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November 20, 2025

—Via Electronic Filing—

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

RE: COMMENTS
IN THE MATTER OF TECHNICAL REFERENCE MANUAL VERSION 5.0
DOCKET NO. E,G999/CIP-18-694

Dear Dr. Lieb:

Northern States Power Company, doing business as Xcel Energy, submits these Comments in response to the Proposed Decision filed by Staff of the Minnesota Department of Commerce, Division of Energy Resources on October 29, 2025 regarding the Minnesota Technical Reference Manual version 5.0.

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 Luke Anderson at 612-216-9238 or Luke.Anderson@xcelenergy.com or contact me at (612) 330-7974 or Christopher.J.Shaw@xcelenergy.com if you have any questions regarding this filing.

Sincerely,

/s/

CHRISTOPHER SHAW
MANAGER, REGULATORY POLICY

Enclosures
cc: Service Lists

STATE OF MINNESOTA
BEFORE THE
MINNESOTA DEPARTMENT OF COMMERCE

IN THE MATTER OF TECHNICAL
REFERENCE MANUAL VERSION 5.0

DOCKET NO. E,G999/CIP-18-694
COMMENTS

INTRODUCTION

Northern States Power Company, doing business as Xcel Energy, submits these Comments in response to the Proposed Decision filed by Staff of the Minnesota Department of Commerce, Division of Energy Resources on October 29, 2025 regarding the Minnesota Technical Reference Manual version 5.0 (TRM v5.0).

We appreciate the Department's considerable time and effort in updating the Minnesota Technical Reference Manual (TRM) and for the opportunity to participate in the TRM Advisory Committee (TRMAC). We find the process through which Department Staff engages stakeholders and thoroughly reviews feedback to be an exemplary process as it allows stakeholders to provide feedback and generally reach a consensus decision. For example, the Company provided several informal comments as part of this process and appreciated the full review of analysis by the TRMAC regarding efficient air conditioning equipment leading to the ultimate decision not to adjust the measure as it is technically viable today. In contrast, the addition of last-minute changes to TRM v5.0 deviates from this exemplary process, was not fully vetted by the TRMAC and results in technical deviations and potential errors within the proposed TRM v5.0. Many of these process concerns are addressed through comments filed jointly with other utilities.

Our comments here focus primarily on the technical deviations we have identified as part of our TRM v5.0 review. While we have provided several informal comments throughout the TRMAC process from May – October of 2025, there are several items that were new in the Proposed Decision so we have focused our response on these. In addition, we provide further context regarding what we believe are unintended consequences of some of these technical determinations.

Based on these comments we recommend maintaining the baseline for furnace and boiler measures at 80 percent AFUE in TRM v5.0 in order to review market

implications in Minnesota as well as fully assess the impacts of a change to the baseline.

COMMENTS

I. Technical Review

The following section addresses specific technical detail as proposed by the Department. Where the Company has not commented, we have no additional feedback on those items, and we appreciate the work of the TRMAC moving towards consensus on many of these adjustments.

A. Residential HVAC – ECM Blower Motors

Proposed Change: Update baseline (existing) furnace efficiency default to 90 percent if unknown.

Electronically Commutated Motors (ECM) are required in furnaces manufactured after 2019. As such, updating the baseline efficiency does not seem applicable to a retrofit only measure that only affects a subset of furnaces greater than six years old. As such the Company suggests that the baseline efficiency be maintained at 80 percent.

B. Residential HVAC – Furnaces and Boilers

Proposed Change: Update baseline efficiency to 90 percent for single family furnaces and boilers.

The Company opposes the baseline adjustment to 90 percent for single family furnaces and boilers and would recommend maintaining the baseline for furnace measures at 80 percent AFUE in TRM v5.0.

The proposed decision indicates that incremental costs for furnaces and boilers are “derived from data in” a report produced by Itron for the California Measure Advisory Committee, and that the costs with various sizing assumptions and “\$300 additional installation costs for existing construction due to the installation of venting.”.¹ It is unclear how this can be the case, since Table 3 of the TRM gives the same costs for both new construction and replace on fail, and the listed incremental

¹ *Proposed Decision*, p. 107.

cost is below \$300 for four of the six furnace efficiency levels listed.² Moreover, only three of the fifteen incremental cost values given appear to have been updated since TRM 4.2 – though this is difficult to interpret given that TRM v5.0 uses different incremental cost categories from version 4.2, with no explanation given for the change.³ Even if the TRM 4.2 incremental costs were correct, the change to a 90 percent AFUE baseline should logically have resulted in a change to most if not all of the incremental costs of replacement and it is unclear why this is not the case.

Moreover, the Company notes that the Itron study used as the basis for the incremental costs was conducted for the California market and published in 2014. While the Company acknowledges that there may not have been a reliable comparable study produced in the decade since the Itron study, it notes that the Itron study gives incremental cost data in real (2014) dollars. It does not appear that the costs listed in the *Proposed Decision* have adjusted the prices given in the Itron study to reflect the considerable inflation that has occurred since that study's publication. It is important for the costs given in the TRM to clearly indicate whether they are given in real or nominal dollars; Minnesota's cost-effectiveness calculations require price inputs in nominal terms and will give distorted results if real prices – especially decade-old real prices – are used instead. Finally, the Company could find no reference to residential condensing boilers in the portion of the Itron study cited by the *Proposed Decision* and requests clarification as to where costs for those measures were sourced.⁴

C. Residential HVAC – Furnace Quality Installation/Maintenance

Proposed Change: Updated Replace on Fail AFUE_base to 90 percent.

The Company does not have a comment on the surrounding assumption of this measure outside of its general comments on the validity of the 90 percent assumption for a baseline furnace.

D. Residential HVAC – Ground Source Heat Pump Systems (GSHP)

Proposed Change: Updates to baseline furnace efficiency.

² *Proposed Decision*, p. 106, Table 3.

³ Compare Table 3 on p. 106 of the *Proposed Decision* with Table 3 on p. 89 of TRM 4.2. In 4.2, the table lists “New Construction” and “Existing” as the subcategories of Incremental Cost, while in v5.0 the subcategories are “New Construction, Replace on Fail” and “Early Replacement,” but the dollar amounts shown are identical in all cases save three.

⁴ Appendix F of the Itron study includes residential boilers with AFUE 85% on page F-10, but residential condensing boilers are not listed and the size of the boiler measure on p. 10 (1.4 MMBTUh) suggests that it may in fact be a commercial boiler that has been mis-classified in the table.

The Proposed Decision updated the “Eff Base” variable to use a 0.90 AFUE value for furnaces and a 0.80 AFUE value for boilers. This is inconsistent with the rest of the TRM with this most recent update where both furnace and boiler baselines were updated to 0.90 AFUE. Additionally, there is inconsistency in the savings formulas found on pages 63 and 64. Specifically, the only formula that is labeled as “New Construction” uses an ASHP baseline. We are unclear whether the Proposed Decision is using the baseline for “New Construction” as the only valid GSHP measure.

E. Residential Envelope – Insulation and Air Sealing

Proposed Change: Update to baseline (existing) furnace efficiency default to 90% if unknown.

For unknown AFUE, the TRM suggests using 0.9 according to Reference 21. The Company notes the link to the Cadmus study is unavailable in the TRM making it hard to track references and verify the validity of the study for those outside of the TRMAC.

F. Air-Source Heat Pumps

Proposed Change: None. The Department noted that updating this measure would take more time as it relies on modeled results.

It is unclear to the Company as to why certain alterations to technologies would be made in the TRM but not cascade through all other impacted measures. This is not typical to a TRAMC process for which all details are reviewed in the context of others. If timing is an issue for the complete review of the TRM specific to furnace baselines, we believe that none of the alterations should be made so that it can be consistently reviewed and cascade throughout the TRM – this provides consistency and reduces the opportunity for potential errors. Moreover, it is possible that this analysis may show insight into other changes being made. The inconsistent approach to updating heating baselines appears to indicate a desire to adjust baselines for only certain measures, specifically natural gas appliances, but not their electric counterparts which should logically use the same baseline assumptions.

II. Proposed Furnace Efficiency Adjustment

We oppose changing the furnace or boiler baseline efficiency for residential equipment to 90 percent. First, we do not believe this change had the opportunity to be fully vetted and reviewed by the TRMAC as thoroughly as necessary for a such a

significant change in efficiency values. Second, we believe there are unintended consequences that will ultimately be difficult to rectify in the future –specifically impacting the Minnesota market—that may increase the cost of efficiency for utility customers. Finally, we are concerned that this modification to the furnace technical details appears to be driven by policy preferences rather than technical considerations.

As noted in the Utility Joint Comments, the TRMAC process has established guidelines and requirements for changes to the TRM – these processes were not followed for the change to 90 percent AFUE for furnaces or boilers and this adjustment was not fully vetted. In fact, during the TRMAC process, we agreed with Department Staff not to include this change until further information was identified and reviewed back in July. The abrupt change in methodology, after parties had agreed with Department Staff, is a significant deviation from the process resulting in, what we believe, to be an incomplete TRM. With the proposed baseline change, the TRM is missing specific changes that should have occurred at the same time (notably for air-source heat pumps, low-e storm windows and cellular shard window coverings) and resulting in inconsistent application of the Department’s furnace baseline proposal. These impacts should have been examined and vetted as part of the TRMAC process and, at minimum, utilized historical reference to how modifications had been made to efficiency levels in the past.

The TRM should focus on technical details. However, the survey results of contractors participating in Focus on Energy programs in Wisconsin does not provide a sufficient basis for the proposed technical modification. Moreover, we believe there are unintended consequences that may result. The current federal furnace standard is set at 80 percent AFUE and is generally the cheapest option for customers to install in a retrofit scenario. If the Department approves TRM v5.0 as proposed, several things could occur impacting the furnace market and customers. First, we will need to reduce the incentives offered to customers for retrofit furnaces to maintain the cost effectiveness of these measures. This will effectively reduce the purchasing power of consumers who may be interested in upgrading their furnace not only due to failure, but also in a scenario for which a furnace is ultimately replaced when adding an air-source pump. When making a choice, a customer may ultimately choose to go with a less efficient option since the rebate levels may no longer be sufficient to make higher efficiency affordable. Second, we believe this change will result in a 71.4 percent reduction in natural gas savings from version 4.2.⁵ This measure is currently a staple of gas utility energy efficiency programming. A change of this magnitude should be considered carefully and not be made on the basis of one single study of debatable

⁵ Based on comparison of the examples in the Residential Furnace measure in Version 4.2 (11.9 Dth savings) and v5.0 (3.4 Dth savings, using the same assumptions as the 4.2 example)

applicability to the Minnesota market. Considering the Department's ongoing potential study due in the early part of 2026, this change seems premature.

Finally, as indicated by Fresh Energy's informal comments, submitted to the MN TRMAC Collaboration Site on October 31, this change seems to be driven by policy factors rather than technical impact. Fresh Energy's advocacy for this change is "for shifting utility program funding away from rebates for gas furnaces—particularly inefficient models—and towards efficient electric heating technologies."⁶ It is unclear what "inefficient models" Fresh Energy refers to, since to the Company's knowledge only high-efficiency furnaces are incentivized through ECO. Nor is Fresh Energy's reference to a determination by the Colorado Commission particularly convincing. Those determinations were based primarily on the Commission's own assumptions and expectations, rather than any empirical assessment of the Colorado HVAC market. The Commission's *Decision* ran contrary to recommendations made by the Southwest Energy Efficiency Project (SWEEP) in the proceeding, who had argued that "[A] lot of very inefficient furnaces could be installed ... without continued support by the Company. ... [T]t is too early to end incentives for gas furnaces."⁷

Changing the baseline to a different efficiency level decreases incentives for higher efficiency models and impacts customers first. As described in our informal comments as part of the Department's ECO Incentive Prioritization stakeholder discussions held in June of 2025, customers have different financial situations, different type of homes, etc. Utilities need to plan for a variety of situational factors as not all customers will benefit from being all electric. Indeed, we have heard some customer feedback describing reasons an all-electric system was not viable for them. Many of these customers have instead installed a hybrid system using a gas furnace for back-up heat. Often it is not practical for customers to install electric resistance back up heat for a variety of reasons including:

- Cost to operate even with the Company's updated Electric Space Heating Rate
- Physical limitations based on the size of the air handler required for these systems
- Duct sizing constraints that prevent the system from providing the required airflow to meet the heating needs

But even when the furnace is intended to provide backup to a heat pump, there are more and less-efficient backup furnaces to choose from. It is important to be able to support and influence customer decisions to install the most efficient system that meets their individualized needs.

⁶ Fresh Energy Comments of October 22, 2025, p. 1.

⁷ Hearing Exhibit 1000, Answer Testimony of Justin Brandt, Proceeding No. 22A-0309EG, 39:14-16.

We oppose the proposed modification for a higher baseline when the cost of minimally code-compliant equipment remains the cheapest option. Abruptly reducing rebates that help reduce the higher cost of efficient equipment may cause customers to choose the cheapest option for their homes, particularly for customers facing unplanned equipment replacement. It will take time for the market to transition to new equipment such as heat pumps. Manufacturers, distributors, and trade partners will also need time to adapt their stocking, sales, and installation practices to shift to supporting heat pump installations. Despite the expectation of new federal furnace efficiency standards coming into effect (and regardless of the baseline that is ultimately assumed in Minnesota's TRM), it is likely that customers who currently have an 80 percent AFUE furnace will be able to replace it with a similar furnace throughout the 2027-2029 Triennial period.⁸

While the TRM v5.0 is not eliminating furnace rebates, the proposal adjusting the efficiency levels, resulting in a change to our ability to cost-effectively incentivize customers to choose more efficient equipment, may ultimately result in same end – the removal of furnace rebates from the portfolio. A change of this magnitude should be thoroughly vetted.

CONCLUSION

The Company appreciates the opportunity to provide these comments to the Department regarding their proposed TRM v5.0. As discussed in these comments we recommend the following:

- Maintaining the baseline for furnace measures at 80 percent AFUE in TRM v5.0
- Maintaining the baseline for boiler measures at 80 percent AFUE in TRM v5.0

Dated: November 20, 2025

Northern States Power Company

⁸ Currently, new federal standards are expected to apply to furnaces manufactured (not purchased) after December 2028; dealers are likely to inventory of the older furnaces well after that point. This is the reason that historically, updates to federal standards have been applied to the measures in the TRM with a year of lag.

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 No.

E,G999/CIP-18-694

Dated this 20th day of November, 2025

/s/

Victor Barreiro
Regulatory Administrator

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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@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	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@otpco.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@smpma.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@aoea.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@aoea.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
						United States				
37	David	Moeller	dmoeller@allete.com	Minnesota Power			Electronic Service		No	ECO SPECIAL SERVICE LIST
38	Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP		33 South Sixth St Ste 4200 Minneapolis MN, 55402 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
39	Carl	Nelson	cnelson@mncee.org	Center for Energy and Environment		212 3rd Ave N Ste 560 Minneapolis MN, 55401 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
40	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	ECO SPECIAL SERVICE LIST
41	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	ECO SPECIAL SERVICE LIST
42	Lisa	Pickard	lseverson@minnkota.com	Minnkota Power Cooperative		5301 32nd Ave S Grand Forks ND, 58201 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
43	Bill	Poppert	info@technologycos.com	Technology North		2433 Highwood Ave St. Paul MN, 55119 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
44	Dave	Reinke	dreinke@dakotaelectric.com	Dakota Electric Association		4300 220th St W Farmington MN, 55024-9583 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST
45	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	ECO SPECIAL SERVICE LIST
46	Jean	Schafer	jeans@bepc.com	Basin Electric Power Cooperative		1717 E Interstate Ave Bismarck ND, 58501 United States	Electronic Service		No	ECO SPECIAL SERVICE LIST

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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