

Direct Testimony and Schedules
Jeff R. Lyng

Before the Minnesota Public Utilities Commission
State of Minnesota

In the Matter of the Application of Northern States Power Company
for Authority to Increase Rates for Natural Gas Service in Minnesota

Docket No. G002/GR-25-356
Exhibit____(JRL-1)

Net-Zero Vision for Natural Gas

October 31, 2025

Table of Contents

I.	Introduction	1
II.	Innovative Energy Policy and Gas Planning in Minnesota	2
III.	Leading the Clean Energy Transition	9
	A. Implementing our Net-Zero Vision for Natural Gas	9
	B. Electrification-First Strategy	12
	1. Advancing Rebates and Programs	14
	2. Engaging with Builders and Developers Early	15
	3. Advance Strategic Electrification Pilots	16
	4. Resource Level of Analysis	17
	5. Expansion Alternative Analysis	17
	C. LDC Methane Strategy	20
IV.	Conclusion	21

Schedules

Statement of Qualifications	Schedule 1
-----------------------------	------------

1 **I. INTRODUCTION**

2

3 Q. PLEASE STATE YOUR NAME, OCCUPATION, AND JOB RESPONSIBILITIES.

4 A. My name is Jeff R. Lyng. I am Vice President, External Affairs & Policy and
5 Chief Sustainability Officer at Xcel Energy Services Inc., the service company
6 subsidiary of Xcel Energy Inc. (Xcel Energy).

7

8 Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

9 A. I am testifying on behalf of Northern States Power Company-Minnesota
10 (NSPM or the Company), d/b/a Xcel Energy.

11

12 Q. PLEASE SUMMARIZE YOUR QUALIFICATIONS AND EXPERIENCE.

13 A. I am responsible for advising Xcel Energy's operating companies on state and
14 federal energy and environmental policy, including responsible business
15 practices. I have over 15 years of work experience in energy policy including in
16 the Colorado Governor's Energy Office, at Opower (now an Oracle company),
17 and with Colorado State University's Center for the New Energy Economy. My
18 graduate degree is in Civil Engineering from the University of Colorado at
19 Boulder. A more detailed description of my qualifications, duties, and
20 responsibilities is set forth in my Statement of Qualifications included as
21 Exhibit____(JRL-1), Schedule 1.

22

23 Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS PROCEEDING?

24 A. The purpose of my Direct Testimony is to provide information regarding the
25 role of our natural gas local distribution company (LDC) in the clean energy
26 transition, and our comprehensive strategy to reduce emissions from both our
27 LDC system and customer use of natural gas. I begin by highlighting

1 Minnesota's innovative regulatory and policy environment, including the 'G21
2 report,' the Energy Conservation and Optimization Act (ECO), and the Natural
3 Gas Innovation Act (NGIA), all of which shape our approach. I also describe
4 Xcel Energy's Net-Zero Vision for natural gas, which supports the State's
5 existing efforts and offers a complementary and an achievable path forward
6 that aligns both Company and State policy objectives. I explain how the Net-
7 Zero Vision and our implementation strategy are evolving to continue to
8 support customer choice and our commitment to safety, affordability,
9 reliability, and a cleaner energy future.

10 11 **II. INNOVATIVE ENERGY POLICY AND GAS PLANNING IN** 12 **MINNESOTA**

13
14 Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

15 A. In this section of my testimony, I call attention to how Minnesota law advances
16 environmental policy for natural gas and describe the Company's active and
17 supportive participation in these efforts. I also discuss how Xcel Energy leads
18 the industry in the clean energy transition, across both our electric and natural
19 gas businesses.

20
21 Q. GENERALLY, HOW DO YOU VIEW THE APPROACH TO CLEAN ENERGY POLICY IN
22 MINNESOTA?

23 A. Minnesota's legislative and regulatory environment, known for its ambitious
24 and common-sense policymaking, is proactive and collaborative, equipping
25 utilities with the necessary tools and flexibility for long-term decarbonization of
26 the natural gas system. Through statutes like the ECO Act and the NGIA, state
27 policy provides tools and flexibility for utilities to pilot innovative technologies,

1 pursue strategic electrification and Efficient Fuel Switching (EFS), and align
2 planning with statewide greenhouse gas (GHG) emission reduction goals. The
3 Minnesota Public Utilities Commission's (Commission) Future of Gas docket
4 (Docket No. G999/CI-21-565) and the new Gas Integrated Resource Plan (Gas
5 IRP) process further strengthen the state's commitment to reliability,
6 affordability, and GHG emissions reductions.

7
8 Q. PLEASE DESCRIBE XCEL ENERGY'S COMMITMENT TO A CLEAN ENERGY FUTURE.

9 A. As Company witness Amy A. Liberkowski describes, Xcel Energy makes
10 leading the clean energy transition a core pillar of our strategic vision. We have
11 established ourselves as an industry leader by deploying renewable energy,
12 reducing GHG emissions, and advancing environmental goals for Minnesota
13 and the other states we serve. In December 2018, Xcel Energy set an industry
14 benchmark by committing to reducing carbon dioxide emissions from the
15 electricity serving customers by 80 percent from 2005 levels by 2030, with the
16 aspiration to deliver 100 percent carbon-free electricity by 2050.

17
18 Building on our ambitious electric system emissions reduction goal, our Net-
19 Zero Vision for Natural Gas commits us to delivering reliable, affordable
20 natural gas service while also achieving net-zero methane emissions on our own
21 system by 2030 and positioning ourselves as a net-zero energy provider by 2050.

22
23 Q. PLEASE DESCRIBE THE COMPANY'S CLEAN ENERGY LEADERSHIP WITH RESPECT
24 TO NATURAL GAS.

25 A. Xcel Energy's Net-Zero Vision for natural gas commits us to achieving net-
26 zero GHG emissions by 2050, in alignment with Minnesota's climate goals. We
27 are transforming our natural gas business by reducing emissions from our own

1 infrastructure, prioritizing electrification where feasible, and supporting
2 customers with innovative programs and clean energy solutions. Our strategy
3 balances reliability and affordability while advancing opportunities for a
4 portfolio approach.

5
6 We work closely with regulators and stakeholders through proceedings like the
7 Gas IRP and the Future of Gas dockets to ensure our long-term planning and
8 investments support both customer needs and state policy objectives. Through
9 these efforts, Xcel Energy is leading the way toward a cleaner, more sustainable
10 natural gas system future for all.

11
12 Q. HOW DO CONTINUING ACTIVITIES IN THE STATE WORK IN CONCERT TO
13 SUPPORT NATURAL GAS SYSTEM INNOVATION AND GHG EMISSIONS
14 REDUCTIONS?

15 A. Ongoing actions within the State, and within the Company, work in concert
16 with each other to achieve our shared policy goals. For example, in 2021, the
17 Great Plains Institute (GPI) and Center for Energy and Environment (CEE)
18 released a report titled Decarbonizing Minnesota's Natural Gas End Uses.¹ It is
19 colloquially referred to as the 'G21 report.' Many consider the G21 report to be
20 a playbook on reducing GHG emissions while continuing to provide reliable,
21 affordable heating for homes and businesses in Minnesota.

22
23 The stakeholder group recommended a dual-fuel approach that emphasizes
24 efficiency, innovation, affordability, and customer choice. This analysis and the
25 stakeholder group's recommendations continue to inform the Company's Net-

¹ <https://e21initiative.org/natural-gas/>

1 Zero Vision today. Our dual-fuel portfolio approach, which promotes
2 efficiency, strategic electrification, innovation, affordability, and customer
3 choice, aligns in many ways with the G21 report findings and recommendations.
4

5 Also in 2021, the ECO Act expanded Minnesota's existing Conservation
6 Improvement Program (CIP) by allowing EFS as part of energy conservation
7 efforts, and the NGIA established a new pathway for innovative pilot projects
8 that reduce GHG emissions including efficiency, strategic electrification, district
9 geothermal, renewable natural gas (RNG), hydrogen, and carbon capture. The
10 Company has worked to implement the benefits of these new tools, filed an
11 ECO Plan with EFS measures on June 29, 2023, and gained approval of its first
12 NGIA Plan on May 16, 2025.
13

14 Q. WHAT IS THE SCOPE OF THE COMPANY'S FIRST NGIA PLAN?

15 A. The Company's first NGIA Plan includes a five-year portfolio of pilot and
16 research projects designed to contribute to the state's GHG emission reduction
17 goals and simultaneously support our Net-Zero Vision. The approved portfolio
18 includes over \$55 million in investments across several categories: RNG,
19 hydrogen, carbon capture, strategic electrification, and thermal energy
20 networks. Section B summarizes notable pilot projects. In addition to pilots, the
21 Plan includes a robust research and development portfolio focused on emerging
22 technologies such as locating potential RNG development opportunities and
23 conducting an industrial heat pump field trial.
24

25 Q. PLEASE DESCRIBE THE SCOPE OF THE ECO PLAN.

26 A. ECO plans are part of a statewide initiative designed to help Minnesota
27 households and businesses use electricity and natural gas more efficiently.

1 Administered by electric and natural gas utilities and overseen by the Minnesota
2 Department of Commerce, Division of Energy Resources (Department), ECO
3 plans aim to conserve energy, reduce carbon dioxide emissions, and defer the
4 need for new utility infrastructure. Customers fund ECO programs, utilities
5 administer them, and the Department oversees them.

6
7 Q. HOW DOES THE ECO PLAN SUPPORT FUEL SWITCHING?

8 A. The ECO Act of 2021 established programs that modernize the state's previous
9 CIP by taking a more holistic approach to energy efficiency and supporting
10 customers who seek to not only use energy more efficiently but to change the
11 form of energy they use. EFS refers to a utility program that provides incentives
12 for customers to switch from one fuel type to another to serve the same end
13 use, provided the new device uses less overall energy and results in lower
14 greenhouse gas emissions. For example, encouraging customers to replace a
15 natural gas water heater with an electric heat pump water heater would be
16 considered EFS.

17
18 The Company began to offer EFS incentives to customers beginning in 2024.
19 Over 8,000 customers have participated in these efforts through heat pump
20 measures, far exceeding our predictions. In addition, we began offering
21 incentives to pay for ancillary costs that often create barriers to full participation
22 through our electric panel upgrade rebate. Customers' interest in these offerings
23 demonstrates how ECO programs advance the state's clean energy and
24 affordability goals.

25
26 Q. HOW DOES THE GAS IRP FRAMEWORK SUPPORT REDUCTIONS IN GHG
27 EMISSIONS?

1 A. The Gas IRP framework established by the Commission leads to a
2 determination of the future mix of resources that best protect customer choice
3 and public interests, maintain safe, reliable, and affordable service, and advance
4 Minnesota's state policy objectives, including GHG emission reductions. The
5 Gas IRP aligns the ECO plan and NGIA within one comprehensive plan. We
6 are developing our first Gas IRP and look forward to filing it by July 1, 2026.

7
8 Q. HOW DOES THE UPCOMING GAS IRP RELATE TO FUTURE LDC RESOURCE
9 EFFORTS?

10 A. The Company's forthcoming Gas IRP is planned to be strategic, forward-
11 looking, and aligned with public interest and state policy goals. At its core, the
12 Gas IRP process seeks to identify the optimal mix of resources that ensures
13 safe, reliable, and affordable service while minimizing lifecycle costs and
14 environmental impacts. By comparing all resource options – supply-side,
15 demand-side, and infrastructure – on a consistent basis, utilities can identify
16 investment portfolios that deliver reliable service at the lowest long-term cost
17 to customers and the environment.

18
19 Additionally, utilities must evaluate two to three upcoming capacity expansion
20 projects through an Expansion Alternatives Analysis (EEA). This includes
21 assessing non-pipeline alternatives (NPA) and non-gas alternatives and
22 considering equity, air quality, and social costs of emissions in the analysis.

23
24 Q. WHAT IS THE CURRENT STATUS OF THE FUTURE OF GAS DOCKET?

25 A. In January, after adopting a new process for integrated resource planning for
26 the natural gas system, the Commission issued a notice of the current scope of

1 the docket and timeline for moving forward.² Additionally, this year, the
2 Commission held a series of planning meetings to better understand issues
3 related to the future of natural gas regulation in Minnesota. The Commission
4 also issued a Notice of Comment Period regarding line extension policy issues
5 in which the Company is participating. Based on the scoping document, we
6 understand that after addressing line extension policies, the Commission
7 intends to consider changes to rates needed to maintain affordable and equitable
8 utility service.

9
10 Q. OVERALL, HOW DO THESE STATUTES, DOCKETS, AND THE COMPANY'S FILINGS,
11 RELATE TO THIS RATE PROCEEDING?

12 A. This rate proceeding focuses on system investments. However, our NGIA and
13 ECO Plans, along with the forthcoming Gas IRP, outline long-term strategies
14 to reduce emissions and foster innovation within the natural gas system. These
15 legislative directives and regulatory tools lay the foundation for how the
16 Company plans and implements its Net-Zero Vision in Minnesota. Collectively,
17 these efforts support the rate case by guiding our approach to future natural gas
18 investments and customer programs.

19
20 Q. ARE THE COSTS OF ANY OF THE PILOTS NOTED ABOVE INCLUDED IN THIS
21 NATURAL GAS RATE CASE?

22 A. Yes. Our ECO program costs are recovered through the Conservation Cost
23 Recovery Charge (CCRC), which sets a baseline that is updated in rate cases like
24 this one. Any variance between the costs recovered through the CCRC and the
25 actual ECO program costs are recovered through the CIP Adjustment Factor,

² [G999/CI-21-565 Notice of Current Scope of Docket and Timeline](#)

1 which is updated as part of our annual reporting process. We recover NGIA
2 pilot implementation costs exclusively through the NGIA Rider, so these costs
3 are not included in this rate case proceeding.
4

5 **III. LEADING THE CLEAN ENERGY TRANSITION**

6

7 Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR DIRECT TESTIMONY?

8 A. In this section of my Direct Testimony, I provide more information regarding
9 the Company's Net-Zero Vision, how it has evolved, and how it relates to this
10 rate case. I further explain how our Net-Zero Vision supports electrification
11 and reductions in LDC methane emissions, which we consider key to the clean
12 energy transition and aligned with the State goals discussed earlier in my Direct
13 Testimony.
14

15 **A. Implementing our Net-Zero Vision for Natural Gas**

16 Q. PLEASE EXPLAIN IN MORE DETAIL XCEL ENERGY'S NET-ZERO VISION,
17 ANNOUNCED ON NOVEMBER 1, 2021.

18 A. The Company's Net-Zero Vision for Natural Gas included commitments to
19 deliver reliable, affordable natural gas service with 25 percent fewer methane
20 and GHG emissions by 2030 (from 2020 levels) and net-zero GHG emissions
21 by 2050. Implementation started by accelerating our plans to reduce methane
22 emissions on our own system, as well as offering customers cost-effective
23 options for reducing carbon emissions from natural gas use. As part of this
24 effort, we expanded our energy conservation programs and piloted new
25 programs that encourage the use of electric appliances and zero-carbon gas
26 alternatives. The announcement also included setting a goal to purchase natural

1 gas only from suppliers with certified low-methane emissions and improving
2 our natural gas delivery system to achieve net-zero methane emissions by 2030.

3
4 Q. HOW HAS XCEL ENERGY EVOLVED ITS NET-ZERO VISION OVER TIME?

5 A. We have continually evolved our Net-Zero Vision over time, aligning our
6 strategy and implementation with evolution of state policy as we continue to
7 strive towards our long-term vision to be a net-zero energy provider by 2050.
8 As part of these efforts, we will continue to operate the cleanest natural gas
9 system possible, including an interim target to achieve net-zero methane
10 emissions on our own system by 2030. However, we have refined our interim
11 2030 goal based on our experience in the market and recent state policy
12 developments. Our updated strategy now adopts an electrification-first focus to
13 2030, rather than a mass-based target, previously 25 percent reduction in GHG
14 emissions by 2030. We revised the 2030 goal to ensure our long-term planning
15 and system investments reflect the reality that the customer drives the pace of
16 adoption. Unlike the electric system, emissions reductions on the gas system are
17 largely achieved through millions of actions taken within homes and businesses,
18 rather than large resource changes and decisions. To support customer emission
19 reduction, we will lead with electrification offerings where feasible and maintain
20 a portfolio approach to continue. One other key change is the removal of
21 upstream certified natural gas (CNG), sometimes referred to as differentiated
22 gas, purchases from our 2030 goal. These purchases reflect scope 3 emissions,³
23 which are outside of our direct management. Based on our experience in the
24 marketplace, CNG has not proven to be a scalable solution at this time and we

³ Scope 3 emissions are the result of activities from assets not owned or controlled by the reporting organization, but that the organization indirectly affects in its value chain. [Scope 3 Inventory Guidance | US EPA](#)

1 have also received little support for paying a premium for CNG purchases. In
2 many ways, the market has not arrived. We continue to support methane
3 emissions reductions from upstream production but shifted our focus to our
4 own infrastructure and helping our customers.

5
6 Q. HOW DO THE COMPANY'S GOALS SUPPORT MINNESOTA'S ECONOMY-WIDE 2050
7 NET-ZERO TARGET?

8 A. Xcel Energy's Net-Zero Vision is aligned with Minnesota's statutory GHG
9 emission reduction goal to be net-zero by 2050. The state target establishes that
10 it is "the goal of the state to reduce statewide greenhouse gas emissions across
11 all sectors producing greenhouse gas emissions... to net zero by 2050."⁴
12 Notably, it does not mandate specific emission reductions by sector, list
13 required or prioritized reduction actions, nor specify an amount of direct
14 reductions versus removals that may occur. By keeping these details flexible, the
15 market can direct the most cost-effective reductions across the state, and the
16 Commission can consider the goals among other policy directives. I further
17 expand on the fundamentals of the Company's Net-Zero Vision in parts B and
18 C of this section.

19
20 Q. HOW DOES THE COMPANY'S NET-ZERO VISION FOR NATURAL GAS RELATE TO
21 THIS RATE CASE?

22 A. As Company witness Liberkowski explains, this rate case focuses on the current
23 costs required to ensure the reliability and safety of the natural gas system, with
24 most of these costs tied to investments forecasted for 2026. However, we
25 believe it is important for the Commission to understand our long-term vision

⁴ Minn. Stat. § [216H.02](#), Subd. 1(a).

1 for the natural gas business, which includes emissions reduction strategies that
2 we will deploy over time in a way that manages overall costs and benefits for
3 our customers. Our vision and efforts align with State policy, demonstrate our
4 strong partnership with the State and underscore the critical role the natural gas
5 system will play in economy-wide efforts to reduce emissions.

6
7 **B. Electrification-First Strategy**

8 Q. PLEASE DESCRIBE XCEL ENERGY'S NEW ELECTRIFICATION-FIRST STRATEGY
9 AND HOW DOES IT ALIGN WITH MINNESOTA'S REGULATORY ENVIRONMENT?

10 A. Our electrification-first strategy is a new approach to gas system planning in
11 Minnesota that evaluates natural gas alternatives and engages customers in
12 evaluating voluntary electric alternatives earlier in the planning process, along
13 with many other initiatives including robust rebates, developer and customer
14 outreach, expansion alternatives analyses, and new pilot initiatives. As such, we
15 will continue to provide reliable, safe, and affordable natural gas service to
16 customers in line with customer demand while also encouraging new and
17 existing customers to electrify. Consistent with our existing customer-facing
18 programs in Minnesota, our electrification-first strategy seeks to enable more
19 customers, particularly large new developments, to evaluate their electric
20 options early in their decision-making process. In the long term, we anticipate
21 these efforts, at a minimum, will give us more data on the actual customer
22 adoption the system will experience and enable more dual fuel and electric
23 options.

24
25 Importantly, our approach to electrification-first is grounded in customer
26 choice. However, engaging with our customers and our partners and providing
27 accurate and comprehensive information is key to the successful

1 implementation of our programs and the Company's electrification-first
2 strategy. The Company aims to provide an avenue that balances customer
3 choice, affordability, and long-term emissions reductions. In Minnesota's cold
4 climate, electrification-first also recognizes the value of dual-fuel systems, where
5 electric technologies are paired with natural gas backup as a foundational
6 strategy to ensure reliability during peak heating conditions. Dual fuel systems
7 can result in significant reductions in greenhouse gas emissions, and natural gas
8 has been shown to be the most efficient and affordable supplemental heat
9 option for customers who install an electric primary heat source.

10
11 Electrification-first reflects a holistic planning approach to maximize and
12 leverage efforts underway in Minnesota's robust policy framework. It supports
13 the state's economy-wide goal to achieve net-zero greenhouse gas emissions by
14 2050, innovative planning, customer empowerment, and market
15 transformation.

16
17 Broadly speaking, these efforts encompass the Company's work to optimize the
18 energy system and ensure we, and our customers, are fully aware of and fully
19 evaluate electric alternatives to gas expansion. While this approach amplifies
20 putting electrification center stage, it also preserves a portfolio of emissions
21 reductions pilot initiatives that we may collectively still need in the long-term,
22 depending on customer adoption. This new approach and mindset are changing
23 how we do gas planning and give the Company, and the Commission, better
24 data to understand customer choices and barriers to electrification options.

25
26 Q. HOW ARE YOU IMPLEMENTING ELECTRIFICATION-FIRST IN MINNESOTA?

1 A. The Company implements electrification-first by continuing to scale existing
2 customer-facing programs and expanding new initiatives to align with
3 Minnesota’s policy landscape. We further advance this strategy through a
4 portfolio of customer-facing programs, pilots, planning tools, and stakeholder
5 engagement.

6
7 *1. Advancing Rebates and Programs*

- 8 • Our electrification first strategy is grounded in our many robust
9 customer-facing programs and offerings. As part of our approved ECO
10 program portfolio, the Company currently offers air-source heat pump
11 (ASHP) rebates up to \$2,000, with additional rebate amounts for efficient
12 new gas furnaces as well as heat pump water heaters.⁵
- 13 • The Company introduced a revised electric space heating rate of
14 \$0.06/kWh, available from October through May, or about half the
15 summer rate, to improve affordability and encourage adoption.⁶
- 16 • The Company is collaborating with the Minnesota Efficient Technology
17 Accelerator, administered by CEE and funded by utilities, to promote
18 these offerings. This initiative includes contractor engagement,
19 community outreach, and targeted marketing to raise awareness of
20 available rebates and electric options.
- 21 • The company proposed and implemented our “geographic Consistency”
22 policy to ensure equitable access to electrification. When our electric

⁵ See the Rebate Summary Sheet at [Heat Pumps | Residential Services | Xcel Energy](#). Rebates of \$1,600 for ASHP and \$2,000 for cold climate ASHP, available for combo electricity and natural gas customers. Smaller rebates for electric-only customers. Rebates for efficient gas furnaces range from \$100 to \$400, with the size of the rebate depending on furnace efficiency and whether installed in a new or existing home. Additional rebates are available if the customer needs to make an electrical panel upgrade to accommodate the ASHP (\$1,500) or installs a smart thermostat (\$50).

⁶ See [Electric Space Heating | Residential Services | Xcel Energy](#).

1 customers receive heating fuel from a different provider, we offer
2 supplemental rebates, so they receive incentives comparable to those
3 available to our dual gas/electric customers. While this policy does not
4 aim to reduce customer's GHG emissions, it supports broader
5 acceptance and adoption of heat pump technology across Minnesota.
6

7 2. *Engaging with Builders and Developers Early*

8 The Company is proactively engaging builders and developers to ensure electric
9 options are considered early in the design and planning process. We provide
10 technical information and planning support for electric, dual-fuel, and thermal
11 energy networks. Examples include:

- 12 • Collaborating with the Saint Paul Port Authority on The Heights
13 development, where we are exploring electric and geothermal options for
14 residential, commercial, and light industrial buildings.
- 15 • Working with the Joint Development Authority for Rice Creek
16 Commons in Arden Hills to evaluate similar opportunities.
- 17 • Considering adding a step in the builder's call line application to ask new
18 gas customers if they want more information about all electric and hybrid
19 electric options, including rebates and incentives.
- 20 • Discussions with the Department and interested stakeholders to
21 determine the suitability of an All-Electric Residential New Build project.

22
23 These engagements reflect our commitment to offering electrification-first in
24 our planning and our role in supporting market transformation through
25 customer awareness. By working directly with developers, we help ensure that

1 new construction projects are aligned with Minnesota’s climate goals and
2 equipped with the infrastructure needed to support clean energy technologies.

3
4 *3. Advance Strategic Electrification Pilots*

5 Consistent with the approved NGIA portfolio, we are beginning to explore
6 scalable electrification strategies and supporting emissions reductions in both
7 new construction and retrofit applications. These include:

- 8 • A weatherization and electrification pilot at the Prairie Island Indian
9 Community, focused on manufactured homes in an environmental
10 justice area.
- 11 • An Income-Qualified Strategic Electrification pilot offering
12 weatherization, electrification of space heating using heat pumps with a
13 strategic focus on integration with the existing hydronic heating system
14 with natural gas backup, and heat pump water heaters for income
15 qualified residential customers.
- 16 • A Commercial Heat Pump and Thermal Storage pilot working with
17 businesses currently using boiler systems to install air-to-water heat
18 pumps with natural gas backup and utilizing thermal storage to aid in
19 energy demand management.
- 20 • A Community Ground Source Heat Pump (Thermal Energy Network)
21 pilot that will create a small scale, connected system which utilizes the
22 consistently mild temperature of the earth below the surface to reduce
23 the energy required to heat and cool buildings with electricity.

24 *4. Resource Level of Analysis*

25 As part of the Company’s first Gas IRP, the Company will be performing a
26 resource level analysis to provide utility-specific clarity about the appropriate

1 and cost-effective level of future energy procurement. As such, the Company
2 will analyze, on an integrated basis, all commercially available resource options,
3 including the supply-side, demand-side, and infrastructure resources, to reliably
4 meet customer requirements. As part of this process, the Company is
5 conducting stakeholder workshops to provide transparency into the Company's
6 planning process, solicit feedback, and educate and inform on the Company's
7 resource level analysis scenarios.

8
9 *5. Expansion Alternative Analysis*

10 As part of our upcoming Gas IRP filing, the Company will conduct an EEA for
11 two to three planned capacity expansion projects. This analysis will evaluate
12 NPAs and non-gas alternatives, including electrification and demand-side
13 management. We will assess these alternatives based on cost-effectiveness and
14 alignment with Minnesota's GHG emission reduction goals. Planning is
15 currently underway, and we will engage stakeholders later this year in the
16 evaluation process of these alternatives.

17
18 Collectively, these initiatives will enhance our understanding of customer
19 preferences and requirements as they consider or implement both all-electric
20 and dual fuel options in Minnesota. This positions Xcel Energy to lead in
21 advancing customer adoption and aligning our planning accordingly. As we get
22 further into implementation in line with regulatory requirements, we will
23 continue to evaluate and identify any additional efforts that support our
24 commitment to reducing emissions while maintaining reliable and affordable
25 energy service.

1 Q. DO THE COMPANY'S ELECTRIFICATION-FIRST EFFORTS CHANGE THE
2 COMPANY'S STRATEGY TO REDUCE CUSTOMERS' EMISSIONS ASSOCIATED WITH
3 THEIR NATURAL GAS USAGE?

4 A. Our electrification-first strategy only enhances our broader approach to
5 reducing customers' emissions. We remain committed to offering a portfolio of
6 solutions that support customer choice and reflect the realities of technology,
7 affordability, and emissions reductions. Strategic electrification is a key pathway,
8 particularly for new construction and feasible retrofits, but it is not the only
9 option.

10
11 Our strategy continues to prioritize customer choice and cost-effective energy
12 efficiency measures. We support strategic electrification under NGIA and EFS
13 under ECO, while also promoting clean fuels options for applications that are
14 difficult to electrify. Our updated strategy aligns system planning and
15 investment decisions with customer needs and readiness, recognizing that
16 adoption will vary across building types and climates. By leading with
17 electrification where appropriate and preserving other options, we can reduce
18 customers' emissions in a way that is practical, cost-effective, and responsive to
19 Minnesota's cold climate and regulatory framework.

20
21 Q. HOW DOES THE NET-ZERO VISION, PARTICULARLY THE ELECTRIFICATION-
22 FIRST STRATEGY, ALIGN WITH THE NEED TO MAKE INVESTMENT IN THE
23 NATURAL GAS SYSTEM?

24 A. Natural gas remains essential for ensuring reliable peak heating demand in a
25 cold climate like our Minnesota territory. We anticipate that the natural gas
26 system, along with technologies in this field, will evolve as advancements
27 continue to emerge. The Company also anticipates using the natural gas

1 distribution system as a delivery mechanism for clean fuels or natural gas as a
2 back-up fuel, working in tandem with electric heating during periods of cold
3 outdoor air temperatures. Continued investment in the natural gas system is
4 necessary to maintain safety, reliability, and affordability for all customers,
5 including those who are not yet able or ready to electrify.

6
7 Ultimately, we balance our emissions reduction goals with the pace of customer
8 adoption, program budgets, and regulatory flexibility; ensuring that our
9 programs remain responsive, equitable, and aligned with customer choice and
10 market conditions.

11
12 Q. IS THE COMPANY'S NET-ZERO VISION FOCUSED ONLY ON ELECTRIFICATION
13 OPTIONS?

14 A. No. While the Company's Net-Zero Vision has a strong emphasis on providing
15 industry leading electrification options for customers, we also recognize the
16 need for other emission reduction strategies to support our 2050 aspiration to
17 be a net-zero energy provider. This includes the potential use of clean fuels,
18 such as RNG and hydrogen, to decrease emissions associated with customers
19 that choose to have gas heating or have gas heating as a back-up to electric
20 heating.

21 Q. BEYOND ELECTRIFICATION-FIRST, ARE THERE OTHER PIECES OF THE NET-
22 ZERO VISION STRATEGY THE COMPANY IS PURSUING?

23 A. Yes. We continue to evaluate the role of clean fuels as part of our portfolio
24 strategy to reduce the carbon intensity on our natural gas LDC. Clean fuels such
25 as RNG and hydrogen play an important role in achieving our 2050 Net-Zero
26 Vision. Innovative pilot programs under our first NGIA Plan allow us to
27 evaluate cost, reliability, and scalability of these clean fuels. While natural gas

1 will remain essential for reliability and affordability in cold climates, clean fuels
2 lower the overall GHG intensity of the fuel delivered by our LDC while utilizing
3 existing infrastructure. Our NGIA Plan includes key pilots like long-term
4 offtake of dairy manure derived RNG, both supporting the agricultural sector
5 and obtaining the associated environmental benefits for our customers. As we
6 establish the cost effectiveness, reliability, and commercial availability of these
7 energy sources in NGIA, we can use our learnings to inform long term system
8 planning processes like the Gas IRP.
9

10 **C. LDC Methane Strategy**

11 Q. PLEASE EXPLAIN THE COMPANY'S GOAL TO ACHIEVE NET-ZERO METHANE
12 EMISSIONS ON ITS LDC SYSTEM.

13 A. As part of our Net-Zero Vision, we are committed to achieving net-zero
14 methane emissions on our LDC system by 2030. This goal reflects our
15 commitment to reduce emissions from our own infrastructure and aligns with
16 our broader commitment to safety and reliability. It also shows our commitment
17 to limit emissions that have a larger climate impact, as methane has higher global
18 warming potential 81.2 times that of carbon dioxide over a 20-year period and
19 27.9 times over a 100-year period.⁷ We are actively implementing enhanced leak
20 and repair programs and an advanced methane leak detection (AMLD) pilot
21 approved in our NGIA plan. This pilot allows us to quantify leak rate as part of
22 leak surveys and prioritize leak repairs based on real-time data. With the
23 knowledge gained from the pilot, we plan to explore options to expand the

⁷ Taken from the International Panel on Climate Change's AR 6 Report, Chapter 7: The Earth's energy budget, climate feedbacks, and climate sensitivity. Table is found on pg. 24 of this document:
[IPCC_AR6_WGL_FGD_Chapter07_SM.pdf](#).

1 program over the next several years, including procurement of two additional
2 units outside of the NGIA pilot to be purchased in 2026 and to begin system
3 surveys in 2027. In addition to the impacts listed above, AMLD allows for faster
4 identification of leaks which result in faster repairs. Company witness Alicia E.
5 Berger describes the scope and costs associated with expanding these programs
6 to provide the technology to increase frequency of emissions surveys and
7 eventually transition to compliance surveys via AMLD and utilize AMLD data
8 to respond to reported incidents.

9
10 Q. HOW DOES THE METHANE STRATEGY RELATE TO THIS CASE?

11 The methane strategy is central to this case as it guides our approach to reducing
12 emissions on our LDC system. Through a pilot under NGIA, the Company is
13 evaluating how many units to deploy and how often to survey the entire system.
14 This complements the Gas IRP requirement to assess capital and O&M costs
15 tied to leakage across the system. All these efforts are aligned with approved
16 regulatory pathways that support future investments in methane emissions
17 reductions.

18 IV. CONCLUSION

19
20 Q. PLEASE SUMMARIZE THE KEY POINTS OF YOUR DIRECT TESTIMONY.

21 A. Xcel Energy and the State of Minnesota are leveraging their shared history of
22 clean energy leadership through industry-leading emissions reduction goals and
23 the State's establishment of broader regulatory frameworks. Our Net-Zero
24 Vision for natural gas and filings under NGIA and ECO, while not directly a
25 part of this rate case, reflect forward-looking long-term efforts to modernize
26 the natural gas system and its role in the low-carbon economy.

1 We recognize that implementing our goals requires us to move at the pace of
2 technology and customer adoption while maintaining a safe, reliable, and
3 affordable system for all customers. We commit to ongoing collaboration with
4 the Commission, policymakers, and stakeholders to deliver the infrastructure
5 and programs necessary for a clean energy transition that is equitable and cost-
6 effective. We will continue to prioritize customer choice and optimal planning
7 as we work together to realize this vision over the coming years.

8
9 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

10 A. Yes, it does.

Statement of Qualifications

Jeff R. Lyng
Vice President, External Affairs & Policy
Chief Sustainability Officer

As the Vice President, External Affairs & Policy and Chief Sustainability Officer, I am responsible for advising Xcel Energy's operating companies on energy policy at the state and federal levels that will continue the Company's leadership in the clean energy transition while keeping customer bills low. These roles are intentionally aligned to ensure that our external policy positions are grounded in internal sustainability commitments and that our long-term environmental goals are supported by actionable regulatory and legislative pathways. My primary responsibilities are twofold. First, to advise on the policies and programs to implement and achieve Xcel Energy's goal to be a net-zero energy provider by 2050, including direct engagement with regulators, legislators, and community stakeholders to shape and support effective policy frameworks. Second, to oversee the Company's sustainability strategy, aligning goals with operational planning, risk management, and transparent reporting.

I joined the Company in February 2018. In previous roles prior to joining Xcel Energy, I served as a Senior Policy Advisor at the Center for the New Energy Economy at Colorado State University, Director of Market Development and Regulatory Affairs for Opower (now an Oracle company) and as Renewable Energy Policy Manager in the Colorado Governor's Energy Office in Governor Bill Ritter's Administration.

I hold a Master of Science degree in Civil Engineering from the Building Systems Program at the University of Colorado at Boulder and a Bachelor of Science Degree in Ecology from the State University of New York College of Environmental Science and Forestry.