

November 20, 2025

VIA eFILING

Sydney Lieb, PhD
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 Technical Reference Manual Version 5.0
Docket No. E,G-999/CIP-18-694**

Joint Comments

Dear Assistant Commissioner Dr. Lieb:

On October 29, 2025, the Minnesota Department of Commerce (“Department”), Division of Energy Resources filed a draft State of Minnesota Technical Reference Manual (“TRM”) for Conservation Improvement Programs, Version 5.0 (the *Draft TRM v.5.0*).¹ CenterPoint Energy Resource Corp., d/b/a CenterPoint Energy Minnesota Gas, Connexus Energy, Dakota Electric Association, Great Plains Natural Gas Co., Great River Energy, Minnesota Energy Resources Corporation, Minnesota Municipal Utilities Association, Minnesota Power, Minnesota Rural Electric Association, Northern States Power Company, doing business as Xcel Energy, and Otter Tail Power Company (collectively, “the Utilities”) for the purpose of this filing are providing these joint comments expressing concerns about the Technical Reference Manual Advisory Committee (“TRMAC”) process and the approach taken to propose changes in the *Draft TRM v.5.0*.

Background and Timeline

The Utilities actively participate² in the TRMAC process and earlier this year the TRMAC was scheduled to meet five times from May through September to discuss measure updates and potential additions to the TRM v5.0. Throughout the summer and early fall, TRMAC members were given the chance to review and discuss measure workpapers introduced during and in-between meetings. As shown below, despite this active participation, the *Draft TRM v5.0* includes proposals that were not part of the TRMAC process and did not include the Utilities input or feedback:

¹ Docket No. E,G-999/CIP-18-694.

² Or represent municipal or cooperative utilities who do.

- On July 25, 2025, in TRMAC Meeting 3, the Department introduced three potential measure updates for TRM v5.0, including updates to baseline Annual Fuel Utilization Efficiency (“AFUE”) for furnaces based on a survey of contractors participating in Wisconsin’s statewide energy-efficiency program, Focus on Energy.³ Department Staff proposed to not pursue the furnace baseline increase because they “don’t believe the WI contractor survey is specific enough in Minnesota to justify this change.”
- Between TRMAC Meeting 3 and TRMAC Meeting 4, Department Staff sent out a request for feedback on its proposal to not pursue the furnace baseline increase. Submitted comments from TRMAC members agreed with this approach.
- Meetings 4 and 5, the last two scheduled meetings, focused on other topics and the furnace baseline topic was not further discussed. No technical review or discussion occurred and no measure workbook or workpaper with furnace baseline changes was uploaded to the TRMAC Collaboration Site. No further opportunity to discuss the WI Focus on Energy contractor survey occurred.
- On October 9, 2025, after all scheduled meetings had taken place, TRMAC members received a redlined *Draft TRM v5.0* which the Department stated it planned to file on October 20, 2025. Participants were asked to provide any informal feedback within 6 business days – by October 17, 2025.
- On October 16, one day prior to the informal feedback deadline, Department Staff notified the TRMAC there would be a delay in filing the *Draft TRM v5.0*. The feedback response deadline was extended to October 22 and a new TRMAC Meeting 6 was planned.
- Some of the Utilities were informed between October 21 and October 24 that the Department was moving forward on updating the Residential HVAC – Furnaces and Boilers measure baseline.
- On October 22, a Meeting 6 was scheduled for October 27, but no draft measure workpapers or workbooks were uploaded to the MN TRMAC Collaboration Site prior to the meeting.
- On October 27, during Meeting 6, the Department proposed to update the residential furnace baseline from 80% AFUE to 90% AFUE in the *Draft TRM v5.0* based on a WI survey results (“Department’s Furnace Baseline Proposal”).⁴ TRMAC members expressed their concern with both the timing and lack of support for the proposed update, and informed the Department that multiple measures use the furnace baseline (e.g., insulation and air source heat pumps [“ASHP”]) and would need to be updated. The Department agreed to look at holistic changes and provide estimates of the impacts on energy savings.
- On October 29, the Department filed *Draft TRM v.5.0* with the changes to the furnace baseline for furnaces, insulation, ECM blower motors, and ground source heat pumps, but

³ Potential updates included removal of Central air conditioners references in the Residential HVAC - Efficient Air Conditioning System measure, increasing the deemed efficiency baseline for gas furnaces in the Residential HVAC - Furnaces and Boilers measure, and changing baselines of certain lighting measures.

⁴ Annual fuel utilization efficiency (“AFUE”) is a thermal efficiency measure of space-heating.

not ASHPs due to the “significant amount of work required” for the update.⁵ In the filing, it was noted that comments from Fresh Energy supporting changes to the furnace baseline were received on October 22.

- The Department emailed estimated changes to energy savings to TRMAC members on October 29.
- Department Staff shared Fresh Energy’s comments with CenterPoint Energy at its request on October 31 and posted them on the MN TRMAC Collaboration Site.

Stakeholder Engagement

The Utilities have concerns about the Department’s Furnace Baseline Proposal, particularly because it is a major decision that was adopted without technical vetting through the TRMAC. Additionally, the precedent this could set for future TRM updates and ECO regulatory matters. Minnesota statute provides the framework for development of the TRM for the purpose of providing technical assistance to utilities:⁶

The commissioner shall establish an inventory of the most effective energy conservation programs, techniques, and technologies, and encourage all Minnesota utilities to implement them, where appropriate. The commissioner shall describe these programs in sufficient detail to provide a utility reasonable guidance concerning implementation.

The overarching purpose of the TRM is to define standards for measuring, evaluating, and reporting energy savings and therefore cost effectiveness. The Department established a TRMAC that meets prior to the filing of each updated version of the TRM. The TRMAC mission is to be a forum for stakeholders to provide ongoing technical vetting, feedback, and recommendations for the TRM. A goal behind the creation of the TRMAC is to work collaboratively and transparently through a deliberative process to evaluate potential updates and modifications to technical assumptions. This process is to ensure changes are supported by relevant technical analysis and data and to avoid any sudden changes that adversely impact utility program planning (e.g., budgeting for future triennials).⁷ The TRM serves a critical function particularly for cooperative and municipal utilities that may have fewer technical support resources. The TRMAC was also set up with the assumption of not endorsing specific products or vendors.⁸

Under Minn. Stat. § 216B.241, conservation plans must be evaluated based on cost-effectiveness and the reliability of technologies, while ensuring consumers retain free choice among qualified

⁵ Staff acknowledge that the revised proposal to update the baseline for Residential Furnaces in existing applications in the MN *Draft TRM v.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.

⁶ Minnesota Statute § 216B.241 subd. 1d

⁷ TRM Meeting Notes, November 20, 2013.

⁸ Department of Commerce. TRM Advisory Committee Meeting Presentation. Slide 4 (June 10, 2014).

devices, methods, and providers.⁹ The TRM is intended to support this statutory framework by providing standardized methodologies for computing energy savings and cost-effectiveness, ensuring consistency and transparency in evaluation. Consistent with statute, the TRM's role is to quantify performance, not to determine market outcomes.

In Meeting 3, Department Staff stated they did not believe the WI contractor survey was applicable enough to MN to justify implementing changes based on that survey without further research. Therefore, the Utilities understood that Staff would not be pursuing this update. TRMAC members were encouraged to provide feedback. All comments provided in August and September agreed with Department Staff, and thus there was no further TRMAC discussion regarding the topic in meetings. The last-minute change by the Department appears to have been decided sometime after the creation of the redline draft TRM v5.0 on October 9.

In the Proposed Decision, Staff acknowledges

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.

Bypassing the TRMAC stakeholder feedback and technical review processes has resulted in a draft TRM that would yield inconsistent outcomes and other inconsistencies for several other measures. In Meeting 6, after TRMAC members pointed out how a residential furnace baseline change affects several TRM measures, the Department updated other TRM measures including Ground Source Heat Pumps, Insulation and Air Sealing, and ECM Blower Motors. The Department notably did not update ASHP, Low E storm windows, and Cellular Shade Window Coverings measures despite acknowledging updates would be needed for consistency, based on the Department's own conclusion that it would require a significant amount of work to update the modeled methodology. The result is inconsistent application of the Department's Furnace Baseline Proposal across various measures—applied to some but not others—without any technical support, with the potential consequence of mischaracterizing savings and cost-effectiveness of certain measures. While the timing of the proposed updates and comment deadlines did not allow for an exhaustive review and vetting of all impacts, other inconsistencies and uncertainties created by the proposed updates include the fact that the proposed incremental costs for furnaces are based on the prior 80% AFUE baseline and therefore not aligned with the proposed updated baseline. Additionally, in light of the proposed updates, it is unclear how energy savings from ECMs can be claimed under the new furnace baseline when condensing furnaces are required by code to have an ECM.

⁹ Minnesota Statute 216B.241, subd. 2c. Energy conservation plans are required to be evaluated on the basis of cost-effectiveness with a free choice of the device, method, material, or project constituting the energy conservation improvement.

Members of the TRMAC were unable to participate in the critical vetting of technical assumptions that ensures TRM measure updates remain transparent, accurate, and grounded in sound analysis. The Utilities strongly support a robust peer-review process and discussion of technical merits of any TRM measure change prior to decision-making. Normally, new measures and changes to measures are previewed and discussed as part of the TRMAC process during meetings and through informal feedback and comments. This proposal did not go through the typical TRMAC review and vetting processes and as a result there are notable inconsistencies and inaccuracies in the TRM that will be harmful to ECO programs supporting customers' access to high-efficiency equipment.

Beyond the impacts of the proposal, the Utilities are concerned by the potential precedent being set to bypass the established TRMAC technical review and vetting process and implement major changes without meaningful notice, opportunity to evaluate technical support, or provide feedback in an open and transparent manner. The Utilities are also concerned by the precedent being set in applying updated assumptions inconsistently across measures without technical support, which undermines the important role of the TRM in quantifying performance consistently and transparently—not determining market outcomes.

Precedent and Standards Used in the TRM

The Utilities also takes issue with basing the decision to update the baseline for Residential Furnaces in some measures in *Draft TRM v5.0* on the WI Focus on Energy survey.¹⁰ Staff's initial recommendation was to postpone consideration of an updated baseline until after additional Minnesota specific baseline research was completed was communicated to the TRMAC in Meeting 3.¹¹ As context, the survey asked contractors participating in Wisconsin's statewide energy efficiency program, Focus on Energy, to report on the lowest efficiency option they had offered to customers.

The Utilities have misgivings about the technical validity of basing Minnesota TRM assumptions on recalled estimates of furnace minimum AFUE offered by Wisconsin contractors participating in the state's energy efficiency program as an accurate representation of current Minnesota markets or the effects of ECO programs.¹²

The Utilities believe that the use of this type of information for TRM assumptions is unprecedented and not a reasonable basis for evaluating ECO program energy savings. Baselines in the TRM should reflect what customers would install in the absence of the ECO program. This ensures that the savings calculated under the TRM methodologies accurately reflects the savings that are attributable to ECO. Consistent with historic practice used for the Minnesota TRM, state energy

¹⁰ Draft TRM v.5.0 at page 107 ("Analysis of an HVAC contractor survey issued in 2023 by WI Focus On Energy and published in the WI TRM v2024 supported an increased efficiency baseline to 90% for non-income qualified single family residential customers (applicable to all baseline scenarios including early replacement.").

¹¹ TRMAC Committee 5.0 – Meeting 6. Recording available at <https://mn.gov/commerce/energy/conserving-energy/eco/technical-reference-manual/> (October 27, 2025)

¹² Also, this approach is not connected to a customer's replaced furnace and actual energy savings.

code and federal equipment codes are generally the most appropriate basis for setting measure baselines and determining the energy savings effects of the ECO Program.¹³ The state of the residential furnace market has not been well studied in Minnesota or evaluated in the TRMAC process.

As discussed above, the WI study does not provide a reasonable baseline for what consumers would be expected to install in the absence of efficiency programing because the survey was of contractors participating in Wisconsin's efficiency program. As a result, their product offerings and recommendations reflect the efficiency program's incentives, not what a consumer would be likely to install in the absence of efficiency program offerings. Contractors participating in the efficiency program are more likely to stock and recommend higher efficiency furnaces because of rebates tied to the efficiency program and their responses likely do not reflect the broader market of contractors or what a typical consumer would install. Efficiency programs are often designed to influence contractors to focus on offering high-efficiency products as minimum offerings through incentive programs. Therefore, using contractor behavior as influenced by energy efficiency programs does not reflect a reasonable baseline for purposes of determining savings associated with ECO offerings.

The Utilities believe state energy code and federal equipment codes remain the most appropriate basis for setting measure baselines and determining energy savings effects of ECO Program. This approach reflects historic practice used to build the TRM and a change in standards has not been identified or consistently applied with respect to the proposed residential furnace baseline updates.

The Department also noted as a consideration for its Furnace Baseline Proposal the updated federal standards for residential gas furnaces, requiring all *new* units manufactured after December 18, 2028, to meet a minimum of 95% AFUE.¹⁴ The Utilities fail to see how forthcoming federal standards—requiring manufacturers to comply with higher minimum efficiencies for products manufactured or imported on or after December 18, 2028—are relevant to the Minnesota market during the 2027–2029 timeframe. 80% AFUE furnaces will remain on the market after those changes in manufacturing requirements are implemented. In the past, when federal standards have been modified, for example lighting and boilers, the Minnesota baselines have been updated following a 1 to 2 year transition period after the federal change went into effect, recognizing the amount of time it takes for existing inventory to be sold and installed before the newly manufactured inventory becomes the new standard.¹⁵ Unless the federal standard timeline changes, this is an issue to be addressed in TRM v.6.0.

¹³ The Utilities also acknowledge that another reasonable standard is market availability, i.e., if the low-efficiency equipment is available and accessible by customers, but 80% AFUE furnaces are readily available in Minnesota.

¹⁴ TRMAC Committee 5.0 – Meeting 6. Slide 6 of 9. Presentation and Recording available at <https://mn.gov/commerce/energy/conserving-energy/eco/technical-reference-manual/> (October 27, 2025).

¹⁵ See *In the Matter of CenterPoint Energy's 2021-2023 Natural Gas Conservation*

The Department also mentioned the ECO new construction furnace baseline being 90% AFUE as a consideration in its decision-making.¹⁶ This supports the Utilities' perspective that codes and standards should be used as the basis for establishing baseline efficiency. Minnesota state residential codes effectively require condensing furnaces to meet venting requirements and therefore an 80% AFUE furnace baseline for new construction would not be appropriate.¹⁷ Due to this code requirement, the TRM furnace baseline was updated to 90% AFUE for new construction, which was reasonably the minimum that could be installed. However, that code requirement is not applicable in the case of retrofits and therefore, the same rationale does not apply in the case of retrofit applications.

Finally, the Department references to Maine and Vermont, two states with very different policy frameworks for energy efficiency programs as compared to Minnesota, in support of the proposed change.¹⁸ Other states such as Illinois and Michigan are both more similar in climate and policy-framework and are using or proposing to use 80% AFUE as their residential furnace baselines.¹⁹

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Conclusions

The Utilities have concerns that the justifications for and the implementation of the Department's Furnace Baseline Proposal are not technically sound or well explained in relation to statute, satisfying the stated purpose of the TRM, or historic practice. At a minimum, the Department should provide additional technical justification and a clear explanation for its Proposal, including how it aligns with statute, fulfills the stated purpose of the TRM, and maintains consistency with historic practice and engagement with stakeholders. The Department's Proposal establishes new precedents that could have implications for many other TRM measures and not just as selectively applied to specific measures. If the approach taken to changing furnace baselines were applied in other areas of ECO, it would undercut the effects of ECO programs by disregarding efforts to influence trade practices. This is not in the State's or customers' interest.

Improvement Program Triennial Plan, Docket No. G-008/CIP-20-478, Request to Modify CenterPoint Energy's Conservation Improvement Programs. (Sep. 1, 2021).

¹⁶ TRMAC 5.0 – Meeting 6. Slide 6 of 9. Presentation and Recording available at <https://mn.gov/commerce/energy/conserving-energy/eco/technical-reference-manual/> (October 27, 2025).

¹⁷ 2024 Minnesota Energy Code with ANSI/ASHRAE/IES Standard 90.1-2019. Section 6.8.1 Minimum Efficiency Requirement Listed Equipment—Standard Rating and Operating Conditions Effective January 5, 2024. https://codes.iccsafe.org/content/MNEC2024P1/6-heating-ventilating-and-air-conditioning#MNEC2024P1_Ch06_Sec6.8

¹⁸ TRMAC 5.0 – Meeting 6. Slide 6 of 9. Recording and Presentation available at <https://mn.gov/commerce/energy/conserving-energy/eco/technical-reference-manual/> (October 27, 2025)

¹⁹ 2026 Illinois Statewide Technical Reference Manual for Energy Efficiency Version 14.0 Volume 3: Residential Measures (September 19, 2025) Pg 182 of 575.

²⁰ The Michigan Energy Measures database (MEMD) <https://www.michigan.gov/en/mpsc/consumer/Energy-Optimization/michigan-energy-measures-database> (retrieved on November 6, 2025).

Further, the Department's Proposal will negatively impact the triennial planning process and inserts substantial uncertainty into the process. The potential impacts on energy efficiency programs are concerning, especially given the current uncertainty in the market caused by expiring tax credits and rising measure costs due to inflation. This is not in the best interest of consumers. Also, low-to-moderate income customers, who tend to live in older housing with low-efficiency furnaces, are most in need of incentives to upgrade to high-efficiency equipment.

The Utilities do appreciate and acknowledge how well the TRMAC process has otherwise been working to date as led by Department Staff and Cadmus. The Utilities appreciate the Department Staff and Cadmus' use of a deliberate and collaborative process to review and incorporate changes in developing other parts of the *Draft TRM v5.0*. The Utilities value the opportunity to participate in the TRMAC process and provide comments and feedback on the TRM.

Please contact the Utilities at the emails listed below with any questions.

Sincerely,

/s/ Ethan S. Warner

Ethan S. Warner
Regulatory Manager
CenterPoint Energy
Ethan.Warner@centerpointenergy.com

/s/ Patrick Mathwig

Patrick Mathwig
Energy Services Representative
Dakota Electric Association
PMathwig@dakotaelectric.com

/s/ Jeff Haase

Jeff Haase
Director, Member Services
Great River Energy
Jhaase@greenergy.com

/s/ Jennifer Kuklenski

Jennifer Kuklenski
Manager – Regulatory Strategy and Policy
Minnesota Power
jkuklenski@mnpower.com

/s/ Jenny Glumack

Jenny Glumack
Director of Government Affairs
Minnesota Rural Electric Association (MREA)
jenny@mrea.org

/s/ Jason Grenier

Jason Grenier
Manager, Retail Energy Solutions
Ottetail Power Company
jgrenier@otpc.com
C: Service List

/s/ Victoria Jones

Victoria Jones
Director, Power Supply and Business Dev.
Connexus Energy
Victoria.Jones@connexusenergy.com

/s/ Larry Oswald

Larry Oswald
Director, Business Dev. and Energy Services
Great Plains Natural Gas Co.
Larry.oswald@mdu.com

/s/ Jennifer Kimmen

Jennifer Kimmen
Senior Customer Program Manager
WEC Business Services, Inc.
Jennifer.Kimmen@wecenergygroup.com

/s/ Kent Sulem

Kent Sulem
Director of Gov. Relations & Senior Counsel
Minnesota Municipal Utilities Association
ksulem@mmua.org

/s/ Christopher Shaw

Christopher Shaw
Regulatory Policy Manager
Xcel Energy
Christopher.j.shaw@xcelenergy.com

In the Matter of Technical Reference Manual Version 5.0	Docket No. E,G999/CIP-18-694
November 20, 2025	Joint Comments

CERTIFICATE OF SERVICE

I, Tyler Glewwe, served the attached *Joint Comments* of the Utilities on the attached service list for Docket No. E,G999/CIP-18-694 by electronic service.

/s/ Tyler Glewwe

Regulatory Analyst, Energy Conservation and Optimization Programs
CenterPoint Energy

#	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@cmmmpa.org	Shakopee Public Utilities		255 Sarazin St Shakopee MN, 55379 United States	Electronic Service		No	18-694CIP-18-694
3	Kathy	Baerlocher	kathy.baerlocher@mdu.com	Great Plains Natural Gas Company		400 N 4th St Bismarck ND, 58501 United States	Electronic Service		No	18-694CIP-18-694
4	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
5	Lisa	Beckner	lbeckner@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	18-694CIP-18-694
6	Sasha	Bergman	sasha.bergman@state.mn.us		Public Utilities Commission		Electronic Service		No	18-694CIP-18-694
7	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
8	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
9	William	Black	bblack@mmua.org	MMUA		Suite 200 3131 Fernbrook Lane North Plymouth MN, 55447 United States	Electronic Service		No	18-694CIP-18-694
10	Matthew	Brodin	mbrodin@allete.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	18-694CIP-18-694
11	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
12	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
13	Ray	Choquette	rchoquette@agp.com	Ag Processing Inc.		12700 West Dodge Road PO Box 2047 Omaha NE,	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
						68103-2047 United States				
14	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	18-694CIP-18-694
15	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
16	Bradley	Davison	bradley.davison@mdu.com	Great Plains Natural Gas Company			Electronic Service		No	18-694CIP-18-694
17	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
18	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
19	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
20	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
21	Sharon	Ferguson	sharon.ferguson@state.mn.us		Department of Commerce	85 7th Place E Ste 280 Saint Paul MN, 55101-2198 United States	Electronic Service		No	18-694CIP-18-694
22	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
23	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
24	Tyler	Glewwe	tyler.glewwe@centerpointenergy.com	CenterPoint Energy		505 Nicollet Mall Minneapolis MN, 55402 United States	Electronic Service		No	18-694CIP-18-694
25	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
26	Jason	Grenier	jgrenier@otpc.com	Otter Tail Power Company		215 South Cascade Street Fergus Falls MN, 56537 United States	Electronic Service		No	18-694CIP-18-694
27	Jeffrey	Haase	jhaase@greenergy.com	Great River Energy		12300 Elm Creek Blvd Maple Grove	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
						MN, 55369 United States				
28	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
29	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
30	Joe	Hoffman	ja.hoffman@smpa.org	SMPA		500 First Ave SW Rochester MN, 55902-3303 United States	Electronic Service		No	18-694CIP-18-694
31	Travis	Jacobson	travis.jacobson@mdu.com	Great Plains Natural Gas Company		400 N 4th St Bismarck ND, 58501 United States	Electronic Service		No	18-694CIP-18-694
32	Dave	Johnson	dave.johnson@aao.org	Arrowhead Economic Opportunity Agency		702 3rd Ave S Virginia MN, 55792 United States	Electronic Service		No	18-694CIP-18-694
33	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
34	Zach	Klabo	zach.klabo@mdu.com	Great Plains Natural Gas Company			Electronic Service		No	18-694CIP-18-694
35	Deborah	Knoll	dknoll@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	18-694CIP-18-694
36	Tina	Koecher	tkoecher@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802-2093 United States	Electronic Service		No	18-694CIP-18-694
37	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
38	Martin	Lepak	martin.lepak@aao.org	Arrowhead Economic Opportunity		702 S 3rd Ave Virginia MN, 55792 United States	Electronic Service		No	18-694CIP-18-694
39	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
40	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

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
41	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
42	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
43	Tim	Miller	tim.miller@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
44	David	Moeller	dmoeller@allete.com	Minnesota Power			Electronic Service		No	18-694CIP-18-694
45	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
46	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
47	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
48	Larry	Oswald	larry.oswald@mdu.com	Great Plains Natural Gas Company		105 W Lincoln Ave PO Box 176 Fergus Falls MN, 56538-9001 United States	Electronic Service		No	18-694CIP-18-694
49	Leah	Peterson	lpeterson@minpower.com	Minnesota Power		30 West Superior St Duluth MN, 55802 United States	Electronic Service		No	18-694CIP-18-694
50	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
51	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
52	Bill	Poppert	info@technologycos.com	Technology North		2433 Highwood Ave St. Paul MN, 55119 United States	Electronic Service		No	18-694CIP-18-694
53	Dave	Reinke	dreinke@dakotaelectric.com	Dakota Electric Association		4300 220th St W Farmington MN, 55024-	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
						9583 United States				
54	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
55	Anne	Rittgers	arittgers@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	18-694CIP-18-694
56	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
57	Jean	Schafer	jeans@bepc.com	Basin Electric Power Cooperative		1717 E Interstate Ave Bismarck ND, 58501 United States	Electronic Service		No	18-694CIP-18-694
58	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
59	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
60	Rick	Sisk	rsisk@trccompanies.com	Lockheed Martin		1000 Clark Ave. St. Louis MO, 63102 United States	Electronic Service		No	18-694CIP-18-694
61	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
62	Anna	Sommer	asommer@energyfuturesgroup.com	Energy Futures Group		PO Box 692 Canton NY, 13617 United States	Electronic Service		No	18-694CIP-18-694
63	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
64	Analeisha	Vang	avang@mnpower.com			30 W Superior St Duluth MN, 55802-2093 United States	Electronic Service		No	18-694CIP-18-694
65	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

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
66	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
67	Ethan	Warner	ethan.warner@centerpointenergy.com	CenterPoint Energy		505 Nicollet Mall Minneapolis MN, 55402 United States	Electronic Service		No	18-694CIP-18-694
68	Shawn	White	shawn.m.white@xcelenergy.com	Xcel Energy		414 Nicollet Mall Minneapolis MN, 55401 United States	Electronic Service		No	18-694CIP-18-694
69	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
70	Terry	Wolf	terry.wolf@mrenergy.com	Missouri River Energy Services		3724 W Avera Dr PO Box Sioux Falls SD, 57109-8920 United States	Electronic Service		No	18-694CIP-18-694
71	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
72	Cristina	Zuniga	czuniga@otpc.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

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1	Julie	Ambach	juliea@cmmmpa.org	Shakopee Public Utilities		255 Sarazin St Shakopee MN, 55379 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
2	Kathy	Baerlocher	kathy.baerlocher@mdu.com	Great Plains Natural Gas Company		400 N 4th St Bismarck ND, 58501 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
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	ECO SPECIAL SERVICE LIST
4	Lisa	Beckner	lbeckner@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
5	Sasha	Bergman	sasha.bergman@state.mn.us		Public Utilities Commission		Electronic Service		No	ECO SPECIAL SERVICE LIST
6	William	Black	bblack@mmua.org	MMUA		Suite 200 3131 Fernbrook Lane North Plymouth MN, 55447 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
7	Matthew	Brodin	mbrodin@allete.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
8	Christina	Brusven	cbrusven@fredlaw.com	Fredrikson Byron		60 S 6th St Ste 1500 Minneapolis MN, 55402-4400 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
9	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	ECO SPECIAL SERVICE LIST
10	Ray	Choquette	rchoquette@agp.com	Ag Processing Inc.		12700 West Dodge Road PO Box 2047 Omaha NE, 68103-2047 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
11	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	ECO SPECIAL SERVICE LIST

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
12	George	Crocker	gwillc@nawo.org	North American Water Office		5093 Keats Avenue Lake Elmo MN, 55042 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
13	Bradley	Davison	bradley.davison@mdu.com	Great Plains Natural Gas Company			Electronic Service		No	ECO SPECIAL SERVICE LIST
14	Charles	Drayton	charles.drayton@enbridge.com	Enbridge Energy Company, Inc.		7701 France Ave S Ste 600 Edina MN, 55435 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
15	Jim	Erchul	jerchul@dbnhs.org	Daytons Bluff Neighborhood Housing Sv.		823 E 7th St St. Paul MN, 55106 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
16	Greg	Ernst	gaernst@q.com	G. A. Ernst & Associates, Inc.		2377 Union Lake Trl Northfield MN, 55057 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
17	Melissa S	Feine	melissa.feine@semcac.org	SEMCAC		PO Box 549 204 S Elm St Rushford MN, 55971 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
18	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	ECO SPECIAL SERVICE LIST
19	Karolanne	Foley	karolanne.foley@dairylandpower.com	Dairyland Power Cooperative		PO Box 817 La Crosse WI, 54602-0817 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
20	Tyler	Glewwe	tyler.glewwe@centerpointenergy.com	CenterPoint Energy		505 Nicollet Mall Minneapolis MN, 55402 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
21	Jenny	Glumack	jenny@mrea.org	Minnesota Rural Electric Association		11640 73rd Ave N Maple Grove MN, 55369 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
22	Jason	Grenier	jgrenier@otpc.com	Otter Tail Power Company		215 South Cascade Street Fergus Falls MN, 56537 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
23	Jeffrey	Haase	jhaase@greenergy.com	Great River Energy		12300 Elm Creek Blvd Maple Grove MN, 55369 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
24	Joe	Hoffman	ja.hoffman@smmpa.org	SMMPA		500 First Ave SW	Electronic Service		No	ECO SPECIAL

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						Rochester MN, 55902-3303 United States				SERVICE LIST
25	Travis	Jacobson	travis.jacobson@mdu.com	Great Plains Natural Gas Company		400 N 4th St Bismarck ND, 58501 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
26	Dave	Johnson	dave.johnson@aeoa.org	Arrowhead Economic Opportunity Agency		702 3rd Ave S Virginia MN, 55792 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
27	Martin	Kapsch	martin.kapsch@centerpointenergy.com	CenterPoint Energy Minnesota Gas		505 Nicollet Mall Minneapolis MN, 55402 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
28	Zach	Klabo	zach.klabo@mdu.com	Great Plains Natural Gas Company			Electronic Service		No	ECO SPECIAL SERVICE LIST
29	Deborah	Knoll	dknoll@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
30	Kathryn	Knudson	kathryn.knudson@centerpointenergy.com	CenterPoint Energy Minnesota Gas		null null, null United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
31	Tina	Koecher	tkoecher@mnpower.com	Minnesota Power		30 W Superior St Duluth MN, 55802-2093 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
32	Martin	Lepak	martin.lepak@aeoa.org	Arrowhead Economic Opportunity		702 S 3rd Ave Virginia MN, 55792 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
33	Corey	Lubovich	coreyl@hpuc.com	Hibbing Public Utilities Commission		1902 6th Ave E Hibbing MN, 55746 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
34	Christine	Marquis	regulatory.records@xcelenergy.com	Xcel Energy		414 Nicollet Mall MN1180-07-MCA Minneapolis MN, 55401 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
35	Josh	Mason	jmason@rpu.org	Rochester Public Utilities		4000 E River Rd NE Rochester MN, 55906 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
36	Scot	McClure	scotmcclure@alliantenergy.com	Interstate Power And Light Company		4902 N Biltmore Ln PO Box 77007 Madison WI, 53707-1007	Electronic Service		No	ECO SPECIAL SERVICE LIST

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
47	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	ECO SPECIAL SERVICE LIST
48	Rick	Sisk	rsisk@trccompanies.com	Lockheed Martin		1000 Clark Ave. St. Louis MO, 63102 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
49	Ken	Smith	ken.smith@districtenergy.com	District Energy St. Paul Inc.		76 W Kellogg Blvd St. Paul MN, 55102 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
50	Anna	Sommer	asommer@energyfuturesgroup.com	Energy Futures Group		PO Box 692 Canton NY, 13617 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
51	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	ECO SPECIAL SERVICE LIST
52	Kodi	Verhalen	kverhalen@taftlaw.com	Taft Stettinius & Hollister LLP		80 S 8th St Ste 2200 Minneapolis MN, 55402 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
53	Michael	Volker	mvolker@eastriver.coop	East River Electric Power Coop		211 S. Harth Ave Madison SD, 57042 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
54	Ethan	Warner	ethan.warner@centerpointenergy.com	CenterPoint Energy		505 Nicollet Mall Minneapolis MN, 55402 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
55	Robyn	Woeste	robynwoeste@alliantenergy.com	Interstate Power and Light Company		200 First St SE Cedar Rapids IA, 52401 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
56	Cristina	Zuniga	czuniga@otpc.com	Otter Tail Power Company		215 South Cascade Street PO Box 496 Fergus Falls MN, 56538 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST