414 Nicollet Mall
Minneapolis, MN 55401

November 21, 2025

—Via Electronic Filing—

Sasha Bergman
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101

RE: REPLY COMMENTS
IN THE MATTER OF A COMMISSION INVESTIGATION INTO GAS UTILITY RESOURCE PLANNING; IN THE MATTER OF A COMMISSION EVALUATION OF CHANGES TO NATURAL GAS UTILITY REGULATORY AND POLICY STRUCTURES TO MEET STATE GREENHOUSE GAS REDUCTION GOALS; IN THE MATTER OF ESTABLISHING AN ESTIMATE OF THE COSTS OF FUTURE CARBON DIOXIDE REGULATION ON ELECTRICITY GENERATION UNDER MINN. STAT. § 216H.06
DOCKET NOS. E999/CI-07-1199; G008, G002, G011/CI-23-117; G999/CI-21-565

Dear Ms. Bergman:

Northern States Power Company, doing business as Xcel Energy, submits to the Minnesota Public Utilities Commission the enclosed Comments in response to the Commission's August 25, 2025 Notice issued in the above-noted docket.

We have electronically filed this document with the Minnesota Public Utilities Commission, and copies have been served on the parties on the attached service list. Please contact Shannon Whiton at shannon.whiton@xcelenergy.com or contact me at jody.l.londo@xcelenergy.com if you have any questions regarding this filing.

Sincerely,

/s/

JODY L. LONDO
DIRECTOR, REGULATORY & STRATEGIC ANALYSIS

Enclosures
cc: Service Lists

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

Katie J. Sieben	Chair
Hwikwon Ham	Commissioner
Audrey C. Partridge	Commissioner
Joseph K. Sullivan	Commissioner
John A. Tuma	Commissioner

IN THE MATTER OF COMMISSION INVESTIGATION INTO GAS UTILITY RESOURCE PLANNING; IN THE MATTER OF A COMMISSION EVALUATION OF CHANGES TO NATURAL GAS UTILITY REGULATORY AND POLICY STRUCTURES TO MEET STATE GREENHOUSE GAS REDUCTION GOALS; IN THE MATTER OF ESTABLISHING AN ESTIMATE OF THE COSTS OF FUTURE CARBON DIOXIDE REGULATION ON ELECTRICITY GENERATION UNDER MINN. STAT. §216H.06	DOCKET NOS. E999/CI-07-1199; G008, G002, G011/CI-23-117; G999/CI-21-565 **REPLY COMMENTS**

INTRODUCTION

Northern States Power Company, doing business as Xcel Energy, submits these Reply Comments to the Minnesota Public Utilities Commission responding to the October 31, 2025 Comments of the Minnesota Department of Commerce (Department) and the Clean Energy Organizations (CEOs), collectively consisting of Fresh Energy, Minnesota Center for Environmental Advocacy, and Sierra Club, pursuant to the Commission's August 25, 2025 Notice of Comment Period in the above-referenced dockets. We thank parties for their comments and provide our response and additional requested information below.

In summary, we continue to recommend a regulatory cost of carbon range of $0 to $13 per ton, which is based on sector-specific regulatory risks in the natural gas supply chain. This range draws on the Environmental Protection Agency's (EPA's) Regulatory Impact Analysis for methane rules affecting upstream and midstream operations, where compliance costs are embedded in commodity pricing before gas reaches local distribution companies (LDCs). Unlike electric-sector carbon values,

which assume broad carbon pricing on generation emissions, this approach reflects foreseeable regulatory obligations for natural gas and avoid speculative assumptions that could distort integrated resource plan (IRP) modeling or impose unnecessary rate impacts.

REPLY COMMENTS

I. ELECTRIC-SECTOR VALUES ARE NOT APPROPORIATE FOR GAS SUPPLY

A. Regulatory Cost of Carbon

The Company understands regulatory carbon costs to represent anticipated compliance expenses tied to greenhouse gas (GHG) regulations, primarily targeting methane emissions from natural gas production, processing, and interstate transmission. These obligations fall on upstream entities – producers and pipeline operators – not on LDCs. By the time natural gas reaches the LDC at the city gate, any upstream compliance costs are already embedded in commodity pricing. Regulatory carbon costs apply only to supply-side resources, influencing procurement strategies and competitive dynamics among gas alternatives – not LDC operations or customer programs.

The Department suggests that the Commission could require Xcel Energy, CenterPoint Energy, and MERC to use the regulatory cost of values established for Minn. Stat. § 216H.06 in their gas IRPs, citing the Commission's broad authority and the state's economy-wide reduction goals.[1] Similarly, the CEOs argue that the carbon values approved for electric utilities should also apply to gas utility planning, claiming the upper end of the established range reflects the minimum needed to meet climate goals and is not sector-specific.

However, the values established under Minn. Stat. § 216H.06 were developed for electricity generation planning and assume carbon pricing mechanisms applicable to electric utilities. These assumptions do not translate to the natural gas supply chain, which faces fundamentally different regulatory risks and compliance pathways. Applying electric-sector values to gas IRPs would misrepresent actual regulatory risk. Electric-sector values assume a carbon price applied broadly to generation emissions, yet no comparable statutory or regulatory framework exists for natural gas supply-side emissions in Minnesota. Inflated cost assumptions could lead to economically inefficient outcomes – such as premature abandonment of cost-effective supply

[1] Minn. Stat. § 216H.02.

resources or overinvestment in alternatives without corresponding regulatory mandates.

Minn. Stat. § 216H.06 explicitly directs the Commission to establish an estimate of future carbon dioxide regulations costs "on electricity generation" – not on natural gas supply. The statute's plain language confines its applicability to electric resource planning. If the Legislature intended these values to apply to natural gas resource planning, it would have said so. While the Commission has broad authority under §§ 216B.03 and 216B.08 to ensure just and reasonable rates, it cannot disregard boundaries. Applying electric sector values to gas IRPs would effectively rewrite § 216H.06 without legislative action.

Minn. Stat. § 216H.02 establishes economy-wide goals rather than specific targets for natural gas emissions, and it does not impose concrete regulatory requirements that would allow us to estimate compliance costs. Planning based on hypothetical carbon prices for natural gas, absent statutory authority, creates unnecessary risk for our customers. While Minnesota's GHG reduction goals are ambitious, regulatory cost estimates must be grounded in likely compliance obligations, not broad economy-wide objectives.

Our recommended range of $0 to $13 per ton CO_2e is based on sector-specific analysis rather than broad assumptions. While the EPA's methane regulations for the oil and gas sector are currently subject to potential recission or revision, the Regulatory Impact Analysis prepared for those rules remains a credible benchmark for estimating compliance costs under foreseeable regulatory scenarios. This range incorporates a risk assessment tailored to the natural gas supply chain, reflecting costs likely to arise from upstream and midstream operations amid regulatory uncertainty. Our proposed approach supports statewide goals by incorporating sector-specific regulatory risk into resource planning without imposing speculative costs that could distort IRP modeling or lead to unnecessary rate impacts. Like the regulatory cost of carbon established for the electric sector, the Commission could revise this value in future updates if the regulatory landscape materially changes.

B. Methane Adder

The CEOs recommend applying a 1.4 percent adder to the commodity cost of natural gas IRPs to account for future methane leakage compliance costs. However, our proposed range already reflects these costs based on EPA projections, so applying this adder would double-count regulatory risk. Moreover, applying a flat 1.4 percent adder would undermine incentives to source lower-methane gas, as such efforts would not reduce the adder.

II. ADDITIONAL INFORMATION REQUESTED BY THE DEPARTMENT

A. Modeling Inputs

The Department interprets future regulatory costs as internal variable costs, treating them similarly to other operations costs, and therefore assumes these costs are reflected in the model's dispatch decision.[2] While this assumption may be reasonable for electric generation, it is less applicable to an LDC natural gas system. Unlike electric generation, an LDC does not "dispatch" units based on marginal cost; gas flows through a pipeline network and is delivered to meet customer demand. However, if "dispatch" is interpreted more broadly to include the selecting and scheduling of natural gas supply resources, these costs could influence upstream procurement choices. Our approach therefore models these costs as part of supply-side resource planning, ensuring that risk is incorporated into portfolio evaluation.

We agree with the Department that externality values should be applied after the model run, but the application must reflect the structure of a gas IRP. For a LDC, the model evaluates a suite of supply-side and demand-side resource options to meet firm demand. Applying externality costs in a sensitivity or cost-benefit analysis after the model selects these resource options ensures that GHG impacts are considered when ranking portfolios, consistent with how externalities are treated in electric resource planning.

In addition, the Department requested that we identify, explain, and discuss both our internal accounting and Federal Energy Regulatory Commission (FERC) accounts and sub-accounts that will be used to track and record our internal costs and future regulatory costs associated with our upcoming natural gas IRP.[3] Costs are charged to accounts and internal orders, which in turn direct costs to FERC accounts. We are using or anticipate using FERC accounts shown below in Table 1 related to the natural gas IRP.

[2] Department Comments at p. 15.
[3] Id.

Table 1
Anticipated and Current FERC Accounts for Gas IRP Costs

Account	Account Description	Activity
813	Other Gas Supply Expenses	Cost of labor and expenses for the selection and scheduling of natural gas supply resources
850	Operation Supervision and Engineering	Cost of labor and expenses in the general supervision and direction of transmission system operations
870	Operation Supervision and Engineering	Cost of labor and expenses in the general supervision and direction of distribution system operations
874	Mains and Services Expenses	Costs of labor and expenses associated with GHG reporting
920	Administrative and General Salaries	Cost of labor associated with load forecasting and regulatory support
921	Office Supplies and Expenses	Cost of expenses associated with load forecasting and regulatory support
928	Regulatory Commission Expenses	Cost of expenses incurred in connection with formal cases before this Commission

We are actively updating our internal accounting for activities related to the gas IRP to ensure accurate tracking and reporting of these costs.

At this time, no amounts are recorded for future regulatory costs related to our upcoming natural gas IRP. Such costs will be determined and recorded when specific regulations are enacted, and the associated obligations are clearly defined.

B. Methane Emissions Reporting

The Department requested that Xcel Energy, CenterPoint, and MERC provide additional information regarding methane emissions reported to EPA under the Greenhouse Gas Reporting Program (GHGRP) in 40 Code of Federal Regulations

(CFR) Part 98.[4] The Department provided a table of reported emissions extracted from the GHGRP database using EPA's Envirofacts GHG Search platform; however, the data returned by this query is incorrect. Review of this query at the time these comments were drafted shows that the annual data combined emissions reported under 40 CFR Part 98, Subparts W and NN, resulting in double counting. Table 2 below provides the GHG emissions reported by Xcel Energy under Subparts W and NN for the years 2010 through 2024, inclusive.

Table 2
GHG Emissions Reported by Northern Sates Power-Minnesota to EPA GHGRP

Reporting Year	Facility	Subpart W* (Metric Tons CO2e)	Subpart NN (Metric Tons CO2e)	Total (Metric Tons CO2e)
2010	Xcel Energy	N/A	4,574,918	4,574,918
2011	Xcel Energy	56,511	4,695,920	4,752,431
2012	Xcel Energy	53,979	4,788,408	4,842,387
2013	Xcel Energy	48,394	5,371,745	5,420,138
2014	Xcel Energy	48,339	5,070,962	5,119,301
2015	Xcel Energy	70,259	4,774,218	4,844,477
2016	Xcel Energy	56,321	4,880,489	4,936,810
2017	Xcel Energy	55,734	5,107,516	5,163,250
2018	Xcel Energy	55,895	5,938,176	5,994,071
2019	Xcel Energy	56,612	6,816,858	6,873,470
2020	Xcel Energy	56,904	6,198,701	6,255,605
2021	Xcel Energy	57,907	6,366,824	6,424,732
2022	Xcel Energy	57,141	5,883,715	5,940,856
2023	Xcel Energy	53,744	6,077,150	6,130,894
2024	Xcel Energy	60,414	5,967,462	6,027,875

* Note: GHG emissions reporting under Subpart W began in 2011.

The Department also requested that the Company provide a short narrative description of how the values listed in the table above, and inclusive of data for 2024, were tabulated and calculated.[5]

Xcel Energy reports GHG emissions from gas operations to EPA in accordance with the GHGRP protocols for Subpart W (Petroleum and Natural Gas Systems, Natural Gas Distribution Segment) and Subpart NN (Suppliers of Natural Gas and Natural Gas Liquids) using the calculation and reporting workbooks as applicable to each reporting year provided by EPA. The data elements required for this reporting are based upon company records prepared and/or maintained by Gas Accounting, Gas

[4] Department Comments at p. 17.
[5] Id.

Engineering and Operations, and Environmental Services. The calculation methodology, monitoring and quality assurance procedures, missing data procedures, data reporting requirements, and recordkeeping requirements are documented in the Company's GHG Monitoring Plans for each subpart as required by GHGRP, included as Attachment A.

In addition, the Department requested that we identify, explain, and discuss both our internal accounting and FERC accounts and sub-accounts that are used to track and record the internal costs used in reporting the data above.[6] As previously discussed, the Company's GHG reporting expenses are recorded to accounts and an internal order that directs costs to FERC account 874, Mains and services expenses.

C. Natural Gas Deliveries

The Department requested that we provide natural gas deliveries (in Dekatherms) for the years 2010 through 2024 segregated by end-user and further segregated between sales and transport categories by end-user. In addition, the Department requested that we identify, explain, and discuss both our internal accounting and FERC accounts and sub-accounts that are used to track and record the internal costs used in reporting the data above.[7] The requested data is included as Attachment B. The Company's sales-related accounting expenses are recorded as labor charges to an internal order, which allocates the costs to FERC Account 920 – Administrative and General Salaries.

CONCLUSION

We appreciate the opportunity to provide this Reply to Parties' Comments in this docket.

Dated: November 21, 2025

Northern States Power Company

[6] Department Comments at p. 15.
[7] Id.

GREENHOUSE GAS MONITORING PLAN

SUBPART NN - SUPPLIERS OF NATURAL GAS AND NATURAL GAS LIQUIDS

Company Name: Northern States Power Company, a Minnesota Corporation
Address: 414 Nicollet Mall
City: Minneapolis State: MN Zip Code: 55401

APPLICABILITY

All local natural gas distribution companies are required to report greenhouse gas emissions under the Environmental Protection Agency's (EPA) Mandatory Reporting Rule, codified in 40 CFR Part 98. Local Distribution Companies (LDCs) are defined in 40 CFR 98.400(b) as companies that own or operate distribution pipelines, not interstate pipelines or intrastate pipelines, that physically deliver natural gas to end users and that are regulated as separate operating companies by State public utility commissions or that operate as independent municipally-owned distribution systems. Any supplier of natural gas and natural gas liquids that operates in 2010 and following years must report greenhouse gases (GHG) under this rule.

Northern States Power Company, a Minnesota Corporation, (NSPM) is an LDC under the definition of this rule, and therefore, is required to report GHG emissions. This monitoring plan covers NSPM's gas distribution operations in Minnesota and South Dakota. The only customer in South Dakota is the Angus Anson power plant owned by NSPM, and so the gas operations in South Dakota do not constitute a separate LDC.

LDCs are required to report the carbon dioxide (CO_2) emissions that would result from the complete combustion or oxidation of the annual volumes of natural gas provided to end-users on their distribution systems.

DESIGNATED REPRESENTATIVE

Each LDC subject to reporting under this rule must select one and only one designated representative (DR), who shall be responsible for certifying, signing, and submitting GHG emissions reports and any other submissions for the LDC to the EPA Administrator. The DR is an individual selected by an agreement binding on the owners and operators of the LDC. The designated representative shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the LDC in all matters pertaining to this part, notwithstanding any agreement between the designated representative and such owners and operators. The owners and operators shall be bound by any decision or order issued to the designated representative by the Administrator or a court.

Each LDC may designate one alternate designated representative (ADR), who shall be an individual selected by an agreement binding on the owners and operators, and may act on behalf of the designated representative, of the LDC. The agreement by which the alternate designated representative is selected shall include a procedure for authorizing the alternate designated representative to act in lieu of the designated representative.

A DR or an ADR may delegate his or her own authority, to one or more individuals, to submit an electronic submission to the Administrator provided for or required under this part. These individuals are called "agents". A notice of delegation, signed by the DR or ADR, must be submitted prior to the agent acting on behalf of the DR or ADR.

If the DR, ADR, or agent for the LDC changes, a revised certificate of representation or notice of delegation must be submitted to EPA. The current DR, ADR, and authorized agent are listed in the following table. In addition, DR Certificates of Representation are stored on the GHG Reporting Shared files.

	First Name	Last Name	Job Title	Phone	Email
Designated Representative	See Certificate of Representation	See Certificate of Representation	Regional Vice President, Gas Operations	See Certificate of Representation	See Certificate of Representation
Authorized Agent	David	Chapman	Environmental Analyst	806-378-2592	David.Chapman@xcelenergy.com
Authorized Agent	Lee	Dananay	Environmental Analyst	806-378-2191	Lee.Dananay@xcelenergy.com
Authorized Agent	Steve	Castagneri	Environmental Analyst	303-294-2029	Steve.M.Castagneri@xcelenergy.com

OTHER RESPONSIBLE PERSONNEL

List the individuals responsible for data collection during this reporting year:

First Name	Last Name	Job Title	Data Collection Responsibilities (i.e., data parameter collected, frequency, contribution to emissions calculation, etc.)
James	Howell	Sr. Accounting Analyst	Volume delivered by end use category (residential, commercial, industrial and electric generating facilities) EIA Form 176
Keith	Parks	Mgr, Analytics and Reporting	Off system volumes & Gas into system
Janet	Reynolds	Account Representative, Natural Gas Services	Gas to LDCs and Large Transport customer volumes
Lee	Dananay	Environmental Analyst	Coordination and submittal of report
Steve	Castagneri	Environmental Analyst	Coordination and submittal of report

PROCESS AND METHODS TO COLLECT DATA (40 CFR 98.403)

Emissions Total – 40 CFR 98.403 (b)(4)

Each LDC is required to report the annual mass emissions of CO_2 that would result from the complete combustion or oxidation of natural gas delivered to end users. All CO_2 mass emissions under this regulation are reported as metric tons. This is determined using Equation NN-6:

$$CO_2 = CO_{2i} + CO_{2n} - CO_{2j} - \sum CO_{2k} - CO_{2l} \quad \text{(Eq. NN-6)}$$

Where: CO_2 = annual CO_2 mass emissions that would result from the combustion or oxidation of natural gas delivered to LDC end-users not covered in paragraph (b)(2) of this section (metric tons).

CO_{2i} = annual CO_2 mass emissions that would result from the combustion or oxidation of natural gas received at the city gate as calculated in paragraph (a)(1) or (2) of this section (metric tons).

CO_{2j} = annual CO_2 mass emissions that would result from the combustion or oxidation of natural gas delivered to transmission pipelines or other LDCs as calculated in paragraph (b)(1) of this section (metric tons).

CO_{2k} = annual CO_2 mass emissions that would result from the combustion or oxidation of natural gas delivered to each large end-user as calculated in paragraph (b)(2) of this section (metric tons). A large end-user means any end-user facility receiving greater than or equal to 460,000 Mscf of natural gas per year.

CO_{2l} = annual CO_2 mass emissions that would result from the combustion or oxidation of the net change in natural gas stored by the LDC within the reported year as calculated in paragraph (b)(3)(i) of this section (metric tons).

CO_{2n} = annual CO_2 mass emissions that would result from the combustion or oxidation of natural gas that was received by the LDC directly from sources bypassing the city gate, and is not otherwise accounted for in Equation NN-1 or NN-2 of this section, as calculated in paragraph (b)(3)(ii) of this section (metric tons).

Natural Gas into System, at City Gate – 40 CFR 98.403 (a)
The emissions that would result from the complete combustion or oxidation of the natural gas received at the city gates calculated using either Equation NN-1 or NN-2:

$$CO_{2i} = 1x10^{-3} * \sum Fuel_h * HHV_h * EF_h \quad \text{(Eq. NN-1)}$$

$$CO_{2i} = \sum Fuel_h * EF_h \quad \text{(Eq. NN-2)}$$

Where: CO_{2i} = annual CO_2 mass emissions that would result from the combustion or oxidation of each product "h" for redelivery to all recipients (metric tons)

$Fuel_h$ = total annual volume of product "h" supplied (Mscf per year)

HHV_h = higher heating value of product "h" supplied (MMBtu/Mscf)

EF_h = CO_2 emission factor of product "h" (kg CO_2/MMBtu) ([NN-1]; MT Co2/mscf [NN-2])

$1x10^{-3}$ = conversion factor from kilograms to metric tons (MT/kg).

Gas Delivered to Pipelines and Other LDCs - 40 CFR 98.403 (b)(1)

The emissions that would result from natural gas delivered to downstream gas transmission pipelines and other LDCs are calculated using Equation NN-3:

$$CO_{2j} = Fuel * EF \quad \text{(Eq. NN-3)}$$

Where: CO_{2j} = annual CO_2 mass emissions that would result from the combustion or oxidation of natural gas for redelivery to transmission pipelines or other LDCs (metric tons)

Fuel = total annual volume of natural gas supplied (Mscf per year)

EF = fuel-specific CO_2 emission factor (MT CO_2/Mscf)

Refer to the Subpart NN – Suppliers of Natural Gas and Natural Gas Liquids Emissions Calculation worksheet for a list of transmission pipelines and other LDCs to which NSPM delivers natural gas to. The worksheet is located in the applicable reporting year folder in the Environmental Services Technical Services shared files.

Gas Delivered to Large-End Users– 40 CFR 98.403(b)(2)

The emissions that would result from natural gas delivered to large end-users are calculated using Equation NN-4:

$$CO_{2k} = Fuel * EF \quad \text{(Eq. NN-4)}$$

Where: CO_{2k} = annual CO_2 mass emissions that would result from the combustion or oxidation of natural gas delivered to each large end-user k, as defined in paragraph (b)(2)(i) of this section (metric tons).

Fuel = total annual volume of natural gas supplied to each large end-user k, as defined in paragraph (b)(2)(i) of this section (Mscf per year)

EF = fuel-specific CO_2 emission factor (MT CO_2/Mscf)

Note that a large-end user means any end-user facility receiving greater than or equal to 460,000 Mscf of natural gas per year. If the LDC does not know the total quantity of gas delivered to the end-user facility based on readily available information in the LDC's possession, then large end-user means any single meter at an end-user facility to which the LDC delivers equal to or greater than 460,000 Mscf per year.

Inclusion of a facility in this calculation is based on the volume delivered in the current reporting year. A particular customer may be included in this calculation one year, and not the next, based on the volume of gas consumed in a given year.

NSPM has both internal and external customers that may be included in this calculation. The data for each category of customer comes from different sources.

Refer to the Subpart NN – Suppliers of Natural Gas and Natural Gas Liquids Emissions Calculation worksheet for a list of large internal and external customers that may need to be included in Equation NN-4. The worksheet is located in the applicable reporting year folder in the Environmental Services Technical Services shared files.

Net Gas Stored – 40 CFR 98.403(b)(3)(i)

The emissions that would result from the net change in natural gas stored on system by the LDC are calculated using Equation NN-5a:

$$CO_{2l} = [Fuel1 – Fuel_2] * EF \quad \text{(Eq. NN-5a)}$$

Where: CO_{2l} = annual CO_2 mass emissions that would result from the combustion or oxidation of the net change in natural gas stored on system by the LDC within the reported year (metric tons).

$Fuel_1$ = total annual volume of natural gas added to storage on-system or liquefied and stored in the reporting year (Mscf per year).

$Fuel_2$ = total annual volume of natural gas that is removed from storage or vaporized and removed from storage and used for deliveries to customers or other LDCs by the LDC within the reporting year (Mscf per year).

EF = annual average CO_2 emission factor for natural gas placed into / removed from storage (MT CO_2/Mscf).

Refer to the Subpart NN – Suppliers of Natural Gas and Natural Gas Liquids Emissions Calculation worksheet for a list of storage facilities that may need to be included in Equation NN-5a. The worksheet is located in the applicable reporting year folder in the Environmental Services Technical Services shared files.

Gas Into System, bypassing City Gate – 40 CFR 98.403(b)(3)(ii)

The emissions that would result from the natural gas received by the LDC that bypassed the city gate and is not otherwise accounted for by Equation NN-1 or NN-2 are calculated using Equation NN-5b:

$$CO_{2n} = Fuel_z * EF_z \quad \text{(Eq. NN-5b)}$$

Where: CO_{2n} = annual CO_2 mass emissions that would result from the combustion or oxidation of natural gas received that bypassed the city gate and is not otherwise accounted for by Equation NN-1 or NN-2 (metric tons).

$Fuel_z$ = total annual volume of natural gas received that was not otherwise accounted for by Equation NN-1 or NN-2 (natural gas from producers and natural gas processing plants from local production, or natural gas that was received as a liquid, vaporized and delivered, and any other source that bypassed the city gate). (Mscf per year)

EF_z = fuel-specific CO_2 emission factor (MT CO_2/Mscf)

Refer to the Subpart NN – Suppliers of Natural Gas and Natural Gas Liquids Emissions Calculation worksheet for a list of natural gas received by the LDC that bypassed the city gate that may need to be included in Equation NN-5b. The worksheet is located in the applicable reporting year folder in the Environmental Services Technical Services shared files.

MONITORING AND QUALITY ASSURANCE PROCEDURES – 40 CFR 98.404

Determination of quantity – 40 CFR 98.404(a)

LDCs shall determine the quantity of natural gas using methods in common use in the industry for billing purposes as audited under existing Sarbanes Oxley regulation.

- Where an appropriate standard method published by a consensus-based standards organization exists, such methods are used by Xcel Energy. Consensus-based standards organizations include, but are not limited to, the following: American Society of Testing and Materials (ASTM) International, the American National Standards Institute (ANSI), the American Gas Association (AGA), the American Society of Mechanical Engineers (ASME), the American Petroleum Institute (API), and the North American Energy Standards Board (NAESB). Xcel Energy follows ANSI standards.
- Where no appropriate standard method developed by a consensus-based standards organization exists, industry standard practices shall be followed.

An LDC shall measure all natural gas under the following standard industry temperature and pressure conditions: Cubic foot of gas at a temperature of 60 degrees Fahrenheit and at an absolute pressure of one atmosphere.

Xcel Energy utilizes various makes and models of gas meters. NSP Gas Engineering maintains records of current tariff provisions on measurement for the NSP distribution system. These tariff provisions identify information such as how gas is measures at the meter, how often, and how the meters are calibrated. All meter data for gas distribution are maintained by Gas Engineering.

Determination of higher heating values (HHV) – 40 CFR 98.404(b)

When a reporter uses the default HHV provided in this section to calculate Equation NN–1 of this subpart, the appropriate value shall be taken from Table NN–1 of this subpart. NSP uses the default HHV for the calculation of Equation NN-1 of this subpart.

Determination of emission factor (EF) – 40 CFR 98.404(c)

When a reporter uses the default EF provided in this section to calculate Equation NN–1 of this subpart, the appropriate value shall be taken from Table NN–1 of this subpart. NSP uses the default EF for the calculation of emissions.

When a reporter uses the default EF provided in this section to calculate Equation NN–2, NN–3, NN–4, NN–5a, NN-5b, or NN–7 of this subpart, the appropriate value shall be taken from Table NN–2 of this subpart. NSPM uses the default EF for the calculation of emissions.

Equipment Calibration – 40 CFR 98.404(d)

Equipment used to measure quantities in Equations NN–1, NN–2, NN-5a, and NN–5b of this subpart shall be calibrated prior to its first use for reporting under this subpart, using a suitable standard method published by a consensus based standards organization or according to the equipment manufacturer's directions.

Equipment used to measure quantities in Equations NN–1, NN–2, NN-5a, and NN–5b of this subpart shall be recalibrated at the frequency specified by the standard method used or by the manufacturer's directions.

Equipment used to measure quantities in Equations NN-3 and NN-4 of this subpart shall be recalibrated at the frequency commonly used within the industry.

Xcel Energy utilizes various makes and models of gas meters. Meter accuracy testing or calibration will depend on the meter type. Required accuracy testing is completed based on the type of meter, the associated meter specifications, and industry standard practice. Xcel Energy has programs for determining the in-service performance of gas meters. Xcel Energy testing program and requirements for the specific type of gas meter used are documented in the Gas Meter Test Program for each operating company and are maintained in the Gas Meter and Measurement group. In addition, NSP Gas Meter and Measurement maintains records of current tariff provisions on measurement for the NSP distribution system. These tariff provisions identify information such as how gas is measures at the meter, how often, and how the meters are calibrated. All meter data for gas distribution are maintained by Gas Meter and Measurement.

MISSING DATA PROCEDURES – 40 CFR 98.405

When a quality-assured value of the quantity of natural gas liquids or natural gas supplied during any period is unavailable (e.g., if a flow meter malfunctions), a substitute data value for the missing quantity measurement must be used in the calculations.

For the determination of quantity, LDCs shall either substitute their delivering pipeline metered deliveries at the city gate or substitute nominations and scheduled delivery quantities for the period when metered values of actual deliveries are not available.

When an LDC that does not make its own HHV measurements according to established business practices cannot follow the quality assurance procedures for developing a reporter-specific HHV, during any period for any reason, the reporter shall use the default HHV provided in Table NN-1 of this part for that period.

DATA REPORTING REQUIREMENTS – 40 CFR 98.36

The following information needs to be included in the annual reports. The annual report is due to the EPA by March 31 of each year for GHG emissions in the previous calendar year. The reports will be submitted electronically, using the appropriate EPA reporting tool, Electronic Greenhouse Gas Reporting Tool (E-GGRT). Please refer to the Electronic Code of Federal Regulations for the most current information.

Data Element	Citation 40 CFR 98	Source of Data
Supplier name and physical street address including the city, state, and zip code.	3(c)(1)	Included in Subpart NN worksheet located in specific reporting year folder in Environmental Services Shared Files.
Year and months covered by the report.	3(c)(2)	Included in Subpart NN worksheet located in specific reporting year folder in Environmental Services Shared Files.
Date of submittal.	3(c)(3)	Included in Subpart NN worksheet located in specific reporting year folder in Environmental Services Shared Files.
For suppliers, report annual quantity of CO2 that would be emitted from combustion or use of the products supplied, imported, and exported during the year.	3(c)(5)	Equation NN-6
A written explanation if you change emission calculation methodologies during the reporting period.	3(c)(6)	Included in Subpart NN worksheet located in specific reporting year folder in Environmental Services shared files.
Each data element for which a missing data procedure was used and the total number of hours in the year that a missing data procedure was used for each data element.	3(c)(8)	Included in Subpart NN worksheet located in specific reporting year folder in Environmental Services Shared Files.
A signed and dated certification statement provided by the designated representative of the owner or operator.	3(c)(9)	Included in Subpart NN worksheet located in specific reporting year folder in Environmental Services Shared Files.
Annual volume in Mscf of natural gas received by the LDC at its city gate stations for redelivery on the LDC's distribution system, including for use by the LDC	406(b)(1)	Input to Equations NN-1 and NN-2 Analytics and Reporting
Annual volume in Mscf of natural gas placed into storage or liquefied and stored ($Fuel_1$ in Equation NN-5a).	406(b)(2)	Input to Equation NN-5a Analytics and Reporting

Data Element	Citation 40 CFR 98	Source of Data
Annual volume in Mscf of natural gas withdrawn from on-system storage and annual volume in Mscf of vaporized liquefied natural gas (LNG) withdrawn from storage for delivery on the distribution system ($Fuel_2$ in Equation NN-5a)	406(b)(3)	Input to Equation NN-5a Analytics and Reporting
Annual volume in Mscf of natural gas that bypassed the city gate(s) and was supplied through the LDC distribution system. This includes natural gas from producers and natural gas processing plants from local production, or natural gas that was vaporized upon receipt and delivered, and any other source that bypassed the city gate ($Fuel_Z$ in Equation NN-5b).	406(b)(5)	Input to Equation NN-5b Analytics and Reporting
Annual volume in Mscf of natural gas delivered to downstream gas transmission pipelines and other local distribution companies.	406(b)(6)	Input to Equation NN-3 Analytics and Reporting
Annual volume in Mscf of natural gas delivered by LDC to each large end-user as defined in 98.403(b)(2)(i).	406(b)(7)	Input to Equation NN-4 Analytics and Reporting
The total annual CO2 mass emissions (metric tons) associated with the volumes in paragraphs (b)(1) through (b)(7) of this section	406(b)(8)	Equations NN-1 through NN-5
Annual CO2 emissions (metric tons) that would result from the complete combustion or oxidation of the annual supply of natural gas to end-users registering less than 460,000 Mcsf.	406(b)(9)	Equation NN-6
The specific industry standard used to develop the volume reported in paragraph (b)(1) of this section.	406(b)(10)	ANSI Reporting Standards

Data Element	Citation 40 CFR 98	Source of Data
If the LDC developed reporter-specific EFs or HHVs, report the following: (i) The specific industry standard(s) used to develop reporter-specific higher heating value(s) and/or emission factor(s) (ii) The developed HHV(s). (iii) The developed EF(s).	406(b)(11)	N/A – use default EPA emissions factors and HHVs
The customer name, address, and meter number of each large end-user reported in (b)(7) of this section. Report whether the quantity of natural gas reported in (b)(7) is the total quantity delivered to a specific meter located at the facility. Report the EIA number (if known) of LDC customer,	406(b)(12)	Natural Gas Service accounting records
The annual volume in Mscf of natural gas delivered by the local distribution company to each of the following end-use categories. For definitions of these categories, refer to EIA Form 176 (Annual Report of Natural Gas and Supplemental Gas Supply & Disposition) and Instructions. (i) Residential consumers. (ii) Commercial consumers. (iii) Industrial consumers. (iv) Electricity generating facilities.	406(b)(13)	Financial Reporting & Technical Accounting EIA Form 176
Each reporter shall report the number of days in the reporting year for which substitute data procedures were used for the following purpose: (1) To measure quantity. (2) To develop HHV(s). (3) To develop EF(s).	406(c)	Analytics and Reporting or Environmental Services

RECORDS THAT MUST BE RETAINED - 40 CFR 98.37

The LDC is required to keep additional records that are not submitted with the annual report. The LDC must be able to present these records in case of an inspection by the EPA. All records must be retained for a period of three years.

Record Type	Citation 40 CFR 98	Department Maintaining Records	Format of Records	Location of Records
A list of all units, operations, processes, and activities for which GHG emission were calculated.	3(g)(1)	Environmental Services	Electronic	Included in Subpart NN worksheet located in specific reporting year folder in Environmental Services Shared Files.
The data used to calculate the GHG emissions for each unit, operation, process, and activity, categorized by fuel or material type. These data include but are not limited to the following information: (i) The GHG emissions calculations and methods used. (ii) Analytical results for the development of site-specific emissions factors. (iii) The results of all required analyses for high heat value, carbon content, and other required fuel or feedstock parameters. (iv) Any facility operating data or process information used for the GHG emission calculations.	3(g)(2)	Environmental Services or appropriate Gas System department records	Electronic	Included in Subpart NN worksheet located in specific reporting year folder in Environmental Services Shared Files.
The annual GHG reports	3(g)(3)	Environmental Services	Electronic	Included in Subpart NN worksheet located in specific reporting year folder in Environmental Services Shared Files.
Missing data computations. For each missing data event, also retain a record of the cause of the event and the corrective actions taken to restore malfunctioning monitoring equipment.	3(g)(4)	Environmental Services	Electronic	Included in Subpart NN worksheet located in specific reporting year folder in Environmental Services Shared Files.
A written GHG Monitoring Plan.	3(g)(5)	Environmental Services	Electronic	Included in Subpart NN worksheet located in specific reporting year folder in Environmental Services Shared Files.

Record Type	Citation 40 CFR 98	Department Maintaining Records	Format of Records	Location of Records
The results of all required certification and quality assurance tests of continuous monitoring systems, fuel flow meters, and other instrumentation used to provide data for the GHGs reported under this part.	3(g)(6)	Appropriate Gas System department records	Electronic	Appropriate Gas System department records
Maintenance records for all continuous monitoring systems, flow meters, and other instrumentation used to provide data for the GHGs reported under this part.	3(g)(7)	Appropriate Gas System department records	Electronic	SAP
Records of all meter readings and documentation to support volumes of natural gas that are reported under this part.	407(a)	Appropriate Gas System department records	Electronic	Appropriate Gas System department records
Records documenting any estimates of missing metered data and showing the calculations of the values used for the missing data.	407(b)	Environmental Services	Electronic	Included in Subpart NN worksheet located in specific reporting year folder in Environmental Services Shared Files.
Calculations and worksheets used to estimate CO2 emissions for the volumes reported under this part.	407(c)	Environmental Services	Electronic	Included in Subpart NN worksheet located in specific reporting year folder in Environmental Services Shared Files.
Records related to the large end-users identified in 98.406(b)(7).	407(d)	Environmental Services	Electronic	Included in Subpart NN worksheet located in specific reporting year folder in Environmental Services Shared Files.
Records relating to measured Btu content or carbon content showing specific industry standards used to develop reporter-specific higher heating values and emission factors.	407(e)	N/A	N/A	N/A - NSP uses default HHV values and emission factors.

Record Type	Citation 40 CFR 98	Department Maintaining Records	Format of Records	Location of Records
Records of such audits as required by Sarbanes Oxley regulations on the accuracy of measurements of volumes of natural gas delivered to customers or on behalf of customers.	407(f)	Gas Meter Group	Electronic	SAP

ADDITIONAL DOCUMENTATION

This section should include an explanation of any assumptions used for the emissions calculations.

- Analyst to add information as necessary.

MONITORING PLAN REVISION HISTORY

Plan Version	Date of Revision	Element Revised	Personnel Completing Revision
1.0	04/01/2010	Original Plan	Jonathan Amos, Environmental Services
2.0	07/21/2011	Removed operations for North Dakota – now covered by separate plan	Jonathan Amos, Environmental Policy & Services
3.0	July 2014	Incorporated Greenhouse Gas Reporting Rule revisions (11/29/2013). Updated responsible personnel. Referenced emissions calculation worksheet instead of including data in plan.	Amanda Kuhl / Matt Shacka, Environmental Services
4.0	July 2015	Updated responsible personnel, data reporting requirements, and location and format of required records.	Amanda Kuhl / Jonathan Amos, Environmental Services
4.0	January 2016	Updated responsible personnel	Judy Herman, Environmental Services
4.1	September 2016	Updated responsible personnel, updated TBS table	Leslie Strong, Environmental Services; Mike Miller, Gas Capacity Planning
4.2	04/30/18	Updated responsible personnel, Monitoring and Quality Assurance Procedures.	Judy Herman, Environmental Services (contractor) and Lacey Johnson, Environmental Services
4.3	09/28/18	Updated responsible personnel	Lacey Johnson, Environmental Services; Rich Hosch and Mike Miller, Gas Capacity Planning
4.4	08/30/19	Updated responsible personnel. Updated language in Net Gas Stored and Equipment Calibration sections. Added Faribault #2 City Gate location	Steve Castagneri, Environmental Services; Mike Miller, Gas Capacity Planning; Dave Malek, Gas Engineering, MN
4.5	10/19/20	Updated responsible personnel	Steve Castagneri, Environmental Services; Mike Miller, Gas Capacity Planning; David Malek, Gas Engineering, MN
4.6	8/18/21	Updated DR/ADR, Agents and responsible personnel. Updated location of records	Steve Castagneri

		references. Removed attachment A due to redundancy, reference NN reporting form for most updated list of city gates.	
4.7	9/29/22	Updated DR/ADR, Agents and responsible personnel. Updated location of records references.	Steve Castagneri
4.8	9/15/2023	Updated DR/ADR, Agents and responsible personnel.	Steve Castagneri
4.9	9/16/2024	Updated DR, Responsible Personnel, Select sources of data	Steve Castagneri
5.0	10/10/2025	Updated responsible personnel	Steve Castagneri

GREENHOUSE GAS MONITORING PLAN

SUBPART W – PETROLEUM AND NATURAL GAS SYSTEMS

Company Name: Northern States Power Company, a Minnesota Corporation
Address: 414 Nicollet Mall
City: Minneapolis State: MN Zip Code: 55401

1.0 Introduction

Petroleum and natural gas systems are required to report greenhouse gas emissions under the Environmental Protection Agency's (EPA) Mandatory Reporting Rule, codified in 40 CFR Part 98. Eight industry segments that must report emissions are defined in 40 CFR §98.230. Northern States Power Company, a Minnesota Corporation (NSPM), is a natural gas distribution system and an onshore natural gas transmission pipeline system that is required to report under §98.230(a)(8) and §98.230(a)(10). This monitoring plan covers NSPM's gas distribution system in Minnesota.

2.0 Industry Segment Applicability

Subpart W contains ten industry segments, as defined in 40 CFR §98.230. NSPM owns facilities that are applicable to three of the ten industry segments. However, NSPM meets the threshold for reporting for only one of those industry segments. Definitions and thresholds of each applicable segment are described below.

2.1 Natural Gas Distribution

Definition §98.230(a)(8)

In 40 CFR §98.230(a)(8), a natural gas distribution segment is defined to include the distribution pipelines (not interstate transmission pipelines or intrastate transmission pipelines) and metering and regulating equipment at metering-regulating stations that are operated by a Local Distribution Company (LDC) within a single state that is regulated as a separate operating company by a public utility commission or that is operated as an independent municipally-owned distribution system. This segment also excludes customer meters and regulators, infrastructure, and pipelines (both interstate and intrastate) delivering natural gas directly to major industrial users and farm taps upstream of the local distribution company inlet.

Threshold §98.231(a)(2)

Per 40 CFR §98.231(a)(2), a facility must report emissions from the natural gas distribution industry segment only if the emissions sources specified in Subpart W [§98.232(i)] emit 25,000 metric tons of CO_2 equivalent (CO_2e) or more per year. The facility definition as applied to the distribution segment is defined as the collection of all distribution pipelines and metering and regulating equipment at metering-regulating stations that are operated by a single LDC.

NSPM is an LDC under the definition of this rule and will meet the 25,000 metric ton CO_2e reporting threshold each year; and therefore, would be required to report GHG emissions.

2.2 Onshore Natural Gas Transmission Pipeline

Definition §98.230(a)(10)

In 40 CFR §98.230(a)(10), an onshore natural gas transmission pipeline segment is defined to include all natural gas transmission pipelines as defined in §98.238. Per 40 CFR §98.238, a transmission pipeline is defined as a Federal Energy Regulatory Commission (FERC) rate-regulated Interstate pipeline, a state regulated Intrastate pipeline, or a pipeline that falls under the "Hinshaw Exemption" as referenced in the Natural Gas Act.

Threshold §98.231(a)(4)

Per 40 CFR §98.231(a)(4), a facility must report emissions from the onshore natural gas transmission pipeline industry segment only if the emissions sources specified in Subpart W [§98.232(m)] emit 25,000 metric tons of CO_2 equivalent (CO_2e) or more per year. The facility definition as applied to the natural gas transmission pipeline segment is defined as the collection of all Interstate natural gas transmission pipelines that are rate-regulated by FERC, all state-regulated Intrastate natural gas transmission pipelines, and all natural gas transmission pipelines that fall under the "Hinshaw Exemption".

NSPM owns natural gas transmission pipeline under the definition of this rule, but will not meet the 25,000 metric ton CO_2e reporting threshold each year; and therefore, would not be required to document and potentially report GHG emissions for this segment.

2.3 Liquefied natural gas (LNG) storage [98.230(a)(6)]

Definition §98.230(a)(6)

Per 40 CFR §98.230(a)(6), the liquified natural gas (LNG) storage segment includes onshore LNG storage vessels located above ground, equipment for liquefying natural gas, compressors to capture and re-liquefy boil-off-gas, re-condensers, and vaporization units for re-gasification of the liquefied natural gas.

Threshold §98.231(a)(4)

Per 40 CFR §98.231(a)(4), a facility must report emissions from the LNG Storage industry segment only if the emissions sources specified in Subpart W [§98.232(i)] emit 25,000 metric tons of CO_2 equivalent CO_2e or more per year.

The LNG Storage Segment applies to NSPM under the definition of this rule; however, it does not meet the threshold for reporting.

3.0 Responsible Personnel

Responsible personnel are described below either by their regulatory requirements or internal data collection requirements.

3.1 Designated Representatives

Each LDC and onshore natural gas transmission pipeline subject to reporting under this rule must select one and only one designated representative (DR), who shall be responsible for certifying, signing, and submitting GHG emissions reports and any other submissions for the LDC and onshore natural gas transmission pipeline segments to the EPA Administrator. The DR is an individual selected by an agreement binding on the owners and operators of the LDC and onshore natural gas transmission pipeline. The DR shall represent and, by his or her representations, actions, inactions, or submissions, legally bind each owner and operator of the LDC and onshore natural gas pipeline in all matters pertaining to this part, notwithstanding any agreement between the DR and such owners and operators. The owners and operators shall be bound by any decision or order issued to the DR by the Administrator or a court.

Each LDC and onshore natural gas transmission pipeline *may* designate one alternate designated representative (ADR), who shall be an individual selected by an agreement binding on the owners and operators, and may act on behalf of the DR of the LDC and onshore natural gas transmission pipeline. The agreement by which the ADR is selected shall include a procedure for authorizing the ADR to act in lieu of the DR.

A DR or an ADR may delegate his or her own authority, to one or more individuals, to submit an electronic submission to the Administrator provided for or required under this part. These individuals are called “agents”. A notice of delegation, signed by the DR or ADR, must be submitted prior to the agent acting on behalf of the DR or ADR.

If the DR, ADR, or agent for the LDC or onshore natural gas transmission pipeline changes, a revised certificate of representation or notice of delegation must be submitted to EPA. The current DR, ADR, and authorized agent(s) are listed in the following table:

TABLE 1.
DESIGNATED REPRESENTATIVE (DR), ALTERNATE DR, AND AGENTS

	First Name	Last Name	Job Title	Group	Email
Designated Representative	See Certificate of Representation	See Certificate of Representation	Regional Vice President, Gas Operations	Gas Distribution - NSPM	See Certificate of Representation
Authorized Agent	Lee	Dananay	Environmental Analyst	Environmental Services	Lee.Dananay@xcelenergy.com
Authorized Agent	Steve	Castagneri	Environmental Analyst	Environmental Services	Steve.M.Castagneri@xcelenergy.com
Authorized Agent	David	Chapman	Environmental Principal	Environmental Services	David.Chapman@xcelenergy.com

3.2 Other Responsible Personnel

List the individuals responsible for data collection during this reporting year:

TABLE 2.
OTHER RESPONSIBLE PERSONNEL

First Name	Last Name	Job Title	Group	Data Collection Responsibilities (i.e., data parameter collected, frequency, contribution to emissions calculation, etc.)
David	Malek	Staff Engineer	Gas Engineering	Gathering of field data. List of metering-regulating stations, leak survey co-ordination, equipment inventories, Mendota Heights heater gas usage
Lee	Dananay	Environmental Analyst	Environmental Services	Coordination and submittal of report
Steve	Castagneri	Environmental Analyst	Environmental Services	Coordination and submittal of report

4.0 Emissions Sources and Required Data

This section describes the data and calculations required for reporting GHGs.

4.1 Natural Gas Distribution Reporting Segment [§98.232(i)]

In 40 CFR §98.232(i), the emissions sources that must be reported for CO2, CH4, and N2O emissions for local distribution companies are outlined. The following sources include:

1) Equipment leaks from connectors, block valves, control values, pressure relief valves, orifice meters, regulators and open-ended lines at above-grade T-D transfer stations.
2) Equipment leaks from vaults at below grade transmission-distribution transfer stations.
3) Meters, regulators, and associated equipment at above grade metering-regulating stations.
4) Equipment leaks at below grade metering-regulating stations.
5) Pipeline main equipment leaks.
6) Service line equipment leaks.
7) Emissions from stationary combustion fuel sources.
8) Other large release events
9) Blowdown vent stacks
10) Natural gas pneumatic device venting
11) Crankcase vents

Subpart W Natural Gas Distribution segment categorizes these emissions sources into distinct emissions categories – **equipment leak surveys, equipment leaks by population count, stationary combustion emissions, other large release events, blowdown vent stacks, natural gas pneumatic device venting, and engine crankcase venting**. The following sections explain the different emissions calculation methodologies and data that will be gathered.

The data elements gathered from the applicable sources in the following sections shall be entered into the EPA optional Spreadsheet titled, *"Optional Calculation Workbook for Facility Recordkeeping Purposes for RY 2017 and Later"* to automatically calculate emissions and associated reporting elements. Outputs of this calculation workbook will then be manually transferred into the "*Subpart W: Petroleum and Natural Gas Systems" form* for final emissions aggregation. This form is then directly uploaded into the EPA e-GGRT reporting tool as the final step prior to approval and submittal of the report.

The EPA Optional Subpart W Calculation Tool is located at:

http://www.ccdsupport.com/confluence/display/help/Optional+Calculation+Spreadsheet+Instructions

The EPA Subpart W Integrated Reporting Form is located at:

http://www.ccdsupport.com/confluence/display/help/Reporting+Forms

4.1.1 Equipment Leak Surveys [§98.233(q)]

Equipment leaks from connectors, block valves, control values, pressure relief valves, orifice meters, regulators and open-ended lines at above-grade T-D transfer stations must be surveyed using any of the leak detection methods listed in §98.234(a) except §98.234(a)(2)(ii) at a frequency specified per §98.233(q)(1)(vii) or §98.233(q)(1)(viii). These equipment leak emissions must be calculated per §98.233(q)(2) or §98.233(q)(3). Leaks must be calculated only for emissions sources in streams with gas content greater than 10 percent CH_4 plus CO_2 by weight and tubing systems greater than 0.5 inches in diameter.

Natural gas distribution facilities may choose to conduct leak detection at the T-D transfer stations over multiple years, not exceeding a five-year period, to cover all T-D transfer stations. If the facility chooses to use the multiple year option, then the number of T-D transfer stations that are monitored in each year should be approximately equal across all years in the cycle without monitoring the same station twice during the multiple year survey.

In 40 CFR §98.234(a), four acceptable leak detection methods are outlined:

- optical gas imaging instrumentation,
- Method 21,
- infrared laser beam illuminated instrumentation, and
- acoustic leak detection devices.

For more specifics on when to use the various leak detection methods, see §98.234(a). Xcel Energy uses Method 21 for leak detection.

Emissions Calculations – Leak Detection

If a leak is detected at above grade T-D stations, natural gas distribution facilities may use methods specified in §98.233(q)(2) (Calculation method 1: Leaker emission factor calculation methodology) or §98.233(q)(3) (Calculation method 2: Leaker measurement methodology) to calculate emissions from these stations as appropriate. Refer to sections §98.233(q)(2) for specific equations and emission factors for Calculation method 1 or sections §98.233(q)(3) and (4) if utilizing Calculation method 2.

The data that must be gathered and reported from the leak detection survey is detailed in Table 3 below.

TABLE 3.
DATA REQUIREMENTS FOR SOURCES USING LEAK DETECTION

Data Element	Citation 40 CFR Part 98	Purpose and Source of Data
Inputs		
Missing data procedures	235	Document missing data procedures and identify any data replacements as needed. Annual above-ground T-D survey results
Number of complete equipment leak surveys performed during the calendar year	236(q)(1)(ii)	Calculation of fugitive emissions from system M/R stations
If performing leak surveys across a multiple year cycle, report number of years in the cycle	236(q)(1)(iii)	Calculation of fugitive emissions from system M/R stations
Method Used to Conduct Leak Surveys	236(q)(1)(vi)	Calculation of fugitive emissions from system M/R stations
Report use of calculation method 1 or 2	236(q)(1)(vii)	Report calculation method selected for determining leak emissions
Component type	236(q)(2)(ii)	Calculation of fugitive emissions from system M/R stations
Leak detection method used	236(q)(2)(iii)	Calculation of fugitive emissions from system M/R stations
Emission factor or measurement method used	236(q)(2)(iv)	Calculation of fugitive emissions from system M/R stations
Total number of components surveyed by type and leak detection method	236(q)(2)(v)	Calculation of fugitive emissions from system M/R stations
Total number of leaking components by type	236(q)(2)(vi)	Calculation of fugitive emissions from system M/R stations
Average time components are assumed to be leaking	236(q)(2)(vii)	Calculation of fugitive emissions from system M/R stations
Annual CO2 emissions in metric tons for the component type	236(q)(2)(viii)	Calculation of fugitive emissions from system M/R stations
Annual CH4 emissions in metric tons for the component type	236(q)(2)(ix)	Calculation of fugitive emissions from system M/R stations
Total number of above grade transmission-distribution transfer stations surveyed in calendar year	236(q)(3)(i)	Calculation of fugitive emissions from system M/R stations
Number of M/R runs at above-grade T-D stations surveyed	236(q)(3)(ii)	Calculation of fugitive emissions from system M/R stations
Average time that M/R runs surveyed were operational	236(q)(3)(iii)	Calculation of fugitive emissions from system M/R stations
Number of above-grade T-D stations surveyed	236(q)(3)(iv)	Calculation of fugitive emissions from system M/R stations
Number of M/R runs at above-grade T-D stations surveyed	236(q)(3)(v)	Calculation of fugitive emissions from system M/R stations
Average time that M/R runs surveyed were operational	236(q)(3)(vi)	Calculation of fugitive emissions from system M/R stations
M/R run CO2 emission factor based on all surveyed T-D stations	236(q)(3)(vii)	Calculation of fugitive CO2 emissions from below ground system M/R station runs
M/R run CH4 emission factor based on all surveyed T-D stations	236(q)(3)(viii)	Calculation of fugitive CH4 emissions from below ground system M/R station runs

Data Element	Citation 40 CFR Part 98	Purpose and Source of Data
If equipment leaks surveys performed across multiple years, must report:	236(q)(3)(ix)	Calculation of fugitive emissions from system M/R stations if leak surveys are conducted across multiple years

The most current list of T-D transfer stations to be surveyed for leak detections is maintained by the Geospatial group and contained within the SAP database.

4.1.2 Population Count Methodology [§98.233(r)]

Subpart W specifies that emissions must be calculated using the population count method for the following sources on the natural gas distribution system:

1) Equipment leaks from vaults at below grade transmission-distribution transfer stations.
2) Meters, regulators, and associated equipment at above grade metering-regulating stations.
3) Equipment leaks from vaults at below grade metering-regulating stations.
4) Distribution main equipment leaks.
5) Distribution services equipment leaks.

Emissions must be calculated only for sources in streams with gas content greater than 10 percent CH_4 plus CO_2 by weight and tubing systems greater than 0.5 inches in diameter.

Emissions Calculation - Population Count [§98.233(r)]

Under the population count methodology, natural gas distribution facility emission sources must calculate emissions using Equation W-32B. The population emission factor must be derived from Table W-5 to Subpart W of Part 98 (Default Methane Population Emission Factors), and M/R run population emission factors must be derived from Equation W-31 in the Leak Detection section to complete Equation W-32B.

$$E_{s,MR,i} = Count_{MR} * EF_{s,MR,i} * T_{w,avg} \qquad \text{(Eq. W-32B)}$$

Where:
$E_{s,MR,I}$ = annual volumetric emissions of GHG_i from all meter/regulator runs at above grade metering regulating stations that are not above grade transmission-distribution transfer stations or, when used to calculate emissions according to paragraph (q)(9) of this section, the annual volumetric emissions of GHG_i from all meter/regulator runs at above grade transmission-distribution transfer stations, in scf.
$Count_{MR}$ = Total number of meter/regulator runs at above grade metering-regulating stations that are not above grade transmission-distribution transfer stations or, when used to calculate emissions according to paragraph (q)(9) of this section, the total number of meter/regulator runs at above grade transmission-distribution transfer stations.
$EF_{s,MR,i}$ = Meter/regulator run population emission factor for GHG_i based on all surveyed above grade transmission-distribution transfer stations over "n" years, in standard cubic feet of GHG_i per operational hour of all meter/regulator runs, as determined in Equation W-31 of this section.
$T_{w,avg}$ = Average estimated time that each meter/regulator run was operational in the calendar year, in hours per meter/regulator run, using engineering estimate based on best available data.

TABLE 4.
DATA REQUIREMENTS FOR SOURCES USING POPULATION COUNT METHODOLOGY

Data Element	Citation 40 CFR Part 98	Purpose and Source of Data
Inputs		
Below Grade Metering-Regulating Stations: ➢ **Inlet pressure <100 psig** ➢ **Inlet Pressure 100 to 300 psig** ➢ **Inlet Pressure >300 psig**		
Total count of below grade M-R stations (including below grade T-D transfer stations)	233(r)	Data Reporting Requirements in EPA Optional Subpart W Calculation Tool; Report or verification from Gas Engineering
Total count of below grade T-D transfer stations only	233(r)	Data Reporting Requirements in EPA Optional Subpart W Calculation Tool; Report or verification from Gas Engineering
Average estimated time that the below grade M-R stations (including below grade T-D transfer stations) were operational in the calendar year (hours)	233(r)	Data Reporting Requirements in EPA Optional Subpart W Calculation Tool; Report or verification from Gas Engineering
Average estimated time that the below grade T-D transfer stations were operational in the calendar year (hours)	233(r)	Data Reporting Requirements in EPA Optional Subpart W Calculation Tool; Report or verification from Gas Engineering
Distribution Mains: ➢ **Cast Iron** ➢ **Plastic** ➢ **Protected Steel** ➢ **Unprotected Steel**		
Total miles of mains	233(r)	Data Reporting Requirements in EPA Optional Subpart W Calculation Tool; Annual Department of Transportation(DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA)
Average estimated time that the mains were operational in the calendar year (hours)	233(r)	Data Reporting Requirements in EPA Optional Subpart W Calculation Tool; Report or verification from Gas Engineering
Distribution Services: ➢ **Copper** ➢ **Plastic** ➢ **Protected Steel** ➢ **Unprotected Steel**		
Total number of services	233(r)	Data Reporting Requirements in EPA Optional Subpart W Calculation Tool; Annual DOT PHMSA report
Average estimated time that the services were operational in the calendar year (hours)	233(r)	Data Reporting Requirements in EPA Optional Subpart W Calculation Tool; Report or verification from Gas Engineering
Above Grade Metering-Regulating Stations		

Total number of above grade T-D transfer stations at the facility	233(r)	Input for Equation W-32B; Data Reporting Requirements in EPA Optional Subpart W Calculation Tool
M-R run population emission factor for GHG based on all surveyed above grade T-D transfer stations	233(r)	Input of Eq. W-32B; Output of Eq. W-31
Total count of above grade M-R stations that are not T-D transfer stations at the facility	236(r)(2)(ii)	Data Reporting Requirements in EPA Optional Subpart W Calculation Tool;
Average estimated time that the meter/regulator runs at all above grade M-R stations (inclusive of above grade T-D transfer stations) were operational in the calendar year (hours)	233(r) and 236(r)(2)(iv)	Input for Eq. W-32B; Report or verification from Gas Engineering
Outputs		
Annual CO2 and CH4 emissions in metric tons , by emission source type for leaks by population count	236(r)(1)(v) and (vi)	Listed under Data Reporting Requirements in §236; Output of "Subpart W Calculation Tool" spreadsheet; Output of Eq. W-32B
Annual CO_2 and CH4 emissions, in metric tons CO_2 and CH4, from above grade metering-regulating stations that are not above grade transmission-distribution transfer stations	236(r)(2)(v)	Listed under Data Reporting Requirements in §236; Output of "Subpart W Calculation Tool" spreadsheet

4.1.3 Stationary Combustion Sources [§98.233(z)]

The natural gas distribution system must calculate CO_2, CH_4 and N_2O combustion emissions from stationary or portable equipment.

External fuel combustion sources with a rated heat capacity equal to or less than 5 mmBtu/hr do not need to report combustion emissions. Simply report the type and number of each external fuel combustion unit.

Internal fuel combustion sources, not compressor-drivers, with a rated heat capacity equal to or less than 1 mmBtu/hr (or the equivalent of 130 hp) do not need to report combustion emissions. Simply report the type and number of each internal fuel combustion unit.

All internal fuel combustion units of any heat capacity that are compressor-drivers must be reported. Report the total quantity of fuel combusted for all units in the calendar year.

Note: Neither NSP nor PSCo operate natural gas compressor drivers of any heat capacity on their distribution systems.

There are two categories of emissions calculations based on the fuel type. All combustion units in the NSPM system burn pipeline quality natural gas, so only those calculations are detailed below.

Fuels Listed in Table C-1 [§98.233(z)(1)]

The Tier 1 methodology from Subpart C may be used to calculate emissions if the fuel combusted in the stationary or portable equipment is listed in Table C-1, or is a blend of the fuels in Table C-1. The only direct measurement for the Tier 1 methodology is the mass or volume of fuel combusted. All other components of the emissions calculation are default values. If the fuel is natural gas and is pipeline quality and has a minimum high heat value of 950 Btu per standard cubic foot, then the natural gas emissions factor and high heat values listed in Tables C-1 and C-2 may be used.

The Tier 1 methodology from §98.33(a)(1)(i) uses the following equations to calculate emissions (Eq. C-1, C-1a, or C-1b):

$$CO_2 = 1x10^{-3} * Fuel * HHV * EF \qquad \text{(Eq. C-1)}$$

Where:
CO_2 = Annual CO_2 mass emissions for the specific fuel type (metric tons).
Fuel = Mass or volume of fuel combusted per year, from company records as defined in §98.6 (express mass in short tons for solid fuel, volume in standard cubic feet for gaseous fuel, and volume in gallons for liquid fuel).
HHV = Default high heat value of the fuel, from Table C–1 of this subpart (mmBtu per mass or mmBtu per volume, as applicable).
EF = Fuel-specific default CO_2 emission factor, from Table C–1 of this subpart (kg CO_2/mmBtu).
1 *10^{-3} = Conversion factor from kilograms to metric tons.

$$CO_2 = 1x10^{-3}\left[0.1 * Gas * EF\right] \qquad \text{(Eq. C-1a)}$$

Where:
CO_2 = Annual CO_2 mass emissions from natural gas combustion (metric tons).
Gas = Annual natural gas usage, from billing records (therms).
EF = Fuel-specific default CO_2 emission factor for natural gas, from Table C–1 of this subpart (kg CO_2/mmBtu).
0.1 = Conversion factor from therms to mmBtu
1*10^{-3} = Conversion factor from kilograms to metric tons.

$$CO_2 = 1x10^{-3} * Gas * EF \qquad \text{(Eq. C-1b)}$$

Where:
CO_2 = Annual CO_2 mass emissions from natural gas combustion (metric tons).
Gas = Annual natural gas usage, from billing records (mmBtu).
EF = Fuel-specific default CO_2 emission factor for natural gas, from Table C–1 of this subpart (kg CO_2/mmBtu).
1*10^{-3} = Conversion factor from kilograms to metric tons.

The Tier 1 methodology from §98.33(c)(1) uses the following equation to calculate emissions of CH_4 and N_2O (Eq. C-8, C-8a, or C-8b):

$$CH_4 \text{ or } N_2O = 1 \times 10^{-3} * Fuel * HHV * EF \text{ (Eq. C-8)}$$

Where:
CH_4 or N_2O = Annual CH_4 or N_2O emissions from the combustion of a particular fuel (metric tons).
Fuel = Mass or volume of fuel combusted per year, from company records or directly measured by a fuel flow meter, as applicable (mass or volume per year).

HHV = Default high heat value of the fuel from Table C–1 of this subpart; alternatively, for Tier 3, if actual HHV data are available for the reporting year, you may average these data using the procedures specified in paragraph (a)(2)(ii) of this section, and use the average value in Equation C-8 (mmBti per mass or volume)
EF = Fuel-specific default CH_4 or N_2O, from Table C–2 of this subpart (kg CH_4 or N_2O per mmBtu).
1 *10^{-3} = Conversion factor from kilograms to metric tons.

$$CH_4 \text{ or } N_2O = 1 \times 10^{-3} * Fuel * 0.1 * EF \qquad \text{(Eq. C-8a)}$$

Where:
CH_4 or N_2O = Annual CH_4 or N_2O emissions from the combustion of natural gas (metric tons).
Fuel = Annual natural gas usage, from gas billing records (therms).
EF = Fuel-specific default emission factor for CH_4 or N_2O, from Table C–2 of this subpart (kg CH_4 or N_2O per mmBtu).
0.1 = Conversion factor from therms to mmBtu
1*10^{-3} = Conversion factor from kilograms to metric tons.

$$CH_4 \text{ or } N_2O = 1 \times 10^{-3} * Fuel * EF \qquad \text{(Eq. C-8b)}$$

Where:
CH_4 or N_2O = Annual CH_4 or N_2O emissions from the combustion of natural gas (metric tons).
Fuel = Annual natural gas usage, from gas billing records (therms).
EF = Fuel-specific default emission factor for CH_4 or N_2O, from Table C–2 of this subpart (kg CH_4 or N_2O per mmBtu).
1*10^{-3} = Conversion factor from kilograms to metric tons.

Units that Combust Field Gas, Process Vent Gas, a Blend of Field and Vent Gas, or Natural Gas That Is Not Pipeline Quality [§98.233(z)(2)]

For fuel combustion units that combust field gas, process vent gas, a blend of the aforementioned fuels, or natural gas that is not of pipeline quality or that has a high heat value of less than 950 Btu per standard cubic feet, calculate combustion emissions as follows:

According to §98.233(z)(2)(i), you may use company records to determine the volume of fuel combusted in the unit during the reporting year.

According to §98.233(z)(2)(ii), if you have a continuous gas composition analyzer on fuel to the combustion unit, you must use these compositions for determining the concentration of gas hydrocarbon constituent in the flow of gas to the unit. If you do not, calculate the appropriate gas compositions for each stream of hydrocarbons going to the combustion unit using (u)(2), which specifies using the most recent gas composition based on available sample analysis from the field.

Note: There are no stationary combustion sources on the NSPM or PSCo gas distribution systems that combust field gas, process vent gas, or gas that is not pipeline quality.

Table 5 lists the data elements that must be recorded for stationary combustion units.

TABLE 5.
DATA REQUIREMENTS FOR STATIONARY COMBUSTION SOURCES

Data Element	Citation 40 CFR Part 98	Purpose and Source of Data
Inputs		
Report whether there are any external fuel combustion units with a rated heat capacity less than or equal to 5 mmBtu/hr	236(z)(1)	Data Reporting Requirements in EPA Subpart W Reporting Form; Environmental Services
Report whether there are any internal combustion units that are not compressor-drivers, with a rated heat capacity less than or equal to 1 mmBtu/hr	236(z)(1)	Data Reporting Requirements in EPA Subpart W Reporting Form; Environmental Services
Type of combustion unit	236(z)(1)(ii)	Data Reporting Requirements in EPA Subpart W Reporting Form; Environmental Services
Total number of combustion units meeting the criteria in 236(z)(1)	236(z)(1)(iii)	Data Reporting Requirements in EPA Subpart W Reporting Form; Environmental Services
Report whether there are any external fuel combustion units with a rated heat capacity greater than 5 mmBtu/hr	236(z)(2)ii	Data Reporting Requirements in EPA Subpart W Reporting Form; Environmental Services
Report whether there are any internal combustion units that are not compressor-drivers, with a rated heat capacity greater than 1 mmBtu/hr	236(z)(2)ii	Data Reporting Requirements in EPA Subpart W Reporting Form; Environmental Services
Report whether there are internal fuel combustion units of any heat capacity that are compressor-drivers	236(z)(2)(ii)	Data Reporting Requirements in EPA Subpart W Reporting Form; Environmental Services
Type of combustion unit	236(z)(2)(v)	Data Reporting Requirements in EPA Subpart W Reporting Form; Environmental Services
Type of fuel combusted	236(z)(2)(iii)	Data Reporting Requirements in EPA Subpart W Reporting Form; Environmental Services
Quantity of fuel combusted in calendar year and unit of measure	236(z)(2)(iv); 33(a) and (c)	Data Reporting Requirements in EPA Optional Subpart W Calculation Tool; Environmental Services
High heating value of fuel	Table C-1; 33(a) and (c)	Input to equation C-1 or C-8; Table C-1
Fuel-specific emission factor	Table C-1 and C-2; 33(a) and (c)	Input to equation C-1 or C-8; Table C-1 and C-2
Outputs		
Report total CO2, CH4, and N2O emissions in metric tons of CO2, CH4, and N2O for each combustion unit	236(z)(2)(viii), (ix), and (x)	Data Reporting Requirements in EPA Subpart W Reporting Form; Output from equation C-1 or C-8

Refer to the EPA Optional Subpart W Calculation Tool, EPA Subpart W Integrated Reporting Form and supporting engineering documents for the list of current combustion sources, located in Environmental Services shared files for the applicable reporting year.

4.1.4 Other Large Release Events [§98.233(y)]

Other large release events are defined as release events other than blowdowns for which there are no established methodologies to appropriately estimate the emissions. Note that the distribution systems in PSCo and NSP-MN fall under the LDC exemption from the super emitter regulations specified in part §60.5371 and as such are not subject to the notification requirements specified in §98.233(y)(6).

Other large release events are releases that qualify for reporting if they meet or exceed the methane emission rate of 100 kg/hr or greater as specified in §98.233(y)(1)(ii). These releases are generally the result of damages to system piping from 3rd party organizations and are tracked by the damage prevention groups.

Estimate the volume and mass emissions of CH4 and CO2 released according to methods specified in §98.233(y)(2) through (5).

Report the data elements for other large release events as specified in §98.236(y)(2) through (10).

4.1.5 Blowdown Vent Stacks [§98.233(i)]

Calculate CO2 and CH4 blowdown vent stack emissions from qualifying planned or emergency blowdowns and excluding any emissions associated with the Other Large Release Events source in accordance with §98.233(i). Report blowdowns only if the unique physical volume is greater than or equal to 500 cubic feet unique physical volume as determined by §98.233(i)(1). If blowdown vent stacks are routed to a flare, calculate annual emissions of CH4, CO2, and N2O as specified in §98.233(n).

Calculate CO2 and CH4 emissions from blowdowns not routed to a flare as specified in §98.233(i)(2) through (4) as applicable.

Report the data elements for blowdowns not routed to a flare as specified in §98.236(i)(1).

4.1.6 Natural Gas Pneumatic Device Venting [§98.233(a)]

Calculate CH4 and CO2 emissions from natural gas pneumatic device venting using the applicable methods specified in §98.233(a). NSP-MN and PSCo will elect to calculate emissions from pneumatic devices, if present, using methods specified in §98.233(a)(4) “Calculation Method 4”.

Report the data elements for pneumatic devices as specified in §98.236(b)(6).

4.1.7 Crankcase Vents [§98.233(ee)]

For each reciprocating internal combustion engine with a rated heat capacity greater than 1 mmBtu/hr (or 130 horsepower), calculate annual CH4 mass emissions using methods specified in §98.233(ee)(1) or (2).

Report the data elements for crankcase vents as specified in §98.236(ee).

Note: There are no internal combustion engines of a heat capacity equal to greater than 1 mmBtu/hr present on the distribution systems.

5.0 Monitoring and Quality Assurance Procedures (§98.234)

This section describes equipment and methods used for monitoring, the calibration requirements for that equipment, as well as repairs, recordkeeping, and missing data requirements.

5.1 Optical Gas Imaging Instrument

Emissions detected by the optical gas imaging instrument is a leak unless screened with Method 21 monitoring, in which case 10,000 ppm or greater is designated a leak. An optical gas imaging instrument must be used for all sources that are inaccessible and cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface. The optical gas imaging instrument will be operated in accordance with the instrument manufacturer's operating parameters.

5.2 Method 21

If an instrument reading of 10,000 ppm or greater is measured, this is considered a leak.

5.3 Infrared Laser Beam Illuminated Instrument

Emissions detected by the infrared laser beam illuminated instrument is a leak unless screened with Method 21 monitoring, in which case 10,000 ppm or greater is designated a leak. The infrared laser beam illuminated instrument will be operated in accordance with the instrument manufacturer's operating parameters.

5.4 Acoustic Leak Detection Device

Use the acoustic leak detection device to detect through-valve leakage. Use the instrument manufacturer's calculation methods to quantify the through-valve leak. A leak is defined as 3.1 scf per hour or greater. The acoustic leak detection device will be operated in accordance with the instrument manufacturer's operating parameters.

5.5 Flow Meters, Composition Analyzers and Pressures Gauges

Xcel Energy uses appropriate standard methods published by consensus-based standards organizations or industry standard practices for quality assurance, maintenance and repair of monitoring systems, flow meters, and other instrumentation used to provide data for Subpart W. Consensus-based standards organization include, but are not limited to, ASTM International, the American National Standards Institute (ANSI), the American Gas Association (AGA), the American Society of Mechanical Engineers (ASME), the American Petroleum Institute (API), and the North American Energy Standards Board (NAESB). Xcel Energy follows ANSI standards.

Xcel Energy utilized various makes and models of gas meters. Meter accuracy testing or calibration will depend on the meter type. Required accuracy testing is completed based on the type of meter, the associated meter specifications, and industry standard practice. Xcel Energy has programs for determining the in-service performance of gas meters. Xcel Energy testing program and requirements for the specific type of gas meter used are documented in the Gas Meter Test Program for each operating company and are maintained in Gas Engineering. In addition, NSPM Gas Engineering maintains records of current tariff provisions on measurement for the NSPM distribution system. These tariff provisions identify information such as how gas is measured at the meter, how often, and how the meters are calibrated. All meter data for gas distribution are maintained by Gas Engineering.

5.6 MISSING DATA PROCEDURES (§98.235)

A complete record of all estimated and/or measured parameters is required, including the procedures used to substitute an unavailable value. Recordkeeping requirements must be followed as listed in §98.237(f). Unless addressed below, for each missing value of any activity data, you must substitute data values using the best available estimate of the parameter, based on all applicable and available process or other data.

For missing data for stationary or portable combustion sources that use calculation methods of 98 Subpart C, missing data procedures in Subpart C are used.

For missing values of a parameter which are measured quarterly or more frequently (e.g., flow meters), you must substitute the arithmetic average of the quality-assured (QA'd) values of that

parameter immediately preceding and immediately following the missing data incident. If the "after" value is not obtained by the end of the year, you may use the "before" value for substitution. If no QA'd data is available prior to the missing data incident, you must use the first QA'd value obtained after the missing data period.

For each missing value of a parameter that should have been measured annually, you must repeat the estimation or measurement activity for those sources as soon as possible, including in the subsequent calendar year if missing data are not discovered until after December 31 of the year in which data are collected, until valid data for reporting are obtained. Data developed and/or collected in a subsequent calendar year to substitute for missing data cannot be used for that subsequent year's emissions estimation. Where missing data procedures are used for the previous year, at least 30 days must separate emissions estimation or measurements for the previous year and emissions estimation or measurements for the current year of data collection.

For each missing value of a parameter that should have been measured biannually (every two years), you must conduct the estimation or measurement activity for those sources as soon as possible in the subsequent calendar year if the estimation or measurement was not made in the appropriate year (first year of data collection and every two years thereafter), until valid data for reporting are obtained. Data developed and/or collected in a subsequent calendar year to substitute for missing data cannot be used to alternate or postpone subsequent biannual emissions estimations or measurements.

For the first 6 months of required data collection, facilities that become newly subject to this subpart W or facilities that are currently subject to this subpart W and that acquire new sources from another facility that were not previously subject may use best engineering estimates for any data that cannot be reasonably measured or obtained according to the requirements.

5.7 Data Reporting Requirements

The following information needs to be included in the annual reports in addition to the data in tables 1 through 6. The annual report is due to EPA by March 31 of each year for GHG emissions in the previous calendar year. The reports will be submitted electronically, using the e-GGRT reporting tool.

TABLE 6.
OTHER DATA REPORTING REQUIREMENTS

Data Element	Citation 40 CFR 98	Purpose and Source of Data
Supplier name and physical street address including the city, state, and zip code.	3(c)(1)	Data reporting requirement in E-GGRT; Agent entry
Year and months covered by the report.	3(c)(2)	Data reporting requirement in E-GGRT; Agent entry
Date of submittal.	3(c)(3)	Data reporting requirement in E-GGRT; Agent entry
A written explanation, as required under §98.3(e) if you change emission calculation methodologies during the reporting period.	3(c)(6)	Data reporting requirement in E-GGRT; Agent entry
Each data element for which a missing data procedure was used according to the procedures of an applicable subpart and the total number of hours in the year that a missing data procedure was used for each data element.	3(c)(8)	Data reporting requirement in E-GGRT; Agent entry
A signed and dated certification statement provided by the designated representative of the owner or operator, according to the requirements of §98.4(e)(1).	3(c)(9)	Data reporting requirement in E-GGRT; DR/ADR verification
Report annual emissions in metric tons of CO_2e for each GHG separately.	236(a)(8)	Data reporting requirement in E-GGRT; Output from Subpart W Reporting Form Introduction Tab
Quantity of natural gas received at all custody transfer stations in the calendar year (mscf)	236(aa)(9)(i)	Output of Subpart NN report for NSPM
Quantity of natural gas withdrawn from in-system storage in the calendar year (mscf)	236(aa)(9)(ii)	Output of Subpart NN report for NSPM
Quantity of natural gas added to in-system storage in the calendar year (mscf)	236(aa)(9)(iii)	Output of Subpart NN report for NSPM
Quantity of natural gas delivered to end users (mscf)	236(aa)(9)(iv)	EIA-176 Report and as reported in Subpart NN report for NSPM
Quantity of natural gas transferred to third parties such as other LDCs or pipelines (mscf)	236(aa)(9(v)	Output of Subpart NN report for NSPM
Quantity of natural gas consumed by the LDC for operational purposes (mscf)	236(aa)(9)(vi)	Annual Site Report from Facilities and Retail and Customer Accounting
Estimated quantity of gas stolen in the calendar year (mscf)	236(aa)(9)(vii)	Collections Groups North and South provide Gas Diversion data, or volume of gas as determined from historic averages from each system.

LOCATION AND FORMAT OF REQUIRED RECORDS

The natural gas distribution system (LDC) is required to keep additional records that are not submitted with the annual report. The LDC must be able to present these records in case of an inspection by the EPA. All records must be retained for a period of three years.

TABLE 7.
REQUIRED RECORDS

Record Type	Citation 40 CFR 98	Department Maintaining Records	Format of Records	Location of Records
A list of all units, operations, processes, and activities for which GHG emission were calculated.	3(g)(1)	Environmental Services	Electronic	Environmental Services shared files for the applicable reporting year.
The data used to calculate the GHG emissions for each unit, operation, process, and activity, categorized by fuel or material type. These data include but are not limited to the following information: (i) The GHG emissions calculations and methods used. (ii) Analytical results for the development of site-specific emissions factors. (iii) The results of all required analyses for high heat value, carbon content, and other required fuel or feedstock parameters. (iv) Any facility operating data or process information used for the GHG emission calculations.	3(g)(2)	Environmental Services	Electronic	Environmental Services shared files for the applicable reporting year.
The annual GHG reports	3(g)(3)	Environmental Services	Electronic	Environmental Services shared files for the applicable reporting year.
Missing data computations. For each missing data event, also retain a record of the cause of the event and the corrective actions taken to restore malfunctioning monitoring equipment.	3(g)(4)	Environmental Services	Electronic	Environmental Services shared files for the applicable reporting year.
A written GHG Monitoring Plan.	3(g)(5)	Environmental Services	Electronic	Environmental Services common Mandatory Reporting Rule shared files
The results of all required certification and quality assurance tests of continuous monitoring systems, fuel flow meters, and other instrumentation used to provide data for the GHGs reported under this part.	3(g)(6)	Gas Engineering	Electronic	Gas Engineering

Record Type	Citation 40 CFR 98	Department Maintaining Records	Format of Records	Location of Records
Maintenance records for all continuous monitoring systems, flow meters, and other instrumentation used to provide data for the GHGs reported under this part.	3(g)(7)	Gas Engineering	Electronic	Gas Engineering
Dates on which measurements were conducted	237(a)	Gas Engineering	Electronic	Gas Engineering
Results of all emissions detected and measurements	237(b)	Gas Engineering	Electronic	Gas Engineering
Calibration reports for detection and measurement instruments used	237(c)	Gas Engineering	Electronic	Gas Engineering
Inputs and outputs of calculations or emissions computer model runs for engineering estimations of emissions	237(d)	Environmental Services	Electronic	Environmental Services shared files for the applicable reporting year.
The records required under §98.3(g)(2)(i) shall include an explanation of how company records, engineering estimation, or best available information are used to calculate each applicable parameter under this subpart.	237(e)	Environmental Services	Electronic	Environmental Services common Mandatory Reporting Rule shared files

ADDITIONAL DOCUMENTATION

This section should include an explanation of any assumptions used for the emissions calculations.

- Analyst to add information as necessary.

5.8 Monitoring Plan Revision History

TABLE8.
DOCUMENTATION OF REVISIONS TO MONITORING PLAN

Plan Version	Date of Revision	Element Revised	Personnel Completing Revision
1.0	02/27/2011	Original Plan	Laura Doze, Environmental Policy & Services
2.0	05/06/2013	Updated to current version of regulation, completed missing data elements	Jonathan Amos, Environmental Policy & Services
3.0	9/26/2014	Updated responsible personnel as warranted. Incorporated Greenhouse Gas Reporting Rule Technical revisions from 2011 and 11/29/2013, updated Data Requirements Tables 3 and 4, updated list of combustion units, and added additional Subpart C equations.	Amanda Kuhl and Jonathan Amos, Environmental Services
4.0	12/14/15	Updated responsible personnel as warranted.	Judy Herman, Environmental Services Conrad Miller, Gas Capacity Planning XS
5.0	09/30/2016	Updated responsible personnel. Incorporated regulation changes throughout document for new onshore natural gas transmission pipeline blowdowns segment and changes to regulation for leak detection, population count, and stationary combustion. Updated T-D transfer station survey list.	Leslie Strong, Environmental Services; Michael Miller, Gas Capacity Planning XS
6.0	04/30/2018	Updated responsible personnel, regulatory references, equipment leak surveys, combustion sources, and quality assurance sections.	Judy Herman, Environmental Services (contractor) and Lacey Johnson Environmental Services
6.1	10/31/2018	Updated Table 1, Emissions Calculations, and Appendix C	Lacey Johnson, Environmental Services; Mike Miller and Rich Hosch, Gas Capacity Planning XS
6.2	9/27/2019	Updated responsible personnel added Moorhead heater to Table 5.	Steve Castagneri, Environmental Services; David Malek, Gas Engineering; DeeDee Brook, Gas Capacity Planning
6.3	11/30/2020	Updated responsible personnel and location of records. Updated EPA form names and data upload process. Updated section 2.3, Updated Table 7, stolen gas purposes and sources of data.	Steve Castagneri, Environmental Services; David Malek, Gas Engineering, DeeDee Brook & Mike Miller, Gas Capacity Planning

6.4	9/10/2021	Updated DR/ADR, responsible personnel, list of stationary combustion units.	Steve Castagneri, Environmental Services
6.5	10/31/2022	Updated DR/ADR, & location of files. Removed appendices A,B,C due to redundancy, refer to current year calculation tool, reporting from, supporting files, and relevant sections of Part 98, Subpart W for information on leak survey stations, default EFs, and most current leak survey forms.	Steve Castagneri, Environmental Services
6.6	9/14/2023	Updated DR/ADR table	Steve Castagneri, Environmental Services
6.7	9/30/2024	Updated DR information in Table 1	Steve Castagneri, Environmental Services
6.8	9/22/2025	Updated the following sections and tables to account for 2024 EPA Subpart W updates: Sections 4.1, 4.1.1, 4.1.2. Updated tables 4,5 and 6 and renumbered all tables. Removed section 5.6 as it was no longer applicable. Added sections 4.1.4 through 4.1.7, which describe the calculation and reporting of emissions for newly added sources.	Steve Castagneri, Environmental Services

MN State	Residential	Commercial	Industrial	Industrial - Transportation	Electric Power	Electric Power - Transportation	Total Retail
2010	33,497,830	17,468,462	15,690,611	8,338,134	859,431	7,411,399	83,265,867
2011	32,244,110	18,068,844	15,476,782	9,601,320	93,075	7,308,574	82,792,705
2012	29,711,564	15,950,952	13,110,482	9,999,113	147,404	16,480,147	85,399,662
2013	38,574,786	20,498,009	14,391,565	10,067,807	132,419	14,801,412	98,465,998
2014	40,552,201	22,227,846	14,337,854	10,294,367	136,024	7,590,634	95,138,926
2015	33,008,429	18,755,418	12,522,242	10,767,338	93,559	14,342,337	89,489,323
2016	31,966,021	17,790,193	12,808,241	10,275,343	132,343	17,004,968	89,977,109
2017	34,302,118	19,808,250	13,238,386	12,078,944	115,221	14,862,689	94,405,608
2018	39,229,258	22,989,032	13,900,550	12,016,596	150,539	24,665,369	112,951,344
2019	40,616,140	23,650,182	14,023,134	12,124,914	196,880	38,153,151	128,764,401
2020	37,155,304	21,411,798	12,712,335	12,714,980	193,974	30,873,665	115,062,056
2021	35,286,911	20,733,036	11,466,496	12,849,790	160,465	38,287,916	118,784,614
2022	41,156,174	24,984,741	11,631,395	13,127,093	156,365	20,192,049	111,247,817
2023	35,470,580	22,242,132	11,117,304	12,708,227	152,463	30,310,131	112,000,837
2024	33,038,318	20,747,781	9,977,144	11,262,989	108,948	40,795,821	115,931,001

CERTIFICATE OF SERVICE

I, Victor Barreiro, hereby certify that I have this day served copies of the foregoing document on the attached list of persons.

xx by depositing a true and correct copy thereof, properly enveloped with postage paid in the United States mail at Minneapolis, Minnesota

xx electronic filing

DOCKET NOS. **E999/CI-07-1199**
G008, G002, G011/CI-23-117
G999/CI-21-565

Dated this 21st day of November 2025

/s/
_____
Victor Barreiro
Regulatory Administrator

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
1	Sasha	Bergman	sasha.bergman@state.mn.us		Public Utilities Commission		Electronic Service		No	7-1199Official
2	Jon	Brekke	jbrekke@grenergy.com	Great River Energy		12300 Elm Creek Boulevard Maple Grove MN, 55369-4718 United States	Electronic Service		No	7-1199Official
3	Matthew	Brodin	mbrodin@allete.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	7-1199Official
4	Christina	Brusven	cbrusven@fredlaw.com	Fredrikson Byron		60 S 6th St Ste 1500 Minneapolis MN, 55402-4400 United States	Electronic Service		No	7-1199Official
5	Mike	Bull	mike.bull@state.mn.us		Public Utilities Commission	121 7th Place East, Suite 350 St. Paul MN, 55101 United States	Electronic Service		Yes	7-1199Official
6	Generic	Commerce Attorneys	commerce.attorneys@ag.state.mn.us		Office of the Attorney General - Department of Commerce	445 Minnesota Street Suite 1400 St. Paul MN, 55101 United States	Electronic Service		No	7-1199Official
7	Stacy	Dahl	sdahl@minnkota.com	Minnkota Power Cooperative, Inc.		5301 32nd Ave S Grand Forks ND, 58201 United States	Electronic Service		No	7-1199Official
8	Curt	Dieren	curt.dieren@dgr.com	L&O Power Cooperative		1302 S Union St Rock Rapids IA, 51246 United States	Electronic Service		No	7-1199Official
9	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		Yes	7-1199Official
10	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	7-1199Official
11	Edward	Garvey	garveyed@aol.com	Residence		32 Lawton St Saint Paul MN, 55102	Electronic Service		No	7-1199Official

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						United States				
12	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	7-1199Official
13	Joe	Hoffman	ja.hoffman@smmpa.org	SMMPA		500 First Ave SW Rochester MN, 55902-3303 United States	Electronic Service		No	7-1199Official
14	Joylyn C	Hoffman Malueg	joylyn.hoffmanmalueg@wecenergygroup.com	Minnesota Energy Resources		2685 145th St W Rosemount MN, 55068 United States	Electronic Service		No	7-1199Official
15	Casey	Jacobson	cjacobson@bepc.com	Basin Electric Power Cooperative		1717 East Interstate Avenue Bismarck ND, 58501 United States	Electronic Service		No	7-1199Official
16	Christine	Marquis	regulatory.records@xcelenergy.com	Xcel Energy		414 Nicollet Mall MN1180-07-MCA Minneapolis MN, 55401 United States	Electronic Service		No	7-1199Official
17	Craig	McDonnell	craig.mcdonnell@state.mn.us		Minnesota Pollution Control Agency	520 Lafayette Road St. Paul MN, 55101 United States	Electronic Service		No	7-1199Official
18	David	Moeller	dmoeller@allete.com	Minnesota Power			Electronic Service		No	7-1199Official
19	Dalene	Monsebroten	dalene.monsebroten@nmpagency.com	Northern Municipal Power Agency		123 2nd St W Thief River Falls MN, 56701 United States	Electronic Service		No	7-1199Official
20	Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP		33 South Sixth St Ste 4200 Minneapolis MN, 55402 United States	Electronic Service		No	7-1199Official
21	Peter	Nelson	peter.nelson@americanexperiment.org	Center of the American Experiment		8441 Wayzata Boulevard Suite 350 Golden Valley MN, 55426 United States	Electronic Service		No	7-1199Official

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
22	David	Niles	david.niles@avantenergy.com	Minnesota Municipal Power Agency		220 South Sixth Street Suite 1300 Minneapolis MN, 55402 United States	Electronic Service		No	7-1199Official
23	Samantha	Norris	samanthanorris@alliantenergy.com	Interstate Power and Light Company		200 1st Street SE PO Box 351 Cedar Rapids IA, 52406-0351 United States	Electronic Service		No	7-1199Official
24	Russell	Olson	rolson@hcpd.com	Heartland Consumers Power District		PO Box 248 Madison SD, 57042-0248 United States	Electronic Service		No	7-1199Official
25	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	7-1199Official
26	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	7-1199Official
27	Robert K.	Sahr	bsahr@eastriver.coop	East River Electric Power Cooperative		P.O. Box 227 Madison SD, 57042 United States	Electronic Service		No	7-1199Official
28	Kay	Schraeder	kschraeder@minnkota.com	Minnkota Power		5301 32nd Ave S Grand Forks ND, 58201 United States	Electronic Service		No	7-1199Official
29	Pat	Treseler	pat.jcplaw@comcast.net	Paulson Law Office LTD		4445 W 77th Street Suite 224 Edina MN, 55435 United States	Electronic Service		No	7-1199Official
30	Karen	Tyler	ktyler@nd.gov	Industrial Commission of North Dakota		14th Floor 600 E. Boulevard Avenue, Dept. 405 Bismarck ND, 58505 United States	Electronic Service		No	7-1199Official
31	Elizabeth	Wefel	eawefel@flaherty-hood.com	Missouri River Energy Services		525 Park St Ste 470 Saint Paul MN, 55103 United States	Electronic Service		No	7-1199Official

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
32	Robyn	Woeste	robynwoeste@alliantenergy.com	Interstate Power and Light Company		200 First St SE Cedar Rapids IA, 52401 United States	Electronic Service		No	7-1199Official

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
1	Michael	Ahern	ahern.michael@dorsey.com	Dorsey & Whitney, LLP		50 S 6th St Ste 1500 Minneapolis MN, 55402-1498 United States	Electronic Service		No	21-565Official Service List
2	Elizabeth	Aldrich	laldrich@bluesource.com	Bluesource		15669 WATERLOO CIR TRUCKEE CA, 96161 United States	Electronic Service		No	21-565Official Service List
3	Gary	Ambach	gambach@slipstreaminc.org	Slipstream, Inc.		8973 SW Village Loop Chanhassen MN, 55317 United States	Electronic Service		No	21-565Official Service List
4	Kristine	Anderson	kanderson@greatermngas.com	Greater Minnesota Gas, Inc.		1900 Cardinal Lane PO Box 798 Faribault MN, 55021 United States	Electronic Service		No	21-565Official Service List
5	Susan	Arntz	sarntz@mankatomn.gov	City Of Mankato		P.O. Box 3368 Mankato MN, 56002-3368 United States	Electronic Service		No	21-565Official Service List
6	Mara	Ascheman	mara.k.ascheman@xcelenergy.com	Xcel Energy		414 Nicollet Mall Fl 5 Minneapolis MN, 55401 United States	Electronic Service		No	21-565Official Service List
7	Ryan	Baumtrog	ryan.baumtrog@state.mn.us		Minnesota Dept of Housing	400 Wabasha St N Ste 400 St. Paul MN, 55102 United States	Electronic Service		No	21-565Official Service List
8	Jessica L	Bayles	jessica.bayles@stoel.com	Stoel Rives LLP		1150 18th St NW Ste 325 Washington DC, 20036 United States	Electronic Service		No	21-565Official Service List
9	Randall	Beck	rbeck3@wm.com	Waste Management Renewable Energy, L.L.C.		1021 Main St Houston TX, 77002 United States	Electronic Service		No	21-565Official Service List
10	David	Bender	dbender@earthjustice.org	Earthjustice		1001 G Street NW Suite 1000 Washington DC, 20001 United States	Electronic Service		No	21-565Official Service List
11	Christina	Benning	christina.benning@centerpointenergy.com	CenterPoint Energy Minnesota Gas			Electronic Service		No	21-565Official Service List
12	Alicia	Berger	alicia.e.berger@xcelenergy.com	Xcel Energy		414 Nicollet Mall Minneapolis MN, 55401 United States	Electronic Service		No	21-565Official Service List
13	Sasha	Bergman	sasha.bergman@state.mn.us		Public Utilities Commission		Electronic Service		Yes	21-565Official Service List
14	Mike	Boughner	michael.l.boughner@xcelenergy.com	Xcel Energy		414 Nicollet Mall Minneapolis MN, 55401 United States	Electronic Service		No	21-565Official Service List
15	Tim	Brinkman	tim.brinkman@gvtel.com	Garden Valley Telephone Company d/b/a Garden Valley Technologies		206 Vance Ave S PO Box 259 Erskine MN, 56535 United States	Electronic Service		No	21-565Official Service List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
16	Matthew	Brodin	mbrodin@allete.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	21-565Official Service List
17	Mike	Bull	mike.bull@state.mn.us		Public Utilities Commission	121 7th Place East, Suite 350 St. Paul MN, 55101 United States	Electronic Service		Yes	21-565Official Service List
18	Roderick	Cameron	roderick.cameron@ftr.com	Frontier Communications of Minnesota, Inc.		180 South Clinton Avenue Rochester NY, 14646 United States	Electronic Service		No	21-565Official Service List
19	Andrew	Campeau	andyc@mnpipetrades.com	Minnesota Pipe Trades Association		353 W 7th street st paul MN, 55102 United States	Electronic Service		No	21-565Official Service List
20	James	Canaday	james.canaday@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	Suite 1400 445 Minnesota St. St. Paul MN, 55101 United States	Electronic Service		No	21-565Official Service List
21	Thomas	Carlson	thomas.carlson@edf-re.com	EDF Renewable Energy		10 2nd St NE Ste. 400 Minneapolis MN, 55413 United States	Electronic Service		No	21-565Official Service List
22	Melodee	Carlson Chang	melodee.carlsonchang@centerpointenergy.com	CenterPoint Energy		505 Nicollet Mall Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
23	Olivia	Carroll	oliviac@cubminnesota.org	Citizens Utility Board of Minnesota		332 Minnesota St W1360 St. Paul MN, 55101 United States	Electronic Service		No	21-565Official Service List
24	Margaret	Cherne-Hendrick	cherne-hendrick@fresh-energy.org			Fresh Energy 408 Saint Peter Street, Suite 220 St. Paul MN, 55102 United States	Electronic Service		No	21-565Official Service List
25	Cody	Chilson	cchilson@greatermngas.com	Greater Minnesota Gas, Inc. & Greater MN Transmission, LLC		1900 Cardinal Ln PO Box 798 Faribault MN, 55021 United States	Electronic Service		No	21-565Official Service List
26	Ray	Choquette	rchoquette@agp.com	Ag Processing Inc.		12700 West Dodge Road PO Box 2047 Omaha NE, 68103-2047 United States	Electronic Service		No	21-565Official Service List
27	John	Coffman	john@johncoffman.net	AARP		871 Tuxedo Blvd. St, Louis MO, 63119-2044 United States	Electronic Service		No	21-565Official Service List
28	Sheri	Comer	sheri.comer@ftr.com	Frontier Communications Corporation		1500 MacCorkle Ave SE Charleston WV, 25396 United States	Electronic Service		No	21-565Official Service List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
29	Generic	Commerce Attorneys	commerce.attorneys@ag.state.mn.us		Office of the Attorney General - Department of Commerce	445 Minnesota Street Suite 1400 St. Paul MN, 55101 United States	Electronic Service		Yes	21-565Official Service List
30	Jean	Comstock	jean.comstock.dbcc@gmail.com	St. Paul 350		729 6th St E St. Paul MN, 55106 United States	Electronic Service		No	21-565Official Service List
31	Noah	Cordoba	noah@buildingdecarb.org	Building Decarbonization Coalition		33594 Herring View Drive Lewes DE, 19958 United States	Electronic Service		No	21-565Official Service List
32	George	Crocker	gwillc@nawo.org	North American Water Office		5093 Keats Avenue Lake Elmo MN, 55042 United States	Electronic Service		No	21-565Official Service List
33	Seth	DeMerritt	seth.demerritt@centerpointenergy.com	CenterPoint Energy Minnesota Gas		505 Nicollet Mall Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
34	James	Denniston	james.r.denniston@xcelenergy.com	Xcel Energy Services, Inc.		414 Nicollet Mall, 401-8 Minneapolis MN, 55401 United States	Electronic Service		No	21-565Official Service List
35	Tom	Dicklich	tdicklich@mntrades.org	Minnesota Building & Construction Trades Council		353 W. 7th St Rm 105 Saint Paul MN, 55102 United States	Electronic Service		No	21-565Official Service List
36	J.	Drake Hamilton	hamilton@fresh-energy.org	Fresh Energy		408 St Peter St Ste 350 Saint Paul MN, 55101 United States	Electronic Service		No	21-565Official Service List
37	Brian	Edstrom	briane@cubminnesota.org	Citizens Utility Board of Minnesota		332 Minnesota St Ste W1360 Saint Paul MN, 55101 United States	Electronic Service		No	21-565Official Service List
38	Caitlin	Eichten	eichten@fresh-energy.org	Fresh Energy		408 St Peter St #350 St. Paul MN, 55102 United States	Electronic Service		No	21-565Official Service List
39	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	21-565Official Service List
40	Sharon	Ferguson	sharon.ferguson@state.mn.us		Department of Commerce	85 7th Place E Ste 280 Saint Paul MN, 55101-2198 United States	Electronic Service		No	21-565Official Service List
41	Mike	Fiterman	mikefiterman@libertydiversified.com	Liberty Diversified International		5600 N Highway 169 Minneapolis MN, 55428-3096 United States	Electronic Service		No	21-565Official Service List
42	Mark	Foster	mark@housingfirstmn.org	Housing First Minnesota		2960 Centre Pointe Drive Roseville MN, 55113 United States	Electronic Service		No	21-565Official Service List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
43	Lucas	Franco	lfranco@liunagroc.com	LIUNA		81 Little Canada Rd E Little Canada MN, 55117 United States	Electronic Service		No	21-565Official Service List
44	Daryll	Fuentes	energy@usg.com	USG Corporation		550 W Adams St Chicago IL, 60661 United States	Electronic Service		No	21-565Official Service List
45	Patrick	Garofalo	pgarofalo@mngrocers.com	Minnesota Grocers Association		1360 Energy Park Drive Suite #300 St Paul MN, 55108 United States	Electronic Service		No	21-565Official Service List
46	Edward	Garvey	garveyed@aol.com	Residence		32 Lawton St Saint Paul MN, 55102 United States	Electronic Service		No	21-565Official Service List
47	James	Gignac	jgignac@ucsusa.org	Union of Concerned Scientists		1 N LaSalle St Ste 1904 Chicago IL, 60602 United States	Electronic Service		No	21-565Official Service List
48	Debbie	Goettel	debbie.goettel@hennepin.us	Partnership on Waste and Energy		2785 White Bear Ave N Ste 350 Maplewood MN, 55109 United States	Electronic Service		No	21-565Official Service List
49	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	21-565Official Service List
50	Laura	Haight	lhaight@pfpi.net	Partnership for Policy Integrity		POB 2513 Amherst MA, 01004 United States	Electronic Service		No	21-565Official Service List
51	Kim	Havey	kim.havey@minneapolismn.gov	City of Minneapolis		350 South 5th Street, Suite 315M Minneapolis MN, 55415 United States	Electronic Service		No	21-565Official Service List
52	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	21-565Official Service List
53	Adam	Heinen	aheinen@dakotaelectric.com	Dakota Electric Association		4300 220th St W Farmington MN, 55024 United States	Electronic Service		No	21-565Official Service List
54	Annete	Henkel	mui@mnutilityinvestors.org	Minnesota Utility Investors		413 Wacouta Street #230 St.Paul MN, 55101 United States	Electronic Service		No	21-565Official Service List
55	Joylyn C	Hoffman Malueg	joylyn.hoffmanmalueg@wecenergygroup.com	Minnesota Energy Resources		2685 145th St W Rosemount MN, 55068 United States	Electronic Service		No	21-565Official Service List
56	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	21-565Official Service List
57	Megan	Hoye	megan.hoye@minneapolismn.gov	City of Minneapolis		505 Fourth Ave S.	Electronic Service		No	21-565Official

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						Minneapolis MN, 55415 United States				Service List
58	Jon	Hunter	jon.hunter@lung.org	American Lung Association		490 Concordia Ave Saint Paul MN, 55103 United States	Electronic Service		No	21-565Official Service List
59	Travis	Jacobson	travis.jacobson@mdu.com	Great Plains Natural Gas Company		400 N 4th St Bismarck ND, 58501 United States	Electronic Service		No	21-565Official Service List
60	John	Jaimez	john.jaimez@hennepin.us			Environment & Energy Department 701 4th Ave S Minneapolis MN, 55415 United States	Electronic Service		No	21-565Official Service List
61	Alan	Jenkins	aj@jenkinsatlaw.com	Jenkins at Law		2950 Yellowtail Ave. Marathon FL, 33050 United States	Electronic Service		No	21-565Official Service List
62	Richard	Johnson	rick.johnson@lawmoss.com	Moss & Barnett		150 S. 5th Street Suite 1200 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
63	Sarah	Johnson Phillips	sjphillips@stoel.com	Stoel Rives LLP		33 South Sixth Street Suite 4200 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
64	Brendan	Jordan	bjordan@gpisd.net	Great Plains Institute & Bioeconomy Coalition of MN		2801 21st Ave S Ste 220 Minneapolis MN, 55407 United States	Electronic Service		No	21-565Official Service List
65	David	Kailbourne	edk@revlng.com	REV LNG, LLC		1002 Empson Rd Ulysses PA, 16948 United States	Electronic Service		No	21-565Official Service List
66	D	Kalmon	dkalmon@mwmo.org	Mississippi Watershed Management Organization		2522 Marshall St NE Minneapolis MN, 55418-3329 United States	Electronic Service		No	21-565Official Service List
67	William	Kenworthy	will@votesolar.org			1 South Dearborn St Ste 2000 Chicago IL, 60603 United States	Electronic Service		No	21-565Official Service List
68	Samuel B.	Ketchum	sketchum@kennedy-graven.com	Kennedy & Graven, Chartered		150 S 5th St Ste 700 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
69	Hudson	Kingston	hudson@curemn.org			PO Box 712 Ely MN, 55731 United States	Electronic Service		No	21-565Official Service List
70	Frank	Kohlasch	frank.kohlasch@state.mn.us		Minnesota Pollution Control Agency	520 Lafayette Rd N. St. Paul MN, 55155 United States	Electronic Service		No	21-565Official Service List
71	Mark	Kresowik	mkresowik@aceee.org	American Council for an Energy-Efficient Economy		529 14th St NW, Suite 600 Washington DC, 20045 United States	Electronic Service		No	21-565Official Service List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
72	Nicolle	Kupser	nkupser@greatermngas.com	Greater Minnesota Gas, Inc.		1900 Cardinal Ln PO Box 798 Faribault MN, 55021 United States	Electronic Service		No	21-565Official Service List
73	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	21-565Official Service List
74	Carmel	Laney	carmel.laney@stoel.com	Stoel Rives LLP		33 South Sixth Street Suite 4200 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
75	Peder	Larson	plarson@larkinhoffman.com	Larkin Hoffman Daly & Lindgren, Ltd.		8300 Norman Center Drive Suite 1000 Bloomington MN, 55437 United States	Electronic Service		No	21-565Official Service List
76	Robert	Lems	administration@dmt-cgs.com	DMT Clear Gas Solutions		19125 SW 125th Ct Tualatin OR, 97062 United States	Electronic Service		No	21-565Official Service List
77	Rachel	Leonard	rachel.leonard@ci.monticello.mn.us	City of Monticello		505 Walnut St Ste 1 Monticello MN, 55362 United States	Electronic Service		No	21-565Official Service List
78	Annie	Levenson Falk	anniel@cubminnesota.org	Citizens Utility Board of Minnesota		332 Minnesota Street, Suite W1360 St. Paul MN, 55101 United States	Electronic Service		No	21-565Official Service List
79	Margaret	Levin	margaret.levin@sierraclub.org	Sierra Club North Star Chapter		2300 Myrtle Ave Ste 260 St. Paul MN, 55114 United States	Electronic Service		No	21-565Official Service List
80	Amy	Liberkowski	amy.a.liberkowski@xcelenergy.com	Xcel Energy		414 Nicollet Mall 7th Floor Minneapolis MN, 55401-1993 United States	Electronic Service		No	21-565Official Service List
81	Sydnie	Lieb	sydnie.lieb@state.mn.us		Department of Commerce	85 7th Place East, Suite 280 St. Paul MN, 55101 United States	Electronic Service		No	21-565Official Service List
82	Jason	Loos	jason.loos@centerpointenergy.com	CenterPoint Energy Resources Corp.		505 Nicollet Mall 3rd Floor Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
83	Kavita	Maini	kmaini@wi.rr.com	KM Energy Consulting, LLC		961 N Lost Woods Rd Oconomowoc WI, 53066 United States	Electronic Service		No	21-565Official Service List
84	Christine	Marquis	regulatory.records@xcelenergy.com	Xcel Energy		414 Nicollet Mall MN1180-07-MCA Minneapolis MN, 55401 United States	Electronic Service		No	21-565Official Service List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
85	Emily	Marshall	emarshall@lourismarshall.com	Miller O'Brien Jensen, PA		120 S. 6th Street Suite 2400 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
86	Linda	Martinez	lmartinez@auri.org	Agricultural Utilization Research Institute		null null, null United States	Electronic Service		No	21-565Official Service List
87	Mary	Martinka	mary.a.martinka@xcelenergy.com	Xcel Energy Inc		414 Nicollet Mall 7th Floor Minneapolis MN, 55401 United States	Electronic Service		No	21-565Official Service List
88	Daryl	Maxwell	dmaxwell@hydro.mb.ca	Manitoba Hydro		360 Portage Ave FL 16 PO Box 815, Station Main Winnipeg MB, R3C 2P4 Canada	Electronic Service		No	21-565Official Service List
89	Erica	McConnell	emcconnell@elpc.org	Environmental Law & Policy Center		35 E. Wacker Drive, Suite 1600 Chicago IL, 60601 United States	Electronic Service		No	21-565Official Service List
90	Taylor	McNair	taylor@gridlab.org			668 Capp Street San Francisco CA, 94110 United States	Electronic Service		No	21-565Official Service List
91	Sarah	Mead	sarah.mead@wecenergygroup.com	MERC		null null, null United States	Electronic Service		No	21-565Official Service List
92	Joseph	Meyer	joseph.meyer@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	Bremer Tower, Suite 1400 445 Minnesota Street St Paul MN, 55101-2131 United States	Electronic Service		No	21-565Official Service List
93	Stacy	Miller	stacy.miller@minneapolismn.gov	City of Minneapolis		350 S. 5th Street Room M 301 Minneapolis MN, 55415 United States	Electronic Service		No	21-565Official Service List
94	David	Moeller	dmoeller@allete.com	Minnesota Power			Electronic Service		No	21-565Official Service List
95	Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP		33 South Sixth St Ste 4200 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
96	Evan	Mulholland	emulholland@mncenter.org	Minnesota Center for Environmental Advocacy		1919 University Ave W Ste 515 Saint Paul MN, 55101 United States	Electronic Service		No	21-565Official Service List
97	Alan	Muller	alan@greendel.org	Energy & Environmental Consulting		1110 West Avenue Red Wing MN, 55066 United States	Electronic Service		No	21-565Official Service List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
98	Pouya	Najmaie	najm0001@gmail.com	Cooperative Energy Futures		3416 16th Ave S Minneapolis MN, 55407 United States	Electronic Service		No	21-565Official Service List
99	Carl	Nelson	cnelson@mncee.org	Center for Energy and Environment		212 3rd Ave N Ste 560 Minneapolis MN, 55401 United States	Electronic Service		No	21-565Official Service List
100	David	Niles	david.niles@avantenergy.com	Minnesota Municipal Power Agency		220 South Sixth Street Suite 1300 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
101	Will	Nissen	wnissen@mncee.org	Center for Energy and Environment			Electronic Service		No	21-565Official Service List
102	Curtis	Nordgaard	nordgaard@fresh-energy.org	Fresh Energy		408 Saint Peter Street Suite 350 St Paul MN, 55102 United States	Electronic Service		No	21-565Official Service List
103	Samantha	Norris	samanthanorris@alliantenergy.com	Interstate Power and Light Company		200 1st Street SE PO Box 351 Cedar Rapids IA, 52406-0351 United States	Electronic Service		No	21-565Official Service List
104	M. William	O'Brien	bobrien@mojlaw.com	Miller O'Brien Jensen, P.A.		120 S 6th St Ste 2400 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
105	Ric	O'Connell	ric@gridlab.org	GridLab		2120 University Ave Berkeley CA, 94704 United States	Electronic Service		No	21-565Official Service List
106	Carol A.	Overland	overland@legalectric.org	Legalectric - Overland Law Office		1110 West Avenue Red Wing MN, 55066 United States	Electronic Service		No	21-565Official Service List
107	Greg	Palmer	gpalmer@greatermngas.com	Greater Minnesota Gas, Inc.		1900 Cardinal Ln PO Box 798 Faribault MN, 55021 United States	Electronic Service		No	21-565Official Service List
108	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	21-565Official Service List
109	Antonio	Parisi	aparisi@sacyr.com	Sacyr Environment USA LLC		3330 Washington Blvd Ste 400 Arlington VA, 22201 United States	Electronic Service		No	21-565Official Service List
110	Bret	Pence	bretpence@mnipl.org	Minnesota Interfaith Power and Light		106 Waverly Place Duluth MN, 55803 United States	Electronic Service		No	21-565Official Service List
111	Lisa	Peterson	lisa.r.peterson@xcelenergy.com			414 Nicollet Mall FL 7 Minneapolis MN, 55401 United States	Electronic Service		No	21-565Official Service List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
112	Catherine	Phillips	catherine.phillips@wecenergygroup.com	Minnesota Energy Resources		231 West Michigan St Milwaukee WI, 53203 United States	Electronic Service		No	21-565Official Service List
113	J.	Porter	greg.porter@nngco.com	Northern Natural Gas Company		1111 South 103rd St Omaha NE, 68124 United States	Electronic Service		No	21-565Official Service List
114	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	21-565Official Service List
115	Lauren	Reeg	lreeg@rmi.org	RMI		806 N Pinyon Ct. Hartland WI, 53029 United States	Electronic Service		No	21-565Official Service List
116	Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	1400 BRM Tower 445 Minnesota St St. Paul MN, 55101-2131 United States	Electronic Service		Yes	21-565Official Service List
117	Kevin	Reuther	kreuther@mncenter.org	MN Center for Environmental Advocacy		26 E Exchange St, Ste 206 St. Paul MN, 55101-1667 United States	Electronic Service		No	21-565Official Service List
118	Nathaniel	Runke	nrunke@local49.org			611 28th St. NW Rochester MN, 55901 United States	Electronic Service		No	21-565Official Service List
119	Bjorgvin	Saevarsson	bjorgvin@yorthgroup.com	Yorth		500 East Grant Street 1207 #1207 Minneapolis MN, 55404 United States	Electronic Service		No	21-565Official Service List
120	Kevin	Saville	kevin.saville@ftr.com	Citizens/Frontier Communications		2378 Wilshire Blvd. Mound MN, 55364 United States	Electronic Service		No	21-565Official Service List
121	Elizabeth	Schmiesing	eschmiesing@winthrop.com	Winthrop & Weinstine, P.A.		225 South Sixth Street Suite 3500 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
122	Kathleen	Schuler	kathleen@hpforhc.org	Health Professionals for a Healthy Climate		Health Professionals for a Healthy Climate PO Box 583013 Minneapolis MN, 55458-3013 United States	Electronic Service		No	21-565Official Service List
123	Douglas	Seaton	doug.seaton@umwlc.org	Upper Midwest Law Center		8421 Wayzata Blvd Ste 300 Golden Valley MN, 55426 United States	Electronic Service		No	21-565Official Service List
124	Patrick	Serfass	pserfass@ttcorp.com	American Biogas Council		1211 Connecticut Ave NW Ste 650 Washington DC, 20036 United States	Electronic Service		No	21-565Official Service List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
125	Patrick	Serfass	info@americanbiogascouncil.org	American Biogas Council		1211 Connecticut Ave NW Ste 650 Washington DC, 20036 United States	Electronic Service		No	21-565Official Service List
126	Janet	Shaddix Elling	jshaddix@janetshaddix.com	Shaddix And Associates		7400 Lyndale Ave S Ste 190 Richfield MN, 55423 United States	Electronic Service		No	21-565Official Service List
127	George	Shardlow	george@energycents.org	Energy CENTS Coalition		823 E. 7th Street Saint Paul MN, 55106 United States	Electronic Service		No	21-565Official Service List
128	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	21-565Official Service List
129	Beth	Smith	bsmith@greatermankato.com	Greater Mankato Growth		1961 Premier Dr Ste 100 Mankato MN, 56001 United States	Electronic Service		No	21-565Official Service List
130	Joshua	Smith	joshua.smith@sierraclub.org			85 Second St FL 2 San Francisco CA, 94105 United States	Electronic Service		No	21-565Official Service List
131	Ken	Smith	ken.smith@districtenergy.com	District Energy St. Paul Inc.		76 W Kellogg Blvd St. Paul MN, 55102 United States	Electronic Service		No	21-565Official Service List
132	Beth	Soholt	bsoholt@cleangridalliance.org	Clean Grid Alliance		570 Asbury Street Suite 201 St. Paul MN, 55104 United States	Electronic Service		No	21-565Official Service List
133	Anna	Sommer	asommer@energyfuturesgroup.com	Energy Futures Group		PO Box 692 Canton NY, 13617 United States	Electronic Service		No	21-565Official Service List
134	Peggy	Sorum	peggy.sorum@centerpointenergy.com	CenterPoint Energy		505 Nicollet Mall Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
135	Mark	Spurr	mspurr@fvbenergy.com	International District Energy Association		222 South Ninth St., Suite 825 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
136	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	21-565Official Service List
137	Byron E.	Starns	byron.starns@stinson.com	STINSON LLP		50 S 6th St Ste 2600 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
138	Richard	Stasik	richard.stasik@wecenergygroup.com	Minnesota Energy Resources Corporation (HOLDING)		231 West Michigan St - P321 Milwaukee WI, 53203 United States	Electronic Service		No	21-565Official Service List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
139	Kristin	Stastny	kstastny@taftlaw.com	Taft Stettinius & Hollister LLP		2200 IDS Center 80 South 8th Street Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
140	Kent	Sulem	ksulem@mmua.org			3131 Fernbrook Ln N Ste 200 Plymouth MN, 55447-5337 United States	Electronic Service		No	21-565Official Service List
141	Matthew	Tomich	tomich@energy-vision.org	Energy Vision		138 E 13th St New York NY, 10003 United States	Electronic Service		No	21-565Official Service List
142	Julie	Voeck	julie.voeck@nee.com	NextEra Energy Resources, LLC		700 Universe Blvd Juno Beach FL, 33408 United States	Electronic Service		No	21-565Official Service List
143	Amelia	Vohs	avohs@mncenter.org	Minnesota Center for Environmental Advocacy		1919 University Avenue West Suite 515 St. Paul MN, 55104 United States	Electronic Service		No	21-565Official Service List
144	Sam	Wade	sam@rngcoalition.com	Coalition for Renewable Natural Gas		1017 L Street #513 Sacramento CA, 95814 United States	Electronic Service		No	21-565Official Service List
145	Jenna	Warmuth	jenna@rewiringamerica.org	Rewiring America		3218 Georgia Ave NW, Suite 1 Washington DC, 20011 United States	Electronic Service		No	21-565Official Service List
146	Nicole	Westling	nicole.westling@state.mn.us		Department of Commerce	85 7th Place E Suite 280 St Paul MN, 55001 United States	Electronic Service		No	21-565Official Service List
147	Casey	Whelan	cwhelan@kinectenergy.com	Kinect Energy Group		605 Highway 169 N Ste 1200 Plymouth MN, 55441 United States	Electronic Service		No	21-565Official Service List
148	Laurie	Williams	laurie.williams@sierraclub.org	Sierra Club		Environmental Law Program 1536 Wynkoop St Ste 200 Denver CO, 80202 United States	Electronic Service		No	21-565Official Service List
149	Joseph	Windler	jwindler@winthrop.com	Winthrop & Weinstine		225 South Sixth Street, Suite 3500 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
150	Tim	Wulling	t.wulling@earthlink.net			1495 Raymond Ave. Saint Paul MN, 55108 United States	Electronic Service		No	21-565Official Service List
151	Mariko	Yatsuhashi	myatsuhashi@mncee.org	Center for Energy and Environment		212 N 3rd Ave Suite 560 Minneapolis MN, 55404 United States	Electronic Service		No	21-565Official Service List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
152	Grant	Zimmerman	gzimmerman@ampamericas.com	Amp Americas		811 W Evergreen Ave Ste 201 Chicago IL, 60642 United States	Electronic Service		No	21-565Official Service List
153	Kurt	Zimmerman	kwz@ibew160.org	Local Union #160, IBEW		2909 Anthony Ln St Anthony Village MN, 55418-3238 United States	Electronic Service		No	21-565Official Service List
154	Emily	Ziring	eziring@stlouispark.org	City of St. Louis Park		5005 Minnetonka Blvd St. Louis Park MN, 55416 United States	Electronic Service		No	21-565Official Service List
155	Patrick	Zomer	pat.zomer@lawmoss.com	Moss & Barnett PA		150 S 5th St #1200 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
1	Michael	Ahern	ahern.michael@dorsey.com	Dorsey & Whitney, LLP		50 S 6th St Ste 1500 Minneapolis MN, 55402-1498 United States	Electronic Service		No	23-117Official List
2	Elizabeth	Aldrich	laldrich@bluesource.com	Bluesource		15669 WATERLOO CIR TRUCKEE CA, 96161 United States	Electronic Service		No	23-117Official List
3	Jose	Alvillar	jose@unidos-mn.org	Unidos-MN		null null, null United States	Electronic Service		No	23-117Official List
4	Gary	Ambach	gambach@slipstreaminc.org	Slipstream, Inc.		8973 SW Village Loop Chanhassen MN, 55317 United States	Electronic Service		No	23-117Official List
5	Kristine	Anderson	kanderson@greatermngas.com	Greater Minnesota Gas, Inc.		1900 Cardinal Lane PO Box 798 Faribault MN, 55021 United States	Electronic Service		No	23-117Official List
6	Susan	Arntz	sarntz@mankatomn.gov	City Of Mankato		P.O. Box 3368 Mankato MN, 56002-3368 United States	Electronic Service		No	23-117Official List
7	Mara	Ascheman	mara.k.ascheman@xcelenergy.com	Xcel Energy		414 Nicollet Mall Fl 5 Minneapolis MN, 55401 United States	Electronic Service		No	23-117Official List
8	James H.	Barkley	james.barkley@bakerbotts.com	Baker Botts		910 Louisiana Street Houston TX, 77002-4995 United States	Electronic Service		No	23-117Official List
9	Marisa	Bayer	mbayer@edinamn.gov	City of Edina		4801 W 50th St Edina MN, 55424 United States	Electronic Service		No	23-117Official List
10	Jessica L	Bayles	jessica.bayles@stoel.com	Stoel Rives LLP		1150 18th St NW Ste 325 Washington DC, 20036 United States	Electronic Service		No	23-117Official List
11	Randall	Beck	rbeck3@wm.com	Waste Management Renewable Energy, L.L.C.		1021 Main St Houston TX, 77002 United States	Electronic Service		No	23-117Official List
12	David	Bender	dbender@earthjustice.org	Earthjustice		1001 G Street NW Suite 1000 Washington DC, 20001 United States	Electronic Service		No	23-117Official List
13	Christina	Benning	christina.benning@centerpointenergy.com	CenterPoint Energy Minnesota Gas			Electronic Service		No	23-117Official List
14	Alicia	Berger	alicia.e.berger@xcelenergy.com	Xcel Energy		414 Nicollet Mall Minneapolis MN, 55401 United States	Electronic Service		No	23-117Official List
15	Sasha	Bergman	sasha.bergman@state.mn.us		Public Utilities Commission		Electronic Service		Yes	23-117Official List
16	Mike	Boughner	michael.l.boughner@xcelenergy.com	Xcel Energy		414 Nicollet Mall Minneapolis MN, 55401 United States	Electronic Service		No	23-117Official List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
17	Elizabeth	Brama	ebrama@taftlaw.com	Taft Stettinius & Hollister LLP		2200 IDS Center 80 South 8th Street Minneapolis MN, 55402 United States	Electronic Service		Yes	23-117Official List
18	Jocelyn	Bremer	jocelyn.bremer@minneapolismn.gov	City of Minneapolis		350 S Fifth St Ste 210 Minneapolis MN, 55415 United States	Electronic Service		No	23-117Official List
19	Tim	Brinkman	tim.brinkman@gvtel.com	Garden Valley Telephone Company d/b/a Garden Valley Technologies		206 Vance Ave S PO Box 259 Erskine MN, 56535 United States	Electronic Service		No	23-117Official List
20	Matthew	Brodin	mbrodin@allete.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	23-117Official List
21	Mike	Bull	mike.bull@state.mn.us		Public Utilities Commission	121 7th Place East, Suite 350 St. Paul MN, 55101 United States	Electronic Service		Yes	23-117Official List
22	Roderick	Cameron	roderick.cameron@ftr.com	Frontier Communications of Minnesota, Inc.		180 South Clinton Avenue Rochester NY, 14646 United States	Electronic Service		No	23-117Official List
23	James	Canaday	james.canaday@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	Suite 1400 445 Minnesota St. St. Paul MN, 55101 United States	Electronic Service		No	23-117Official List
24	Thomas	Carlson	thomas.carlson@edf-re.com	EDF Renewable Energy		10 2nd St NE Ste. 400 Minneapolis MN, 55413 United States	Electronic Service		No	23-117Official List
25	Melodee	Carlson Chang	melodee.carlsonchang@centerpointenergy.com	CenterPoint Energy		505 Nicollet Mall Minneapolis MN, 55402 United States	Electronic Service		No	23-117Official List
26	Barbara	Case	barbara.case@state.mn.us		Office of Administrative Hearings	600 N. Robert St. St. Paul MN, 55101 United States	Electronic Service		No	23-117Official List
27	Margaret	Cherne-Hendrick	cherne-hendrick@fresh-energy.org			Fresh Energy 408 Saint Peter Street, Suite 220 St. Paul MN, 55102 United States	Electronic Service		No	23-117Official List
28	Cody	Chilson	cchilson@greatermngas.com	Greater Minnesota Gas, Inc. & Greater MN Transmission, LLC		1900 Cardinal Ln PO Box 798 Faribault MN, 55021 United States	Electronic Service		No	23-117Official List
29	Ray	Choquette	rchoquette@agp.com	Ag Processing Inc.		12700 West Dodge Road PO Box 2047 Omaha NE, 68103-2047 United States	Electronic Service		No	23-117Official List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
30	John	Coffman	john@johncoffman.net	AARP		871 Tuxedo Blvd. St, Louis MO, 63119-2044 United States	Electronic Service		No	23-117Official List
31	Sheri	Comer	sheri.comer@ftr.com	Frontier Communications Corporation		1500 MacCorkle Ave SE Charleston WV, 25396 United States	Electronic Service		No	23-117Official List
32	Generic	Commerce Attorneys	commerce.attorneys@ag.state.mn.us		Office of the Attorney General - Department of Commerce	445 Minnesota Street Suite 1400 St. Paul MN, 55101 United States	Electronic Service		Yes	23-117Official List
33	Jean	Comstock	jean.comstock.dbcc@gmail.com	St. Paul 350		729 6th St E St. Paul MN, 55106 United States	Electronic Service		No	23-117Official List
34	Noah	Cordoba	noah@buildingdecarb.org	Building Decarbonization Coalition		33594 Herring View Drive Lewes DE, 19958 United States	Electronic Service		No	23-117Official List
35	George	Crocker	gwillc@nawo.org	North American Water Office		5093 Keats Avenue Lake Elmo MN, 55042 United States	Electronic Service		No	23-117Official List
36	Leigh	Currie	lcurrie@mncenter.org	Minnesota Center for Environmental Advocacy		1919 University Ave W Ste 515 St. Paul MN, 55104 United States	Electronic Service		No	23-117Official List
37	Seth	DeMerritt	seth.demerritt@centerpointenergy.com	CenterPoint Energy Minnesota Gas		505 Nicollet Mall Minneapolis MN, 55402 United States	Electronic Service		No	23-117Official List
38	James	Denniston	james.r.denniston@xcelenergy.com	Xcel Energy Services, Inc.		414 Nicollet Mall, 401-8 Minneapolis MN, 55401 United States	Electronic Service		No	23-117Official List
39	Tom	Dicklich	tdicklich@mntrades.org	Minnesota Building & Construction Trades Council		353 W. 7th St Rm 105 Saint Paul MN, 55102 United States	Electronic Service		No	23-117Official List
40	Richard	Dornfeld	richard.dornfeld@ag.state.mn.us		Office of the Attorney General - Department of Commerce	Minnesota Attorney General's Office 445 Minnesota Street, Suite 1800 Saint Paul MN, 55101 United States	Electronic Service		No	23-117Official List
41	J.	Drake Hamilton	hamilton@fresh-energy.org	Fresh Energy		408 St Peter St Ste 350 Saint Paul MN, 55101 United States	Electronic Service		No	23-117Official List
42	Brian	Edstrom	briane@cubminnesota.org	Citizens Utility Board of Minnesota		332 Minnesota St Ste W1360 Saint Paul MN, 55101 United States	Electronic Service		No	23-117Official List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
43	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	23-117Official List
44	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	23-117Official List
45	Mike	Fiterman	mikefiterman@libertydiversified.com	Liberty Diversified International		5600 N Highway 169 Minneapolis MN, 55428-3096 United States	Electronic Service		No	23-117Official List
46	Lucas	Franco	lfranco@liunagroc.com	LIUNA		81 Little Canada Rd E Little Canada MN, 55117 United States	Electronic Service		No	23-117Official List
47	Daryll	Fuentes	energy@usg.com	USG Corporation		550 W Adams St Chicago IL, 60661 United States	Electronic Service		No	23-117Official List
48	Edward	Garvey	garveyed@aol.com	Residence		32 Lawton St Saint Paul MN, 55102 United States	Electronic Service		No	23-117Official List
49	Debbie	Goettel	debbie.goettel@hennepin.us	Partnership on Waste and Energy		2785 White Bear Ave N Ste 350 Maplewood MN, 55109 United States	Electronic Service		No	23-117Official List
50	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	23-117Official List
51	Matthew B	Harris	matt.b.harris@xcelenergy.com	XCEL ENERGY		401 Nicollet Mall FL 8 Minneapolis MN, 55401 United States	Electronic Service		No	23-117Official List
52	Kim	Havey	kim.havey@minneapolismn.gov	City of Minneapolis		350 South 5th Street, Suite 315M Minneapolis MN, 55415 United States	Electronic Service		No	23-117Official List
53	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	23-117Official List
54	Adam	Heinen	aheinen@dakotaelectric.com	Dakota Electric Association		4300 220th St W Farmington MN, 55024 United States	Electronic Service		No	23-117Official List
55	Annete	Henkel	mui@mnutilityinvestors.org	Minnesota Utility Investors		413 Wacouta Street #230 St.Paul MN, 55101 United States	Electronic Service		No	23-117Official List
56	Valerie	Herring	vherring@taftlaw.com	Taft Stettinius & Hollister LLP		2200 IDS Center 80 S. Eighth Street	Electronic Service		No	23-117Official List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						Minneapolis MN, 55402 United States				
57	Katherine	Hinderlie	katherine.hinderlie@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	445 Minnesota St Suite 1400 St. Paul MN, 55101-2134 United States	Electronic Service		No	23-117Official List
58	Joylyn C	Hoffman Malueg	joylyn.hoffmanmalueg@wecenergygroup.com	Minnesota Energy Resources		2685 145th St W Rosemount MN, 55068 United States	Electronic Service		No	23-117Official List
59	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	23-117Official List
60	Travis	Jacobson	travis.jacobson@mdu.com	Great Plains Natural Gas Company		400 N 4th St Bismarck ND, 58501 United States	Electronic Service		No	23-117Official List
61	John	Jaimez	john.jaimez@hennepin.us			Environment & Energy Department 701 4th Ave S Minneapolis MN, 55415 United States	Electronic Service		No	23-117Official List
62	Alan	Jenkins	aj@jenkinsatlaw.com	Jenkins at Law		2950 Yellowtail Ave. Marathon FL, 33050 United States	Electronic Service		No	23-117Official List
63	Richard	Johnson	rick.johnson@lawmoss.com	Moss & Barnett		150 S. 5th Street Suite 1200 Minneapolis MN, 55402 United States	Electronic Service		No	23-117Official List
64	Sarah	Johnson Phillips	sjphillips@stoel.com	Stoel Rives LLP		33 South Sixth Street Suite 4200 Minneapolis MN, 55402 United States	Electronic Service		No	23-117Official List
65	Brendan	Jordan	bjordan@gpisd.net	Great Plains Institute & Bioeconomy Coalition of MN		2801 21st Ave S Ste 220 Minneapolis MN, 55407 United States	Electronic Service		No	23-117Official List
66	David	Kailbourne	edk@revlng.com	REV LNG, LLC		1002 Empson Rd Ulysses PA, 16948 United States	Electronic Service		No	23-117Official List
67	D	Kalmon	dkalmon@mwmo.org	Mississippi Watershed Management Organization		2522 Marshall St NE Minneapolis MN, 55418-3329 United States	Electronic Service		No	23-117Official List
68	William	Kenworthy	will@votesolar.org			1 South Dearborn St Ste 2000 Chicago IL, 60603 United States	Electronic Service		No	23-117Official List
69	Samuel B.	Ketchum	sketchum@kennedy-graven.com	Kennedy & Graven, Chartered		150 S 5th St Ste 700 Minneapolis MN, 55402 United States	Electronic Service		No	23-117Official List
70	Frank	Kohlasch	frank.kohlasch@state.mn.us		Minnesota Pollution	520 Lafayette Rd N. St. Paul MN,	Electronic Service		No	23-117Official List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
					Control Agency	55155 United States				
71	Kyle R.	Kroll	kkroll@winthrop.com	Winthrop & Weinstine, P.A.		225 South Sixth Street Suite 3500 Minneapolis MN, 55402 United States	Electronic Service		No	23-117Official List
72	Nicolle	Kupser	nkupser@greatermngas.com	Greater Minnesota Gas, Inc.		1900 Cardinal Ln PO Box 798 Faribault MN, 55021 United States	Electronic Service		No	23-117Official List
73	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	23-117Official List
74	Carmel	Laney	carmel.laney@stoel.com	Stoel Rives LLP		33 South Sixth Street Suite 4200 Minneapolis MN, 55402 United States	Electronic Service		No	23-117Official List
75	Andrew	Larson	andrew.m.larson@state.mn.us		Public Utilities Commission	121 7th Place E., #350 Saint Paul MN, 55101 United States	Electronic Service		Yes	23-117Official List
76	Peder	Larson	plarson@larkinhoffman.com	Larkin Hoffman Daly & Lindgren, Ltd.		8300 Norman Center Drive Suite 1000 Bloomington MN, 55437 United States	Electronic Service		No	23-117Official List
77	Robert	Lems	administration@dmt-cgs.com	DMT Clear Gas Solutions		19125 SW 125th Ct Tualatin OR, 97062 United States	Electronic Service		No	23-117Official List
78	Rachel	Leonard	rachel.leonard@ci.monticello.mn.us	City of Monticello		505 Walnut St Ste 1 Monticello MN, 55362 United States	Electronic Service		No	23-117Official List
79	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	23-117Official List
80	Amy	Liberkowski	amy.a.liberkowski@xcelenergy.com	Xcel Energy		414 Nicollet Mall 7th Floor Minneapolis MN, 55401-1993 United States	Electronic Service		No	23-117Official List
81	Jason	Loos	jason.loos@centerpointenergy.com	CenterPoint Energy Resources Corp.		505 Nicollet Mall 3rd Floor Minneapolis MN, 55402 United States	Electronic Service		No	23-117Official List
82	Kavita	Maini	kmaini@wi.rr.com	KM Energy Consulting, LLC		961 N Lost Woods Rd Oconomowoc WI, 53066 United States	Electronic Service		No	23-117Official List
83	Christine	Marquis	regulatory.records@xcelenergy.com	Xcel Energy		414 Nicollet Mall MN1180-07-MCA Minneapolis MN, 55401 United States	Electronic Service		No	23-117Official List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
84	Emily	Marshall	emarshall@lourismarshall.com	Miller O'Brien Jensen, PA		120 S. 6th Street Suite 2400 Minneapolis MN, 55402 United States	Electronic Service		No	23-117Official List
85	Linda	Martinez	lmartinez@auri.org	Agricultural Utilization Research Institute		null null, null United States	Electronic Service		No	23-117Official List
86	Mary	Martinka	mary.a.martinka@xcelenergy.com	Xcel Energy Inc		414 Nicollet Mall 7th Floor Minneapolis MN, 55401 United States	Electronic Service		No	23-117Official List
87	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	23-117Official List
88	Taylor	McNair	taylor@gridlab.org			668 Capp Street San Francisco CA, 94110 United States	Electronic Service		No	23-117Official List
89	Sarah	Mead	sarah.mead@wecenergygroup.com	MERC		null null, null United States	Electronic Service		No	23-117Official List
90	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	23-117Official List
91	Stacy	Miller	stacy.miller@minneapolismn.gov	City of Minneapolis		350 S. 5th Street Room M 301 Minneapolis MN, 55415 United States	Electronic Service		No	23-117Official List
92	David	Moeller	dmoeller@allete.com	Minnesota Power			Electronic Service		No	23-117Official List
93	Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP		33 South Sixth St Ste 4200 Minneapolis MN, 55402 United States	Electronic Service		No	23-117Official List
94	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	23-117Official List
95	Alan	Muller	alan@greendel.org	Energy & Environmental Consulting		1110 West Avenue Red Wing MN, 55066 United States	Electronic Service		No	23-117Official List
96	Carl	Nelson	cnelson@mncee.org	Center for Energy and Environment		212 3rd Ave N Ste 560 Minneapolis MN, 55401 United States	Electronic Service		No	23-117Official List
97	David	Niles	david.niles@avantenergy.com	Minnesota Municipal Power Agency		220 South Sixth Street Suite 1300 Minneapolis MN, 55402 United States	Electronic Service		No	23-117Official List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
98	Samantha	Norris	samanthanorris@alliantenergy.com	Interstate Power and Light Company		200 1st Street SE PO Box 351 Cedar Rapids IA, 52406-0351 United States	Electronic Service		No	23-117Official List
99	M. William	O'Brien	bobrien@mojlaw.com	Miller O'Brien Jensen, P.A.		120 S 6th St Ste 2400 Minneapolis MN, 55402 United States	Electronic Service		No	23-117Official List
100	Ric	O'Connell	ric@gridlab.org	GridLab		2120 University Ave Berkeley CA, 94704 United States	Electronic Service		No	23-117Official List
101	Carol A.	Overland	overland@legalectric.org	Legalectric - Overland Law Office		1110 West Avenue Red Wing MN, 55066 United States	Electronic Service		No	23-117Official List
102	Greg	Palmer	gpalmer@greatermngas.com	Greater Minnesota Gas, Inc.		1900 Cardinal Ln PO Box 798 Faribault MN, 55021 United States	Electronic Service		No	23-117Official List
103	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	23-117Official List
104	Antonio	Parisi	aparisi@sacyr.com	Sacyr Environment USA LLC		3330 Washington Blvd Ste 400 Arlington VA, 22201 United States	Electronic Service		No	23-117Official List
105	Lisa	Peterson	lisa.r.peterson@xcelenergy.com			414 Nicollet Mall FL 7 Minneapolis MN, 55401 United States	Electronic Service		No	23-117Official List
106	Catherine	Phillips	catherine.phillips@wecenergygroup.com	Minnesota Energy Resources		231 West Michigan St Milwaukee WI, 53203 United States	Electronic Service		Yes	23-117Official List
107	J.	Porter	greg.porter@nngco.com	Northern Natural Gas Company		1111 South 103rd St Omaha NE, 68124 United States	Electronic Service		No	23-117Official List
108	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	23-117Official List
109	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	23-117Official List
110	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	23-117Official List
111	Nathaniel	Runke	nrunke@local49.org			611 28th St. NW Rochester	Electronic Service		No	23-117Official List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						MN, 55901 United States				
112	Bjorgvin	Saevarsson	bjorgvin@yorthgroup.com	Yorth		500 East Grant Street 1207 #1207 Minneapolis MN, 55404 United States	Electronic Service		No	23-117Official List
113	Kevin	Saville	kevin.saville@ftr.com	Citizens/Frontier Communications		2378 Wilshire Blvd. Mound MN, 55364 United States	Electronic Service		No	23-117Official List
114	Elizabeth	Schmiesing	eschmiesing@winthrop.com	Winthrop & Weinstine, P.A.		225 South Sixth Street Suite 3500 Minneapolis MN, 55402 United States	Electronic Service		No	23-117Official List
115	Peter	Scholtz	peter.scholtz@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	Suite 1400 445 Minnesota Street St. Paul MN, 55101-2131 United States	Electronic Service		No	23-117Official List
116	Douglas	Seaton	doug.seaton@umwlc.org	Upper Midwest Law Center		8421 Wayzata Blvd Ste 300 Golden Valley MN, 55426 United States	Electronic Service		No	23-117Official List
117	Patrick	Serfass	pserfass@ttcorp.com	American Biogas Council		1211 Connecticut Ave NW Ste 650 Washington DC, 20036 United States	Electronic Service		No	23-117Official List
118	Patrick	Serfass	info@americanbiogascouncil.org	American Biogas Council		1211 Connecticut Ave NW Ste 650 Washington DC, 20036 United States	Electronic Service		No	23-117Official List
119	Janet	Shaddix Elling	jshaddix@janetshaddix.com	Shaddix And Associates		7400 Lyndale Ave S Ste 190 Richfield MN, 55423 United States	Electronic Service		Yes	23-117Official List
120	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	23-117Official List
121	Beth	Smith	bsmith@greatermankato.com	Greater Mankato Growth		1961 Premier Dr Ste 100 Mankato MN, 56001 United States	Electronic Service		No	23-117Official List
122	Joshua	Smith	joshua.smith@sierraclub.org			85 Second St FL 2 San Francisco CA, 94105 United States	Electronic Service		No	23-117Official List
123	Ken	Smith	ken.smith@districtenergy.com	District Energy St. Paul Inc.		76 W Kellogg Blvd St. Paul MN, 55102 United States	Electronic Service		No	23-117Official List
124	Beth	Soholt	bsoholt@cleangridalliance.org	Clean Grid Alliance		570 Asbury Street Suite 201 St. Paul MN, 55104 United States	Electronic Service		No	23-117Official List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
125	Anna	Sommer	asommer@energyfuturesgroup.com	Energy Futures Group		PO Box 692 Canton NY, 13617 United States	Electronic Service		No	23-117Official List
126	Peggy	Sorum	peggy.sorum@centerpointenergy.com	CenterPoint Energy		505 Nicollet Mall Minneapolis MN, 55402 United States	Electronic Service		No	23-117Official List
127	Mark	Spurr	mspurr@fvbenergy.com	International District Energy Association		222 South Ninth St., Suite 825 Minneapolis MN, 55402 United States	Electronic Service		No	23-117Official List
128	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	23-117Official List
129	Byron E.	Starns	byron.starns@stinson.com	STINSON LLP		50 S 6th St Ste 2600 Minneapolis MN, 55402 United States	Electronic Service		No	23-117Official List
130	Richard	Stasik	richard.stasik@wecenergygroup.com	Minnesota Energy Resources Corporation (HOLDING)		231 West Michigan St - P321 Milwaukee WI, 53203 United States	Electronic Service		No	23-117Official List
131	Kristin	Stastny	kstastny@taftlaw.com	Taft Stettinius & Hollister LLP		2200 IDS Center 80 South 8th Street Minneapolis MN, 55402 United States	Electronic Service		No	23-117Official List
132	Kent	Sulem	ksulem@mmua.org			3131 Fernbrook Ln N Ste 200 Plymouth MN, 55447-5337 United States	Electronic Service		No	23-117Official List
133	Emily	Suppes	emily.suppes@centerpointenergy.com	CenterPoint Energy Minnesota Gas		505 Nicollet Mall Minneapolis MN, 55402 United States	Electronic Service		No	23-117Official List
134	Matthew	Tomich	tomich@energy-vision.org	Energy Vision		138 E 13th St New York NY, 10003 United States	Electronic Service		No	23-117Official List
135	Julie	Voeck	julie.voeck@nee.com	NextEra Energy Resources, LLC		700 Universe Blvd Juno Beach FL, 33408 United States	Electronic Service		No	23-117Official List
136	Sam	Wade	sam@rngcoalition.com	Coalition for Renewable Natural Gas		1017 L Street #513 Sacramento CA, 95814 United States	Electronic Service		No	23-117Official List
137	Nicole	Westling	nicole.westling@state.mn.us		Department of Commerce	85 7th Place E Suite 280 St Paul MN, 55001 United States	Electronic Service		No	23-117Official List
138	Casey	Whelan	cwhelan@kinectenergy.com	Kinect Energy Group		605 Highway 169 N Ste 1200 Plymouth MN, 55441 United States	Electronic Service		No	23-117Official List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
139	Laurie	Williams	laurie.williams@sierraclub.org	Sierra Club		Environmental Law Program 1536 Wynkoop St Ste 200 Denver CO, 80202 United States	Electronic Service		No	23-117Official List
140	Joseph	Windler	jwindler@winthrop.com	Winthrop & Weinstine		225 South Sixth Street, Suite 3500 Minneapolis MN, 55402 United States	Electronic Service		No	23-117Official List
141	James	Worlobah	james.worlobah@state.mn.us		Public Utilities Commission	121 7th Place E, Suite 350 St. Paul MN, 55101 United States	Electronic Service		No	23-117Official List
142	Tim	Wulling	t.wulling@earthlink.net			1495 Raymond Ave. Saint Paul MN, 55108 United States	Electronic Service		No	23-117Official List
143	Michael A.	Yuffee	michael.yuffee@bakerbotts.com	Baker Botts		700 K St NW Washington DC, 20001 United States	Electronic Service		No	23-117Official List
144	Grant	Zimmerman	gzimmerman@ampamericas.com	Amp Americas		811 W Evergreen Ave Ste 201 Chicago IL, 60642 United States	Electronic Service		No	23-117Official List
145	Kurt	Zimmerman	kwz@ibew160.org	Local Union #160, IBEW		2909 Anthony Ln St Anthony Village MN, 55418-3238 United States	Electronic Service		No	23-117Official List
146	Emily	Ziring	eziring@stlouispark.org	City of St. Louis Park		5005 Minnetonka Blvd St. Louis Park MN, 55416 United States	Electronic Service		No	23-117Official List
147	Patrick	Zomer	pat.zomer@lawmoss.com	Moss & Barnett PA		150 S 5th St #1200 Minneapolis MN, 55402 United States	Electronic Service		No	23-117Official List