



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**

Comments

Dear Assistant Commissioner 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 ("CenterPoint Energy") or ("The Company") provides these comments to express concerns about the Technical Reference Manual Advisory Committee ("TRMAC") process and the approach taken to justify by-passing the TRMAC process to propose changes in the *Draft TRM v.5.0*.

CenterPoint Energy does not have feedback on the many updates to the TRM that resulted from the TRMAC process. The Company recommends that the proposed residential furnace baseline of 80 percent annual fuel utilization efficiency ("AFUE") remain in TRM v.5.0 and disagrees that an increase to 90 percent AFUE has a sound technical basis. The Company also believes that this proposal has not undergone the same level of technical assessment by the TRMAC as current and past measure updates in the TRM.

Background and Timeline

CenterPoint Energy actively participates (i.e., providing feedback, technical expertise, and data) in the TRMAC process since the TRMAC's formation more than a decade ago. In recent years, The Department and Cadmus have overseen several TRMAC processes and have successfully

¹ Docket No. E,G-999/CIP-18-694.

facilitated discussions and implemented TRM revisions that have satisfied the objective and vision to provide a reference manual for good data practices and guidance regarding how to calculate and report energy savings in utility plans. The Company appreciates the process for the development of numerous TRM revisions and updates that the Department has guided. In recent years, the process has been relatively smooth, data driven, and consensus based.

CenterPoint Energy has significant concerns regarding the lack of this same TRMAC process in 2025 with regards to the proposal to increase furnace baselines of 80 percent AFUE to 90 percent in the *Draft TRM v.5.0* filed in E,G999/CIP-18-694. See pg. 1-3 of *Joint Comments* filed on November 20, 2025, for a complete timeline of TRMAC activity.²

TRMAC members who submitted informal comments shared CenterPoint Energy's concerns, and there was no additional TRMAC discussion on the topic during the regularly scheduled TRMAC meetings. Adding to the uncertainty in the process, a redlined proposal draft was shared with the TRMAC without furnace baseline changes eleven days prior to the initial scheduled filing date. This abrupt change resulted in the postponement of the initial *Draft TRM v.5.0* filing and the scheduling of a previously unplanned TRMAC Meeting 6 to inform the TRMAC of the new proposal. The Company's understanding is that only some of the TRMAC members were informed as to the subject of the meeting beforehand. During the meeting, the Company's understanding is that the Staff's recommendation to further study the issue was rejected in favor of the confusing justifications supplied by the Department. The Company believes that this approach misunderstands the purpose of the TRM as well as the mission and goals of the TRMAC as laid out by the Department over a decade ago.

Furnace Baseline Updates

The Department presented four justifications for the proposal to update the furnace baseline from 80 percent AFUE to 90 percent AFUE in several measures in the *Draft TRM v.5.0*.

The first justification is the Wisconsin ("WI") Contractor Survey first mentioned to the TRMAC group in Meeting 3 in July 2025. At the time, the Department discussed the findings of the WI Survey with the TRMAC and allowed committee members several weeks to provide feedback on the survey. Department Staff concluded that the WI contractor survey was not relevant enough to Minnesota to justify a change in furnace baseline and stated that a change would not be pursued. The Department also noted that this was a potential area of research that needed to be explored in the next few years. Several commenters, including CenterPoint Energy, reviewed the survey findings and agreed with this recommendation in informal comments. With no TRMAC member supporting a change in furnace baseline, no new proposal regarding furnace baselines was discussed in Meeting 4 or Meeting 5.

² See *In the Matter of Technical Reference Manual Version 5.0 Docket No. E,G-999/CIP-18-694*. Joint Comments. Pg 1-3. (November 20, 2025).

Much of the remainder of the TRMAC meeting discussion was spent discussing whether to remove high-efficiency air conditioners (“AC”) with the proposal to end incentives for the measure in ECO Programs. This proposal was ultimately not implemented.

WI’s statewide energy efficiency program, Focus on Energy, updated furnace baseline efficiencies for market rate single-family homes from 92.8 percent AFUE to 90.6 percent and raised furnace baseline efficiencies from 80 percent to 88.3 percent for income eligible applications. The change was based on a survey of heating, ventilation, and air conditioning (“HVAC”) contractors in 2023 where contractors estimated the lowest efficiency option offered to customers.³ 94 percent of the HVAC contractors surveyed were in Focus on Energy’s closed network of contractors participating in energy efficiency programs.⁴

CenterPoint Energy has concerns with basing energy savings algorithms in the TRM on the lowest efficiency option offered by trade allies. Specifically, the Company has concerns about the technical validity of basing Minnesota TRM assumptions on “recalled” estimates of furnace minimum AFUE offered by Wisconsin contractors as an accurate representation of current Minnesota markets or the effects of ECO programs.⁵ This leads to a bias in survey responses as only active energy efficiency participants are being considered instead of the full WI market. The survey results also disregard that in Minnesota utility energy efficiency programs are a main reason why trade allies may not stock or install lower efficiency furnaces. The survey also does not provide data on the furnaces replaced by customers. Without the replacement information, the survey is also unable to provide a way to calculate actual energy savings for customers.

As stated in *Joint Comments*, the Company believes that ECO should continue to encourage ECO programs to support customers to install high-efficiency options as the norm or standard in the market.⁶

The Department noted as additional considerations to justify the increase in furnace baseline:⁷

- A planned increase of federal standards to 95 percent AFUE in December 2028.
- The current TRM new construction furnace baseline being 90 percent AFUE.
- Other states like Maine and Vermont removing or not having furnaces as a rebated measure.

³ Wisconsin Focus on Energy 2025 Technical Reference Manual, Cadmus (January 29, 2025). Pg. 734 (Revision History Version Number 16 12/2023 – Updated AFUE base with latest furnace baseline and contractor survey results).

⁴ Wisconsin Focus on Energy Calendar Year 2023 Evaluation Report – Volume III (May 17, 2024). Appendix J. Detailed Survey and Interview Findings. Pg. J-2.

⁵ Also, this approach is not connected to customer furnace replacement and actual energy savings.

⁶ See *In the Matter of Technical Reference Manual Version 5.0 Docket No. E, G-999/CIP-18-694*. Joint Comments. (November 20, 2025).

⁷ Technical Reference Manual Advisory 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).

As highlighted in *Joint Comments*:⁸

- New equipment standards do not immediately remove equipment from the market. As Minnesota energy efficiency programs have done in the past when federal standards have changed, a one-year transition period for measures, such as boilers, has been used and approved by the Department, in acknowledgment that the lower efficiency measure is still available for installation.⁹
- Minnesota state residential codes effectively require condensing furnaces to meet venting requirements and therefore an 80 percent AFUE furnace baseline would not be appropriate.¹⁰ The TRM has been developed with codes and standards in mind for baseline efficiency.
- Other states with more similar energy efficiency policy-frameworks, such as Illinois and Michigan, are using or proposing to use 80 percent AFUE as the baseline in their technical reference manuals.^{11 12}

These states are not appropriate comparison points for Minnesota. CenterPoint Energy believes it is notable that the Department cited Maine and Vermont's models for Minnesota even though they have very different policy frameworks for energy efficiency programs as compared to Minnesota. The Company also notes that one major concern driving electrification in these states is the desire to reduce the use of delivered fuels. In 2023, about 66.3 percent of homes in Maine were heated with heating oil or propane and about 8.4 percent with natural gas.¹³ In 2023, about 56.1 percent of homes in Vermont were heated with fuel oil or propane and 17.2 percent heated with natural gas.¹⁴

The lack of available furnace rebates in Maine and Vermont was mentioned as a supporting reason to revise the Minnesota TRM. This is an interesting justification in the context of the TRM. The purpose of the TRM is primarily about technical assumptions for claiming energy savings and

⁸ See *In the Matter of Technical Reference Manual Version 5.0 Docket No. E,G-999/CIP-18-694*. Joint Comments. Pg. 5-7. (November 20, 2025).

⁹ See *In the Matter of CenterPoint Energy's 2021-2023 Natural Gas Conservation Improvement Program Triennial Plan*, Docket No. G-008/CIP-20-478, Request to Modify CenterPoint Energy's Conservation Improvement Programs. (Sep. 1, 2021).

¹⁰ 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.

¹¹ 2026 Illinois Statewide Technical Reference Manual for Energy Efficiency Version 14.0 Volume 3: Residential Measures (September 19, 2025) Page 182 of 575.

¹² The Michigan Energy Measures database (MEMD) <https://www.michigan.gov/en/mpsc/consumer/Energy-Optimization/michigan-energy-measures-database> (retrieved on November 6, 2025).

¹³ Heating Fuel Source By State. <https://northeastgas.org/event-details/Heating-Fuel-Source-By-State>.

¹⁴ Heating Fuel Source By State. <https://northeastgas.org/event-details/Heating-Fuel-Source-By-State>.

not directly around program design and policy around utility rebate offerings.¹⁵ The Company notes that Vermont has a Clean Heat Standard focusing on electrification and decarbonization and Maine's requirements for minimum heat pump installations, neither of which are relevant policy frameworks to look to for ECO programs.^{16 17}

CenterPoint Energy believes state energy code and federal equipment codes remain the most appropriate basis for setting measure baselines and determining energy savings effects of ECO Programs.¹⁸ This approach reflects historic practice used to build the TRM and a change in standards has not been articulated by the Department and applied consistently to the TRM. The Company does not support arbitrary increases in the baselines of single TRM measures based on market practice as influenced by energy efficiency programs at least when low efficiency products are readily available to customers.

The Minnesota Furnace Market

CenterPoint Energy continues to support a new market study for the whole state of Minnesota. However, CenterPoint Energy does agree that it is important for utilities and other stakeholders to understand the conditions of the HVAC market. Understanding the state of the furnace market, such as the products available and installed by customers, provides valuable information for ECO program design as well as information on current ECO programs. The Company spent time looking for data and information on the Minnesota furnace market to provide in these *Comments* with limited results.

First, the Center for Energy and the Environment is expected to include in their comments in this docket, data from participants in CenterPoint Energy's and Xcel Energy's Home Energy Squad® program. This is likely the most current information on furnaces installed in homes, but it does not say anything about furnace availability and installation.¹⁹ Also, this data is not a fully randomized survey. It is instead based on active energy efficiency program participants who requested energy audits and is limited to the service areas of CenterPoint Energy and Xcel Energy. The data set is probably most representative of the Twin Cities metro area based on 67 percent of the visits occurring in the Twin Cities (not the full metro), but the data is likely less representative of greater Minnesota. The State of the State's Housing 2024 report analyzed housing trends across 7 Minnesota regions. Several regions of greater Minnesota include a higher proportion of houses

¹⁵ During Meeting 6, TRMAC members had to correct the Department regarding the status of Maine's energy efficiency programs by pointing out that certain Maine gas utilities in fact still offer natural gas furnace rebates. Summit Natural Gas Maine Rebates. <https://summitnaturalgasmaine.com/rebates> (Retrieved on November 17, 2025).

¹⁶ Clean Heat Standard | Public Utility Commission. <https://puc.vermont.gov/clean-heat-standard>

¹⁷ <https://www.maine.gov/energy/initiatives/energy-efficiency>.

¹⁸ CenterPoint Energy also acknowledge that another reasonable standard is if low-efficiency equipment is available and accessible by customers. According to contractors 80% AFUE furnaces are readily available in Minnesota.

¹⁹ As context, CenterPoint Energy's market-rate rebate program rebated over 16,000 furnaces in 2024 as compared to the nearly 22,000 HES visits from 2020-2025.

built before 1970 compared to the Twin Cities region. A higher amount of older housing stock would correspond with a higher market share of non-condensing furnaces.

CenterPoint Energy found a few studies and solicited information from its trade ally network that, while limited in various ways, show that the furnace market in MN and WI to be quite different.

Nationwide market share data by state and region show WI to be an outlier in terms of gas furnace market share at each AFUE.²⁰ Based on this summary of shipment data from 2013 through 2020, 80 percent AFUE furnaces have 7 percent market share in WI while they have 19 percent market share in Minnesota. Unfortunately, this data includes all furnaces, including those installed in new construction.²¹ This data set does not represent the market for retrofitting furnaces. Unfortunately, this resource is out of date with regards to market shifts related to changes in policy and the expiring tax credits as well as inflation in equipment costs. The Company is not convinced that this resource is an accurate depiction of the current furnace market. For example, in talking to its trade ally network in preparation for these Comments the Company heard anecdotally from contractors that roughly a third of homes they serviced have had 80 percent AFUE furnaces installed.

A Conservation Applied Research and Development (“CARD”) report from 2019 that was an outcome of the Statewide DSM Potential study, presented statewide furnace sales data in Minnesota.²² About 20 percent of furnaces have been found to have an AFUE rating of less than 90 percent. The market share varies by region in the state with the Twin Cities regional market share resulting in the most sales for less than 90 AFUE furnaces.²³ The CARD Potential Study report shows that over 18,000 furnaces with an AFUE rating less than 90 are sold in Minnesota each year. Unfortunately, this data also includes all furnaces, including those used in new construction. Also, this data is not more recent than the resource the Company found.

CenterPoint Energy explored a bit further into the reasons for Wisconsin differing from other states regionally. CenterPoint Energy deduced from looking at housing data on housing age that many residential customers in Minnesota may not have the ability to upgrade to a condensing furnace without costly infrastructure upgrades. For example, according to the State of the State’s Housing 2024 report, 39 percent of houses in the Twin Cities region were built before 1970 and would have had non-condensing furnaces originally installed.²⁴ It appears that WI successfully transformed the market for high-efficiency furnaces in the state through utility, contractor, and stakeholder collaboration beginning as far back as the 1980s and through the 90s. This

²⁰ See ENERGY STAR Program - Version 5.0 Furnace Specification. American Gas Association *Comments*. Attachment A (May 16, 2024).

²¹ As stated above, in new construction a 90 percent AFUE or higher furnace is needed to meet code requirements.

²² This study was also noted by Fresh Energy in their informal comments.

²³ Minnesota Energy Efficiency Potential Study: 2020-2029. Appendix M: Minnesota HVAC Sales Data. Pg. 7. March 27, 2019.

²⁴ State of the State’s Housing 2024. Minnesota Housing Partnership. Pg. 28.

unprecedented long-term effort has resulted in a WI furnace market that is unlike other states in the Midwest.²⁵

CenterPoint Energy does not believe that the effects of Minnesota's ECO programs are captured by using market data to set furnace baselines, but it appears that it is well documented that WI's market is not the same as Minnesota's. The Company also notes the limitations of the resources above for understanding the current furnace market and ECO program design for the 2027-2029 Triennial Plan. Though the Company would agree that the HES data would be the most useful for that purpose as it provides current information on installed furnaces in customers' homes.

Interactive Effects

CenterPoint Energy believes the most appropriate method for setting measure baselines is through codes and standards, or availability in the market. This method results in an accurate determination of energy savings effects of ECO programs. Minnesota residential energy code currently sets furnace minimum efficiency at 80 percent AFUE, and these low efficiency furnaces are readily available for residential customers. As stated in the Purpose and Use of Manual, the TRM does not represent an exclusive set of measures that may be applied in ECO programs.²⁶

The TRM is not intended to define a single set of approved calculation methods; rather, the TRM is a standard set of methodologies and inputs that ECO administrators may reference when developing, implementing, and reporting on ECO programs. Each measure herein represents a pre-approved calculation method when correctly applied in a program. While Commerce encourages utilities to use the TRM measure designs, utilities may propose, with justification, variations that reflect different program designs or enhanced calculation methods that will result in more accurate savings estimations.

CenterPoint Energy would not recommend using technical assumptions with significant inconsistencies. The update to residential furnace baselines in the *Draft TRM v.5.0* resulted in several interactive effects on other measures. With the baseline change, measure updates need to be made for eight TRM measures. The *Draft TRM v.5.0* addresses five of these measures with updates including Insulation and Air Sealing, Ground Source Heat Pump, and the Residential HVAC – Furnaces and Boilers measures. Air Source Heat Pump Systems ("ASHP") and two of the residential windows measures were left unchanged. CenterPoint Energy agrees with the Department that updating the ASHP measure would require work. The Company also believes this same level of work and attention to detail should be applied to furnace measures.²⁷ By not addressing the ASHP measure until MN TRM v5.1, the Department is proposing to pre-approve a calculation method that directly contradicts their new policy for furnace baselines. These selective updates by the Department highlight the haste in which these updates were made to

²⁵ Transforming a Market: How Wisconsin was first to get high-efficiency furnaces in (almost) every home. Slipstream. July 5, 2023. <https://slipstreaminc.org/blog/ashp-market-transformation-part-i> (Retrieved on November 17, 2025).

²⁶ *Minnesota Technical Reference Manual v5.0*. Purpose and Use of Manual. Pg. xi.

²⁷ See *In the Matter of the Minnesota Technical Reference Manual Version 5.0*. Docket No. E,G999/CIP-18-694. Department Staff Proposed Decision. Table 2. Pg. 3 (October 29, 2025).

account for interactive effects of new policy and/or the favoritism in preserving the current version of specific measures.

The *Draft TRM v.5.0* also includes an update to incremental costs seen in Table 3 of the Residential HVAC – Furnaces and Boilers measure. As stated in the *Draft TRM v.5.0*, incremental costs are periodically updated to reflect data from MN utility installations and market available product costs.²⁸ Incremental costs per unit were updated for replacement of existing furnaces at 92 percent, 96 percent, and 97 percent AFUE. This update was peer-reviewed and implemented prior to the Department updating the furnace baseline to 90 percent. The Company reviewed and submitted these incremental costs to the TRM prior to this furnace baseline change. This cost was updated independently of the baseline efficiency change and is likely more representative of the cost of upgrading from an 80 percent AFUE furnace rather than a 90 percent AFUE furnace which implies that in general the Department also agrees that many existing furnaces on the market are 80 percent AFUE. This lack of incremental cost updates further highlights the haste in which this proposal has been implemented with several effects unaccounted for in the *Draft TRM v.5.0*.

Unfortunately, due to the lack of a timely process, CenterPoint Energy cannot confidently say that it has had time to review or comment on inconsistencies through the TRM that resulted from changes to furnace baselines.

Potential Impact of New Furnace Baselines on Triennial Planning

CenterPoint Energy does not currently plan to shift its triennial planning process. However, the Company wants to illustrate how significant of an impact this decision potentially has on utilities that rely on the TRM such as municipal and co-operative utilities. If the Company were to adopt the furnace baseline of 90 percent AFUE to all applicable measures in the Company's ECO Triennial Plan for program years 2027-2029, it would likely reshape focus and program offerings for HVAC customers.

CenterPoint Energy completed a preliminary assessment of the effects of a shift in residential furnace baseline by looking at 2024 ECO performance. By consistently modifying the savings from furnaces, air source heat pumps, and insulation, the Company found that portfolio wide energy savings decreased by about 10 percent with most of that decrease in residential and low-income programs (by 26 percent).²⁹ Because furnaces are a measure estimated to have on average a 20-year lifetime, portfolio cost-effectiveness as measured by the Minnesota test would drop more significantly by about 20 percent with the residential segment cost-effectiveness dropping by 30 percent.

CenterPoint Energy has not completed a full impact analysis and cannot forecast exactly how the 2027-2029 Triennial Plan would change if the new furnace baseline were implemented. However,

²⁸ See *Minnesota Technical Reference Manual Version 5.0. Proposed*. Docket No. E,G-999/CIP-18-694 Pg. 106 (October 29, 2025).

²⁹ Or roughly 180,000 Dths less relative to 1.89 million Dth in 2024.

the size of these changes would require a major shift in focus for triennial planning and the ECO program portfolio. The Company would potentially make the following changes:

- Right size rebates for energy savings and the potential for moving the market towards high-efficiency equipment and completing insulation.
- Adjust programs to make up for the loss of at least 180,000 dekatherms (Dth) to at least maintain annual energy savings levels.³⁰
- Pause long-term innovation projects to focus mostly on short-term and immediate innovation.

Given this, CenterPoint Energy expects that it would need to reprioritize to focus on the most cost-effective energy savings which are generally for commercial and industrial customers.³¹ The Company would still seek to grow programs for residential customers to make up the energy savings deficit, in particular insulation. However, fundamentally the energy savings loss would require significant tradeoffs in focus for triennial planning and in the short-term the potential for energy savings would be in the commercial and industrial sector.

The HVAC market is already facing uncertainty related to expiring tax credits and increasing measure costs resulting from inflationary trends. Trade allies have noted to the Company that increasing measure costs are contributing to far more customers focusing on furnace *repairs* rather than *replacements* to high efficiency models. Low-to-moderate income customers, who tend to live in older housing with low-efficiency non-condensing furnaces, are most in need of incentives to upgrade to high-efficiency equipment.³² The Company also expects it will be harder for customers with the resources to install an air source pump to be able to afford that choice and some of them will even install 80 percent AFUE furnaces to save on HVAC capital costs. This may result in backsliding, where a low efficiency gas furnace would then be providing heat on the coldest winter days.

Stakeholder Engagement and Precedent

As mentioned in *Joint Comments*, CenterPoint Energy is concerned about such a major decision occurring without technical vetting of the proposal through the TRMAC and the precedent this sets for future ECO regulatory matters. Minnesota statute provides the framework for development of the TRM for the purposes of providing technical assistance to utilities:³³

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.

³⁰ CenterPoint Energy notes that the energy savings loss would likely be larger based on maintaining energy savings performance relative to all of the current triennial plan (including 2025 and 2026).

³¹ The Minnesota test for the residential segment was 2.59 and for C&I customers was 8.99 in 2024.

³² CenterPoint Energy encourages income-qualifying customers to participate in no or low costs income qualifying programs, but realistically many prefer market rate rebate programs.

³³ Minnesota Statute 216B.241 subd. 1d.

The purpose of the TRM is to provide a standard set of methodologies and inputs that can assist ECO program development. The TRMAC convenes each year to peer-review and vet methods, inputs, and calculations that utilities can use in their programs. The TRM is not an exclusive set of measures for ECO programs:³⁴

“to put forth standard methodologies and inputs for calculating the savings impacts and cost-effectiveness of Energy Conservation and Optimization (ECO) Programs, formerly Conservation Improvement Programs (CIP), in Minnesota.”

As mentioned in the Purpose and Use of Manual section of the *Draft TRM v.5.0*, utilities are encouraged to apply TRM measure designs. Utilities may also propose, with justification, program designs and methods that result in more accurate savings estimations. However, the TRM is particularly important for utilities that lack the resources and technical expertise to develop energy savings algorithms. As stated in existing documentation, the Company believes that TRMAC discussions on revising the TRM should be focused on pre-approving calculation methodologies.

CenterPoint Energy continues to support a dual fuel future and the air source heat pump market. This is showcased by the Company, as the largest gas-only utility in Minnesota, issuing the third highest number of utility ASHP rebates issued in 2024 for the state, with only Xcel Energy and Great River Energy issuing more ASHP rebates.³⁵ CenterPoint Energy continues to support the fuel- and equipment-neutral standard approach the TRM process has historically valued.

CenterPoint Energy is concerned several proposals in the TRMAC meetings and the *Draft TRM v.5.0* have the appearance of ECO program policy changes justified mainly by preferences for customers to install air source heat pumps above other sources of heating and cooling, without strongly considering energy savings or cost-effectiveness for customers.³⁶ This includes:

- The now rescinded Department proposal to end incentives within ECO Programs for above-code central air conditioning units.
- An abrupt shift to propose changes to the residential furnace baseline efficiency without a substantive TRMAC process, contrasted with the pause until MN TRM v5.1 to update the ASHP measure with the same current baseline of 80 percent AFUE as residential furnaces.
- The *Draft TRM v.5.0* including an increased furnace baseline from 80 percent AFUE to 90 percent for 5 of the 8 measures this change should pertain to. ASHPs have not been included.

³⁴ Technical Reference Manual for Energy Conservation Improvement Programs. Version 5.0 Proposed. Purpose and Use of Manual. Pg. xi.

³⁵ 2024 Residential ASHP Market Report. Efficient Technology Accelerator. Pg. 7-8 (November 14, 2025).

³⁶ Please note that CenterPoint Energy could potentially support such a policy preference outside the TRMAC and TRM process if based on consideration of the relative energy savings or cost-effectiveness of the measures. In fact, this approach aligns with the Company's support of the ECO statutory framework passed in 2021 and revised in 2024.

CenterPoint Energy hopes that during regulatory discussion of revisions to the residential furnace baseline in stakeholder comments that there will be significant technical review, vetting, and statistical analysis of materials through the commenting process.

Due to the uncertainty in this proposal, CenterPoint Energy seeks clarification from the Department in their reply comments on:

- What does it view the purpose of the TRMAC and the TRM to be? Should existing documents and frameworks be updated?
 - Does the Department now view the TRM as acting as measure eligibility screening for ECO program design rather than a pre-approval process?
- Does the Department feel there is a technical justification for applying baselines inconsistently in the TRM? Does this apply to triennial plan filings as well?
- What are the standards or criteria the Department believes are important for deciding when to by-pass TRMAC engagement for a TRM change?
- Does the Department believe it is setting precedents if it adopts the standard of evidence for a change to the furnace baseline?
 - Do these precedents need to be applied consistently to other measures in future versions of the TRM? Why or why not?
- Given the policy focus of parts of 2025's TRMAC, does the Department have new guidance or policy utilities should consider in their triennial planning process as resulting from decisions on the TRM? It would be important for utilities to know as soon as possible for consideration in triennial planning.

Finally, CenterPoint Energy would not typically bring up the ECO shared savings mechanism in comments on the TRM process.³⁷ However, the Company feels compelled to note how this proposed decision intersects with that process. As described earlier, the potential effects of incorporating the new furnace baseline into the Company's triennial planning is a significant 10 percent cut to energy savings.³⁸ The Company is in the situation of taking a position on the proposed changes to the financial incentive mechanism that is normalized based on 2024 ECO program performance using current furnace energy savings algorithms or arguing to adjust to match the new furnace baseline proposed.

Conclusions

Overall, CenterPoint Energy continues to support the solution Department Staff initially proposed: market research on furnaces in Minnesota in the next few years.

CenterPoint Energy recommends the furnace baseline remain at 80 percent in TRM v.5.0 and is supportive of studying this issue in the next few years to inform TRM v6.0. The proposed change

³⁷ See *Proposal for Modifications to the Shared Savings DSM Financial Incentive Mechanism for Implementation Beginning in 2027*. Docket Number E,G999/CI-08-133. June 26, 2025.

³⁸ Typically, when CenterPoint Energy anticipates cuts, such as from the new federal standards that would go into effect at the end of 2028, the company undergoes potentially years of planning to innovate and make up for the loss of energy savings.

to the furnace baseline is weakly supported and not in the best interests of Minnesota or utility customers, many of whom are low-to-moderate income customers that need ECO programs to support upgrading to condensing equipment and justifying purchases of high-efficiency equipment models.

CenterPoint Energy values the opportunity to participate in the TRMAC process and provide these comments and feedback on the TRM. The Company appreciates Department Staff and Cadmus' use of a deliberate and collaborative process to review and incorporate changes in developing the rest of the *Draft TRM v.5.0*. This year, the TRMAC peer reviewed several new and changed measures along with overarching modifications to the TRM. Most of these changes were the result of a workpaper rollout that allowed TRMAC members to review and provide feedback. This peer-review process is essential to developing a TRM that can be seen as having a defined standard set of methodologies and inputs.

If you have questions, please contact me at Ethan.Warner@centerpointenergy.com or 612-321-4324.

Sincerely,

/s/ Ethan S. Warner

Ethan S. Warner
Regulatory Manager
CenterPoint Energy
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C: Service List

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

CERTIFICATE OF SERVICE

I, Tyler Glewwe, served the attached *Comments* of CenterPoint Energy 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
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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@grenergy.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@aepa.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@aepa.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@minnpower.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

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
1	Julie	Ambach	juleia@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

[illegible]

#	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