	0	0	0	26,274	2,344
7/10/2024	0	0	0	0	0	31,795	2,344
7/11/2024	0	0	0	0	0	30,790	2,344
7/12/2024	0	0	0	0	0	27,059	2,344
7/13/2024	0	0	0	0	0	20,215	2,344
7/14/2024	0	0	0	0	0	24,195	2,344
7/15/2024	0	0	0	2	1	26,903	2,573
7/16/2024	6	3	0	6	4	28,103	4,288
7/17/2024	7	8	1	8	6	27,209	5,199
7/18/2024	0	1	0	2	0	25,958	2,564
7/19/2024	0	0	0	0	0	22,211	2,344
7/20/2024	0	0	0	0	0	22,735	2,344
7/21/2024	0	0	0	0	0	20,614	2,344
7/22/2024	0	0	0	0	0	25,798	2,344
7/23/2024	4	9	0	7	5	25,457	4,781
7/24/2024	0	3	0	3	1	31,126	2,997
7/25/2024	0	0	0	0	0	26,404	2,344
7/26/2024	0	0	0	0	0	22,280	2,344
7/27/2024	0	0	0	0	0	18,449	2,344
7/28/2024	0	0	0	0	0	16,481	2,344
7/29/2024	0	0	0	0	0	20,862	2,344
7/30/2024	0	0	0	0	0	27,253	2,344
7/31/2024	0	0	0	0	0	24,784	2,344
8/1/2024	0	0	0	0	0	26,908	2,344
8/2/2024	0	0	0	0	0	20,786	2,344
8/3/2024	0	0	0	3	1	19,264	2,675
8/4/2024	1	1	0	4	1	18,036	2,874
8/5/2024	11	7	6	9	9	25,112	6,335
8/6/2024	0	3	0	1	1	24,814	2,717
8/7/2024	9	3	8	6	7	26,278	5,393

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Variable	450

Date	38.14% Bemidji Adjusted HDD	23.16% Cloquet Adjusted HDD	14.84% Fargo Adjusted HDD	23.86% Intl. Falls Adjusted HDD	100.00% Weighted Adjusted HDD	Actual Total Through- Put *	Estimated Firm Through- Put **
8/8/2024	12	8	8	11	10	27,728	6,992
8/9/2024	11	10	6	10	10	22,875	6,735
8/10/2024	5	3	3	2	4	22,477	3,927
8/11/2024	3	2	0	1	1	19,438	3,006
8/12/2024	1	0	0	1	1	21,450	2,574
8/13/2024	0	0	0	0	0	22,087	2,344
8/14/2024	0	0	0	0	0	21,974	2,344
8/15/2024	0	0	0	0	0	23,652	2,344
8/16/2024	1	0	0	1	0	19,967	2,552
8/17/2024	0	0	0	1	0	18,360	2,455
8/18/2024	0	3	0	2	1	17,673	2,776
8/19/2024	0	0	0	0	0	22,512	2,344
8/20/2024	0	5	0	0	1	23,558	2,881
8/21/2024	0	1	0	0	0	22,344	2,398
8/22/2024	2	0	0	0	1	22,395	2,712
8/23/2024	0	1	0	0	0	18,130	2,398
8/24/2024	0	0	0	0	0	16,932	2,344
8/25/2024	0	0	0	0	0	15,805	2,344
8/26/2024	0	0	0	0	0	18,416	2,344
8/27/2024	1	1	2	3	2	20,171	3,070
8/28/2024	0	4	0	2	1	21,230	2,977
8/29/2024	2	3	1	6	3	25,565	3,791
8/30/2024	0	1	0	0	0	17,979	2,401
8/31/2024	4	0	0	3	2	15,767	3,366
9/1/2024	10	9	1	10	8	14,748	6,130
9/2/2024	1	3	0	2	1	15,687	2,988
9/3/2024	0	1	0	0	0	21,046	2,402
9/4/2024	1	0	0	1	0	22,426	2,492
9/5/2024	13	10	8	14	12	20,978	7,692
9/6/2024	13	18	10	18	15	20,530	9,104
9/7/2024	5	9	3	8	6	17,979	5,194
9/8/2024	2	1	0	4	2	18,202	3,064
9/9/2024	0	0	0	0	0	22,735	2,344
9/10/2024	0	0	0	0	0	22,514	2,344
9/11/2024	0	0	0	2	0	22,622	2,568
9/12/2024	0	0	0	0	0	21,669	2,344
9/13/2024	0	0	0	0	0	20,086	2,344
9/14/2024	0	0	0	0	0	16,920	2,344

Attachment 9

**MINNESOTA ENERGY RESOURCES - Consolidated**

Daily Total Throughput Data - July 1, 2024 through June 30, 2025  
Consolidated

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Base	2,344
Variable	450

Date	38.14% Bemidji Adjusted HDD	23.16% Cloquet Adjusted HDD	14.84% Fargo Adjusted HDD	23.86% Intl. Falls Adjusted HDD	100.00% Weighted Adjusted HDD	Actual Total Through- Put *	Estimated Firm Through- Put **
9/15/2024	0	0	0	0	0	17,007	2,344
9/16/2024	0	0	0	0	0	20,941	2,344
9/17/2024	0	0	0	0	0	21,377	2,344
9/18/2024	0	0	0	0	0	20,687	2,344
9/19/2024	0	0	0	0	0	22,081	2,344
9/20/2024	1	3	0	4	2	21,907	3,253
9/21/2024	10	5	12	9	9	24,349	6,307
9/22/2024	14	15	6	15	13	25,615	8,330
9/23/2024	6	10	2	8	7	32,527	5,381
9/24/2024	8	9	3	10	8	31,660	5,881
9/25/2024	1	2	0	3	2	27,408	3,020
9/26/2024	0	0	0	0	0	26,236	2,344
9/27/2024	7	0	1	6	4	23,596	4,174
9/28/2024	0	2	0	4	1	22,145	2,947
9/29/2024	0	3	0	0	1	23,162	2,679
9/30/2024	10	6	11	9	9	29,312	6,432
10/1/2024	15	14	10	15	14	29,996	8,630
10/2/2024	13	7	7	14	11	30,127	7,299
10/3/2024	21	21	14	24	21	35,424	11,606
10/4/2024	9	11	8	14	10	28,715	7,052
10/5/2024	13	9	8	13	11	23,979	7,425
10/6/2024	20	21	13	23	20	30,486	11,254
10/7/2024	18	18	9	21	17	30,420	10,182
10/8/2024	14	15	3	19	14	32,498	8,561
10/9/2024	11	13	1	12	10	31,931	7,009
10/10/2024	0	6	0	3	2	29,823	3,239
10/11/2024	17	12	10	21	16	29,717	9,418
10/12/2024	19	21	14	19	19	27,958	10,727
10/13/2024	29	28	23	28	28	28,724	14,891
10/14/2024	33	29	30	31	31	35,737	16,456
10/15/2024	25	29	27	28	27	35,637	14,431
10/16/2024	17	20	14	19	18	28,960	10,445
10/17/2024	7	8	8	7	7	25,878	5,695
10/18/2024	11	6	19	15	12	25,289	7,766
10/19/2024	16	15	16	20	17	23,576	9,812
10/20/2024	10	6	4	13	9	20,995	6,334
10/21/2024	4	5	3	5	4	25,314	4,295
10/22/2024	17	13	18	19	17	36,613	9,915



Attachment 9

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Date	38.14% Bemidji Adjusted HDD	23.16% Cloquet Adjusted HDD	14.84% Fargo Adjusted HDD	23.86% Intl. Falls Adjusted HDD	100.00% Weighted Adjusted HDD	Actual Total Through- Put *	Estimated Firm Through- Put **
10/23/2024	24	23	17	29	24	38,420	13,013
10/24/2024	23	19	25	23	22	35,063	12,315
10/25/2024	31	26	23	30	28	33,476	15,052
10/26/2024	26	22	20	26	24	30,513	13,247
10/27/2024	20	17	16	20	19	29,801	10,886
10/28/2024	12	11	10	14	12	32,148	7,606
10/29/2024	20	12	17	18	17	35,767	10,120
10/30/2024	34	26	32	31	31	44,004	16,353
10/31/2024	35	36	33	38	36	43,466	18,443
11/1/2024	31	33	31	38	33	38,736	17,301
11/2/2024	29	24	24	29	27	36,618	14,573
11/3/2024	24	21	19	21	22	31,142	12,067
11/4/2024	24	19	24	23	23	37,378	12,493
11/5/2024	29	29	29	32	30	39,212	15,628
11/6/2024	24	23	30	29	26	38,457	14,026
11/7/2024	30	25	26	31	29	39,963	15,182
11/8/2024	25	24	21	28	25	35,868	13,489
11/9/2024	22	23	21	18	21	31,774	11,790
11/10/2024	28	26	27	26	27	33,097	14,370
11/11/2024	36	32	31	36	34	45,582	17,788
11/12/2024	30	29	27	29	29	42,385	15,368
11/13/2024	27	25	25	27	26	44,024	14,200
11/14/2024	30	29	28	26	28	40,350	15,013
11/15/2024	23	26	28	26	25	41,500	13,594
11/16/2024	26	21	23	24	24	38,651	13,074
11/17/2024	33	29	27	34	32	39,659	16,549
11/18/2024	28	25	25	26	26	40,287	14,212
11/19/2024	32	28	38	29	31	44,959	16,450
11/20/2024	39	35	47	31	37	47,563	19,211
11/21/2024	43	32	47	32	39	50,591	19,698
11/22/2024	43	33	44	38	40	50,125	20,193
11/23/2024	43	36	45	41	41	47,602	20,942
11/24/2024	44	34	50	39	41	45,532	21,017
11/25/2024	59	45	58	48	53	56,989	26,128
11/26/2024	51	48	52	48	50	53,059	24,740
11/27/2024	52	44	51	47	49	52,842	24,348
11/28/2024	61	54	66	53	58	54,185	28,562
11/29/2024	72	64	69	64	68	63,115	32,738

Attachment 9

**MINNESOTA ENERGY RESOURCES - Consolidated**

**Daily Total Throughput Data - July 1, 2024 through June 30, 2025  
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Design Day:

Base	2,344
Variable	450

Date	38.14% Bemidji Adjusted HDD	23.16% Cloquet Adjusted HDD	14.84% Fargo Adjusted HDD	23.86% Intl. Falls Adjusted HDD	100.00% Weighted Adjusted HDD	Actual Total Through- Put *	Estimated Firm Through- Put **
11/30/2024	70	63	70	61	66	61,179	<b>32,086</b>
12/1/2024	59	51	62	52	56	56,839	<b>27,480</b>
12/2/2024	53	49	60	53	53	60,369	<b>26,312</b>
12/3/2024	49	46	49	50	49	59,327	<b>24,216</b>
12/4/2024	69	60	67	65	66	71,656	<b>31,871</b>
12/5/2024	56	51	57	58	56	64,208	<b>27,326</b>
12/6/2024	40	42	40	44	41	60,679	<b>20,952</b>
12/7/2024	33	31	33	32	32	42,859	<b>16,900</b>
12/8/2024	35	32	38	39	35	44,111	<b>18,307</b>
12/9/2024	50	43	49	49	48	57,891	<b>23,850</b>
12/10/2024	67	53	62	68	63	66,162	<b>30,879</b>
12/11/2024	90	81	78	88	86	86,189	<b>40,919</b>
12/12/2024	79	75	74	81	78	85,347	<b>37,368</b>
12/13/2024	67	65	63	70	67	71,718	<b>32,334</b>
12/14/2024	46	44	45	47	45	52,288	<b>22,734</b>
12/15/2024	38	35	37	35	37	46,710	<b>18,874</b>
12/16/2024	49	42	47	47	47	56,409	<b>23,377</b>
12/17/2024	53	49	53	58	53	60,312	<b>26,375</b>
12/18/2024	64	59	58	72	64	67,530	<b>31,010</b>
12/19/2024	68	60	69	69	66	66,687	<b>32,233</b>
12/20/2024	72	66	67	74	70	75,034	<b>33,989</b>
12/21/2024	60	56	56	63	59	60,997	<b>28,855</b>
12/22/2024	48	45	51	48	48	50,887	<b>23,761</b>
12/23/2024	50	47	51	49	49	51,131	<b>24,526</b>
12/24/2024	48	45	50	47	47	52,572	<b>23,568</b>
12/25/2024	41	40	42	39	40	50,570	<b>20,568</b>
12/26/2024	37	35	35	34	36	54,220	<b>18,341</b>
12/27/2024	34	31	36	31	33	50,807	<b>17,125</b>
12/28/2024	34	37	34	36	35	50,457	<b>18,039</b>
12/29/2024	36	34	33	37	35	51,941	<b>18,212</b>
12/30/2024	44	40	46	41	43	59,166	<b>21,509</b>
12/31/2024	55	49	54	53	53	59,315	<b>26,128</b>
1/1/2025	64	57	58	60	61	61,817	<b>29,638</b>
1/2/2025	71	63	67	67	67	73,396	<b>32,700</b>
1/3/2025	80	73	76	79	77	78,837	<b>37,219</b>
1/4/2025	78	75	77	77	77	81,972	<b>36,890</b>
1/5/2025	73	69	73	73	72	78,205	<b>34,871</b>
1/6/2025	65	61	65	67	65	73,957	<b>31,455</b>

Attachment 9

**MINNESOTA ENERGY RESOURCES - Consolidated**

**Daily Total Throughput Data - July 1, 2024 through June 30, 2025  
Consolidated**

Design Day:

Base	2,344
Variable	450

Date	38.14% Bemidji Adjusted HDD	23.16% Cloquet Adjusted HDD	14.84% Fargo Adjusted HDD	23.86% Intl. Falls Adjusted HDD	100.00% Weighted Adjusted HDD	Actual Total Through- Put *	Estimated Firm Through- Put **
1/7/2025	69	58	66	63	65	73,847	31,437
1/8/2025	60	56	59	56	58	70,341	28,420
1/9/2025	48	50	47	49	48	62,260	24,166
1/10/2025	57	52	55	58	56	65,219	27,427
1/11/2025	57	52	60	57	56	60,885	27,625
1/12/2025	78	72	77	77	76	76,309	36,628
1/13/2025	83	81	80	80	81	85,903	38,893
1/14/2025	72	70	74	73	72	78,036	34,718
1/15/2025	50	56	49	52	52	58,714	25,586
1/16/2025	39	38	45	37	39	51,428	19,967
1/17/2025	63	57	62	61	61	63,238	29,797
1/18/2025	88	83	84	89	87	81,609	41,357
1/19/2025	92	87	89	91	90	86,574	42,847
1/20/2025	96	94	93	97	95	91,834	45,279
1/21/2025	75	80	69	80	76	78,436	36,596
1/22/2025	75	67	72	75	73	78,083	35,120
1/23/2025	73	74	70	74	73	78,418	35,121
1/24/2025	55	59	50	55	55	62,073	27,055
1/25/2025	63	57	63	58	60	63,841	29,559
1/26/2025	51	52	47	51	51	58,685	25,108
1/27/2025	41	43	40	54	44	55,866	22,292
1/28/2025	47	43	38	51	45	53,604	22,809
1/29/2025	46	46	41	51	46	57,436	23,186
1/30/2025	38	34	44	41	39	54,841	19,705
1/31/2025	59	49	55	66	58	61,703	28,288
2/1/2025	50	50	44	59	51	56,750	25,429
2/2/2025	55	47	60	57	55	60,626	26,893
2/3/2025	75	70	73	77	74	82,453	35,663
2/4/2025	71	67	66	72	70	72,821	33,685
2/5/2025	64	58	64	61	62	66,298	30,117
2/6/2025	75	67	70	66	70	72,801	33,940
2/7/2025	63	57	61	64	61	66,928	29,910
2/8/2025	70	66	73	72	70	72,238	33,833
2/9/2025	66	63	72	67	66	72,113	32,136
2/10/2025	81	74	82	81	79	81,079	38,032
2/11/2025	80	79	86	80	81	81,653	38,633
2/12/2025	81	73	80	84	80	83,354	38,278
2/13/2025	72	70	81	74	73	78,392	35,256

Attachment 9

# MINNESOTA ENERGY RESOURCES - Consolidated

## Daily Total Throughput Data - July 1, 2024 through June 30, 2025 Consolidated

Design Day:

Base	2,344
Variable	450

Date	38.14% Bemidji Adjusted HDD	23.16% Cloquet Adjusted HDD	14.84% Fargo Adjusted HDD	23.86% Intl. Falls Adjusted HDD	100.00% Weighted Adjusted HDD	Actual Total Through- Put *	Estimated Firm Through- Put **
2/14/2025	68	61	71	68	67	70,332	32,357
2/15/2025	76	68	78	78	75	70,450	36,124
2/16/2025	84	79	84	78	81	79,549	38,982
2/17/2025	87	82	85	82	84	90,492	40,340
2/18/2025	81	78	81	79	80	85,942	38,242
2/19/2025	73	69	77	70	72	79,716	34,740
2/20/2025	59	59	69	61	61	75,249	29,780
2/21/2025	53	56	61	50	54	62,669	26,656
2/22/2025	38	39	44	40	40	55,012	20,207
2/23/2025	31	32	36	35	33	45,465	17,263
2/24/2025	33	31	33	37	34	43,473	17,488
2/25/2025	30	28	31	34	31	45,753	16,158
2/26/2025	37	28	30	36	34	48,977	17,472
2/27/2025	35	33	31	35	34	47,618	17,603
2/28/2025	62	54	58	64	60	60,462	29,282
3/1/2025	54	57	54	59	56	41,427	27,442
3/2/2025	37	42	36	40	38	32,091	19,630
3/3/2025	27	26	28	26	27	27,306	14,287
3/4/2025	45	39	51	44	44	40,041	22,279
3/5/2025	46	49	42	52	47	40,200	23,569
3/6/2025	42	43	42	52	45	38,171	22,524
3/7/2025	42	44	38	51	44	34,696	22,058
3/8/2025	28	31	26	34	30	27,024	15,741
3/9/2025	26	23	22	30	26	25,466	13,883
3/10/2025	37	28	33	40	35	31,211	18,136
3/11/2025	49	40	45	50	47	35,224	23,314
3/12/2025	31	30	28	33	31	29,431	16,217
3/13/2025	24	26	16	35	26	24,719	13,957
3/14/2025	24	22	26	19	23	22,468	12,563
3/15/2025	61	44	52	54	54	38,450	26,609
3/16/2025	51	45	45	51	48	33,942	24,084
3/17/2025	34	36	30	47	37	31,366	19,011
3/18/2025	37	36	37	43	38	31,541	19,509
3/19/2025	43	43	41	51	44	35,683	22,336
3/20/2025	34	33	27	37	33	28,551	17,298
3/21/2025	54	45	52	57	52	39,151	25,889
3/22/2025	47	48	40	50	47	33,263	23,451
3/23/2025	53	42	51	54	50	37,608	25,031

Attachment 9

**MINNESOTA ENERGY RESOURCES - Consolidated**

**Daily Total Throughput Data - July 1, 2024 through June 30, 2025  
Consolidated**

Design Day:

Base	2,344
Variable	450

Date	38.14% Bemidji Adjusted HDD	23.16% Cloquet Adjusted HDD	14.84% Fargo Adjusted HDD	23.86% Intl. Falls Adjusted HDD	100.00% Weighted Adjusted HDD	Actual Total Through- Put *	Estimated Firm Through- Put **
3/24/2025	40	39	35	45	40	31,851	20,418
3/25/2025	31	32	32	38	33	27,954	17,201
3/26/2025	30	27	30	29	29	28,159	15,347
3/27/2025	27	25	23	35	28	26,478	14,931
3/28/2025	36	40	29	40	37	30,151	19,014
3/29/2025	39	43	35	40	40	30,564	20,188
3/30/2025	37	42	37	38	38	28,790	19,662
3/31/2025	38	35	36	42	38	29,684	19,439
4/1/2025	37	36	37	37	37	28,660	18,957
4/2/2025	38	40	38	39	39	28,994	19,737
4/3/2025	36	34	34	31	34	26,185	17,676
4/4/2025	42	34	42	39	39	28,063	20,068
4/5/2025	38	35	35	40	37	27,430	19,208
4/6/2025	39	34	35	42	38	28,843	19,412
4/7/2025	45	44	38	46	44	31,231	22,149
4/8/2025	32	31	32	36	33	24,524	17,040
4/9/2025	25	33	18	30	27	23,801	14,468
4/10/2025	31	32	27	27	30	22,120	15,736
4/11/2025	18	19	18	18	18	19,037	10,572
4/12/2025	15	15	11	18	15	18,733	9,065
4/13/2025	26	18	17	26	23	19,566	12,544
4/14/2025	38	33	33	35	36	23,185	18,322
4/15/2025	32	32	23	33	31	22,829	16,356
4/16/2025	22	28	15	23	23	19,322	12,509
4/17/2025	24	19	26	24	23	21,039	12,781
4/18/2025	37	32	34	34	34	22,458	17,831
4/19/2025	29	28	24	31	29	23,204	15,220
4/20/2025	26	24	18	23	23	20,664	12,858
4/21/2025	15	18	9	17	16	20,888	9,369
4/22/2025	21	27	18	23	23	24,052	12,483
4/23/2025	32	21	25	26	27	24,598	14,416
4/24/2025	22	22	19	26	22	21,023	12,427
4/25/2025	24	25	15	24	23	18,696	12,606
4/26/2025	13	19	11	13	14	18,347	8,585
4/27/2025	13	16	10	16	14	17,921	8,701
4/28/2025	29	20	28	31	27	26,155	14,658
4/29/2025	27	28	27	31	28	24,628	15,021
4/30/2025	9	22	7	13	13	20,244	7,985

Attachment 9

**MINNESOTA ENERGY RESOURCES - Consolidated**

**Daily Total Throughput Data - July 1, 2024 through June 30, 2025  
Consolidated**

Design Day:

Base	2,344
Variable	450

Date	38.14% Bemidji Adjusted HDD	23.16% Cloquet Adjusted HDD	14.84% Fargo Adjusted HDD	23.86% Intl. Falls Adjusted HDD	100.00% Weighted Adjusted HDD	Actual Total Through- Put *	Estimated Firm Through- Put **
5/1/2025	23	17	23	27	23	23,189	12,506
5/2/2025	21	29	19	21	23	19,671	12,537
5/3/2025	11	12	4	10	10	16,635	6,960
5/4/2025	2	18	0	4	6	14,974	4,968
5/5/2025	1	11	0	0	3	16,815	3,578
5/6/2025	15	2	12	14	11	20,389	7,359
5/7/2025	13	23	5	18	15	19,098	9,243
5/8/2025	6	24	0	8	10	17,485	6,704
5/9/2025	11	3	4	12	8	16,394	6,103
5/10/2025	2	16	0	6	6	16,899	5,048
5/11/2025	0	0	0	0	0	16,150	2,344
5/12/2025	0	0	0	0	0	16,599	2,344
5/13/2025	0	0	0	0	0	16,367	2,344
5/14/2025	0	6	0	0	1	16,050	3,009
5/15/2025	3	9	2	0	4	16,266	4,004
5/16/2025	23	18	26	20	22	20,029	12,050
5/17/2025	31	23	28	29	28	23,292	15,012
5/18/2025	25	26	19	27	25	22,863	13,481
5/19/2025	23	30	21	19	23	25,542	12,824
5/20/2025	22	31	24	16	23	25,006	12,556
5/21/2025	21	26	22	18	21	20,934	11,945
5/22/2025	16	19	11	17	16	19,763	9,616
5/23/2025	19	19	11	20	18	18,119	10,468
5/24/2025	18	19	11	16	17	17,261	9,856
5/25/2025	9	14	7	14	11	16,465	7,264
5/26/2025	3	9	2	4	4	10,753	4,249
5/27/2025	8	8	5	7	7	12,280	5,699
5/28/2025	5	5	4	7	5	12,688	4,760
5/29/2025	1	0	1	0	1	11,962	2,602
5/30/2025	0	3	0	3	1	10,493	2,960
5/31/2025	3	11	0	10	6	9,884	5,018
6/1/2025	0	3	0	0	1	22,416	2,614
6/2/2025	2	0	5	4	2	24,490	3,387
6/3/2025	9	10	5	13	10	24,141	6,683
6/4/2025	6	8	4	8	7	24,955	5,317
6/5/2025	3	0	2	10	4	27,306	3,973
6/6/2025	5	8	1	8	6	25,412	5,028
6/7/2025	3	3	0	2	3	23,397	3,473

Attachment 9

**MINNESOTA ENERGY RESOURCES - Consolidated**

**Daily Total Throughput Data - July 1, 2024 through June 30, 2025  
Consolidated**

Design Day:

Base	2,344
Variable	450

Date	38.14% Bemidji Adjusted HDD	23.16% Cloquet Adjusted HDD	14.84% Fargo Adjusted HDD	23.86% Intl. Falls Adjusted HDD	100.00% Weighted Adjusted HDD	Actual Total Through- Put *	Estimated Firm Through- Put **
6/8/2025	13	10	10	15	12	23,690	7,820
6/9/2025	14	8	14	11	12	24,573	7,783
6/10/2025	1	3	0	8	3	26,062	3,639
6/11/2025	8	6	0	12	7	22,988	5,685
6/12/2025	7	15	1	10	9	22,906	6,194
6/13/2025	9	17	6	14	12	22,180	7,588
6/14/2025	4	14	2	9	7	21,321	5,612
6/15/2025	1	11	1	0	3	27,207	3,744
6/16/2025	1	4	1	1	1	22,046	3,013
6/17/2025	1	0	0	3	1	22,120	2,716
6/18/2025	0	0	0	0	0	20,421	2,344
6/19/2025	0	4	0	2	1	16,004	2,897
6/20/2025	0	2	0	0	0	15,296	2,512
6/21/2025	0	0	0	0	0	15,522	2,344
6/22/2025	0	4	0	0	1	24,101	2,736
6/23/2025	9	2	4	8	6	29,969	5,127
6/24/2025	2	2	0	6	2	21,601	3,374
6/25/2025	7	10	3	7	7	22,929	5,534
6/26/2025	5	10	3	0	4	21,198	4,364
6/27/2025	0	5	0	0	1	19,902	2,879
6/28/2025	0	0	0	0	0	17,690	2,344
6/29/2025	0	0	0	0	0	18,416	2,344
6/30/2025	0	0	0	0	0	20,827	2,344
Totals	9,708	9,278	9,132	9,947	9,580	13,138,304	5,166,636

\* Volumes include interruptible and transportation volumes

\*\* Design Model numbers are used to calculate firm volumes only

## MINNESOTA ENERGY RESOURCES - Consolidated

Customer Counts by PGAC Class - July 1, 2024 through June 30, 2025

Tariff Rate Class	Rate Designation	Jul-24 Customers	Aug-24 Customers	Sep-24 Customers	Oct-24 Customers	Nov-24 Customers	Dec-24 Customers	Jan-25 Customers	Feb-25 Customers	Mar-25 Customers	Apr-25 Customers	May-25 Customers	Jun-25 Customers	Annual Average Customers
Residential	MERC000002	30,650	32,004	31,968	31,970	32,340	32,685	32,747	32,639	32,639	32,677	32,688	32,556	32,297
Firm Class 1	MERC000006	2,160	2,263	2,238	2,241	2,431	2,480	2,504	2,450	2,474	2,478	2,473	2,332	2,377
Firm Class 2	MERC002221	3,136	3,311	3,315	3,291	3,141	3,150	3,165	3,234	3,182	3,174	3,159	2,940	3,183
Firm Class 3	MERC002231	8	9	9	9	8	7	7	7	7	7	7	7	8
Firm Class 4	MERC002241	0	0	0	0	0	0	0	0	0	0	0	0	0
Firm Class5	MERC002251	0	0	0	0	0	0	0	0	0	0	0	0	0
Agricultural Grain Dryer Class 1	MERC002217	11	13	10	14	13	12	12	12	12	12	11	13	12
Agricultural Grain Dryer Class 2	MERC002227	6	7	6	7	6	6	6	6	6	6	6	6	6
Agricultural Grain Dryer Class 3	MERC002237	0	0	0	0	0	0	0	0	0	0	0	0	0
Interruptible Class 2	MERC002222	54	44	39	40	40	37	39	38	38	38	38	38	40
Interruptible Class 3	MERC002232	17	13	11	10	12	11	11	11	11	11	11	11	12
Interruptible Class 4	MERC002242	3	2	2	2	2	2	2	2	2	2	1	3	2
Interruptible Class 5	MERC002252	0	0	0	0	0	0	0	0	0	0	0	0	0
Firm/Interruptible Class 2	MERC002223	3	1	1	3	2	3	2	2	2	2	2	2	2
Firm/Interruptible Class 3	MERC002233	1	1	1	1	1	1	1	1	1	1	1	1	1
Firm/Interruptible Class 4	MERC002243	0	0	0	0	0	0	0	0	0	0	0	0	0
Firm/Interruptible Class 5	MERC002253	0	0	0	0	0	0	0	0	0	0	0	0	0
Interruptible Electric Generation Class 1	MERC002218	0	0	0	0	0	0	0	0	0	0	0	0	0
Interruptible Electric Generation Class 2	MERC002228	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		36,050	37,668	37,600	37,588	37,996	38,394	38,496	38,402	38,374	38,409	38,397	37,909	37,940



Projected Hedged Cost - November 2025 through March 2026

10,000 DlyContract														New25														Dec-25														Jan-26													
Deal Number	Purchase Date	Trade Number	Number Contracts	Financial Volume	Strike Price	Strike Cost	LDS Settle*	LDS Settle Cost	Over/(Under) Market	Premium Per Unit	Premium Cost	Total Cost	Deal Number	Purchase Date	Trade Number	Number Contracts	Financial Volume	Strike Price	Strike Cost	LDS Settle*	LDS Settle Cost	Over/(Under) Market	Premium Per Unit	Premium Cost	Total Cost	Deal Number	Purchase Date	Trade Number	Number Contracts	Financial Volume	Strike Price	Strike Cost	LDS Settle*	LDS Settle Cost	Over/(Under) Market	Premium Per Unit	Premium Cost	Total Cost																	
1	05/16/25	132751	6	60,000	\$ 4.2290	\$ 253,740	\$ 3,1090	\$ 186,360	\$ 67,380	\$ -	\$ -	\$ 253,740	1	05/22/25	133031	12	120,000	\$ 4.6380	\$ 556,560	\$ 3,7300	\$ 456,160	\$ 101,400	\$ -	\$ -	\$ 556,560	1	05/16/25	132752	13	130,000	\$ 5.0260	\$ 653,380	\$ 4,1250	\$ 536,250	\$ 117,130	\$ -	\$ -	\$ 653,380																	
2	09/13/25	133465	6	60,000	\$ 4.1020	\$ 246,120	\$ 3,1090	\$ 186,360	\$ 59,760	\$ -	\$ -	\$ 246,120	2	06/24/25	133735	11	110,000	\$ 4.7210	\$ 519,310	\$ 3,7300	\$ 417,230	\$ 102,080	\$ -	\$ -	\$ 519,310	2	06/13/25	133466	12	120,000	\$ 4.9180	\$ 599,160	\$ 4,1250	\$ 495,000	\$ 85,160	\$ -	\$ -	\$ 599,160																	
3	09/13/25	133466	6	60,000	\$ 4.1020	\$ 246,120	\$ 3,1090	\$ 186,360	\$ 59,760	\$ -	\$ -	\$ 246,120	3	07/24/25	134468	9	90,000	\$ 4.2860	\$ 385,200	\$ 3,7300	\$ 341,370	\$ 43,830	\$ -	\$ -	\$ 385,200	3	06/13/25	133467	11	110,000	\$ 4.9880	\$ 549,980	\$ 4,1250	\$ 458,750	\$ 91,230	\$ -	\$ -	\$ 549,980																	
4	09/13/25	134968	6	60,000	\$ 3.3320	\$ 199,200	\$ 3,1090	\$ 186,360	\$ 12,840	\$ -	\$ -	\$ 199,200	4	07/24/25	134469	9	90,000	\$ 4.2860	\$ 385,200	\$ 3,7300	\$ 341,370	\$ 43,830	\$ -	\$ -	\$ 385,200	4	06/13/25	134969	11	110,000	\$ 4.2380	\$ 456,960	\$ 4,1250	\$ 453,750	\$ 12,210	\$ -	\$ -	\$ 456,960																	
5	09/02/25	135650	6	60,000	\$ 3.3360	\$ 202,800	\$ 3,1090	\$ 186,360	\$ 16,440	\$ -	\$ -	\$ 202,800	5	06/25/25	135234	10	100,000	\$ 3.7160	\$ 371,600	\$ 3,7300	\$ 373,300	\$ (7,700)	\$ -	\$ -	\$ 371,600	5	06/02/25	135651	10	100,000	\$ 4.2150	\$ 421,500	\$ 4,1250	\$ 412,500	\$ 9,000	\$ -	\$ -	\$ 421,500																	
6	10/06/25	136038	5	50,000	\$ 3.3970	\$ 169,850	\$ 3,1090	\$ 155,300	\$ 14,550	\$ -	\$ -	\$ 169,850	6	06/15/25	135738	3	30,000	\$ 3.8140	\$ 114,420	\$ 3,7300	\$ 113,700	\$ 720	\$ -	\$ -	\$ 114,420	6	10/06/25	136039	9	90,000	\$ 4.3500	\$ 391,500	\$ 4,1250	\$ 391,500	\$ 20,000	\$ -	\$ -	\$ 391,500																	
7							\$ 3,1090	\$ -	\$ -	\$ -	\$ -	\$ -	7	06/19/25	135739	5	50,000	\$ 3.8260	\$ 191,300	\$ 3,7300	\$ 189,650	\$ 1,650	\$ -	\$ -	\$ 191,300	7							\$ 4,1250	\$ -	\$ -	\$ -																			
8							\$ 3,1090	\$ -	\$ -	\$ -	\$ -	\$ -	8	10/09/25	136654	8	80,000	\$ 3.9800	\$ 318,400	\$ 3,7300	\$ 303,440	\$ 14,960	\$ -	\$ -	\$ 318,400	8							\$ 4,1250	\$ -	\$ -	\$ -																			
9							\$ 3,1090	\$ -	\$ -	\$ -	\$ -	\$ -	9						\$ 3,7300	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	9							\$ 4,1250	\$ -	\$ -	\$ -																			
10							\$ 3,1090	\$ -	\$ -	\$ -	\$ -	\$ -	10						\$ 3,7300	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	10							\$ 4,1250	\$ -	\$ -	\$ -																			
11							\$ 3,1090	\$ -	\$ -	\$ -	\$ -	\$ -	11						\$ 3,7300	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	11							\$ 4,1250	\$ -	\$ -	\$ -																			
12							\$ 3,1090	\$ -	\$ -	\$ -	\$ -	\$ -	12						\$ 3,7300																																				

\*Prices from 10/10/2025 NYMEX market close

## MINNESOTA ENERGY RESOURCES - Consolidated

Projected Storage Cost - November 2025 through March 2026

Month/ Year	K#118657 NNG Storage (Dth)			Total NNG Storage (Dth)	Projected NNG WACOG	K#118657 NNG Storage Cost			Total NNG Storage Cost	ANR Storage GLGT/VGT (Dth)	ANR Storage GLGT/VGT WACOG	ANR Storage GLGT/VGT Cost
Nov-25	585,000			585,000	\$ 2.5119	\$ 1,469,483			\$ 1,469,483	90,000	\$ 2.8863	\$ 259,769
Dec-25	1,470,000			1,470,000	\$ 2.5119	\$ 3,692,547			\$ 3,692,547	248,000	\$ 2.8863	\$ 715,808
Jan-26	1,470,000			1,470,000	\$ 2.5119	\$ 3,692,547			\$ 3,692,547	310,000	\$ 2.8863	\$ 894,760
Feb-26	1,470,000			1,470,000	\$ 2.5119	\$ 3,692,547			\$ 3,692,547	196,000	\$ 2.8863	\$ 565,719
Mar-26	585,000			585,000	\$ 2.5119	\$ 1,469,483			\$ 1,469,483	62,000	\$ 2.8863	\$ 178,952
Total	5,580,000			5,580,000		\$ 14,016,605			\$ 14,016,605	906,000		\$2,615,008

Month/ Year	NNG Storage Volume (Dth)	NNG Index Price	NNG Index Cost		Month/ Year	ANR Storage Volume (Dth)	Emerson Index Price	Emerson Market Cost
Nov-25	585,000	\$ 2.8735	\$ 1,680,998		Nov-25	90,000	\$ 2.1610	\$ 194,490
Dec-25	1,470,000	\$ 4.3580	\$ 6,406,260		Dec-25	248,000	\$ 3.0180	\$ 748,464
Jan-26	1,470,000	\$ 5.7200	\$ 8,408,400		Jan-26	310,000	\$ 3.3500	\$ 1,038,500
Feb-26	1,470,000	\$ 5.6105	\$ 8,247,435		Feb-26	196,000	\$ 3.0080	\$ 589,568
Mar-26	585,000	\$ 3.4465	\$ 2,016,203		Mar-26	62,000	\$ 2.7940	\$ 173,228
Total	5,580,000		\$ 26,759,295		Total	906,000		\$ 2,744,250
Storage Savings (Cost):			\$ 12,742,690					\$ 129,242

\*Indexes and projected WACOG based on 10/10/2025 market prices and actual wacog through 9/2025.

**Projected Hedged Cost - November 2025 through March 2026**

Call/Put Options	10,000	Dth/contract
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\*Prices from 10/10/2025 NYMEX market close

**Attachment 12: Forecast Methodology for MERC Demand Entitlement  
Effective November 1, 2025**

1. Peak-day

a. Purpose

Gather data and perform analysis used in the “Petition for Change in Demand” for MERC, otherwise known as the “MERC Demand Entitlement Filings.”

b. Background

MERC customers are served by four pipelines<sup>1</sup>

1. VGT - Viking Gas Transmission system
2. NNG - Northern Natural Gas pipeline
3. GLGT - Great Lakes Gas Transmission pipeline
4. Centra - Centra pipeline

Weather data is obtained from eight weather stations: International Falls, Bemidji, Cloquet, Fargo, Minneapolis, Rochester, Worthington, and Ortonville.

For analytical purposes, data is subdivided, analyzed, and regressed by the following nine demand areas:

	<b>Pipeline</b>	<b>PGA</b>	<b>Weather Station(s)</b>
1	Centra	MERC Consolidated	International Falls
2	GLGT	MERC Consolidated	Bemidji
3	GLGT	MERC Consolidated	Cloquet
4	VGT	MERC Consolidated	Fargo
5	NNG	MERC NNG	Cloquet
6	NNG	MERC NNG	Minneapolis
7	NNG	MERC NNG	Ortonville
8	NNG	MERC NNG	Rochester
9	NNG	MERC NNG	Worthington

<sup>1</sup> MERC acquired Interstate Power & Light Company's Minnesota natural gas operations and customers in 2015. The Commission's Order Approving Sale Subject to Conditions in Docket No. G-001,011/PA-14-107 required MERC to maintain the transitioned customers on a separate PGA (MERC–NNG–Albert Lea). Pursuant to the Commission's Order in Docket No. G011/GR-15-736, the NNG and NNG–Albert Lea PGAs were consolidated effective July 1, 2017. MERC now submits only two demand entitlement petitions (NNG and Consolidated) for each heating season.

## 2. Analytical Approach

### a. Summary

1. Obtain daily weather data for each weather station.
2. Obtain daily total throughput volumes by pipeline and by weather station.
3. Obtain daily large volume transportation, interruptible, and joint interruptible volumes by pipeline and by weather station (Data A).
4. Obtain daily small volume interruptible volumes by pipeline and by weather station (Data B).
5. Calculate daily “firm” volumes by subtracting both Data A and Data B from total throughput volumes.
6. Perform quality control on volumetric data (e.g., identify missing or bad reads, and, to the extent possible, fix missing or bad reads).
7. Perform firm peak day regressions. In response to comments from the Minnesota Department of Commerce, Division of Energy Resources (Department):
  - a. Incorporate a methodology to mitigate the impact of autocorrelation.
  - b. Provide a reasonable explanation whenever a regression model is selected that does not have an intercept.
8. Add back Daily Firm Capacity (DFC) customer selections.

## 3. Process

The Peak Day Process consisted of:

- I. Data Preparation
- II. Regression Generation of Net Daily Metered Volumes
- III. Volume Risk Adjustments
- IV. Adjusting the Regression Results to a Firm Peak Day Estimate
- V. Firm Peak Day Estimate Gate Station Allocation

i. The **Data Preparation** consisted of:

- Identify the coldest Adjusted Heating Degree Day (AHDD) since January 1996 for each weather station. Note, this is a change in practice from prior analysis that used a rolling 20-year period. The change was included because many weather stations experienced historically cold weather in the January/February 1996 time period and without inclusion of that additional data from January/February 1996, AHDD were materially lower and not reflective of MERC's capacity needs.
- Determine the most recent three years of December through February daily total metered throughput by pipeline and by weather station.
- Determine the most recent three years of December through February daily large volume transportation, interruptible, and joint interruptible volumes by pipeline and by weather station (Data A).
- Determine the most recent three years of December through February daily small volume interruptible volumes by pipeline and by weather station (Data B).
- Review daily total metered throughput, Data A, and Data B, and identify missing or bad reads, and to the extent possible, fix missing or bad reads. To the extent that the data could not be fixed, it was not included in the regressions.
- Subtract both Data A and Data B daily meter readings for all three December through February years from the total throughput for each pipeline and each weather station. Use the resulting net daily metered volumes for regressions. Examples of transportation, interruptible, and joint interruptible meter readings subtracted are paper mills, direct-connects, taconites, and off-system end users. See "Adjusting the Regression Results to a Firm Peak Day Estimate" below.

Each daily weather station data file was searched to find the coldest Adjusted Heating Degree Day (AHDD65) since January 1996. Many weather stations experienced historically cold weather in the January/February 1996 time period; without inclusion of that additional data from January/February 1996, AHDD65 were materially lower and not reflective of MERC's capacity needs. The coldest AHDD65 data since 1996 is included in the table below, along with the AHDD65 conditions on the day prior ("AHDD65-1").

<u>Station</u>	<u>Date</u>	<u>Avg. Temp</u>	<u>Avg. Wind</u>	<u>HDD65</u>	<u>AHDD65</u>	<u>AHDD65-1</u>
Bemidji	1/29/2019	-32	14	97	110	84
Cloquet	1/29/2019	-24	16	89	103	74
Fargo	1/18/1996	-16	34	81	109	85
International Falls	2/2/1996	-34	8	99	107	107
Minneapolis	1/29/2019	-20	17	85	100	71
Rochester	1/29/2019	-20	21	85	104	76
Worthington	1/29/2019	-20	21	85	103	81
Ortonville	1/29/2019	-23	14	88	101	77

This data by weather station was then compared to the AHDD65 data used in the previous demand entitlement filing:

<u>Station</u>	<u>Date</u>	<u>Avg. Temp</u>	<u>Avg. Wind</u>	<u>HDD65</u>	<u>AHDD65</u>	<u>AHDD65-1</u>
Bemidji	2/1/1996	-34	8	99	107	94
Cloquet	2/2/1996	-31	7	96	103	100
Fargo	1/18/1996	-16	34	81	109	85
International Falls	2/2/1996	-34	8	99	107	107
Minneapolis	2/2/1996	-25	8	90	97	92
Rochester	2/2/1996	-27	10	92	101	94
Worthington	1/18/1996	-8	32	73	96	74
Ortonville	1/14/2009	-21	11	86	96	86

While the January, 2019 cold weather outbreak was significant, it was not considered to be as severe as the weather conditions experienced in 1996. With the exception of Worthington, the 1996 weather conditions overall were colder when considering both the current day and the prior day weather conditions. Following is the data by weather station that was ultimately used in MERC's current analysis:

<u>Station</u>	<u>Date</u>	<u>Avg. Temp</u>	<u>Avg. Wind</u>	<u>HDD65</u>	<u>AHDD65</u>	<u>AHDD65-1</u>
Bemidji	2/1/1996	-34	8	99	107	94
Cloquet	2/2/1996	-31	7	96	103	100
Fargo	1/18/1996	-16	34	81	109	85
International Falls	2/2/1996	-34	8	99	107	107
Minneapolis	2/2/1996	-25	8	90	97	92
Rochester	2/2/1996	-27	10	92	101	94
Worthington	1/29/2019	-20	21	85	103	81
Ortonville	1/14/2009	-21	11	86	95	86

ii. The **Regression Generation of Net Daily Metered Volumes** consisted of:

- For each of the pipelines and weather stations:
  1. Gather the net daily metered volumes and weather station data including AHDD65.<sup>2</sup>
  2. Add indicator variables for day-type and month. Day-type variables are used to isolate load that changes by day of the week, such as commercial or industrial customers who may change their consumption on weekends when they run fewer shifts. Month indicator variables are used to isolate load that changes based on winter months, such as businesses that are open extra hours in December and resume normal operating hours in January.
  3. Perform ordinary least squares linear regressions for the 3-year time frame using the AHDD65 weather variable and the significant indicator variables.
  4. In response to comments from the Department, the regression methodology incorporates a process to mitigate the impact of autocorrelation. See section below on autocorrelation.

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<sup>2</sup> Temperature and weather data were obtained from DTN (formerly Schneider Electric) via DataMaxx then converted to HDD65 and AHDD65 in an Excel spreadsheet by MERC – Gas Supply. Temperature and wind data is the 24-hour average based on the 9am to 9am gas day.



5. In response to comments from the Department, provide an explanation whenever we choose to use a regression model that does not have an intercept.
6. Summarize the Baseload and Use/AHDD65 and Use/Prior Day AHDD65 from each regression.
7. Calculate a point estimate from each regression based on the baseload value plus the Use/AHDD65 coefficient times the coldest AHDD65 since January 1996 and the Use/Prior Day AHDD65 coefficient times the AHDD65 on the day prior to the coldest AHDD65 since January 1996.

iii. **Volume Risk Adjustments**

Volume risk adjustments were incorporated into the forecast to provide a confidence level that the daily metered load under design conditions would not exceed the daily metered regression estimate. An appropriate volume risk adjustment was determined for each regression group by multiplying the standard error of each regression analysis (sigma) by a factor needed to attain a desired confidence level. The desired confidence level chosen was 97.5%.

iv. **Adjusting the Regression Results to a Firm Peak Day Estimate** consisted of:

1. **Add back DFC customer selections**

While transportation, interruptible, and joint interruptible customer volumes were removed (as described above), in order to determine firm peak day load, daily firm capacity volumes needed to be added back. Reporting from the billing system provided historical monthly DFC data for the joint service customers from the prior winter that showed the volume that each customer has selected to receive as firm service from MERC each month. Based on direction from the Company's Gas Supply department, the Joint Firm/ Interruptible customers who were relying on MERC to provide peak day firm supply were identified and their daily firm

capacity volumes were summed by month for each pipeline. The total volumes were then added back to the regression results.

v. **Firm Peak Day Estimate Gate Station Allocation:**

After the data is subdivided, analyzed, and regressed to the nine demand areas, the data is further subdivided to each Gate Station within each of the nine demand areas. To provide a firm peak day estimate for each Gate Station, the following steps are taken:

1. The previous winter's actual historical throughout, by Gate Station, is gathered.
2. Estimated transportation, interruptible, and joint interruptible customer volumes are allocated to each Gate Station. The allocation is determined by which Gate Station has the closest geographical location to the customer.
3. For each Gate Station, using the last winter's data, the estimated coincidental transportation and interruptible Gate Station non-firm throughput total for the same date of the Gate Station's total throughput peak is then subtracted from the total throughput peak value in order to calculate an estimated coincidental peak firm value for each Gate Station.

$$\text{Gate Total Throughput Peak} - \text{Same Date Location-based estimated Non-Firm Total Throughput} = \text{Coincidental Gate Station Firm Estimate}$$

4. Each of the calculated coincidental peak firm values at each Gate Station are then divided by the new demand area total of the coincidental firm peak day estimates, and then multiplied by the initial demand area firm peak day total.

$$\left[ \frac{\text{Coincidental Gate Station Firm Estimate}}{\text{Total Demand Area Coincidental Firm Estimate}} \right] \times \text{Regression Demand Area Firm Estimate}$$

By having the coincidental peak day estimates as a ratio of the initial demand area estimates, the Gate Station peak day estimates continue to maintain the initial demand area estimates that resulted from the regression analyses in steps i. through iv. above.

## **Exhibit 1**

### **Pipeline and Weather Station Regression Notes**

#### **A. Large Volume Transportation, Interruptible, and Joint Interruptible Customers**

GLGT Paper Mills =

- Blandin mapped to Bemidji
- Sappi and USG mapped to Cloquet

VGT Lamb Weston mapped to Fargo

NNG Taconites / Direct Connects =

- CCI EMPIRE IND DEL PT 2 TILDEN mapped to Cloquet
- CCI NORTHSORE mapped to Cloquet
- UNITED TACONITE (was EVELETH TACONITE) mapped to Cloquet
- HIBBING TACONITE CO. mapped to Cloquet
- U.S. STEEL #1 & #2 mapped to Cloquet
- NATIONAL STEEL PELLET mapped to Cloquet
- COTTAGE GROVE TBS LS POWER mapped to Minneapolis
- INLAND STEEL mapped to Cloquet

NNG OSEU (End Users) =

- ARKEMA INC. mapped to Rochester
- MAYO Clinic 1 Fairmont mapped to Worthington
- MAYO Clinic 2 (Franklin Htg) mapped to Rochester
- MAYO Clinic 3 (St Mary's) mapped to Rochester
- ARCHER DANIELS MIDLAND, CO. mapped to Minneapolis
- ASSOCIATED MILK PRODUCTS, INC. mapped to Rochester
- Hawkins Inc. mapped to Minneapolis
- CORRECTIONAL CTR mapped to Minneapolis
- DAIRY FARMERS OF AMERICA mapped to Rochester
- Dick's Sanitation mapped to Minneapolis
- KEMPS LLC mapped to Rochester
- KERRY BIO-SCIENCE mapped to Rochester
- LAKESIDE mapped to Rochester
- MILK SPECIALTIES mapped to Worthington
- LAND O'LAKES mapped to Rochester
- PRO-CORN mapped to Rochester

- SWIFT mapped to Worthington
- SENECA FOODS-ROCHESTER mapped to Rochester
- ENGINEERED POLYMERS mapped to Cloquet
- SANDSTONE FEDERAL CORRECTIONAL INSTITUTE mapped to Cloquet
- Agra Resources(Exol) mapped to Rochester
- Halcon Corporation mapped to Rochester
- REG ALBERT LEA, LLC mapped to Rochester
- Zinpro North Branch mapped to Minneapolis

## **B. Daily Firm Capacity**

### VGT

- DETROIT LAKES MIDDLE SCHOOL
- ROSSMAN SCHOOL

### GLGT

- NORTHLAND APTS

### NNG

- HENDRICKS HOSPITAL
- BRAND FX BODY INC

## **4. Autocorrelation Review**

The Commission's February 4, 2015, Order in MERC's 2012-2013 demand entitlement dockets<sup>3</sup> required MERC to check its regression models for autocorrelation and correct the model if autocorrelation is present and to provide a reasonable explanation of its use of no-intercept models if it chooses to use one again in the future.

In a regression analysis, using time series data, autocorrelation of the errors is a problem. Autocorrelation of the errors, which themselves are unobserved, can generally be detected because it produces autocorrelation in the observable residuals. (Errors are also known as "error terms" in econometrics.) Autocorrelation violates the ordinary least squares (OLS) assumption that the error terms are uncorrelated. While it does not bias the OLS coefficient estimates, the standard errors tend to be underestimated (and the t-scores overestimated) when the autocorrelations of the errors at low lags are positive. The traditional

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<sup>3</sup> Docket Nos. G011/M-12-1192, G011/M-12-1193, G011/M-12-1194, and G011/M-12-1195

test for the presence of first-order autocorrelation is the Durbin–Watson statistic or, if the explanatory variables include a lagged dependent variable, Durbin's h statistic. To correct for this use, MERC used the Yule-Walker estimation method within the SAS software package to employ an AR(1) regression which then showed that the Durbin–Watson statistics are all either close to 2 or above.

#### 5. Design-Day Model

Order Point 5 of the Commission's January 21, 2015, Order in MERC's 2010-2011 demand entitlement dockets<sup>4</sup> required that in future demand entitlement filings, MERC provide (1) the determinants used in its Design-Day models that account for each and every impact on usage associated with economic conditions, and (2) a detailed explanation of each and every cause of unexpected changes in usage that might impact the Design-Day calculation, and what, if any, modifications the Company made to its Design-Day numbers. MERC does not forecast its Design Day using economic variables. Additionally, there were no unexpected changes in the Design-Day forecast.

#### 6. Verification of Regression Analysis Results

Order Point 10 of the Commission's April 28, 2016, Order in Docket No. G011/M-15-722 required that MERC verify its regression analysis results in future demand entitlement filings to ensure the results are consistent with the underlying theory the analysis attempts to explain. MERC has carefully reviewed the results of its regression analysis and verified that the results are consistent with the underlying theory the analysis attempts to explain. Please see the May 31, 2016, compliance filing in Docket Nos. G011/M-15-722, G011/M-15-723, and G011/M-15-724 for further discussion of this issue.

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<sup>4</sup> Docket Nos. G007/M-10-1166, G007/M-10-1167, G011/M-10-1168, and G011/M-10-1169

**ATTACHMENT D**

In the Matter of the Petition of Minnesota  
Energy Resources Corporation for Approval  
of a Change in Demand Entitlement for its  
Consolidated System

Docket No. G011/M-25-69

CERTIFICATE OF SERVICE

I, Colleen T. Sipiorski, hereby certify that on the ~~31st~~<sup>1st</sup> day of ~~October~~<sup>August</sup>, 2025, on behalf of Minnesota Energy Resources Corporation (MERC) I electronically filed a true and correct copy of MERC's Petition for Approval of a Change in Demand Entitlement on [www.edockets.state.mn.us](http://www.edockets.state.mn.us). Said documents were also served via U.S. mail and electronic service as designated on the attached service list.

Dated this ~~31st~~<sup>1st</sup> day of ~~October~~<sup>August</sup>, 2025.

/s/ Colleen T. Sipiorski  
Colleen T. Sipiorski

Last Name	First Name	Email	Organizatic Agency	Delivery M	Alternate E	View Trade	Service List Name
Ahern	Michael	ahern.mich	Dorsey & Whitney, LLP	Electronic Service	No		M-25-69
Bergman	Sasha	sasha.bergman@state	Public Utiliti	Electronic Service	Yes		M-25-69
Bull	Mike	mike.bull@state.mn.u	Public Utiliti	Electronic Service	Yes		M-25-69
Commerce	Generic	commerce.attorneys@	Office of th	Electronic Service	Yes		M-25-69
Ferguson	Sharon	sharon.ferguson@stat	Departmer	Electronic Service	No		M-25-69
Fuentes	Daryll	energy@us	USG Corporation	Electronic Service	No		M-25-69
Hoffman M	Joylyn C	joylyn.hoff	Minnesota Energy Res	Electronic Service	No		M-25-69
Moratzka	Andrew	andrew.mc	Stoel Rives LLP	Electronic Service	No		M-25-69
Phillips	Catherine	catherine.r	Minnesota Energy Res	Electronic Service	No		M-25-69
Residential	Generic No	residential.utilities@a	Office of th	Electronic Service	Yes		M-25-69
Schmiesing	Elizabeth	eschmiesin	Winthrop & Weinstine	Electronic Service	No		M-25-69
Stasik	Richard	richard.sta	Minnesota Energy Res	Electronic Service	No		M-25-69
Stastny	Kristin	kstastny@t	Taft Stettinius & Hollis	Electronic Service	No		M-25-69
Wuyts	Tina E	tina.wuyts	(Minnesota Energy Res	Electronic Service	No		M-25-69