

October 29, 2025

Syndie Lieb
Assistant Commissioner of Regulatory Analysis
Minnesota Department of Commerce
Division of Energy Resources
85 7th Place East, Suite 500
St. Paul, Minnesota 55101-2198

RE: In the Matter of the Minnesota Technical Reference Manual Version 5.0
Docket No. E,G999/CIP-18-694

Dear Dr. Lieb,

Pursuant to Minnesota Statutes §216B.241 and Administrative Rules Chapter 7690, enclosed is the Proposed Decision (Proposed Decision) of the Staff of the Minnesota Department of Commerce, Division of Energy Resources (Staff) in the following matter:

Minnesota Technical Reference Manual Version 5.0.

This Proposed Decision is filed by the Minnesota Department of Commerce on October 29, 2025.

As discussed in greater detail herein, Staff recommend that the Assistant Commissioner approve the Proposed Decision. Staff are available to answer any questions that the Assistant Commissioner may have.

The Department of Commerce will accept comments on Staff's Proposed Decision through Thursday, November 20, 2025.

Sincerely,

/s/ LAUREN E. SWEENEY
Energy Planner, Director
Minnesota Department of Commerce
Division of Energy Resources

LS/ar
Attachment



**COMMERCE
DEPARTMENT**
Department Staff Proposed Decision

Minnesota Department of Commerce, Division of Energy Resources

Docket No. E,G999/CIP-18-694

I. INTRODUCTION

Minnesota's Energy Conservation and Optimization (ECO) program is an energy efficiency and demand-side management program administered by over 125 investor-owned, municipal, and cooperative electric and natural gas utilities in Minnesota. These electric and natural gas utilities are subject to annual energy savings goals.

The Minnesota Department of Commerce (the Department) has regulatory oversight of ECO and is charged with developing and maintaining standard energy, demand, and load management savings assumptions for utility use.¹ In fulfillment of this responsibility, the Department developed a Technical Reference Manual (TRM) to serve as a standard reference for quantifying these savings values, incremental costs, and measure lifetime estimates. The Minnesota Technical Reference Manual (MN TRM) presently includes over 200 electric, gas, and combined fuel measures covering a variety of end uses within the residential, commercial, and industrial sectors.

To ensure that the MN TRM continues to accurately reflect current technologies, markets, and codes and standards, the Department has established the TRM Advisory Committee (TRMAC), consisting of ECO stakeholders, to review and update the MN TRM on an annual basis. A list of the TRMAC Members for MN TRM Version 5.0 is included in Appendix A. MN TRM Version 5.0 will be used by utilities for calculating the savings impacts of measures installed in 2027.

A total of six TRMAC meetings specific to the MN TRM Version 5.0 took place between May 30, 2025, and October 27, 2025. The first five of the six meetings occurred as expected based on the MN TRM Version 5.0 schedule and process outlined during the first meeting and occurred before the non-regulatory review period concluded. The sixth meeting occurred after the non-regulatory review period concluded and after informal comments were due on the draft MN TRM Version 5.0 which was provided to the TRMAC for final review on October 9, 2025. One additional presentation of ongoing research that is particularly applicable to MN ECO Programs and the MN TRM occurred in August of this year with the purpose of making TRMAC members aware of this research. The recordings and slide decks from TRMAC meetings one through six can be found on the MN TRM Webpage² under tab "TRMAC Meetings." The complete non-regulatory process schedule for MN TRM Version 5.0 is outlined in Table 1.

¹ Minn. Stat. §216B.241, subd. 1d

² *ECO Programs - Technical Reference Manual*. MN Commerce Department Energy & Utilities. Available at: <https://mn.gov/commerce/energy/conserving-energy/eco/technical-reference-manual/>

Table 1. MN TRMAC Version 5.0 Process Schedule

Date	Event	Description
5/30/2025	Meeting 1 - Kickoff Meeting	Priority List for TRM v5.0 Introduced
7/2/2025	Meeting 2	Discussion on M&V Protocols and Weather Normalization Methodology to Determine ECO Goal
7/25/2025	Meeting 3	Measure Workpapers Introduction and Discussion
8/27/2025	Optional Presentation	Discussion of the Model Affecting Measures: "Commercial HVAC – Energy Recovery Ventilator" and "C/I HVAC – Heat Pump RTU"
8/29/2025	Meeting 4	Measure Workpapers Discussion Continued
9/26/2025	Meeting 5	Measure Workpapers Discussion Conclusion
10/9/2025	Redlined TRM v5.0 Issued	Redlined TRM v5.0 Issued for TRMAC Review
10/22/2025	Review Period Concludes	TRMAC Non-Regulatory Comments Due on TRM v5.0
10/27/2025	Meeting 6	Additional Meeting Discussing Proposed Update to the Baseline for Residential Furnaces within the MN TRM v5.0.

The sixth TRMAC meeting introduced the Department's revised proposal to update the baseline requirements for Residential Furnaces in existing applications from 80% Annual Fuel Utilization Efficiency (AFUE) to 90% AFUE in single family homes in the MN TRM Version 5.0. This topic was introduced in the priority list³ shared with TRMAC members for Meeting 2 and Staff's initial recommendation to postpone this update until after additional Minnesota specific baseline research was completed was communicated to the TRMAC in Meeting 3. During Meeting 3 and in follow-up email communication to the TRMAC, Staff requested that TRMAC members provide informal comments on this subject and Staff's proposed solution by August 22, 2025. In response to that request, the Department received informal comments on this topic from three TRMAC member organizations: CenterPoint Energy, Minnesota Power, and Xcel Energy. All three of the TRMAC member organizations supported maintaining the current deemed baselines for Residential Furnaces in the MN TRM Version 5.0. No other comments were received on this topic from TRMAC members until October 22, 2025, when Fresh Energy provided comments in support of updating the baseline for Residential Furnaces in existing applications from 80% AFUE to 90% AFUE in single family homes in the MN TRM Version 5.0.

Staff acknowledge that the revised proposal to update the baseline for Residential Furnaces in existing applications in the MN TRM Version 5.0 introduced in Meeting 6 was issued later in the process than is typical. Staff also acknowledge that this Proposed Decision filing is the first time TRMAC members are able to review the specific changes to measures affected by this proposed update. Measures affected by this update are noted in Table 2.

³ The TRM Version 5.0 Priority List (Priority List) can be found in Appendix B. This Priority List outlines updates the TRMAC has made in Version 5.0 and would like to make in future iterations of the MN TRM. A more robust version of the Priority List was shared with TRMAC members in follow-up email communication after meetings 1 through 5 inclusive topic, status, TRMAC feedback received, and Department responses.

Table 2. MN TRM Measures Affected by Revised Update to the Baseline Values in Residential Furnaces

MN TRM v5.0 Measure	Version to Address	Department Notes
Residential HVAC – ECM Blower Motors	MN TRM v5.0	Updated in the Proposed Decision on the MN TRM v5.0
Residential HVAC – Furnace Quality Installation/Maintenance	MN TRM v5.0	Updated in the Proposed Decision on the MN TRM v5.0
Residential HVAC – Furnaces and Boilers	MN TRM v5.0	Updated in the Proposed Decision on the MN TRM v5.0
Residential HVAC – Air Source Heat Pump Systems (ASHP)	MN TRM v5.1	Not updated in the Proposed Decision on the MN TRM v5.0. Department Staff Propose updating this measure with the 90% AFUE Baseline for Residential Furnaces in the MN TRM v5.1 due to the significant amount of work required of update this modeled methodology.
Residential HVAC - Ground Source Heat Pump (GSHP)	MN TRM v5.0	Updated in the Proposed Decision on the MN TRM v5.0
Residential Envelope – Insulation and Air Sealing	MN TRM v5.0	Updated in the Proposed Decision on the MN TRM v5.0
Residential Envelope – Low-E storm windows	MN TRM v5.1+	Not updated in the Proposed Decision on the MN TRM v5.0. Department Staff Propose updating this measure with the 90% AFUE Baseline for Residential Furnaces in the MN TRM v5.1 or MN TRM v5.2 due to the work required to update this modeled methodology. Department Staff note that CenterPoint Energy is the only IOU with this measure included in their 2024-2026 Triennial Plan and participation for this measure was 0 (zero) participants in Program Year 2024 and so view this as a lower priority update.
Residential Envelope – Cellular Shade Window Coverings	MN TRM v5.1+	Not updated in the Proposed Decision on the MN TRM v5.0. Department Staff Propose updating this measure with the 90% AFUE Baseline for Residential Furnaces in the MN TRM v5.1 or MN TRM v5.2 due to the work required of update this modeled methodology. Department Staff note that no IOUs have this measure included in their 2024-2026 Triennial Plan so view this as a lower priority update.

II. REVIEW AND DETERMINATIONS

A draft version of TRM Version 5.0 is filed in this docket and is available for public review and comment. The following schedule applies for filings concerning the review of the TRM Version 5.0:

October 29, 2025	Proposed Technical Reference Manual version 5.0
November 20, 2025	Written Comments
December 8, 2025	Reply Comments
January 9, 2026	Assistant Commissioner Decision

Written comments and reply comments must be filed with the Department and the Minnesota Public Utilities Commission. Filing comments via eDockets will satisfy this requirement.

Appendix A – Technical Advisory Committee Members for Minnesota Technical Reference Manual Version 5.0

Name	Organization	Name	Organization
Anthony Fryer	MN Department of Commerce	Kelsey Kopp	Great River Energy
Adam Zoet		Rodney De Fouw	
Laura Silver		Victoria Browning	ICF
Lindsay Anderson		Dan Cooper	Lake Country Power
Catherine Fair		Chris Trembley	Madelia Municipal Light & Power
Lauren Sweeney		Grey Staples	Mendota Group
Jenna Lipscomb	Cadmus	Joel Pertszsch	Michaels Energy
Amalia Hicks		Jen Kimmen	Minnesota Energy Resources
Kim Lillyblad	Avant Energy	Huei Wong	Minnesota Energy Resources - ICF
Lauren Runyan		Julian Graybill Brubaker	
Elyse Malherrek	Big Ladder Software	Katie O'Rourke	
Andy Baeten	Center for Energy and Environment	Katy Koon	
Ben Schoenbauer		Zach Froio	
Carl Nelson		Cassie Theisen	Minnesota Power
Isaac Smith		Chad Trebilcock	
Kristen Funk		Wyatt Miller	
Ranal Tudawe		Lisa Severson	Minnkota Power Cooperative
Ritika Kumbharkar		Darlene Weber-Scott	Missouri River Energy Services
Will Nissen		Jesse Robertson	
Eric Johansen		Kurt Hauser	
Ethan Warner		Lisa Fischer	
Marty Kapsch	CenterPoint Energy	Zach Klabo	
Tyler Glewwe		Betty Balegana	
Chris Droske		Cristina Zuniga	Otter Tail Power Company
Isaac Evans		Jason Grenier	
Cory Hetchler	Connexus Energy	Jon Fabre	Dakota Electric Association
David Reinke	Dakota Electric Association	Luke Meech	
Patrick Mathwig		Allegra Steenson	
Gary Swanson		Annie Hu	Pacific Northwest National Laboratory
Dean Laube	Franklin Energy Services	Junke Wang	
George Roemer		David Siddiqui	
Luke Gehrke		Erin Kempster	Power TakeOff
Nicholas Dombrosky		Lucas Born	
Caitlin Eichten	Fresh Energy	Peter Widmer	
Sam Friesen		Josh Mason	Rochester Public Utilities
Doug Eli		Laurie Cook	
Janhavi Datar	Frontier Energy	Olivia Prieto	Rocky Mountain Institute
Matt Haley		Andy Lick	
Tanuj Gulati		Ben Ipsen	Slipstream
Tom Vagts		Joe Hoffman	
Travis Hinck	GDS Associates, Inc.	John O'Neil	
Kathy Baerlocher	Great Plains Natural Gas Company	Katy Janda	University of Oxford; University of Minnesota
Larry Oswald		Chris Baker	VEIC
Amelinda Hendrickx	Great River Energy	Danny Price	Xcel Energy
Jamie Stallman		Erin Kern	
Jeff Haase		Karl Shlanta	

Appendix B – Priority List

Version to Address	Measure/Topic	Included in TRM v5.0/Notes
5.0	Appendix F - Standard Conversion Factors	Yes
5.0	Com - ECM Blower Motors	Yes
5.0	Com - ECM Circulators	Yes
5.0	Com - ECM Fan Motors	Yes
5.0	Com - Electric Forklifts	Yes
5.0	Com - Electric Oven and Range	Yes
5.0	Com - ERV/HRV	Yes
5.0	Com - Heat Pump RTU	Yes
5.0	Com - Refrigeration Gasket Replacements	Yes
5.0	Com - Review and Edit Networked Lighting Controls based on (2) DLC Papers	Yes
5.0	Com Hot Water – Heat Pump Water Heater	Yes
5.0	Com/Ind - Demand Defrost Controls	Yes
5.0	Com/Ind- HVAC – Mini Split Ductless Systems A/C Only and Heat Pump Measure Description Update	Yes
5.0	Com/Ind - LED Grow Lights	Yes
5.0	Com/Ind - VFD Air Compressors	Yes
5.0	Define Naming Convention and Unique ID	Yes
5.0	MN HER Coordination - HOMES, HEAR	Yes
5.0	Res - Heat Pump Water Heater	Yes
5.0	Res - Air to Water Heat Pump	Yes
5.0	Res - ASHP	Yes
5.0	Res - Central AC/ASHP Tune-Up	Yes
5.0	Res - Compact Refrigerator/Freezer Recycling	Yes
5.0	Res - ECM Circulators	Yes
5.0	Res - EFLH	Yes
5.0	Res - ENERGY STAR Air Purifiers	Yes
5.0	Res - ENERGY STAR Clothes Dryers	Yes
5.0	Res - ENERGY STAR Clothes Washers; Res - ENERGY STAR Clothes Dryers	Yes
5.0	Res - ERV/HRV	Yes
5.0	Res - Furnaces	Yes, less (3) Measures: Residential HVAC – Air Source Heat Pump Systems (ASHP), Residential Envelope – Low-E storm windows, and Residential Envelope – Cellular Shade Window Coverings
5.0	Res - GSHP Desuperheater	Yes
5.0	Res - GSHP; Methodology and ICCs	Yes
5.0	Res - In Service Rate/Install Rate - Definition and add to algorithms	Yes
5.0	Res - Induction Cooktops	Yes
5.0	Res - Packaged Window Heat Pumps	Yes
5.0	Res - Review Res Furnace Incremental Costs	Yes
5.0	Res Misc. – Residential Electric Bicycles	Yes

Version to Address	Measure/Topic	Included in TRM v5.0/Notes
5.0	Res/Com - Convert all SEER, EER, HSPF ratings to SEER2, EER2, HSPF2 with references	Yes
5.0	Res/Com - Update UEF references for all DHW measures	Yes
5.0	Appendix E - Conservation Voltage Reduction Examples	Resolved for TRM v5.0
5.0	Com - Split system ASHP furnace/AC units in small and medium sized commercial buildings replacing your standard gas/AC split system	Resolved for TRM v5.0
5.0	Com/Ind - Update all mentions of VSD to VFD	Resolved for TRM v5.0
5.0	ENERGY STAR Central Air Conditioner Phase Out	Resolved for TRM v5.0
5.0	Lighting - Mercury Emissions 2024 Leg Session: MN Statute 116.92 Subd. 7b and ENERGY STAR Lamps and Luminaires Phase out; Appendix B	Resolved for TRM v5.0
5.0	Res - Add Specific Insulation Measures due to the energy savings not being the same and incremental cost discrepancies	Resolved for TRM v5.0
5.0	Res - ES Heat Pump Clothes Dryers + ES Clothes Washers - Combo Units	Resolved for TRM v5.0
5.0	Res/Com/Ind - Cooling Applications	Resolved for TRM v5.0
5.0	M&V Protocols for Large Custom ECO Projects	To be reviewed outside of the TRMAC Process in Q4 2025/Q1 2026
5.0	Incorporate Updated Efficient Fuel Switching Guidance per the 2024 Leg Session within EFS measures	In Progress - to be shared with the TRMAC in Q1 2026
5.0	Review Codes and Standards for all measures in order to Develop review schedule of all TRM measures	In Progress - to be shared with the TRMAC in Q1 2026
5.0	Transition from pdf to excel workbook	In Progress - to be shared with the TRMAC in Q1 2026
5.0	Weather Normalization to determine ECO Goal	In Progress - to be shared with the TRMAC in Q1 2026
5.1	Add a Main Deemed Sheet Appendix	Bumped from v5.0
5.1	Appendix E - Conservation Voltage Reduction Examples	Bumped from v5.0
5.1	C/I HVAC – Cold Climate Heat Pump RTU	Bumped from v5.0
5.1	CARD Sources - Sources to have accurate hyperlinks	Bumped from v5.0
5.1	Com - GSHP; Methodology and ICCs	Bumped from v5.0
5.1	Com/Ind - Grain Dryers	Bumped from v5.0
5.1	Com/Ind - Grocery Refrigeration Equipment Optimization	Bumped from v5.0
5.1	Com/Ind - Steam Traps	Bumped from v5.0
5.1	Com/Ind - Switched Reluctance Motors for Commercial Buildings	Bumped from v5.0 - No MN IOUs rebated this measure in Program Year 2024.
5.1	Com/Ind - Update all mentions of VSD to VFD	Bumped from v5.0
5.1	Direct Install spray foam (cans)	Bumped from v5.0
5.1	Ensure Definitions are the same - SF, MF, C and I	Bumped from v5.0
5.1	Hot Tub Covers	Bumped from v5.0
5.1	Incremental Costs Review and Updates	Bumped from v5.0
5.1	Res - Add Specific Insulation Measures due to the energy savings not being the same and incremental cost discrepancies	Bumped from v5.0

Version to Address	Measure/Topic	Included in TRM v5.0/Notes
5.1	Res - Air Fryers (replacing ovens)	Bumped from v5.0
5.1	Res - Electric Outdoor Lawn Equipment	Bumped from v5.0
5.1	Res - ENERGY STAR Clothes Dryers	Bumped from v5.0
5.1	Res - Storm Windows Air Sealing	Bumped from v5.0
5.1	Res/Com - Incorporate work from the MN CARD Study - Load Shape Development and EFS for Demand Management	Bumped from v5.0
5.1	Review Codes and Standards for all measures - Fed and state baselines and ES requirements	Bumped from v5.0
5.1	Review indicators for measure gas/electric/both savings	Bumped from v5.0
5.1	Review indicators for measure gas/electric/both savings	Bumped from v5.0
5.1	Appendix D - Commercial Building Models - Review inputs	Always noted to be addressed in the MN TRM v5.1.
5.1	Baselines incorporating dual fuel (not 100% elec, 100% gas, blend)	Always noted to be addressed in the MN TRM v5.1.
5.1	Behavioral Programs	Always noted to be addressed in the MN TRM v5.1.
5.1	ccASHP - Comm - separate measure specific to cc, modeled	Always noted to be addressed in the MN TRM v5.1.
5.1	ccASHP - Res - separate measure specific to cc, modeled	Always noted to be addressed in the MN TRM v5.1.
5.1	Future MN ETA Initiatives - Defined through the MN ETA Emerging Technology Committee	Always noted to be addressed in the MN TRM v5.1.
5.1	Incremental Costs Review and Updates	Always noted to be addressed in the MN TRM v5.1.
5.1	LLLC	Always noted to be addressed in the MN TRM v5.1.
5.1	Res - ASHP - Incremental Capital Costs	Always noted to be addressed in the MN TRM v5.1.
5.1	ResNet Software ES compared to other EM software ES compared to real life ES	Always noted to be addressed in the MN TRM v5.1.
5.1+	Virtual Commissioning	Bumped to future TRM version. Department Staff concerns include only having manufacturer funded research available, a small sample size of these projects in MN (Qty 16) for the 2024 Program Year, and only one TRMAC Stakeholder responding to this measure claiming that this wasn't a "need to have" prescriptive measure in the MN TRM v5.0. At this point in time and with the above noted concerns, Department Staff believe that MN Utilities should submit these projects as custom projects as that is a more defensible solution.

CERTIFICATE OF SERVICE

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

**Minnesota Department of Commerce
Proposed CIP Decision**

Docket No. E, G999/CIP-18-694

Dated this **29th** day of **October 2025**

/s/Sharon Ferguson

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
1	Tasha	Altmann	tasha.altmann@mrenergy.com	Missouri River Energy Services		3724 W. Avera Drive PO Box 88920 Sioux Falls SD, 57109-8920 United States	Electronic Service		No	18-694CIP-18-694
2	Julie	Ambach	juliea@cmmpa.org	Shakopee Public Utilities		255 Sarazin St Shakopee MN, 55379 United States	Electronic Service		No	18-694CIP-18-694
3	Tom	Balster	tombalster@alliantenergy.com	Interstate Power & Light Company		PO Box 351 200 1st St SE Cedar Rapids IA, 52406-0351 United States	Electronic Service		No	18-694CIP-18-694
4	Lisa	Beckner	lbeckner@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	18-694CIP-18-694
5	Sasha	Bergman	sasha.bergman@state.mn.us	Public Utilities Commission			Electronic Service		No	18-694CIP-18-694
6	Derek	Bertsch	derek.bertsch@mrenergy.com	Missouri River Energy Services		3724 West Avera Drive PO Box 88920 Sioux Falls SD, 57109-8920 United States	Electronic Service		No	18-694CIP-18-694
7	Deb	Birgen	dbirgen@mrenergy.com	Missouri River Energy Services		PO Box 88920 Sioux Falls MN, 57109 United States	Electronic Service		No	18-694CIP-18-694
8	William	Black	bblack@mmua.org	MMUA		Suite 200 3131 Fernbrook Lane North Plymouth MN, 55447 United States	Electronic Service		No	18-694CIP-18-694
9	Matthew	Brodin	mbrodin@allete.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	18-694CIP-18-694
10	Christina	Brusven	cbrusven@fredlaw.com	Fredrikson Byron		60 S 6th St Ste 1500 Minneapolis MN, 55402-4400 United States	Electronic Service		No	18-694CIP-18-694
11	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	18-694CIP-18-694
12	Ray	Choquette	rchoquette@agp.com	Ag Processing Inc.		12700 West Dodge Road PO Box 2047 Omaha NE, 68103-2047 United States	Electronic Service		No	18-694CIP-18-694
13	Generic	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney		445 Minnesota	Electronic Service		Yes	18-694CIP-

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
					General - Department of Commerce	Street Suite 1400 St. Paul MN, 55101 United States				18-694
14	George	Crocker	gwillc@nawo.org	North American Water Office		5093 Keats Avenue Lake Elmo MN, 55042 United States	Electronic Service		No	18-694CIP-18-694
15	Charles	Drayton	charles.drayton@enbridge.com	Enbridge Energy Company, Inc.		7701 France Ave S Ste 600 Edina MN, 55435 United States	Electronic Service		No	18-694CIP-18-694
16	Jim	Erchul	jerchul@dbnhs.org	Daytons Bluff Neighborhood Housing Sv.		823 E 7th St St. Paul MN, 55106 United States	Electronic Service		No	18-694CIP-18-694
17	Greg	Ernst	gaernst@q.com	G. A. Ernst & Associates, Inc.		2377 Union Lake Trl Northfield MN, 55057 United States	Electronic Service		No	18-694CIP-18-694
18	Melissa S	Feine	melissa.feine@semcac.org	SEMCAC		PO Box 549 204 S Elm St Rushford MN, 55971 United States	Electronic Service		No	18-694CIP-18-694
19	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	18-694CIP-18-694
20	Lisa	Fischer	lisa.fischer@mrenergy.com	Missouri River Energy Services		PO Box 88920 Sioux Falls SD, 57109-8920 United States	Electronic Service		No	18-694CIP-18-694
21	Karolanne	Foley	karolanne.foley@dairylandpower.com	Dairyland Power Cooperative		PO Box 817 La Crosse WI, 54602-0817 United States	Electronic Service		No	18-694CIP-18-694
22	Tyler	Glewwe	tyler.glewwe@centerpointenergy.com	CenterPoint Energy		505 Nicollet Mall Minneapolis MN, 55402 United States	Electronic Service		No	18-694CIP-18-694
23	Jenny	Glumack	jenny@mrea.org	Minnesota Rural Electric Association		11640 73rd Ave N Maple Grove MN, 55369 United States	Electronic Service		No	18-694CIP-18-694
24	Jason	Grenier	jgrenier@otpco.com	Otter Tail Power Company		215 South Cascade Street Fergus Falls MN, 56537 United States	Electronic Service		No	18-694CIP-18-694
25	Jeffrey	Haase	jhaase@grenergy.com	Great River Energy		12300 Elm Creek Blvd Maple Grove MN, 55369 United States	Electronic Service		No	18-694CIP-18-694
26	Curtis	Hanson	chanson@franklinenergy.com	Franklin Energy		2303 Wycliff Street, Suite 2E St. Paul MN, 55114 United States	Electronic Service		No	18-694CIP-18-694

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
27	Kurt	Hauser	kurt.hauser@mrenergy.com	Missouri River Eenergy Services		3724 W Avera Dr PO Box 88920 Sioux Falls SD, 57109-8920 United States	Electronic Service		No	18-694CIP-18-694
28	Joe	Hoffman	ja.hoffman@smpma.org	SMMPA		500 First Ave SW Rochester MN, 55902-3303 United States	Electronic Service		No	18-694CIP-18-694
29	Dave	Johnson	dave.johnson@aeoa.org	Arrowhead Economic Opportunity Agency		702 3rd Ave S Virginia MN, 55792 United States	Electronic Service		No	18-694CIP-18-694
30	Jennifer	Kimmen	jennifer.kimmen@wecenergygroup.com	Minnesota Energy Resources Corporation (HOLDING)		2685 145th St W Rosemount MN, 55033 United States	Electronic Service		No	18-694CIP-18-694
31	Deborah	Knoll	dknoll@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	18-694CIP-18-694
32	Tina	Koecher	tkoecher@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802-2093 United States	Electronic Service		No	18-694CIP-18-694
33	Dean	Laube	deanlaube@franklinenergy.com	Franklin Energy Services		2215 East Clairemont Avenue Eau Claire WI, 54701 United States	Electronic Service		No	18-694CIP-18-694
34	Martin	Lepak	martin.lepak@aeoa.org	Arrowhead Economic Opportunity		702 S 3rd Ave Virginia MN, 55792 United States	Electronic Service		No	18-694CIP-18-694
35	Christine	Marquis	regulatory.records@xcelenergy.com	Xcel Energy		414 Nicollet Mall MN1180-07-MCA Minneapolis MN, 55401 United States	Electronic Service		No	18-694CIP-18-694
36	Josh	Mason	jmason@rpu.org	Rochester Public Utilities		4000 E River Rd NE Rochester MN, 55906 United States	Electronic Service		No	18-694CIP-18-694
37	Scot	McClure	scotmcclure@alliantenergy.com	Interstate Power And Light Company		4902 N Biltmore Ln PO Box 77007 Madison WI, 53707-1007 United States	Electronic Service		No	18-694CIP-18-694
38	David C.	McLaughlin	david.fhmab@midconetwork.com	Missouri River Energy Services		25 NW 2nd St Ste 102 Ortonville MN, 56278 United States	Electronic Service		No	18-694CIP-18-694
39	Tim	Miller	tim.miller@mrenergy.com	Missouri River Energy Services		3724 W Avera Dr PO Box 88920 Sioux Falls	Electronic Service		No	18-694CIP-18-694

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						SD, 57109-8920 United States				
40	David	Moeller	dmoeller@allete.com	Minnesota Power			Electronic Service		No	18-694CIP-18-694
41	Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP		33 South Sixth St Ste 4200 Minneapolis MN, 55402 United States	Electronic Service		No	18-694CIP-18-694
42	Carl	Nelson	cnelson@mncee.org	Center for Energy and Environment		212 3rd Ave N Ste 560 Minneapolis MN, 55401 United States	Electronic Service		No	18-694CIP-18-694
43	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	18-694CIP-18-694
44	Leah	Peterson	lpeterson@mnpower.com	Minnesota Power		30 West Superior St Duluth MN, 55802 United States	Electronic Service		No	18-694CIP-18-694
45	Lisa	Pickard	lseverson@minnkota.com	Minnkota Power Cooperative		5301 32nd Ave S Grand Forks ND, 58201 United States	Electronic Service		No	18-694CIP-18-694
46	Joe	Plummer	jplummer@franklinenergy.com	Franklin Energy Services, LLC		2303 Wycliff St Suite 2E St. Paul MN, 55114 United States	Electronic Service		No	18-694CIP-18-694
47	Bill	Poppert	info@technologycos.com	Technology North		2433 Highwood Ave St. Paul MN, 55119 United States	Electronic Service		No	18-694CIP-18-694
48	Dave	Reinke	dreinke@dakotaelectric.com	Dakota Electric Association		4300 220th St W Farmington MN, 55024-9583 United States	Electronic Service		No	18-694CIP-18-694
49	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	18-694CIP-18-694
50	Anne	Rittgers	arittgers@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	18-694CIP-18-694
51	Merlin	Sawyer	merlin.sawyer@mrenergy.com	Missouri River Energy Services		3724 W AVERA DR PO BOX 88920 Sioux Falls SD, 57109-8920 United States	Electronic Service		No	18-694CIP-18-694
52	Jean	Schafer	jeans@bepc.com	Basin Electric Power		1717 E Interstate	Electronic Service		No	18-694CIP-

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
				Cooperative		Ave Bismarck ND, 58501 United States				18-694
53	Ben	Schoenbauer	bschoenbauer@mncee.org	Center for Energy and Environment		212 3rd Ave N Ste 560 Minneapolis MN, 55401 United States	Electronic Service	No	18-694CIP-18-694	
54	Rob	Scott Hovland	rob.scott-hovland@mrenergy.com	Missouri River Energy Services		3724 W Avera Dr PO Box 88920 Sioux Falls SD, 57109-8920 United States	Electronic Service	No	18-694CIP-18-694	
55	Rick	Sisk	rsisk@trccompanies.com	Lockheed Martin		1000 Clark Ave. St. Louis MO, 63102 United States	Electronic Service	No	18-694CIP-18-694	
56	Ken	Smith	ken.smith@districtenergy.com	District Energy St. Paul Inc.		76 W Kellogg Blvd St. Paul MN, 55102 United States	Electronic Service	No	18-694CIP-18-694	
57	Anna	Sommer	asommer@energyfuturesgroup.com	Energy Futures Group		PO Box 692 Canton NY, 13617 United States	Electronic Service	No	18-694CIP-18-694	
58	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	18-694CIP-18-694	
59	Analeisha	Vang	avang@mnpower.com			30 W Superior St Duluth MN, 55802-2093 United States	Electronic Service	No	18-694CIP-18-694	
60	Kodi	Verhalen	kverhalen@taftlaw.com	Taft Stettinius & Hollister LLP		80 S 8th St Ste 2200 Minneapolis MN, 55402 United States	Electronic Service	No	18-694CIP-18-694	
61	Michael	Volker	mvolker@eastriver.coop	East River Electric Power Coop		211 S. Harth Ave Madison SD, 57042 United States	Electronic Service	No	18-694CIP-18-694	
62	Ethan	Warner	ethan.warner@centerpointenergy.com	CenterPoint Energy		505 Nicollet Mall Minneapolis MN, 55402 United States	Electronic Service	No	18-694CIP-18-694	
63	Shawn	White	shawn.m.white@xcelenergy.com	Xcel Energy		414 Nicollet Mall Minneapolis MN, 55401 United States	Electronic Service	No	18-694CIP-18-694	
64	Robyn	Woeste	robynwoeste@alliantenergy.com	Interstate Power and Light Company		200 First St SE Cedar Rapids IA, 52401 United States	Electronic Service	No	18-694CIP-18-694	
65	Terry	Wolf	terry.wolf@mrenergy.com	Missouri River Energy Services		3724 W Avera Dr PO Box	Electronic Service	No	18-694CIP-18-694	

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						Sioux Falls SD, 57109- 8920 United States				
66	Brian	Zavesky	brianz@mrenergy.com	Missouri River Energy Services		3724 West Avera Drive P.O. Box 88920 Sioux Falls SD, 57108- 8920 United States	Electronic Service	No	18-694CIP-18-694	
67	Cristina	Zuniga	czuniga@otpco.com	Otter Tail Power Company		215 South Cascade Street PO Box 496 Fergus Falls MN, 56538 United States	Electronic Service	No	18-694CIP-18-694	

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
1	Julie	Ambach	juliea@cmmpa.org	Shakopee Public Utilities		255 Sarazin St Shakopee MN, 55379 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
2	Tom	Balster	tombalster@alliantenergy.com	Interstate Power & Light Company		PO Box 351 200 1st St SE Cedar Rapids IA, 52406-0351 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
3	Lisa	Beckner	lbeckner@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
4	Sasha	Bergman	sasha.bergman@state.mn.us		Public Utilities Commission		Electronic Service		No	CIP SPECIAL SERVICE LIST
5	William	Black	bblack@mmua.org	MMUA		Suite 200 3131 Fernbrook Lane North Plymouth MN, 55447 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
6	Matthew	Brodin	mbrodin@allete.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
7	Christina	Brusven	cbrusven@fredlaw.com	Fredrikson Byron		60 S 6th St Ste 1500 Minneapolis MN, 55402-4400 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
8	Mike	Bull	mike.bull@state.mn.us		Public Utilities Commission	121 7th Place East, Suite 350 St. Paul MN, 55101 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
9	Ray	Choquette	rchoquette@agp.com	Ag Processing Inc.		12700 West Dodge Road PO Box 2047 Omaha NE, 68103-2047 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
10	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	CIP SPECIAL SERVICE LIST
11	George	Crocker	gwillc@nawo.org	North American Water Office		5093 Keats Avenue Lake Elmo MN, 55042 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
12	Charles	Drayton	charles.drayton@enbridge.com	Enbridge Energy Company, Inc.		7701 France Ave S Ste 600 Edina MN, 55435 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
13	Jim	Erchul	jerchul@dbnhs.org	Daytons Bluff Neighborhood Housing Sv.		823 E 7th St St. Paul MN, 55106 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
14	Greg	Ernst	gaernst@q.com	G. A. Ernst & Associates, Inc.		2377 Union Lake Trl Northfield MN, 55057 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
15	Melissa S	Feine	melissa.feine@semcac.org	SEMCAC		PO Box 549 204 S Elm St Rushford MN, 55971 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
16	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	CIP SPECIAL SERVICE LIST
17	Karolanne	Foley	karolanne.foley@dairylandpower.com	Dairyland Power Cooperative		PO Box 817 La Crosse WI, 54602-0817 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
18	Tyler	Glewwe	tyler.glewwe@centerpointenergy.com	CenterPoint Energy		505 Nicollet Mall Minneapolis MN, 55402 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
19	Jenny	Glumack	jenny@mrea.org	Minnesota Rural Electric Association		11640 73rd Ave N Maple Grove MN, 55369 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
20	Jason	Grenier	jgrenier@otpco.com	Otter Tail Power Company		215 South Cascade Street Fergus Falls MN, 56537 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
21	Jeffrey	Haase	jhaase@greenergy.com	Great River Energy		12300 Elm Creek Blvd Maple Grove MN, 55369 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
22	Joe	Hoffman	ja.hoffman@smpma.org	SMPMA		500 First Ave SW Rochester MN, 55902-3303 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
23	Dave	Johnson	dave.johnson@aeoa.org	Arrowhead Economic Opportunity Agency		702 3rd Ave S Virginia MN, 55792 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
24	Martin	Kapsch	martin.kapsch@centerpointenergy.com	CenterPoint Energy Minnesota Gas		505 Nicollet Mall Minneapolis MN, 55402 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
25	Deborah	Knoll	dknoll@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
26	Kathryn	Knudson	kathryn.knudson@centerpointenergy.com	CenterPoint Energy Minnesota Gas		null null, null United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
27	Tina	Koecher	tkoecher@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802-2093 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
28	Martin	Lepak	martin.lepak@aeoa.org	Arrowhead Economic Opportunity		702 S 3rd Ave Virginia MN, 55792 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
29	Corey	Lubovich	coreyl@hpuc.com	Hibbing Public Utilities Commission		1902 6th Ave E Hibbing MN, 55746 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
30	Christine	Marquis	regulatory.records@xcelenergy.com	Xcel Energy		414 Nicollet Mall MN1180-07-MCA Minneapolis MN, 55401 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
31	Josh	Mason	jmason@rpu.org	Rochester Public Utilities		4000 E River Rd NE Rochester MN, 55906 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
32	Scot	McClure	scotmcclure@alliantenergy.com	Interstate Power And Light Company		4902 N Biltmore Ln PO Box 77007 Madison WI, 53707-1007 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
33	David	Moeller	dmoeller@allete.com	Minnesota Power			Electronic Service		No	CIP SPECIAL SERVICE LIST
34	Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP		33 South Sixth St Ste 4200 Minneapolis MN, 55402 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
35	Carl	Nelson	cnelson@mncee.org	Center for Energy and Environment		212 3rd Ave N Ste 560 Minneapolis MN, 55401 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
36	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	CIP SPECIAL SERVICE LIST
37	Lisa	Pickard	lseverson@minnkota.com	Minnkota Power Cooperative		5301 32nd Ave S Grand Forks ND, 58201 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
38	Bill	Poppert	info@technologycos.com	Technology North		2433 Highwood Ave St. Paul MN, 55119 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
39	Dave	Reinke	dreinke@dakotaelectric.com	Dakota Electric Association		4300 220th St W Farmington MN, 55024-9583 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
40	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		No	CIP SPECIAL SERVICE LIST
41	Jean	Schafer	jeans@bepc.com	Basin Electric Power Cooperative		1717 E Interstate Ave Bismarck ND, 58501 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
42	Laura	Silver	laura.silver@state.mn.us	Department of Commerce		85 7th Place E, Suite 500 St. Paul MN, 55101 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
43	Rick	Sisk	rsisk@trccompanies.com	Lockheed Martin		1000 Clark Ave. St. Louis MO, 63102 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
44	Ken	Smith	ken.smith@districtenergy.com	District Energy St. Paul Inc.		76 W Kellogg Blvd St. Paul MN, 55102 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
45	Anna	Sommer	asommer@energyfuturesgroup.com	Energy Futures Group		PO Box 692 Canton NY, 13617 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
46	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	CIP SPECIAL SERVICE LIST

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
47	Kodi	Verhalen	kverhalen@taftlaw.com	Taft Stettinius & Hollister LLP		80 S 8th St Ste 2200 Minneapolis MN, 55402 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
48	Michael	Volker	mvolker@eastriver.coop	East River Electric Power Coop		211 S. Harth Ave Madison SD, 57042 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
49	Ethan	Warner	ethan.warner@centerpointenergy.com	CenterPoint Energy		505 Nicollet Mall Minneapolis MN, 55402 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST
50	Robyn	Woeste	robynwoeste@alliantenergy.com	Interstate Power and Light Company		200 First St SE Cedar Rapids IA, 52401 United States	Electronic Service		No	CIP SPECIAL SERVICE LIST