



July 8, 2025

Will Seuffert, Executive Secretary  
Minnesota Public Utilities Commission  
121 7<sup>th</sup> Place East, Suite 350  
St. Paul, MN 55101

**RE: Center for Energy and Environment’s Initial Comments in the Matter of a Commission Evaluation of Changes to Natural Gas Utility Regulatory and Policy Structures to Meet State Greenhouse Gas Reduction Goals**

Docket Number: G999/CI-21-565

Mr. Seuffert,

Center for Energy and Environment (CEE) appreciates the opportunity to provide Initial Comments in response to the Minnesota Public Utilities Commission (Commission) Notice of Comment Period issued on May 5, 2025, regarding what action, if any, the Commission should take to modify existing gas line extension policies for rate regulated gas utilities.

In the comments below, CEE recommends the Commission take the following actions:

- Establish new criteria for considering line extension tariffs across all rate-regulated gas utilities.
- Require gas utilities that include free footage allowances in line extension tariffs to propose a comprehensive single-family new home ECO program with the Department with specific components.
- Delegate authority to the Executive Secretary to revisit line extension tariffs again at a future date.

Please do not hesitate to contact me with any questions.

Sincerely,

/s/ Will Nissen

Director of Policy

Center for Energy and Environment

[wnissen@mncee.org](mailto:wnissen@mncee.org)

## I. SUMMARY

Line extension tariffs establish rules, protocols, and procedures for determining and paying for the costs of extending gas service to new customers. These tariffs have been in place in Minnesota for over 30 years as the gas distribution system has expanded to include more customers, with guidance for considering line extension tariffs established by the Minnesota Public Utilities Commission (Commission) in 1995. Since then, significant changes have occurred in the utility regulatory landscape through legislative and regulatory actions around emission reductions and utility programs, as well as technological advancements that have made electric end uses like air source heat pumps (ASHPs) more viable and affordable than in the past.

Debates in recent gas utility rate cases, as well as actions by Legislatures and Commissions in other states, have renewed attention to line extension tariffs with particular focus on free footage allowances that place a portion of the costs to extend service to new customers on existing ratepayers. In the context of reducing emissions from the building sector, eliminating a subsidy on expanding the natural gas distribution system can have significant appeal to policymakers looking to advance decarbonization efforts.

Center for Energy and Environment's (CEE's) core mission is to discover and deploy the most effective energy solutions that strengthen the economy and improve the environment, with a vision toward a healthy, carbon-neutral economy that works for all people. CEE approaches the line extension discussion from the standpoint of finding the best approach to advancing the market for decarbonizing buildings in Minnesota while reducing costs. This grows from our efforts to understand and improve electrification technologies,<sup>1</sup> enact policy around efficiency programs, gas decarbonization, gas integrated resource planning, and rate design, and expand home weatherization to make homes more efficient and reduce energy costs.<sup>2</sup>

By considering a variety of factors discussed in these comments, CEE provides a pathway for the Commission to make progress on decarbonizing Minnesota's building sector that practically and effectively moves the market further toward more efficient homes and greater implementation of electric end uses to reduce emissions. In the decision options provided, CEE recommends the Commission establish new criteria for considering line extensions tariffs, require comprehensive single-family new home Energy Conservation and Optimization (ECO) program proposals from gas utilities that continue to offer free footage allowances, and plan to revisit line extension tariffs at a future date.

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<sup>1</sup> See the Minnesota Air Source Heat Pump Collaborative (<https://www.mnashp.org>) and CEE's market and field research (<https://www.mncee.org/air-source-heat-pumps>)

<sup>2</sup> For example, see the Minneapolis 1-4 Unit Residential Weatherization and Electrification Road Map completed for the City of Minneapolis. February 2023. <https://www.mncee.org/electrificationminneapolis>

## II. LINE EXTENSION TARIFFS BACKGROUND

On May 5, 2025, the Commission issued a Notice of Comment Period (Notice) in Docket No. G999/CI-21-565 (Future of Gas Docket) asking what actions, if any, the Commission should take to modify existing gas line extension policies for rate-regulated gas utilities. The Notice stems from recent debate in several gas utility rate cases around line extension policies, which have focused in part on the role of free footage allowances in line extension tariffs. As stated in the Notice, the Commission indicated the Future of Gas Docket as an appropriate forum for line extension policy discussions in recent CenterPoint Energy (CenterPoint) and Xcel Energy (Xcel) rate cases,<sup>3</sup> and, through a settlement in its recent rate case, required Minnesota Energy Resources Corporation (MERC) to conduct a line extension policy study.<sup>4</sup>

Minnesota statutes do not include specific definitions, provisions, or guidance regarding line extension tariffs. However, the Commission's Order issued March 31, 1995, in Docket No. G999/CI-90-563 (1995 Order) provides some considerations and rationale for the tariffs, which grew from concerns about competition between gas utilities for new customers. In that Order, the Commission stated that "the purpose of a tariffed service extension policy is to ensure that all new customers receive the same treatment" when determining how costs are determined and paid for between the new customer(s) and the utility.<sup>5</sup>

In addition, the 1995 Order established six questions for parties to address when reviewing line extension tariffs in future rate cases for gas utilities, or local distribution companies (LDCs):

- Should the "free" footage or service extension allowance include the majority of all new extensions with only the extremely long extensions requiring a customer contribution-in-aid-of-construction (CIAC)?
- How should the LDC determine the economic feasibility of service extension projects and whether the excess footage charges are collected?
- Should the LDC's service extension policy be tariffed in number of feet without consideration to varying construction costs among projects or should the allowance be tariffed as a total dollar amounts per customer?
- Is the LDC's extension charge refund policy appropriate?
- Should customers be allowed to run their own service line from the street to the house (or use an independent contractor) if it would be less expensive than having the utility construct the line?

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<sup>3</sup> Commission Order issued September 23, 2022, in Docket G008/GR-21-435, page 7. Commission Order issued April 13, 2023, in Docket No. G002/GR-21-678, pages 8-9.

<sup>4</sup> Commission Order issued November 14, 2023, in Docket No. G011/GR-22-504. Page 7.

<sup>5</sup> Commission Order issued March 31, 1995, in Docket No. G999/CI-90-563. Page 6.

- Should the LDC be required to offer its customers financing for service extension charges? This could be offered as an alternative to paying extension charges in advance of construction.<sup>6</sup>

Since the 1995 Order, the Commission has approved line extension tariffs in utility-specific rate cases across all five rate-regulated gas utilities that include, among other things, some or all of the following components for an extension project:

- A calculation of projected revenues from the new customer(s) and a determination of whether revenues will exceed the costs of the project over a specified time. If costs exceed projected revenues, the new customer(s) pays for a portion of the costs to extend service through installation of new gas mains and/or service lines.
- A “free footage allowance” for gas mains and service lines needed to serve new residential customers, meaning costs associated with installing new mains and service lines up to a certain distance are paid for by the utility (i.e., existing ratepayers).
- A calculation and methodology for the new customer(s) to pay for the costs to extend service beyond the free footage allowance.

In the recent rate cases for CenterPoint, Xcel, and MERC previously mentioned, new issues have been debated that were not contemplated in the Commission’s decision 30 years ago through the 1995 Order. These issues are in part reflected in the topics covered in MERC’s line extension policy study filed on November 14, 2024, in Docket No. G011/GR-22-504, which include the following:

- Useful lives of installed infrastructure and impact of changing useful life assumptions
- Impact on revenues from changing customer gas usage due to usage patterns, utility costs, and rate design considerations
- Cost components used in line extension calculations
- Methodology for determining customer contributions in aid of construction (CIAC) for residential main and service extensions
- Social costs of emissions related to extending natural gas service, including emissions of alternative home heating sources
- Other social and customer impacts of extending natural gas service

As discussed further below, the free footage allowance portion of line extension tariffs has been a particular point of interest in these cases.

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<sup>6</sup> *Id.* Pages 6-7.

### **III. ESTABLISH NEW CRITERIA FOR LINE EXTENSION TARIFFS**

Following the 1995 Order that established broad considerations and questions for assessing line extension tariffs, the Commission has reviewed and approved utility-specific tariffs in utility-specific rate case proceedings. The Future of Gas Docket is a generic docket applicable to all rate-regulated gas utilities, so CEE recommends updating the 1995 Order to establish new criteria applicable to all rate-regulated gas utilities for considering line extension tariffs moving forward. The Commission would then review and approve utility-specific tariffs in utility-specific proceedings based on the new criteria.

To establish the new criteria, CEE looked at several broad areas where the natural gas utility regulation landscape has changed significantly over the last 30 years, or where policies in place at the time of the 1995 Order should be explicitly addressed when considering line extension tariffs moving forward.

#### **Statewide Greenhouse Gas Emissions Reduction Goal**

Perhaps the most significant change in the regulatory landscape since 1995 was the establishment of statewide greenhouse gas (GHG) emission reduction goals in Minn. Stat. § 216H.02. First passed in 2007 with a goal of reducing GHG emissions 80 percent by 2050 compared to 2005 levels, the statute was modified in 2023 with a goal of net-zero emissions by 2050 compared to 2005 levels. While not specific to the natural gas utility sector, Minn. Stat. § 216H.02 clearly sets the direction for the state and provides a foundation for considering questions regarding utility regulation.

#### **Emission-Reducing Programs and Frameworks**

In addition, the Legislature and Commission have established comprehensive frameworks for advancing emission reductions in the natural gas utility sector through programs, planning, and rate design efforts.

##### *Energy Conservation and Optimization Act*

The Energy Conservation and Optimization Act was passed in 2021 and modernized Minnesota's long-standing framework for utility-led energy efficiency and conservation efforts under Minn. Stat. § 216B.241. Among other things, the ECO Act increased the spending requirement on low-income programs and allowed both electric and natural gas utilities to include efficient fuel-switching (EFS) measures in their ECO portfolios. For example, with program approval from the Minnesota Department of Commerce (Department), gas utilities can now incentivize customers to install an electric air source heat pump (ASHP) to provide highly efficient heating and cooling needs.

### *Natural Gas Innovation Act*

The Legislature passed the Natural Gas Innovation Act (NGIA) in 2021, which provided a pathway for natural gas utilities to pilot new ways to reduce emissions through innovation plans under Minn. Stat. § 216B.2427. The Commission established frameworks to develop and assess utility innovation plans,<sup>7</sup> and has approved five-year plans for CenterPoint Energy<sup>8</sup> and Xcel Energy<sup>9</sup> that combine to reduce or avoid an estimated two million metric tons of carbon dioxide equivalent in emissions.

### *Gas Integrated Resource Plans*

On October 28, 2024, the Commission issued its second of two Orders establishing a comprehensive framework and timeline for natural gas utility integrated resource plans (Gas IRPs) for CenterPoint, Xcel, and MERC.<sup>10</sup> The first step in an iterative process,<sup>11</sup> the Commission stated the following in laying the foundation for Gas IRPs:

The Commission finds that the objective of integrated resource planning for natural gas utilities is to determine, based on the best information currently available, the mix of energy resources that best protects ratepayer and public interests; maintains safe, reliable and affordable service; and advances state policy moving forward.

Integrated resource planning for natural gas utilities includes analysis and evaluation of the appropriate resource mix, including supply-side and demand-side resources to serve customer end-use energy needs, and consideration of new infrastructure investments necessary to meet existing or forecasted gas demand needs.<sup>12</sup>

Notably, the Commission also required gas utilities to describe how Gas IRPs “will support and serve Minnesota’s greenhouse-gas-emission reduction goals.”<sup>13</sup> Under the timeline established by the Commission, Xcel Energy, CenterPoint Energy, and MERC will file Gas IRPs with the Commission by July 1, 2026, 2027, and 2028, respectively.

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<sup>7</sup> Commission Orders issued June 1, 2022, and September 12, 2022, in Docket No. G999/CI-21-566.

<sup>8</sup> Commission Order issued October 9, 2024, in G008/M-23-215.

<sup>9</sup> Commission Order issued May 16, 2025, in G002/M-23-518.

<sup>10</sup> Commission Orders issued October 28, 2024, and March 27, 2024 in Docket No. G008,G002,G011/CI-23-117.

<sup>11</sup> Commission Order issued October 28, 2024, in Docket No. G008,G002,G011/CI-23-117. Page 3.

<sup>12</sup> Commission Order issued March 27, 2024, in Docket No. G008,G002,G011/CI-23-117. Order Points 2 & 3. Page 6.

<sup>13</sup> Comprehensive Gas IRP Requirements from Commission Order issued October 28, 2024, in Docket No. G008,G002,G011/CI-23-117. Order Point 55b. Page 8.

## *Rate Design*

In an Order issued May 15, 2025, in Xcel Energy's time-of-use rate docket, the Commission approved an updated space heating rate under Xcel Energy's electric tariffs that reduced the rate by 20 percent to \$0.06537/kWh from October 1 through May 31.<sup>14</sup> This rate became effective June 1, 2025. As described in CEE's new home construction analysis, this brings electrification efforts like home heating with ASHPs closer to cost parity with natural gas heating methods.

## **Affordability and Ratepayer Protections**

Residential customers of rate-regulated natural gas utilities have access to a range of programs, services, and protections to ensure they receive safe, affordable, and reliable service. The Commission's Consumer Affairs Office assists customers with complaints on a variety of issues related to utility service. Under Minn. Stat. § 216B.16, subd. 15, the Commission has required rate-regulated natural gas utilities to provide low-income affordability programs "to ensure affordable, reliable, and continuous service to low-income customers."<sup>15</sup> Under Minn. Stat. § 216B.096, residential customers of gas utilities are protected from service disconnection during cold weather months. Rate-regulated gas utility customers also have access to a suite of ECO programs under Minn. Stat. § 216B.241 to support the implementation of energy efficiency measures to reduce energy bills.

This is not an exhaustive list, and many of these programs, services, and protections existed when the 1995 Order was issued. However, the availability of these offerings to residential customers of rate-regulated gas utilities should be considered in the context of extending service to new customers through line extension tariffs, particularly to customers on delivered fuels whose service provider operates outside the utility regulatory framework.

In addition, under the free footage allowance offered in line extension tariffs, existing utility ratepayers pay for part of the cost to extend service to new customers. These costs are included in customers' rates, comprising a portion of an existing customer's energy costs. Whether existing customers should pay for part, or any, of the cost to extend service to new customers should also be considered when reviewing line extension tariffs.

## **New Construction vs. Existing Structures**

As discussed, line extension tariffs apply to cases where gas service is being extended to a new customer or group of customers. This can be an extension of service to a newly constructed home, development, or large customer, or to existing homes or buildings without gas service,

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<sup>14</sup> Commission Order issued May 15, 2025, in Docket No. E002/M-23-524.

<sup>15</sup> Minn. Stat. § 216B.16, subd. 15, part (a).

and each case carries different considerations regarding impacts on other state policy goals. For example, in the case of residential customers receiving service for new construction, building technologies, practices, and building code requirements have progressed since the 1995 Order to make new homes increasingly more energy efficient. In addition, energy efficient measures that improve home heating performance, like insulation, windows, and the overall thermal envelope of the building, are nearly always cheaper and easier to implement when a home is being built than when retrofitting an existing home.

Line extension tariffs should consider differences in serving different customer types with new gas service, such as whether service is being extended to new structures or existing structures without gas service. This will be particularly important as all-electric heating methods become more viable and affordable compared to gas heating methods.

### **Viability and Affordability of Alternative Home Heating Methods**

Space heating is the primary end use of natural gas in residential homes, and roughly 64% of Minnesotans used natural gas to heat their homes in 2023.<sup>16</sup> The remaining portion of homes in Minnesota used electricity, propane, fuel oil, or wood to provide heat. Extending gas service to homes that could heat with these methods, or already do, warrants assessment of the viability of alternative methods to provide heat in a cold climate state like Minnesota, as well as the cost of doing so, compared to natural gas.

Importantly, as the electric system serving Minnesota becomes cleaner to meet the carbon-free by 2040 standard established in Minn. Stat. § 216B.1691, electrification of space heating becomes an increasingly critical tool to meet the statewide GHG emission goals in Minn. Stat. § 216H.02. ASHP technology has advanced significantly in recent years, making this an increasingly viable heating option in a cold climate state like Minnesota. In addition, as more ASHPs are deployed, homes become more efficient, and space heating rates are redesigned, the upfront and operational costs of installing and using an ASHP will bring the technology closer to cost parity to natural gas heating appliances. The viability and affordability of alternative heating methods should be considered when developing and assessing line extension tariffs.

### **New Criteria for Considering Line Extension Tariffs**

The issues discussed, while not exhaustive, provide a new basis on which the Commission can provide guidance and considerations for utilities and parties when developing and assessing line extension tariffs. CEE recommends the Commission require rate-regulated natural gas

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<sup>16</sup> U.S. Energy Information Administration. Minnesota State Energy Profile. Last Updated September 19, 2024. <https://www.eia.gov/state/print.php?sid=MN>

utilities filing new or modified line extension tariffs to demonstrate that the proposed tariff has considered the following questions:

- How does the tariff support and serve Minnesota’s greenhouse gas emission reduction goals?
- How does the tariff consider actions taken by the Commission and the Department in other proceedings, including but not limited to Gas Integrated Resource Plans, Natural Gas Innovation Act Plans, Energy Conservation and Optimization Plans, and other utility pilots, programs, and rate design offerings?
- How does the tariff consider affordability and ratepayer protections related to both existing and new customers?
- How does the tariff consider the differences in serving different customer types, such as whether service is being extended to new structures or existing structures without gas service?
- How does the tariff consider the viability and affordability of alternative heating methods?

CEE looks forward to further record development on this matter and is open to additional considerations recommended by other parties.

The following sections address the free footage allowance provisions in line extension tariffs, present analysis done by CEE comparing annual energy costs of an all-electric home compared to a standard gas appliance home, and recommend changes to gas utility new home construction ECO programs if gas utilities continue offering free footage allowances.

#### **IV. FREE FOOTAGE ALLOWANCES**

As mentioned above and in the Notice, the free footage allowance portion of line extension tariffs has become a source of debate in recent rate cases. As a result, the amount of allowance given to new customers for gas main and service line extensions has steadily decreased. In other words, the length of new gas mains and service lines for which costs are paid by existing ratepayers has gone down in recent years. Table 1 shows the current free footage allowance distances for rate-regulated utilities in Minnesota. Note that CenterPoint, Xcel, and MERC allowances apply to residential customers only. Greater MN Gas and Great Plains Gas allowances apply to all customer classes with some restrictions.

**Table 1. Current Line Extension Free Footage Allowances**

	<b>Gas Mains</b>	<b>Service Lines</b>
<b>CenterPoint</b>	100 feet	75 feet
<b>Xcel</b>	80 feet	75 feet
<b>MERC</b>	0 feet	75 feet
<b>Greater MN Gas</b>	0 feet	125 feet
<b>Great Plains Gas</b>	100 feet	75 feet

Clean Energy Organizations have argued in recent rate cases that free footage allowances should be re-examined, further reduced, and eventually eliminated for the following general reasons:

- Gas utilities have increased spending on the distribution system, which has increased customer costs.
- Expansion of the gas system has increased emissions from the buildings sector in recent years.
- New policies to reduce emissions in buildings, such as fuel-switching, are projected to dramatically reduce gas use in the future, making it more difficult to recover sunk costs on the system in the future.
- Other state Legislatures and Commissions have taken actions to reduce or eliminate free footage allowances, citing emissions goals and expanding gas system costs.<sup>17</sup>

While CEE finds that these arguments have merit, it is important to recognize the costs associated with free footage allowances and how eliminating the allowance could impact builder and homeowner decisions when constructing a new home. Pulling from relevant portions of the record in recent rate cases, eliminating the free footage allowance for extension of gas mains and service lines on residential customers would add an average of \$1,888<sup>18</sup> to \$2,215<sup>19</sup> in costs to new residential customers.

One argument for eliminating free footage allowances has been that adding this cost to new home construction would provide economic signals to encourage electrification measures over

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<sup>17</sup> These arguments were presented by witness Joe Dammel in Direct Testimony on behalf of Clean Energy Organizations in Docket Nos. G008/GR-21-435, G002/GR-21-678, and G011/GR-22-504.

<sup>18</sup> Page 26 of MERC’s Line Extension Policy Study stated \$25.18 for the average residential installation cost per foot for new service lines, multiplied by MERC’s 75-foot allowance for service line extensions.

<sup>19</sup> Direct Testimony of Ron Nelson on behalf of Clean Energy Organizations identified \$885 in average costs for CenterPoint Energy’s 125-foot allowance for gas main extensions, and \$1330 in average costs for service line extensions. Docket No. G008/GR-21-435. Filed February 7, 2022. Page 18.

gas end uses. This was summarized by Clean Energy Organization witness Ron Nelson in Direct Testimony in CenterPoint's 2021 rate case:

Excessive line extension allowances distort customer decisions in favor of an asset that is not only likely to become more expensive but would challenge the state's ability to meet its decarbonization goals at a time when cleaner alternatives (electrification) are readily available.<sup>20</sup>

CEE agrees with the sentiment of this statement that incentivizing greater gas use when cleaner alternatives are available and cost-competitive runs counter to state policy goals. CEE anticipates that parties will extend this argument to recommend elimination of free footage allowances in line extension tariffs in the current Notice of Comment Period. However, CEE raises two questions regarding this approach:

- What is the current viability and cost of an all-electric home in Minnesota compared to a standard gas appliance home?
- Does adding roughly \$2,000 to the total cost of a new home that receives gas service extension influence builder and homeowner behavior toward electrification technologies to the point of avoiding extension of gas service entirely?

Regarding the first question, CEE modeled and analyzed a variety of new construction home types across the state to compare the post-construction operational costs of an all-electric home compared to a standard gas appliance home.

Regarding the second question, CEE asserts that a "carrot" approach, through comprehensive new home construction ECO programs from rate-regulated gas utilities, is more appropriate and effective to influence builder and homeowner decision-making toward greater electrification efforts.

## **V. NEW HOME ENERGY COST ANALYSIS**

CEE defined eight single-family home types, differing in building geometry, climate zone, utility rates, occupancy, and energy use. Each home was modeled in a standard gas scenario (furnace and gas appliances) and a fully electrified scenario for comparison. These models were defined in Ekotrope<sup>21</sup> to compare performance under the current Minnesota residential energy building code and the new energy code currently under review by the Minnesota Department of Labor

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<sup>20</sup> Direct Testimony of Ron Nelson on behalf of Clean Energy Organizations. Docket No. G008/GR-21-435. Filed February 7, 2022. Page 30.

<sup>21</sup> Ekotrope is a modeling software used by building raters to evaluate the impacts of building design changes on home energy performance.

and Industry.<sup>22</sup> The all-electric heat pump models reference CEE's cold climate ASHP field data, applying these observed performance assumptions to the same loads modeled in Ekotrope to estimate real-world outcomes from heating electrification.

The analysis assumes a close approximation of current electric and gas rates for the represented utilities including customer charges, riders, and weights across seasonal energy charges where applicable. However, the analysis does not attempt to project future costs or rates. In addition, the analysis focuses on energy costs for the first year after construction and does not include upfront equipment costs for gas or electric appliances, though equipment and installation costs for efficient electric home and water heating appliances are generally higher than gas appliances. Attachment A provides a complete description of assumptions used in the model.

Table 2 describes the eight household types used in the analysis, based on a selection of homes generally represented in the new construction housing market.

**Table 2. House Types Used in the Analysis**

<b>House Type 1</b>	Slab-On-Grade <sup>23</sup> Attached Townhome 1900 square feet
<b>House Type 2</b>	Attached Townhome w/ Full Basement 2500 square feet
<b>House type 3</b>	Detached Single Family w/ Basement 2500 square feet
<b>House Type 4</b>	Detached Single Family w/ Basement 3700 square feet
<b>House Type 5</b>	Detached Single Family w/ Basement 4490 square feet
<b>House Type 6</b>	Slab-On-Grade Detached Single Family 1500 square feet
<b>House Type 7</b>	Slab-On-Grade Detached Single Family 2500 square feet
<b>House Type 8</b>	Slab-On-Grade Detached Single Family 3500 square feet

<sup>22</sup> The current residential energy code follows the 2012 International Energy Conservation Code (IECC) with modifications. As required under Minn. Stat. § 326B.106, subd. 1, part (g), the Department of Labor and Industry is currently reviewing the 2024 IECC for implementation in Minnesota through the Technical Advisory Group. Expected effective date of the new residential energy code is 2027 or 2028.

<sup>23</sup> Slab-on-grade homes are built on a concrete slab and rest directly on the ground without a basement or crawl space.

Next, CEE applied each of these house types to four different geographic areas in the state to capture different utility rates and climate zones. These are shown in Table 3 below.

**Table 3. Geographic Areas Used in Analysis**

<b>Area 1</b>	Gas: CenterPoint Energy, Electric: Xcel Energy Climate Zone 6 (urban metro)
<b>Area 2</b>	Gas: MERC, Electric: Dakota Electric Climate Zone 6 (suburban metro)
<b>Area 3</b>	Gas: MERC, Electric: Rochester Public Utilities (RPU) Climate Zone 6 (southern MN)
<b>Area 4</b>	Gas: MERC, Electric: Minnesota Power Climate Zone 7 (northern MN)

After running the eight housing types in Table 2 through the four geographic areas in Table 3, using the assumptions around heating and cooling load, energy use, equipment installed, utility rates, and building code requirements listed in Attachment A, Tables 4 and 5 show the first-year energy savings from an all-electric home compared to a standard gas appliance home under current and new energy codes, respectively. Negative energy savings indicate higher costs.

**Table 4. First-Year Energy Savings from Electric Home vs. Gas Home Under Current Residential Energy Code**

<b>House Type</b>	<b>Xcel-CPE (CZ6)</b>	<b>Dakota-MERC (CZ6)</b>	<b>RPU-MERC (CZ6)</b>	<b>MN Power-MERC (CZ7)</b>
<b>1</b>	\$85	\$(232)	\$(128)	\$(377)
<b>2</b>	\$111	\$(239)	\$(130)	\$(392)
<b>3</b>	\$103	\$(288)	\$(161)	\$(477)
<b>4</b>	\$85	\$(472)	\$(285)	\$(730)
<b>5</b>	\$93	\$(549)	\$(334)	\$(836)
<b>6</b>	\$83	\$(208)	\$(110)	\$(350)
<b>7</b>	\$82	\$(300)	\$(176)	\$(474)
<b>8</b>	\$105	\$(418)	\$(248)	\$(683)

**Table 5. First-Year Savings from Electric Home vs. Gas Home Under  
New Residential Energy Code**

<b>House Type</b>	<b>Xcel-CPE (CZ6)</b>	<b>Dakota-MERC (CZ6)</b>	<b>RPU-MERC (CZ6)</b>	<b>MN Power-MERC (CZ7)</b>
<b>1</b>	\$82	\$(190)	\$(108)	\$(314)
<b>2</b>	\$108	\$(196)	\$(109)	\$(319)
<b>3</b>	\$114	\$(213)	\$(117)	\$(369)
<b>4</b>	\$98	\$(362)	\$(224)	\$(571)
<b>5</b>	\$109	\$(419)	\$(262)	\$(645)
<b>6</b>	\$91	\$(160)	\$(82)	\$(273)
<b>7</b>	\$81	\$(250)	\$(151)	\$(396)
<b>8</b>	\$112	\$(326)	\$(196)	\$(539)

These results are not meant to represent the entire new construction housing stock in Minnesota. However, these case studies provide a helpful view into the current state of the market on the path to cost parity between all-electric and standard gas homes. Currently, from a first-year energy cost standpoint based on the case studies analyzed, new homes in the Xcel-CenterPoint area have relative cost parity between all-electric and natural gas heated homes. In other parts of the state, it is more expensive to live in an all-electric new construction home built to the current or new residential energy code compared to a typical gas appliance new construction home.

Notably, the Xcel-CenterPoint example achieved relative cost parity likely due, in part, to Xcel’s new electric space heating rate that went into effect June 1, 2025. Because it is a whole-house rate, other electric appliances that provide an alternative to natural gas end uses, such as water heaters, ranges, and dryers, also see reduced costs compared to higher electric rates. Rate design that better reflects the actual costs of serving space heating customers and improves the economics of electrification efforts, such as Xcel’s new space heating rate, can bring all-electric homes closer to cost parity with gas appliance homes.

As stated, CEE’s analysis is limited to the first-year operating cost differences of natural gas and efficient electric end uses in a variety of new single-family homes. It does not include additional important factors such as the upfront cost of mechanical equipment or the potential effect of all-electric homes on winter utility system peaks. CEE continues to collect cost data from customers installing a variety of different home heating systems, but that work is preliminary, and we have little data on home builders’ installation costs. In our limited data set, installing all-electric systems remains more expensive than natural gas heating systems combined with a central air conditioning unit. Measuring the impact of efficient all-electric new construction on

the electric grid was outside the scope of our analysis but warrants further consideration as the state continues down the path to a fully decarbonized building sector.

Furthermore, home builders, in CEE's experience, base heating fuel decisions on their own construction costs and customer perceptions that could ultimately influence home sale prices. Today, customers are likely to perceive a natural gas-heated home to have lower operating costs than an all-electric home and are likely unaware that cost gap is closing. However, due to higher installation costs of cold climate heat pumps with back-up electric heat compared to high-efficiency natural gas equipment, and higher operating costs in many all-electric homes, CEE is concerned that eliminating the free footage allowance in today's conditions will not meaningfully move the market toward electrification, and risks simply increasing costs to new customers without tangible benefit.

As an alternative approach, in addition to updating the Commission's criteria when evaluating line extension tariffs, CEE recommends the Commission require gas utilities that continue to offer free footage allowances following the Commission's decision on this matter to propose comprehensive new home construction programs through ECO to support efficient construction and reduce gas throughput.

## **VI. ECO NEW HOME PROGRAM RECOMMENDATIONS**

While Minnesota gas utilities currently provide good new home construction programs, there are some basic elements that all programs should include to drive the market toward the state's emission reduction and savings goals. CEE recommends that the Commission require rate-regulated gas utilities offering a free footage allowance for new residential service to propose a comprehensive single-family new construction ECO program with the Department by June 1, 2026, the filing date for the 2027–2029 ECO Triennial Plans, that includes the following components:

- Require homes to achieve minimum energy savings of 10 percent better than Minnesota's residential building code requirements.
- Require installation of an ASHP in lieu of a central air conditioner (CAC) to be eligible for the program.
- Do not require installation of natural gas appliances to be eligible for the program and do not make rebate levels contingent on installation of natural gas appliances.<sup>24</sup>

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<sup>24</sup> CEE assumes that a natural gas utility would require a home to have natural gas service to participate in a gas utility ECO program. Therefore, there would likely be one or more natural gas appliances in the home, but the program design should not include a requirement of an appliance's specific fuel source.

- Provide a bonus rebate, or rebate tiers, for homes with a UA threshold that is better than Minnesota’s residential building code requirements.

The “better than code” requirement is a common ECO new construction program design that incentivizes builders to push beyond the code to more efficient design and practices. CenterPoint, Xcel, and MERC already have programs that include this design, so this recommendation establishes a strong program floor across gas utilities.

Requiring an ASHP in lieu of a CAC significantly improves cooling efficiency in homes, and there is growing consensus among advocates and electric utilities in Minnesota to phase out CAC rebates in the 2027–2029 ECO Triennial Plans. Standard ASHPs also provide efficient heating in shoulder seasons without adding significant cost beyond a CAC. Cold-climate heat pumps provide deeper heating and cooling savings and could be further incentivized through more substantial rebates to offset their higher costs. None of Minnesota’s gas utilities require an ASHP in their current program design.

While natural gas utilities should be allowed to incentivize higher-efficiency gas equipment through their new construction programs, they should not be able to disincentivize builders and homeowners from installing electric appliances. In their high-efficiency new construction programs, CenterPoint and MERC offer rebates up to \$5,000 and \$2,500, respectively, for achieving savings levels at different tiers above the residential energy code.<sup>25</sup> However, these rebates are capped at \$500 and \$750, respectively, if the builder or homeowner does not install a natural gas water heater, despite the availability of electric heat pump water heaters. Natural gas companies should not be allowed to use ECO programs to disincentivize electric equipment, particularly when that electric equipment is significantly more efficient than the gas equipment, as is the case with electric heat pump water heaters.

Finally, building performance software can provide a calculation of a home’s total UA value, which is a common measurement to determine the overall building shell efficiency. The “U” is the U-value common in measuring building shell or window efficiency: the lower the U-value, the better the efficiency. The “A” represents the area of the building shell, so less surface area means less heating and cooling loss and therefore greater efficiency.

By providing a bonus incentive for UA values that are better (lower) than code, gas utilities could incentivize an improved building shell, which is the most critical component of a new construction program. Unlike mechanical equipment, the building shell 1) is very unlikely to be improved upon by a future occupant and 2) lowers the heating load, resulting in lower capacity

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<sup>25</sup> CenterPoint Energy’s 2024-2026 Natural Gas Energy Conservation and Optimization Triennial Plan Compliance Filing. Docket No. G008/CIP-23-95. Filed January 26, 2024. Page 72.

MERC’s 2024-2026 Triennial Conservation Improvement Program/Energy Conservation and Optimization Plan Compliance Filing. Docket No. G011/CIP-23-98. Filed January 16, 2024. Page 79.

requirements for current and future heating equipment. Xcel includes a UA bonus incentive for better-than-code performance in its Colorado Residential New Home Construction program,<sup>26</sup> and in Minnesota Xcel already offers a better-than-code UA incentive in its Affordable Efficient New Home Construction ECO program.<sup>27</sup>

## VII. CONCLUSION

CEE appreciates the opportunity to provide comments on this important issue. CEE offers the Commission a practical path to align line extension tariffs with state policy goals, recent legislative and regulatory actions, and existing and future ratepayer considerations, while assessing the current state of residential building electrification.

Based on this discussion, CEE recommends that the Commission establish new criteria across all rate-regulated natural gas utilities for considering line extension tariffs proposed in utility-specific proceedings. In addition, CEE recommends the Commission require gas utilities that continue offering free footage allowances following the Commission's decision in this matter to file a comprehensive single-family new construction ECO program with the Department in 2027–2029 ECO Triennial Plans. Finally, recognizing that markets, policies, costs, technologies, and other factors are changing fast, CEE recommends that the Commission delegate authority to the Executive Secretary to revisit line extension tariffs at a future date.<sup>28</sup>

CEE offers the following decision options:

- Require that rate-regulated natural gas utilities filing new or modified line extension tariffs to the Commission demonstrate that the proposed tariff has considered the following:
  - How does the tariff support and serve Minnesota's greenhouse gas emission reduction goals?
  - How does the tariff consider actions taken by the Commission and the Department in other proceedings, including but not limited to Gas Integrated Resource Plans, Natural Gas Innovation Act Plans, Energy Conservation and Optimization Plans, and other utility pilots, programs, and rate design offerings?

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<sup>26</sup> Xcel Energy's Colorado 2024-2026 Demand-Side Management and Beneficial Electrification Plan. Proceeding No. 23A-0589EG. Filed December 6, 2024. Page 167.

<sup>27</sup> Xcel Energy's Minnesota Electric and Natural Gas Energy Conservation and Optimization Program 2024-2026 Triennial Plan Compliance Filing. Docket No. E,G002/CIP-23-92. Filed January 29, 2024. Page 162.

<sup>28</sup> CEE leaves the date open at the moment to allow further record development to take place through the comment period.

- How does the tariff consider affordability and ratepayer protections related to both existing and new customers?
  - How does the tariff consider the differences in serving various customer types, such as whether service is being extended to new structures or existing structures without gas service?
  - How does the tariff consider the viability and affordability of alternative heating fuels?
- Require rate-regulated natural gas utilities that offer a free footage allowance through line extension tariffs following the Commission’s decision in this matter to file a comprehensive single-family new construction ECO program with the Department by June 1, 2026, that includes the following components:
    - Require homes to achieve minimum energy savings of 10 percent better than Minnesota’s residential building code requirements.
    - Require installation of an air source heat pump in lieu of a central air conditioner to be eligible for the program.
    - Do not require installation of natural gas appliances to be eligible for the program and do not make rebate levels contingent on installation of natural gas appliances.
    - Provide a bonus rebate for homes with a UA threshold that is better than Minnesota’s residential building code requirements.
- Delegate authority to the Executive Secretary to, [at a relevant future date] in an appropriate docket or proceeding, issue a notice of comment period to consider modifications to the line extension considerations due to changes in Minnesota policy goals, Minnesota building code requirements, advancements in appliance technologies and costs, housing and construction markets, and other factors.

## ATTACHMENT A

The tables provided in this Attachment describe the assumptions used in CEE's new home energy cost analysis between all-electric homes and homes with standard gas appliances.

Table 1 shows the energy use assumptions across all eight housing types in the two climate zones across the four geographic areas described in CEE's comments.

**Table 1. Energy Use Assumptions in Each House Type**

	<b>Heating Load (kBtu)</b>	<b>Cooling Load (kBtu)</b>	<b>Gas DHW (therms)</b>	<b>Electric DHW (kWh)</b>	<b>Electric<sup>1</sup> (kWh)</b>
<b>House Type 1</b>	CZ6: 29 CZ7: 31	CZ6: 12 CZ7: 9	CZ6: 186 CZ7: 202	CZ6: 968 CZ7: 1083	5,434
<b>House Type 2</b>	CZ6: 29 CZ7: 31	CZ6: 11 CZ7: 9	CZ6: 186 CZ7: 202	CZ6: 962 CZ7: 1075	6164
<b>House Type 3</b>	CZ6: 33 CZ7: 36	CZ6: 13 CZ7: 11	CZ6: 186 CZ7: 202	CZ6: 958 CZ7: 1070	6164
<b>House Type 4</b>	CZ6: 49 CZ7: 52	CZ6: 18 CZ7: 14	CZ6: 216 CZ7: 235	CZ6: 1130 CZ7: 1264	7947
<b>House Type 5</b>	CZ6: 56 CZ7: 60	CZ6: 19 CZ7: 15	CZ6: 216 CZ7: 235	CZ6: 1133 CZ7: 1267	8908
<b>House Type 6</b>	CZ6: 27 CZ7: 29	CZ6: 11 CZ7: 9	CZ6: 186 CZ7: 202	CZ6: 966 CZ7: 1081	4948
<b>House Type 7</b>	CZ6: 35 CZ7: 38	CZ6: 14 CZ7: 11	CZ6: 216 CZ7: 235	CZ6: 1132 CZ7: 1267	6506
<b>House Type 8</b>	CZ6: 48 CZ7: 51	CZ6: 19 CZ7: 15	CZ6: 216 CZ7: 235	CZ6: 1133 CZ7: 1268	7722

Table 2 shows the code requirements used when assessing the impact of the current residential energy code and the new energy code anticipated in 2027 or 2028.

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<sup>1</sup> Lights, other electric appliances, and plug loads.

**Table 2. Current and New Residential Building Code Requirements**

	<b>Current Code</b>	<b>New Code</b>
<b>Air Tightness</b>	3.0 ACH50 <sup>2</sup>	2.5 ACH50
<b>Attic Insulation</b>	R49 <sup>3</sup>	R49
<b>Walls and Rim</b>	R20	R20 + R5 ECI
<b>Foundation Wall</b>	R15 (R10 slab edge)	R15 (R10 slab edge)
<b>Windows</b>	0.32 U-Value <sup>4</sup>	0.28 U-Value

Table 3 shows the installed appliance type assumptions across the gas house and electric house scenarios.

**Table 3. Appliance Type Assumptions in Gas and Electric House Scenarios**

	<b>Gas House</b>	<b>Electric House</b>
<b>Heating</b>	92% AFUE <sup>5</sup> furnace	8.1 HSPF2 <sup>6</sup> /15.2 SEER ccASHP <sup>7</sup>
<b>Cooling</b>	14 SEER <sup>8</sup> Air Conditioner	8.1 HSPF2 <sup>9</sup> /15.2 SEER ccASHP <sup>10</sup>
<b>Water Heater</b>	<i>Current Code:</i> 0.62 EF <sup>11</sup> Gas Direct Hot Water System <i>New Code:</i> 0.70 EF Gas Direct Hot Water System	3.35 UEF <sup>12</sup> Heat Pump Water Heater

<sup>2</sup> Air Changes Per Hour at 50 Pascals measures the airtightness of a building, calculating how many times the air inside a building is replaced by outside air in one hour under a pressure difference of 50 Pascals. A lower ACH50 indicates a tighter, more energy-efficient building with fewer air leaks.

<sup>3</sup> R-value indicates how well a material resists heat flow. Higher R-value indicates better insulation.

<sup>4</sup> U-Value measures how well a window prevents heat transfer. Lower U-value indicates better insulating ability.

<sup>5</sup> Annual Fuel Utilization Efficiency measures how much of the fuel consumed is actually converted into usable heat. Higher AFUE percentage indicates a more efficient furnace.

<sup>6</sup> Heating Seasonal Performance Factor 2 measures how effectively a heat pump converts electricity into usable heat during the heating season. Higher HSPF2 indicates a more efficient heat pump.

<sup>7</sup> Cold Climate Air Source Heat Pump is a specific heat pump designed to operate efficiently in colder climates. Heat pumps provide both cooling and heating capabilities.

<sup>8</sup> Seasonal Energy Efficiency Ratio indicates how efficiently an air conditioner or heat pump cools over a cooling season. Higher SEER rating indicates a more efficient system.

<sup>9</sup> Heating Seasonal Performance Factor 2 measures how effectively a heat pump converts electricity into usable heat during the heating season. Higher HSPF2 indicates a more efficient heat pump.

<sup>10</sup> Cold Climate Air Source Heat Pump is a specific heat pump designed to operate efficiently in colder climates.

<sup>11</sup> Energy Factor measures how efficiently the water heater converts the energy consumed into heating water. Higher EF indicates a more efficiency system.

<sup>12</sup> Uniform Energy Factor measure how efficiently a water heater uses energy to heat water. Higher UEF indicates a more efficient system.

<b>Heat/Energy Recovery Ventilator<sup>13</sup></b>	<i>Current Code: 60%</i> <i>New Code: 65%</i>	<i>Current Code: 60%</i> <i>New Code: 65%</i>
<b>Range/Dryer</b>	Gas	Electric

Table 4 shows the energy rates used in the analysis across the utilities indicated in the four geographic areas used. The all-in charge includes the energy charge, riders, and fuel costs where applicable, but do not include local taxes or fees. These rates estimates were pulled from previous CEE analysis and updated as much as possible, but CEE recognizes these may not exactly reflect current rates or all rate components across the board for all utilities represented.

**Table 4. Utility Energy Rates Used in Analysis**

	<b>All-in Charge</b>	<b>Customer charge</b>
<b>CenterPoint Energy<sup>14</sup></b>	\$0.9364/therm	\$9.50
<b>MERC<sup>15</sup></b>	\$0.98452/therm	\$9.50
<b>Xcel Energy<sup>16</sup></b>	Jun-Sep: \$0.1733/kWh Oct-May: \$0.10381/kWh	\$6.00
<b>Dakota Electric<sup>17</sup></b>	Jun-Aug: \$0.149/kWh Sep-May: \$0.1351/kWh	\$10.00
<b>Rochester Public Utilities<sup>18</sup></b>	Jun-Sep: \$0.14415/kWh Oct-May: \$0.12068	\$23.44
<b>Minnesota Power<sup>19</sup></b>	All year: \$0.1429/kWh	\$8.00

<sup>13</sup> Heat and Energy Recovery Ventilators transfer heat between incoming and outgoing air to pre-heat or pre-cool, leading to a more efficient heating and cooling system. ERVs also transfer moisture to better manage humidity levels. The percentage is the amount of heat captured from outgoing air to condition incoming air. Higher percentage indicates a more efficient system.

<sup>14</sup> All-in charge is an average volumetric rate across 17 months from Sept 2022 through May 2024 that includes the base cost of gas, delivery charge, gas affordability rider, Conservation Improvement Adjustment Rider, Conservation Improvement Adjustment Rider Adjustment, February 2021 weather rider, Purchased Gas Adjustment, and Revenue Decoupling Rider.

<sup>15</sup> MERC Tariff and Rate Book. All-in charge includes distribution charge per therm and base cost of gas per therm.

<sup>16</sup> Northern States Power Company Minnesota Electric Rate Book. All-in charge includes seasonal electric space heating energy charge, Conservation Improvement Program Rider, Renewable Development Fund Rider, Transmission Cost Recovery Rider, Renewable Energy Standard Rider, and Average Fuel Cost Charge.

<sup>17</sup> Dakota Electric Association Residential Electric Rates. All-in charge includes 9.5% interim rate adjustment effective March 1, 2025.

<sup>18</sup> Rochester Public Utilities 2024-2025 Rate Schedule. All-in charge includes the 2025 seasonal energy charge.

<sup>19</sup> Minnesota Power Electric Rate Book. These were not updated to reflect new rates effective March 1, 2025, but all-in charge does include previous rates and riders amounts.

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
1	Michael	Ahern	ahern.michael@dorsey.com	Dorsey & Whitney, LLP		50 S 6th St Ste 1500 Minneapolis MN, 55402-1498 United States	Electronic Service		No	21-565Official Service List
2	Elizabeth	Aldrich	laldrich@bluesource.com	Bluesource		15669 WATERLOO CIR TRUCKEE CA, 96161 United States	Electronic Service		No	21-565Official Service List
3	Gary	Ambach	gambach@slipstreaminc.org	Slipstream, Inc.		8973 SW Village Loop Chanhassen MN, 55317 United States	Electronic Service		No	21-565Official Service List
4	Kristine	Anderson	kanderson@greatermngas.com	Greater Minnesota Gas, Inc.		1900 Cardinal Lane PO Box 798 Faribault MN, 55021 United States	Electronic Service		No	21-565Official Service List
5	Susan	Arntz	sarntz@mankatomn.gov	City Of Mankato		P.O. Box 3368 Mankato MN, 56002-3368 United States	Electronic Service		No	21-565Official Service List
6	Mara	Ascheman	mara.k.ascheman@xcelenergy.com	Xcel Energy		414 Nicollet Mall Fl 5 Minneapolis MN, 55401 United States	Electronic Service		No	21-565Official Service List
7	Jessica L	Bayles	jessica.bayles@stoel.com	Stoel Rives LLP		1150 18th St NW Ste 325 Washington DC, 20036 United States	Electronic Service		No	21-565Official Service List
8	Randall	Beck	rbeck3@wm.com	Waste Management Renewable Energy, L.L.C.		1021 Main St Houston TX, 77002 United States	Electronic Service		No	21-565Official Service List
9	David	Bender	dbender@earthjustice.org	Earthjustice		1001 G Street NW Suite 1000 Washington DC, 20001 United States	Electronic Service		No	21-565Official Service List
10	Christina	Benning	christina.benning@centerpointenergy.com	CenterPoint Energy Minnesota Gas			Electronic Service		No	21-565Official Service List
11	Alicia	Berger	alicia.e.berger@xcelenergy.com	Xcel Energy		414 Nicollet Mall Minneapolis MN, 55401 United States	Electronic Service		No	21-565Official Service List
12	James J.	Bertrand	james.bertrand@stinson.com	STINSON LLP		50 S 6th St Ste 2600 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
13	Mike	Boughner	michael.l.boughner@xcelenergy.com	Xcel Energy		414 Nicollet Mall Minneapolis MN, 55401 United States	Electronic Service		No	21-565Official Service List
14	Tim	Brinkman	tim.brinkman@gvtel.com	Garden Valley Telephone Company d/b/a Garden Valley Technologies		206 Vance Ave S PO Box 259 Erskine MN, 56535 United States	Electronic Service		No	21-565Official Service List
15	Matthew	Brodin	mbrodin@allete.com	Minnesota Power		30 West Superior Street Duluth MN, 55802 United States	Electronic Service		No	21-565Official Service List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
16	Mike	Bull	mike.bull@state.mn.us		Public Utilities Commission	121 7th Place East, Suite 350 St. Paul MN, 55101 United States	Electronic Service		Yes	21-565Official Service List
17	Roderick	Cameron	roderick.cameron@ftr.com	Frontier Communications of Minnesota, Inc.		180 South Clinton Avenue Rochester NY, 14646 United States	Electronic Service		No	21-565Official Service List
18	James	Canaday	james.canaday@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	Suite 1400 445 Minnesota St. St. Paul MN, 55101 United States	Electronic Service		No	21-565Official Service List
19	Thomas	Carlson	thomas.carlson@edf-re.com	EDF Renewable Energy		10 2nd St NE Ste. 400 Minneapolis MN, 55413 United States	Electronic Service		No	21-565Official Service List
20	Melodee	Carlson Chang	melodee.carlsonchang@centerpointenergy.com	CenterPoint Energy		505 Nicollet Mall Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
21	Margaret	Cherne-Hendrick	cherne-hendrick@fresh-energy.org			Fresh Energy 408 Saint Peter Street, Suite 220 St. Paul MN, 55102 United States	Electronic Service		No	21-565Official Service List
22	Cody	Chilson	cchilson@greatermngas.com	Greater Minnesota Gas, Inc. & Greater MN Transmission, LLC		1900 Cardinal Ln PO Box 798 Faribault MN, 55021 United States	Electronic Service		No	21-565Official Service List
23	Ray	Choquette	rchoquette@agp.com	Ag Processing Inc.		12700 West Dodge Road PO Box 2047 Omaha NE, 68103-2047 United States	Electronic Service		No	21-565Official Service List
24	John	Coffman	john@johncoffman.net	AARP		871 Tuxedo Blvd. St, Louis MO, 63119-2044 United States	Electronic Service		No	21-565Official Service List
25	Sheri	Comer	sheri.comer@ftr.com	Frontier Communications Corporation		1500 MacCorkle Ave SE Charleston WV, 25396 United States	Electronic Service		No	21-565Official Service List
26	Generic	Commerce Attorneys	commerce.attorneys@ag.state.mn.us		Office of the Attorney General - Department of Commerce	445 Minnesota Street Suite 1400 St. Paul MN, 55101 United States	Electronic Service		Yes	21-565Official Service List
27	Jean	Comstock	jean.comstock.dbcc@gmail.com		St. Paul 350	729 6th St E St. Paul MN, 55106 United States	Electronic Service		No	21-565Official Service List
28	George	Crocker	gwillc@nawo.org	North American Water Office		5093 Keats Avenue Lake Elmo MN, 55042 United States	Electronic Service		No	21-565Official Service List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
29	Seth	DeMerritt	seth.demerritt@centerpointenergy.com	CenterPoint Energy Minnesota Gas		505 Nicollet Mall Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
30	James	Denniston	james.r.denniston@xcelenergy.com	Xcel Energy Services, Inc.		414 Nicollet Mall, 401-8 Minneapolis MN, 55401 United States	Electronic Service		No	21-565Official Service List
31	Tom	Dicklich	tdicklich@mnrtrades.org	Minnesota Building & Construction Trades Council		353 W. 7th St Rm 105 Saint Paul MN, 55102 United States	Electronic Service		No	21-565Official Service List
32	J.	Drake Hamilton	hamilton@fresh-energy.org	Fresh Energy		408 St Peter St Ste 350 Saint Paul MN, 55101 United States	Electronic Service		No	21-565Official Service List
33	Brian	Edstrom	briane@cubminnesota.org	Citizens Utility Board of Minnesota		332 Minnesota St Ste W1360 Saint Paul MN, 55101 United States	Electronic Service		No	21-565Official Service List
34	John	Farrell	jfarrell@ilsr.org	Institute for Local Self-Reliance		2720 E. 22nd St Institute for Local Self-Reliance Minneapolis MN, 55406 United States	Electronic Service		No	21-565Official Service List
35	Sharon	Ferguson	sharon.ferguson@state.mn.us		Department of Commerce	85 7th Place E Ste 280 Saint Paul MN, 55101-2198 United States	Electronic Service		No	21-565Official Service List
36	Mike	Fiterman	mikefiterman@libertydiversified.com	Liberty Diversified International		5600 N Highway 169 Minneapolis MN, 55428-3096 United States	Electronic Service		No	21-565Official Service List
37	Mark	Foster	mark@housingfirstmn.org	Housing First Minnesota		2960 Centre Pointe Drive Roseville MN, 55113 United States	Electronic Service		No	21-565Official Service List
38	Lucas	Franco	lfranco@liunagro.com	LIUNA		81 Little Canada Rd E Little Canada MN, 55117 United States	Electronic Service		No	21-565Official Service List
39	Daryll	Fuentes	energy@usg.com	USG Corporation		550 W Adams St Chicago IL, 60661 United States	Electronic Service		No	21-565Official Service List
40	Edward	Garvey	garveyed@aol.com	Residence		32 Lawton St Saint Paul MN, 55102 United States	Electronic Service		No	21-565Official Service List
41	Debbie	Goettel	debbie.goettel@hennepin.us	Partnership on Waste and Energy		2785 White Bear Ave N Ste 350 Maplewood MN, 55109 United States	Electronic Service		No	21-565Official Service List
42	Todd J.	Guerrero	todd.guerrero@kutakrock.com	Kutak Rock LLP		Suite 1750 220 South Sixth Street Minneapolis MN, 55402-1425 United States	Electronic Service		No	21-565Official Service List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
43	Laura	Haight	lhaight@pfpi.net	Partnership for Policy Integrity		POB 2513 Amherst MA, 01004 United States	Electronic Service		No	21-565Official Service List
44	Kim	Havey	kim.havey@minneapolismn.gov	City of Minneapolis		350 South 5th Street, Suite 315M Minneapolis MN, 55415 United States	Electronic Service		No	21-565Official Service List
45	Philip	Hayet	phayet@jkenn.com	J. Kennedy and Associates, Inc.		570 Colonial Park Drive Suite 305 Roswell GA, 30075-3770 United States	Electronic Service		No	21-565Official Service List
46	Adam	Heinen	aheinen@dakotaelectric.com	Dakota Electric Association		4300 220th St W Farmington MN, 55024 United States	Electronic Service		No	21-565Official Service List
47	Annete	Henkel	mui@mutilityinvestors.org	Minnesota Utility Investors		413 Wacouta Street #230 St. Paul MN, 55101 United States	Electronic Service		No	21-565Official Service List
48	Joylyn C	Hoffman Malueg	joylyn.hoffmanmalueg@wecenergygroup.com	Minnesota Energy Resources		2685 145th St W Rosemount MN, 55068 United States	Electronic Service		No	21-565Official Service List
49	Michael	Hoppe	lu23@ibew23.org	Local Union 23, I.B.E.W.		445 Etna Street Ste. 61 St. Paul MN, 55106 United States	Electronic Service		No	21-565Official Service List
50	Travis	Jacobson	travis.jacobson@mdu.com	Great Plains Natural Gas Company		400 N 4th St Bismarck ND, 58501 United States	Electronic Service		No	21-565Official Service List
51	John	Jaimez	john.jaimez@hennepin.us			Environment & Energy Department 701 4th Ave S Minneapolis MN, 55415 United States	Electronic Service		No	21-565Official Service List
52	Alan	Jenkins	aj@jenkinsattlaw.com	Jenkins at Law		2950 Yellowtail Ave. Marathon FL, 33050 United States	Electronic Service		No	21-565Official Service List
53	Richard	Johnson	rick.johnson@lawmoss.com	Moss & Barnett		150 S. 5th Street Suite 1200 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
54	Sarah	Johnson Phillips	sjphillips@stoel.com	Stoel Rives LLP		33 South Sixth Street Suite 4200 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
55	Brendan	Jordan	bjordan@gpsid.net	Great Plains Institute & Bioeconomy Coalition of MN		2801 21st Ave S Ste 220 Minneapolis MN, 55407 United States	Electronic Service		No	21-565Official Service List
56	David	Kailbourne	edk@revlmg.com	REV LNG, LLC		1002 Empson Rd Ulysses PA, 16948 United States	Electronic Service		No	21-565Official Service List
57	D	Kalmon	dkalmon@mwmw.org	Mississippi Watershed		2522 Marshall St NE	Electronic Service		No	21-565Official

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
				Management Organization		Minneapolis MN, 55418-3329 United States				Service List
58	William	Kenworthy	will@votesolar.org			1 South Dearborn St Ste 2000 Chicago IL, 60603 United States	Electronic Service		No	21-565Official Service List
59	Samuel B.	Ketchum	sketchum@kennedy-graven.com	Kennedy & Graven, Chartered		150 S 5th St Ste 700 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
60	Hudson	Kingston	hudson@curemn.org			PO Box 712 Ely MN, 55731 United States	Electronic Service		No	21-565Official Service List
61	Frank	Kohlasch	frank.kohlasch@state.mn.us		Minnesota Pollution Control Agency	520 Lafayette Rd N. St. Paul MN, 55155 United States	Electronic Service		No	21-565Official Service List
62	Nicolle	Kupser	nkupser@greatermngas.com	Greater Minnesota Gas, Inc.		1900 Cardinal Ln PO Box 798 Faribault MN, 55021 United States	Electronic Service		No	21-565Official Service List
63	Brenda	Kyle	bkyle@stpaulchamber.com	St. Paul Area Chamber of Commerce		401 N Robert Street Suite 150 St Paul MN, 55101 United States	Electronic Service		No	21-565Official Service List
64	Carmel	Laney	carmel.laney@stoel.com	Stoel Rives LLP		33 South Sixth Street Suite 4200 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
65	Peder	Larson	plarson@larkinhoffman.com	Larkin Hoffman Daly & Lindgren, Ltd.		8300 Norman Center Drive Suite 1000 Bloomington MN, 55437 United States	Electronic Service		No	21-565Official Service List
66	Robert	Lems	administration@dm-t-cgs.com	DMT Clear Gas Solutions		19125 SW 125th Ct Tualatin OR, 97062 United States	Electronic Service		No	21-565Official Service List
67	Rachel	Leonard	rachel.leonard@ci.monticello.mn.us	City of Monticello		505 Walnut St Ste 1 Monticello MN, 55362 United States	Electronic Service		No	21-565Official Service List
68	Annie	Levenson Falk	annielf@cubminnesota.org	Citizens Utility Board of Minnesota		332 Minnesota Street, Suite W1360 St. Paul MN, 55101 United States	Electronic Service		No	21-565Official Service List
69	Amy	Liberkowski	amy.a.liberkowski@xcelenergy.com	Xcel Energy		414 Nicollet Mall 7th Floor Minneapolis MN, 55401-1993 United States	Electronic Service		No	21-565Official Service List
70	Jason	Loos	jason.loos@centerpointenergy.com	CenterPoint Energy Resources Corp.		505 Nicollet Mall 3rd Floor Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
71	Kavita	Maini	kmaini@wi.rr.com	KM Energy Consulting, LLC		961 N Lost Woods Rd Oconomowoc WI, 53066 United States	Electronic Service		No	21-565Official Service List
72	Emily	Marshall	emarshall@lourismarshall.com	Miller O'Brien Jensen, PA		120 S. 6th Street Suite 2400 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
73	Linda	Martinez	lmartinez@auri.org	Agricultural Utilization Research Institute		null null, null United States	Electronic Service		No	21-565Official Service List
74	Mary	Martinka	mary.a.martinka@xcelenergy.com	Xcel Energy Inc		414 Nicollet Mall 7th Floor Minneapolis MN, 55401 United States	Electronic Service		No	21-565Official Service List
75	Daryl	Maxwell	dmaxwell@hydro.mb.ca	Manitoba Hydro		360 Portage Ave FL 16 PO Box 815, Station Main Winnipeg MB, R3C 2P4 Canada	Electronic Service		No	21-565Official Service List
76	Taylor	McNair	taylor@gridlab.org			668 Capp Street San Francisco CA, 94110 United States	Electronic Service		No	21-565Official Service List
77	Sarah	Mead	sarah.mead@wecenergygroup.com	MERC		null null, null United States	Electronic Service		No	21-565Official Service List
78	Joseph	Meyer	joseph.meyer@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	Bremer Tower, Suite 1400 445 Minnesota Street St Paul MN, 55101-2131 United States	Electronic Service		No	21-565Official Service List
79	Stacy	Miller	stacy.miller@minneapolismn.gov	City of Minneapolis		350 S. 5th Street Room M 301 Minneapolis MN, 55415 United States	Electronic Service		No	21-565Official Service List
80	David	Moeller	dmoeller@allete.com	Minnesota Power			Electronic Service		No	21-565Official Service List
81	Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP		33 South Sixth St Ste 4200 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
82	Evan	Mulholland	emulholland@mncenter.org	Minnesota Center for Environmental Advocacy		1919 University Ave W Ste 515 Saint Paul MN, 55101 United States	Electronic Service		No	21-565Official Service List
83	Alan	Muller	alan@greendel.org	Energy & Environmental Consulting		1110 West Avenue Red Wing MN, 55066 United States	Electronic Service		No	21-565Official Service List
84	Carl	Nelson	cnelson@mncee.org	Center for Energy and Environment		212 3rd Ave N Ste 560 Minneapolis MN, 55401 United States	Electronic Service		No	21-565Official Service List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
85	David	Niles	david.niles@avantenergy.com	Minnesota Municipal Power Agency		220 South Sixth Street Suite 1300 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
86	Samantha	Norris	samanthanorris@alliantenergy.com	Interstate Power and Light Company		200 1st Street SE PO Box 351 Cedar Rapids IA, 52406-0351 United States	Electronic Service		No	21-565Official Service List
87	M. William	O'Brien	bobrien@mojlaw.com	Miller O'Brien Jensen, P.A.		120 S 6th St Ste 2400 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
88	Ric	O'Connell	ric@gridlab.org	GridLab		2120 University Ave Berkeley CA, 94704 United States	Electronic Service		No	21-565Official Service List
89	Carol A.	Overland	overland@legalelectric.org	Legalelectric - Overland Law Office		1110 West Avenue Red Wing MN, 55066 United States	Electronic Service		No	21-565Official Service List
90	Greg	Palmer	gpalmer@greatermngas.com	Greater Minnesota Gas, Inc.		1900 Cardinal Ln PO Box 798 Faribault MN, 55021 United States	Electronic Service		No	21-565Official Service List
91	Jessica	Palmer Denig	jessica.palmer-denig@state.mn.us		Office of Administrative Hearings	600 Robert St N PO Box 64620 St. Paul MN, 55164 United States	Electronic Service		No	21-565Official Service List
92	Antonio	Parisi	aparisi@sacyr.com	Sacyr Environment USA LLC		3330 Washington Blvd Ste 400 Arlington VA, 22201 United States	Electronic Service		No	21-565Official Service List
93	Bret	Pence	bretpence@mnipl.org	Minnesota Interfaith Power and Light		106 Waverly Place Duluth MN, 55803 United States	Electronic Service		No	21-565Official Service List
94	Catherine	Phillips	catherine.phillips@wecenergygroup.com	Minnesota Energy Resources		231 West Michigan St Milwaukee WI, 53203 United States	Electronic Service		No	21-565Official Service List
95	J.	Porter	greg.porter@nngco.com	Northern Natural Gas Company		1111 South 103rd St Omaha NE, 68124 United States	Electronic Service		No	21-565Official Service List
96	Kevin	Pranis	kpranis@liunagro.com	Laborers' District Council of MN and ND		81 E Little Canada Road St. Paul MN, 55117 United States	Electronic Service		No	21-565Official Service List
97	Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us		Office of the Attorney General - Residential Utilities Division	1400 BRM Tower 445 Minnesota St St. Paul MN, 55101-2131 United States	Electronic Service		Yes	21-565Official Service List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
98	Kevin	Reuther	kreuther@mncenter.org	MN Center for Environmental Advocacy		26 E Exchange St, Ste 206 St. Paul MN, 55101-1667 United States	Electronic Service		No	21-565Official Service List
99	Nathaniel	Runke	nrunke@local49.org			611 28th St. NW Rochester MN, 55901 United States	Electronic Service		No	21-565Official Service List
100	Bjorgvin	Saevarsson	bjorgvin@yorthgroup.com		Yorth	500 East Grant Street 1207 #1207 Minneapolis MN, 55404 United States	Electronic Service		No	21-565Official Service List
101	Kevin	Saville	kevin.saville@ftr.com	Citizens/Frontier Communications		2378 Wilshire Blvd. Mound MN, 55364 United States	Electronic Service		No	21-565Official Service List
102	Elizabeth	Schmiesing	eschmiesing@winthrop.com	Winthrop & Weinstine, P.A.		225 South Sixth Street Suite 3500 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
103	Christine	Schwartz	regulatory.records@xcelenergy.com	Xcel Energy		414 Nicollet Mall, MN1180-07-MCA Minneapolis MN, 55401-1993 United States	Electronic Service		No	21-565Official Service List
104	Douglas	Seaton	doug.seaton@umwlc.org	Upper Midwest Law Center		8421 Wayzata Blvd Ste 300 Golden Valley MN, 55426 United States	Electronic Service		No	21-565Official Service List
105	Patrick	Serfass	pserfass@ttcorp.com	American Biogas Council		1211 Connecticut Ave NW Ste 650 Washington DC, 20036 United States	Electronic Service		No	21-565Official Service List
106	Patrick	Serfass	info@americanbiogascouncil.org	American Biogas Council		1211 Connecticut Ave NW Ste 650 Washington DC, 20036 United States	Electronic Service		No	21-565Official Service List
107	Janet	Shaddix Elling	jshaddix@janetshaddix.com	Shaddix And Associates		7400 Lyndale Ave S Ste 190 Richfield MN, 55423 United States	Electronic Service		No	21-565Official Service List
108	Andrew R.	Shedlock	andrew.shedlock@kutakrock.com	Kutak Rock LLP		60 South Sixth St Ste 3400 Minneapolis MN, 55402-4018 United States	Electronic Service		No	21-565Official Service List
109	Beth	Smith	bsmith@greatermankato.com	Greater Mankato Growth		1961 Premier Dr Ste 100 Mankato MN, 56001 United States	Electronic Service		No	21-565Official Service List
110	Joshua	Smith	joshua.smith@sierraclub.org			85 Second St FL 2 San Francisco CA, 94105 United States	Electronic Service		No	21-565Official Service List

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
111	Ken	Smith	ken.smith@districtenergy.com	District Energy St. Paul Inc.		76 W Kellogg Blvd St. Paul MN, 55102 United States	Electronic Service		No	21-565Official Service List
112	Beth	Soholt	bsoholt@cleangridalliance.org	Clean Grid Alliance		570 Asbury Street Suite 201 St. Paul MN, 55104 United States	Electronic Service		No	21-565Official Service List
113	Anna	Sommer	asommer@energyfuturesgroup.com	Energy Futures Group		PO Box 692 Canton NY, 13617 United States	Electronic Service		No	21-565Official Service List
114	Peggy	Sorum	peggy.sorum@centerpointenergy.com	CenterPoint Energy		505 Nicollet Mall Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
115	Mark	Spurr	mspurr@fvbenergy.com	International District Energy Association		222 South Ninth St., Suite 825 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
116	Byron E.	Starns	byron.starns@stinson.com	STINSON LLP		50 S 6th St Ste 2600 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
117	Richard	Stasik	richard.stasik@wecenergygroup.com	Minnesota Energy Resources Corporation (HOLDING)		231 West Michigan St - P321 Milwaukee WI, 53203 United States	Electronic Service		No	21-565Official Service List
118	Kristin	Stastny	kstastny@taftlaw.com	Taft Stettinius & Hollister LLP		2200 IDS Center 80 South 8th Street Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
119	James M	Strommen	jstrommen@kennedy-graven.com	Kennedy & Graven, Chartered		150 S 5th St Ste 700 Minneapolis MN, 55402 United States	Electronic Service		No	21-565Official Service List
120	Kent	Sulem	ksulem@mmua.org			3131 Fernbrook Ln N Ste 200 Plymouth MN, 55447-5337 United States	Electronic Service		No	21-565Official Service List
121	Matthew	Tomich	tomich@energy-vision.org	Energy Vision		138 E 13th St New York NY, 10003 United States	Electronic Service		No	21-565Official Service List
122	Julie	Voeck	julie.voeck@nee.com	NextEra Energy Resources, LLC		700 Universe Blvd Juno Beach FL, 33408 United States	Electronic Service		No	21-565Official Service List
123	Sam	Wade	sam@rngcoalition.com	Coalition for Renewable Natural Gas		1017 L Street #513 Sacramento CA, 95814 United States	Electronic Service		No	21-565Official Service List
124	Nicole	Westling	nicole.westling@state.mn.us		Department of Commerce	85 7th Place E Suite 280 St Paul MN, 55001 United States	Electronic Service		No	21-565Official Service List
125	Casey	Whelan	cwhelan@kinectenergy.com	Kinect Energy Group		605 Highway 169 N Ste 1200	Electronic Service		No	21-565Official

#	First Name	Last Name	Email	Organization	Agency	Address	Delivery Method	Alternate Delivery Method	View Trade Secret	Service List Name
						Plymouth MN, 55441 United States				Service List
126	Laurie	Williams	laurie.williams@sierraclub.org	Sierra Club		Environmental Law Program 1536 Wynkoop St Ste 200 Denver CO, 80202 United States	Electronic Service		No	21- 565Official Service List
127	Joseph	Windler	jwindler@winthrop.com	Winthrop & Weinstine		225 South Sixth Street, Suite 3500 Minneapolis MN, 55402 United States	Electronic Service		No	21- 565Official Service List
128	Tim	Wulling	t.wulling@earthlink.net			1495 Raymond Ave. Saint Paul MN, 55108 United States	Electronic Service		No	21- 565Official Service List
129	Grant	Zimmerman	gzimmerman@ampamericas.com	Amp Americas		811 W Evergreen Ave Ste 201 Chicago IL, 60642 United States	Electronic Service		No	21- 565Official Service List
130	Kurt	Zimmerman	kwz@ibew160.org	Local Union #160, IBEW		2909 Anthony Ln St Anthony Village MN, 55418-3238 United States	Electronic Service		No	21- 565Official Service List
131	Patrick	Zomer	pat.zomer@lawmoss.com	Moss & Barnett PA		150 S 5th St #1200 Minneapolis MN, 55402 United States	Electronic Service		No	21- 565Official Service List