

March 19, 2025

Will Seuffert
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101-2147

RE: Comments of the Minnesota Department of Commerce
Docket No. E-999/CI-23-151

Dear Mr. Seuffert:

Attached are the reply comments of the Minnesota Department of Commerce (Department) in the following matter:

In the Matter of an Investigation into Implementing Changes to the
Renewable Energy Standard and the Newly Created Carbon Free Standard
under Minn. Stat. § 216B.1691

The Investigation was initiated by the Minnesota Public Utilities Commission (Commission) on April 28, 2023.

The Department recommends **a transition to hourly tracking and matching of energy and carbon-free credit trading**, and is available to answer any questions the Minnesota Public Utilities Commission may have.

Sincerely,

/s/ Dr. SYDNIE LIEB
Assistant Commissioner of Regulatory Analysis

SL/AZ/ad
Attachment

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Acronyms, Abbreviations and Definitions

Acronyms and Abbreviations

| | |
|---------------|---|
| AEC | alternative energy certificate |
| AMI | advanced metering infrastructure |
| CCS | carbon capture and sequestration |
| CFA | carbon-free allocator |
| CFS | Carbon-free Standard |
| DLOL | Direct Loss of Load |
| DSES | Distributed Solar Energy Standard |
| EAC | energy attribute certificate |
| EETS | Eligible Energy Technology Standard |
| IRP | Integrated Resource Plan |
| IRS | Internal Revenue Service |
| LRR | Local Reliability Requirement |
| LMP | locational marginal price |
| LCFS | Low Carbon Fuel Standard |
| MISO | Midcontinent Independent System Operator |
| M-RETS | Midwest Renewable Energy Tracking Systems |
| PPA | power purchase agreement |
| REC | renewable energy certificate |
| RES | Renewable Energy Standard |
| SES | Solar Energy Standard |



Before the Minnesota Public Utilities Commission

Reply Comments of the Minnesota Department of Commerce

Docket No. E-999/CI-23-151

I. INTRODUCTION

The Minnesota Legislature created the carbon-free standard (CFS) with the passage of H.F. 7, which requires Minnesota electric utilities to reach 100% carbon-free electricity by 2040 and tasks the Minnesota Public Utilities Commission (Commission) with the implementation of the standard. The Commission laid out a series of proceedings to implement the standard in its July 7, 2023 *Notice of Docket Process and Timeline*,¹ and the current proceeding is the third round, which focuses on CFS compliance.²

In these reply comments, the Department seeks to ensure that the CFS compliance process is well defined and does not allow for double counting.

II. PROCEDURAL BACKGROUND

The following procedural history outlines relevant Commission action to the current proceeding.

| | |
|----------------|--|
| March 19, 2010 | The Commission issues its <i>Order Clarifying Criteria and Standards for Determining Compliance Under Minn. Stat. § 216B.1691</i> in Docket No. E-999/CI-03-389. ³ |
| July 7, 2023 | The Minnesota Legislature signs H.F. 7 into law, which created the CFS and amended Minn. Stat. § 216B.1691 to increase the Renewable Energy Standard (RES), also known as the Eligible Energy Technology Standard (EETS), to 55 percent by 2035. ⁴ |
| July 7, 2023 | Commission issues its <i>Notice of Docket Process and Timeline</i> which set comment period dates for changes to RES and Solar Energy Standard (SES; Round 1), new and amended terms (Round 2), CFS compliance (Round 3), and the off ramp process (Round 4). ⁵ |

¹ Minnesota Public Utilities Commission, Notice of Docket Process and Timeline, July 7, 2023, (eDockets) [20237-197301-01](#) at 2, (hereinafter “Notice of Docket Process and Timeline”).

² Minnesota Public Utilities Commission, Notice of Comment Period and Updated Timeline, October 31, 2024, (eDockets) [202410-211486-01](#), (hereinafter “Notice”).

³ *In the Matter of Detailing Criteria and Standards Measuring an Electric Utility's Good Faith Efforts in Meeting the Renewable Energy Objectives Under Minn. Stat. 216B. 169*, Minnesota Public Utilities Commission, Order Clarifying Criteria and Standards for Determining Compliance Under Minn. Stat. § 216B.1691, March 19, 2010, Docket No. E-999/CI-03-869, (eDockets) [20103-48177-01](#), (hereinafter “March 19, 2020 Order”).

⁴ See [H.F. 7](#).

⁵ Notice of Docket Process and Timeline.

| | |
|------------------|---|
| December 6, 2023 | The Commission issues its order for Round 1 of comments. The Commission orders that a hydroelectric facility greater than 100 MW and built before February 8, 2023 qualifies for compliance with the RES. The Commission also states that RECs are eligible for use in the year of generation and for four years following the year of generation. ⁶ |
| April 12, 2024 | The Commission issues its order for Round 1.5 of comments. ⁷ |
| June 28, 2024 | The Department submits its comments for Round 2. ⁸ |
| October 31, 2024 | The Commission issues its Notice of Comment for the current proceeding. |
| November 7, 2024 | The Commission issues its <i>Order Initiating New Docket and Clarifying "Environmental Justice Area"</i> which created the Docket No. E-999/CI-24-352 to further record development on partial compliance and the application of fuel life-cycle analysis. ⁹ |
| January 29, 2025 | The Department files its initial comments in the current proceeding. ¹⁰ |

Topics open for comment:

- When and how should utilities report preparedness for meeting upcoming CFS requirements?
- By which criteria and standards should the Commission measure an electric utility's compliance with the CFS?
- What considerations should the Commission take into account regarding the double counting of Renewable Energy Credits (RECs) to meet multiple requirements?
- How should net market purchases be counted towards CFS compliance?
- Are there other issues or concerns related to this matter?

The Minnesota Department of Commerce (Department) submits its reply comments in the context of multiple related proceedings, including the newly created Docket No. E-999/CI-24-352,¹¹ which has implications for how partial compliance and market purchases are measured and reported for CFS

⁶ See Order Point 6. Minnesota Public Utilities Commission, Order, December 6, 2023, Docket No. E-999/CI-23-151, (eDockets) [202312-201019-01](#) at 9, ("hereinafter December 6, 2023 Order").

⁷ Minnesota Public Utilities Commission, Order, April 12, 2024, Docket No. E-999/CI-23-151, (eDockets) [20244-205306-01](#), (hereinafter "April 12, 2024 Order").

⁸ Minnesota Department of Commerce, Comments, June 28, 2024, (eDockets) [20246-208098-01](#), (hereinafter "Department June 28, 2024 Comments").

⁹ Minnesota Public Utilities Commission, Order Initiating New Docket And Clarifying "Environmental Justice Area," November 7, 2024, Docket No. E-999/CI-24-352, (eDockets) [202411-211701-01](#), (hereinafter "November 7, 2024 Order").

¹⁰ Minnesota Department of Commerce, Initial Comments, January 19, 2025, (eDockets) [20251-214567-01](#), (hereinafter "Department Initial Comments").

¹¹ See Order Point 1. November 7, 2024 Order.

compliance. In addition, the fourth round of comments in the current docket concerns the “Off Ramp Process,” which will discuss modifications to the Commission’s March 19, 2010 Order in Docket No. E999/CI-03-869.¹² The Commission’s March 19, 2010 Order also includes criteria and standards related to measurement and achievement,¹³ which makes it difficult to separate relevant topics open for comment in each proceeding. The Department addresses overlaps with other proceedings, and describes these concerns in relevant areas of Section III.

III. DEPARTMENT ANALYSIS

A. *WHEN AND HOW SHOULD UTILITIES REPORT PREPAREDNESS FOR MEETING UPCOMING CFS REQUIREMENTS?*

The Department has no additional comments on this notice topic.

B. *BY WHICH CRITERIA AND STANDARDS SHOULD THE COMMISSION MEASURE AN ELECTRIC UTILITY’S COMPLIANCE WITH THE CFS?*

B.1. *Criteria and Standards for the Measurement of CFS Compliance*

B.1.1. *Tracking of Electric Utility Credit Sales and Imports*

The Clean Energy Organizations (CEOs) raise a concern with the calculation of multi-state compliance. Currently, multi-state utilities can retire RECs from utility-owned assets in different states to demonstrate EETS compliance. Should this practice continue, utilities can retire RECs to demonstrate CFS compliance from facilities not built to serve Minnesota load. The CEOs state:

It is important that utilities that serve multiple states or that have significant net market sales do not inappropriately inflate their CFS compliance by attributing to Minnesota carbon-free power that has not been generated to serve Minnesota retail customers.

[...]

However, determining how to calculate the numerator – “electricity generated from a carbon-free energy technology to provide the electric utility’s retail customers in Minnesota” – is more complex, at least for utilities that serve multiple states or have significant net market sales. The plain language of the law requires that compliance be based on the share of the utility’s carbon-free energy that is generated to provide to Minnesota retail customers. Defining the numerator broadly to include the carbon-free power that goes to other states in the utility’s territory, or to the regional market, would thus violate the statute and could substantially distort the CFS calculation. If the numerator is inflated in this way, a utility will be able to claim compliance with the CFS even if it is far from providing

¹² Notice of Docket Process and Timeline at 2.

¹³ See Section I. Issues 1, 2, and 4 and Order Points 1, 2, and 7-10. March 19, 2020 Order at 3 and 11-12.

to *Minnesota* customers the required percentage of carbon-free generation.

Moreover, allowing utilities to attribute to Minnesota the carbon-free generation they sell to MISO gives utilities an inappropriate incentive to maximize their net market sales, since the more carbon-free generation a utility can attribute to Minnesota – even if that generation does not serve Minnesota -- the higher the utility’s calculated CFS-compliance percentage. This then reduces the utility’s incentive to build new carbon-free generation that actually serves Minnesota as well as reducing the downward pressure that the CFS is intended to put on carbon-emitting generation.¹⁴ [citation omitted]

The CEOs then make the following recommendation:

Specifically, utilities should be required in their reports to provide:

A) the utility’s predicted and actual rates of compliance with the Minnesota CFS, based on the statutory formula below:

“electricity generated from a carbon-free energy technology to provide
the electric utility’s retail customers in Minnesota”
“the electric utility’s total retail electric sales to retail customers in
Minnesota”

The utility should precisely explain how the numerator and denominator were calculated, and it must demonstrate that it has only included in the numerator carbon-free electricity (and/or applicable RECs) generated or procured to provide to retail customers in Minnesota (and therefore, that it has excluded electricity that serves customers in other states, that supports net sales to regional markets, or that is sold to other parties that are not Minnesota retail customers);¹⁵

This recommendation will be difficult to apply for compliance with the CFS for several reasons. First, as discussed in the Department’s Initial Comments,¹⁶ electric generators are dispatched by the Midcontinent Independent System Operator (MISO), and are not dispatched to meet Minnesota load, but are rather dispatched to meet MISO load. This makes the attribution of Minnesota electric generation impossible, because generator dispatch is decoupled from Minnesota completely. Even if generator dispatch from facilities paid for by Minnesota ratepayers were used in the calculation of Minnesota generation, this would be a violation of Minn. Stat. § 216b.1691 subd. 4, because it would restrict the “trading of renewable energy credits between states.” If an electric utility cannot use RECs generated from its own assets in other states, then it also cannot purchase RECs from other states.

¹⁴ The Minnesota Center for Environmental Advocacy, the Sierra Club, and Fresh Energy, Initial Comments, January 29, 2025, (eDockets) [20251-214613-01](#) at 2-4, (hereinafter “CEOs Initial Comments”).

¹⁵ *Id.*, at 8.

¹⁶ Department Initial Comments at 6-7.

The Department shares the concern expressed by the CEOs regarding new and local power generation, however, practically, this concern can only be addressed with the regional preference for energy attribute certificates (EAC) purchases recommended by the Department in its Initial Comments:

The Department recommends that the Commission order that all EACs retired to demonstrate CFS compliance be generated within the Midwest Region, as defined by 26 CFR Ch. I, Sch. A, § 1.45V-4 Paragraph (d)(2)(ix), or meet the 45V requirements for interregional delivery, as defined by 26 CFR Ch. I, Sch. A, § 1.45V-4 Paragraph (d)(3)(iii)(B).¹⁷

The recommendations in the Department's Initial Comments (Section III.B.1.1) attempt to capture the dynamics of MISO imports and exports, and maintain technical feasibility. The Department notes that the CEOs' Recommendations D) and E) in Section I. provide similar information, albeit without time bounds.¹⁸ The Department restates its recommendations:

The Department recommends that the Commission order electric utilities to report all sales and purchases of EACs at the time interval required for CFS matching.

The Department recommends that the Commission order electric utilities to report all hourly Minnesota retail electric sales.^{19,20}

The Department also clarifies that market exports to MISO do not automatically mean that these sales should not be counted for CFS compliance unless A) EACs are required to meet other state's renewable compliance requirements, or B) the EACs are bundled with electricity sales.

A commission order on the latter point is not required, because reporting systems such as M-RETS track EAC retirements to meet specific standards, and thus an electric utility cannot retire an EAC and claim compliance for multiple states. Other state compliance obligations are only relevant in integrated resource planning (IRP).

B.1.2. Multiple EACs

In its Initial Comments, the Department made the following recommendation:

The Department recommends that the Commission order EACs to only be issued in quantities of 0-1 EAC per megawatt-hour.²¹

¹⁷ Department Initial Comments at 14.

¹⁸ CEOs Initial Comments at 8-9.

¹⁹ Department Initial Comments at 7.

²⁰ Note the Department corrected a grammatical error that was present in both recommendations.

²¹ Department Initial Comments at 15.

The Carbon Solutions Group (CSG)²² and Center for Resource Solutions (CRS)²³ and the Midwest Renewable Energy Tracking Systems Inc. (M-RETS)²⁴ all submitted comments relevant to this recommendation. All groups state that renewable energy certificates (RECs) or energy attribute certificates (EACs) represent one MWh of generation. These statements imply, but do not explicitly state, that a deviation from the practice of 1 MWh generation equals 1 EAC is problematic for the REC industry. The Department attempted to explain this problem in its initial comments:

If electric utilities are allowed to report multiple EACs per MWh of electricity generated, then electric utilities would be allowed to generate less than the full amount of electricity required to meet their total retail electric sales, and would by extension then have to make up for actual power needs from other sources that may not be carbon-free. The allowance of multiple EACs could make Minnesota more reliant on fossil fuels to make up for gaps in actual power needs by creating a larger gap between the amount of carbon-free electricity actually generated and utility load.²⁵

While the Department maintains that multiple EACs should not be issued for one MWh of generation, the Department's recommendation is problematic for the issuance of partial credits that fall within the 0-1 range of the Department's recommendation. EAC accounting relies on the principle that every credit represents 1 MWh of eligible generation. If credits are issued on a fractional basis, then a similar disconnect between actual generation and EACs is created.

There are two cases that necessitate further Commission orders on this matter. The first case is for biomass, which is partially CFS-eligible, for example 50 percent, and fully EETS eligible. In this case, there is a clear disconnect between 1 MWh that applies fully to the EETS and only 0.5 MWh that applies partially to the CFS. The second case is for a partial CFS eligible resource, such as natural gas with carbon capture and sequestration (CCS). For example, a 95 percent carbon-free power plant should be eligible to receive 0.95 MWh for every MWh of generation. Both of these examples illustrate how a one to one relationship of generation and compliance is broken by CFS partial compliance.

There are multiple potential options to address this problem, which include:

- 1) Disallow biomass eligibility from the CFS.
- 2) Make all biomass fully eligible for the CFS.
- 3) Issue a separate credit for CFS.
- 4) Issue all EACs equivalent to the CFS partial compliance MWh only, such that RECs apply to the EETS and CFS equally.

²² Carbon Solutions Group, LLC, Initial Comments, January 29, 2025, (eDockets) [20251-214606-01](#) at 2, (hereinafter "CSG Initial Comments").

²³ Center for Resource Solutions, Initial Comments, January 29, 2025, (eDockets) [20251-214651-01](#) at 8, (hereinafter "CRS Initial Comments").

²⁴ Midwest Renewable Energy Tracking System, Inc., Reply Comments, February 5, 2025, (eDockets) [20251-214590-01](#) at 1, (hereinafter "M-RETS Reply Comments").

²⁵ Department Initial Comments at 15.

- 5) Generate whole EACs that receive partial CFS credit upon retirement, based on a carbon-free allocator.
- 6) Generate whole EACs that apply to either one or multiple standards, based on a carbon-free allocator.

Option 1), which disallows biomass from the CFS, creates a strong disincentive to use biomass to meet the CFS and would penalize statutorily defined biomass that is eligible for EETS compliance. If any biomass continues to run after 2040, it could not be counted for CFS compliance and would then result in a surplus of generation above Minnesota electric sales. This solution also does not address partial compliance that is not eligible for the EETS; however, a solution to partial compliance can be implemented separately.

Option 2), which makes all biomass eligible for the CFS, may allow biomass that is not actually carbon-free, and may incentivize high carbon-emitting biomass that may even have higher carbon emissions than burning fossil fuels. This solution also does not address partial compliance that is not eligible for the EETS; as above, a solution to partial compliance can be implemented separately.

Option 3), which issues separate CFS credits, overcomplicates reporting and creates several new compliance risks. If credits are issued separately, then a generator could sell one REC to one party, and a second CFS-EAC to another—and both would represent the same MWh of generation. The Commission could require these separate credits to be bundled, but partial credits would still be issued for the CFS that do not match actual generation. While technically possible to implement this solution, it is problematic.

Option 4), which requires that RECs match CFS compliance, breaks the existing REC market for biomass. Currently, biomass receives full RECs. If this system is modified by the Commission, fewer RECs would flow from the same biomass production, and therefore results in less revenue for biomass producers. This solution would also create an incentive for biomass producers to sell RECs outside of the Minnesota compliance market to obtain higher revenues.

Options 5) and 6), which issue credits equivalent to the exact compliance share, have the greatest potential. Both options implement a carbon-free allocator (CFA), which would determine the percent of electricity generation that is eligible for the CFS. Electric generation would be multiplied by the CFA to determine the MWh eligible for CFS compliance. Solution 5) would issue full credits that correspond to metered generation, and would assign the CFA to the credit. Upon retirement, a 50% CFS eligible REC would produce 1 MWh of EETS compliance and 0.5 MWh of CFS compliance. Similarly, a 95% compliant AEC would produce 0 MWh of EETS compliance and 0.95 MWh of CFS compliance. This solution is not standard practice in the REC industry, as currently RECs simply represent 1 MWh of renewable generation and nothing more. The solution would also generate fractional credits that are not ideal for the REC markets.

Based on evaluation of the options, the Department concludes that Option 6) provides the best solution to the challenges surrounding biomass and partial credits. The Department's preferred solution is Option 6). This option applies the CFA to electric generation at the time of credit generation. The CFA determines how many full credits are eligible for both the EETS and CFS, and how many credits are only eligible for the EETS. In practice, full RECs are issued equivalent to the fractional share of generation that is fully EETS and CFS eligible and only EETS eligible based on a true-up period. For example, if 100 MWh are generated in a 50% partially compliant renewable generation facility, 50

MWh would be fully eligible for both the EETS and the CFS. The other 50 MWh would be eligible for only the EETS. This option would work similarly for the 95% CFS compliant natural gas with CCS power plant. If 100 MWh are generated, 95 AECs would be created that are eligible for only the CFS. This solution is not without precedent, as Iowa created a similar bifurcation of REC issuance with its renewable capacity compliance requirement and voluntary sale of residual RECs.²⁶ This option is preferred over Option 5 because it: (1) retains the existing 1 MWh equals 1 EAC framework, (2) does not add the CFA to the credit, and (3) because it would issue whole credits instead of credits that represent fractional generation for the CFS.

While these subjects could be discussed in Docket No. E-999/CI-24-352, a Commission decision on this subject is best made in the current proceeding because the subject pertains strictly to the measurement and the achievement of CFS compliance, and does not pertain to resource eligibility or the methodology used to determine partial compliance. As such, the Department rescinds its previous recommendation and replaces it with the following recommendation:

The Department recommends the Commission order:

- A. EACs be issued equivalent to metered generation on a per MWh basis;***
- B. A single REC be issued for all generation that may be retired to demonstrate both EETS and CFS compliance;***
- C. A carbon-free allocator, which defines the percentage of CFS eligible generation, must be used for any generation facility that is partially CFS compliant;***
- D. For all generation made in a CFS partial compliant facility that is also eligible for the EETS, metered generation in A. shall be:***
 - a. Multiplied by C. to determine the whole number of RECs to issue that are fully eligible for both the EETS and CFS;***
 - b. Multiplied by one minus C. to determine the whole number of RECs to issue that are only eligible for the EETS;***
- E. For all generation made in a CFS partial compliant facility that is not eligible for the EETS, metered generation in A. shall be multiplied by C. to determine the whole number of AECs to issue that are only eligible for the CFS; and***
- F. The methodology to determine the carbon-free allocation shall be decided in Docket No. E-999/CI-24-352.***

B.1.3. Hourly Matching

CMPAS raises a concern that was not adequately addressed in the Department's Initial Comments:

Recommendation: Utilities of all Sizes Need Flexibility Regarding REC Vintages

CMPAS also has contracts with large, central renewable resources. CMPAS members use these contracts to serve their own needs and do not own

²⁶ See Attachment A.

resources that also make excess sales into the market. Additionally, as a small entity, CMPAS depends on output from a much smaller number of renewable facilities than larger utilities, who have dozens of facilities that generate CFE-compliant energy. As such, CFE compliance for CMPAS is more acutely impacted by variations in load and renewable energy output than are larger utilities – should one of CMPAS’s contracts have a poor year or should utility load vary unexpectedly, CMPAS could be at an unexpected deficit it cannot make up by using excess generation from a large pool of other contracts. While a typical PPA provision is for generator owners to provide replacement energy, capacity, and RECs with these contracts in the event of substandard performance, generator owners may certainly provide unexpired RECs from earlier years, from other generators to meet such an obligation.

Given these examples above, CMPAS is thus counting on the option to retire unexpired RECs from past years where absolutely necessary for CFS compliance, similar to RES compliance, and we recommend the same latitude for CFS compliance.²⁷

Between 2030 and 2034, the Department recommends annual compliance and the removal of REC banking. CMPAS requests continued flexibility to bank RECs. The Department does not support any ability to bank RECs while CFS compliance transitions to hourly matching. Instead, the Department suggests a true-up period to account for variable renewable generation. The true-up period would allow electric utilities to buy or sell RECs to meet their annual compliance requirement or generate revenue, rather than bank RECs. To allow utilities time to buy or sell RECs to establish compliance, electric utilities should be given a period of three months to true-up compliance. The results of the true-up should be reported in electric utilities annual REC retirement reports in Docket No. E999/PR-YR-12.

The Department recommends the Commission order a 2030 to 2034 CFS compliance true-up period of three months after the conclusion of the reporting year.

B.1.4. Line Losses

In their Initial Comments, the CEOs make the following recommendation:

Specifically, utilities should be required in their reports to provide:

- B) the utility’s predicted and actual estimated line losses, including the basis for the estimate and an explanation of how those line losses affect the calculation under item A above;²⁸

²⁷ Central Municipal Power Agency/Services, Initial Comments, January 29, 2025, (eDockets) [20251-214554-01](#) at 5, (hereinafter “CMPAS Initial Comments”).

²⁸ CEOs Initial Comments at 8.

With this recommendation, the CEOs point to a problem in existing practice for EETS compliance. Electricity is not generated where load is, and the transport of electricity results in line losses. Therefore, generation must always be higher than load in order to fully supply load. The practice of matching RECs to load without the inclusion of transmission line losses results in a deficiency of electric generation to fully serve load.

In Attachment A of the CEO's Initial Comments, Xcel states in an information request response that 9.66% of its generation in 2030 will be lost due to line losses.²⁹ This figure represents a significant mismatch between generation and load. While REC retirement to meet the EETS and SES have never used line losses in the compliance calculation, H.F. 7 modified Minn. Stat. § 216B.1691 subd. 2a as follows:

Subd. 2a. Eligible energy technology standard.

(a) Except as provided in paragraph (b), Each electric utility shall generate or procure sufficient electricity generated by an eligible energy technology to provide its retail customers in Minnesota, or the retail customers of a distribution utility to which the electric utility provides wholesale electric service, so that the electric utility generates or procures an amount of electricity from an eligible energy technology that is equivalent to at least the following standard percentages of the electric utility's total retail electric sales to retail customers in Minnesota ~~are generated by eligible energy technologies~~ by the end of the year indicated:

- (1) 2012 12 percent
- (2) 2016 17 percent
- (3) 2020 20 percent
- (4) 2025 25 percent.
- (5) 2035 55 percent.³⁰

Minn. Stat. § 216B.1691 subd. 2g contains the same edit, which adds "equivalent to" to the statute. This modification decouples generation from total retail electric sales by the addition of equivalence, and allows the Commission the ability to determine that generation should serve load and not merely match load. Should the current practice continue, a 100 percent CFS compliance achievement could still allow, in the Xcel 2030 example above, 10.7 percent of the electricity used to serve Xcel's total retail electric customers to come from CFS-ineligible generation sources.³¹

In addition, IRPs include line losses. For example, in Xcel's most recent IRP, the Company stated:

²⁹ *Id.*, Attachment A at 2.

³⁰ 2023 Minn. Laws ch. 7, § 5. Available at: <https://www.revisor.mn.gov/laws/2023/0/7/laws.0.3.0#laws.0.3.0>

³¹ 90.34% of electricity would be delivered. The remainder of the generation is calculated by dividing 100% by 90.34%, which yields 110.7% of electricity required to meet 100% of load.

We convert the sales forecast into energy requirements at the generator level by adding energy losses. The forecasted losses are based on forecasted loss factors, which are developed by modeling actual historical losses.³²

It does not make sense to plan for losses in IRPs, but then ignore losses for CFS or RES compliance, particularly because the statute was modified to align CFS and RES compliance with common IRP practice.³³

The Department recommends the Commission order CFS and RES compliance measurement to factor in line losses to determine compliance with each standard.

B.1.5. Carbon Emissions

In their Initial Comments, the CEOs make the following recommendation:

Specifically, utilities should be required in their reports to provide:

F) the predicted and actual CO₂ emissions associated with all electricity generated or procured to provide retail customers in Minnesota, including emissions associated with the excess power generated or procured to cover line losses.³⁴

The Department questions how this recommendation would be implemented. Even if line losses are added to demonstrate CFS compliance, utilities cannot report greater than 100 percent of their retail sales matched by EACs, which allows the utilities to claim zero electricity emissions. While the Department recognizes that fossil fuels will be burned to supply Minnesota energy needs even at 100% CFS compliance, the attribution of these emissions is already nullified by the retirement of RECs to meet the CFS. As discussed in Section III.B.1, the attribution of electricity generation to Minnesota is challenging, because power plants are dispatched by MISO to meet MISO load. Even if a utility's total generation fleet is quantified, the attribution of emissions to Minnesota becomes zero at 100% CFS compliance, which means that all fossil fuel generation is attributed outside of Minnesota. Net market purchases would also have to be factored into this calculation. The Department welcomes further discussion from the CEOs about how emissions could be quantified, but the Department cannot support this recommendation without further explanation.

B.1.6. Health Impacts

In their Initial Comments, Health Professionals for a Healthy Climate (HPHC), Climate Generation, CURE, Minnesota Environmental Justice Table, Minnesota Interfaith Power and Light, MN350 and Sierra Club North Star Chapter state:

³² *In the Matter of Xcel Energy's 2024-2040 Integrated Resource Plan*, Northern States Power Company, dba Xcel Energy, Integrated Resource Plan Appendix E, February 2, 2024, Docket No. E002/RP-24-67, (eDockets) [20242-203057-01](#) at 1.

³³ Note that the Solar Energy Standard (Minn. Stat. § 216B.1691 subd. 2f) and the Distributed Solar Energy Standard (Minn. Stat. § 216B.1691 subd. 2h) do not contain "equivalent to," and thus the Department does not make recommendations to update compliance determinations for these standards.

³⁴ CEOs Initial Comments at 20-21.

We urge the PUC to consider impacts on human health from co-pollutants generated by biomass emissions. Such co-pollutants should be quantified and tracked along with any renewable energy credits/carbon-free credits that these dirty sources of energy are associated with.³⁵

HPHC further asserts that “the tracking process and utility planning should effectively quantify and analyze the deaths and morbidity these facilities cause in overburdened communities in Minnesota and other jurisdictions.”³⁶

The Department concludes that HPHC’s requests fall outside of the scope of orders issued pursuant to Minn. Stat. § 216B.1691. The statute directs the Commission to issue orders establishing the criteria and standards to be used to measure a utility’s efforts to meet the various renewable energy standards and determine whether a utility is satisfying those standards.³⁷ The statute specifies that in establishing the criteria and standards the Commission must allow for partial compliance and “protect against undesirable impacts on the reliability of the utility’s system and economic impacts on the utility’s ratepayers and that consider technical feasibility.”³⁸ HPHC’s requests fall outside of these considerations, and instead relate to issues that are within the ambit of the Minnesota Pollution Control Agency (MPCA) and the Minnesota Department of Health. Indeed, the MPCA is in the process of adopting new rules governing air quality based on recent legislation that requires the MPCA to consider the cumulative impacts a proposed action, such as approving an air permit, will have on the environment or health of residents in an Environmental justice area.³⁹

B.2. Criteria and Standards for the Determination of CFS Achievement

B.2.1. Reporting Mechanism

In their Initial Comments, the CEOs state:

Currently, utilities submit their RES compliance reports using a reporting template identifying what information utilities must provide. This template was recently updated by the Commission staff and the Department to reflect the 2023 amendments to the RES requirements of Minn. Stat. § 216B.1691.³⁹ The CEOs recognize the value of a reporting template, and suggest that the Commission’s order in this phase of the docket should be incorporated into that template. The updated template should reflect input from the reporting utilities, and the CEOs also ask for the opportunity to comment on the updated template once proposed. It is difficult for stakeholders other than utilities to identify potential gaps in

³⁵ Health Professionals for a Healthy Climate, Climate Generation, CURE, Minnesota Environmental Justice Table, Minnesota Interfaith Power and Light, MN350, and Sierra Club North Star Chapter, Initial Comments, January 29, 2025, (eDockets) [20251-214633-01](#) at 2.

³⁶ *Id.* at 5.

³⁷ [Minn. Stat. § 216B.1691, subd. 2d\(a\).](#)

³⁸ [Minn. Stat. § 216B.1691, subd. 2d\(b\).](#)

³⁹ [2023 Minn. Laws ch. 60, art. 8, § 3.](#)

the CFS reporting requirements without a detailed proposal to respond to.⁴⁰ [citation omitted]

Based on this statement, the CEOs recommend:

The Commission should ask the Department to propose an update of the reporting template currently used to report RES compliance to reflect the new requirements of this order. The Department should consult with utilities in preparing this update and other stakeholders should be able to comment upon it once proposed.⁴¹

The recommendation to update the template is not necessary, because the Commission already issued an order in the current docket, as stated by the Department in its Initial Comments:

The Commission's Order Point 7 in its December 6, 2023 Order provided guidance for the implementation of reporting, which stated:

The Commission delegates authority to the Executive Secretary to work with the Department of Commerce and other utilities to incorporate new reporting required by H.F. 7 into the current reporting template.

The Department has discussed development of the new reporting template with Commission staff; however, the final template will not be complete until after the Commission issues its order in Docket No. E-999/CI-24-352 and determines the final reporting requirements for all eligible resources.

While the Commission has not explicitly designated the annual E999/PR-YR-12 REC Retirement Docket by order to be the venue to report CFS compliance, the Department understands the above referenced Order Point 7 to make this determination. Therefore, the Department expects that future CFS compliance filings will be made in the annual E999/PR-YR-12 REC Retirement Docket.⁴²

Further stakeholder involvement is not necessary, because the template will have to comply with all Commission orders in the current docket. The CEOs should address all template recommendations in the current proceeding.

B.2.2. Auditing of Reporting

In their Initial Comments, the CEOs state:

The law gives the Commission the responsibility to closely oversee utilities' progress toward achieving the CFS, including the authority to set the compliance measurement criteria and to receive detailed compliance

⁴⁰ CEOs Initial Comments at 17.

⁴¹ *Id.*, at 22.

⁴² Department Initial Comments at 16-17.

reports. Moreover, the Commission is required to “regularly investigate whether an electric utility is in compliance” with the statute’s obligations, including the CFS, and has the authority to require compliance action or impose penalties. Fulfilling these responsibilities requires closely overseeing the utility compliance filings, and the CEOs believe that the next few years will require greater oversight than has been necessary in recent years given the greater ambition of the CFS (and RES) targets. While stakeholders will no doubt be involved in commenting upon some of the utility CFS compliance plans, we believe these plans should also be subject to a rigorous audit by the Department, reporting these results to the Commission. The Department is already required to report to the legislature every two years on utilities’ progress in increasing their use of renewable energy. We suggest that this biennial report should also analyze utilities’ progress toward meeting the CFS more broadly.⁴³ [citations omitted]

The CEOs then recommend:

The Commission should request the Department to conduct rigorous audits of utility CFS filings to ensure they are making sufficient progress toward compliance.⁴⁴

The Department notes consensus from the CEOs on the need for enhanced auditing for the CFS. The Department recommends that the Commission adopt the Department’s recommendation, which is more prescriptive:

The Department recommends that the Commission order auditing of all CFS compliance reports during the preparedness period, as well as the 2030 report to establish the need for further auditing in subsequent years.⁴⁵

B.3. Criteria and Standards for Reliability Impacts

In its Initial Comments, the Minnesota Large Industrials Group (MLIG) states:

As important as reasonable cost increases to meet decarbonization targets, reliability cannot suffer as a result of utility efforts to implement the 2040 legislation. The Commission should set specific reporting requirements to establish a framework for evaluating how compliance with the RES, SES and CFS affects system reliability. The Commission should require the utilities to analyze the findings available in their current reliability filings, determine whether implementation of the 2040 bill has caused reliability impacts and file a report annually to outline any changes

⁴³ CEOs Initial Comments at 18-19.

⁴⁴ *Id.*, at 22.

⁴⁵ Department Initial Comments at 18.

to their implementation plans necessary to maintain reliability. MLIG believes the current reliability reporting is insufficient to isolate instances attributable to implementation of the 2040 legislation, and therefore a more elaborate framework needs to be created so that the Commission can monitor reliability according to benchmarks and metrics to determine whether offramps or partial compliance may be required.⁴⁶

The Department disagrees with the MLIG's recommendation, because it is duplicative and unnecessary. In its Initial Comments, the Department stated:

Grid reliability is not optional, and the passage of H.F. 7 will have no impact on grid reliability. Electric utilities will be subject to the same reliability requirements that were required before the passage of H.F. 7, including the requirements stipulated by Minn. R. 7826.0500 – 0700 and the Commission's resource planning process.

[...]

Reliability planning is primarily performed in IRPs. As discussed above, the only difference induced by H.F. 7 is the additional need for capacity with a higher share of renewable generation. For electric utilities that are required to submit IRPs, these capacity needs will be planned in IRPs. Reliability requirements will similarly not change for electric utilities that do not submit IRPs. Based on the above analysis, the Department does not see a need for the Commission to set any new standards or criteria to meet reliability needs.⁴⁷

B.4. Criteria and Standards for Economic Impacts

In its Initial Comments, the MLIG states:

It is clear to MLIG the cost of implementation of the CFS could be prohibitively detrimental to customers and therefore MLIG requests the Commission adopt annual uniform reporting requirements that allow stakeholders to examine the pace of planned investments to ensure just and reasonable rates.

The production and presentation of rate impacts is rarely uniform across utility dockets, and the Commission should carefully develop the "uniform reporting system" required in Minn. Stat. §216B.1691, subd. 2e. Accordingly, MLIG requests the Commission require utilities to file:

⁴⁶ Minnesota Large Industrial Group, Initial Comments, January 29, 2025, (eDockets) [20251-214647-01](#) at 2-3, (hereinafter "MLIG Initial Comments").

⁴⁷ Department Initial Comments at 18-19.

- a reference case scenario, detailing the least cost plan, from a ratepayer impact perspective, for meeting the CFS by 2040 and 2050; and
- a reference case scenario, detailing the least cost plan, from a ratepayer impact perspective, to partially meet the CFS by 2040 and 2050.

MLIG continues to support these requirements as a way to uniformly track the cost of implementation of the 2040 legislation. These two reference case scenarios would give the Commission and intervening parties the information they need to understand the utility's preferred plan versus other possible plans, with the ability to evaluate (i) the least cost way of meeting the carbon free target by 2040 or a later date; and (ii) the cost mitigation that could result if utilities partially meet the carbon free target.

As part of these reference case requirements, MLIG requests the Commission provide utilities and customers with some expectation as to what is a "reasonable" cost increase, to provide a target or range of costs that are acceptable and in the public interest to achieve compliance with the 2040 legislation. This would provide guidance to utilities and customers as they prepare their IRPs and budgets and allow the Commission to determine in future proceedings whether the actual costs of approved IRPs were reasonable, or whether the pace of investments need to be slowed to maintain affordability.⁴⁸ [citations omitted]

The Department supports some of the information requested by the MLIG. The first bulleted recommendation to study a ten-year delay of the standard is practical and useful for decision making purposes, however a ten-year delay is too long and is not tied to the typical five-year integrated resource plan (IRP) action plan. There is no added benefit to the study of an additional five years, and a delay could be studied at any point in the CFS compliance period, which makes the MLIG's recommendation inflexible. Instead, if the Commission decides to adopt this requirement, it should require the study of a five-year delay of the existing CFS standard at that time. Should the Commission desire to grant a delay of the CFS under Minn. Stat. § 216B.1691 subd. 2b, this information would aid in the decision-making process.

The Department does not support MLIG's second bulleted recommendation. While Minn. Stat. § 216B.1691 subd. 2b outlines provisions to modify or delay the CFS, the MLIG's partial CFS compliance request is more extreme in nature and is far more open-ended. This request would study the modification of the CFS, rather than delay, which would involve a significant Commission modification of the CFS if adopted. Partial CFS compliance could range from 0 to 99 percent and could add considerably more complexity to IRP scenario planning. The MLIG has proposed no framework to study partial compliance, and the marginal addition of partial compliance, as opposed to delay, would only be to impose a standard of less than 80 percent carbon-free electricity. The EETS 55 percent renewable

⁴⁸ MLIG Initial Comments at 2-3.

energy requirement would set a lower limit for CFS partial compliance, unless this standard is also approved for partial compliance, and therefore the utility of studying partial compliance only falls between 55 to 80 percent without further EETS intervention. This recommendation is overly burdensome and counter-productive, and should not be supported.

Finally, in regards to the MLIG's request for Commission guidance on the reasonableness of rate impacts, the Department restates its position from its Initial Comments:

The risk for increased costs should not be managed differently from that of existing practice. As described in Minn. Stat. § 216B.2422 subd. 3(a) and 3(b), the Social Cost of Greenhouse Gases, socioeconomic costs, and other external factors should be considered as part of the decision to approve a resource plan. However, given that the potential cost of a solution may not outweigh the risk, it is important to consider whether a given resource mix provides a higher benefit than any increased cost. In this regard, a comparison of the societal costs to the revenue requirement of any given scenario should yield a higher result as compared to the difference in revenue requirement between a CFS-eligible and a CFS-ineligible resource. While the Department does not argue that this equation should be the only consideration for a request to modify or delay a standard, it should form the basis to consider such a request. The Department concludes that a Commission order is not necessary, as the Department's recommendation is not a deviation from standard practice.⁴⁹

There is no need for further clarification about ratepayer impacts, which are covered by existing IRPs. Finally, if the MLIG desires to continue to recommend its clarification, the proper venue is in the next Round 4 Comment Period of the current docket, because this request does not pertain to measurement or achievement of CFS compliance.

C. WHAT CONSIDERATIONS SHOULD THE COMMISSION TAKE INTO ACCOUNT REGARDING THE DOUBLE COUNTING OF RENEWABLE ENERGY CREDITS (RECS) TO MEET MULTIPLE REQUIREMENTS?

In its Initial Comments, CMPAS states:

Recommendation: Utilities of all Sizes Need Flexibility in Measuring the Amount of Qualifying Non-Renewable, Carbon Free Energy

One of the most important items in Table 1 is that utilities be allowed multiple ways to prove the amount of qualifying energy, most particularly for non-renewable, carbon-free energy (i.e., such as nuclear energy) that do not qualify for RECs. CMPAS notes that it has PPAs for very small percentages of existing large, existing central renewable and carbon-free resources physically located outside of Minnesota. A prime example is our PPA for less than 2% of the Point Beach Nuclear Plant Units 1 and 2 in

⁴⁹ Department Initial Comments at 20.

Wisconsin. As small off takers, CMPAS may not have the contractual rights to certain ways of verifying energy generated for all of these resources, such as 1) accessing actual revenue grade meter reads from very large generation resources it does not own or 2) requiring such plant owners to use any newly emerging certifications or verification methods that might require them to certify power output for the entirety of their larger central resource, not just what is purchased by CMPAS members. Because different utilities may have different power arrangements, it is critical to allow multiple options for measuring the amount of qualifying energy from non-renewable, carbon-free sources, including PPA billing statements, metered generation data, or certification standards. The options allowed need to be practical for different types of resource ownership and pre-existing contractual arrangements.⁵⁰

CMPAS's request would create a significant double counting risk, for two reasons. First, any renewable energy facility is guaranteed to issue RECs for its generation. Second, as compliance markets expand in Minnesota and elsewhere in the United States, facilities that can retire or sell alternative energy credits (AECs)⁵¹ will do so because AECs have a market value. Point Beach, mentioned in CMPAS's comments, is registered in M-RETS.⁵² In this example, Point Beach will retire or sell all of its AECs, regardless of whether or not CMPAS purchases the AECs. If CMPAS were to execute a power purchase agreement (PPA) and then claim its energy-only contract for CFS compliance, this arrangement would be double counting. The only way to address the double counting risk is to require the retirement of RECs or AECs to demonstrate CFS compliance. CMPAS, or any other organization, can and should include REC or AEC purchases in all of its PPAs to the extent that such EACs are required to demonstrate CFS compliance. There is no substitute for this requirement. If CMPAS cannot purchase EACs with its PPAs, then it is free to purchase unbundled EACs from elsewhere.

D. HOW SHOULD NET MARKET PURCHASES BE COUNTED TOWARDS CFS COMPLIANCE?

CRS, CSG, and M-RETS discuss double counting concerns regarding net market purchases.⁵³ CRS recommends a residual mix accounting solution, which would allow utilities to retire RECs from within MISO that have not been claimed by any other party:

CRS proposes requiring utilities to use a subregional residual mix to determine the percentage of annual net purchases from a regional transmission organization that it may count as carbon-free. Specifically, CRS suggests that the Commission require utilities claiming partial compliance apply a residual mix reported by the U.S. Environmental Protection Agency (EPA) for the subregion under EPA's Emission &

⁵⁰ CMPAS Initial Comments at 5.

⁵¹ AECs are issued for generators that do not meet the criteria for RECs, but which can produce carbon-free electricity, such as nuclear power plants or fossil fuels with carbon capture and storage.

⁵² Midwest Renewable Energy Tracking Systems. *Public M-RETS Generators*. (Accessed March 4, 2025). Available at: https://app.mrets.org/reports/public/generators?generator_name=d059fc1a-a2fa-4de1-be3b-aa3a34040313,68edc00b-4b36-40d3-a659-3f621c0f5bb8

⁵³ CRS Initial Comments, CSG Initial Comments, and M-RETS Reply Comments in their entirety.

Generation Resource Integrated Database (eGRID) where the utility's operations are located.⁵⁴

CSG is skeptical that residual mix accounting may have any value if there is no residual carbon-free generation to draw from, and recommend that EACs be used to demonstrate CFS compliance:

Net market purchases can only potentially count towards CFS compliance *after* REC retirements have been eliminated from the systemwide, subregional, or entity-level fuel mix. The process of subtracting REC retirements out of a fuel mix is called residual mix accounting. It should be noted that there may be no claimable carbon-free emissions left in a fuel mix after solving for an accurate residual mix. For example, at the systemwide level, net market purchases could only count towards CFS compliance to the extent that the Midcontinent Independent System Operator ("MISO") residual mix still contains carbon-free attributes that have gone unclaimed by voluntary buyers, obligated entities in Minnesota, or obligated entities outside of Minnesota.⁵⁵

[...]

An additional critical point is that—after each entity accounts for all PPAs, unbundled contracts, and other direct contracts at the entity-level—the LRZ residual mix could likely be rendered 0% carbon-free.

[...]

That all said, thinking about this issue from an LRZ residual mix standpoint is quite confusing and obscures the most straightforward compliance pathway. The most straightforward compliance pathway would be for the obligated entity to submit RECs for each MWh it claims for compliance, which also results in a subregional, utility-level fuel mix.⁵⁶

The Department is also skeptical that residual mix accounting is necessary or beneficial. The creation of a residual mix accounting framework would be burdensome for both utilities and the Department to ensure its enforcement. Instead, the Department agrees with CSG that retirement of EACs is the simplest compliance instrument.

The Department restates its recommendation from its Initial Comments:

The Department recommends that the Commission order:

- A. Net market purchases shall only be quantified for CFS compliance when the carbon-free share of the systemwide annual fuel mix or

⁵⁴ CRS Initial Comments at 8.

⁵⁵ CSG Initial Comments at 2.

⁵⁶ *Id.*, at 28.

an applicable subregional fuel mix is necessary to demonstrate CFS compliance.

- B. EACs must be purchased in the subsequent reporting year for the carbon-free share of the systemwide annual fuel mix or an applicable subregional fuel mix that is necessary to demonstrate CFS compliance.⁵⁷

Under this recommendation, all CFS compliance claims will be made with RECs, which aligns with CSG's recommendation. This solution will not require a second compliance framework to ensure that RECs are not double counted in net market purchase calculations, and will greatly simplify reporting and auditing requirements.

If CSG's prediction is correct, meaning that there may be no residual RECs available, then utilities would be forced to buy RECs to demonstrate compliance even if residual mix accounting is adopted. Therefore, the Department's recommendation provides the most practical solution.

Finally, the Department aligns B. from the above recommendation with its recommendation made in Section III.B.1.3. If EACs were to be purchased for planned net market purchases in a forward-looking manner, this may require the sale of EACs during an annual true-up period if renewable generation is higher than expected. Electric utilities should be granted the same three-month period to true-up any net market purchases that need to be matched with EACs. The Department modifies its recommendation to read:

The Department recommends the Commission order:

- A. Net market purchases shall only be quantified for CFS compliance when the carbon-free share of the systemwide annual fuel mix or an applicable subregional fuel mix is necessary to demonstrate CFS compliance.***
- B. EACs must be purchased in the first three months of the subsequent reporting year for the carbon-free share of the systemwide annual fuel mix or an applicable subregional fuel mix that is necessary to demonstrate CFS compliance.***

E. ARE THERE OTHER ISSUES OR CONCERNS RELATED TO THIS MATTER?

E.1. Resource Eligibility

In their Initial Comments, the CEOs request clarity from the Commission concerning the eligibility of biomass and its potential fuel life-cycle analysis result:

The Commission should specify that RECs must be from carbon-free sources to be used for compliance with the CFS, and that no RECs from biomass or solid waste facilities may be used unless those facilities have

⁵⁷ Department Initial Comments at 24.

been subject to a lifecycle analysis and had their carbon-free status approved by the Commission.⁵⁸

The Department agrees with the CEOs' interpretation, but does not agree that the current docket is the proper venue for this determination, because it is not related to the measurement and achievement of CFS compliance. Instead, the CEOs' recommendation is best directed to Docket No. E-999/CI-24-352, where questions of resource eligibility and calculation methodology will be discussed.

E.2. Definition of Terms

In its Initial Comments, CMPAS states:

The first issue regards definition of key terminology. As part of development of final compliance reporting requirements for the CFS, CMPAS asks for clear and explicit definitions on key terms being used. For example, the phrases "bilateral contract" and "power purchase agreement" are used in the November 7 Order regarding the purchase of energy. However, many in the electric utility industry who are involved in power trading and energy transactions use the term "bilateral contract" to refer to contracts exclusively for capacity (i.e., sale of "Zonal Resource Credits"), where no energy is included in the contract for actual purchase by the buyer. As such, a formal definition of what is meant by "bilateral contracts" and other terms in the context of CFS compliance will help ensure a common understanding between all parties.⁵⁹

In its November 7 order, the Commission stated that, pending the investigation into the fuel life-cycle analysis in the newly initiated docket, it would provisionally direct utilities to:

Calculate the percentage of carbon-free energy, when a utility purchases energy from a specified resource such as in the context of a bilateral contract or power purchase agreement, based on the percentage of carbon-free energy generated by the resource.

In this context, the Department understands the terms "bilateral contract" and "power purchase agreement" to refer to binding contracts and agreements that govern a utility's purchase of electricity generated by another entity. The Department acknowledges that bilateral contracts may also involve capacity⁶⁰ but understands the above reference in the Commission's November 7 order to refer specifically to bilateral contracts involving the purchase of energy by a utility.

⁵⁸ CEOs Initial Comments at 21.

⁵⁹ CMPAS Initial Comments at 7.

⁶⁰ For example, the Commission previously approved Minnesota Power's petition to recover costs stemming from a bilateral contract involving the sale of both capacity and energy. See *In the Matter of Minnesota Power's Petition for Approval to Recover Impacts of the Bilateral Contract with Hibbing Public Utilities in the FPE Rider*, Minnesota Public Utilities Commission, Order, May 16, 2023, Docket No. E-015/M-22-501, (eDockets) [20235-195863-01](#).

IV. DEPARTMENT RECOMMENDATIONS

Based on analysis of Minn. Stat. § 216B.1691 and the information in the record, the Department has prepared recommendations, which are provided below. The recommendations correspond to the subheadings of Section III from the Department's Initial Comments.

A. *WHEN AND HOW SHOULD UTILITIES REPORT PREPAREDNESS FOR MEETING UPCOMING CFS REQUIREMENTS?*

A. A.1. The Department recommends the Commission order electric utilities to begin to report CFS compliance in 2029 for generation year 2028.

- A.2. The Department recommends that any decisions regarding modifications to the existing REC tracking system be made in Docket No. E-999/CI-24-352.

B. *BY WHICH CRITERIA AND STANDARDS SHOULD THE COMMISSION MEASURE AN ELECTRIC UTILITY'S COMPLIANCE WITH THE CFS?*

- B.1.1.1. The Department recommends the Commission order electric utilities to report all sales and purchases of EACs at the time interval required for CFS matching.
- B.1.1.2 The Department recommends the Commission order electric utilities to report all hourly Minnesota retail electric sales.
- B.1.2.1.1. The Department recommends the Commission order hourly matching for CFS compliance for electric all electric utilities.
- B.1.2.1.2. The Department recommends the Commission rescind its order points 1 and 3 from its December 18, 2007 Order in Docket Nos. E-999/CI-04-1616 and E999/CI-03-869 and modify order point 6 of the Commission's December 6, 2023 Order in Docket E-999/CI-23-151 to remove "All renewable energy credits generated from such facilities will be eligible for use in the year of generation and for four years following the year of generation." These orders will be rescinded/modified effective January 1, 2030.
- B.1.2.2.1. The Department recommends the Commission order the following total retail electric sales matching requirements for electric utilities by the end of the year indicated:
 - 2030: Annual matching of 80 percent for public utilities; 60 percent for other electric utilities
 - 2035: Hourly matching of 80 percent for public utilities; 60 percent for other electric utilities
 - 2040: Hourly matching of 90 percent for all electric utilities
 - 2045: Hourly matching of 100 percent for all electric utilities.
- B.1.2.2.2. The Department recommends the Commission order a 2030 to 2034 CFS compliance true up period of three months after the conclusion of the reporting year.

- B.1.2.3. The Department recommends the Commission order all integrated resource plans where the utility uses a capacity expansion model to incorporate hourly matching constraints in the models to demonstrate CFS compliance.
- B.1.2.4.1. The Department recommends the Commission order the Department to submit an annual compliance report that outlines the status of EAC markets and provides potential options to implement hourly EAC trading for electric utilities.
- B.1.2.4.2 The Department recommends the Commission order a new docket be opened in 2029, which shall determine the requirements necessary to facilitate the sales and purchases of hourly EACs.
- B.1.3. The Department recommends the Commission order all EACs retired to demonstrate CFS compliance be generated within the Midwest Region, as defined by 26 CFR Ch. I, Sch. A, § 1.45V-4 Paragraph (d)(2)(ix), or meet the 45V requirements for interregional delivery, as defined by 26 CFR Ch. I, Sch. A, § 1.45V-4 Paragraph (d)(3)(iii)(B).
- B.1.4. The Department recommends the Commission order:
 - A. EACs be issued equivalent to metered generation on a per MWh basis;
 - B. A single REC be issued for all generation that may be retired to demonstrate both EETS and CFS compliance;
 - C. A carbon-free allocator, which defines the percentage of CFS eligible generation, must be used for any generation facility that is partially CFS compliant;
 - D. For all generation made in a CFS partial compliant facility that is also eligible for the EETS, metered generation in A. shall be:
 - E. Multiplied by C. to determine the whole number of RECs to issue that are fully eligible for both the EETS and CFS;
 - F. Multiplied by one minus C. to determine the whole number of RECs to issue that are only eligible for the EETS;
 - G. For all generation made in a CFS partial compliant facility that is not eligible for the EETS, metered generation in A. shall be multiplied by C. to determine the whole number of AECs to issue that are only eligible for the CFS; and
 - H. The methodology to determine the carbon-free allocation shall be decided in Docket No. E-999/CI-24-352.
- B.2.4. The Department recommends that the Commission order that hourly matching achievement for electric utilities be determined by the calculation of the total number of hours for which total retail electric sales are matched by EACs, as compared to the hourly matching standard for that year.
- B.6. The Department recommends that all decisions made regarding criteria and standards to measure a utility's partial compliance with the CFS be made in Docket No. E-999/CI-24-352.

- B.7. The Department recommends the Commission order CFS and RES compliance measurement to factor in line losses to determine compliance with each standard.

C. WHAT CONSIDERATIONS SHOULD THE COMMISSION TAKE INTO ACCOUNT REGARDING THE DOUBLE COUNTING OF RENEWABLE ENERGY CREDITS (RECS) TO MEET MULTIPLE REQUIREMENTS?

- None.

D. HOW SHOULD NET MARKET PURCHASES BE COUNTED TOWARDS CFS COMPLIANCE?

- D.1. The Department recommends that all decisions made regarding criteria and standards to measure a utility's net market purchases be made in Docket No. E-999/CI-24-352.
- D.2. The Department recommends the Commission order:
 - Net market purchases shall only be quantified for CFS compliance when the carbon-free share of the systemwide annual fuel mix or an applicable subregional fuel mix is necessary to demonstrate CFS compliance.
 - EACs must be purchased in the first three months of the subsequent reporting year for the carbon-free share of the systemwide annual fuel mix or an applicable subregional fuel mix that is necessary to demonstrate CFS compliance.

E. ARE THERE OTHER ISSUES OR CONCERNS RELATED TO THIS MATTER?

- E.1. The Department recommends the Commission order the Commissioner of Commerce to seek authority from the Commissioner of Management and Budget to incur costs for specialty services to provide reports on the status of EAC markets and to propose a suite of solutions that would facilitate hourly EAC trading for electric utilities.
- E.2 The Department recommends the Commission order the Commissioner of Commerce to seek authority from the Commissioner of Management and Budget to incur costs for specialty services to provide auditing of all CFS reports for up to three years

STATE OF IOWA
DEPARTMENT OF COMMERCE
UTILITIES BOARD

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| IN RE: INTERSTATE POWER AND LIGHT COMPANY AND MIDAMERICAN ENERGY COMPANY | DOCKET NO. AEP-07-1 |
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**ORDER APPROVING FACILITIES AND ASSOCIATED CAPACITIES, ADOPTING
REQUIREMENTS FOR M-RETS PARTICIPATION, AND REQUIRING REPORT**

(Issued November 21, 2007)

INTRODUCTION

The Utilities Board (Board) has been monitoring the growing number of states in the Midwest that have adopted renewable portfolio standard (RPS) mandates for their regulated electric utilities. While the various RPS mandates have been adopted on a state-by-state basis, there appears to be growing recognition among regulators, utilities, and others of the multi-state nature of wholesale energy markets, which include renewable energy markets. In order to ensure verification of compliance with the various RPS mandates in a regional market, the Board (and many others) believes it is appropriate to have one or more centralized accounting systems that link specific renewable resources with specific state RPS requirements. These systems could also allow Iowa investor-owned utilities to sell all or some of the attributes of renewable power to utilities in states with RPS mandates, with the resulting revenues benefiting Iowa ratepayers.

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Because of the laws of physics that govern operation of the electric transmission system, it is impossible to ensure that electricity produced by a particular renewable source is specifically and exclusively directed, in a physical sense, to the purchasing entity. An accounting system that verifies compliance must therefore rely on an agreed-upon abstract medium of exchange similar to the way the financial markets rely on money to represent value. In the renewable energy area, Tradable Renewable Certificates (TRCs) have been developed as a medium of exchange representing the renewable attributes of renewable energy. TRCs can be used to show compliance with energy-based RPS mandates.

In 2003 the Izaak Walton League, the Center for Resource Solutions, and Great Plains Institute, all non-governmental organizations, organized an effort to form a centralized exchange for creating, tracking, and transferring ownership of TRCs in the Midwest region, known as the Midwest Renewable Energy Tracking System (M-RETS). Several utility regulators in the Midwest, including those from Iowa, Wisconsin, Minnesota, Montana, North and South Dakota, and the Canadian province of Manitoba, expressed interest in M-RETS, either as a way to verify compliance with an individual state's energy-based RPS requirements or as a means for individual utilities to export surplus in-state renewable resources for meeting other states' RPS requirements (with resulting revenues benefiting the utility's customers). The state of Wisconsin contracted to implement and operate M-RETS. M-RETS was launched in July 2007 and has begun registering participants and generating facilities, with the cost funded by a participant-based fee structure.

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POTENTIAL BENEFITS TO IOWA UTILITIES

Iowa does not have an energy-based RPS requirement. Iowa's statutory alternate energy production (AEP) requirements are found in Iowa Code §§ 476.41 through 476.45 and were adopted before energy-based RPS standards achieved widespread use in other states. Iowa's requirement is capacity-based and relates to specific AEP facilities either owned or contracted by utilities, rather than an energy-based portfolio requirement. Iowa's investor-owned electric utilities, Interstate Power and Light Company (IPL) and MidAmerican Energy Company (MidAmerican), are, among other things, required by the AEP statutes to own or purchase, at any one time, their share of 105 MW of power from AEP production facilities or small hydro facilities. Iowa Code § 476.44(2). The Board allocates this percentage between the two utilities; 49.8 MW is allocated to IPL and 55.2 MW to MidAmerican, based on total Iowa retail peak demand. Iowa Code § 476.44(2) and 199 IAC 15.11(1).

Because Iowa's AEP requirements are capacity-based and related to specific AEP facilities, IPL and MidAmerican cannot use energy-based TRCs to comply with their Iowa AEP statutory mandates; TRCs are not mentioned in either the Iowa AEP statutes or Board rules. However, based on information filed with the Board, both IPL and MidAmerican currently own or contract with AEP facilities for more than the statutory 105 MW mandate. IPL and MidAmerican could become net exporters of TRCs, with the resulting TRC sales revenues providing a net benefit (after participation fees) to IPL and MidAmerican customers. In the case of IPL, benefits to customers could flow through the energy adjustment clause. In the case of

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MidAmerican, benefits to customers would flow through the revenue sharing mechanism approved in Docket No. RPU-03-1 and most recently extended in Docket No. RPU-07-2.

In the event IPL or MidAmerican decide to export TRCs by participating in M-RETS, they will need an authoritative basis for differentiating renewable resources used for meeting the Iowa AEP requirements from those resources available for TRC export. Without this, TRC purchasers in M-RETS would have no way of knowing whether a particular Iowa-based resource is being double-counted; that is, a renewable resource cannot be used to satisfy both the Iowa AEP requirement and, through export of TRCs, the energy-based RPS standard in another state.

AEP REPORTING REQUIREMENT

In order to facilitate voluntary M-RETS participation by IPL and MidAmerican, and to ensure compliance with Iowa's AEP statutory mandate, the Board issued an order in this docket on July 12, 2007, that required IPL and MidAmerican to each file reports designating specific AEP generating facilities (or fractional facilities), and associated capacity and energy production, that the utility exclusively dedicates to meeting its AEP requirements under Iowa Code §§ 476.41 through 476.45 and 199 IAC 15.11(1). The facility designations were subject to Board approval.

IPL filed its report on August 13, 2007, designating the following:

A 62 percent fraction of the 80.3 MW "Buena Vista Wind Farm" (49.8 MW capacity and 117,833 MWH estimated annual energy production) contracted with Storm Lake Power Partners, located in Buena Vista County near Storm Lake, Iowa.

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The capacity (49.8 MW) and associated energy production of this designated fractional facility matches IPL's AEP requirements under Iowa Code §§ 476.41 through 476.45 and 199 IAC 15.11(1).

MidAmerican designated the following in its report filed on August 14, 2007, as amended on August 27, 2007:

1. A 42.3 percent fraction of the 112.5 MW "Storm Lake/BV Wind" facility (47.54 MW capacity and 117,047 MWH estimated annual energy production) contracted with Storm Lake Power Partners LLC, located near Alta, Iowa;
2. The 6.4 MW "DSM Waste Management" methane facility (54,677 MWH estimated annual energy production) contracted with Waste Management Inc., located near Mitchellville, Iowa; and
3. The 1.28 MW "Davenport Waste Water" methane facility (6,243 MWH estimated annual energy production) contracted with the City of Davenport, located in Davenport, Iowa.

The combined capacity (55.2 MW) and associated energy production of these designated facilities matches MidAmerican's AEP requirements under Iowa Code §§ 476.41 through 476.45 and 199 IAC 15.11(1).

The facilities and associated capacities and energy production identified by IPL and MidAmerican satisfy their AEP requirements under Iowa Code §§ 476.41 through 476.45 and 199 IAC 15.11(1). The designations will be approved. IPL and MidAmerican are reminded that any changes in these designations will require Board approval.

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M-RETS PARTICIPATION REQUIREMENTS

To provide further authoritative basis for voluntary participation in M-RETS, the Board in its July 12, 2007, order invited interested persons to file comments on draft requirements for M-RETS participation by IPL and MidAmerican. IPL, MidAmerican, and the Iowa Industrial Energy Group (IIEG) filed comments.

At the outset, the Board wants to emphasize that any participation in M-RETS by IPL or MidAmerican is voluntary as far as Iowa regulatory requirements are concerned. As MidAmerican noted in its comments, there are other TRC tracking systems that may have greater value to MidAmerican's customers, particularly if the multiple identifiable attributes associated with renewable energy are unbundled; M-RETS currently issues certificates that bundle all the attributes associated with a MWh of renewable energy. In issuing M-RETS participation requirements, the Board is not seeking to mandate participation but to facilitate participation. IPL and MidAmerican are free to market their excess TRCs through other tracking systems. In the event Iowa adopts an energy-based RPS, the Board might need to revisit the issue of whether M-RETS participation should remain voluntary.

In its July 12, 2007, order, the Board set out four draft requirements for Iowa's investor-owned electric utilities that choose to participate in M-RETS. These were:

1. Register with M-RETS those AEP facilities and associated capacities designated by the utility for meeting its AEP requirement under Iowa Code §§ 476.41 through 476.45 and 199 IAC 15.11(1), with the registration information identifying the facilities and associated capacities as such.

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2. Transfer the M-RETS Certificates associated with energy produced from these facilities and associated capacities, to an M-RETS retirement subaccount specifically established to record the utility's compliance with its AEP obligation under Iowa Code §§ 476.41 through 476.45 and 199 IAC 15.11(1).

3. Register with M-RETS those AEP facilities and associated capacities dedicated to the utility's Alternate Energy Purchase Program under Iowa Code § 476.47 and 199 IAC 15.17, with the registration information identifying the facilities and associated capacities as such.

4. Enter the net revenues from sale of M-RETS Certificates in account 447 of the Uniform System of Accounts if the utility has an energy adjustment clause under 199 IAC 20.9.

Initially, IPL raised a concern with requirements 1 and 3 because it could not determine how to identify the facilities and associated capacities using the M-RETS facility registration fields. M-RETS has since developed additional facility registration fields to accommodate this requirement. Information about the additional registration fields has been provided to IPL and it is the Board's understanding that the issue has been resolved. With this resolution, no one opposed the first three requirements.

Although no one opposed the first three requirements, the Board believes that requirement 3 as originally drafted was too restrictive because it would require a utility to register AEP facilities with M-RETS that might not otherwise be registered. Requirement 3 should only apply to AEP facilities that a utility chooses to register with M-RETS. In other words, if an M-RETS registered facility also happens to be dedicated to a utility's Iowa Code § 476.47 green power program, then the utility should be required to identify it as such in the facility's registration information, which will allow other state regulatory agencies to treat the facility's M-RETS certificates in

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accordance with their specific requirements. The Board will change requirement 3 to read as follows:

3. For any Iowa AEP facility that is registered with M-RETS and is wholly or partially dedicated to the utility's Alternate Energy Purchase Program under Iowa Code § 476.47 and 199 IAC 15.17, identify the dedicated facility capacity as such in the facility's registration information.

With the above changes to requirement 3, the Board will adopt Requirements 1, 2, and 3.

No one opposed the fourth requirement, but IPL asked for clarification that "net revenues" would be M-RETS certificate revenue in excess of the utility's M-RETS participation fees and expenses. The Board will adopt IPL's proposed clarification and will amend requirement 4 as follows (changes underlined):

4. Enter the net revenues from sale of M-RETS Certificates in excess of participation fees and associated expenses in account 447 of the Uniform System of Accounts if the utility has an energy adjustment clause under 199 IAC 20.9.

The IIEG also offered comments on the fourth requirement. The IIEG noted that if MidAmerican decides to participate, the benefits of TRC sales revenues would be passed on to customers through MidAmerican's revenue sharing mechanism previously approved by the Board, under which the customers' share is used to offset allowance for funds used during construction and depreciation expense for coal, gas, and wind generating facilities. The IIEG does not want to undo the prior settlements that resulted in the current revenue sharing mechanism, but it does oppose the use of renewable-related revenues to subsidize coal and gas-based generation and is

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concerned that utility costs could be recovered twice, first through utility base rates and again as offsets to TRC revenue.

The IIEG will have an opportunity to raise its concerns about using TRC revenue to subsidize coal and gas-based generation in the next docket that addresses the revenue freeze and revenue sharing settlement adopted in Docket No. RPU-07-2; the IIEG stated it had no desire to undo the current settlement. Similarly, the IIEG can explore whether TRC revenues are double counted in IPL's and MidAmerican's next full rate cases; double counting is not an issue now because neither utility recovers any M-RETS participation fees in base rates.

As suggested by MidAmerican, rate-regulated electric utilities that do not participate in M-RETS will be required to file on an annual basis, as part of their 199 IAC 15.11(3) report, a statement that they have not sold any TRCs or renewable energy attributes associated with energy produced from the facilities designated for meeting their AEP obligations under Iowa Code §§ 476.41 through 476.45 and 199 IAC 15.11(1). This will ensure that all utilities continue to comply with Iowa's AEP purchase requirements and that the resources used for meeting these requirements will not be double counted elsewhere.

The Board recognizes, as noted by MidAmerican in its comments, that there is a difference between a utility's renewable energy purchases and production and the renewable energy used by its customers. To the extent a utility exports its renewable energy, either as a bundled product or in the form of TRCs, that renewable energy can no longer be claimed as renewable energy used by the utility's customers. The

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Board's current reporting requirements in 199 IAC 15.11(3) and 15.17(5) relate only to renewable energy purchased and produced by the utility, not renewable energy used by the utility's customers.

ORDERING CLAUSES

IT IS THEREFORE ORDERED:

1. The facilities and associated capacities and energy production identified and described in the body of this order, designated by Interstate Power and Light Company on August 13, 2007, and MidAmerican Energy Company on August 14, 2007 (as amended on August 27, 2007), as exclusively dedicated to satisfying the utilities' AEP requirements under Iowa Code §§ 476.41 through 476.45 and 199 IAC 15.11(1) are approved. Any changes to these designations are subject to Board review and approval.

2. The following requirements are adopted for any rate-regulated electric utility that participates in M-RETS, either on a voluntary basis or pursuant to another state's regulatory requirements; specifically, an M-RETS utility must:

a. Register with M-RETS those AEP facilities and associated capacities designated by the utility for meeting its AEP requirement under Iowa Code §§ 476.41 through 476.45 and 199 IAC 15.11(1), with the registration information identifying the facilities and associated capacities as such.

b. Transfer the M-RETS Certificates associated with energy produced from these facilities and associated capacities to an M-RETS retirement subaccount specifically established to record the utility's compliance with its AEP obligation under Iowa Code §§ 476.41 through 476.45 and 199 IAC 15.11(1).

c. For any Iowa AEP facility that is registered with M-RETS and is wholly or partially dedicated to the utility's Alternate Energy Purchase Program

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under Iowa Code § 476.47 and 199 IAC 15.17, identify the dedicated facility capacity as such in the facility's registration information.

d. Enter the net revenues from sale of M-RETS Certificates in excess of participation fees and associated expenses in account 447 of the Uniform System of Accounts if the utility has an energy adjustment clause under 199 IAC 20.9.

3. Any rate-regulated electric utility that does not participate in M-RETS must annually file a statement with the Board, as part of its 199 IAC 15.11(3) report, that it has not sold any TRCs or renewable energy attributes associated with energy produced from the facilities designated for meeting its AEP obligation under Iowa Code §§ 476.41 through 476.45 and 199 IAC 15.11(1).

UTILITIES BOARD

/s/ John R. Norris

/s/ Krista K. Tanner

ATTEST:

/s/ Judi K. Cooper
Executive Secretary

Dated at Des Moines, Iowa, this 21st day of November, 2007.

CERTIFICATE OF SERVICE

I, Sharon Ferguson, hereby certify that I have this day, served copies of the following document on the attached list of persons by electronic filing, certified mail, e-mail, or by depositing a true and correct copy thereof properly enveloped with postage paid in the United States Mail at St. Paul, Minnesota.

Minnesota Department of Commerce
Reply Comments

Docket No. E999/CI-23-151

Dated this **19th** day of **March 2025**

/s/Sharon Ferguson

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| 75 | Becky | Dobbs | bdobbs@greenergy.com | | | null null, null United States | Electronic Service | | No | 23-151Official |
| 76 | J. | Drake Hamilton | hamilton@fresh-energy.org | Fresh Energy | | 408 St Peter St Ste 350 Saint Paul MN, 55101 United States | Electronic Service | | No | 23-151Official |
| 77 | Shane | Drift | sdrift@boisforte-nsn.gov | Bois Forte Band of Chippewa | | Bois Forte Tribal Government 5344 Lakeshore Drive Nett Lake MN, 55772 United States | Electronic Service | | No | 23-151Official |
| 78 | Adam | Duininck | aduininck@ncsrcc.org | North Central States Regional Council of Carpenters | | 700 Olive Street St. Paul MN, 55130 United States | Electronic Service | | No | 23-151Official |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|----|------------|----------------|--------------------------------------|--|------------------------|---|--------------------|---------------------------|-------------------|-------------------|
| 79 | Kristin W | Duncanson | kw.duncanson@gmail.com | | | 57746 Highway 30 Mapleton MN, 56065 United States | Electronic Service | | No | 23-151Official |
| 80 | Wally | Dupuis | wallydupuis@fdlband.org | Fond du Lac Band of Lake Superior Chippewa | | 1720 Big Lake Road Cloquet MN, 55720 United States | Electronic Service | | No | 23-151Official |
| 81 | Kevin | Dupuis, Sr. | kevindupuis@fdlrez.com | | | Reservation Business Committee 1720 Big Lake Rd Cloquet MN, 55720 United States | Electronic Service | | No | 23-151Official |
| 82 | Brian | Edstrom | briane@cubminnesota.org | Citizens Utility Board of Minnesota | | 332 Minnesota St Ste W1360 Saint Paul MN, 55101 United States | Electronic Service | | No | 23-151Official |
| 83 | Jamie | Edwards | jamie.edwards@millelacsband.com | Mille Lacs Band of Ojibwe | | 43408 Oodena Drive Onamia MN, 56358 United States | Electronic Service | | No | 23-151Official |
| 84 | Kristen | Eide Tollefson | healingsystems69@gmail.com | R-CURE | | 28477 N Lake Ave Frontenac MN, 55026-1044 United States | Electronic Service | | No | 23-151Official |
| 85 | Betsy | Engelking | betsy@nationalgridrenewables.com | National Grid Renewables | | 8400 Normandale Lake Blvd Ste 1200 Bloomington MN, 55437 United States | Electronic Service | | No | 23-151Official |
| 86 | Michael | Fairbanks | michael.fairbanks@whiteearth-nsn.gov | White Earth Reservation Business Committee | | PO Box 418 White Earth MN, 56591 United States | Electronic Service | | No | 23-151Official |
| 87 | John | Farrell | jfarrell@ilsr.org | Institute for Local Self-Reliance | | 2720 E. 22nd St Institute for Local Self-Reliance Minneapolis MN, 55406 United States | Electronic Service | | No | 23-151Official |
| 88 | 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 | 23-151Official |
| 89 | Terri | Finn | terri.goggleye@llojibwe.net | | | null null, null United States | Electronic Service | | No | 23-151Official |
| 90 | Mike | Fiterman | mikefiterman@libertydiversified.com | Liberty Diversified International | | 5600 N Highway 169 Minneapolis MN, 55428-3096 United States | Electronic Service | | No | 23-151Official |
| 91 | Christine | Fox | cfox@itasca-mantrap.com | Itasca-Mantrap Coop. Electric Assn. | | PO Box 192 Park Rapids MN, 56470 United States | Electronic Service | | No | 23-151Official |
| 92 | Lucas | Franco | lfranco@liunagroc.com | LIUNA | | 81 Little Canada Rd E Little Canada | Electronic Service | | No | 23-151Official |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|-----|-------------|-----------|-----------------------------------|---|--------|---|--------------------|---------------------------|-------------------|-------------------|
| | | | | | | MN, 55117 United States | | | | |
| 93 | Ronald J. | Franz | ronald.franz@dairylandpower.com | Dairyland Power Cooperative | | 3200 East Ave S PO Box 817 La Crosse WI, 54602-0817 United States | Electronic Service | | No | 23-151Official |
| 94 | Nathan | Franzen | nathan@nationalgridrenewables.com | Geronimo Energy, LLC | | 8400 Normandale Lake Blvd Ste 1200 Bloomington MN, 55437 United States | Electronic Service | | No | 23-151Official |
| 95 | Gary | Frazer | gfrazier@mnchippewatribe.org | Minnesota Chippewa Tribe | | PO Box 217 Cass Lake MN, 56633 United States | Electronic Service | | No | 23-151Official |
| 96 | Barb | Freese | bfreese@mncenter.org | Minnesota Center for Environmental Advocacy | | 1919 University Ave W Ste 515 Saint Paul MN, 55104-3435 United States | Electronic Service | | No | 23-151Official |
| 97 | Christopher | Friez | christopher.friez@nacco.com | NACCO Natural Resources/North American Coal | | 918 E. Divide Ave., Suite 200 Bismarck ND, 58501 United States | Electronic Service | | No | 23-151Official |
| 98 | Stacey | Fujii | sfujii@grenergy.com | Great River Energy | | 12300 Elm Creek Boulevard Maple Grove MN, 55369-4718 United States | Electronic Service | | No | 23-151Official |
| 99 | Jessica | Fyhrie | jfyhrie@otpc.com | Otter Tail Power Company | | PO Box 496 Fergus Falls MN, 56538-0496 United States | Electronic Service | | Yes | 23-151Official |
| 100 | Edward | Garvey | garveyed@aol.com | Residence | | 32 Lawton St Saint Paul MN, 55102 United States | Electronic Service | | No | 23-151Official |
| 101 | Benjamin | Gerber | ben@mrets.org | Midwest Renewable Energy Tracking System | | 60 South Sixth Street Suite 2800 Minneapolis MN, 55402 United States | Electronic Service | | No | 23-151Official |
| 102 | David P. | Geschwind | dp.geschwind@smmpa.org | Southern Minnesota Municipal Power Agency | | 500 First Avenue SW Rochester MN, 55902 United States | Electronic Service | | No | 23-151Official |
| 103 | Shannon | Geshick | shannon.geshick@state.mn.us | Minnesota Indian Affairs Council (MIAC) | | null null, null United States | Electronic Service | | No | 23-151Official |
| 104 | Allen | Gleckner | gleckner@fresh-energy.org | Fresh Energy | | 408 St. Peter Street Ste 350 Saint Paul MN, 55102 United States | Electronic Service | | No | 23-151Official |
| 105 | Jenny | Glumack | jenny@mrea.org | Minnesota Rural Electric Association | | 11640 73rd Ave N Maple Grove MN, 55369 United States | Electronic Service | | No | 23-151Official |
| 106 | Julie | Goehring | julie@redriverbasincommission.org | | | 708 70 Ave NW Moorhead | Electronic Service | | No | 23-151Official |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|-----|------------|-----------|---------------------------------------|--------------------------------------|--------|---|--------------------|---------------------------|-------------------|-------------------|
| | | | | | | MN, 56560 United States | | | | |
| 107 | Todd J. | Guerrero | todd.guerrero@kutakrock.com | Kutak Rock LLP | | Suite 1750 220 South Sixth Street Minneapolis MN, 55402-1425 United States | Electronic Service | | No | 23-151Official |
| 108 | Tessa | Haagenson | tessa.haagenson@connexusenergy.com | Connexus Energy | | 14601 Ramsey Blvd NW Ramsey MN, 55303 United States | Electronic Service | | No | 23-151Official |
| 109 | Jeffrey | Haase | jhaase@grenergy.com | Great River Energy | | 12300 Elm Creek Blvd Maple Grove MN, 55369 United States | Electronic Service | | No | 23-151Official |
| 110 | Hal | Halpern | halhalpern@clpower.com | Cooperative Light & Power | | 1554 Hwy 2 PO Box 69 Two Harbors MN, 55616 United States | Electronic Service | | No | 23-151Official |
| 111 | Jeremy | Hamilton | jhamilton@uppersiouxcommunity-nsn.gov | Upper Sioux Community | | Upper Sioux Community PO Box 147 Granite Falls MN, 56241 United States | Electronic Service | | No | 23-151Official |
| 112 | David A. | Hansen | hansen@federatedrea.coop | Federated Rural Electric Association | | 77100 U.S. Highway 71 PO Box 69 Jackson MN, 56143 United States | Electronic Service | | No | 23-151Official |
| 113 | James | Hartson | | | | 59931 300th Street Waltham MN, 55982 United States | Paper Service | | No | 23-151Official |
| 114 | Amy | Hastings | amyh@uppersiouxcommunity-nsn.gov | Upper Sioux Community | | 5722 Travers Lane PO Box 147 Granite Falls MN, 56241 United States | Electronic Service | | No | 23-151Official |
| 115 | Erik | Hatlestad | erik@cureriver.org | | | 117 1st St Montevideo MN, 56265 United States | Electronic Service | | No | 23-151Official |
| 116 | Kim | Havey | kim.havey@minneapolismn.gov | City of Minneapolis | | 350 South 5th Street, Suite 315M Minneapolis MN, 55415 United States | Electronic Service | | No | 23-151Official |
| 117 | Philip | Hayet | phayet@jkenn.com | J. Kennedy and Associates, Inc. | | 570 Colonial Park Drive Suite 305 Roswell GA, 30075-3770 United States | Electronic Service | | No | 23-151Official |
| 118 | Adam | Heinen | aheinen@dakotaelectric.com | Dakota Electric Association | | 4300 220th St W Farmington MN, 55024 United States | Electronic Service | | No | 23-151Official |
| 119 | Annete | Henkel | mui@mutilityinvestors.org | Minnesota Utility Investors | | 413 Wacouta Street #230 St.Paul MN, 55101 United States | Electronic Service | | No | 23-151Official |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|-----|------------|--------------|-----------------------------------|----------------------------------|--------|--|--------------------|---------------------------|-------------------|-------------------|
| 120 | Jessy | Hennesy | jessy.hennesy@avantenergy.com | Avant Energy | | 220 S. Sixth St. Ste 1300 Minneapolis MN, 55402 United States | Electronic Service | | No | 23-151Official |
| 121 | Kristin | Henry | kristin.henry@sierraclub.org | Sierra Club | | 2101 Webster St Ste 1300 Oakland CA, 94612 United States | Electronic Service | | No | 23-151Official |
| 122 | Benjamin | Hertz | bhertz@bepc.com | Basin Electric Power Cooperative | | 1717 E Interstate Ave Bismarck ND, 58503 United States | Electronic Service | | Yes | 23-151Official |
| 123 | Holly | Hinman | holly.r.hinman@xcelenergy.com | Xcel Energy | | 414 Nicollet Mall, 7th Floor Minneapolis MN, 55401 United States | Electronic Service | | No | 23-151Official |
| 124 | Joe | Hoffman | ja.hoffman@smmpa.org | SMMPA | | 500 First Ave SW Rochester MN, 55902-3303 United States | Electronic Service | | No | 23-151Official |
| 125 | Michael | Hoppe | lu23@ibew23.org | Local Union 23, I.B.E.W. | | 445 Etna Street Ste. 61 St. Paul MN, 55106 United States | Electronic Service | | No | 23-151Official |
| 126 | Ronald | Horman | rhorman@redwoodelectric.com | Redwood Electric Cooperative | | 60 Pine Street Clements MN, 56224 United States | Electronic Service | | No | 23-151Official |
| 127 | Rick | Horton | rhorton@minnesotaforests.com | Minnesota Forest Industries | | 324 West Superior Street 903 Medical Arts Building Duluth MN, 55802 United States | Electronic Service | | No | 23-151Official |
| 128 | Robbie | Howe | robbie.howe@llojbwe.net | Leech Lake Band of Ojibwe | | 190 Sailstar Drive NW Cass Lake MN, 56633 United States | Electronic Service | | No | 23-151Official |
| 129 | John | Ihle | ljihle@rrt.net | PlainStates Energy LLC | | 27451 S Hwy 34 Barnesville MN, 56514 United States | Electronic Service | | No | 23-151Official |
| 130 | Annie | Jackson | cheryl.jackson@whiteearth-nsn.gov | White Earth Nation | | White Earth Tribal Headquarters 35500 Eagle View Road Ogemo MN, 56569 United States | Electronic Service | | No | 23-151Official |
| 131 | Faron | Jackson, Sr. | faron.jackson@llojbwe.net | | | 190 Sailstar Drive NW Cass Lake MN, 56633 United States | Electronic Service | | No | 23-151Official |
| 132 | Casey | Jacobson | cjacobson@bepc.com | Basin Electric Power Cooperative | | 1717 East Interstate Avenue Bismarck ND, 58501 United States | Electronic Service | | No | 23-151Official |
| 133 | Justin | Jahnz | justin.jahnz@ecemn.com | East Central Energy | | 412 Main Ave N Braham MN, | Electronic Service | | No | 23-151Official |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|-----|------------|---------------------|------------------------------------|--|--------|---|-----------------------|---------------------------|-------------------|--------------------|
| | | | | | | 55006 United States | | | | |
| 134 | Alan | Jenkins | aj@jenkinsatlaw.com | Jenkins at Law | | 2950 Yellowtail Ave. Marathon FL, 33050 United States | Electronic Service | | No | 23- 151Official |
| 135 | Nathan | Jensen | njensen@otpc.com | Otter Tail Power Company | | 215 S. Cascade St. Fergus Falls MN, 56537 United States | Electronic Service | | No | 23- 151Official |
| 136 | Kevin | Jensvold | kevinj@uppersiouxcommunity-nsn.gov | Upper Sioux Community | | PO Box 147 Granite Falls MN, 56241- 0147 United States | Electronic Service | | No | 23- 151Official |
| 137 | Annette | Johnson | annette.johnson@redlakenation.org | Red Lake Nation | | 15484 Migizi Drive Red Lake MN, 56671 United States | Electronic Service | | No | 23- 151Official |
| 138 | Jody | Johnson | jody.johnson@piic.org | Prairie Island Indian Community | | 5636 Sturgeon Lake Rd Welch MN, 55089 United States | Electronic Service | | No | 23- 151Official |
| 139 | Johnny | Johnson | johnny.johnson@piic.org | Prairie Island Indian Community | | 5636 Sturgeon Lake Road Welch MN, 55089 United States | Electronic Service | | No | 23- 151Official |
| 140 | Richard | Johnson | rick.johnson@lawmoss.com | Moss & Barnett | | 150 S. 5th Street Suite 1200 Minneapolis MN, 55402 United States | Electronic Service | | No | 23- 151Official |
| 141 | Sarah | Johnson Phillips | sjphillips@stoel.com | Stoel Rives LLP | | 33 South Sixth Street Suite 4200 Minneapolis MN, 55402 United States | Electronic Service | | No | 23- 151Official |
| 142 | Nate | Jones | njones@hcpd.com | Heartland Consumers Power | | PO Box 248 Madison SD, 57042 United States | Electronic Service | | No | 23- 151Official |
| 143 | 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- 151Official |
| 144 | Veda | Kanitz | vmkanitz@gmail.com | | | null null, null United States | Electronic Service | | No | 23- 151Official |
| 145 | Jenny | Kartes | jkartes@arrowhead.coop | Arrowhead Electric Cooperative, Inc.(P) | | PO Box 39 5401 W Hwy 61 Lutsen MN, 55612 United States | Electronic Service | | No | 23- 151Official |
| 146 | David | Kempf | dkempf@greenergy.com | Great River Energy | | 12300 Elm Creek Blvd Maple Grove MN, 55369 United States | Electronic Service | | No | 23- 151Official |
| 147 | William | Kenworthy | will@votesolar.org | | | 1 South Dearborn St Ste 2000 Chicago IL, 60603 United States | Electronic Service | | No | 23- 151Official |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|-----|------------|-----------|--------------------------------|---------------------------------------|------------------------------------|---|--------------------|---------------------------|-------------------|-------------------|
| 148 | Becky | Kern | bkern@bepc.com | Basin Electric Power Cooperative | | 1717 E Interstate Ave Bismarck ND, 58501 United States | Electronic Service | | Yes | 23-151Official |
| 149 | Samuel B. | Ketchum | sketchum@kennedy-graven.com | Kennedy & Graven, Chartered | | 150 S 5th St Ste 700 Minneapolis MN, 55402 United States | Electronic Service | | No | 23-151Official |
| 150 | Nazir | Khan | nazir@mnejtable.org | Minnesota Environmental Justice Table | | 2720 E 22nd St Minneapolis MN, 55406 United States | Electronic Service | | No | 23-151Official |
| 151 | Hudson | Kingston | hudson@curemn.org | | | PO Box 712 Ely MN, 55731 United States | Electronic Service | | No | 23-151Official |
| 152 | Kate | Knuth | kate.knuth@gmail.com | | | 2347 14th Terrace NW New Brighton MN, 55112 United States | Electronic Service | | No | 23-151Official |
| 153 | Frank | Kohlasch | frank.kohlasch@state.mn.us | | Minnesota Pollution Control Agency | 520 Lafayette Rd N. St. Paul MN, 55155 United States | Electronic Service | | No | 23-151Official |
| 154 | Brian | Kolbinger | brian@beckertownship.org | Becker Township Board | | PO Box 248 12165 Hancock St Becker MN, 55308 United States | Electronic Service | | No | 23-151Official |
| 155 | Seth | Koneczny | st.koneczny@smmpa.org | SMMPA | | 500 First Avenue, SW Rochester MN, 55902-3303 United States | Electronic Service | | No | 23-151Official |
| 156 | Brian | Krambeer | bkrambeer@mienergy.coop | MiEnergy Cooperative | | PO Box 626 31110 Cooperative Way Rushford MN, 55971 United States | Electronic Service | | No | 23-151Official |
| 157 | Randy | Kramer | rlkramer89@gmail.com | Water and Soil Resources Board | | 42808 Co. Rd. 11 Bird Island MN, 55310 United States | Electronic Service | | No | 23-151Official |
| 158 | Allen | Krug | allen.krug@xcelenergy.com | Xcel Energy | | 414 Nicollet Mall-7th fl Minneapolis MN, 55401 United States | Electronic Service | | No | 23-151Official |
| 159 | Kay | Kuhlmann | teri.swanson@ci.red-wing.mn.us | City Of Red Wing | | 315 West Fourth Street Red Wing MN, 55066 United States | Electronic Service | | No | 23-151Official |
| 160 | Brenda | Kyle | bkyle@stpaulchamber.com | St. Paul Area Chamber of Commerce | | 401 N Robert Street Suite 150 St Paul MN, 55101 United States | Electronic Service | | No | 23-151Official |
| 161 | Therese | LaCanne | tlacanne@grenergy.com | Great River Energy | | 12300 Elm Creek Blvd Maple Grove MN, 55369 United States | Electronic Service | | No | 23-151Official |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|-----|------------|---------------|------------------------------------|--------------------------------------|--------|---|--------------------|---------------------------|-------------------|-------------------|
| 162 | Matthew | Lacey | mlacey@grenergy.com | Great River Energy | | 12300 Elm Creek Boulevard Maple Grove MN, 55369-4718 United States | Electronic Service | | No | 23-151Official |
| 163 | Becky | Lammi | cityclerk@ci.aurora.mn.us | City of Aurora | | 16 W 2nd Ave N PO Box 160 Aurora MN, 55705 United States | Electronic Service | | No | 23-151Official |
| 164 | Carmel | Laney | carmel.laney@stoel.com | Stoel Rives LLP | | 33 South Sixth Street Suite 4200 Minneapolis MN, 55402 United States | Electronic Service | | No | 23-151Official |
| 165 | Arthur | LaRose | arthur.larose@llojbwe.net | Leech Lake Band of Ojibwe | | 190 Sailstar Drive NW Cass Lake MN, 56633 United States | Electronic Service | | No | 23-151Official |
| 166 | Robert L | Larsen | robert.larsen@lowersioux.com | Lower Sioux Indian Community | | PO Box 308 39527 Reservation Highway 1 Morton MN, 56270 United States | Electronic Service | | No | 23-151Official |
| 167 | Emily | Larson | elarson@duluthmn.gov | City of Duluth | | 411 W 1st St Rm 403 Duluth MN, 55802 United States | Electronic Service | | No | 23-151Official |
| 168 | James D. | Larson | james.larson@avantenergy.com | Avant Energy Services | | 220 S 6th St Ste 1300 Minneapolis MN, 55402 United States | Electronic Service | | No | 23-151Official |
| 169 | Mark | Larson | mlarson@meeker.coop | Meeker Coop Light & Power Assn | | 1725 Highway 12 E Ste 100 Litchfield MN, 55355 United States | Electronic Service | | No | 23-151Official |
| 170 | Peder | Larson | plarson@larkinhoffman.com | Larkin Hoffman Daly & Lindgren, Ltd. | | 8300 Norman Center Drive Suite 1000 Bloomington MN, 55437 United States | Electronic Service | | No | 23-151Official |
| 171 | Rachel | Leonard | rachel.leonard@ci.monticello.mn.us | City of Monticello | | 505 Walnut St Ste 1 Monticello MN, 55362 United States | Electronic Service | | No | 23-151Official |
| 172 | Dan | Leshner | dlesher@grenergy.com | Great River Energy | | 12300 Elm Creek Blvd Maple Grove MN, 55369 United States | Electronic Service | | No | 23-151Official |
| 173 | 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 | 23-151Official |
| 174 | Jesse | Levine | jesse_levine@afandpa.org | | | 1101 K St NW Suite 700 Washington DC, 20005 United States | Electronic Service | | No | 23-151Official |
| 175 | Amy | Liberkowski | amy.a.liberkowski@xcelenergy.com | Xcel Energy | | 414 Nicollet Mall 7th Floor | Electronic Service | | No | 23-151Official |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|-----|------------|-----------|--------------------------------|---|-----------------------------------|---|--------------------|---------------------------|-------------------|-------------------|
| | | | | | | Minneapolis MN, 55401-1993 United States | | | | |
| 176 | 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 | 23-151Official |
| 177 | Eric | Lipman | eric.lipman@state.mn.us | | Office of Administrative Hearings | PO Box 64620 St. Paul MN, 55164-0620 United States | Electronic Service | | Yes | 23-151Official |
| 178 | Michelle | Lommel | mlommel@grenergy.com | Great River Energy | | 12300 Elm Creek Blvd Maple Grove MN, 55369 United States | Electronic Service | | No | 23-151Official |
| 179 | Bob | Long | rlong@larkinhoffman.com | Larkin Hoffman (Silicon Energy) | | 1500 Wells Fargo Plaza 7900 Xerxes Ave S Bloomington MN, 55431 United States | Electronic Service | | No | 23-151Official |
| 180 | Andrea | Lovoll | alovoll@mnejtable.org | Minnesota Environmental Justice Table | | 2720 E 22nd St. Minneapolis MN, 55406 United States | Electronic Service | | No | 23-151Official |
| 181 | Nicole | Luckey | nluckey@inveneryllc.com | Invenery LLC | | 1 S. Wacker Suite 1800 Chicago IL, 60606 United States | Electronic Service | | No | 23-151Official |
| 182 | Susan | Ludwig | sludwig@mnpower.com | Minnesota Power | | 30 West Superior Street Duluth MN, 55802 United States | Electronic Service | | No | 23-151Official |
| 183 | Robert | Lunder | robert.lunder@mdu.com | Montana-Dakota Utilities (ET) | | 400 N 4th St Bismark ND, 58501 United States | Electronic Service | | No | 23-151Official |
| 184 | Alice | Madden | alice@communitypowermn.org | Community Power | | 2720 E 22nd St Minneapolis MN, 55406 United States | Electronic Service | | No | 23-151Official |
| 185 | Scott | Magnuson | smagnuson@bpu.org | Brainerd Public Utilities | | 8027 Highland Scenic Rd Baxter MN, 56425 United States | Electronic Service | | No | 23-151Official |
| 186 | Kavita | Maini | kmains@wi.rr.com | KM Energy Consulting, LLC | | 961 N Lost Woods Rd Oconomowoc WI, 53066 United States | Electronic Service | | No | 23-151Official |
| 187 | Emily | Marshall | emarshall@jourismarshall.com | Miller O'Brien Jensen, PA | | 120 S. 6th Street Suite 2400 Minneapolis MN, 55402 United States | Electronic Service | | No | 23-151Official |
| 188 | Mary | Martinka | mary.a.martinka@xcelenergy.com | Xcel Energy Inc | | 414 Nicollet Mall 7th Floor Minneapolis MN, 55401 United States | Electronic Service | | No | 23-151Official |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|-----|------------|------------|------------------------------------|--|--------|--|--------------------|---------------------------|-------------------|-------------------|
| 189 | Gregg | Mast | gmast@cleanenergyeconomymn.org | Clean Energy Economy Minnesota | | 4808 10th Avenue S Minneapolis MN, 55417 United States | Electronic Service | | No | 23-151Official |
| 190 | Shena | Matrious | shena.matrious@millelacsband.com | Mille Lacs Band of Ojibwe | | 43408 Oodena Drive Onamia MN, 56349 United States | Electronic Service | | No | 23-151Official |
| 191 | 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 | 23-151Official |
| 192 | Tim | McCarthy | tim.mccarthy@siouxvalleyenergy.com | Sioux Valley Southwestern Electric Cooperative, Inc. d/b/a Sioux Valley Energy | | null null, null United States | Electronic Service | | No | 23-151Official |
| 193 | Scot | McClure | scotmcclure@alliantenergy.com | Interstate Power And Light Company | | 4902 N Biltmore Ln PO Box 77007 Madison WI, 53707-1007 United States | Electronic Service | | No | 23-151Official |
| 194 | April | McCormick | aprilm@grandportage.com | Grand Portage Band of Lake Superior Chippewa | | PO Box 428 Grand Portage MN, 55605 United States | Electronic Service | | No | 23-151Official |
| 195 | Jess | McCullough | jmccullough@mnpower.com | Minnesota Power | | 30 W Superior St Duluth MN, 55802 United States | Electronic Service | | No | 23-151Official |
| 196 | Sara G | McGrane | smcgrane@felhaber.com | Felhaber Larson | | 220 S 6th St Ste 2200 Minneapolis MN, 55420 United States | Electronic Service | | No | 23-151Official |
| 197 | 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 | 23-151Official |
| 198 | Harvey | McMahon | hcmahon@otpc.com | Otter Tail Power Company | | 215 South Cascade Street Fergus Falls MN, 56537 United States | Electronic Service | | No | 23-151Official |
| 199 | Taylor | McNair | taylor@gridlab.org | | | 668 Capp Street San Francisco CA, 94110 United States | Electronic Service | | No | 23-151Official |
| 200 | Ronald | Meier | rmeier@mcleodcoop.com | Mcleod Cooperative Power | | 3515 11th St East Glencoe MN, 55336 United States | Electronic Service | | No | 23-151Official |
| 201 | Melanie | Mesko Lee | melanie.lee@burnsvillemn.gov | City of Burnsville | | 100 Civic Center Parkway Burnsville MN, 55337-3867 United States | Electronic Service | | No | 23-151Official |
| 202 | Peder | Mewis | pmewis@cleangridalliance.org | Clean Grid Alliance | | 570 Asbury St. St. Paul MN, | Electronic Service | | No | 23-151Official |

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|-----|------------|---------------|-----------------------------------|---|---|--|--------------------|---------------------------|-------------------|-------------------|
| | | | | | | 55104 United States | | | | |
| 203 | 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 | 23-151Official |
| 204 | Valentina | Mgeni | valentina.mgeni@piic.org | Prairie Island Indian Community | | Prairie Island Indian Community 5636 Sturgeon Lake Road Welch MN, 55089 United States | Electronic Service | | No | 23-151Official |
| 205 | Cole W. | Miller | cole.miller@shakopeedakota.org | Shakopee Mdewakanton Sioux Community | | Shakopee Mdewakanton Sioux Community 2330 Sioux Trail NW Prior Lake MN, 55372 United States | Electronic Service | | No | 23-151Official |
| 206 | Stacy | Miller | stacy.miller@minneapolismn.gov | City of Minneapolis | | 350 S. 5th Street Room M 301 Minneapolis MN, 55415 United States | Electronic Service | | No | 23-151Official |
| 207 | David | Moeller | dmoeller@allte.com | Minnesota Power | | | Electronic Service | | No | 23-151Official |
| 208 | Dalene | Monsebroten | dalene.monsebroten@nmpagency.com | Northern Municipal Power Agency | | 123 2nd St W Thief River Falls MN, 56701 United States | Electronic Service | | No | 23-151Official |
| 209 | Sarah | Mooradian | sarah@curemn.org | CURE | | 117 South 1st Street Montevideo MN, 56265 United States | Electronic Service | | No | 23-151Official |
| 210 | Andrew | Moratzka | andrew.moratzka@stoel.com | Stoel Rives LLP | | 33 South Sixth St Ste 4200 Minneapolis MN, 55402 United States | Electronic Service | | No | 23-151Official |
| 211 | Travis | Morrison | travis.morrison@boisforte-nsn.gov | Bois Forte Band of Chippewa | | Bois Forte Tribal Government 5344 Lakeshore Drive Nett Lake MN, 55772 United States | Electronic Service | | No | 23-151Official |
| 212 | David | Morrison, Sr. | david.morrison@boisforte-nsn.gov | Bois Forte Band of Chippewa | | Bois Forte Tribal Government 5344 Lakeshore Drive Nett Lake MN, 55772 United States | Electronic Service | | No | 23-151Official |
| 213 | 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 | 23-151Official |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|-----|------------|--------------|----------------------------------|-------------------------------------|-------------------------------------|--|--------------------|---------------------------|-------------------|-------------------|
| 227 | Matthew | Olsen | molsen@otpc.com | Otter Tail Power Company | | 215 South Cascade Street Fergus Falls MN, 56537 United States | Electronic Service | | No | 23-151Official |
| 228 | Russell | Olson | rolson@hcpd.com | Heartland Consumers Power District | | PO Box 248 Madison SD, 57042-0248 United States | Electronic Service | | No | 23-151Official |
| 229 | Debra | Opatz | dopatz@otpc.com | Otter Tail Power Company | | 215 South Cascade Street Fergus Falls MN, 56537 United States | Electronic Service | | No | 23-151Official |
| 230 | Mikayla | Osterman | mosterman@otpc.com | Otter Tail Power Company | | 215 S Cascade St PO Box 496 Fergus Falls MN, 56537 United States | Electronic Service | | No | 23-151Official |
| 231 | Jamie | Overgaard | jovergaard@minnkota.com | Minnkota Power Cooperative, Inc. | | 5301 32nd Ave S Grand Forks ND, 58201 United States | Electronic Service | | No | 23-151Official |
| 232 | Carol A. | Overland | overland@legalelectric.org | Legalelectric - Overland Law Office | | 1110 West Avenue Red Wing MN, 55066 United States | Electronic Service | | No | 23-151Official |
| 233 | Gregory | Padden | gpadden@grenergy.com | Great River Energy | | 12300 Elm Creek Blvd Maple Grove MN, 55369 United States | Electronic Service | | No | 23-151Official |
| 234 | Jessica | Palmer Denig | jessica.palmer-denig@state.mn.us | | Office of Administrative Hearings | 600 Robert St N PO Box 64620 St. Paul MN, 55164 United States | Electronic Service | | No | 23-151Official |
| 235 | Marsha | Parlow | mparlow@grenergy.com | Great River Energy | | 12300 Elm Creek Blvd Maple Grove MN, 55369 United States | Electronic Service | | No | 23-151Official |
| 236 | Priti | Patel | ppatel@grenergy.com | Great River Energy | | 12300 Elm Creek Blvd Maple Grove MN, 55369-4718 United States | Electronic Service | | No | 23-151Official |
| 237 | Gerad | Paul | gpaul@minnkota.com | Minnkota Power Cooperative | | 5301 32nd Ave S Grand Forks ND, 58201 United States | Electronic Service | | No | 23-151Official |
| 238 | Earl | Pendleton | earl.pendleton@lowersioux.com | Lower Sioux Indian Community | | 39527 Highway 1 Morton MN, 56270 United States | Electronic Service | | No | 23-151Official |
| 239 | Mary Beth | Peranteau | mperanteau@fredlaw.com | Fredrikson & Byron, P.A. | | 44 East Mifflin Street Suite 1000 Madison WI, 53703 United States | Electronic Service | | No | 23-151Official |
| 240 | Thom | Petersen | thom.petersen@state.mn.us | | Minnesota Department of Agriculture | 625 North Robert St Saint Paul MN, 55155 United States | Electronic Service | | No | 23-151Official |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|-----|----------------|--------------------------------|--------------------------------------|---|---|--|--------------------|---------------------------|-------------------|-------------------|
| 241 | Luke | Peterson | luke.peterson@hpuc.com | Hibbing Public Utilities Commission | | 1902 Sixth Ave E Hibbing MN, 55746 United States | Electronic Service | | No | 23-151Official |
| 242 | Neil | Peterson | info@nclucb.org | Northern Counties Land Use Coordinating Board | | null null, null United States | Electronic Service | | No | 23-151Official |
| 243 | DONNA | PICKARD | dpickard@aladdinsolar.com | Genie Solar Support Services | | 1215 Lilac Lane Excelsior MN, 55331 United States | Electronic Service | | No | 23-151Official |
| 244 | Gordon | Pietsch | gpietsch@grenergy.com | Great River Energy | | 12300 Elm Creek Blvd. Maple Grove MN, 55369-4718 United States | Electronic Service | | No | 23-151Official |
| 245 | Joe | Plumer | joe.plumer@redlakenation.org | Red Lake Nation | | 15484 Migizi Drive Red Lake MN, 56671 United States | Electronic Service | | No | 23-151Official |
| 246 | J. | Porter | greg.porter@nngco.com | Northern Natural Gas Company | | 1111 South 103rd St Omaha NE, 68124 United States | Electronic Service | | No | 23-151Official |
| 247 | Kevin | Pranis | kpranis@liunagroc.com | Laborers' District Council of MN and ND | | 81 E Little Canada Road St. Paul MN, 55117 United States | Electronic Service | | No | 23-151Official |
| 248 | Robert | Prescott | bob.prescott@lowersioux.com | Lower Sioux Indian Community | | 39527 Highway 1 Morton MN, 56270 United States | Electronic Service | | No | 23-151Official |
| 249 | David | Raatz | draatz@bepc.com | Basin Electric Power Cooperative | | 1717 East Interstate Avenue Bismarck ND, 58501 United States | Electronic Service | | No | 23-151Official |
| 250 | John C. | Reinhardt | | Laura A. Reinhardt | | 3552 26th Ave S Minneapolis MN, 55406 United States | Paper Service | | No | 23-151Official |
| 251 | Victoria | Reinhardt | victoria.reinhardt@co.ramsey.mn.us | Partnership on Waste and Energy | | Ramsey County Board Office 15 W. Kellogg Blvd., Ste. 220 St. Paul MN, 55102 United States | Electronic Service | | No | 23-151Official |
| 252 | 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 | 23-151Official |
| 253 | 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 | 23-151Official |
| 254 | John | Richards | johnrichards@nweco.com | Northwestern Wisconsin | | 104 S. Pine St. Grantsburg | Electronic Service | | No | 23-151Official |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|-----|------------|-------------|-------------------------------------|---------------------------------------|-------------------------------------|--|--------------------|---------------------------|-------------------|-------------------|
| | | | | Electric Company | | WI, 54840 United States | | | | |
| 255 | Greg | Ridderbusch | greg.ridderbusch@connexusenergy.com | Connexus Energy | | 14601 Ramsey Boulevard Ramsey MN, 55303 United States | Electronic Service | | No | 23-151Official |
| 256 | Susan | Romans | sromans@allte.com | Minnesota Power | | 30 West Superior Street Legal Dept Duulth MN, 55802 United States | Electronic Service | | No | 23-151Official |
| 257 | Stephan | Roos | stephan.roos@state.mn.us | | Minnesota Department of Agriculture | 625 Robert St N Saint Paul MN, 55155-2538 United States | Electronic Service | | No | 23-151Official |
| 258 | Alan | Roy | alan.roy@whiteearth-nsn.gov | White Earth Nation | | White Earth Tribal Headquarters 35500 Eagle View Road Ogema MN, 56569 United States | Electronic Service | | No | 23-151Official |
| 259 | Bill | Rudnicki | bill.rudnicki@shakopeedakota.org | Shakopee Mdewakanton Sioux Community | | Shakopee Mdewakanton Sioux Community 2330 Sioux Trail NW Prior Lake MN, 55372 United States | Electronic Service | | No | 23-151Official |
| 260 | Nathaniel | Runke | nrunke@local49.org | | | 611 28th St. NW Rochester MN, 55901 United States | Electronic Service | | No | 23-151Official |
| 261 | Zachary | Ruzycki | zruzycki@grenergy.com | Great River Energy | | 12300 Elm Creek Boulevard Maple Grove MN, 55369 United States | Electronic Service | | No | 23-151Official |
| 262 | Robert K. | Sahr | bsahr@eastriver.coop | East River Electric Power Cooperative | | P.O. Box 227 Madison SD, 57042 United States | Electronic Service | | No | 23-151Official |
| 263 | Todd | Sailer | | Minnetonka Power Cooperative | | 5301 32nd Ave. S Grand Forks ND, 58201 United States | Paper Service | | No | 23-151Official |
| 264 | Miranda | Sam | miranda.sam@lowersioux.com | Lower Sioux Indian Community | | 39527 Reservation Highway 1 PO Box 308 Morton MN, 56270 United States | Electronic Service | | No | 23-151Official |
| 265 | Joseph L | Sathe | jsathe@kennedy-graven.com | Kennedy & Graven, Chartered | | 150 S 5th St Ste 700 Minneapolis MN, 55402 United States | Electronic Service | | No | 23-151Official |
| 266 | Adam | Savariego | adams@uppersiouxcommunity-nsn.gov | Upper Sioux Community | | 5722 Travers Lane PO Box 147 Granite Falls MN, 56241 United States | Electronic Service | | No | 23-151Official |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|-----|------------|----------------|-----------------------------------|--|-----------------------------|---|--------------------|---------------------------|-------------------|-------------------|
| 267 | John | Saxhaug | john_saxhaug@yahoo.com | | | 3940 Harriet Ave Minneapolis MN, 55409 United States | Electronic Service | | No | 23-151Official |
| 268 | Jean | Schafer | jeans@bepc.com | Basin Electric Power Cooperative | | 1717 E Interstate Ave Bismarck ND, 58501 United States | Electronic Service | | No | 23-151Official |
| 269 | Jeff | Schneider | jeff.schneider@ci.red-wing.mn.us | City of Red Wing | | 315 West 4th Street Red Wing MN, 55066 United States | Electronic Service | | No | 23-151Official |
| 270 | Kay | Schraeder | kschraeder@minnkota.com | Minnkota Power | | 5301 32nd Ave S Grand Forks ND, 58201 United States | Electronic Service | | No | 23-151Official |
| 271 | Kathleen | Schuler | keschuler47@gmail.com | | | 1520 10th Ave S #2 Minneapolis MN, 55404 United States | Electronic Service | | No | 23-151Official |
| 272 | Robert H. | Schulte | rhs@schulteassociates.com | Schulte Associates LLC | | 1742 Patriot Rd Northfield MN, 55057 United States | Electronic Service | | No | 23-151Official |
| 273 | J.P. | Schumacher | jps@mrenergy.com | Missouri River Energy Services | | null null, null United States | Electronic Service | | No | 23-151Official |
| 274 | Kevin | Schumacher | kevin@mrets.org | Midwest Renewable Energy Tracking System | | null null, null United States | Electronic Service | | No | 23-151Official |
| 275 | Ronald J. | Schwartau | rschwartau@noblesce.com | Nobles Electric Cooperative | | 22636 U.S. Hwy. 59 Worthington MN, 56187 United States | Electronic Service | | No | 23-151Official |
| 276 | Christine | Schwartz | regulatory.records@xcelenergy.com | Xcel Energy | | 414 Nicollet Mall FL 7 Minneapolis MN, 55401-1993 United States | Electronic Service | | No | 23-151Official |
| 277 | Douglas | Seaton | doug.seaton@umwlc.org | Upper Midwest Law Center | | 8421 Wayzata Blvd Ste 300 Golden Valley MN, 55426 United States | Electronic Service | | No | 23-151Official |
| 278 | Dean | Sedgwick | sedgwick@itascapower.com | Itasca Power Company | | PO Box 455 Spring Lake MN, 56680 United States | Electronic Service | | No | 23-151Official |
| 279 | Jessie | Seim | jessie.seim@piic.org | Prairie Island Indian Community | | 5636 Sturgeon Lake Rd Welch MN, 55089 United States | Electronic Service | | No | 23-151Official |
| 280 | Darrell | Seki, Sr. | dseki@redlakenation.org | | | 15484 Migizi Drive Red Lake MN, 56671 United States | Electronic Service | | No | 23-151Official |
| 281 | Will | Seuffert | will.seuffert@state.mn.us | | Public Utilities Commission | 121 7th PI E Ste 350 Saint Paul MN, 55101 United States | Electronic Service | | Yes | 23-151Official |
| 282 | Janet | Shaddix Elling | jshaddix@janetshaddix.com | Shaddix And Associates | | 7400 Lyndale Ave S Ste 190 | Electronic Service | | Yes | 23-151Official |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|-----|------------|------------|--------------------------------|---|--------|--|--------------------|---------------------------|-------------------|-------------------|
| | | | | | | Richfield MN, 55423 United States | | | | |
| 283 | Bria | Shea | bria.e.shea@xcelenergy.com | Xcel Energy | | 414 Nicollet Mall Minneapolis MN, 55401 United States | Electronic Service | | No | 23-151Official |
| 284 | Andrew R. | Shedlock | andrew.shedlock@kutakrock.com | Kutak Rock LLP | | 60 South Sixth St Ste 3400 Minneapolis MN, 55402-4018 United States | Electronic Service | | No | 23-151Official |
| 285 | Doug | Shoemaker | dougs@charter.net | Minnesota Renewable Energy | | 2928 5th Ave S Minneapolis MN, 55408 United States | Electronic Service | | No | 23-151Official |
| 286 | Beth | Smith | bsmith@greatermankato.com | Greater Mankato Growth | | 1961 Premier Dr Ste 100 Mankato MN, 56001 United States | Electronic Service | | No | 23-151Official |
| 287 | Joel | Smith | jsmith@mnchippewatribe.org | Minnesota Chippewa Tribe | | PO Box 217 Cass Lake MN, 56633 United States | Electronic Service | | No | 23-151Official |
| 288 | Joshua | Smith | joshua.smith@sierraclub.org | | | 85 Second St FL 2 San Francisco CA, 94105 United States | Electronic Service | | No | 23-151Official |
| 289 | Ken | Smith | ken.smith@districtenergy.com | District Energy St. Paul Inc. | | 76 W Kellogg Blvd St. Paul MN, 55102 United States | Electronic Service | | No | 23-151Official |
| 290 | Nizhoni | Smith | nizhoni.smith@lowersioux.com | Lower Sioux Indian Community | | PO Box 308 39527 Reservation Highway 1 Morton MN, 56270 United States | Electronic Service | | No | 23-151Official |
| 291 | Trevor | Smith | trevor.smith@avantenergy.com | Avant Energy, Inc. | | 220 South Sixth Street Suite 1300 Minneapolis MN, 55402 United States | Electronic Service | | No | 23-151Official |
| 292 | Roger | Smith, Sr. | rogermsmithsr@fdrez.com | | | 1720 Big Lake Road Cloquet MN, 55720 United States | Electronic Service | | No | 23-151Official |
| 293 | Beth | Soholt | bsoholt@cleangridalliance.org | Clean Grid Alliance | | 570 Asbury Street Suite 201 St. Paul MN, 55104 United States | Electronic Service | | No | 23-151Official |
| 294 | Anna | Sommer | asommer@energyfuturesgroup.com | Energy Futures Group | | PO Box 692 Canton NY, 13617 United States | Electronic Service | | No | 23-151Official |
| 295 | Marie | Spry | mariespry@grandportage.com | | | PO Box 428 Grand Portage MN, 55605 United States | Electronic Service | | No | 23-151Official |
| 296 | Mark | Spurr | mspurr@fvbenergy.com | International District Energy Association | | 222 South Ninth St., Suite 825 Minneapolis | Electronic Service | | No | 23-151Official |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|-----|------------|-----------------------|--------------------------------|--------------------------------------|--------|---|--------------------|---------------------------|-------------------|-------------------|
| | | | | | | MN, 55402 United States | | | | |
| 297 | Wallace | St. John, Sr. | wally.stjohn@millelacsband.com | Mille Lacs Band of Ojibwe | | 43408 Oodena Drive Onamia MN, 56359 United States | Electronic Service | | No | 23-151Official |
| 298 | LeRoy | Staples Fairbanks III | leroy.fairbanks@llojibwe.net | Leech Lake Band of Ojibwe | | 190 Sailstar Drive NW Cass Lake MN, 56633 United States | Electronic Service | | No | 23-151Official |
| 299 | Russ | Stark | russ.stark@ci.stpaul.mn.us | City of St. Paul | | Mayor's Office 15 W. Kellogg Blvd., Suite 390 Saint Paul MN, 55102 United States | Electronic Service | | No | 23-151Official |
| 300 | Byron E. | Starns | byron.starns@stinson.com | STINSON LLP | | 50 S 6th St Ste 2600 Minneapolis MN, 55402 United States | Electronic Service | | No | 23-151Official |
| 301 | Cary | Stephenson | cstephenson@otpc.com | Otter Tail Power Company | | 215 South Cascade Street Fergus Falls MN, 56537 United States | Electronic Service | | Yes | 23-151Official |
| 302 | Mark | Strohfus | mstrohfus@grenergy.com | Great River Energy | | 12300 Elm Creek Boulevard Maple Grove MN, 55369-4718 United States | Electronic Service | | No | 23-151Official |
| 303 | James M | Strommen | jstrommen@kennedy-graven.com | Kennedy & Graven, Chartered | | 150 S 5th St Ste 700 Minneapolis MN, 55402 United States | Electronic Service | | No | 23-151Official |
| 304 | Samuel | Strong | sam.strong@redlakenation.org | Red Lake Nation | | 15484 Migizi Drive Red Lake MN, 56671 United States | Electronic Service | | No | 23-151Official |
| 305 | Kent | Sulem | ksulem@mmua.org | | | 3131 Fernbrook Ln N Ste 200 Plymouth MN, 55447-5337 United States | Electronic Service | | No | 23-151Official |
| 306 | Timothy | Sullivan | tsullivan@whe.org | Wright Hennepin Coop. Electric Assn. | | 6800 Electric Drive PO Box 330 Rockford MN, 55373 United States | Electronic Service | | No | 23-151Official |
| 307 | David | Sunderman | daves@benco.org | BENCO (DUPLICATE) | | PO Box 8 Mankato MN, 56002-0008 United States | Electronic Service | | No | 23-151Official |
| 308 | Eric | Swanson | eswanson@winthrop.com | Winthrop & Weinstine | | 225 S 6th St Ste 3500 Capella Tower Minneapolis MN, 55402-4629 United States | Electronic Service | | No | 23-151Official |
| 309 | Randy | Synsteliën | rsynsteliën@otpc.com | Otter Tail Power Company | | 215 S Cascade St Fergus Falls MN, 56537 United States | Electronic Service | | No | 23-151Official |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|-----|------------|------------|--------------------------------------|--|--------|--|--------------------|---------------------------|-------------------|-------------------|
| 323 | Michael | Volker | mvolker@eastriver.coop | East River Electric Power Coop | | 211 S. Harth Ave Madison SD, 57042 United States | Electronic Service | | No | 23-151Official |
| 324 | Toni | Volkmeier | toni.volkmeier@state.mn.us | MPCA | | 520 Lafayette Rd. N. St. Paul MN, 55155 United States | Electronic Service | | No | 23-151Official |
| 325 | Trent | Waite | twaite@grenergy.com | | | null null, null United States | Electronic Service | | No | 23-151Official |
| 326 | Laurance R | Waldoch | larrywaldoch@gmail.com | Attorney | | 2597 Parkview Dr Saint Paul MN, 55110 United States | Electronic Service | | No | 23-151Official |
| 327 | Greg | Wannier | greg.wannier@sierraclub.org | Sierra Club | | 2101 Webster St Ste 1300 Oakland CA, 94612 United States | Electronic Service | | No | 23-151Official |
| 328 | Roger | Warehime | roger.warehime@owatonnautilities.com | Owatonna Municipal Public Utilities - Gas | | 208 S Walnut Ave PO BOX 800 Owatonna MN, 55060 United States | Electronic Service | | No | 23-151Official |
| 329 | Cynthia | Warzecha | cynthia.warzecha@state.mn.us | Minnesota Department of Natural Resources | | 500 Lafayette Road Box 25 St. Paul MN, 55155-4040 United States | Electronic Service | | No | 23-151Official |
| 330 | Carol | Westergard | cwestergard@otpc.com | Otter Tail Power Company | | 215 S Cascade St Fergus Falls MN, 56537 United States | Electronic Service | | No | 23-151Official |
| 331 | Heather | Westra | heather.westra@piic.org | Prairie Island Indian Community | | 5636 Sturgeon Lake Rd Welch MN, 55089 United States | Electronic Service | | No | 23-151Official |
| 332 | Paul | White | paul.white@prcwind.com | Project Resources Corp./Tamarac Line LLC/Ridgewind | | 618 2nd Ave SE Minneapolis MN, 55414 United States | Electronic Service | | No | 23-151Official |
| 333 | Steve | White | steve.white@llojibwe.net | Leech Lake Band of Ojibwe | | 190 Sailstar Drive NW Cass Lake MN, 56633 United States | Electronic Service | | No | 23-151Official |
| 334 | Cody | Whitebear | cody.whitebear@piic.org | Prairie Island Indian Community | | 5636 Sturgeon Lake Road Welch MN, 55089 United States | Electronic Service | | No | 23-151Official |
| 335 | John | Williams | jwilliams@grenergy.com | Great River Energy | | 12300 Elm Creek Blvd Maple Grove MN, 55369 United States | Electronic Service | | No | 23-151Official |
| 336 | Laurie | Williams | laurie.williams@sierraclub.org | Sierra Club | | Environmental Law Program 1536 Wynkoop St Ste 200 Denver CO, 80202 United States | Electronic Service | | No | 23-151Official |

| # | First Name | Last Name | Email | Organization | Agency | Address | Delivery Method | Alternate Delivery Method | View Trade Secret | Service List Name |
|-----|------------|-----------|--------------------------------|--|--------|---|--------------------|---------------------------|-------------------|-------------------|
| 337 | Virgil | Wind | virgil.wind@millelacsband.com | Mille Lacs Band of Ojibwe | | 43408 Oodena Drive Onamia MN, 56359 United States | Electronic Service | | No | 23-151Official |
| 338 | Joseph | Windler | jwindler@winthrop.com | Winthrop & Weinstine | | 225 South Sixth Street, Suite 3500 Minneapolis MN, 55402 United States | Electronic Service | | No | 23-151Official |
| 339 | Robyn | Woeste | robynwoeste@alliantenergy.com | Interstate Power and Light Company | | 200 First St SE Cedar Rapids IA, 52401 United States | Electronic Service | | No | 23-151Official |
| 340 | Sara | Wolff | sara@mnipl.org | | | 710 Linwood Avenue St Paul MN, 55105 United States | Electronic Service | | No | 23-151Official |
| 341 | Tim | Wulling | t.wulling@earthlink.net | | | 1495 Raymond Ave. Saint Paul MN, 55108 United States | Electronic Service | | No | 23-151Official |
| 342 | Laurie | York | laurie.york@whiteearth-nsn.gov | White Earth Reservation Business Committee | | PO Box 418 White Earth MN, 56591 United States | Electronic Service | | No | 23-151Official |
| 343 | Kurt | Zimmerman | kwz@ibew160.org | Local Union #160, IBEW | | 2909 Anthony Ln St Anthony Village MN, 55418-3238 United States | Electronic Service | | No | 23-151Official |
| 344 | Emily | Ziring | eziring@stlouispark.org | City of St. Louis Park | | 5005 Minnetonka Blvd St. Louis Park MN, 55416 United States | Electronic Service | | No | 23-151Official |
| 345 | Patrick | Zomer | pat.zomer@lawmoss.com | Moss & Barnett PA | | 150 S 5th St #1200 Minneapolis MN, 55402 United States | Electronic Service | | No | 23-151Official |