



July 19, 2024

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

**RE: Reply comments from the Building Decarbonization Coalition
In the Matter of a Commission Investigation into Gas Utility Resource Planning** (Docket Number G008, G002, G011/CI-23-117)

The Building Decarbonization Coalition (“BDC”) respectfully submits these Reply Comments to the Minnesota Public Utilities Commission (“Commission”) in reference to stakeholders’ Initial Comments submitted June 28, 2024 in the Matter of a Commission Investigation into Gas Utility Resource Planning following the May 7, 2024 Noticed of Extended Comment Period (“Notice”).

BDC thanks the many stakeholders who filed Initial Comments in Response to the Notice. After reviewing these Comments BDC both maintains the recommendations outlined in our Initial Comments in this docket and supports proposed decision options other parties outlined in their own.

These Reply Comments aim to focus on 4 topics relating to the Commission's March 27, 2024 Order Establishing Framework for Natural Gas Utility Integrated Resource Planning (“Scoping Order”) and subsequent Notice:

1. Aligning integrated resource plans (“IRPs”) with the State’s greenhouse gas reduction goals
2. Consideration of non-combustion resources in expansion alternatives analysis (“EEAs”)
3. Establishing an investment threshold to embed equity
4. Leveraging data and mapping tools for project selection

Aligning IRPs with the State’s Greenhouse Gas Reduction Goals

Minnesota’s statewide greenhouse gas reduction goals aim to get the State economy-wide to net zero emissions by 2050 with a 50% reduction by 2030 compared to 2005 levels.¹ Order point 4 of the Commission's Scoping Order states that the scope of IRPs must consider these statewide goals but leaves much of the interpretation of how this should be done to be decided.² As the Center for Energy and

¹ Minn. Stat. § 216H.02, subd. 1.

² Order Establishing Framework for Natural Gas Utility Integrated Resource Planning at 7, ¶ 4 (Mar. 27, 2024)

Environment (“CEE”) noted in their Initial Comments, methane gas consumption and the resulting emissions has only risen in Minnesota jumping 32.5% from 2005 to 2022.³ BDC agrees with the Clean Energy Organizations (“CEOs”) that, as the 3 largest methane gas providers in the State, Xcel Energy (“Xcel”), Centerpoint Energy (“Centerpoint”), and Minnesota Energy Resources Corporation (“MERC”) (“collectively, “Utilities”) play a crucial role in meeting State emissions reduction targets⁴ and encourages the Commission to give direction towards the many opportunities present in the IRP process. By leveraging the current planning position, we can realize emissions reductions in future utility business operations that will be influenced by IRPs.

Consideration of Non-Combustion Resources in Expansion Alternatives Analysis

In order to consider the State’s greenhouse gas reduction goals in IRPs BDC believes it important that resources being considered as alternatives to gas system expansion are solutions with zero onsite combustion as part of normal system operation and effectively emit zero greenhouse gasses. The 2021 Natural Gas Innovation Act (NGIA) specified a number of solutions that BDC suggests the Commission adopt as preferred solutions and require utilities to consider in their EEAs.⁵ These solutions include:

- Neighborhood-Scale Electrification
- Geothermal district energy
- Networked geothermal/Thermal energy networks (“TENs”)

Further, the NGIA allowed natural gas utilities the opportunity to submit Innovation Plans (“Plans”) proposing pilots of these innovative resources outlined in the legislation and recover the cost of these pilots across their rate base. To date, Xcel and Centerpoint have both filed Plans with the Commission including electrification, district energy, and TENs pilots.⁶ These pilots will give Utilities crucial experience implementing these innovative resources across their portfolios preparing them for greater deployment of these solutions and position them well to evaluate and implement them as part of their EEAs. BDC suggests that the Commission require Utilities to consider these innovative resources in their EEAs in alignment with Order Point 4 in the Scoping Order. This consideration still allows for a reasonable cost-effectiveness and feasibility assessment and comparison of these resources against others not listed but ensures that the Utilities and stakeholders have the opportunity to evaluate these resources against the cost of traditional methane gas system expansion projects.

Beyond alignment with the State’s greenhouse gas goals, BDC supports the consideration of TENs in EEAs because of the crucial role we believe they will play in the energy transition. TENs are interconnected networks of pipes filled with water that move heat in between buildings via electric heat pumps and leverage

³ Center for Energy and Environment’s Comments *in the Matter of a Commission Investigation into Gas Utility Resource Planning 5* (Jun 28, 2024) [hereinafter CEE’s Comments]

⁴ Initial Comments of the Clean Energy Organizations 2, 3 (Jun 28, 2024) [hereinafter CEOs’ Comments]

⁵ Minn. Stat. § 216B.2427.

⁶ Petition by CenterPoint Energy for Approval of its First Natural Gas Innovation Plan (Jun 28, 2023); Xcel Energy Natural Gas Innovation Act Plan (Dec 15, 2023).

the constant temperature of the earth to offer both heating and cooling.⁷ No different than traditional methane gas pipes underground, TENs installation and maintenance requires the skilled labor of pipefitters, operating engineers, drillers, electricians, and more. As such, they represent a crucial path forward for gas workers to gain experience installing zero-emission technologies using many of the skills they already possess. Every opportunity the Utilities can get to consider the piloting and deployment of these types of systems is one that opens doors for clean energy job growth.

Even more, we believe TENs are an appropriate technology to consider for EEAs because they are inherently neighborhood-scale. TENs require a series of interconnected buildings to be able to exchange heat between themselves and shallow geothermal boreholes connected to the system. The more buildings on the network means greater diversity of heating and cooling loads which translates to higher efficiency. At Colorado Mesa University, one of the longest studied TENs projects in the country, this efficiency boasted a coefficient of performance as high as 5.7, according to a case study performed by Xcel.⁸

Proposed Decision Option:

- Require Utilities to consider zero on-site combustions technologies like electrification, geothermal district energy, and thermal energy networks in their expansion alternatives analysis.

Establishing an Investment Threshold to Embed Equity

In the initial Scoping Order the Commission directed Utilities to conduct 2-3 EEAs for significant upcoming capacity expansion projects above a threshold to be determined at a later date.⁹ Following this, Utilities submitted straw proposals including cost thresholds for EEAs based on internal analyses of expansion projects planned or completed in the past 5 years. Stakeholder discussion at the Gas Utility Innovation Roundtable convened by the Great Plains Institute determined that insight into the numbers of eligible projects at lower-than-proposed cost thresholds would help stakeholders better make recommendations on the investment threshold. To this end, Utilities submitted Initial Comments reporting the number of projects that would have been eligible at the investment thresholds of \$1 million, \$3 million, \$5 million, \$10 million, and \$15 million. When evaluating at a \$1 million threshold Xcel and Centerpoint reported 6 and 15 projects, respectively while MERC argued to not propose a threshold at this time and instead develop this after their initial IRP.¹⁰ In our initial Comments BDC proposed a decision option for the Commission to adopt an investment threshold that would allow Utilities to have far greater than the 2-3 projects required for EEAs so the utility could reasonably apply considerations of equity into the selection process for projects to receive a full EEA. BDC maintains this recommendation and believes the Commission should adopt an investment threshold of \$1 million. Additionally, we recommend the Commission adopt a single threshold for all Utilities to find administrative efficiencies.

⁷ Building Decarbonization Coalition, Thermal Energy Networks (July 2024) <https://buildingdecarb.org/resource-library/tens>.

⁸ Building Decarbonization Coalition, Neighborhood Scale: The Future of Building Decarbonization 13 (Nov 2023);

⁹ Order Establishing Framework, *supra* note 2, at 11, 12, ¶ 4.

¹⁰ Initial Comments of Xcel Energy 1 (Jun 28, 2024) [hereinafter Xcel's Initial Comments]; Initial Comments of Centerpoint Energy 1 (Jun 28, 2024) [hereinafter Centerpoint's Initial Comments]; Minnesota Energy Resources Corporation Straw Proposal (May 31, 2024) [hereinafter "MERC's Straw Proposal"].

Following MERC’s citation of having a limited number of significant capacity expansion projects to draw from to inform an investment threshold, the Citizen Utility Board’s (“CUB”) Initial Comments outlined recent main extension and new gas service investments the utility has made, identifying the need for greater clarity among stakeholders for what is considered a “significant capacity expansion project.”¹¹ Further, CUB offers the recommendation that projects that meet the statutory definition of a natural gas extension project (“NGEP”) should be eligible to be considered for an EEA if above the to-be-determined investment threshold.¹² BDC supports this position and encourages the Commission to adopt this approach for each of the Utilities.

Leveraging Data and Mapping Tools for Project Selection

In order for Utilities to effectively consider equity as a consideration for EEA project selection they need to have clear ways to compare gas system characteristics, planned investments, and system constraints with sociodemographic characteristics of customers across their service territory. In their initial straw proposal Centerpoint communicated a desire to incorporate public data and mapping tools to identify low-income customers and disadvantaged communities.¹³ Initial Comments by CUB point out that in a current proposal before the Commission Xcel has proposed using U.S. Census data combined with company data to identify high energy burdened customers and highlights an existing map developed by Xcel already to overlay low-income program participation with energy system data.¹⁴ Lastly, the CEOs cite Pacific Gas and Electric’s development and use of a gas system mapping tool that overlays census tract-specific gas pipeline information with U.S. census demographic data, utility program participation, and more to identify crucial areas in their system for pruning, targeted electrification, and equitable investments.

These 3 examples demonstrate the use of data and mapping to identify and deliver investments more equitably. In addition to our recommendation to leverage the statutorily defined definition of environmental justice community, BDC supports the use of additional mapping tools to identify opportunities for targeted equitable investments in environmental justice communities. Further, the Minnesota Pollution Control Agency’s active rulemaking on Cumulative Impacts¹⁵ where the environmental justice definition we proposed originates from is producing updated statewide ArcGis maps overlaying census tracts that meet one or more of the following environmental justice definition criteria:

- At least 35% of people reported income less than 200% of the federal poverty level
- 40% or more people of color
- Federally recognized Indian Tribes
- At least 40% of people have limited English proficiency

In addition to those outlined by other stakeholders, BDC recommends the use of these EJ maps as another equity consideration for EEA project selection. MNPCA currently plans to have these maps completed for

¹¹ Initial Comments of the Citizens Utility Board of Minnesota 8 (Jun 28, 2024) [hereinafter CUB’s Comments].

¹² CUB’s Comments at 8.

¹³ Centerpoint Energy’s Straw Proposal (May 31, 2024) (hereinafter “Centerpoint’s Straw Proposal”).

¹⁴ CUB’s Comments at 14.

¹⁵ Cumulative Impacts, Minnesota Pollution Control Agency, Docket No. R-04805 (202).

statewide use in August 2024. In order to embed equity into the EEA selection process in this way, the CEOs put forth the following proposed decision option:

To integrate equity into alternatives analyses, utilities shall evaluate ways to overlay maps of proposed capital projects and resource acquisitions across maps of environmental justice and disadvantaged communities in the utilities' service areas.¹⁶

BDC supports this decision option and encourages the Commission to adopt this approach to project selection as one way to embed equity in the IRP process.

Respectfully submitted,

Building Decarbonization Coalition
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¹⁶ CEOs' comments at 13.