

Staff Briefing Papers

Meeting Date **May 15, 2026**

Agenda Item ***1

Company Northern States Power Co. d/b/a Xcel Energy

Docket No. E-022/M-25-289

In the Matter of Xcel Energy's Petition for Approval of Large General Time of Day Service Customer and Large Peak Controlled Time of day Service Tariffs.

Issues approve, reject, or modify Xcel Energy's proposed Large General and Large Peak Controlled Time of Day Service tariffs, associated rider revisions, and the Retail Customer Form Electric Service Agreement (ESA)?

Should the Commission approve, reject, or modify the Incremental Cost Test (ICT)?

Should the Commission limit the use of the ICT to an interim basis and instead address cost allocations for these new sub-classes through a traditional Class Cost of Service Study in a future general rate case?

Should the Commission set the demand size threshold for the new tariffs at 100 MW, or adopt an alternative threshold?

Should the Commission include additional criteria when determining tariff applicability?

Should the Commission modify the minimum ESA term length?

Should the Commission allow Xcel to remove the Plant Stratification process and shift more cost recovery to demand charges and less to energy charges?

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The attached materials are work papers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.



Should the Commission modify the minimum billing demand and exit fee calculations?

Should the Commission treat super-large customers as a separate customer class rather than an incremental sub-class, and direct Xcel to allocate shared versus dedicated system resources accordingly?

Should the Commission determine that the Petition complies with the Commission's IRP Order and Minn. Stat. § 216B.1622?

Should the Commission explicitly require Xcel to provide "bring your own generation" (BYOG) avenues and develop a voluntary clean energy and capacity tariff by a specific date?

Should the Commission direct Xcel to implement an expedited interconnection process for clean or flexible large loads?

Should the Commission require Xcel to submit recurring reports detailing the number of new large customer requests, signed ESAs, total capacity, and participation in load flexibility and clean energy programs?

Staff	Christine Pham	Christine.Pham@state.mn.us	651-201-2249
	Justin Andringa	Justin.Andringa@state.mn.us	651-539-1079
	Nikki Brown-Huss	Nikki.Brown-Huss@state.mn.us	651-201-2255
	Sean Stalpes	Sean.Stalpes@state.mn.us	651-201-2252

Relevant Documents

Date

Xcel Energy

Petition	July 16, 2025
Reply Comments	November 5, 2025
Supplemental Comments	December 5, 2025
Proposed Decision Options	March 27, 2026

Minnesota Department of Commerce (DOC)

Comments	October 13, 2025
Supplemental Comments	December 5, 2025

Relevant Documents

	Date
Letter Requesting Agenda Meeting	March 6, 2026
Proposed Decision Options	March 27, 2026
<u>Minnesota Office of Attorney General (OAG)</u>	
Extension Variance Request	September 19, 2025
Comments	October 13, 2025
Reply Comments	November 5, 2025
Letter Requesting Agenda Meeting	March 6, 2026
Proposed Decision Options	March 25, 2026
<u>Citizens Utility Board of Minnesota (CUB)</u>	
Comments	October 13, 2025
Request for Supplemental Comment Period	October 15, 2025
Supplemental Comments	December 5, 2025
Letter Requesting Agenda Meeting	March 6, 2026
Proposed Decision Options	March 27, 2026
<u>Clean Grid Alliance</u>	
Comments	October 13, 2025
<u>Supplemental Comments</u>	December 5, 2025
Preferred Decision Options	March 27, 2025
<u>CloudHQ LLC</u>	
Comments	October 13, 2025
Reply Comments	November 5, 2025
Supplemental Comments	December 5, 2025
Proposed Decision Options	March 27, 2025
<u>Data Center Coalition</u>	
Comments	October 13, 2025
Reply Comments	November 5, 2025
Supplemental Comments	December 5, 2025
Proposed Decision Options	March 27, 2025
<u>Environmental Law & Policy Center and Vote Solar</u>	
Comments	October 13, 2025

Relevant Documents

	Date
Supplemental Comments	December 5, 2025
Letter Requesting Agenda Meeting	March 6, 2026
Proposed Decision Options	March 27, 2026
<u>Fresh Energy and Minnesota Center for Environmental Advocacy</u>	
Comments	October 13, 2025
Letter Requesting Agenda Meeting	March 6, 2026
Proposed Decision Options	March 27, 2026
<u>Geronimo Power, LLC</u>	
Comments	October 13, 2025
Supplemental Comments	December 5, 2025
Proposed Decision Options	March 27, 2026
<u>Google LLC</u>	
Comments	October 13, 2025
Reply Comments	November 5, 2025
Supplemental Comments	December 5, 2025
Proposed Decision Options	March 27, 2025
<u>Legaletric-NoCapX 2020</u>	
Extension Request	October 17, 2025
<u>LIUNA Minnesota/North Dakota</u>	
Comments	October 14, 2025
Supplemental Comments	December 8, 2025
Proposed Decision Options	March 27, 2026
<u>Tract Capital Management, LP</u>	
Comments	October 13, 2025
Supplemental Comments	December 5, 2025
Proposed Decision Options	March 30, 2026
<u>Xcel Large Industrials</u>	
Comments	December 5, 2025
Proposed Decision Options	March 27, 2025
<u>Public Comments</u>	
Sarah Swindle	September 24, 2025

 **Relevant Documents**

Date

Khalena Wickstrom

September 30, 2025

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Statement of the Issues

- Should the Commission approve, reject, or modify Xcel Energy's proposed Large General and Large Peak Controlled Time of Day Service tariffs, associated rider revisions, and the Retail Customer Form ESA?
- Should the Commission approve, reject, or modify the Incremental Cost Test?
- Should the Commission limit the use of the ICT to an interim basis and instead address cost allocations for these new sub-classes through a traditional Class Cost of Service Study in a future general rate case?
- Should the Commission set the demand size threshold for the new tariffs at 100 MW, or adopt an alternative threshold?
- Should the Commission include additional criteria when determining tariff applicability?
- Should the Commission modify the minimum ESA term length?
- Should the Commission allow Xcel to remove the Plant Stratification process and shift more cost recovery to demand charges and less to energy charges?
- Should the Commission modify the minimum billing demand and exit fee calculations?
- Should the Commission treat super-large customers as a separate customer class rather than an incremental sub-class, and direct Xcel to allocate shared versus dedicated system resources accordingly?
- Should the Commission determine that the Petition complies with the Commission's IRP Order and Minn. Stat. § 216B.1622?
- Should the Commission explicitly require Xcel to provide "bring your own generation" (BYOG) avenues and develop a voluntary clean energy and capacity tariff by a specific date?
- Should the Commission direct Xcel to implement an expedited interconnection process for clean or flexible large loads?
- Should the Commission require Xcel to submit recurring reports detailing the number of new large customer requests, signed ESAs, total capacity, and participation in load flexibility and clean energy programs?

Introduction

Procedural Summary

On April 21, 2025, the Commission issued its *Order Approving Settlement Agreement with Modifications* in Xcel Energy's (Xcel or the Company) 2024-2040 Integrated Resource Plan (IRP) and Acquisition of 800 Megawatts (MW) of Firm Dispatchable Resources (IRP/Firm Dispatchable Order) dockets.¹

Order Point 32 required Xcel to file, by July 16, 2025, a proposal for developing a new rate class or sub-class and tariff for super-large customers, with a focus on affordability, reliability, and clean energy goals and standards, demand flexibility, demand response, and energy efficiency. The Order also required Xcel to begin developing, with consultation from the Department of Commerce (Department), a voluntary carbon-free electricity (CFE) procurement program:

By July 16, 2025, Xcel must make a filing in a new docket with a proposal for development of a new rate class or sub-class and tariff for super-large customers. In the proposal, Xcel must describe how it will ensure continued achievement of affordability, reliability, and clean energy goals and standards. Specifically, the proposal must detail what combination of existing and new renewable or thermal energy resources, transmission (both high voltage alternating current and high voltage direct current), demand flexibility from super-large customers, demand response, and energy efficiency resources Xcel will use to serve the super-large class or sub-class. Xcel must also discuss how existing and future electric service agreements will be incorporated into a future rate case.

The initial proposed tariff must include the following nonexclusive factors:

- Ensure that all incremental costs attributable to super-large customers are assigned to the super-large class or sub-class.
- Provide electricity to the super-large class or sub-class that achieves each benchmark of the state's electricity standards under Minn. Stat. § 216B.1691.
- Include provisions to ensure that super-large customers financially commit to purchasing a certain level of electricity to protect non-super-large customers from the risk of stranded costs.
- Include provisions to ensure that all super-large customer-related incremental costs will be recovered over the life of the service agreement.
- Include provisions to ensure that, if the super-large customer ceases operations for any reason, all remaining financial commitments will still be paid.

¹ Xcel Petition, p. 1.

Xcel must consult with the Department and consider filing a voluntary carbon-free electricity procurement program that enables more customers to achieve annual CFE goals and increase hourly matching CFE levels.

On July 16, 2025, Xcel filed a petition for approval (Petition) of proposed tariffs for Large General Time of Day (TOD) Service and Large Peak Controlled TOD Service, as well as revisions to the Tier 1 Energy Controlled Service rider.

The Company proposes to serve Large General TOD Service and Large Peak Controlled TOD Service customers as a new sub-class of the Demand class. The Company also proposes a Retail Form Electric Service Agreement (ESA) that details the specific terms and conditions governing service to the customer.

The tariff requires an “Incremental Cost Test” (ICT) at the time the ESA is executed. The ICT methodology – which Staff notes is perhaps the most controversial aspect of this proceeding – will calculate the costs and benefits associated with new Large General TOD Service customers to demonstrate that they will provide a net benefit to the system.

Staff emphasizes that, in this proceeding, Xcel is proposing a Retail Form ESA. Because each new Large General TOD Service customer will be unique, Xcel will bring forward an actual ESA and its accompanying Interconnection Agreement (IA) for Commission review and approval.

Staff also notes that the Large Peak Controlled TOD Service tariff and Tier 1 Energy Controlled Service rider are interruptible rate options, which are open to qualifying data centers and other Large General TOD Service customers.

Finally, Xcel proposes revisions to the Conservation and Improvement Program (CIP) Adjustment rider. This is because, pursuant to Minn. Stat. § 216B.241, subd. 1a, “qualified large-scale data centers” are legally exempt from funding, and participating in, the Company’s Energy Conservation and Optimization (ECO) programs. Thus, the proposed CIP Adjustment rider revisions remove the CIP charge and explicitly state that exempt data center customers can no longer participate in the Company’s ECO programs.

In summary, Xcel seeks Commission approval of the following:

- Large General Time of Day Service tariff;
- Large Peak Controlled Time of Day Service tariff;
- Rules for the Application of Peak Controlled Services tariff revisions;
- Tier 1 Energy Controlled Service rider tariff revisions;
- CIP Adjustment rider tariff revisions;
- Administrative revisions to the Company’s Tariff Book; and
- Retail Customer Form ESA.

IRP Order and Relevant Statutes

This section will discuss the Petition's relationship to the IRP/Firm Dispatchable Order state statutes applicable to this proceeding. For this section, Staff will briefly summarize the IRP/Firm Dispatchable Order and relevant statutes and their relationship to the parties' arguments. A more detailed discussion will be provided in later sections of the briefing papers.

Order Point 32 of the IRP/Firm Dispatchable Order

The Petition was filed in compliance with the Commission's April 21, 2025, IRP/Firm Dispatchable Order. As discussed above, Order Point 32 required Xcel to submit a proposal by July 16, 2025, for a new rate class or sub-class and tariff specifically designed for super-large customers. The Commission required that the framework detail the combination of generation resources, transmission infrastructure, and demand flexibility that Xcel will use to serve this rate class or sub-class while maintaining affordability, reliability, and state clean energy standards.

In addition, the Commission required that the tariff provide ratepayer protection provisions, such as mitigating the risk of stranded costs, and that all incremental costs attributable to super-large customers be assigned directly to their class and fully recovered over the lifespan of their service agreements.

Lastly, Order Point 32 required Xcel to consult with the Department of Commerce (Department) to develop a voluntary carbon-free electricity (CFE) procurement program to help customers achieve their annual CFE goals and improve hourly matching levels.

Minn. Stat. § 216B.1622 (Service to Very Large Customers)

On June 14, 2025, Governor Walz signed into law Minn. Stat. § 216B.1622, subd. 11, which requires the Commission to consider, by December 15, 2026, how best to achieve specific required outcomes when evaluating a proposed tariff or ESA between a public utility and a very large customer, such as a data center. Moreover, it mandates that all costs attributable to very large customers be assigned directly to their specific class or sub-class.

Specifically, the statute requires the Commission to establish the definition and characteristics of a very large customer class or subclass for each public utility providing electric service, and the Commission's approval of proposed ESAs shall consider:

- cost assignment;
- compliance with renewable energy requirements;
- stranded costs protections; and
- other public interest considerations.

Provisions of the legislation are provided below:

216B.1622 SERVICE TO VERY LARGE CUSTOMERS.

Subdivision 1. Very large customer class or subclass. By December 15, 2026, the commission shall establish by order the definition and appropriate characteristics of a very large customer class or subclass for each public utility providing electric service. The commission may do this in a rate case under section 216B.16 for that utility or in another proceeding.

Subd. 2. Tariff or energy supply agreement. The commission may approve, modify, or reject a tariff or electric service agreement proposed between a public utility and a very large customer establishing the terms and conditions under which the utility will provide electric service to the customer. As it evaluates a tariff or agreement under this section, the commission must consider how best to achieve the following required outcomes:

- (1) all costs attributable to the utility's very large customers not exempt under subdivision 3 are assigned to the very large customer class or subclass determined by the commission under paragraph (a);
- (2) the electricity to be provided by the utility to a very large customer achieves each quantitative benchmark of the state's electricity standards under section 216B.1691, as demonstrated by a plan submitted by the utility to serve the additional load without recourse to requesting a delay or modification of these standards;
- (3) the tariff or agreement contains protections necessary to ensure that other customers of the public utility are not placed at risk for paying stranded costs associated with the utility serving the very large customer; and
- (4) any other outcome deemed important by the commission to ensure the tariff or agreement is in the public interest.

Subd. 3. Existing tariff or agreements. This section shall not apply to existing, renewed, or extended electric service agreements of public utility customers meeting the threshold of a very large customer, or to very large customers that have been actively taking electric service from the public utility prior to 2020.

Later in the briefing papers, Staff will discuss Xcel's compliance with the relevant statutes. However, it is worth noting here that under Minn. Stat. § 216B.1622, while the Commission must establish the definition and appropriate characteristics of a "very large customer," the statute explicitly grants the Commission the flexibility to fulfill this requirement "in a rate case . . . for that utility or in another proceeding," meaning the Commission is not legally bound to

finalize the statutory definition within this specific tariff docket. However, parties debate whether the Commission should use this current proceeding to fulfill the statute's mandate.

Minn. Stat. § 216B.1623 (Clean Energy and Capacity Tariff)

Minn. Stat. § 216B.1623 directs the Commission to require all public utilities to file and offer an optional Clean Energy and Capacity Tariff (CECT) for commercial and industrial (C&I) customers, which enables very large load customers to voluntarily serve some or all of their electricity needs using clean energy resources. Participating customers are required to pay the proportional costs associated with supplying their own clean energy or capacity, and in exchange, customers receive credits for the energy and capacity value generated by those resources.

A fundamental consumer protection built into the statute is that the tariff prohibits cost-shifting to the utility's existing ratepayers. To achieve this, very large load customers must pay for "all proportional costs associated with the addition of the new clean energy or capacity resources" that are brought onto the grid specifically to serve their operation.

Provisions of the legislation are provided below:

216B.1623 CLEAN ENERGY AND CAPACITY TARIFF.

The commission shall require each public utility to offer a clean energy and capacity tariff for commercial and industrial customers. The clean energy and capacity tariff shall require a special contract between the utility and one or more customers that shall:

- (1) be optional for participating customers;
- (2) permit participating customers to elect to serve some or all of their energy or capacity usage from new clean energy or capacity resources as long as reliability is maintained;
- (3) require the participating customers to pay all proportional costs associated with the addition of the new clean energy or capacity resources, including any utility costs caused by the addition of the new clean energy or capacity resources to the grid;
- (4) develop an appropriate energy and capacity credit;
- (5) prohibit cost shifting from the participating customers to other utility customers or vice versa; and

(6) allow a utility with an applicable tariff on file to demonstrate their existing tariff's compliance with this section.

Staff notes that, similar to the discussion above regarding Minn. Stat. § 216B.1622, parties disagree on whether the Commission should require Xcel to address Minn. Stat. § 216B.1623 in this specific docket. Xcel argues that the Commission does not need to address the statute's requirements in this proceeding, whereas other parties believe this is the appropriate forum to address the statute. This is largely because, as parties argued, Minn. Stat. § 216B.1623 naturally accommodates behind-the-meter (BTM) generation and "Bring Your Own Generation" (BYOG) procurement approaches. Later sections of these briefing papers will discuss parties' analysis and recommendations pertaining to the statute's role in this proceeding.

Also, Staff notes that Minn. Stat. § 216B.1623 does not impose a statutory deadline by which utilities shall file and offer a CECT, so several parties recommend various timelines for Xcel to develop and implement a CECT.

Minn. Stat. § 216B.02 (Definitions)

Minn. Stat. § 216B.02, subd. 11 defines a data center as a facility designed to have a load of 100 MW or more.² Xcel relied on this statutory definition to establish the 100 MW applicability threshold for the new Large General TOD Service tariff.

Several parties commented that Minn. Stat. § 216B.02, subd. 11 should not strictly define the applicability threshold for very large customers in this proceeding. Some parties recommend lowering the applicability threshold, or to include a "system intensive" parameter that captures large loads regardless of whether they meet the precise 100 MW definition of a data center.

Minn. Stat. §§ 216B.03 (Reasonable Rate) and 216B.07 (Rate Preference Prohibited)

Minn. Stat. §§ 216B.03 and 216B.07 prohibit utility rates that are unreasonably preferential, prejudicial, or discriminatory between customers, and require rates to be consistent in application to a class of consumers.

In this proceeding, the primary dispute regarding these statutes is whether Xcel's proposed ICT results in illegal, discriminatory ratemaking. Xcel argued that using an ICT to ensure large load customers cover their own incremental costs prevents the new rates from being unreasonably preferential to data centers, while others argue that the ICT violates both statutes by imposing customer-specific surcharges.

² **Subd. 11. Data center.** "Data center" means a facility that is designed to have a load of 100 megawatts or more and whose primary purpose is the storage, management, and processing of digital data via the interconnection and operation of information technology and network telecommunications equipment, including all related facilities and infrastructure for backup electricity generation, power distribution, environmental control, cooling, and security.

Minn. Stat. § 216B.241 (Energy Conservation and Optimization)

Minn. Stat. § 216B.241, subd. 1a and 2a exempt qualified large-scale data centers and other “large customer facilities” from financially contributing to, or participating, in CIP, which Xcel manages as its ECO plan. This statutory exemption shapes this proceeding in three main ways:

1. Because of the ECO/CIP exemption, and the prohibition from a data center’s ability to participate in ECO-funded peak demand reduction options (such as Xcel’s Peak Partner Rewards program), Xcel designed the new Large Peak Controlled TOD Service tariff and proposed revisions to the Tier 1 Energy Controlled Service rider. These tariffs offer interruptible, discounted rates to data centers outside of the standard ECO framework, ensuring that data center loads can still be curtailed during periods of peak demand or high energy prices.
2. The CIP exemption under § 216B.241 resulted in debate among parties over whether data centers are subsidizing existing ratepayers or vice-versa. Data Center Coalition (DCC) argued that the annual fees data centers must pay to support low-income energy efficiency and conservation programs act as a statutorily mandated, annual cross-subsidy from data centers to existing low-income customers. The Office of the Attorney General (OAG) disagreed, arguing that the data center fee is partially or fully offset because these facilities are statutorily exempt from paying the utility’s regular CIP rider under Minn. Stat. § 216B.241.
3. Xcel proposed revisions to its CIP Adjustment rider to account for the statutory changes and exemptions described above.

Minn. Stat. § 216B.72 (Qualified Large-Scale Data Center Fee)

Minn. Stat. § 216B.72 requires qualified large-scale data centers to pay an annual fee to the Department to fund low-income energy efficiency, conservation, and weatherization programs. The collected fees are deposited into the state’s energy and conservation account and used to support low-income programs that help reduce residential utility bills statewide. The annual fee is tiered, based on the data center’s peak demand:

- 100 MW to 250 MW: \$2 million
- Over 250 MW to 500 MW: \$3 million

Summary of Key Tariff Terms

The Petition describes the following key terms of the Large General TOD Service tariff:

- **Applicability Threshold:** As noted above, the eligibility threshold is 100 MW or greater of new electric demand, consistent with the definition of “data center” under Minn.

Stat. § 216B.02, subd. 11.³

- **Contract Term and Load Ramp:** The default initial term for an ESA is at least 15 years, which Xcel believes is appropriate due to the substantial infrastructure investments required to serve data center loads, while ensuring long-term continuity of service. This includes a load ramp-up period of up to 5 years to accommodate phased facility construction. Of note, the load ramp period is inclusive within the 15-year default initial contract term, and parties expressed different views of how the load ramp period should be applied to the 15-year default term.
- **Voltage:** Customers are required to take either “transmission transformed” voltage (three phase from 2,400 volts up to 69,000 volts) or “transmission” voltage (three phase at 69,000 volts or higher).
- **Pricing:** Xcel designed new base rates for these tariffs to shift more cost recovery through demand charges and less cost recovery from energy charges, which Xcel explained promotes cost recovery stability and creates a higher and more reasonable basis to assess capacity reduction and exit fees.
- **Minimum Billing Demand:** To guarantee revenue for the infrastructure built to serve them, customers are subject to a minimum monthly bill equivalent to 75% of their contract capacity, regardless of their actual energy usage.
- **Exit and Capacity Reduction Fees:** If a customer terminates their contract early or reduces their capacity, they must pay a fee calculated at 75% of the effective demand charges multiplied by the lesser of 10 years or the remainder of the ESA term.
- **Forecasts:** Every six months, customers must provide a five-year rolling energy and demand forecast.
- **Participation in Demand Response and Energy Efficiency Programs:** Customers may participate in the Company’s demand response programs.
- **Electric Service Agreement (ESA) and Interconnection Agreement (IA):** Customers will be required to enter into both an ESA and an IA. The ESA covers key terms of the contract, such as the contract length, contracted demand, forecasted kW and kWh per year, etc. The IA covers the technical, safety, and regulatory aspects of connecting the

³ “‘Data center’ means a facility that is designed to have a load of 100 megawatts or more and whose primary purpose is the storage, management, and processing of digital data via the interconnection and operation of information technology and network telecommunications equipment, including all related facilities and infrastructure for backup electricity generation, power distribution, environmental control, cooling, and security.”

customer to the Company's grid.⁴ Both the executed ESA and IA for each new Large General TOD Service customer will be submitted to the Commission for approval.

- **Incremental Cost Test (ICT):** At the time an individual ESA is signed, Xcel will perform a ICT, which compares the projected revenues from the customer against the specific incremental costs required to serve them (including new capacity, MISO transmission, and jurisdictional allocation changes). If projected costs exceed revenues, the customer's individual ESA will include a surcharge to bridge the gap.
- **Grid Stability:** The ESA will require the installation of, and Company control over, interrupting equipment at the transmission level.

Summary of Party Positions

As noted above, Xcel requests approval of:

1. **Large General Time of Day Service tariff:** Xcel requests the tariff to comply with Order Point 32 of the Commission's IRP/Firm Dispatchable Order, which required the creation of a tariff for super-large customers.
2. **Large Peak Controlled Time of Day Service tariff; Rules for the Application of Peak Controlled Services tariff revisions; and Tier 1 Energy Controlled Service rider tariff revisions:** Additions and revisions for Controlled Services will provide interruptible rate options for large load customers, which Xcel explained are necessary due to the statutory exemption for qualified data centers from contributing to, and participating in, the Company's ECO offerings.
3. **Conservation and Improvement Program (CIP) Adjustment rider tariff revisions:** These revisions comply with an exemption in Minn. Stat. 216B.241 subd. 1a (a) for qualified data centers from paying into the state's environmental conservation and weatherization programs.
4. **Retail Customer Form ESA:** The Retail Form ESA sets forth the specific terms and conditions governing service for each customer. As noted above, the Retail Form ESA is a template outlining the standard terms and conditions for providing electric service to large loads, and it contains examples of the types of security and risk mitigation

⁴ Specifically, the ESA includes terms such as the contract term, contracted demand, forecasted kW and kWh per year, security and risk mitigation provisions, early exit fees, as well as the service location, delivery characteristics, delivery voltage, and excess facilities provided by the Company. The IA addresses the terms and conditions for construction of the facilities to connect the customer to the Company's grid and covers the technical, safety, and regulatory aspects of the connection and defines the responsibilities of both the customer and the Company.

measures that Xcel will generally consider. In contrast, an actual ESA is a finalized, customer-specific contract negotiated and executed between Xcel and an individual super-large customer. While the Retail Form ESA serves as a starting template, each actual, executed ESA must be individually submitted to the Commission for separate review and approval as new super-large customers are identified.

5. **Administrative revisions to the Company's Tariff Book:** These updates incorporate the new Large General Time of Day and Large Peak Controlled Time of Day Service tariffs into Xcel's existing rulebook.

The following parties filed comments on Xcel's proposal:

- Citizens Utility Board of Minnesota (CUB)
- Clean Grid Alliance (CGA)
- CloudHQ LLC (CloudHQ)
- Data Center Coalition (DCC)
- Department of Commerce (Department)
- Environmental Law & Policy Center and Vote Solar (ELP/VS)
- Fresh Energy & Minnesota Center for Environmental Advocacy
- Geronimo Power, LLC (Geronimo)
- Google LLC (Google)
- LIUNA Minnesota/North Dakota (LIUNA)
- OAG-RUD (OAG)
- Tract Capital Management, LP (Tract)
- Xcel Large Industry (XLI)

The major areas of dispute regarding Xcel's proposal include, but are not limited to:

- ICT
- Cost allocation
- The 100 MW applicability threshold
- Terms such as contract length, minimum bills, and exit fees; and
- Enabling large load customers to provide their own clean energy, in particular BTM generation, to meet all or a portion of their demand.

The table below provides summary of these disputed issues, and it is followed by a brief discussion. Staff notes that, due to the volume of recommendations, the table is not intended to provide a complete list but rather a broad overview of topics raised in comments.

Table 1. Summary of Party Recommendations

Issue	Party	Recommendation
Incremental Cost Test (ICT)	Xcel	Approve the ICT to compare costs and revenues.
	DCC, Google	Reject the ICT, as it conflicts with standard ratemaking, the IRP order, and statutes.
	ELPC/VS	Require the ICT to be filed for review to show there will be no cost shifts to other rate classes.
	CloudHQ	Approve only on an interim basis until a full cost of service study is conducted in the next rate case.
	OAG	Require sufficient information with each ICT to allow third parties to interpret and replicate the results, and require Xcel to submit updated ICTs annually.
Size Thresholds	DCC, Xcel	Support applying tariffs to customers with demand >100 MW.
	Dept.	Include loads less than 100 MW or create a new tariff for 5-99 MW.
	ELPC/VS	Lower the threshold to 50 MW.
	XLI	Increase the threshold for the new very large customer class to 250 MW.
Contract Terms & Fees	DCC	10-year min. term + 5-year load ramp; 75% minimum bill; exit fees mitigated for full duration.
	Google	Mitigate exit fees for full duration; support 75% min demand charges; add ESA flexibility clauses.
	CloudHQ, DCC	Permit financial security to be satisfied by guaranties from credit-worthy third parties/assignees.
	CGA	Require docketed proceedings for decreasing default contract term lengths.
	Dept.	Min. 15 year term length; calculate minimum bills, exit fees, and reduction fees using at least 75% of contract capacity.
Cost Allocation & Class	OAG, XLI	Create a separate customer class and directly assign incremental costs/revenues to this class.
	DCC	Treat large customers as a collective group/class for cost allocation, not customer-by-customer.
	CUB, DCC, Google, XLI	Require updated CCOS studies in future general rate cases.
	CUB	Incorporate revised allocation factors annually; track and refund rider recovery differences.
	Dept.	Require Xcel to design a sales true-up specifically for the Very Large customer class in its next rate case.
Clean Energy & Flexibility	Several	Direct Xcel to develop a CECT/CFE program with stakeholder engagement.
	FE/MCEA, ELPC/VS	Require load flexibility modeling to avoid infrastructure buildouts; allow virtual power plants (VPPs).
	Geronimo, CGA, ELPC/VS	Authorize BTM generation and sleeved PPAs; agnostic to commercial structure.
Interconnection	Geronimo	Implement expedited load interconnection studies for data centers co-located with clean energy generation.
	ELPC/VS, CGA	Prioritize interconnection for customers deploying clean energy.
	Tract	Require transparency in tariffs regarding interconnection steps, timing, and queue management.

	Dept.	Modify Section 1.03 of the Form IA to match Xcel's updated BTM backup generation language in the ESA.
Regulatory Compliance	Xcel	Find the proposal complies with the IRP Order and Minn. Stat. § 216B.1622.
	Dept.	Determine compliance with each individual ESA filing.
	LIUNA	Recognize that approved terms maximize public benefits.

Several parties criticized the ICT for relying on highly unpredictable and unreliable assumptions, such as 15-year forecasts of wholesale market prices and capital costs. The OAG, Google, and DCC also asserted that the ICT violates the requirement under Minn. Stat. § 216B.1622 to assign “all costs” to the sub-class, since it only accounts for incremental costs. Several parties recommend rejecting or significantly modifying the ICT in favor of establishing a wholly-separate very large customer class within standard CCOSS during a general rate case.

Several parties also recommend lowering the 100 MW minimum threshold. CUB, the Department, CGA, and ELPC/VS identified flaws with the strict threshold; for example, loads falling just short of 100 MW (such as a 95 MW facility) can have significant grid impacts and also require costly infrastructure investments, such as a dedicated substations. Moreover, a strict 100 MW limit may incentivize developers to build data centers just below the threshold specifically to bypass the tariff's ratepayer protections.

Some argued that the provisions designed to protect existing customers from the financial risks and stranded asset costs associated with serving data centers are insufficient. For example, several parties noted that a 15-year contract falls far short of the 30-plus-year book life of the power plants built to serve these customers. Also, the Department and the OAG both recommend increasing the minimum billing demand and exit fee calculations, as well as striking the 10-year cap on exit fees. However, others oppose these modifications, arguing that the terms are already stringent.

ELPC/VS, FE/MCEA, CGA, and Geronimo urge the Commission to prioritize clean energy, which includes fast-tracking and/or prioritizing interconnection queue requests for data center companies who bring their own generation; co-locate with clean energy and storage; or offer demand flexibility.

What the Commission will Need to Decide

The Commission will need to ultimately make the following determinations, which Staff notes is not a comprehensive list:

The Commission must decide whether to approve, reject, or modify the tariffs, revised riders, and Retail Form ESA and IA.

The Commission will need to determine whether the ICT satisfies all statutory requirements, including non-discriminatory ratemaking and the mandate under Minn. Stat. § 216B.1622 to assign “all costs attributable” to the very large customer class. In addition, the Commission will

need to address parties’ recommendations to approve, reject, or significantly modify the ICT. The Commission may also need to address whether to create a distinct Very Large Customer class within rate case proceedings.

The Commission will have to decide whether Xcel’s proposed 100 MW threshold is reasonable and adequately captures the loads that will have significant impact on Xcel’s system costs, or if the threshold should be modified.

The Commission will need to consider parties’ recommendations regarding the key terms of the tariffs, such as the minimum contract term, the minimum billing demand charge, and the exit/capacity reduction fees.

The Commission must also decide whether to require a CECT as part of this proceeding, or if (as Xcel argues) the CECT is outside the scope of this proceeding.

Key Discussion

Table 2 highlights discussions between Xcel and various parties regarding the Company’s proposed Large General Time of Day Service (LGTODS) and Large Peak Controlled Time of Day Service (LPCTODS) tariffs.

Table 2: Highlight discussions on Large General Time of Day Service (LGTODS) and Large Peak Controlled Time of Day Service (LPCTODS) tariffs

Xcel Energy	Objectives
Petition (July 16, 2025)	- Proposed a rate design for 2 new customer sub-classes: the Large General Time of Day Service (LGTODS) tariff and the Large Peak Controlled Time of Day Service (LPCTODS) tariff for 100 MW or higher loads customers. - The specialized rate design shifting more costs recovery to demand charges, and less cost recovery from energy charges. - Introduced Incremental Cost Test (ICT) as a protection tool other customers to ensures “super-large customers” to pay “all attributable costs” cover incremental generation, transmission, and system costs caused by their service - Proposed contract term: 15-year minimum ESA (incl. 5-year ramp); 75% minimum bill; 10- year capped exit fee (or Early termination fee based on 75% of demand charges x remaining term); \$9,000 monthly charge for “super-large customers”. - Xcel said this proposal is to comply with state regulatory and Commission Order requiring a tariff for "super-large customers" (like data centers) as well as attract large loads while protecting other customers from stranded asset risk and cost shifting.

Reply Comments (November 5, 2025)	• Further explained purpose of Incremental Cost Test (ICT) and how it prevents cross-subsidization • Confirmed that ICT will be filed with each ESA. • Continued support for its initial proposed contract terms: 15-year minimum ESA (incl. 5-year ramp); 75% minimum bill; 10- year capped exit fee as market competitive; maintains load control authority
Supplemental Comments (Dec. 5, 2025)	Xcel provided technical clarifications and impact modeling to demonstrate the proposal's benefits rather than harms the existing customers: • ICT Framework: Revenues from large load customers must meet or exceed the incremental costs of serving them. The ICT is designed to protect existing customer classes from financial risk while enabling service to super-large loads. • Transmission System Costs: Large load customers are assigned only transmission costs that directly benefit them (e.g., dedicated facilities and substations). These facilities are specifically sized for the large load, with minimal excess capacity for others, making side-benefit quantification difficult and complex. • Customer True-up Mechanisms: Xcel rejected reconciliation approach. Instead, each Energy Service Agreement (ESA) will include a tailored true-up mechanism reflecting the customer's timing, size, and load characteristics. These mechanisms will be submitted for Commission review in future proceedings. • Prevention of Cost Shifting: provided an illustrative 100 MW example showing that adding a large load does not necessarily shift costs to existing customers. • System-Wide Benefits: The addition of a large load may lower overall revenue deficiency across all customer classes, indicating that revenues from the large load can contribute more to system costs than the incremental costs they create.
Department	Objectives
Initial Comments (Oct. 13, 2025)	• Expressed understanding of the need for the tariffs but requested additional data on the ICT. • Recommended increasing the minimum bill to 85%. • Requested for detail on \$9000 month charge. Need more data on customer charge breakdown, and energy charge protection. • Suggested that 85% minimum bill might be more appropriate to protect other ratepayers.
Supplemental Comments	• Recommended removing the 10-year cap on exit fees (making them payable for the remaining term of the ESA).

(Dec. 5, 2025)	- Recommended increasing the minimum bill to 85% - Recommended the Commission to require Xcel to get approval for contract capacity increases.
OAG	Objectives
Initial Comments (Oct. 13, 2025)	- Stated that Xcel's proposal does not meet the legislative requirements for transparency and cost attribution standard or the Commission's directives associated with Xcel's IRP approval. - Argued that the ICT as opaque and "hard-coded", making it impossible for stakeholders to verify assumptions. It is suggested that these customers should have a separate class for ratemaking to prevent cost socialization. - Recommended the Commission to require Xcel to provide additional details on how it plans to calculate incremental costs and ensure that all other attributable costs are properly assigned to very large customers.
Reply Comments (Nov. 5, 2025)	OAG acknowledged the need for better ICT transparency, however, the OAG disagreed with other parties that ICT causes cross-subsidization. Specifically regarding the recommendation from DCC and Google to replace the ICT with traditional CCROSS methods in rate cases. The OAG said CCROSS is inappropriate for transformational, highly concentrated loads such as hyperscale data centers. By removing the ICT without a more effective mechanism it would fail to ensure very large customers pay all costs attributable to them.
Supplemental Comments (Dec. 5, 2025)	- Recommended the Commission to reject Xcel's reliance on confidential "market competitiveness" claims. - Recommended the Commission to require transparency for the ICT, including annual updates and itemized generation costs for the full useful life of assets.
CUB	Objectives
Initial Comments (Oct. 13, 2025)	- Raised concerns that Xcel Energy's proposed tariffs were insufficiently protective of residential ratepayers and failed to fully satisfy the statutory mandates for very large load customers such as: - Procedural and Record Development Concerns - Stranded Asset Risk and Contract Term Length: 15-year minimum contract term is too short vs. wind and solar assets have useful lives of 30 years or more. - Concerns on the 100MW threshold - Potential for transmission cost-shifting through the Transmission Cost Recovery (TCR) rider. - Support BYOG

	Express concern on lack of minimum number of load control
Supplemental Comments (Dec. 5, 2025)	- Recommended 75 MW Automatic Threshold and 50 MW "System Intensive" Trigger (for loads between 50 MW and 75 MW (or 100 MW)) - Recommended 18- to 20-Year Minimum contract term. - Recommends requiring a minimum number of load control events to ensure the system actually receives the reliability benefits it is paying for. - Recommended Reliability-Only Tier: a third "tier" - Recommended requiring Xcel to submit a compliance filing whenever it chooses not to aggregate facilities that would otherwise meet the threshold. - Recommended that Xcel clarify in its tariffs that any grid upgrades required due to a customer's load expansion during the contract term must be paid by that customer, not other ratepayers. - Recommended Clean Energy Tariff Deadline by December 1, 2026
Tract	Objections
Initial Comments (Oct. 13, 2025)	- Supported Xcel Energy's proposal to create new tariffs for very large electricity users, particularly data centers, in Minnesota but stated that the proposal lacks sufficient predictability and transparency for developers evaluating large-scale data center projects. - Recommended revisions improving tariff clarity, strengthen Minnesota's competitiveness for data center investment, and maintain safeguards for current customers: Detail on the Incremental Cost Test (ICT); Clearer credit support requirements; Greater clarity on timing and queue management; Revisions to minimum on-peak demand charges; Changes to Electric Service Agreement assignment provisions.
Supplemental Comments (Dec. 5, 2025)	- Raised concern that Xcel Energy's proposed Large Load Tariffs lack the predictability and transparency necessary to make Minnesota a competitive market for large load customers such as : Transparency of the Incremental Cost Test (ICT). - remains concerned about the lack of clarity regarding how Xcel will calculate the required amount of credit support for each applicant - Requested clarification on how Xcel intends to manage the interconnection queue. - Recommended that Xcel base its minimum charges on "costs caused" rather than a flat percentage of committed demand. - Recommended more flexible assignment-by-right provisions to align the ESA with broader market standards
EPLC/VS	Objectives

Initial Comments (Oct. 13, 2025)	• Recommended a lower applicability threshold, such as 50 MW. • Recommended exploring innovative load flexibility opportunities, such as VPPs • Recommended enabling all potential pathways for clean energy, including voluntary carbon free procurement, and behind-the-meter clean generation. • Recommended addressing transmission cost concerns and ensure all incremental transmission costs are fully assigned to very large load customers. • Recommended engagement with stakeholders to further design the Clean Energy and Capacity Tariff; and file within 90 days of the final order. • Recommended filing the actual ICT analysis in tandem with the ESA and other relevant agreements. • Recommended expressly endorsing clean, behind-the-meter resources as a way to encourage clean generation and decrease or mitigate demand. • Recommended modifying prioritization in considering new large-load interconnection standards. • Recommended the Commission explicitly state that approval of the tariffs does not constitute approval of cost recovery from other rate classes. • Recommended that in each ESA and associated ICT filing, that Xcel demonstrate 1) that all incremental generation, transmission, and distribution investments required to serve a very-large-load customer are fully assigned to that customer or subclass; 2) that a class cost-of-service impact analysis was conducted, showing no cost shift to residential or small-commercial classes; and 3) that these allocations are reconciled in the next general rate case.
Supplemental Comments (Dec. 5, 2025)	• Reaffirmed recommendations from initial comments. • Recommended conducting a class cost-of-service impact analysis for each very large customer and reconcile cost allocation in the next rate case.
Google	Objectives
Initial Comments (Oct. 13, 2025)	• Found 15-year initial contract term reasonable • Recommended removal of ICT, instead handling cost allocation and recovery in rate cases • Supported the 75% minimum demand charge, but opposed minimum energy charges • Recommended that exit and contract reduction fees be mitigated for entire duration period

	Recommended that qualifications to implement a control event are exclusively when MISO deploys similar resources during its emergency procedures.
Reply Comments (November 5, 2025)	- Reiterated initial comment recommendations - Noted that increased energy sales enable large customers to help spread the fixed costs of regional projects, which reduces the transmission rate for all customers - Supported the recommendation by other parties to expedite clean energy programs associated with very large loads.
Supplemental Comments (Dec. 5, 2025)	- Supported not inhibiting Xcel and a customer from agreeing to additional ESA terms, as long as they do not contradict the tariff or state statute. - Did not oppose large load customers (100 MW and larger) becoming their own distinct class. - If keeping the ICT, recommended approval on interim basis and subject to a mandatory "true-up" in the next general rate case. - Emphasized that utilities should only recover actual costs or near-term investments that are "used and useful." - Noted that Michigan and Missouri commissions determined cost allocation and revenue treatment must be handled in general rate cases.
Fresh Energy & MCEA	Objectives
Initial Comments (Oct. 13, 2025)	- Support for tariff conditional on protecting existing customers and aligning with clean energy laws. - Recommended individual flexibility arrangements tailored to specific situations, rather than limited to Xcel's two demand response options. - Suggested modeling (such as with Encompass) to determine what specific levels of flexibility could change the size, type, or timing of necessary infrastructure. - Encouraged prioritizing cost allocation, stranded cost protections, robust contract requirements, and alignment with state policy.
Geronimo Power	Objectives
Initial Comments (Oct. 13, 2025)	- Recommended that data center customers meet their load through co-located generation or traditional front-of-the-meter generation that is geographically proximate to the load. - Recommended that the tariffs be agnostic to the commercial structure for the co-located generation and provide flexibility to accommodate self-supply, PPA, VPPA, or other alternative arrangements that are consistent with Minnesota's regulated retail electric service market.

	• Recommended implementing an expedited load interconnection study process for new data center loads. • Recommended a scoring metric that favors or prefers generating resources co-located or geographically proximate to data center customers in any future procurement proceeding. • Recommended additional clarity on proposals to implement if Xcel's ICT shows that new data center customers will generate revenues lower than incremental costs.
Supplemental Comments (Dec. 5, 2025)	• Recommended co-located generation and to expedite the interconnection process. • Recommended to disregard Xcel's request to defer these matters to future proceedings.
LIUNA	Objectives
Initial Comments (Oct. 13, 2025)	• LIUNA broadly supported Xcel's proposal and emphasized that the tariff incorporates strong consumer protection measures, balances between economic growth, environmental responsibility, and consumer safeguards, ensuring energy costs remain fair and transparent for all ratepayers. • Recommended that the Electric Service Agreements (ESAs) also include information on the socioeconomic benefits of new large loads, including the anticipated quantity and quality of construction and permanent jobs.
Supplemental Comments (Dec. 5, 2025)	• Continue supports the proposed Xcel's proposal of 100 MW threshold. • Recommended the Commission approving this Xcel's tariff and it should not be viewed as precedent for other utility large load tariffs. • Suggested that even this Xcel Energy's tariff (pricing/rules structure) is being approved now, the approval is not permanent or final. The company or regulators can still propose changes later if circumstances change.

Regulatory Compliance

In this section, Staff will summarize parties' comments on whether the Petition complies with the IRP/Firm Dispatchable Order and the relevant statutes discussed previously. Then, Staff will discuss the areas of regulatory compliance that are in dispute.

IRP/Firm Dispatchable Order

As discussed previously, Order Point 32 of the Commission’s IRP/Firm Dispatchable Order required Xcel to file a proposal for a new rate class or sub-class and tariff for super-large customers, and the “initial proposed tariff must include the following nonexclusive factors:

- Ensure that all incremental costs attributable to super-large customers are assigned to the super-large class or sub-class.
- Provide electricity to the super-large class or sub-class that achieves each benchmark of the state’s electricity standards under Minn. Stat. § 216B.1691.
- Include provisions to ensure that super-large customers financially commit to purchasing a certain level of electricity to protect non-super-large customers from the risk of stranded costs.
- Include provisions to ensure that all super-large customer-related incremental costs will be recovered over the life of the service agreement.
- Include provisions to ensure that, if the super-large customer ceases operations for any reason, all remaining financial commitments will still be paid.”⁵

Additionally, Xcel was required to consult with the Department to develop a voluntary CFE procurement program.

Several parties weighed in on compliance with Order Point 32, and their positions are briefly summarized in the table below:

⁵ Order Point 32, Commission’s April 21, 2025, Order.

Table 3. Party Positions on Compliance with Order Point 32

Party	Position	Arguments
Department	Cannot determine compliance upfront	Compliance must be evaluated as each customer-specific ESA is submitted for approval.
Google & DCC	ICT violates Order Point 32	Costs must be assigned by class, not customer-by-customer; prefer traditional CCOS
ELPC/VS	ICT concept is supported but insufficient	Xcel must conduct a class-level impact analysis in the next rate case to definitively prove no cost-shifting.
CGA	Specific elements do not comply	Xcel does not allow customers to supply their own clean energy.
CUB	Specific elements do not comply	The 15-year ESA term fails to protect existing ratepayers from stranded costs.
Xcel	Fully complies with Order Point 32	The ICT prevents cost-shifting, and various ratepayer protections insulate ratepayers from stranded cost risk.

The Department noted that the Petition “addressed the factors required” in Order Point 32,⁶ but “it is not possible to determine if Xcel’s proposed super-large tariff will be in compliance with [the IRP/Firm Dispatchable Order] . . . until after the Commission has reviewed and approved each customer-specific ESA and IA.”⁷ Thus, the Department recommends the Commission’s order in this proceeding note “that the Commission will determine IRP Order and Minn. Stat. § 216B.1622 Subd. 2 compliances at such times as each customer-specific ESA is brought before the Commission for approval.”⁸

Google and DCC argued that the ICT violates Order Point 32 because it explicitly requires costs to be assigned to the “super-large class or sub-class,” whereas the ICT creates customer-by-customer rates. Google argued that compliance should instead be achieved through traditional regulatory ratemaking and CCOS.

ELPC/VS supported the ICT concept but argued it is not sufficient for compliance unless Xcel conducts a class-level impact analysis in the next rate case to definitively prove that no costs were shifted to other customer classes.

CGA argued that Xcel adhered to the “letter but not the spirit” of Order Point 32, objecting to the Company’s retention of the sole responsibility for resource procurement, rather than

⁶ Department, initial comments, p. 32.

⁷ Department, supplemental comments, p. 11.

⁸ Department, supplemental comments, p. 11.

allowing very large customers to bring their own generation through mechanisms such as a CECT.

CUB and CGA argued that Xcel's proposed 15-year minimum contract term violates the Order's directive to protect existing ratepayers from stranded cost risk. This is because the generation assets built to serve very large loads will have much longer book lives than the ESA terms. Conversely, Google asserted that Xcel's proposal complies with the stranded cost protections, arguing that the 15-year term, combined with other strict requirements, creates appropriate financial commitments from very large customers.

Xcel maintains that its proposed tariffs reflect a careful balance that fully complies with the requirements and goals of Order Point 32. Xcel argues that the ICT is the exact tool needed to comply with Order Point 32's mandate to ensure incremental costs are not shifted to existing customers. Also, Xcel argued that the state's clean energy requirements will be met by acquiring system resources consistent with its approved IRP. Moreover, the Company believes that the stranded cost directive is achieved through a combination of tools, including the 15-year term, the ICT, strict security requirements, and various provisions that will be discussed throughout these briefing papers.

Minn. Stat. §§ 216B.03 and 216B.07

Minn. Stat. §§ 216B.03 and 216B.07 govern utility rate standards. Section 216B.03 requires that rates be "consistent in application to a class of consumers" and prohibits rates that are "unreasonably preferential, unreasonably prejudicial, or discriminatory." Section 216B.07 similarly prohibits utilities from granting any rate preferences or subjecting any customer to unreasonable prejudice or disadvantage.

DCC and Google argued that the ICT violates these statutes because it constitutes single-issue ratemaking for individual customers. DCC further asserted this violates the requirement that rates be consistent in application to a class and constitutes unreasonable prejudice and discrimination under §§ 216B.03 and 216B.07. Google agreed that the ICT creates individualized rates and should be removed; instead, standard ratemaking practice is required to ensure just and reasonable rates for all customers.

The OAG disagreed with DCC and Google, arguing that directly assigning costs to individual very large customers through the ICT does not violate the statutes, provided the test is applied consistently. However, while the OAG defended the underlying legality of the ICT against claims of discrimination and cross-subsidization, it still found Xcel's specific proposal to be deeply flawed. The OAG argued that the current ICT is far too opaque and relies on unverified, hypothetical cost forecasts.

Xcel responded that the ICT is lawful and does not violate standard ratemaking principles or the statutes, arguing that:

- The ICT does not define a rate; rather, it is a tool to confirm that incremental costs are covered by the cost-causer.
- It upholds the principle of cost-causation by requiring that the customer causing the increased costs pay for them.
- It prevents cross-subsidization by ensuring a customer's revenue meets the cost of providing service to that customer.
- The methodology is applied consistently; while the mathematical outcome of the ICT may be unique for each customer, due to their specific load characteristics, the ICT methodology itself is applied uniformly and in the exact same way to every large load customer.

Minn. Stat. § 216B.1622

Several parties commented on whether Xcel's proposed tariffs comply with Minn. Stat. § 216B.1622. Mostly, parties debated whether Xcel's proposal complies with the mandate under Minn. Stat. § 216B.1622 that "all costs attributable" to very large customers are assigned to that class or sub-class, and that existing ratepayers are protected from stranded costs. Parties positions are briefly summarized in the table below, then explained in further detail.

Table 4 - Party Positions on Compliance with Minn. Stat. § 216B.1622

Party	Position
OAG	Xcel's proposal fails to comply with the statutory mandate of "all costs attributable, as it only includes "incremental costs."
DCC & Google	Applying surcharges on an individual basis is single-issue ratemaking and violates the directive to assign costs to the class or subclass.
Department, CUB, & ELPC/VS	The 100 MW threshold is arbitrary; the Commission has the authority to define the sub-class.
XLI	Very large customers should be established as a distinct customer class, rather than treated merely as a subclass within C&I Demand.
Xcel	The ICT methodology is reasonable because only incremental costs solely from the large load customer are directly attributable.

The OAG argued that Xcel's proposal fails to comply with Minn. Stat. § 216B.1622 because it equates "incremental costs" with "all costs attributable." The OAG pointed out that the Legislature deliberately chose the broader phrase "all costs attributable," despite using the narrower term "incremental costs" elsewhere in the same statutory chapter, which suggests

that very large customers must pay their fair share of embedded system fixed costs, not just new incremental costs.

DCC and Google argued that the ICT violates the statutory directive to assign costs to the “very large customer class or sub-class” by applying surcharges on an individual, customer-by-customer basis, which is single-issue ratemaking.

The Department, CUB, and ELPC/VS argued that applying a 100 MW threshold is arbitrary for energy tariffs in this case. They argued that the statute gives the Commission authority to define the sub-class.

XLI argued that treating very large customers merely as a sub-class within the broader C&I Demand class violates the spirit of proper cost allocation, so XLI recommends the Commission require a distinct customer class for these loads. XLI provided the following justifications:

- **Size:** The electrical demand of new large load customers (at least 100 MW) significantly exceeds the demand of an average C&I Demand customer.
- **Load Factor and Peak Coincidence:** Because data centers operate around the clock, they maintain very high load factors that often exceed 90%, which means their maximum loads will likely occur at the exact same time as Xcel’s system peaks.
- **Voltage Level:** Very large load customers will take service exclusively at transmission or transmission-transformed voltages, in contrast to existing C&I Demand customers who have materially smaller power demands.
- **CCOSS:** Failing to separate very large customers into a distinct class would distort the results of Xcel’s CCOSS.

Xcel countered that ICT methodology is explicitly designed to identify costs that are attributable to the large load customer:

The ICT is a methodology that identifies the costs that are solely driven by (and thus attributable to) the large load customer. By definition, attribution only applies to incremental costs. All other costs are allocated and are not directly attributable to a single customer. For instance, most of the Company’s cost types do not change when adding a large load customer. To the extent they do, we have attempted to attribute that cost to the large load customer.⁹

⁹ Xcel, reply comments, pp. 23-24.

Minn. Stat. § 216B.1623

Minn. Stat. § 216B.1623 directs the Commission to require public utilities to file an optional CECT for C&I customers. Multiple stakeholders, including the Department, CUB, ELPC/VS, DCC, and Google, supported Xcel offering a CECT, arguing that a CECT is a critical tool for data centers with corporate clean energy commitments to bring their own generation, as well as mitigate stranded asset risks. Because the statute does not include a deadline, parties provided various timelines for filing a CECT.

Xcel opposed these recommendations, arguing that the implementation of Minn. Stat. § 216B.1623 should be effectuated through a “coordinated process for all utilities, not in an ad hoc fashion as part of this proceeding.”¹⁰ These issues will be discussed further later in the briefing papers.

Staff Discussion – Regulatory Compliance**Order Point 32**

There are arguments both supporting and opposing a finding of Xcel’s compliance with Order Point 32 of the IRP/Firm Dispatchable Order.

First, perhaps the main issue parties raised was the flaws of the ICT. Order Point 32 requires that all incremental costs must be assigned to the super-large class or sub-class. According to Xcel, the ICT complies with Order Point 32 because this test is necessary to determine that all incremental costs are assigned directly to super-large customers.

Staff agrees there is reason to support using the ICT, as the Commission has previously determined that it is a reasonable tool to justify whether data centers will benefit the system. The Department and the OAG noted that the Commission has examined the ICT and its results in past dockets approving ESAs for large data centers, including Google’s¹¹ and META’s¹² data center projects. However, Google and DCC argued that the ICT has historically been used strictly to justify discounts compared to standard tariffed rates, not to set specific, individualized rates.

Others argued that the Petition does not comply with Order Point 32 because it exposes ratepayers to stranded asset risk. CUB and CGA argued that there is a mismatch between the term length of an ESA and the book lives of the generation facilities that will be constructed to meet data centers’ demand. They argued that if a data center’s contract expires after 15 years and is not renewed, existing residential and commercial ratepayers could be forced to pay for the remaining depreciation and operational costs of those investments. Arguably, this could

¹⁰ Xcel, reply comments, p. 34.

¹¹ Docket No. E002/M-19-39.

¹² Docket Nos. E002/M-22-572 & E002/M-22-579.

violate Order Point 32’s directive to recover all incremental costs “over the life of the service agreement.”

On this point, Staff does not interpret Order Point 32 as a strict requirement to exactly match the length of a contract with the book life of a generation facility. Instead, Staff believes the Commission must consider market realities when interpreting the directive to recover costs “over the life of the service agreement.” For instance, Staff agrees with Xcel, DCC, and Google, who argued that 15-year contracts reflect industry standards as a minimum default term, and Xcel intends to negotiate longer ESA terms.

The Commission’s decision on this issue will largely rest on whether the 15-year term, when combined with other provisions – e.g., minimum billing, exit fees, etc. – sufficiently address stranded asset risk. While stricter terms might theoretically offer more protection, there could be downside risk in possibly creating unnecessary disincentives to data center development, which was a point raised numerous times in LIUNA’s comments.

Parties also debated whether Xcel’s resource procurement proposal complies with Order Point 32’s requirement that the tariff “achieves each benchmark of the state’s electricity standards under Minn. Stat. § 216B.1691.” Specifically, this debate centers on the merits of encouraging BTM generation and incorporating a CECT.

Staff will address BTM generation and the CECT in later sections of the briefing papers; in short, Staff believes that while encouraging BTM generation could improve the proposal, in the context of complying with Order Point 32, Staff believes that it was reasonable for Xcel to initially propose relying on the established, comprehensive IRP process. Xcel argued the IRP process will ensure that the resources to serve data center growth is necessary to balance affordability, reliability, and clean energy objectives. Staff believes this is a reasonable argument that does not fail to comply with Order Point 32. Again, the Commission can still incorporate additional avenues for BTM generation and BYOG approaches without finding that Xcel’s initial proposal fails to comply with Order Point 32.

Minn. Stat. § 216B.1622 (Service to Very Large Customers)

Several parties recommended lowering the minimum size threshold to define data centers as less than 100 MW, since smaller-sized facilities could have similar impacts on the system. Staff agrees with the parties that it is within the Commission’s statutory authority to define the sub-class. The Commission could address parties’ concerns by, for example, adopting CUB’s recommendation to require Xcel to submit a compliance filing when a new customer sized under the minimum threshold requests service, and the compliance filing would address whether the customer is “system intensive.” The Commission could also adopt the Department recommendation to either modify the Petition to lower the minimum threshold, or require a separate tariff for customers between 5 MW to 99 MW.

Xcel and LIUNA emphasized that the 100 MW threshold directly aligns with the Legislature’s definition of a “data center” and the Commission’s directive to create a tariff for very large customers. With respect to resource procurement and its compliance with Order Point 32, Xcel’s initial 100 MW threshold proposal appears consistent with the applicable regulatory requirements for data centers, while recognizing that the Commission may further examine and ultimately determine the appropriate size threshold, higher or lower than 100MW, for very large customers.

Minn. Stat. § 216B.1623 (CECT)

Several parties reference Minn. Stat. § 216B.1623 as a reason for Xcel to incorporate a CECT in this proceeding. However, Staff agrees with Xcel that the statute did not require a CECT as part of this proposal, and therefore Staff does not believe Xcel needs to comply with Minn. Stat. § 216B.1623 in this docket.

Having said that, later sections of the briefing papers will address the CECT and its benefits in more depth, and Staff will discuss how the Commission could weigh Xcel’s argument that Minn. Stat. § 216B.1623 should be implemented through a coordinated process for all utilities against parties’ arguments that a statewide process unnecessarily delays the state’s transition to a carbon-free system while very large loads are actively seeking interconnection.

Financial Impacts Issues

Class Cost Of Service Studies (CCOSS) and Incremental Cost Test (ICT)

The debate over the ICT and CCOSS centers on whether very large loads should be governed by individualized cost-tracking tools or by traditional, class-based ratemaking processes.

Xcel Energy

a. ICT

Xcel proposed applying an ICT to each LGTODS and LPCTODS customer to ensure that revenues exceed the incremental costs of serving the load. When revenues exceed incremental costs, system customers will receive positive benefits as the additional revenues contribute to the recovery of system fixed costs.

If the ICT indicated that projected revenues fall short of incremental costs, Xcel and the customer would address the shortfall through the Electric Service Agreement (ESA), incorporating provisions to increase revenues so that all incremental costs are recovered and a benefit is realized for system customers.

The ICT is comprised of the following elements:^{[\[1\]](#)}

- Base Rate Revenue (comprised of the following):

- Customer charge revenue based on the customer charge of the LGTODS for each bill;
 - Energy charge revenue based on the LGTODS energy related charges and the customer's estimated usage;
 - Demand charge revenue based on the LGTODS demand charges and the customer's peak demand, estimated by year;
 - Interim revenue if effective at the time of the Incremental Cost Test analysis.
- Rider Revenue based on current rider rates^[2] at the time of the ICT, and the customer's estimated usage and yearly peak demand;
- Fuel Revenue and Energy Costs based on the most current forecasted fuel rates (2026), and the customer's estimated usage;
- Energy Costs based on the most current forecasted fuel rates on record, and the customer's estimated usage. The current fuel forecast for use in the Incremental Cost Test is the 2026 fuel forecast.^[3]
- Capacity Costs based on the potential need for a mix of incremental generation and energy storage resource additions, consistent with Xcel's latest Integrated Resource Plan,^[4] current market price estimates of the incremental resources, and the customer's contribution to increased peak load estimated by year;
- Jurisdictional Cost Allocation Increase to Minnesota based on Xcel's twelve-month coincident peak demand (12CP) by jurisdiction, and quantifies the change in revenue requirement allocated to Minnesota based on the 12CP change if peak demand were added in Minnesota consistent with the customer's yearly estimated peak load;
- Incremental MISO Costs based on the customer's yearly estimated peak load and energy consumption, as well as the following revenue and cost factors:
 - Increased retail share of the revenue requirement due to a higher retail load ratio share driven by the increased load;
 - Increased ancillary, administration, transmission expansion plan, and reserve margin driven by the increased load.
- Benefits Large General Time of Day Service Customers Provide to All Classes of Customers to determine whether the customer will provide benefits to system customers, or if additional revenues are needed.

In applying the ICT to Xcel's large load tariffs, the Company detailed steps to ensure incremental costs are recovered from large load customers, as follows:

- Using Encompass to determine the incremental generic resources needed to serve the new customer;
- Including incremental resource costs in the ICT, along with the revenues for the large load customer;
- Filing the ICT and ESA for Commission review and approval. The ESA will include provisions for true-ups to actual resource costs;
- Incorporating actual cost true-ups once actual resources are procured, which may lead to additional revenues from large load customers;
- Allocating the costs of these resources to all classes in a rate case, as the resources procured in this process are system resources.
- Allocating revenues to all classes using the test year base revenue allocator, if the large load ESA requires additional revenues in the ICT.

As previously noted, very large customers would be exempt from the ECO plan.^[5] This exemption would be reflected in both customer billing and the ICT revenue calculations used to support the ESA and IA.

Xcel also noted that the ICT was previously applied in conjunction with the Competitive Response Rider in its ESA with META. The Company asserted that this analysis provided a more detailed, customer-specific evaluation of incremental costs – such as energy, capacity, transmission costs not paid up front, jurisdictional allocation changes, and forecast of specific customer revenues – than a traditional CCROSS.^[6]

Xcel explained that the ICT is designed to ensure that a super-large customer's incremental costs are fully covered by that customer's revenues, offering a direct comparison of costs and revenues that is not available within the CCROSS framework. Xcel reiterated that under their proposal, the incremental costs of serving large load customers must be met or exceeded by the associated customer revenues.^[7]

b. Individual Customer Analysis

Given the long-range nature of the calculation and unique timing of each LGTODS customer, Xcel determined that a bespoke incremental cost calculation is necessary to understand the impact to system customers.

Due to the irregular timing of new customer additions, the calculation's long-range timeframe, and the urgent timeline of potential customers, Xcel designed the methodology to occur outside of a rate case. This approach is intended to both comply with the Commission's Order and accommodate the timing needs of prospective customers.

c. Transmission System Costs and Benefits

Xcel indicated that, prior to executing an ESA with a super-large customer, the Company would conduct a transmission system impact and facility study to identify potential impacts on reliability and safety resulting from new load interconnection, as well as engineering and construction requirements to connect the load. The customer will be obligated to pay for interconnection cost requirements identified through these studies.

Xcel explained that only the portion of transmission system costs that directly benefit a large load customer is assigned to that customer within the ICT. Since the additional transmission lines or required upgrades are driven by the super-large customer, these costs are appropriately allocated to them.^[8]

According to Xcel's proposed tariffs (LGTODS and LPCTODS), it required customers to take service at high voltage levels 2,400V to 69,000V via dedicated feeders or Transmission (69,000V or higher).^[9]

TERMS AND CONDITIONS OF SERVICE

1. Alternating current service is provided at the following nominal voltages:

a. Transmission Transformed Voltage: Three phase from 2,400 volts up to but not including 69,000 volts, where service is provided at the Company's disconnecting means of a distribution substation transformer, or

b. Transmission Voltage: Three phase at 69,000 volts or higher.

Because of the above requirement, the Company embedded the below condition regarding Transmission costs:^[10]

Transmission Costs. Pursuant to the IA, Customer agrees to pay Company construction and interconnection costs in advance for necessary overhead or underground electric transmission extension facilities. Customer acknowledges that the Customer charges include interconnection, ongoing maintenance and related facilities charges necessary to maintain the interconnection facilities to a standard consistent with the Tariff and Good Utility Practices.

Xcel further noted that, in most cases, the connections and substations serving a large load customer are dedicated facilities that do not serve other customers. Consequently, any potential benefit to non-large load customers from these transmission investments would be minimal.^[11]

OAG

a. ICT

The OAG argued that Xcel's ICT is opaque, relies on forecasted costs, lacks assurances that it will be updated over time, and does not include a plan to separately track actual costs incurred to serve very large customers. As a result, it would not be possible to assess whether ICT estimates align with actual costs over the contract term, allow appropriate cost attribution in future rate cases, or effectively true up estimates to actual costs. However, the OAG did not recommend rejecting the ICT outright, provided it is replaced with a better mechanism for identifying and assigning incremental costs.

The OAG suggested several enhancements to the ICT, such as including capacity costs that align with the years the costs will be incurred, tracking these costs throughout the useful life of the associated capacity assets or power purchase agreements, updating ICTs annually with actual expenses and improved forecasts, and incorporating an appropriate portion of embedded system costs.^[12] Because "incremental" is not the most accurate description of costs in the test – particularly with the inclusion of a fair share of embedded system costs – the OAG recommended renaming the ICT to the Very Large Customer Cost Test, to better reflect the nature of the costs included.

The OAG further contended that forecasting costs attributable to a single customer over a decade or more is inherently uncertain and should be approached with skepticism. It noted that Xcel's proposal lacked sufficient detail regarding how incremental cost estimates are determined. When asked how Xcel would ensure ICT estimates reflect actual costs, Xcel responded only that "[t]he Company will assess the actual cost of resources through the resource acquisition process, in order to confirm the capacity cost estimates are reasonable."^[13]

After reviewing previously-submitted ICTs, the OAG concluded that future ICTs filed with ESAs are unlikely to provide sufficient transparency or interpretability regarding the methods and assumptions used in cost attribution. Further, the OAG identified incomplete or unclear information regarding ICT cost assumptions and emphasized the need for greater transparency to allow stakeholders to understand how costs are assigned to very large customers, particularly given the potential for significant cost shifting.

The OAG also argued that ICT estimates are unlikely to match actual costs, even with additional information, and recommended that Xcel include a mechanism to track actual costs of new capacity required to serve very large customers, and fairly apportioning these costs. The OAG expressed concern that fuel costs, MISO transmission-related costs, and incremental jurisdictional costs included in the ICT may not align with actual costs over the contract term.^[14]

Generation-related costs were identified as a particular concern due to their magnitude and long asset lives, thus should reflect the actual costs to serve the very large customer class as closely as possible in the ICT. The OAG recommended that ICTs include detailed, year-by-year

generation cost estimates over the full useful life of assets, itemized by cost category, including rate of return costs, depreciation, Operations and Maintenance (O&M) expenses, property taxes, income taxes, and other related costs.^[15] The OAG emphasized that this would not be requesting new information, but rather a recommendation to present it in a more informative and realistic way.

The OAG provided templates (Tables 5–6) demonstrating how generation costs, total annual costs, and net present value analyses should be presented. and argued that Xcel should incorporate all applicable generation-related cost categories typically included in its CCOSS studies.

Table 5 - Template for Yearly Generation Costs in the ICT^[16]

	(A) Rate Base	(B) Return = Rate Base * ROR	(C) Depreciation Expenses	(D) O&M Expenses	(E) Property Tax	(F) Income- Tax	(Z) Owned Generation Costs = B+C+D+ E+F+...
Year 1							
Year 2							
...							
Last year of useful life							
Total NPV							

The OAG recommended that Xcel use the calculated generation costs to estimate the total annual costs attributable to very large customers, and indicated that Table 3 identifies the cost categories that should be included in the ICT.

Table 6 – Template for Yearly Costs in the ICT^[17]

	(A) Company- Owned Generation Plant Costs	(B) Purchased Capacity Costs	(C) Energy Costs	(D) Jurisdict. Cost Allocation Increase to MN	(E) MISO Costs	(F) Transmiss. Costs	(Z) Total Additional Costs = A+B+C+D +E+F+...
Year 1							
Year 2							
...							
Last year of useful life							

To fully capture generation costs, the OAG argued that Xcel should provide net revenue calculations across a range of scenarios that reflect the complete costs of generation assets attributable to very large customers, as illustrated in Table 7 below.

Table 7 – Template for Net Present Revenues in the ICT^[18]

	(A) NPV of Capacity Costs (over life of assets)	(B) NPV of Other Costs (energy, jurisdictional, MISO, transmission)	(C) NPV of Revenues	(D) NPV of Revenues minus Costs = C – (A+B)
Scenario 1: Customer takes service throughout useful life of asset				
Scenario 2: Customer takes service through end of contract term				
Scenario 3: Customer takes service through end of contract term but reduces load to minimum billing demand after ramp period				
Scenario 4: Customer terminates contract after five years and pays exit fee				

Table 7 provides an example of the scenarios that should be included in the net present value calculations to assess whether a customer's revenues are likely to exceed its costs over the period of service.

The OAG further argued that, even if Xcel's ICT was revised to better reflect actual costs, its incremental cost standard does not ensure that new customers will contribute to embedded costs. Nor does it include provisions requiring very large customers to cover additional embedded costs if they exit early. While ICT assumptions may overestimate incremental costs for very small customers, they are more likely to underestimate costs for very large customers, who pose a greater risk to the system.^[19]

The OAG also noted that Xcel's ICT does not account for potential increases in the cost of capital resulting from the need to finance major infrastructure investments or heightened perceived risk regarding cost recovery, which could affect the rate of return.

In summary, the OAG recommended that Xcel provide greater transparency, including:

- Modeling ICTs and cost allocation studies for very large customers under a range of assumptions in generation costs, plant type, O&M, depreciation, fuel, MISO transmission-related and jurisdictional costs, and discount rates;
- Tracking actual costs incurred to serve very large customers; including a clear method for allocating the actual costs;

- Committing to increased transparency in cost attribution, including within the ICT; and
- Requiring increased clarity on attributed costs to very large customers now, as it will be more difficult to implement later.^[20]

The OAG proposed that very large customers should pay for incremental capacity resources built or procured to serve them, in addition to any Construction Work in Progress (CWIP) costs. Given Xcel's acknowledgement that "an embedded cost approach is unlikely to capture resource costs required for these [very large] customers" and "would not comply with the Commission's requirement to 'ensure that all incremental costs are attributable to super large customers,'" ^[21] the OAG agreed and recommended updating cost allocation to ensure very large customers bear the costs of generation resources built to serve them.

In response to whether Xcel would provide more detail on ICTs in the future, the Company stated it could provide, and the OAG recommended including with each ICT submission:

- The EnCompass analysis used to guide the resources required for the customer;
- Sources of energy cost estimates used in the ICT;
- Methods and assumptions used to calculate the incremental capacity cost value;
- Sources of cost estimates, revenue requirement calculations, methods, and assumptions; and
- Upper and lower bound ranges.^[22]

The OAG noted that, although Xcel submitted an ICT for a hypothetical customer, ^[23] the entire analysis was designated as trade secret, preventing adequate review of very large customer cost attribution. While acknowledging that certain information may warrant trade secret protection, the OAG contended that some assumptions, calculations, and source information likely do not require this designation. ^[24] Accordingly, the OAG requested that Xcel redact only values and calculations needed for an adequate level of protection and provide explanations for any parts of the ICT designated as trade secret. ^[25]

Finally, in response to DCC, the OAG observed that requiring very large customers to cover their incremental costs would prevent cross-subsidies, as any shortfall in revenues would be the responsibility of the customer. If revenues exceeded costs, only the C&I Demand class would be subsidized. ^[26]

Department of Commerce

a. Cost Recovery

The Department noted that cost recovery will be grounded in the ICT. If costs exceeded revenues, the resulting incremental costs will be incorporated into the ESA and recovered over the ESA term, either through separate demand charges or upfront payments. In addition, the

tariff required ESAs to include adequate security and collateral provisions—such as a parent guarantee or letter of credit—along with minimum bill requirements and exit and capacity reduction fees, to ensure that costs are borne by the LGTODS customer or its guarantors.^[27]

b. ICT

The Department reviewed Xcel's ICT and results from prior large load customer ESA dockets,^[28] finding it a useful baseline tool for assessing whether projected revenues are likely to exceed forecasted costs. The ICT can also help inform the Commission of potential risks of additional costs being borne by other system customers. Any situations in which a large load customer's costs are projected to exceed revenues will be evaluated when an ESA is submitted for Commission approval.

However, the Department expressed concern that the ICT alone does not guarantee that all incremental costs attributable to Large General Service customers will be fully assigned to those customers over the ESA term, given that multiple rate changes may affect projected revenues.

Accordingly, the Department requested that Xcel explain how any discrepancy between the ICT at the time an ESA is executed and actual revenues and costs would be reconciled over the ESA term—either through periodic updates to the ICT comparing actual revenues to actual incremental costs, or through existing mechanisms such as Xcel's Sales True-up and revised cost allocations for the sub-class based on updated CCROSS studies in future rate cases.^[29]

The Department also requested that Xcel provide an example illustrating how generation and transmission costs would be allocated to the new subclass over the ESA term, and how incremental costs would be tracked and potentially trued up to ensure that actual revenues exceed actual incremental costs.

In response, Xcel stated that the ICT framework ensures that costs driven by super-large load customers are appropriately attributed to them and asserted that a separate CCROSS would not be able to determine whether each individual super-large customer is paying its own incremental costs.

The Department recommended that Xcel modify its proposed LGTODS (Rate Code AXX) and the LPCTODS (Rate Code AXX) tariffs as follows:

INCREMENTAL COST TEST

An Incremental Cost Test is required prior to service under this tariff.

Each customer-specific Incremental Cost Test is subject to approval by the Minnesota Public Utilities Commission.^[30]

Citizens Utility Board (CUB)

CUB requested that Xcel provide a more detailed explanation of how the ICT: (1) identifies and calculates all costs attributable to very large customers; (2) accounts for investments with

depreciation schedules longer than 15 years; and (3) ensures that the full cost of utility investments made to serve very large customers will be paid off should the customer not renew service or materially reduce demand after the initial ESA term ends.

Environmental Law & Policy Center and Vote Solar (ELPC/VS)

a. ICT

ELPC/VS pointed out two instances in which other utilities allocated transmission-related costs to non-large load customers,^[31] and requested that Xcel clarify how its proposed ICT addresses these issues, ensuring that all incremental transmission costs are fully assigned to very large load customers.

Additionally, ELPC/VS recommended that Xcel submit the actual Incremental Cost Test analysis for Commission review together with the ESA and any related agreements. Doing so would help ensure that both revenues and costs are properly evaluated, and that any resulting ESA accommodations are appropriate, all in the interest of meeting the applicable statutory requirements and the Commission's related directives.

ELPC/VS further argued that the ICT does not demonstrate how incremental costs and revenues will ultimately be allocated across customer classes once the new resources are incorporated into the rate base as system resources.

b. Relationship with Current and Future Rate Cases

ELPC/VS expressed concern that Xcel's ICT, on its own, does not ensure that residential and small commercial customers experience cost shifts associated with very large customers. It also noted that Xcel did not explain how incremental costs would be traced through rate design and class cost-of-service allocations to confirm that no residual costs are recovered from other customer classes.^[32]

ELPC/VS reiterated its recommendations from Xcel's current rate case that clear accounting and reporting requirements be used to track incremental costs identified in the ICT through subsequent rate design proceedings.^[33] Additionally, ELPC/VS clarified its request that Xcel conduct a targeted impact analysis in its next rate case linking ICT results to CCOSS and rate design, enabling the Commission to verify that statutory "hold harmless" protections for other classes are achieved in practice. Without such tracing of costs and revenues, ELPC/VS argued that there is no way to confirm that the ICT's "no harm" conclusion holds in practice.

ELPC/VS further recommended that, with each ESA filing and associated ICT, Xcel demonstrate that: (1) all incremental generation, transmission, and distribution investments required to serve a very-large-load customer are fully assigned to that customer or subclass; (2) a class cost-of-service impact analysis shows no cost shifts to residential or small commercial customers; and (3) these allocations are reconciled in Xcel's next general rate case to maintain transparency and ensure that other ratepayers are held harmless.^[34]

In supplemental comments, ELPC/VS opposed eliminating the ICT and agreed with the OAG that existing cost allocation practices are insufficient to ensure that all costs attributable to very large customers are assigned to those customers, as required by statute and contemplated by the Commission in its IRP Order.^[35]

c. Demand Flexibility, Demand Response, and Energy Efficiency

ELPC/VS supported the suggestion from Fresh Energy and MCEA to allow Xcel and individual customers to develop tailored flexibility arrangements that may extend beyond the two demand response options included in the proposal. Under this approach, any such arrangement would be incorporated into the ESA or other filings submitted to the Commission, allowing for review by the Commission and stakeholders.^[36]

Additionally, ELPC/VS recommended that Xcel consider offering expedited interconnection for customers that incorporate demand flexibility measures. To the extent these arrangements reduce the cost to serve a customer, ELPC/VS emphasized that those cost reductions should be reflected in the ICT.^[37]

d. Feasibility and Usefulness of Targeted Class Impact Analysis

ELPC/VS noted that Xcel described how incremental resources and revenues associated with large loads would be incorporated into future rate cases, and asserted that these customers would provide “benefits” to other customers by contributing to embedded fixed costs. ELPC/VS also observed that Xcel developed an ICT workbook and confirmed that an ICT will be prepared for each ESA and filed with the Commission. It further noted that inputs such as incremental resources, incremental revenues, and contributions to embedded costs could be mapped into a rate case CCOSS to illustrate how any resulting benefits—or risks—are distributed across customer classes.^[38]

ELPC/VS reiterated its request that Xcel perform a standardized, class-level impact analysis in each general rate case to demonstrate that all incremental generation, transmission, and distribution costs associated with very large customers are fully assigned to that subclass and not shifted to residential or small commercial customers.

Google

Google opposed Xcel’s proposed ICT and recommended that the Commission adopt an alternative approach more consistent with established regulatory practices, such as those used in regular IRPs and rate cases. Google argued that the ICT lacks transparency in its components and calculations, leaving customers unable to predict costs or ensure that rates will reflect actual cost of service without cross-subsidization among classes.

Google also pointed to Xcel’s acknowledgment that the ICT would likely produce a unique incremental cost for each LGTODS customer,^[39] effectively resulting in individualized rates.

Google contended that this approach is inconsistent with sound regulatory practice and does not align with the intent of Order Point 32 or the Large Load Statute, which direct that costs be assigned at the class or sub-class level rather than on a customer-specific basis.

Additionally, Google argued that the ICT fails to account for the broader system benefits associated with new resources built to serve LGTODS customers, such as enhanced reliability and resiliency, reduced congestion costs, and the displacement of higher-cost resources.

Google further noted that ICTs have not historically been used to set specific rates and depend on numerous assumptions that are difficult to predict over long time horizons, such as tax policy, resource costs, rate trajectories, dispatch modeling, and resource accreditation. These uncertainties, Google argued, would complicate any future true-up process, as the Commission would need to determine how to allocate investments among individual large-load customers and the broader customer base.

Google advocated instead for allocating costs based on “used and useful” resources through established cost-of-service methodologies in rate cases, consistent with cost causation principles in Order Point 32 and the Large Load Statute. It argued that Xcel’s ICT departs from this framework by setting rates based on projections for investments not yet made and resources not yet in service, which introduces a high likelihood of inaccuracies and could result in unjust or unreasonable rates that are difficult to correct after the fact.

Google also emphasized that utilities are generally permitted to recover only actual costs incurred—or reasonably certain forecasted costs in future test years—and that traditional ratemaking approaches have proven effective across a wide range of economic and industry conditions.

Overall, Google agreed with other commenters that the ICT is flawed and should be modified or replaced with a more just, reasonable, and transparent approach, such as a CCOSS conducted within a rate case. It also cautioned that, because the ICT is not based on plant in service, its use without a true-up or reconciliation mechanism could result in cost shifting among customer classes.^{[\[40\]](#)}

Google further stated that, if the ICT is approved, it should be implemented on an interim basis and revisited in the next rate case. It also recommended that any revenues collected in excess of tariff-based rates as a result of the ICT be subject to a true-up through a regulatory account, tracker, deferred accounting mechanism, or similar process that reconciles actual costs with actual revenues. Google emphasized that such mechanisms are necessary to ensure that any customers adversely affected by the ICT can be made whole.^{[\[41\]](#)}

Tract Capital Management (Tract)

Tract argued that Xcel should provide greater detail regarding the ICT calculation, noting that it currently lacks sufficient information to explain how the calculation operates or to allow large

load customers to reasonably predict their cost of service. In particular, Tract observed that three ICT components – capacity costs,^[42] jurisdictional cost allocation,^[43] and incremental MISO costs^[44] – do not specify a defined per-kWh rate or fixed cost.

Tract also noted that Xcel's tariffs provide limited clarity on how ICT cost and revenue elements are compared, or whether it is sufficient for customer revenues to simply equal associated costs.

Additionally, Tract pointed out that Xcel's Attachment B, which includes an ICT for a hypothetical customer, is redacted as Trade Secret, preventing stakeholders and potential customers from understanding how costs are calculated. Tract emphasized that this lack of transparency underlies many of the concerns raised by commenters, including the risk of uneven and unpredictable rates. It echoed broader concerns that traditional rate case processes would offer more predictability and consistency in rate application.^[45]

Finally, Tract stated that Xcel has not adequately explained why it would be necessary to charge more than the costs attributable to a large load customer in order to protect other ratepayers.

CloudHQ

CloudHQ agreed with DCC that a full rate case is the appropriate forum to determine whether all costs attributable to large customers are properly assigned to them, and therefore recommended that the ICT be rejected.

CloudHQ observed that the ICT departs from longstanding regulatory practice of socializing non-localized utility costs, since all customers benefit from such resources and should share in the costs. CloudHQ further noted that if a transmission line is constructed partly to serve large load customers, it is asymmetric and unfair to allocate the full cost solely to those customers, as other non-large load customers could also connect and existing customers benefit from improved reliability and system enhancements.^[46]

If the ICT is approved, CloudHQ recommended adopting a holistic approach that accounts for large-load customer costs net of any benefits, including those benefits accruing to other customers.

Geronimo Power

Geronimo Power requested that Xcel clarify what specific measures or proposals it would implement to ensure new large load customers fully cover the incremental costs of service, particularly if the initial ICT indicates that projected revenues fall short of those costs.

Geronimo also noted that requiring large loads to assume financial responsibility for part or all of their own generation would protect other ratepayers and support the Commission's affordability objectives.

Data Center Coalition (DCC)

a. ICT

DCC argued that Xcel's ICT violates standard ratemaking principles. Specifically, DCC noted that if projected revenues from a large load customer fall short of incremental costs, Xcel reserves the ability to impose a surcharge without specifying the amount in the tariff or clearly explaining how it would be calculated.

DCC further contended that, because the ICT is performed in isolation—without incorporating complete and actual cost and revenue data across all customers—it cannot reliably ensure that large customers pay their full cost of service.

DCC also raised concerns about transparency, stating that the ICT makes it difficult for prospective large customers to evaluate the cost of service and compare Xcel's territory to other jurisdictions. Without the ability to reasonably estimate costs prior to ESA negotiations, customers may choose to invest elsewhere.

DCC was concerned that Xcel could aggregate premises for the purpose of imposing a surcharge for failing to meet Xcel's bespoke incremental cost test.^[47] In reply comments, Xcel clarified its aggregation proposal would apply the ICT to multiple facilities that would not otherwise be subject to it. DCC opposed this approach, arguing that if rates are properly designed for each class or subclass, there should be no need to aggregate facilities to impose additional surcharges through the ICT.^[48]

Finally, DCC asserted that directly assigning incremental resource costs on a customer-by-customer basis through the ICT is inconsistent with Minnesota's traditional vertically integrated regulatory framework.

b. ICT – Legal Considerations

DCC argued that requiring a large customer to provide revenues in excess of the cost to serve them would violate Minn. Stat. § 216B.07, which prohibits rates that "subject any person to any unreasonable prejudice or disadvantage." Additionally, DCC noted that Xcel does not appear to have a mechanism to ensure that any excess revenues from large customers benefit other ratepayers, rather than resulting in a windfall to shareholders.

DCC observed that most of Xcel's ESAs establish competitive rates under Minn. Stat. § 216B.162, which permits rate reductions for customers facing effective competition, provided those rates recover "at least the incremental cost of providing the service."^[49] Using the ICT to confirm that a discounted rate for a competitive customer does not fall below incremental cost—and thereby avoids creating a cross-subsidy—is consistent with standard cost-causation principles. However, using the ICT to ensure that a customer's tariff-based rate exceeds its cost of service in order to create a cross-subsidy for other customers is inconsistent with those same principles.

DCC recommended that the Commission reject Xcel's ICT. However, if the ICT is approved, DCC urged the Commission to clarify that it will review ICT analyses for any large customer upon request. DCC further recommended that customers be allowed to seek Commission review if they dispute the results of a customer-specific ICT. In addition, any customer that agrees to an ESA surcharge based on the ICT should be permitted to request that Xcel and the Commission revisit that surcharge at a later date.

LIUNA

LIUNA understood Xcel's ICT as a true-up mechanism intended to ensure that the actual cost of serving new data center load does not exceed associated revenues due to unanticipated circumstances, such as higher-than-expected costs for new generation or other necessary resources.

Decision Options

- Approve the use of the Incremental Cost Test as a tool to compare the costs imposed by and revenues derived from the addition of a new large load customer. (Xcel Energy)
- The Department recommends the Commission modify Xcel's proposed Large General Time of Day Service (Rate Code AXX) and the Large Peak Controlled Time of Day Service (Rate Code AXX) as follows:

INCREMENTAL COST TEST

Each customer-specific Incremental Cost Test is subject to approval by the Minnesota Public Utilities Commission.

- Reject the Incremental Cost Test ("ICT"). (CloudHQ)
- Reject Xcel's incremental cost test proposal in its entirety. The incremental cost test results in discriminatory rates that violate Minn. Stat. §§ 216B.03 and 216B.07 by imposing bespoke surcharges on similarly situated customers. (DCC)
- The Commission should modify the tariff by removing the Incremental Cost Test ("ICT") in its entirety. (Google)
- If the Commission decides to approve the ICT, then it should only do so on an interim basis until a full cost of service study can be more fully addressed and evaluated in the Company's next rate case to set rates for these new sub-classes. (CloudHQ)

- Alternatively, to the extent the Commission includes the ICT in the tariff, then the Commission should limit the ICT to an interim basis, and revisited in the next applicable general rate case. Any revenues collected above the tariff's applicable rates due to an ICT should be subject to true-up via a regulatory account, tracker, deferred accounting mechanism, or any other process that reconciles actual costs with actual revenues. To the extent an ICT is used, Xcel must properly allocate all costs, considering all costs, benefits, revenues, and expenses, and this allocation and all costs will be reviewed in a general rate case. (Google)
- Require Xcel Energy modify the Incremental Cost Test to provide sufficient details on how each cost factor will be calculated and how costs will be balanced against the revenue elements to allow customers to reasonably predict the cost of service. (Tract)
- Require Xcel Energy to file the actual Incremental Cost Test analysis for Commission review in tandem with the ESA and other relevant agreements. (ELPC/VS)
- Require Xcel to submit information with each ICT submission sufficient to allow for interpretation and replication of the results, including but not limited to the following: (OAG)
 - the EnCompass analysis used to determine resources required;
 - the sources, assumptions, and methods used to arrive at all cost and revenue estimates; and
 - upper and lower bound ranges for all estimates.
- For any values and calculations identified as protected data in the Incremental Cost Test, Xcel must provide specific explanations of why protected status is necessary. (OAG)
- Require Xcel to report costs and revenues in the Incremental Cost Test over the full useful life of any generation assets included in the Incremental Cost Test, including: (OAG)
 - Estimated generation costs and revenues by year for each year of useful life of any relevant generation assets, with costs disaggregated by the generation-related rate base and expense categories used in Xcel's CCOSSES; (see Table 5)
 - All estimated costs and revenues by year for each year of useful life of any relevant generation assets, with costs disaggregated by Xcel's proposed categories of generation/capacity costs, energy costs, MISO costs, and transmission costs; (see Table 6) and

- Net present value estimates of net revenues over relevant generation asset lifetimes, for at least the following scenarios: (1) the customer takes service throughout the useful life of relevant generation assets; (2) the customer takes service through the end of the contract term; (3) the customer takes service through the end of the contract term, but the customer reduces load to the minimum billing demand after the ramp period; and (4) the customer terminates the contract after five years and pays the exit fee. (See Table 7)
 - Require Xcel to submit updated Incremental Cost Tests annually.
- Require Xcel to include an appropriate share of embedded system costs in the Incremental Cost Test and rename it the Very Large Customer Cost Test to reflect this change. (OAG)
- Require Xcel Energy, for each filing of an ESA and associated Incremental Cost Test, to demonstrate: (ELPC/VS)
 - That all incremental generation, transmission, and distribution investments required to serve a very-large-load customer are fully assigned to that customer or subclass;
 - That the Company has conducted a class cost-of-service impact analysis showing no cost shift to residential or small-commercial classes; and
 - That these allocations are reconciled in the Company's next general rate case to maintain transparency and ensure ratepayers remain held harmless.
- Reject Xcel's proposal to aggregate multiple customer premises for the sole purpose of subjecting a customer to the ICT. If the Commission approves any aggregation of customer premises, direct Xcel to aggregate the measured demand of all aggregated premises for purposes of determining whether the minimum bill applies. (DCC)

CCOSS and True Up

Xcel proposed eliminating the Plant Stratification process used in its CCOSS to allocate fixed and fixed production O&M costs between energy-related and capacity-related categories. Removing this process would result in fewer costs being classified as energy-related and more being assigned to demand-related categories. The Company and other parties are debating how to prevent "cost shifting" and protect residential and small-business customers.

Xcel Energy

a. Incorporation into Rate Cases, and Jurisdictional Allocation

Xcel stated that the sales, revenues, and costs associated with resources procured to serve new load under this tariff will be incorporated into future rate cases. Additionally, Xcel explained that the jurisdictional cost allocation increase to Minnesota is based on the twelve-month

coincident peak demand (12CP) by jurisdiction, which serves as the foundation for allocating electric expenses and plant investment to Minnesota's jurisdiction. Changes in peak demand in any jurisdiction can shift these allocations.^[54]

Any additional revenues required from the LGTODS customers as a result of the ICT will be allocated to customer classes based on the test-year base revenue allocator. This approach ensured that all customers receive benefits from large load customers. At the same time, the ICT framework ensures that all incremental costs attributable to these customers are assigned to the super-large class or sub-class, rather than being shifted to other customers.

For cost allocation, Xcel will incorporate changes in the large load customer's load characteristics into class allocations for annual rider filings and future rate cases. Regarding the treatment of the new LGTODS customer subclass within the sales true-up rider in future rate cases, Xcel indicated that large load customers will be included in the Commercial Demand Billed Sales True-up class and treated the same as other commercial demand billed customers.^[55]

b. Cost Allocation

Xcel used incremental instead of embedded costs to estimate the cost of serving a new large load customer. The Company argued that an embedded cost of service study does not adequately protect other customers from costs associated with serving large load customers, for several reasons:

- It is unlikely to capture the specific resource costs required to serve these customers;
- It relies on extensive actual and forecasted data, as well as the development of new demand allocators, to produce meaningful results; and
- It is not designed to evaluate costs at the individual customer level, whereas the ICT allows for customer-specific analysis and includes a true-up mechanism.^[56]

Xcel argued that because the OAG's proposed alternatives rely on hypothetical data, both CCOSS scenarios would ultimately assign identical costs to the large load class and the C&I Demand class, respectively. According to Xcel, it lacks the data necessary to meaningfully differentiate between the two approaches.

To illustrate potential impacts, Xcel presented an example in which a hypothetical large load customer—contributing \$75 million in revenue and incurring \$50 million in incremental costs—is added to the CCOSS. In this scenario, all customer classes experience the benefit of a reduced revenue deficiency.

Table 8: Xcel's Illustrative Example^[57]

CCOSS Before Addition of Large Load Customer

\$1,000s	Total	Residential	Non-Demand	Demand	Street Lighting
Revenue Requirement	\$3,996,016	\$1,657,929	\$119,082	\$2,177,786	\$41,219
Present Revenue	\$3,630,687	\$1,460,463	\$126,894	\$2,011,776	\$31,553
Deficiency	\$365,329	\$197,465	\$(7,812)	\$166,010	\$9,666

CCOSS After Addition of Large Load Customer

\$1,000s	Total	Residential	Non-Demand	Demand	Street Lighting
Revenue Requirement	\$4,046,018	\$1,650,178	\$118,593	\$2,236,075	\$41,172
Present Revenue	\$3,705,687	\$1,460,463	\$126,894	\$2,086,776	\$31,553
Deficiency	\$340,331	\$189,715	\$(8,301)	\$149,299	\$9,619

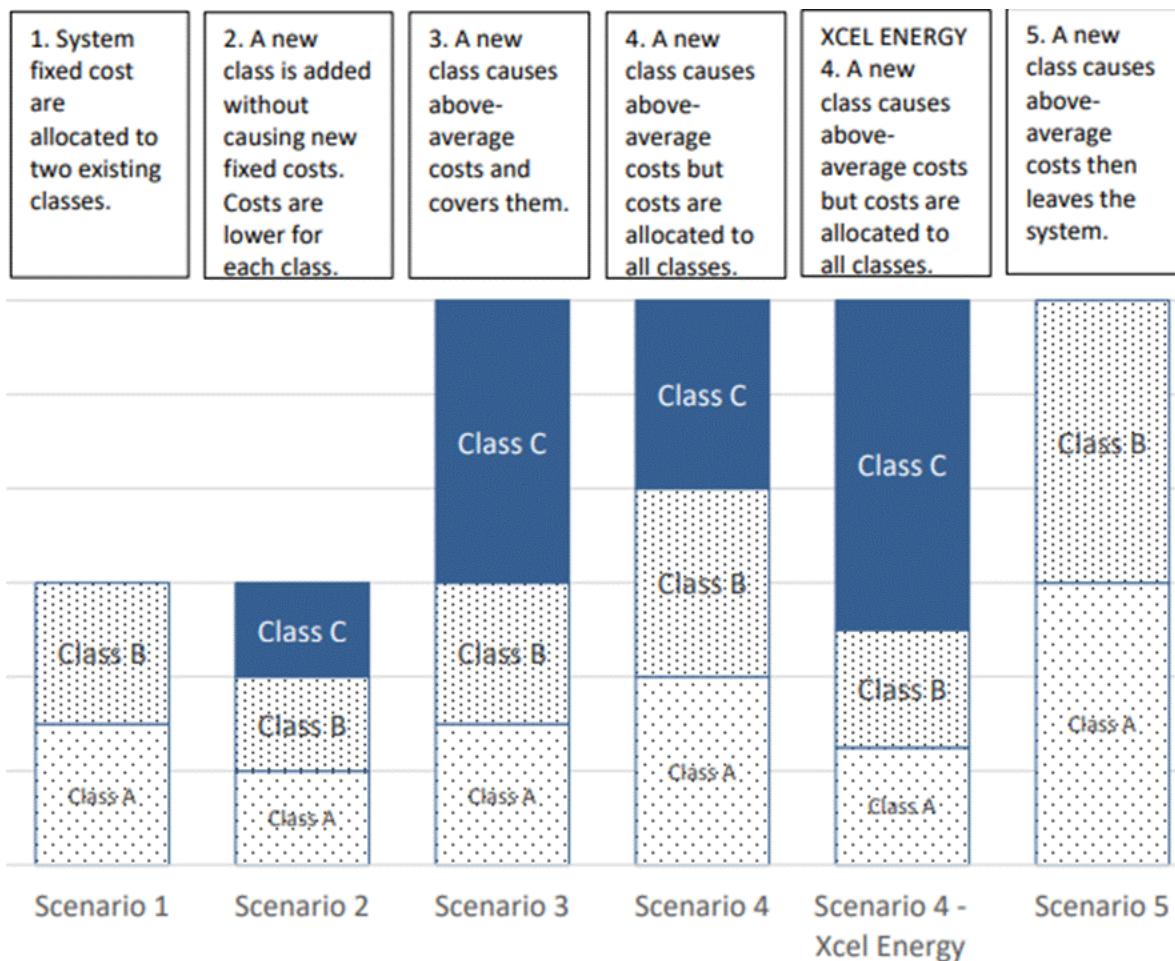
Change in Deficiency

\$1,000s	Total	Residential	Non-Demand	Demand	Street Lighting
Deficiency Change	\$(24,998)	\$(7,750)	\$(489)	\$(16,712)	\$(47)

In summary, Xcel emphasized that the ICT ensures that incremental costs are allocated to the responsible cost causers and offers a level of transparency over the term of the agreement that an embedded CCOSS cannot provide.

Additionally, Xcel included Figure 1, updated in response to the OAG's reply comments, presenting a revised Scenario 4 that illustrates the potential impacts on existing customer classes.

Figure 1
Possible Effects on Existing Customer Classes of a New Customer Class
(Based on the OAG's Figure 7 below, with Xcel Energy Revised Scenario 4)^[58]



In addition to the changes in class cost assignments, Xcel presented an overall impact on class deficiencies in Table 9.

**Table 9 - Illustrative Example of Revenue Comparison:
Before and After Addition of a Large Load Customer (\$1,000s)** ^[59]

Revenue Requirement	Before Addition of Large Load	With Large Load Addition	Difference
Residential	\$1,657,929	\$1,650,178	\$(7,750)
Non-Demand	\$119,082	\$118,593	\$(489)
Demand	\$2,177,786	\$2,236,075	\$58,288
Street Lighting	\$41,219	\$41,172	\$(47)
Total Revenue Requirement	\$3,996,016	\$4,046,018	\$50,002

Revenue Requirement	Before Addition of Large Load	With Large Load Addition	Difference
Residential	\$1,460,463	\$1,460,463	\$0
Non-Demand	\$126,894	\$126,894	\$0

Demand	\$2,011,776	\$2,086,776	\$75,000
Street Lighting	\$31,553	\$31,553	\$0
Total Revenue Requirement	\$3,630,686	\$3,705,686	\$75,000

Revenue Requirement	Before Addition of Large Load	With Large Load Addition	Difference
Residential	\$197,465	\$189,715	\$(7,750)
Non-Demand	\$(7,812)	\$(8,301)	\$(489)
Demand	\$166,010	\$149,299	\$(16,712)
Street Lighting	\$9,666	\$9,619	\$(47)
Total Revenue Requirement	\$365,329	\$340,331	\$(24,998)

Xcel stated that the combination of additional incremental costs and revenues, along with changes in allocators from adding large loads, leads to a reduced revenue deficiency across all classes. Xcel further noted that the illustrative example reasonably reflects the potential impacts of various load levels and associated costs.

c. Cost Allocation Concerns

In response to concerns about allocating costs to large load customers without creating a separate large load customer class in future CCOS analyses, Xcel stated that such an approach would not reveal whether class revenues actually cover incremental costs. Instead, revenues would be measured against embedded costs rather than incremental costs, potentially indicating a revenue deficiency even when the class is fully meeting its incremental cost responsibility.

Xcel further argued that a CCOS cannot determine whether individual large load customers are covering their incremental costs, as it would not distinguish costs and revenues among large load customers within a class. This limitation could lead to intra-class subsidies. Finally, Xcel noted that identifying and assigning incremental costs to a dedicated large load customer class would be a complex and resource-intensive process.^[60]

d. True-Up Mechanism

Xcel stated that there should be a mechanism to reconcile ICT cost estimates with actual costs over time, though the appropriate timing for a true-up will depend on each customer's load ramp period, size, and the timing of resource additions. Xcel also noted that ESAs will include provisions for cost true-ups to ensure that large load customers pay their actual incremental costs.^[61]

Xcel stated that, given the size and scale of each customer, ESAs will likely include unique features such that a standardized true-up mechanism would not be appropriate. Accordingly, the Company and customer will agree to a true-up mechanism specific to their agreement and submit those terms for Commission review in future ESA proceedings.

OAG

a. Cost Allocation and CCOSS

The OAG noted that the challenges associated with data center load growth are particularly prevalent when attempting to determine fair and reasonable cost allocation and are difficult to accommodate within the traditional cost allocation framework. Traditional CCOSS methods were not designed to fairly reflect cost causation from large and sudden surges in load growth driven by a small number of very large customers.

While the OAG recommended creating a separate class for very large customers for ratemaking purposes and directly assigning costs to that class, it observed that Xcel had not conducted adequate modeling to compare the cost allocation impacts of this approach with the Company's preferred CCOSS treatment of very large customers. The OAG indicated that if the Commission does not adopt its recommendations for a separate class and direct cost assignment, it could direct Xcel to prepare alternative CCOSS studies in the next rate case that incorporate customers under the new tariffs. Specifically, the OAG suggested that Xcel provide CCOSS and proposed class revenue requirements for at least the following three scenarios:

- Very large customers are included in the C&I Demand class for cost allocation and rate design purposes, with all resources treated as system resources (Xcel's preferred version);
- Very large customers are treated as a separate class for cost allocation and rate design purposes, with all resources treated as system resources; and
- Very large customers are treated as a separate class for cost allocation and rate design purposes, with costs attributable to them – including, but not limited to, incremental costs – directly assigned to the class.^[62]

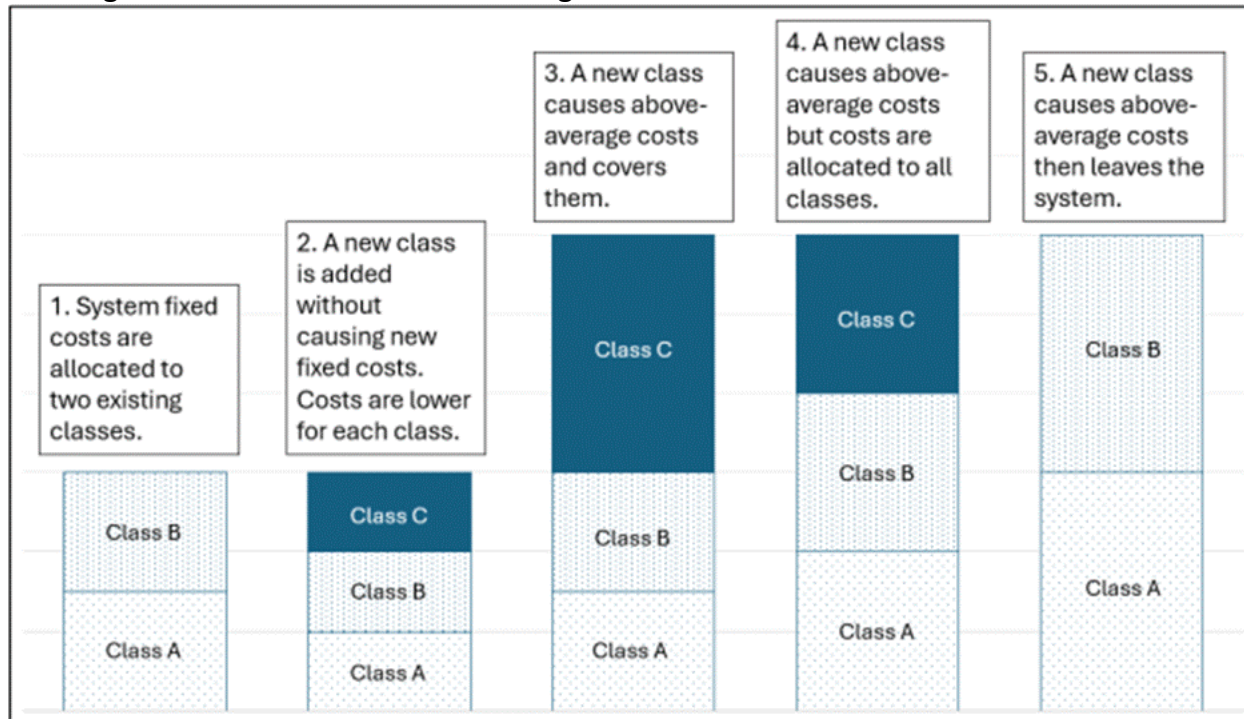
The OAG contended that requiring these alternative studies would illustrate the impact of different allocation choices on other customers and help ensure the issue is not overlooked in subsequent rate cases. Additionally, because these studies require significant time to produce, rate case parties may not be able to request them through discovery in time to incorporate them into their analysis.

In supplemental comments, the OAG observed that Xcel's single illustrative example of CCOSS impacts for adding a very large customer did not demonstrate that such customers would provide benefits to all classes. Further, Xcel's CCOSS would allocate very large customer costs to all customers, and the currently proposed ICT does not ensure appropriate cost attribution.^[63]

The OAG identified two effects of adding large customers under a traditional CCOSS allocation. First, production and transmission costs^[64] are spread across more load, resulting in a smaller

share of embedded costs being allocated to non-very-large customer classes.^[65] Second, Xcel will incur costs to serve very large customers, which constitutes the “incremental cost effect.”^[66] Figure 2 below illustrates these allocation and incremental cost effects.

Figure 2 – Possible Effects on Existing Customer Classes of a New Customer Class^[67]



- Scenario 2 illustrates the allocation effect of adding Class C, assuming no new fixed costs are incurred; all classes pay less.
- Scenario 3 illustrates higher-than-average costs for the new class, but these costs are directly assigned to the new class, leaving other classes unaffected.
- Scenario 4 illustrates potential cross-subsidization using traditional allocation methods. While incremental costs are the same as Scenario 3, they are allocated across classes based on energy use, peak demand, customer counts, and other traditional metrics, causing Classes A and B to pay more than before the new class joined the system. The OAG argued that Xcel’s proposal does not adequately protect against this scenario.
- Scenario 5 illustrates a worst-case scenario in which substantial fixed costs are incurred to serve Class C, and the new class subsequently leaves the system. The OAG noted that minimum bill and minimum fee provisions are intended to reduce this stranded asset risk; however, unless these fees cover all costs incurred to serve the new customers, the risk cannot be fully eliminated.

The OAG contended that Xcel's current proposal would inappropriately socialize actual costs to all customers in future rate cases through traditional CCOSS allocation. Approving the tariff would implicitly approve Xcel's cost attribution methods, making it more difficult to modify cost allocation in future rate cases.^[68]

Additionally, the OAG noted that higher incremental costs caused by very large customers would be unfairly shifted to other classes under typical CCOSS allocation. Unless very large customers constitute a separate class, it will be impossible to ensure that they are covering their costs and to assess compliance with statutory cost attribution requirements.^[69]

The OAG argued that creating a separate class for very large customers would naturally allocate embedded costs consistently with other classes and improve transparency. In response to Xcel's concerns about limitations of creating a separate class,^[70] the OAG stated that the new class simply recognizes that this group differs significantly from other customers. For context, the average annual energy usage of a very large customer with 100 MW peak demand and a 90% load factor would be 788,400 MWh,^[71] compared to 366 MWh for the remainder of the C&I Demand class.^[72]

The OAG also observed that costs Xcel claims are too complex to track are the same costs included in each customer's ICT. While creating a separate class does not assist in identifying incremental costs for that class (unless directly assigned), it allows for identification of embedded costs allocated to the class and provides the ability to directly assign costs to ensure very large customers pay all costs attributable to them. The OAG cited examples from other states where a separate class has been successfully implemented.^[73] ^[74]

In response to OAG inquiries on CCOSS treatment, Xcel indicated that LGTODS and LPCTODS rates would initially align with General TOD rates, but in subsequent rate cases, costs would be allocated using the traditional CCOSS method.

The OAG contended that, aside from transmission interconnection costs, the costs to serve these customers would not be isolated, but allocated based on the functionalization, classification, and allocation assumptions in the CCOSS, like all other system costs. Sales and revenues from these customers would be included in the C&I Demand class revenue requirement calculations, with the split between demand and energy charges calculated as described in Xcel's proposal.^[75] Because traditional CCOSS allocation does not isolate costly incremental resources built or procured primarily to serve very large customers, the OAG argued that these costs are unfairly spread to other ratepayers.

When asked about cost allocation to the new subclasses, Xcel confirmed that "[n]o costs will be directly assigned to the LGTODS or LPCTODS sub-classes in the CCOSS" and that "[a]ll resources will be system resources."^[76] The OAG contended that this approach would prevent tracking how these customers' costs are allocated across classes and hinder the ability to assess whether those costs align with ICT estimates. It further argued that it would not be possible to

ensure that very-large customer rates align with the costs they cause, as distinct from other C&I Demand class customers.

The OAG further noted that cost shift tracking is difficult because many costs to serve very large customers first appear in riders rather than base rates.^[77] For example, costs recovered through the Fuel Clause Adjustment (FCA) or Transmission Cost Recovery (TCR) Riders would not appear in the CCOSS. Very large customers could cause FCA costs to rise for all customers, and increased transmission project costs could go through the TCR Rider and allocated using the transmission allocators from Xcel's last rate case.^[78] Consequently, a CCOSS could falsely suggest that very large customers benefit other ratepayers while their incremental costs are dispersed across multiple riders. The OAG recommended that any very large customer costs allocated through riders—including the Renewable Energy Standard (RES) rider—be allocated according to cost causation principles rather than class shares of base revenue.^[79]

Regarding CCOSS allocations, the OAG recommended providing a recent baseline CCOSS without the addition of new customer costs to illustrate class allocations before new customer introduction. The CCOSS model should include costs normally recovered via riders. Xcel should also provide an alternative CCOSS with: (1) very large customers included in the Transmission and Transmission Transformed subclasses of the C&I Demand class, as currently proposed, and (2) very large customers in a separate class with costs allocated directly to them.^[80]

The OAG observed that other jurisdictions are exploring creative solutions to data center cost allocation. For example, Arizona Public Service proposed allocating costs for new generation resources based on class shares of load and energy growth, rather than class load shares.^[81] Another approach would be to register each very large customer with MISO as a separate commercial pricing node, enabling direct pass-through of day-ahead LMP, real-time LMP, ancillary services, and other MISO charges. The OAG concluded that adding very large customers to the C&I Demand class and applying traditional allocation methods is insufficient.

The OAG also noted that very large customers would not be allocated most distribution costs under Xcel's proposal, since they take service at transmission or transmission-transformed voltages, and thus do not provide these benefits to other ratepayers.

In response to DCC and Google's argument that cost allocation decisions should be left to a rate case, the OAG cited Minn. Stat. § 216B.1622, noting that the Commission must consider cost assignment and allocation at the current stage and not defer to future rate cases. Deferring cost allocation decisions would favor Xcel's existing plan, which does not ensure very large customers pay their full costs.

Regarding Xcel's hypothetical CCOSS for a very large customer, the OAG noted that the assumptions lacked context and sensitivity analyses, providing little assurance about the results. For costs not directly assigned, appropriate attribution depends on accurate cost allocators, which rely on accurate forecasts, timely updates, and reasonable assumptions.^[82]

The OAG observed that Xcel's peak demand allocator is highly sensitive to several assumptions, including the single hour of peak demand and accuracy of class load forecasts. With increasing shares of peak demand coming from a few very large customers, forecast accuracy becomes less stable in future rate case test years. To ensure proper reflection of very large customer load, the CCOSS peak demand allocator should reflect the greater of each customer's forecasted coincident peak demand or minimum billing demand.^[83]

Finally, the OAG argued that TCR rider allocators should be updated to account for very large customer load in each TCR filing. The class allocators used in Xcel's 2026 TCR petition were based on the 2021 rate case and must be updated to reflect the load and energy of added very large customers. In response to a question about plans for rider allocation, Xcel stated that "[t]he Company will update allocation factors for rider filings that have historically relied on class allocations determined in previous rate cases,"^[84] and the OAG recommended updating these factors with each TCR rider filing.

b. Cost Assignment

The OAG disagreed with DCC and Google's assertion that directly assigning costs to very large customers—whether through the ICT or another mechanism—would violate statutory language or depart from Commission guidance. Instead, the OAG argued that direct assignment may be necessary to ensure compliance with the requirement that all costs attributable to very large customers are assigned to that class or subclass, thereby preventing cross-subsidization.^[85]

While the OAG did not endorse a specific method for assigning incremental generation costs, it noted that regulators and utilities are capable of innovative cost allocation solutions in response to the unique challenges posed by very large customer loads, and noted several examples from other states. As an example, the OAG cited a recent Minnesota Commission framework for proactive distribution upgrades, which requires certain interconnecting customers to pay a per-kW charge based on the total cost of approved upgrades divided by accredited capacity.^[86] The OAG argued that if such a mechanism can allocate grid upgrade costs across a dispersed group of customers, it should also be feasible to assign new generation costs to a relatively small number of very large customers.

The OAG further argued that Minn. Stat. § 216B.1622, subd. 2(1) requires only that non-very-large customers not bear costs attributable to the very large customer class or subclass, and does not prescribe how costs must be apportioned within that class or subclass. It contended that relying solely on CCOSS in rate cases is inconsistent with legislative intent,^[87] noting that the creation of a specific statutory provision for very large customers indicates that existing ratemaking practices were not viewed as sufficient to protect other ratepayers.

The OAG also noted that costs may either be directly assigned to individual customers, as in the ICT, or included in system costs and allocated across classes using traditional CCOSS methodologies.

However, the OAG expressed concern that traditional ratemaking practices may fail to ensure appropriate cost allocation due to timing mismatches between when incremental costs are incurred to serve very large customers and when any benefits from increased load are reflected in cost allocators.

Additionally, the OAG argued that traditional allocation methods may under-attribute costs to very large customers, and that these customers may ultimately pay even less than their allocated share due to the application of the Competitive Response Rider (CRR), the Energy Charge Credit (ECC), and potentially interruptible load discounts.^[88]

The OAG described the CRR as cost discounts allocated to all customer classes based on revenue shares,^[89] effectively creating an additional subsidy from residential and small business customers to larger customers. Under Xcel's proposed tariffs, very large customers would be eligible for the CRR,^[90] which the OAG argued would undermine efforts to ensure that these customers pay their full costs, as they would only be required to cover incremental costs as determined by the ICT. The OAG further contended that allowing very large customers to receive CRR discounts would be inconsistent with the Legislature's intent to establish distinct requirements for this class under Minn. Stat. § 216B.1622. Accordingly, the OAG recommended that Xcel revise its tariff language to make customers taking service under the proposed tariffs ineligible for the CRR.

With respect to the ECC, the OAG noted that General Service and General Time of Day Service customers receive a credit for energy usage exceeding their demand multiplied by 400 hours,^[91] which reflects on the monthly bill. The OAG also noted that very large customers under the proposed tariffs would receive additional discounts in exchange for providing curtailable load.^[92] While such demand response incentives could provide net system benefits if effectively utilized, the OAG emphasized that the costs of these discounts are allocated to all customer classes based on contributions to peak demand.^[93] As a result, these discounts may function as subsidies to interruptible customers unless they meaningfully reduce the need for additional capacity.

Department of Commerce

a. ESA (Electric Service Agreement)

The Department requested that Xcel confirm its understanding that each executed ESA, along with the associated interconnection agreement, will be submitted to the Commission for review and approval in a separate proceeding. The Department also noted that incremental costs not covered by the ESA would be recovered through Xcel's annual riders and through updated rates, terms, and conditions established in future rate cases to reflect the generation and transmission resources added to serve new large loads over the ESA term.^[94]

In its reply comments, the Department observed that while Xcel distinguished between interconnection costs and resource addition costs^[95] It did not clearly explain how these costs

would be accounted for or recovered—whether through base rates set in future rate cases or through ESA and interconnection agreement rate terms. As a result, the Department remained uncertain whether “all costs attributable to the utility’s very large customers [...] are assigned to the very large customer class or subclass determined by the commission.”^[96]

b. CCOSS and Rate Cases

The Department noted that Xcel will allocate system costs to Large General Service customers using the CCOSS reviewed in each rate case over the ESA term. Because each rate case may adjust system cost allocations—including the incremental costs assigned to these customers—the actual revenues collected and incremental costs attributed to the Large General Service subclass could differ significantly from the projections used in the ICT at the time the ESA is executed.^[97]

The Department further observed that outcomes in future rate cases could substantially influence whether the Large General Service subclass fully covers its incremental costs or whether other customers are subsidizing these costs.

c. Sales True Up

The Department explained that Xcel’s sales true-up rider establishes a rate adjustment to reconcile annual differences between the base rate revenue authorized by the Commission in the most recent rate case and the actual base rate revenue collected for each customer class.

Because the new Large General Service subclass will be included within the C&I Demand-Billed class, the Department noted that revenues from this subclass would be combined with total C&I Demand-Billed revenues and compared against the Commission-approved revenue requirement from the most recent rate case. If actual revenues exceed the approved level, the excess would be refunded to the class through the rider; if revenues fall short, the difference would be recovered through a surcharge in subsequent years. While refunds are uncapped, the Department noted that surcharges are subject to a 3% cap.^[98]

The Department further noted that Xcel proposed removing fixed costs from the energy charge so that it reflects only variable costs, primarily fuel. As a result, the new subclass would not create an increased revenue incentive, and the sales true-up would not function as a revenue decoupling mechanism. However, the Department indicated that the sales true-up rider—or a modified version—could help ensure that actual base revenues exceed the incremental costs of serving these customers.

The Department requested that Xcel clarify how it intended to treat the new Large General Service subclass within the sales true-up rider in future rate cases and to provide an example demonstrating how revenues from the subclass would be tracked and potentially trued up to ensure that revenues exceed incremental costs.^[99]

In reply comments, Xcel stated that very large load customers would be included in the C&I Demand-Billed sales true-up class and treated the same as other C&I demand-billed customers. The Department expressed concern that this approach could place undue risk on other C&I customers with smaller loads. If revenues from a very large customer fall short, the resulting shortfall could lead to significant surcharges for all customers within the C&I Demand-Billed class.

The Department also noted that the Commission previously ordered Xcel's proposed tariff include "provisions to ensure that super-large customers financially commit to purchasing a certain level of electricity to protect non-super-large customers from the risk of stranded costs."^[100]

Additionally, the Department emphasized that ESA risk mitigation measures do not eliminate a super-large customer's incentive to reduce or eliminate demand. Once a super-large customer can determine energy efficiency cost savings measures outweigh the costs, it is likely to act in its self interest. In such cases, other C&I Demand or non-super-large customers could bear the burden of recovering resulting revenue shortfalls through the sales true-up mechanism.^[101]

Accordingly, the Department recommended that Xcel develop a separate sales true-up mechanism for the very large customer class in its next rate case.

d. Cost Allocation

The Department indicated that incremental costs associated with serving Large General Service customers will significantly affect cost allocation factors within the CCOSS. Over the ESA term, generation and transmission costs are expected to increase as investments are made in local transmission projects, regional network upgrades, reliability improvements, and overall system efficiency enhancements.^[102]

The Department further noted that fixed generation and transmission costs are allocated among customers using cost allocation factors established in the most recent rate case. Because these costs are complex and difficult to assign precisely, the Department emphasized the importance of regularly reviewing and updating these allocation factors.

Because new generation and transmission costs are recovered between rate cases through Xcel's riders—based on CCOSS allocation factors from the most recent rate case—the Department expressed concern that regulatory lag and outdated allocation factors could lead to inequities if not updated in a timely and accurate manner.

Accordingly, the Department requested that Xcel explain how it intends to assign generation and transmission costs to customers within the new subclass and how it will account for changes in cost allocation factors for new generation and transmission system resources due to regulatory lag between rate cases.^[103]

In addition, the Department noted that Xcel did not confirm its understanding of AMI capabilities to link to MISO energy prices, nor did it explain how other system customers would be protected from the impact of large load customers on marginal energy costs, which the Department understands are recovered through the fuel clause paid by all retail customers.^[104]

The Department also indicated that costs associated with Xcel-owned and contracted resources are designed to be recovered through the demand charge rather than the energy charge. As described in Xcel's Petition, removing the Production Plant and Production Plant O&M Stratification results in energy charges that primarily reflect variable fuel costs. The Department remained concerned, however, that Large Load customers—particularly during peak periods—could influence real-time market fuel rates and, consequently, the costs recovered through the fuel clause.^[105]

Citizens Utility Board (CUB)

a. Transmission Expenses

CUB emphasized that it is critical for very large customers to bear the full costs of any additional construction, interconnection, and MISO transmission-related expenses resulting from their addition to the system, and questioned whether Xcel's proposed processes adequately ensure this outcome.^[106]

CUB noted that Xcel's Transmission Cost Recovery (TCR) Rider allocates eligible transmission expenses to the Residential, C&I Demand, and C&I Non-Demand classes using the demand allocation factors approved in Xcel's most recent electric rate case. Consequently, even if a transmission line is built solely to serve a very large customer or group of customers, the TCR would still assign a portion of the costs to other rate classes. CUB contended that this approach appears inconsistent with statute and the IRP/Firm Dispatchable Order and requested that Xcel clarify how it plans to insulate other ratepayers from transmission costs that would not exist but for the interconnection of very large customers.^[107]

b. Rate Case Impacts

CUB acknowledged Xcel's goal of quickly incorporating sales and revenues from super-large customers into future rate cases, but remained concerned that without a mechanism to trigger cost allocation updates or deliver the claimed benefits, other customers could end up paying more than their fair share of interconnection and service costs for new very large customers.

CUB further noted that, in the absence of a new rate case or another formal process to revise cost allocation, class cost of service models would not reflect the new load, and other customers might not capture the intended value associated with these customers coming online.^[108]

While riders such as the TCR operate independently of rate cases, CUB observed that recovery from each class or subclass would not accurately reflect relative contributions to system costs

until class cost of service studies are updated and allocation factors adjusted. Xcel's petition did not clearly explain how these issues would be addressed.

CUB emphasized that because class contributions to system costs—and their allocation—are determined in rate cases, it is uncertain how incremental and embedded costs could be properly recovered from large-load customers between proceedings. If allocation factors, which are typically established in rate cases, are not updated in a timely manner when a very large customer comes online, other rate classes could temporarily bear more than their fair share.^[109]

In response, Xcel noted that it would apply the load characteristic changes to class allocations in annual rider filings as the load comes online.^[110] CUB noted that while annual updates help improve accuracy in recovering rider costs between rate cases, there could still be a lag before the Commission formally adopts updated allocation factors. CUB found it reasonable that Xcel's true-up provisions could address this gap by refunding other rate classes for any interval in which rider costs were under-recovered from the very large customer.

CUB recommended that revised allocation factors be incorporated into annual rider filings as new very large customers come online, and that Xcel track and refund any differences in rider recovery between when a very large customer comes online and the Commission's adoption of updated allocation factors.

c. Allocation of Energy Resources Costs

CUB observed that Xcel plans to treat generation resources acquired to serve very large customers as system resources, with costs allocated across all ratepayer classes.^[111] While CUB did not address the specifics of Xcel's proposals, it expressed concern that this approach could limit the ability to effectively shield the Company and existing customers from the costs of new generation driven by very large customers.

d. Mid-Term Expansions or Modifications

CUB requested that Xcel explicitly state in its tariffs and agreements that any system modifications, upgrades, or expansions required to serve very large customers will be the sole responsibility of those customers and not allocated to other ratepayer classes.^[112]

CUB disagreed with CloudHQ's assertion that including such a provision would exceed the scope of Xcel's proposed ICT, noting that if a customer's capacity needs grow, the initial ICT would no longer accurately reflect the anticipated costs and revenues for serving that customer. While Xcel's proposed true-up mechanism could address minor variances, CUB emphasized that it is not designed to accommodate these types of fundamental changes.^[113]

Environmental Law & Policy Center and Vote Solar (ELPC/VS)

ELPC/VS reiterated its recommendations from Xcel's current rate case that the Commission explicitly state in its order that approval of the proposed very large load customer tariffs does not constitute approval of cost recovery from other customer classes. [\[114\]](#)

Google

a. Transmission Costs

With respect to transmission cost allocation, Google stated its understanding that any direct transmission extensions and/or substation upgrades required to interconnect an LGTODS customer would be identified through a System Impact Study and funded by that customer under a Facilities Construction Agreement or similar arrangement. Beyond those direct costs, Google agreed that LGTODS customers should be responsible for transmission-related costs associated with serving their load, while recognizing that other customers may also receive transmission-related benefits when very large customers come online. [\[115\]](#)

Google also expressed concern that the ICT does not account for these broader transmission system benefits, particularly because it is based on a one-time run of a capacity expansion model typically used for IRPs, rather than a framework designed for setting customer rates. By contrast, Google noted that ratemaking in a rate case allows for consideration of all costs, benefits, revenues, and expenses associated with serving a customer or class of customers, thus ensuring that the benefits are appropriately reflected in rates across all customer classes. [\[116\]](#)

b. CCOSS and Rate Case Discussion

In supplemental comments, Google noted that both the Michigan and Missouri Public Service Commissions have indicated that cost allocation and rate treatment for large load customers should be addressed within rate cases. [\[117\]](#) [\[118\]](#)

Google did not oppose establishing a separate class for large load customers (100 MW and above), rather than treating them as a subclass of the C&I Demand class, provided that the class is clearly and reasonably defined based on service characteristics.

Google maintained that adherence to established ratemaking principles requires that LGTODS customers be charged through traditional ratemaking practices (such as a CCOSS), including: (a) determining a total revenue requirement; (b) allocating costs across customer classes in a just and reasonable manner; and (c) designing rates consistent with regulatory standards and state policy objectives [\[119\]](#). Google emphasized that this analysis should occur within a rate case, where the Commission can review a comprehensive cost-of-service study, reconcile prior over- or under-collections, and incorporate plant-in-service costs before allocating revenues among classes.

Additionally, Google noted that actual costs and revenues should be utilized as a basis for ratemaking in subsequent rate cases.

c. True Up Discussion

Regarding a true-up, Google agreed that the use of actual costs and revenues is a just and reasonable approach to ratemaking, and is consistent with longstanding ratemaking practices and the application of CCOSS methodologies relied upon by regulators for decades.^[120]

CloudHQ

CloudHQ agreed with DCC that a full rate case is the appropriate forum to determine whether all costs attributable to large customers are properly assigned to them.^[121]

Geronimo Power

Geronimo observed that it is unclear whether Xcel's current Standby Service Rider would cover co-located generation owned by a third party, as standby service typically applies only to customer-owned generation.^[122] Additionally, the existing Standby Service Rider excludes solar photovoltaic generation and closed to new wind generation,^[123] which could prevent new data centers from using co-located renewable generation, whether customer-owned or otherwise.

Data Center Coalition (DCC)

a. Class Cost of Service Studies

DCC agreed that each customer class should bear the costs Xcel incurs to serve it, and that large customers should neither subsidize nor be subsidized by other classes. DCC noted that adding large customers will put downward pressure on rates by spreading the fixed costs of shared resources and system infrastructure over a larger sales base. It reiterated its support for cost-based rates and for ensuring that large customers, as a class or subclass, fully cover the costs of serving them, including incremental, embedded, and rider-related costs.

DCC indicated that a CCOSS is a tried and time-tested ratemaking tool for ensuring that a class or subclass pays its full cost of service without subsidization from other customers. DCC argued that Xcel can perform such analyses in a rate case to confirm that revenues from LGTODS customers are sufficient to cover the costs of serving that subclass. This approach reflects standard ratemaking practice and does not require "bespoke" customer-specific analyses or individualized surcharges.^[124] DCC also noted that any potential modifications to the CCOSS could be explored to ensure that incremental costs driven by large customers are appropriately assigned to the relevant class or subclass.^[125]

DCC further contended that there is no value in contractually establishing a surcharge in an ESA if that amount may later be modified through a true-up. In DCC's view, a contract that allows

customer-specific charges to change unpredictably over time does not function as a true contract, but rather resembles a tariff applicable to a single customer.

Additionally, DCC argued that the ICT cannot ensure that all costs attributable to large customers are ultimately assigned to them, since such costs evolve over time and can only be accurately determined and allocated in a rate case. While DCC agreed that large customers should bear the costs they cause, it maintained that those costs should be recovered through class- or subclass-based rates, rather than through bespoke, customer-specific charges. Therefore, DCC recommended that the costs of shared system resources be assigned to the large customer class or subclass through a CCOS in a rate case, and not through customer-specific surcharges.

b. Contribution in Aid of Construction (CIAC)

In supplemental comments, DCC noted that Xcel and the OAG cited Xcel's CIAC policies as an example of a ratemaking tool that can result in different charges for customers within the same class without being considered discriminatory.^[126] In response, DCC explained that CIAC charges are used to recover the costs of new facilities dedicated to a single customer, such as non-standard service extensions or transmission upgrades for customers taking service at transmission voltage.^[127] DCC did not oppose assigning the costs of such dedicated facilities directly to the benefiting customer, which aligns with the Interconnection Agreement process proposed by Xcel in this proceeding.

However, DCC emphasized that Xcel has indicated large customers will be served as system customers, with resources treated as system resources. In Minnesota, dedicated facilities serve a single customer, whereas system resources provide benefits to all customers. Accordingly, DCC argued that Xcel's proposal to apply individualized surcharges to large customers based on bespoke ICT analyses is simply not analogous to CIAC charges.^[128]

Clean Grid Alliance (CGA)

a. Interconnection Costs

CGA noted that Xcel did not clearly state whether prospective super-large customers would be responsible for the costs of studies required for interconnection—such as the Facility Study and System Impact Study—indicating only that customers “will be obligated to pay for interconnection cost requirements identified through these studies”—which are estimated to range from \$200,000 to \$350,000.^[129] CGA recommended that the costs of these studies be directly assigned to the Large Load Customer.

b. Cost Allocation

CGA stated that additional guardrails are needed around the ICT. While Xcel indicated that any remaining revenue requirements for newly procured resources would be recovered through exit fees, CGA argued that there may be situations where Xcel remains exposed to significant generation procurement costs. To enhance customer protections and transparency, CGA recommended that the tariff clearly specify how such costs would be allocated—whether through riders, true-ups, or other mechanisms—consistent with the Commission’s existing practices for handling generation cost overruns and prudence reviews.^[130]

LIUNA

LIUNA agreed with DCC and Google that it is important to monitor how Xcel’s projected costs of service compare to actual results.

LIUNA disagreed that Xcel should prioritize interconnection requests based on proposed features like co-location of generation, utility-sleeved power purchase agreements, or demand-side management programs. If such features provide tangible benefits to Xcel’s customers, those benefits should instead be incorporated into the incremental cost of service calculations.^[131]

Additionally, LIUNA disagreed that Xcel’s proposed cost allocation methodology would fail to protect customers from excess costs under any circumstances. LIUNA noted that requiring additional safeguards would effectively be a costly purchase of extra insurance against a very low-risk scenario where a small portion of investments might not be recovered. LIUNA recognized the tradeoff between this additional protection and the potential loss of benefits if data centers relocate outside Minnesota or to a utility not regulated by the PUC.^[132]

XLI

XLI argued that Xcel has not sufficiently explained how the new customer subclasses will be represented in its CCOSS or the mechanics of its proposed cost allocation.

XLI noted that LGTODS and LPCTODS customers have usage characteristics that are distinct from the existing C&I Demand class, including significantly larger overall size, higher load factors, and greater power demand.^[133]

Accordingly, XLI requested that Xcel establish a separate customer class for LGTODS and LPCTODS customers and allocate any incremental revenues in the same manner as Xcel’s production and transmission plant. XLI explained that combining fundamentally different customer types would distort Xcel’s CCOSS results, making it difficult to ensure such customers making it difficult to ensure these customers fully cover their cost of service^[134] and potentially lowering the calculated rate of return for the C&I Demand class. XLI further observed that many other utilities plan to treat very large load customers as separate classes in their CCOSSs.^[135]

Additionally, XLI found Xcel's proposal to allocate large load incremental revenues using base rate revenues to be problematic. Because fuel costs are treated as a pass-through, XLI noted that most incremental base rate costs are directly associated with production and transmission plant and related expenses.^[136] Allocating incremental revenues through base rate revenues, therefore, would violate cost causation principles.

Decision Options

Cost Attribution:

- Approve Xcel's proposed treatment to allocate any additional revenue accruing from the large load customer to all other customers to offset incremental costs. [Xcel Energy]
- Require Xcel to assign the incremental costs of capacity built or procured to serve very large customers to the very large customer class. [OAG]
- Require that each very large customer taking service under the proposed tariffs register with MISO as a separate commercial pricing node and require Xcel to pass through locational marginal price-based charges associated with that node directly to the customer. [OAG]
- Require Xcel to ensure that class cost allocators incorporate very large customer demand by: [OAG]
 - a. Constructing demand allocators using the greater of a very large customer's actual forecasted demand or its minimum billing demand,
 - b. Updating Transmission Cost Recovery (TCR) rider allocation factors with recent forecast data in each TCR rider filing, and
 - c. Allocating Renewable Energy Standard (RES) Rider costs analogously to how those costs are allocated in Xcel's CCOSSES
- Find that Commission approval of proposed very-large-load customer tariffs does not constitute approval of cost recovery from other rate classes. [ELPC/VS]
- Direct Xcel to directly assign the costs of dedicated facilities (e.g., interconnection facilities) to the customer that benefits from them. [DCC]
- Direct Xcel to assign the costs of shared system resources to the large customer class or subclass through a CCOS in a rate case, not through customer-specific surcharges. [DCC]
- DCC takes no position on whether large customers should be designated a separate class or a subclass. Regardless of designation of a separate class or a subclass, large customers

should be treated as a collective group for cost allocation purposes, with costs assigned to the large customer class or subclass as a whole and not on a customer-by-customer basis. [DCC]

- Require Xcel to explicitly state in its tariffs and agreements that the costs of system upgrades or modifications necessitated by the expansion of service to the very large customer will be borne by that entity and not other ratepayer classes. [CUB]

Class Cost of Service / Future Rate Cases:

- Require Xcel to file multiple CCOSSES and revenue requirement proposals in subsequent rate cases representing different treatments of the very large customer class, including ones in which: [OAG]
 - a. Very large customers are included as part of the C&I Demand class for cost allocation and rate design purposes and all resources are treated as system resources (Xcel's preferred version),
 - b. Very large customers are treated as a separate class for cost allocation and rate design purposes and all resources are treated as system resources, and
 - c. Very large customers are treated as a separate class for cost allocation and rate design purposes and costs attributable to very large customers, including but not limited to incremental costs, are directly assigned to this class.
- Address the allocation of costs associated with the new sub-classes in a future rate case. [CloudHQ]
- Require Xcel to conduct a class cost of service study for the large customer class or subclass in each future general rate case. [DCC, Google]
- Assign Large General Time of Day Service rates according to standard regulatory treatment of: [Google]
 - a. Assessing a revenue requirement for all customers,
 - b. Identifying a just and reasonable cost allocation that assigns revenues to the appropriate classes and sub-classes, and
 - c. Designing rates for each class and sub-class in accordance with sound regulatory principles and state policy goals. Actual costs and revenues should be utilized as a basis for ratemaking in subsequent rate cases.

- Direct Xcel to demonstrate in all future rate cases that rates paid by the large customer class or subclass cover the full cost of service, including incremental costs, embedded system costs, and rider costs, and do not result in cross subsidies between customer classes. [DCC]
- Direct Xcel to conduct a class cost of service study for the large customer class or subclass in each future general rate case to ensure that the rates paid by large customers cover the full cost of service. [DCC]
- With respect to the new large class, require Xcel to allocate any incremental revenues collected from new large load customers to customer classes in the same manner as its production and transmission plant. [XLI]
- Require Xcel to submit a new and revised CCOS, either in Docket No. 24-320, or in subsequent rate case dockets, whenever Xcel's incremental peak demand exceeds 250 MW from its previously approved CCOS. [XLI]

True-Up

- Require Xcel to incorporate revised allocation factors into annual rider filings as new very large customers come online. [CUB]
- Require Xcel to track and refund the difference in rider recovery between when a very large customer comes online and when new allocation factors are adopted by the Commission. [CUB]
- Require Xcel to design a sales true-up for the Very Large customer class in its next rate case. [Department]

Staff Analysis

ICT

Staff observed that the structure of Xcel's ICT in this proceeding closely mirrors what was submitted in earlier dockets preceding the construction of data centers for Honeycrisp Power LLC/Google, [\[137\]](#) and Amber Kestrel, LLC/Meta Platforms. [\[138\]](#) As in those prior proceedings, Xcel designated the entire document in the current proceeding as Trade Secret.

In the Google proceeding, Xcel's incremental cost analysis was uncontested by Fresh Energy, Google, or the Department. Similarly, in the Meta proceeding, the Department did not contest Xcel's incremental cost analysis. In both proceedings, the Commission approved Xcel's incremental cost analyses and directed Xcel to provide annual updates of the analysis. [\[139\]](#) [\[140\]](#)

Staff reviewed Xcel's Trade Secret incremental cost analysis figures from its annual updates in the forementioned dockets. While Staff cannot comment on specific numbers, it notes the wide variations that have occurred year over year.

Additionally, Staff notes that HoneyCrisp Power LLC/Google pulled out of the proposed data center project in December 2022, approximately 3 ½ years after Commission approval.

Class Cost of Service Studies

Staff observes that cost studies are only one consideration in the determination of revenue responsibility to classes in rate cases, and like Xcel's proposed ICT, are at best, estimates of the true cost of service. Concurrently, the cost allocation within a CCOS provides a starting point for a discussion of rate design.

The Commission has previously found that "[n]o single cost-study method can be judged superior to all others in all contexts, and the choice among methods involves disputes over assumptions, applications, and data."^[141] In Xcel's previous rate case, the Commission reaffirmed the view that each CCOS model provided useful information and declined to adopt any one model for all purposes.^[142]

Staff notes that Xcel emphasized the resource-intensive process of establishing a new customer class for very large customers, while the OAG noted the significant disparity in annual energy usage between very large customers and the rest of the C&I Demand class, and pointed to examples from other states that have created separate classes for such customers.

Additionally, on March 27, 2026, XLI a decision option, in which Xcel would be required to submit a new and revised CCOS – either in Docket No. 24-320, or in subsequent rate case dockets – whenever its incremental peak demand exceeds 250 MW from its previously approved CCOS. However, XLI did not provide any discussion on the matter in its supplemental comments. The Commission may wish to request further explanation from XLI at the agenda meeting.

True Up

Staff notes that Xcel's proposal would include a true-up mechanism for each ESA submitted to the Commission, but maintained that the timing and specifics would be negotiated with each very large customer by the time the ESA is submitted. The Department observed that the existing sales true-up mechanism may be inadequate, as surcharges are capped at 3%.

Customer Classification

Xcel's Proposal

In its initial petition on July 16, 2025, Xcel proposed to treat LGTODS and LPCTODS customers as incremental sub-classes within the C&I Demand class^[143]. For each customer, the Company will submit detailed projections on demand, energy use, incremental costs, revenues, and system benefits, along with an ESA for Commission review and approval. This process increases transparency and ensures these customers provide net benefits, generating revenues that exceed the incremental costs they impose on the system while protecting existing system customers. In addition, the company proposed Large Peak Controlled Time-of-Day Service tariff and revisions to the Tier 1 Energy Controlled Service rider to provide interruptible rate options for data centers and other Large General Time-of-Day Service customers.^[144]

Xcel stated that establishing these customers as incremental sub-classes within the Demand class offers several advantages: ^[145]

- Ensures consistency in rate design among Demand-billed customers;
- Allows for revenue neutrality across Time of Day rates while shifting a greater share of cost recovery to demand charges and less to energy charges;
- Preserves the ability to adopt a commercial three-period time-of-use rate design in the future;
- Allows for stable, ongoing competitive pricing for new load; and
- Helps create certainty for new large load customers by creating a pathway for immediate rate design development, so customers can evaluate the pricing term of service and make an informed decision to locate in the service territory

Generally, Xcel's proposal is for the rates for new LGTODS and LPCTODS customers would initially align with current General TOD rates. In future rate cases, Xcel would allocate costs using its standard CCOSS approach, including these customers in the C&I Demand class (Transmission or Transmission-Transformed subclasses) and updating allocators to reflect added load. Except for directly assigned transmission interconnection costs, all other costs would be treated as system costs and allocated consistently with existing CCOSS methods. Sales and revenues from these customers would be included in the C&I Demand class. Updated rates would then reflect the revised class revenue requirement, with demand and energy charge splits determined under Xcel's proposed methodology.

In its reply comments, Xcel responded to concerns raised by the OAG, Google, and DCC regarding the treatment of large load customers as incremental subclasses. In particular, the OAG concerns that without creating a separate "large load" customer class in a CCOSS (Cost of Service Study), not all costs especially big ones like generation and transmission would be properly assigned to those customers. The Company argued that using a separate class in the context of a CCOSS wouldn't solve the problem and has some limitations, including challenges

in assessing whether the class or individual customers are covering their incremental costs, as well as administrative difficulties in identifying and assigning those costs^[1].

The Company identified several drawbacks:

- CCOSS requires extensive historical and forecasted data (such as energy data for all 8,760 hours of a year) which does not yet exist for unknown future large load customers. ^[2]
- CCOSS focuses on embedded (existing) costs, not incremental costs. Therefore, it can't accurately show whether large customers are covering the new costs they cause. It might even look like they're underpaying when they're actually covering their incremental costs.^[3]
- It can't track individual customers. Different large customers create different costs, but grouping them into a single class makes it impossible to verify that each is paying in its own way, which could result in intra-class subsidies.^[4]
- It would be extremely complex to implement. Assigning all incremental costs to a separate class would require detailed tracking of many cost components (infrastructure, taxes, depreciation, etc.) and constant updates in every rate case, creating a heavy administrative burden.^[5]

Bottom line, Xcel contended that a separate customer class in traditional cost studies is too blunt and complex. The Company maintained its proposed ICT is a more targeted tool that ensures each large customer pays for the specific costs they create, while treating them as a subclass of the C&I Demand class.^[6]

^[1] Xcel Reply Comments, pg. 22-25

^[2] *Id.*, pg. 25

^[3] *Id.*

^[4] *Id.*, pg. 26

^[5] *Id.*, pg. 27

^[6] See more discussion in the "Incremental Cost Test - ICT" section

OAG

The OAG opposed Xcel's proposal to treat very large load customers as a subclass of the C&I Demand class and instead argues they should be established as a separate customer class ^[147]. The OAG argued that Minnesota law requires very large customers to cover their costs, and the Commission directed Xcel to specify the resources used to serve them. However, Xcel proposed not to isolate or directly assign most costs (other than interconnection), instead treating all resources as system-wide and allocating costs through its standard CCOSS. As a result, costs driven by very large customers cannot be tracked or matched to the Incremental Cost Test, nor

can rates be aligned with the distinct costs these customers impose. The OAG asserted by grouping very large customers within the broader C&I Demand class, Xcel's approach risks shifting higher incremental costs to other customers, especially given that traditional CCOS methods are not designed for transformational load growth like data centers^[148]. To support its argument, the OAG listed similar experience in other jurisdictions shows that embedded cost allocation can obscure and shift costs to other ratepayers ^[149] ^[150]. These challenges are compounded because many costs will be recovered through riders (e.g., RES, FCA, TCR) rather than base rates, making it even more difficult to assess whether very large customers are fully covering the costs they cause.^[151]

In its reply comments, OAG addressed DCC's concern about potential cross-subsidies if revenues exceed costs under the ICT, but in that case only the C&I Demand class would benefit, since costs are allocated across all classes while revenues from very large customers are assigned to the C&I class. The OAG argued the DCC appears to misunderstand what "additional revenues" represent under the ICT. These revenues are required when a very large customer's incremental costs exceed the revenues generated under existing C&I Demand rates, which may not yet reflect the customer's true cost of service. In this case, the additional charge is intended to cover the shortfall and prevent a cross-subsidy from other ratepayers to the very large customer, not create one. The OAG continued that eliminating the ICT as DCC proposed would produce a similar outcome since very large customers pay all costs attributable, including both incremental and a fair share of system-wide fixed costs, consistent with how other customers are treated. Applying a uniform cost test across all customers within a subclass ensures equitable treatment and does not create unreasonable discrimination, even if customer-specific factors (such as usage or demand) result in different cost responsibilities. Thus, OAG concluded that creating a separate class would also ensure these large load customers pay their fair share of embedded system fixed costs in addition to incremental costs.^[152]

In its supplemental comments, the OAG suggested the Commission should consider requiring each very large customer to register as a separate MISO commercial pricing node.^[153] This would allow utilities like Xcel to directly pass through wholesale market costs such as day-ahead and real-time LMP, ancillary services, and MISO charges, ensuring these costs are borne by the customers who cause them rather than being socialized through base rates or the fuel clause adjustment. OAG said This approach has precedent in other states (Alliant Energy, Wisconsin Electric, Missouri Public Service Commission staff's recommendation), where large-load customers must have dedicated pricing nodes to enable precise cost attribution and avoid shifting costs to other ratepayers.

Additionally, the OAG stated that combining very large customers with broader C&I customers obscures whether costs are properly assigned and increases the risk of cross-subsidization. A distinct class would improve transparency, allow better tracking of both incremental and embedded costs, and help ensure these customers pay all costs attributable to their service. It would also reduce the risk that revenue shortfalls from a small number of large customers are shifted to others. Therefore, very large customers should be established as a separate class for cost allocation and rate design.

The OAG further noted that, without a separate class, revenue shortfalls or variability from a small number of very large customers could be shifted to other C&I customers, especially during true-ups. The existing “sales true-up” mechanism could force smaller businesses within the same class to pay significant surcharges to recover missing revenue. Creating a dedicated class would mitigate this risk and support more accurate cost allocation.^[154]

Finally, the OAG argued that Xcel’s rationale for not creating a separate class, that revenues may appear insufficient if both incremental and embedded costs are assigned underscores the importance of proper rate design and is not sufficient justification. Ultimately, separating very large customers into their own class would enhance cost causation, enable more precise cost assignment, and align with practices adopted by other utilities facing similar large-load customer growth.^[155]

Overall, the OAG said that creating separate pricing nodes and a distinct customer class would enhance cost causation, transparency, and fairness in rate design. The OAG recommended the Commission requiring Xcel to create a separate very large customer class for cost allocation and rate design purposes, separate from the C&I Demand Class.

Xcel Large Industrial (XLI)

XLI opposed Xcel’s proposal to treat new large load customers as a sub-class within the C&I Demand class. XLI argued that customer classes should group users with similar characteristics, but data centers are “drastically distinct” from standard industrial users due to their 90%+ load factors; peak demand coincident with system peaks; and service taken at transmission or transformed transmission voltage. Given these distinct characteristics, XLI argued that very large load customers should be established as a separate Large General Time of Day Service class. Many utilities similarly recognize such customers as distinct classes in CCOS studies. XLI said combining these customers with the broader C&I group risks distorting cost allocation and rate design. Any revenue shortfall from large load customers could reduce the C&I class’s realized rate of return, making it difficult to ensure that these customers fully cover their cost of service.^[156]

Department

The Department noted that defining the characteristics of a very large customer class or subclass involves a degree of subjective judgment. However, the Department raises concerns about including very large load customers within the C&I demand-billed class, as doing so could shift significant risk onto smaller C&I customers. Under the sales true-up mechanism, if revenues from a very large customer fall short, due to minimum bills, reduced contract capacity, or exit fees, any resulting shortfall could lead to substantial surcharges across the entire class ^[157]. The Department further noted that the Commission has requested Xcel’s proposal to include provisions ensuring that super-large customers make firm financial commitments to purchasing electricity, thereby protecting other customers from stranded cost risk.^[158]

Accordingly, the Department recommends that the Commission define the “very large customer” class to include only customers taking service under the LGTODS or LPCTODS tariffs.

Google

In its initial comment on October 13, 2025, Google supported Xcel’s proposed Large General Time of Day Service tariff. It stated creating a subclass for customers with peak demand of 100 MW or greater addresses key requirements in Order Point 32 and the Large Load Statute and provides a foundation for addressing cost causation, minimum contract terms, and minimum payments. Google argued these provisions create a sound foundation for a just and reasonable tariff, while ensuring large customers make meaningful commitments that improve load forecasting and protect other ratepayers. It also emphasizes that the tariff should be applied on a non-discriminatory basis, supporting Xcel’s approach to define customers by system usage characteristics rather than industry type, and opposing the creation of a data center-specific rate class. Consistent with established practice, Minnesota does not create separate classes for specific industries. Accordingly, the Commission should approve a non-discriminatory large customer classification, rather than one specific to data centers. ^[159]

In its Supplemental Comments, Google noted that the OAG argues that traditional ratemaking tools, including general rate cases and class cost of service studies, may not adequately protect other customers if large load customers are treated as a subclass within the C&I Demand class. While Xcel proposed the 100 MW+ group as a subclass within the existing Commercial & Industrial (C&I) Demand class, Google stated it “would not oppose” these customers becoming their own entirely separate class, provided the definition remains based on objective service characteristics. ^[160]

Staff Analysis

Staff notes that Xcel’s proposal would place very large customers (100 MW+) into a sub-class within the existing Commercial & Industrial (C&I) demand-billed class. If the Commission were to allow this proposal, it might want to consider that, as a result, standard tariff terms may not adequately address the stranded asset risk associated with a small number of massive data centers, and regulatory oversight would be blended with that of thousands of much smaller businesses.

Industry trends suggest that data center loads are no longer treated simply as industrial load, but rather as a distinct category requiring tailored rate design and regulatory oversight. To better protect other ratepayers, the Commission may wish to consider establishing a separate class for very large load customers. Doing so could improve transparency in cost tracking and allocation for data center-related investments and reduce the risk that infrastructure costs are incorporated into the broader rate base shared by other C&I customers or shifted to residential and small business customers.

The Commission may also wish to request further explanation from Xcel at the agenda meeting regarding the complexity of reliability dynamics between very large load customers and existing C&I customers, as well as the risk that other C&I customers could subsidize the substantial demand of data centers.

Decision Options

1. Approve Xcel's proposed treatment of large load customers under Large General Time of Day Service and the Large Peak Controlled Time of Day Service as incremental sub-classes within the Demand class. (Xcel Energy)
2. Require Xcel to create a separate very large customer class for cost allocation and rate design purposes, separate from the C&I Demand Class. (OAG, XLI)
3. Define the very large customer class to only include customers taking service under either the Large General TOD Service and Large Peak Controlled TOD Service customers. (Department)
4. The Commission should approve the non-discriminatory classification (100 MW and larger) for this large user class or sub-class. (Google)

Or

5. Large load customers (100MW and larger) shall become their own class, rather than a subclass of the C&I Demand class, defined based on its service characteristics. (Google)

Key Terms/ Rate Design

As noted previously, Xcel and other parties debated the following rate design issues within the Large General TOD Service tariff:

- The demand threshold
- Demand charges, energy charges and monthly customer charge.
- Minimum billing and exit fee.
- Changes in contract demand.
- Contract term length.

Size Threshold

a. Xcel

In incorporating the Minn. Stat. § 216B.1622^[162], Order Point 32^[163], and the Minn. Stat. § 216B.1602, subd. 11 ^[164], Xcel proposed tariffs for large load customers with peak electric

demands of 100 MW or more. The eligibility will be based on the interconnection agreement, including any load ramp-up period (up to five years).

To prevent customers from circumventing the threshold, Xcel said it will use reasonable judgment when deciding whether to combine multiple facilities to determine if a customer qualifies for this rate. In making this determination, the Company will consider factors such as whether the projects are proposed in Xcel's Minnesota service area by the same parent company, affiliate, or subsidiary and whether the threshold is met [\[165\]](#).

In its reply comments, Xcel responded to the Department, CUB, ELPC/VS, and CGA concerns about the 100MW threshold. The Company acknowledged that there are other large load tariffs with lower thresholds but argued that the proposed 100 MW threshold is appropriate based on based on industry practices, system impacts, focus on "super-large" customers and alignment with Minn. Stat. § 216B.02, subd. 11 [\[166\]](#). The Company stated that it maintained the standard IRP process and existing tariffs are adequate to manage the impacts of customers between 5 MW and 99 MW, and that the proposal is not intended to address all impactful loads. In response to CGA's suggestion to include customers with high load factors below 100 MW, the Company refused to add a load factor requirement, arguing that costs are driven mainly by capacity needs, rather than load factor, so large customers impose significant cost regardless of usage pattern. By not including a load factor requirement is better protecting other ratepayers and aligning with most existing large-load tariffs. The Company noted that other utilities in different states (Every (Missouri), Georgia Power, Duke Energy (Florida), AEP Ohio, Duke Energy (North/South Carolina), and Duquesne Light (Pennsylvania) have also proposed 100 MW threshold for their large load tariff [\[167\]](#).

The Company agreed to aggregate contracted load to determine eligibility for the 100 MW threshold, to prevent customers from avoiding costs they drive. However, it disagreed with DCC's suggestion on aggregating demand for billing, since demand charges are location-specific and aggregation could under-recover costs [\[168\]](#). Xcel also rejected CUB's recommendation on making aggregation mandatory (e.g., based solely on common ownership), noting that facilities may be in different locations and served by different resources, making aggregation inappropriate in some cases. Because circumstances vary, Xcel asserted that aggregation decisions should be made case by case rather than through rigid rules and that aggregation can be assessed through the existing customer negotiation process. [\[169\]](#)

b. CUB

CUB stated that Minnesota law's definition of "data centers" as facilities with 100 MW or more is mainly used for water permitting [\[170\]](#), not energy regulation. There is currently no clear definition of a "very large customer" under energy law, and the Commission must establish one, raising questioned about Xcel's use of a 100 MW threshold for all large customers. CUB noted that other jurisdictions use lower thresholds (25–100 MW) and that smaller projects can still require significant infrastructure [\[171\]](#). It also argued that relying only on a MW threshold may miss impactful customers and suggested using additional criteria. CUB supported

aggregating related facilities to prevent developers from splitting projects to avoid the threshold but expressed concern that Xcel's discretionary approach is too weak. It also questioned about how Xcel will identify related entities and allocate costs and recommended a broader proceeding to better define "very large customers" and capture high-impact loads below the threshold to ensure costs are not shifted to other ratepayers.^[172]

In its supplemental comments, CUB maintained that 100 MW threshold is insufficient to protect customers from financial risks. CUB emphasized that loads below 100 MW can still require major infrastructure upgrade. Furthermore, CUB also noted that Xcel's argument about 100 MW threshold for large load tariffs is appropriate because other utilities use this level but Xcel did not provide analysis to justify the proposed threshold. CUB argued that, while some utilities do use 100 MW, many others have lower thresholds, typically ranging from 25 MW to 100 MW. CUB mentioned the analysis of 33 large load tariffs by North Carolina's Public Staff found 76% had thresholds below 100 MW.^[173]

CUB added that Minnesota law does not limit protections to "data centers," giving the Commission flexibility to define "very large customers" and set the threshold based on usage and cost impacts, including whether a load poses significant financial risks. These risks can arise not only from 100 MW loads but also from smaller loads requiring major system investments.^[174]

Given these various concerns, CUB recommended a two-tier "system intensive" structure:^[175]

1. 75 MW for determining which new loads are automatically considered very large customers for the purposes of Minn. Stat. § 216B.1622.
2. 50 MW - 74 MW: for customers whose loads may significantly impact the utility system, even if they fall below the automatic threshold. CUB suggested the Commission mirroring Dakota Electric Association's approach, where customers taking service above a certain voltage automatically fall under the large-load tariff, and others can be included if their service requires significant system modifications, design, or engineering. Xcel must file a compliance report for any new customer in this range, explaining whether the customer is "system intensive." System-intensive customers would be treated as very large customers and subject to the large-load tariff. Non-system-intensive customers' filings should explain the determination. Stakeholders and customers could comment under Minn. R. 7829.1400.

CUB stated the issue of aggregating facilities is critical when determining very large customer classifications. Allowing a company to bypass the ratepayer protections of Minn. Stat. § 216B.1622 by splitting projects would be improper.^[176] However, CUB is concerned about letting Xcel have full discretion over these decisions, and stated "it is unclear how the Company would identify the need for aggregation and ensure the costs attributable to the facilities are not borne by other customer"^[177]. Furthermore, in its supplement comments, CUB concerned

about cases where facility ownership changes during the contract term. For example, a third party may build a facility that does not meet the very large customer threshold, but if it is later sold to a company with multiple aggregated premises exceeding the threshold, the aggregation decision may need to be revisited, and a new ESA executed to ensure the correct tariff is applied. While Xcel and the Data Center Coalition said identifying which facilities to aggregate is usually straightforward, CUB agreed there are cases where aggregation may not make sense, such as facilities in different service areas or many small facilities that together meet the threshold [\[178\]](#). Thus, CUB recommended that Xcel file a report whenever a parent company's total load exceeds the threshold and Xcel either chooses not to aggregate, or the customer disagrees. The filing should explain the decision, allowing stakeholders and customers to review it. If both Xcel and the customer agree to aggregate, no separate filing would be needed. [\[179\]](#)

CUB continued that Xcel opposed its initial recommendation for an industry-wide docket to establish standardized terminology, arguing that customer characteristics may vary by utility, though it has supported coordinated processes in other contexts, such as clean energy tariffs. CUB recognized both the need for timely action and the importance of utility-specific considerations. Its proposal for a broader proceeding was intended to create consistent definitions that utilities could incorporate into their individual tariff filings—not to replace utility-specific analysis. While CUB did not oppose proceeding without an industry-wide docket, it is recommended that the Commission take care to establish clear definitions in this proceeding, as they may serve as a baseline for other utilities. Alternatively, the Commission could open staggered dockets for each utility to ensure compliance with the statutory deadline. [\[180\]](#)

c. Department

In its initial comments, the Department raised concern about Xcel applying the Large General TOD Service tariff only to customers with demand of ≥ 100 MW. The Department said the IRP Order#32 directed Xcel to create a new rate class or tariff for “super-large customers” that supports affordability, reliability, and clean energy goals, but it does not define a specific MW threshold for what qualifies as a super-large customer. The Department agreed that ≥ 100 MW data centers qualify as “super-large” but argued that customers in the 5–99 MW range may also have significant system impacts. The Department requested that Xcel clarify how it will treat these mid-sized large customers, whether under existing tariffs, the proposed tariff, or through a new tariff structure. [\[181\]](#)

In its Supplemental Comments, the Department maintained its initial concern regarding the large load customer threshold, although Xcel emphasized that established processes address customers of varying sizes, including large load customers under 100 MW, and that its Integrated Resource Plan (IRP) accounts for the impacts of new load. Specifically, the Department believed that customers under 100 MW could disproportionately affect affordability, reliability, and clean energy goals, particularly if Xcel's petition is approved. Under the proposed rate design, these customers may be incentivized to develop data centers just below the 100 MW threshold to avoid stricter terms applied to very large users. To address this

concern, the Department recommends that the Commission either expand the petition to include customers well below 100 MW or require Xcel to create an additional Large Load General (TOD) tariff for customers between 5 MW and 100 MW.^[182]

d. Google

Google generally supported Xcel's proposed Large General Time of Day Service Tariff, stating that the 100 MW threshold aligns with both Commission's Order Point 32 and the Large Load Statute (Minn. Stat. § 216B.1622 regarding "very large" customers class.^[183] It noted that the 100 MW baseline is consistent with emerging industry standards and similar large-load tariffs approved or pending in other states, such as Indiana, West Virginia, Kansas, Virginia, Missouri. Google emphasized that the 100 MW threshold should be applied in a non-discriminatory manner based on service characteristics and demand size rather than the specific end-use of the power.^[184]

e. Data Center Coalition (DCC)

Data Center Coalition supported Xcel's proposal 100 MW, stating that this approach aligns with both the Commission's IRP Order, which references "super-large customers," and Minn. Stat. § 216B.1622, subd. 2, which refers to "very large customers". DCC noted on the increase in data center demand and it should be viewed within the broader context of substantial long-term growth in electricity demand. Although DCC agreed with Xcel that most customers exceeding 100 MW are data centers, tariffs should be based on the costs customers impose on the system rather than their end use. To avoid discrimination and ensure preparedness for diverse future load growth, DCC emphasized that the threshold should be applied to all new customers meeting the size requirement regardless of their industry to remain non-discriminatory^[185]. DCC also supported limiting the new Large General Time of Day Service to customers initiating service after the tariff's effective date, as well as to existing customers that expand load under new agreements. This approach is consistent with Minn. Stat. § 216B.1622, subd. 3, and fairly allows existing customers, who have already made significant investments in Minnesota, to continue operating under their current rate structures and agreements.^[186]

In its reply comments, DCC responded to CGA's argument about data centers have high, steady load factors, similar C&I customers should also be eligible for Large General TOD and Large Peak Controlled TOD tariffs. DCC said tariffs should be designed based on the costs that customers impose on Xcel's system, not based on the purpose for which customers use electricity. DCC added it did not oppose optional access for smaller customers but opposed requiring customers under 100 MW to take service based solely on load factor ^[187]. DCC's main concern was that targeting high load factor customers effectively singles out data centers based on their business model rather than actual system costs. This approach conflicts with Minnesota law, which requires Customer classes to be based on size (not load characteristics), and Rates to avoid unreasonable discrimination. Therefore, DCC recommends rejecting CGA's proposal to expand tariff applicability based on load factor.^[188]

DCC did not oppose aggregation in principle and agreed it can be reasonable to treat a customer as a single large user even when operating multiple premises below the 100 MW threshold. However, DCC mentioned if aggregation of customer sites for purposes of meeting the 100 MW threshold occurred, the actual measured demand of all premises should be aggregated for purposes of calculating the customer's demand charge (including any minimum bill based on contracted capacity). DCC also opposed granting Xcel unilateral discretion to decide when aggregation applies, particularly given concerns that such discretion combined with the proposed ICT, could result in unfair surcharges through ESAs. Accordingly, DCC recommended that the Commission allow customers to seek review of any Xcel determination to aggregate their premises for purposes of applying the Large Peak Controlled Time of Day Service Tariff.^[189]

f. LIUNA

LIUNA supported the proposed 100 MW threshold and opposed lowering it. LIUNA stated that Minnesota lawmakers deliberately set this benchmark in House File 16 to target larger data centers and related policy impacts. LIUNA argued that any new load can affect the system, focusing regulatory efforts on smaller additions, incremental loads in the 5–99 MW range, would be inefficient and inconsistent with the state's goal of promoting electrification.^[190]

g. The Environmental Law & Policy Center and Vote Solar (ELPC/VS)

In its initial comments on October 13, 2025, ELPC/VS noted that while the statute defines “data centers” as loads of 100 MW or greater, it does not apply this threshold to all “very large” or “super-large” customers. On the other hand, ELPC/VS concerned that the 100 MW cap may incentivize customers to remain below that level to avoid tariff requirements, despite still having significant system impacts^[191]. ELPC/VS encouraged the Commission to consider a lower applicability threshold, such as 50 MW. To support its recommendation, ELPC/VS mentioned an ongoing proceeding in Illinois, ComEd, has proposed a 50 MW threshold.

ELPC/VS also raised concerns about potential disaggregation of facilities to circumvent the threshold, particularly given Xcel's broad and undefined discretion over aggregation.

In its supplement comments, ELPC/VS stated Xcel provided the comparisons to other utilities that have selected a 100 MW threshold for their large-load tariffs but that did not justify its proposed 100 MW threshold. ELPC/VS said data from the DELTA database shows that most approved large-load tariffs have thresholds below 100 MW. ELPC/VS also noted that while Xcel acknowledges customers above 100 MW have greater system impacts but did not explain why this justifies the specific threshold, leaving uncertainty and reinforcing the need to further examine large-load interconnection standards.^[192]

ELPC/VS provided example thresholds from nearby Midwest utilities, as shown in table 10 below. Most utilities use thresholds under 100 MW, and in one case (Ameren Missouri), regulators reduced a proposed 100 MW threshold to 75 MW.

Table 10 - Midwest utilities Applicability Thresholds^[193]

State	Utility	Applicability Threshold	Status
IL	Commonwealth Edison ²⁹	50 MW	Proposed
MI	Consumers Energy ³⁰	100 MW	Approved
OH	AEP Ohio ³¹	25 MW	Approved
MO	Ameren Missouri ³²	75 MW	Approved

Thus, ELPC/VS argued this supports lowering the very large customer threshold and maintained its initial recommendation to a lower applicability threshold, such as 50 MW.

h. Clean Grid Alliance (CGA)

In its comments on October 13, 2025, CGA said that the Large General Time-of-Day tariff should not be limited to customers with demand ≥ 100 MW, instead, it should also include smaller C&I customers with similarly high load factors. CGA noted that the Company's analysis assumes a 90% load factor, but the tariff itself did not define or require a specific load factor. Because data centers—regardless of size (e.g., 5–100 MW)—share consistently high load factors and flat load profiles, they impose similar operational demands on the system.^[194] Therefore, the proposal contends that tariff design should be based on these operational characteristics (i.e., steady, high-load usage) rather than an arbitrary 100 MW size threshold.

CGA did not set a specific demand threshold or load factor but encouraged the Company to lower the load threshold and make both large load tariffs available to C&I customers with high load factors, as seen in other jurisdictions.^[195] CGA provided examples below to support its concerns:

1. Dominion Energy Virginia: proposed a new rate class for customers ≥ 25 MW with load factors of at least 75%.
2. Indiana Michigan Power: offers large load tariff to customers ≥ 70 MW
3. Consumers Energy intervenors advocating 25 MW threshold instead of 100 MW.

In its reply comments, CGA stated it shares a similar point of view with the Department, CUB, and ELPC/VS, and continued to advocate for lowering the 'very large customer' threshold and for considering load factors when determining eligibility.^[196]

i. Xcel Large Industrial (XLI)

XLI did not provide comments or analysis regarding its position on Xcel's proposed threshold for 100 MW+ loads during the parties' comment period. However, on March 27, 2026, XLI filed its decision options, recommending that the size threshold for the new very large customer class be set at customers with a peak demand at a single site of 250 MW or more.

j. Staff Analysis

In supporting the Commission better review the national average threshold for large loads, Staff examines the recent DELTA database of Emerging Large-Load Tariffs (DELTA), an excel report listing 75 + tariffs for large load customer sector [\[1\]](#). The database shows that many states moved toward load threshold in the 20 MW to 50 MW range. In addition, the discussions at the Midcontinent Independent System Operator (MISO) Large Load Workshop in January 2026^[2] and MISO Planning Advisory Committee meeting in February 2026^[3] focused on evolving definitions of large load size across the industry, including those used by MISO, NERC, ANOPR, PJM, SPP, ERCOT. These discussions reflect a range of thresholds from 10+MW to 75+MW threshold. They also included MISO's draft proposal of a 50MW+ threshold and the pending Federal Energy Regulatory Commission (FERC) docket No. RM26-4-000^[4], which included an Advance Notice of Proposed Rulemaking (ANOPR) addressing potential reforms related to how large loads, generally defined as electricity demand 20 MW+ interconnect to the transmission system. Staff notes that, compared with national average for new large load threshold from other states and Regional Transmission Organizations (RTO) discussions, the proposed 100MW threshold is relatively high.

Staff agrees with CUB that setting the threshold should be based on usage and cost impacts, including whether a load poses significant financial and reliability risks. These risks can arise not only from 100 MW loads but also from smaller loads requiring major system investments. To better understand average peak demand and energy usage in the Xcel's territory, and to support the Commission's decision-making on an appropriate threshold in Minnesota, staff requested in Information Request MPUC-001 (IR#1) that Xcel Energy provide data on its top 10 existing customers. This included the number of customers with the highest annual peak load averaged over three years, along with their monthly peak demand (MW), monthly energy usage. Xcel provided a trade secret report identifying existing large-load customers by annual peak demand for those exceeding 100 MW, 75 MW, 50 MW, and 25 MW^[5]. Staff notes that over the past 3 years, Xcel has had one customer consistently with annual peak demand between 50MW and over 100MW, and 5 customers with load exceeding 25MW. Historical performance indicates the Company's ability to provide reliable service for load 100MW+ and suggests it had already addressed some technical challenges associated with that specific load size. However, throughout the proceeding, parties have expressed concern about the uncertainty with large and sensitive fluctuations like data center. To address those concerns, the Commission may wish to further examine more into Xcel's interconnection process^[6] at the hearing; and if transmission upgrades are needed, they must go through MISO's transmission expansion planning (MTEP) process^[7] which is only briefly discussed in this proceeding.

Given the ongoing interconnection bottlenecks ^[8] affecting renewable projects, many of which are currently stalled in the queue, approval of large loads (100 MW+) raises reliability concerns. The Commission may wish to request further explanation from Xcel how the company guarantees sufficient additional power to serve these customers without adversely affecting other rate classes. Given the current lack of information, the Commission may consider starting

with a lower than 100MW threshold to support interconnection reliability and protect other ratepayers.

Finally, staff notes that XLI filed decision options on March 27 2026, proposing a threshold 250MW but did not provide any discussion on this matter during the comments period. The Commission may wish to request further explanation from XLI at the hearing.

^[1] <https://sepapower.org/large-load-tariffs-database/> : 75+ tariffs across the U.S. for large load

^[2] [MISO's January 30, 2026 Large Load Additions Workshop](#): various definitions of large load size from 10MW+ to 75MW+

^[3] [MISO's February 25, 2026 Planning Advisory Committee](#): MSIO proposed threshold 50MW+

^[4] <https://www.ferc.gov/rm26-4>: DOE Section 403 proposal asking FERC to consider reforms related to large load interconnections through an ANOPR for new large load 20MW+

^[5] Information request MPUC-001 (IR#1) – April 16, 2026

^[6] Xcel Petition, Attachment H, Interconnection Agreement (IA) – Also See Interconnection Agreement section of this briefing papers.

^[7] Geromino Power Comments, pg. 8-9

^[8] For the parties' discussion of this issue, see the discussions from parties on Interconnection Bottlenecks issues section of this briefing papers (CUB, CGA, Geromino Power, Tract)

k. Decision Options

1. Approve the Company's proposed application of the tariffs to new loads sized 100 MW or greater. (Xcel Energy, Google, Data Center Coalition, LIUNA)
2. Establish an applicability threshold that treats new loads of at least 75 MW as "very large customers" that must receive service under Xcel's Large General Time of Day Service Tariff or Large Peak Controlled Time of Day Service Tariff. (CUB)
 - a. Establish a "system intensive" threshold that allows new loads of at least 50 megawatts or more to be considered for inclusion as "very large customers" if they are expected to have an outsized impact on the Company's system.
 - b. Require Xcel to submit a compliance filing whenever a customer meeting or exceeding 50 MW of load—but falling below the automatic applicability threshold—seeks to interconnect to the Company's system. As part of this filing, Xcel must explain its reasoning for whether the new customer is "system intensive." System intensive customers are those that will require significant

system modifications, design, engineering, or other expenditures prior to receiving service. [CUB]

- c. If a customer is designated as system intensive, they will be treated as a “very large customer” for the purpose of Minn. Stat. § 216B.1622 and will be required to take service under Xcel’s Large General Time of Day Service Tariff or Large Peak Controlled Time of Day Service Tariff. (CUB)
3. Established size threshold to 75 MW and consider load factor criteria in making eligibility determinations under the Tariff. (CGA)
4. Confirm that the large customer class or subclass is defined based on customer demand (over 100 MW) and not based on load factor or business type. (DCC)
5. Modify Xcel’s petition to include large load customers that are significantly less than 100 MW. [Department]

Or

6. Require that Xcel propose another Large Load General (TOD) service tariff(s) for a subclass of Large Load Customers that are larger than 5 MW and less than 100 MW, in addition to the proposed tariffs for Very Large customers. (Department)
7. Require Xcel Energy to adopt a lower applicability threshold, such as 50 MW. (ELPC/VS)
8. Set the size threshold for the new very large customer class as those customers with a peak demand at a single site of 250 MW or more. (XLI)
9. Require the Company to submit a compliance filing any time the total load of a parent company and its subsidiaries exceeds the applicability threshold for very large customers, and either the Company chooses not to aggregate facilities or the customer disputes the Company’s aggregation determination. The compliance filing should explain and justify the Company’s aggregation decision. If both of the Company and the customer agree to aggregate, no separate filing would be needed, as information on that determination would be included with the ESA. (CUB) [\[198\]](#)
10. Allow customers to seek review of any Company determination to aggregate their premises for purposes of applying the Large Peak Controlled Time of Day Service Tariff. (DCC) [\[199\]](#)

Demand charge, Energy charge, and Customer Charge

a. Xcel's Proposal

Xcel proposed redesigning its Large General TOD and Large Peak-Controlled TOD rates, which shift more cost recovery through demand charges and less cost recovery from energy charges [\[200\]](#). Xcel stated this approach promotes cost recovery stability and creates a higher and more reasonable basis by which the Company can assess capacity reduction and exit fees. This design also helps to protect other customers from revenue erosion due to lower off-peak usage over [\[201\]](#).

Energy Charge: Xcel explained, normally, plant stratification allocates fixed generation costs into capacity- and energy-related portions using a combustion turbine (CT) benchmark. The split costs defined as below:

Capacity-related costs (for meeting peak demand): Fixed costs equal to or less than a comparable combustion turbine (CT) peaking plant are classified as 100% capacity related

Energy-related costs (for producing electricity over time): Fixed generation costs that exceed the cost of a comparable CT peaking plant are sub-functionalized as energy-related.

By removing the stratification process from the rate design, fewer costs are classified as energy-related, resulting in lower energy charges (\$/kWh). Correspondingly, more costs are classified as demand-related, leading to higher demand charges (\$/kW).

Xcel explained the Real Time Pricing customers paid the fuel clause like all other retail customers. According to Xcel, the proposed base rate energy charges do not recover marginal energy or fuel related costs. Xcel noted that Large Data Center customers will be exempt from the Company's Energy and Conservation Optimization (ECO) plan according to Minn. Stat. § 216B.241, subd. 1.a(a). Customers qualifying for this exemption will see the exemption reflected on their bill and in the revenue calculation of in the ICT that the Company prepares to support the ESA and IA with the customer.⁴ Xcel explained that because it serves its customers with owned and contracted resources, its customers are not materially exposed to energy market prices

Demand Charge: Xcel said any costs not recovered through the customer charge or the energy charge will be recovered via the demand charge, ensuring the Company collects the same total revenue as if Large General Time of Day Service customers were billed under standard General Time of Day Service rates. The analysis assumes no changes to the customer charge to achieve revenue neutrality prior to accounting for incremental customer charge costs [\[202\]](#). Xcel provided Attachment I to support how it calculated the energy and demand rates for both transmission and transmission-transformed services.

Customer Charge: For its proposed customer charge, the Company conducted an incremental internal labor study to quantify the additional ongoing time required for Economic Development, Account Management, and Billing activities associated with a Large General Time of Day Service (LGTODS) customer, relative to a standard General Service customer. Based on this analysis, the Company proposed directly assigning these incremental costs to LGTODS customers through a customer-specific charge. This approach is intended to ensure that costs are recovered from the customers whose increased load drives the need for additional labor resources. Any remaining costs not recovered through customer or energy charges would be collected through demand charges.^[203]

As shown on table 11, Xcel proposed a monthly customer charge of \$9,000.00, significantly higher than the standard charge of \$29.98^[204].

Table 11: Large General Time of Day Service Rate Design Customer Charge Analysis Cost^[205]

Large General Time of Day Service Customer Charge Analysis	Monthly Cost
Incremental Economic Development Costs	\$6,200
Incremental Account Management Costs	\$1,400
Incremental Billing and Billing Support Costs	\$1,400
Total Monthly Customer Related Costs	\$9,000

b. Department

The Department reviewed the “plant stratification” methodology in Xcel’s work papers^[206] but raised concerns regarding Xcel’s proposal to remove the Plant Stratification process or determining the energy charge under the Large General TOD Service tariff.

Energy Charge: The Department acknowledged that eliminating Production Plant and Production Plant O&M Stratification would limit energy charge recovery to variable fuel costs. These energy costs are based on the most recent forecasted fuel rates and estimated customer usage. Xcel’s energy charge primarily recovers variable energy costs, largely derived from forecasted fuel rates from its last rate case (Docket No. E002/GR-21-630). The Department expressed concern about the impact of Large General TOD Service customers on actual real-time market fuel rates, particularly during peak periods, as their usage could significantly affect marginal energy costs. If marginal energy costs exceed the revenues collected from these customers, other non-data center customers could be adversely affected. Accordingly, the Department suggested considering an energy charge tied to day-ahead market prices and/or a Real-Time Pricing (RTP) rate. Xcel’s Advanced Metering Infrastructure (AMI) should support linking rates to MISO energy prices.^[207] The Department also noted that costs for company-

owned and contracted resources are intended to be recovered through the demand charge, not the energy charge. While it remains concerned about the potential impact of large-load customers on real-time fuel costs reflected in the fuel clause, the Department did not oppose Xcel's methodology of removing Production Plant and Production Plant O&M Stratification ("Plant Stratification") in designing energy rates for the Large General TOD Service class.^[208]

Demand Charge: The Department understood Xcel's proposed methodology for determining the demand charges. The Department did not oppose this methodology for determining the demand charge for the Large General TOD Service tariff. Department recommended approval of the methodology for determining the Demand Charge but stated it would review the final rate in the event Xcel changes how it has determined the customer and/or energy charge.^[209]

Customer Charge: The Department supported Xcel's approach to ensure Large General TOD Service customers are charged for the incremental labor required to serve their additional load. The Department requested that Xcel provide comments in reply with a detailed account of services under Economic Development, Account Management, and Billing Support, including the methodology for estimating total monthly hours for each category. Based on Xcel's explanation about the methodology, the Department supported Xcel's methodology for setting the customer charge under the Large General TOD Service tariff as these services are necessary and the hours reasonable.^[210]

c. OAG

The OAG mentioned standard cost allocation methods already tend to under-attribute costs to very large customers. Under Xcel's proposals, the very large load customers may pay even less than the allocated costs due to mechanisms like the Competitive Response Rider (CRR), Energy Charge Credit (ECC), and potentially interruptible load discounts. The OAG noted that the Energy Charge Credit (ECC), a credit for high-load-factor customers developed to compensate for the stratification method, becomes unnecessary and was eliminated from the proposed tariffs because stratification was removed. Overall, The OAG said combined, the CRR, ECC, and other discounts mean that very large customers may pay substantially less than their cost responsibility, shifting the burden to other customer classes. This creates uncertainty and potential inequity for residential and small business ratepayers.^[211]

d. Google

Google supported the shift, noting that the "straight fixed-variable approach" is reasonable because the minimum demand charges will be directly associated with the generation capacity Xcel must maintain to provide reliable service. This approach meets Order Point 32's goal of protecting against stranded costs by ensuring customers commit financially to a minimum level of electricity consumption Google proposed that the tariff should be modified to clarify that Large Load Customers will be subject to minimum demand charges, but not minimum energy charges.^[212]

e. Data Center Coalitions (DCC)

DCC agreed with Google that establishing a minimum bill based on demand charges for large customers is appropriate. DCC concurred that minimum energy charges are inappropriate, as they could require a customer to pay for costs the utility did not actually incur. DCC recommended that the Commission clarify that the minimum bill provisions in the Large General Time of Day Service and Large Peak Controlled Time of Day Service tariffs apply only to demand charges and not to energy charges.^[213]

f. CloudHQ

CloudHQ opposed the shift and stated that the Company's proposed rate design for large customers deviates from its standard methodology for the "Demand Billed Class". This deviation is not cost-based but designed to increase revenue through minimum demand charges, exit fees, and capacity reduction charges. CloudHQ argued that this approach is discriminatory, inconsistent with cost-of-service principles, and could penalize large customers without justification. They contend the design is not based on cost causation but is specifically intended to maximize termination penalties.^[214]

g. Staff Analysis

Staff notes that, overall, most parties support Xcel's straight fixed-variable rate design, with clarifications to prevent including energy charges. Staff concurs with the Department's recommendation, as minimum demand charges will be embedded. Staff further notes that minimum demand billings are necessary to protect utilities from stranded costs and to ensure that other ratepayers are not financially burdened.

h. Decision Options

1. Approve the Company's proposed rate design and methodologies for determining the customer, demand, and energy charge for Large General Time of Day customers. (Department, Xcel Energy)
2. The tariff should be modified to clarify that Large Load Customers will be subject to minimum demand charges, but not minimum energy charges. (Google, DCC)
3. Require the Company design the rates for these new sub-classes consistent with cost causation. (CloudHQ)
4. Find that customers taking service under the proposed tariffs are not eligible for the competitive response rider (CRR). (OAG)

Minimum Billing and Exit Fee

a. Xcel's Proposal

Exit Fee: Xcel Energy provided the proposal if a customer terminates early, they must provide at least 24 months' notice and pay an exit fee. The fee is designed to recover lost revenue from minimum demand charges and remaining incremental generation costs. It is generally calculated as 75% of current demand charges over the lesser of 10 years or the remaining contract term, with any additional required revenues included. [\[215\]](#)

Minimum Bill: Xcel's proposed tariff requires that a Large General Time of Day Service customer pay a minimum bill of at least 75 percent of its contracted demand for the full term of the ESA. Should the Large General Time of Day Service customer terminate the contract early, it will be required to pay an exit fee which includes the full amount of the minimum bill through the remainder of the contract term [\[216\]](#). To ensure large customers honor potentially significant financial commitments, the tariff requires sufficient security and collateral (e.g., parent guarantees, letters of credit). Xcel said the specific terms are customized in each customer's ESA based on their financial situation and submitted for Commission review. The Retail Customer Form ESA [\[217\]](#) provides examples of acceptable security and risk mitigation measures. These provisions reduce stranded asset risk and comply with Commission and Minnesota legislative requirements, ensuring other customers are protected from costs associated with unfulfilled large customer commitments. The minimum bill is calculated by multiplying the 75% capacity floor by the effective monthly demand charge, plus the effective monthly customer charge (\$9,000) and other applicable tariff-related charges. [\[218\]](#) Xcel stated that its proposed termination fee structure reflects market conditions based on discussions with large customers and that the recommended 85% of contract capacity is not aligned with those conditions, while 75% still provides sufficient customer protection. It also noted it would justify specific ESAs in future filings. To support its claim that 85% or higher does not reflect market conditions, Xcel cited Google's support and noted that minimum demand charges of 70% to 80% have been approved by commissions in several states and proposed in others. [\[219\]](#)

b. Department

Exit Fee: The Department asked Xcel to justify why the exit fee is calculated using the lesser of 10 years or the remaining ESA term, and to explain why limiting the calculation to 10 years is reasonable when more than 10 years remain on the contract, Xcel responded:

The Load Ramp Period shall not exceed five (5) years. The minimum Term of the ESA is 15 years. The 15-year Term minus the five (5) year Load Ramp Period, leaves a 10-year maximum available period to assess an exit fee. [\[220\]](#)

The Department does not believe the "lesser than" language in sections 16.2 and 16.3 meet the statutory requirements of Minn. Stat § 216B.1622. The Department requested that Xcel

revise this language by removing the lesser option for 10 years (120 months) and instead state the exit fee is payable for the remaining term of the ESA. [\[221\]](#)

The Department was also concerned by the provisions in Article 16.3 of the ESA. The Department raised concerns that Xcel's general commitment to justify future ESAs is insufficient for approving the current proposal, that no verifiable evidence was provided to support the claimed market conditions, and that Minnesota law requires all costs attributable to very large customers to be assigned to them. The Department also notes Xcel cited no statutory basis for tying cost recovery protections to market conditions. As a result, the Department concludes the "lesser than" language does not meet statutory requirements and recommended revising the ESA to require a higher recovery level, such as 85% or more of contract capacity

Below are Department's recommendations to modify section 16.2 and 16.3 of the Retail Customer Form ESA as follows:

16.2 Contract Capacity Reduction Payment. In the event of Customer Contract Capacity Reduction under Section 3.3 and subject to the Termination Notice required in 16.1(ii), Customer shall pay to Company an Early Contract Capacity Reduction Payment as of the date of the Customer Notice of Capacity Reduction, calculated as follows: In addition to any revenue or other fees that may be due and owing, Customer shall pay within 30 days of the Termination Date the total of (i) the difference between the effective Contract Capacity and reduced Contract Capacity or the difference between the effective Load Ramp Capacity and reduced Load Ramp Capacity multiplied by (ii) the current effective Tariff rates on peak demand charges contained in Exhibit C multiplied by (iii) ~~not less than eightyseven~~ five percent (8575%)* multiplied by (iv) the "Termination Fee Period," defined for this Section 16.2 as ~~the lesser of~~ the remaining contract months in Article 10 ~~or 120 months from the date of the Termination Notice~~, as liquidated damages and not as a penalty.

*The final customer-specific percentage of the "Termination Fee Period" is subject to approval by the Minnesota Public Utilities Commission.

16.3 Exit Fee. In the event of termination by Customer under Section 16.1 (ii)(b) and termination by Company due to Customer breach under 16.1(iii), Customer shall pay to Company an Exit Fee (a) in the case of termination pursuant to 16.1(ii)(b) 24 months from the date of the Termination Notice, or (b) in the case of termination pursuant to 16.1(ii) within 30 days of the Termination Date, calculated as follows: In addition to any revenue or other fees that may be due and owing, the total of (i) the current effective Tariff rates on-peak demand charges contained in Exhibit B multiplied by (ii) ~~not less than eightyseven~~ five percent (8575%)* of the Contract Capacity multiplied by (iii) the "Termination Fee Period" defined for this Section 16.3 as ~~the lesser of~~ the remaining contract months in Article 10 ~~or 120 months~~, as liquidated damages and not as a penalty.

*The final customer-specific percentage of the “Contract Capacity” is subject to approval by the Minnesota Public Utilities Commission.

The Department recommends the Commission modify Xcel’s proposed Large General Time of Day Service (Rate Code AXX) and the Large Peak Controlled Time of Day Service (Rate Code AXX) as follows:

9. Exit Fee and Contract Capacity Reduction Payment. Early termination or Contract Capacity reduction shall incur fees calculated as the total of (i) the Effective Contract Capacity multiplied by (ii) the on peak demand charges contained in this rate schedule multiplied by (iii) ~~not less than eighty~~ ~~seventy~~ ~~-five percent (8575%)*~~ multiplied by (iv) the “Termination Period,” defined as ~~the lesser of the remaining contract months of the ESA Term. or 120 months from the date of the Termination Notice as defined in the ESA.~~

~~*The final customer-specific percentage of “Termination Period” is subject to approval by the Minnesota Public Utilities Commission.~~

Minimum Billing: In its comments the Department said although it supported the methodology for determining demand charges but expressed its concern that Xcel’s proposed minimum bill of 75% of its contracted demand may not be sufficient to protect Xcel’s other customers given the potential large loads of these customers.^[222]

The Department provided recent Commission Orders in Indiana, West Virginia, and Utah were based on Stipulated Agreements between the parties. Similarly, Kansas, and Missouri approved settlement agreements. Each of these agreements included provisions for minimum monthly bills^[223].

The Department provided observations on minimum demand and minimum bills:

Comparison the mentioned 5 states, it was contrary to Google’s claim that minimum demand charges of 70–80% have been approved broadly:

Kansas and Missouri: Commissions approved 80% of contract demand.

Indiana and West Virginia: Stipulated not less than 80%.

Utah: Sets 75% for large load customers with <200,000 kVA Reserved Capacity. For ≥200,000 kVA, minimum on-peak power charges are negotiated via special contracts. Appropriate charges for new or growing large customers ≥200,000 kVA are addressed in Utah’s Investigatory Docket on Rocky Mountain Power Line Extension Policy.

All five states approved settlement agreements between parties.

The Department stated that no current discussions exist in this proceeding regarding a settlement. Thus, any future settlement must comply with Minn. Stat § 216B.1622,

subd. 2, ensuring that all costs for very large customers are assigned to that customer class. The Department asserted that minimum bills at 80% do not fully address the remaining 20% of costs for very large customers.^[224]

The Department noted that Indiana, West Virginia, Kansas, and Missouri included detailed additional charges in the minimum bill.

The Department noted that Minn. Stat § 216B.1622, subd. 2 requires costs for very large customers to be assigned appropriately but Xcel’s language only references “effective customer charge and other applicable tariff-related charges”, which is less detailed. The Department pointed out that Xcel has not cited statutory support for linking security and risk mitigation measures to “market conditions.”

The Department recognized that allocating all costs for very large customers is complex and wants to understand Xcel’s proposed cost allocation and ICT implementation. To ensure fairness, the Department recommended the Commission allow stakeholders to provide input on the minimum bill during later proceedings for customer-specific ESAs for large load customers. These modifications aim to align Xcel’s minimum bill with statutory requirements and best practices observed in other states.

Accordingly, the Department recommended modifications to Xcel’s proposed minimum bill language for the following:

Energy Service Agreements (ESA): section 3.3 of Xcel’s proposed Retail Customer Form ESA.^[225]

*3.3 Minimum Bill. Upon Company Facilities achieving the technical requirements for energization, and no later than the Customer Load Ramp period start date documented in Exhibit D, the Customer is subject to a monthly minimum bill shall ~~not be less than of equal to~~ the greater of (i) on peak period demand to be billed, or (ii) ~~eightyseventy-five~~ percent (~~8575~~%) * of either (a) the Load Ramp Capacity as provided in Exhibit D or (b) the Contract Capacity as provided in Exhibit E (as applicable), multiplied by the effective monthly demand charge plus the effective customer charge and other applicable Tariff related charges.*

**The final customer-specific percentages of either the “Load Ramp Capacity” or the “Contract Capacity” are subject to approval by the Minnesota Public Utilities Commission.*

Large General Time of Day Service (Rate Code AXX) and Large Peak Controlled Time of Day Service (Rate Code AXX):

Adjusted On Peak Period Demand in kW for billing purposes shall be determined by dividing the Maximum Actual On Peak Period Demand by the power factor expressed in percent but not more than 95%, multiplying the quotient so obtained by 95%, and rounding to the nearest whole kW. In no month shall the on peak period demand to be

billed be less than the current month's Adjusted On Peak Demand in kW, or ~~8575~~% of the Load Ramp Capacity or Contract Capacity as defined for that time period in the ESA.*

**The final customer-specific percentages of either the "Load Ramp Capacity" or the "Contract Capacity" are subject to approval by the Minnesota Public Utilities Commission.*

Customer Load Ramp and Minimum Bill:

The maximum Load Ramp Period is up to five (5) years. Pursuant to the ESA, in each month after Company's Facilities are capable of energization, the Customer will be billed not be less than the greater of: (a) the on peak period demand; or (b) ~~8575~~% of the Load Ramp Capacity, multiplied by the effective monthly demand charge plus the effective customer charge and other applicable Tariff related charges, as calculated pursuant to the Terms and Conditions of Service herein. After the Load Ramp Period, the Customer will be billed not be less than the greater of: (a) the actual metered on peak period demand to be billed; or (b) the Adjusted ~~8575~~%* of the Contract Capacity, multiplied by the effective monthly demand charge plus the effective customer charge and other applicable Tariff related charges.as calculated pursuant to the terms and Conditions of Service herein.*

**The final customer-specific percentages of either the "Load Ramp Capacity" or the "Contract Capacity" are subject to approval by the Minnesota Public Utilities Commission.*

Terms And Conditions Of Service

10. Security/Risk Mitigation: At a minimum, the following security and risk mitigation requirements will be included in the ESA.

a. Sufficient credit support;

b. Minimum On Peak Demand Charges. The Minimum On Peak Demand Charges during and after the Load Ramp Period shall not be less than the greater of (i) on peak period demand to be billed or(ii) ~~8575~~% of the Effective Contract Capacity, multiplied by the effective firm demand charge during the month for which the bill is rendered.*

**The final customer-specific percentages of either the "Load Ramp Capacity" or the "Contract Capacity" are subject to approval by the Minnesota Public Utilities Commission.*

c. OAG

The OAG disagreed with Xcel's proposed exit fee which set a 75% of demand charges for up to 10 years or the remaining ESA term and the 75% minimum billing rate. The OAG stated that the Company failed to provide analysis demonstrating that these terms would protect other customers from the risk of stranded costs, as claimed. It also noted that these fees are on the low end of the range compared to other utilities' large-load tariff terms^[226]. The OAG provided

the analysis assuming the annual demand charge at 100% of contract capacity is \$27.4 million, as estimated in Xcel's tariff proposal in Attachment I [\[227\]](#). The OAG compared the new generation costs (Table 9) with Revenues (Table 10) in order to evaluate whether Xcel Energy's proposed 75% minimum bill is sufficient to offset large fixed costs and protect other customers from stranded asset risks.

Table 12 reflects a rough sense of the lifetime capital costs of new generation built for large customers (a 100 MW plant), including return and taxes, assuming 30 years of straight-line depreciation for all resource types. The totals do not include ongoing O&M, property taxes, or other expenses, so they do not reflect the full cost of the resources. OAG noted, other costs including energy, MISO, and jurisdictional costs should decrease if the customer leaves. The main risk is fixed, long-lived generation costs, which minimum bills are supposed to recover.

Table 12: Lifetime Capital Cost Estimates for Generation Resources, 100 MW[\[228\]](#)

Plant Type	Cost per kW (\$)	Cost of 100 MW (\$ million)	Estimated Return assuming 6.95% WACC and 30-year straight-line depreciation (\$ million)	Estimated Income Tax assuming 21% Federal and 9.8% State (\$ million)	Total (\$ million)
Peaking	\$1,414	\$141.40	\$147.40	\$59.50	\$348.30
CC Gas	\$2,148	\$214.80	\$223.90	\$90.30	\$529.10
Solar	\$3,736	\$373.60	\$389.50	\$157.10	\$920.20
Wind	\$11,419	\$1,141.90	\$1,190.40	\$480.20	\$2,812.50

Table 13 reflects the annual and cumulative revenues collected from a 100 MW transmission-level customer under Xcel's 75% minimum bill.

Table 13: Minimum Bill at 75% Contract Demand, Transmission Voltage Customer[\[229\]](#)

Year	Contract Demand (MW)	75% of Contract Demand (MW)	75% Contract Demand Charge (\$ million)	Cumulative Total Undiscounted (\$ million)
Ramp 1	10	7.5	\$2.06	\$2.06
Ramp 2	20	15	\$4.11	\$6.17
Ramp 3	40	30	\$8.22	\$14.39
Ramp 4	60	45	\$12.34	\$26.73
Ramp 5	80	60	\$16.45	\$43.18
1	100	75	\$20.56	\$63.74
2	100	75	\$20.56	\$84.30
3	100	75	\$20.56	\$104.86

4	100	75	\$20.56	\$125.42
5	100	75	\$20.56	\$145.98
6	100	75	\$20.56	\$166.54
7	100	75	\$20.56	\$187.10
8	100	75	\$20.56	\$207.66
9	100	75	\$20.56	\$228.22
10	100	75	\$20.56	\$248.78
11	100	75	\$20.56	\$269.34
12	100	75	\$20.56	\$289.90
13	100	75	\$20.56	\$310.46
14	100	75	\$20.56	\$331.02
15	100	75	\$20.56	\$351.58

According to the OAG's analysis, using the assumption of 100 MW peaking plant, it costs total \$348 million (capital + return + taxes, excluding O&M and other ongoing costs). Under Xcel's proposal (75% minimum, 15-year term including ramp), the total minimum bill collected approximately \$249 million, which is well below \$348 million cost. OAG laid out an early exit scenario in 2nd year, customers might pay around \$178 million exit fee, which is just over half the plant's cost \$348 million. The OAG found that minimum demand charges cover a peaking plant's capital costs only if the contract runs 15 years beyond the ramp period; in all other cases, revenues fall short. Even then, the proposed minimum bill does not cover more capital-intensive resources or ongoing O&M costs. Although simplified, OAG's analysis suggested Xcel Energy's proposed terms may not adequately protect other customers from stranded cost risk.

In addition, the OAG also referred to DELTA's report with 26 large-load tariffs in comparison with 17 require minimum billing of at least 80% of contract capacity, and only one requires less than 75%. The OAG provided example Ohio AEP's tariff example with ≥85% minimum billing; Indiana Michigan Power and Florida Power and Light proposed 90% minimums. The OAG recommended the Commission strengthens protection for other customers by approving Xcel to:

- Set the minimum bill at 85% of contract capacity or load ramp capacity.
- Set the exit fee at 85% of contract capacity multiplied by on-peak demand charges for all remaining ESA months.
- Clarify in the tariff that these values are minimum thresholds, with individual customer terms subject to Commission approval.

d. CUB

CUB discussed issues related to "exit fees," explaining that its proposals for accelerated depreciation or end-of-term (exit) fees were intended as true-up mechanisms to recover any remaining costs at the end of a contract, not to force renewal. If all costs are recovered during the contract term, these measures will not be necessary. The goal is to ensure that any

unrecovered costs are paid by the large customer, preventing stranded cost risk from shifting to other ratepayers^[230].

In its supplemental comments, CUB noted that Xcel appears to propose a similar approach, using ongoing “additional revenue” true-ups during the contract term to ensure full cost recovery. This approach could avoid large lump-sum payments at the end of the contract, though any remaining costs would still be due upon early termination. Accordingly, CUB recommends that Xcel’s ESA tariff language explicitly require that exit fees be paid alongside any outstanding incremental cost charges. Specifically, CUB recommends that the Commission require Xcel to incorporate language clarifying that customers who terminate early must pay the applicable exit fees “plus the remaining incremental cost fee(s) that may be due and owing as of the Termination Date, as provided in Exhibit C.”^[231]

e. CloudHQ

CloudHQ raised concerns about Xcel’s proposed rate design. It argued that Xcel did not use a cost-based approach, but instead structuring rates to maximize demand-related charges thereby increasing revenues from minimum demand charges, exit fees, and capacity reduction charges.^[232] CloudHQ said Xcel provided no clear justification for selecting a 75% minimum billing level while acknowledging the need to ensure cost recovery and protect other customers. It contended this targeted approach is punitive, discriminatory, and inconsistent with standard cost-of-service ratemaking practices that too high a minimum could discourage large customers from locating in Minnesota, risking lost economic benefits^[233]. CloudHQ recommended a 60% minimum demand charge, which it argued would still ensure substantial revenue recovery, providing flexibility to adjust upward later if needed.

f. Google

Google generally supported Xcel’s proposed framework for 75% minimum demand charges and exit fees, viewing them as critical components for protecting existing ratepayers from stranded cost risks. However, Google argued that mitigation should apply for the full fee period, which could be up to 10 years. Xcel can reassign or sell the capacity throughout this period, so limiting mitigation to 24 months could result in the utility collecting both the fee and additional revenue, creating an unreasonable windfall. Reasonable exit and termination provisions also support economic development by allowing unused capacity to be reallocated to new customers in Minnesota. Google also stressed that the minimum bill should cover only demand and customer charges, not energy charges, because demand charges reflect actual costs, whereas minimum energy charges could overcharge the customer for unused energy. To increase clarity, Google proposed updating tariff language to specify that the minimum bill is calculated based on usage as metered.^[234]

g. Data Center Coalitions (DCC)

DCC supported Xcel’s proposed exit fees, minimum bill, and capacity reduction fees at 75% of the relevant demand or capacity charges. However, DCC opposed Xcel’s proposal to base these

fees on a “Termination Fee Period” of up to 120 months (10 years), calling it excessive, unnecessary, and potentially a windfall for Xcel. DCC argued that 10 years far exceeds the time Xcel would need to reassign the departing customer’s load to mitigate stranded costs and could discourage large customers from choosing Minnesota. Instead, DCC recommended a 36-month Termination Fee Period, which, combined with the 24-month advance notice requirement, sufficiently protects Xcel without being overly punitive. Additionally, if Xcel can reassign the departing customer’s capacity to another large customer, any termination fee should be refunded or reduced, since the risk it was meant to cover would no longer exist. DCC said that this approach ensures fees are reasonable, aligned with best practices, and avoid discouraging investment.^[235] In addition, DCC also suggested that the minimum bill should only apply after the load ramp period. DCC said during the ramp period, the customer’s load grows gradually and unpredictably, and Xcel may not have completed necessary system upgrades. Charging a minimum bill based on contract capacity during this time could unfairly penalize the customer and undermine the purpose of the ramp period. Thus, DCC recommended the Company to apply the minimum bill only after the load ramp period is complete, when the customer is expected to operate at full contract capacity.^[236]

DCC agreed with Google’s comments regarding minimum bills for large customers should be based on demand charges, not energy charges, because demand charges reflect the actual costs of serving the customer, whereas energy charges could overcharge for costs not incurred. Additionally, limiting the mitigation of exit or capacity reduction fees to 24 months is too short. If Xcel can successfully reassign or sell the capacity, the mitigation should apply for the full fee period, since continuing to collect fees after the risk is eliminated would be unnecessary and excessive.^[237]

h. Tract Capital Management (Tract)

Tract supported Xcel’s proposal, stating that it serves the goals of attracting new large-load customers while protecting existing ratepayers but stated that the proposed tariffs lack the predictability and transparency needed for large-load customers to evaluate project feasibility and broader market competitiveness. Tract asserted that several targeted modifications would improve tariff clarity and predictability for large-load customers, strengthen Minnesota’s competitiveness for data center development, and maintain protections for existing ratepayers.

Tract raised its concerns related to rate design and Retail Customer Form ESA: Xcel’s proposed monthly 75% contract capacity minimum billing which does not reflect natural demand fluctuations for large loads.^[238] Tract asserted that basing charges on actual system prevents Xcel from collecting “windfall” revenues when a customer’s usage naturally fluctuates. Therefore, Tract recommended using an actual cost metric or providing credits for months where usage exceeds forecasts to prevent over-collection.^[239] In the alternative, Tract recommended a “banking” system where customers receive credit for high-usage months to offset months where they fall below the 75% minimum.^[240]

i. Decision Options

1. Approve the Company's proposed terms for minimum bill, including that minimum billing demand is at least 75 percent of the customer's contract capacity. (Xcel Energy)
2. Approve the Company's proposed terms for an exit fee, including its 24-month notice period and its calculation. The calculation is the current effective demand charges, times seventy-five percent (75%), times the lesser period of ten (10) years or the remainder of the ESA term, plus remainder of revenues required through the Incremental Cost Test. (Xcel Energy)
3. The Company should allow a 12-month bridge period after the end of the 24-month notice period where a customer can pay monthly minimums rather than the full Exit Fee. This 12-month period would give the customer time to secure an off-taker. After the 12-month period, if an off-taker or mitigation is not obtained during the bridge period, then the full Exit Fee, less the minimums paid over the bridge period, would be due in full. (CloudHQ)
4. The Commission should approve the tariff's 75% minimum demand charges. (Google)
5. The tariff should be modified such that the Exit Fee is mitigated for the entire duration of the termination fee period, rather than limited to 24 months. (Google)
6. Require Xcel to use a minimum of 85 percent of contract capacity to calculate the minimum bill and the exit fee with potentially higher minimums if the Commission deems it appropriate. (OAG)
7. Define the Termination Fee Period as the lesser of 36 months or the remaining months in the ESA. Reject calls to extend the exit fee period or capacity reduction fee period to the full remaining term of the ESA. Require Xcel to mitigate exit fees and capacity reduction fees for the entire duration of the fee period, not only for 24 months. Require Xcel to reimburse a customer for the value of successful mitigation efforts for the entire duration of the fee period. Reject calls to impose an exit fee or capacity reduction fee upon nonrenewal of an ESA at the end of its term. (DCC)
8. Allow the minimum bill, exit fee, and capacity reduction fee remain based on 75 percent of contract capacity. Reject calls to increase these fees to 85 percent of contract capacity or higher. (DCC)
9. Require Xcel to incorporate language in its tariffs and agreements which clarifies that customers exercising early termination must pay the applicable exit fees "plus the

remaining incremental cost fee(s) that may be due and owing as of the Termination Date as provided in Exhibit C. (CUB)

10. Require Xcel Energy modify the Minimum On Peak Demand Charge to:
 - a. Be the actual costs incurred by serving a customer; and
 - b. Grant customers credits on months when demand exceeded contract capacity to be applied on months when demand is lower than the contract capacity. (Tract)

Changes in Contract Demand

j. Xcel's Proposal

Xcel's proposed tariff allows for changes in a Large General Time of Day Service customer's demand. The Company will monitor demand using forecast data and actual monthly averages.

Increase in contract demand: Xcel stated the increases in contract capacity depend on available generation and transmission capacity, as determined at Xcel's discretion. In the Company's proposed the Retail Customer Form ESA - section 3.1.1^[241], stated that capacity may be increased (subject to system availability) if actual demand exceeds the current level by more than 9%, or if updated forecasts indicate higher expected demand, prompting the parties to review and adjust capacity.

Reduce in contract demand: Xcel said customers may also reduce capacity with 12 months' notice, subject to a capacity reduction fee designed to recover costs associated with the customer's originally forecasted capacity, and they remain subject to minimum demand billing requirements. The Capacity Reduction Fee is calculated based on (i) the amount of the capacity reduction; (ii) multiplied by the tariff rate for peak demand charges; (iii) multiplied by 75percent (75%); (iv) multiplied by the lesser of the remaining term of the ESA or 120 months. The Capacity Reduction Fee is due as a lump sum within 30 days of the date capacity is reduced^[242]. The ESA will specify the terms of the capacity reduction fee for each customer.

According to Xcel, these provisions help protect against stranded assets and align with the Commission's directives.^[243]

k. Department

Increase in contract demand: The Department is concerned that contract capacity increases beyond the defined connected load could shift costs onto other non-data customers. It stated that simply requiring the parties to meet and confer is insufficient to mitigate this risk. The Department suggested that the Retail Customer Form ESA should state the Commission shall be notified for any increase in Demand and not reflect only that the parties will meet and confer regarding an increase to the effective Contract Capacity. The Department recommended the Commission modify in Section 3.1.1 of the Retail ESA as follows:

3.1.1 Contract Capacity Increases. The effective Contract Capacity will be increased, subject to generation and transmission capacity availability as determined at the sole discretion of the Company and not to exceed the Connected Load (as described in Exhibit E), if either of the following occur: (a) if the prior year actual average monthly on-peak demand exceeds the effective Contract Capacity plus nine percent (9%); or (b) in the event that a Customer Load Forecast of monthly on peak demand provided pursuant to Section 3.5 exceeds the effective Contract Capacity as described in Exhibit E, the parties will meet and confer regarding an increase to the effective Contract Capacity. Any updates to the applicable terms in the ESA, including Exhibit E, are subject to approval by the Minnesota Public Utilities Commission.

The Department also recommended the Commission modify Xcel's proposed Large General Time of Day Service (Rate Code AXX) and the Large Peak Controlled Time of Day Service (Rate Code AXX) as follows:

1. Contract Capacity Increase. The effective Contract Capacity will be increased if either of the following occur: (a) if the monthly average of the prior consecutive 12 month period Actual On Peak Demands exceeded the effective Contract Capacity plus 9 percent (9%), Company reserves the right to revise the Contract Capacity percentage margin based on future wholesale capacity market conditions and/or policy changes. (b) Increases to Contract Capacity after the execution of an ESA are subject to generation and transmission capacity availability as determined at the sole discretion of the Company and subject to the Customer and Company agreement and approval by the Minnesota Public Utilities Commission.

Reduce in contract demand: The Department raised concerns regarding the capacity reduction fee, similar to its concerns with the exit fee, particularly when more than 10 years remain in the ESA term. It questioned the limitation of cost recovery to 75% of the termination fee period and recommended removing the 10-year cap, instead applying the fee over the full remaining term of the ESA.

For the same reasons discussed in the "Exit Fee" section above, the Department provided consistent recommendations for both exit fees and capacity reduction fees (see Department comments and decision options in the Exit Fee section of this briefing paper).^[244]

I. CloudHQ

CloudHQ raised concerns that the proposal allows for no voluntary capacity reductions without triggering the Capacity Reduction Fee as well as the requirement that the fee be paid within 30 days of the date capacity is reduced, even when no stranded costs exist, and provides no flexibility if replacement load is available.^[245]

CloudHQ recommended that the Commission requires the Company allow up to 20% capacity reduction without triggering the fee to reflect normal business variability. In also, the customer should be given a 12-month bridge period during which the customer pays monthly minimums instead of the full fee, allowing time to secure a replacement customer or other mitigation before any remaining fee is due.

According to CloudHQ, these changes would better align the policy with business realities and avoid unnecessary penalties.

m. Data Center Coalition (DCC)

DCC agreed with CloudHQ that requiring large customers to pay capacity reduction or exit fees upfront is unnecessary, since Xcel is likely to successfully mitigate these fees. Instead, DCC supported a 12-month optional bridge period following the 24-month notice period, during which the customer continues paying minimum bills. After this period, the customer would pay only the remaining exit or capacity reduction fees after accounting for any successful mitigation. [\[246\]](#)

n. Decision Options

1. Approve the Company's proposed tariff terms that address changes in customer contract demand. Any increases to the contract capacity after the execution of the ESA are subject to generation and transmission capacity availability, as determined at the sole discretion of the Company. (Xcel Energy)
2. The Company should permit up to a twenty percent (20%) capacity reduction without triggering the Capacity Reduction Fee. (CloudHQ)
3. If a Capacity Reduction Fee is required, the Company should provide a bridge period of up to 12 months where a customer can pay monthly minimums rather than the full Capacity Reduction Fee. This 12-month period would give the customer time to secure an off-taker. After the 12-month period, if an off-taker or mitigation is not obtained during the bridge period, then the full Capacity Reduction Fee, less the minimums paid over the bridge period, would be due in full. (CloudHQ)
4. Direct Xcel to provide an optional 12-month bridge period after the 24-month notice period, during which a customer would continue to pay minimum bills before paying any remaining exit fee or capacity reduction fee. (DCC)

Contract terms length

a. Xcel's Proposal

Xcel proposed that a customer entering into an ESA must commit to a minimum 15-year term (inclusive of a 5-year ramp), reflecting the significant infrastructure investments required and aligning with industry trends for large-load customers like data centers. This long-term commitment helps ensure system stability and protects other customers by maintaining consistent load and delivering economic benefits. Xcel also explained that ESA terms could be longer than 15 years and may be needed due to project-specific, operational, or financial factors, such as ensuring service continuity, supporting long-term investments, accommodating load ramps, or matching the lifespan and financing of generation assets. Xcel indicated that 15–30 years may be appropriate depending on these factors. However, contract length may be negotiated based on individual circumstances.^[247]

b. CUB

CUB is concerned that the assets of investments made to serve very large customers will likely extend beyond Xcel's proposed minimum 15-year term (inclusive of a 5-year ramp) and that the infrastructure costs incurred to serve very large customers will not be fully paid down over this time period.^[248] CUB argued that Xcel Energy's proposed 15-year contract term is likely too short to protect ratepayers, since generation assets (e.g., wind and solar) can last 30+ years, leaving costs unrecovered if customers exit early. While mechanisms like minimum charges and exit fees help, they do not fully eliminate stranded cost risk.^[249]

CUB noted that other states have adopted longer terms (17–20 years) and recommended a minimum contract length of 18–20 years to better align with asset lifespans and improve cost recovery, while still allowing flexibility for longer agreements if needed. CUB noted that Xcel Energy's claim that its 15-year contract term would not be treated as a "minimum" but as a "suggested" term period. CUB said this contradicts both the plain meaning of "minimum" and the tariff language requiring contracts to be at least 15 years. CUB argued that ratepayer protections should not be weakened through negotiation and urges the Commission to clearly enforce a true minimum contract length, regardless of the specific duration ultimately adopted.^[250] For the foregoing reasons, CUB continued recommending the Commission adopt a minimum contract term of between 18 and 20 years.

c. OAG

The OAG agreed with CUB and CGA that Xcel Energy's proposed 15-year contract term is insufficient to ensure very large customers fully pay for generation assets. It argued the current framework underestimates costs by treating long-term generation investments like short-term marginal costs that disappear if load declines. Without incorporating full lifetime asset costs, longer contract terms are the most effective way to reduce stranded cost risk. The OAG also noted that while 15-year terms are common, many jurisdictions adopt longer commitments (up to 20 years), reinforcing the case for extended contract lengths to better align with asset

lifespans and protect ratepayers. The OAG recommended a minimum 15-year contract term exclusive of a 5-year ramp period.^[251]

d. Clean Grid Alliance (CGA)

CGA understand Xcel's proposed the default contract term of 15- years for the purpose to hedge against risks such as load not materializing, demand reductions, or customer exit, which could otherwise leave generation and transmission investments under-recovered. However, CGA said this term is shorter than the typical 20–30 year lifespan of generation assets and many Power Purchase Agreements (PPAs), making it insufficient to fully protect other customers from stranded cost risk. CGA stated that similar 15-year terms have been proposed in other utilities within the MISO North and Central regions and some customers seek even shorter terms. The regulatory decisions in Florida and Kentucky have required minimum 20-year terms, and some tariffs align contract length with asset life. The core issue is ensuring that large-load investments do not shift costs to other customers if demand falls short.

CGA said contract length is a foundational tariff term that affects multiple related issues and is critical to risk mitigation and compliance with Minnesota law and the Commission's Order. CGA recommended that risk could be mitigated through options like "bring your own generation," which shift some responsibility to large-load customers. also, any deviation from the default term should ensure full cost recovery, and specifically, no shorter term should be permitted unless it ensures full cost recovery of investments made for the Large Load Customer over that period; and any such change must be approved through a public, docketed proceeding with stakeholder participation. The Company should not be allowed to privately negotiate shorter, customer-specific initial terms in "black box" sessions.

e. Department

The Department suggested the contract should last for "the full depreciation term of the infrastructure investments or assets needed to serve the specific load". ESA terms should reflect full cost recovery for infrastructure investments and that terms longer than 15 years may be justified for specific customers. The Department noted that operational lifespans and financing structures of investment necessitating cost recovery and financing structures may extend beyond the minimum term of at least 15 years. Accordingly, the Department recommended approval tariff language requiring an ESA initial term of at least fifteen years inclusive of any Load Ramp Period up to a maximum of five years while recognizing that longer terms may be necessary depending on the circumstances of individual large load customers.^[252]

The Department also recommended the Commission approve Xcel's Retail Customer ESA Form and tariffs with modifications noting the Commission will determine the specific ESA Term Length at such times as each customer-specific ESA is brought before the Commission for approval.^[253]

Modify Section 10 of the Retail Customer Form ESA as follows:

Effective Date; Term. This Agreement shall be in full force and effect from the date the Commission deems it approved (i) in form and substance satisfactory to both Company and Customer, inclusive of all Exhibits, and (ii) is not the subject of (a) a petition or application for reconsideration or rehearing, (b) a request for judicial review, or (c) a petition for preliminary injunction, and (iii) Company's Facilities are capable of being energized. This Agreement shall remain in full force and effect for at least fifteen (15) years (the "Term")* unless terminated by either Party pursuant to Article 16 or as otherwise provided herein.

*The final customer-specific ESA Term Length is subject to approval by the Minnesota Public Utilities Commission.

Modify Xcel's proposed Large General Time of Day Service (Rate Code AXX) and the Large Peak Controlled Time of Day Service (Rate Code AXX) as follows:

TERM

Customers subject to this tariff must enter into an ESA with an initial term of at least fifteen (15) years*, inclusive of any Load Ramp Period of up to a maximum of five (5) years. For electrical service beyond the initial term, customers with demand equal to or greater than 100,000 kW have the option of remaining on Large General Time of Day Service or moving to Large Peak Controlled Time of Day Service. A subsequent ESA will be required.

*The final customer-specific ESA Term Length is subject to the approval of the Minnesota Public Utilities Commission.

f. Data Center Coalition (DCC)

The DCC said Xcel's proposal of a 15-year ESA term (including up to a 5-year load ramp) is longer than necessary and inequitable, because customers with shorter ramp periods end up locked into longer full-capacity terms than those with longer ramps. The DCC strongly rejected recommendations from CUB and CGA to extend terms to 18–20 years or more to match the useful life of generation assets. The DCC said that because large loads are served by system resources rather than dedicated facilities, it is neither possible nor reasonable to match the service agreement to the 30-year "book life" of any specific resource.

DCC recommended a 10-year initial term (excluding ramp) with the option to add up to 5 years of load ramp, creating a flexible "10 + 5" structure. DCC stated that this length is sufficient to recover incremental costs while being fairer and more adaptable for large customers.

g. Google

Google supported Xcel's proposed of a 15-year contract term (including a 5-year ramp) as a reasonable balance between economic development and ratepayer protection. Google stated

longer terms are unnecessary because Xcel Energy already has multiple safeguards such as exit fees, capacity reduction fees, and credit requirements to manage risk. Together, these tools are sufficient to ensure that incremental costs are recovered over the life of the agreement.^{[\[254\]](#)}

h. Decision Options

1. Approve the Company's proposed default initial term of an ESA taken under the tariffs of at least 15 years. (Xcel Energy)
2. Require Xcel to establish a minimum term-length for Xcel's energy supply agreements of between 18 and 20 years. (CUB)
3. Require Xcel to set a minimum ESA term of 15 years, exclusive of an optional 5-year ramp period, with the option for a longer term if the Commission deems it appropriate (OAG)
4. Allow establish a minimum ESA term of ten years, plus a separate load ramp period of up to five years (the "10+5 construct"). Reject calls to require ESA terms exceeding fifteen years. (DCC)
5. Approve a 15-year contract period, inclusive of an optional 5-year load ramp. (Google)
6. Require Xcel to ensure any decreases to the initial default contract term length negotiated in ESAs are presented in docketed proceedings open to other stakeholders. (CGA)

Staff Analysis of Terms

Overall, Staff finds that higher minimum billing percentages and exit fees are necessary to ensure that very large customers bear the financial risks associated with the infrastructure built to serve them. This is especially important in cases of early contract termination or lower-than-expected usage, where insufficient protections could leave utilities exposed to unrecovered fixed costs. Stronger minimum payment requirements reduce the pressure on utilities to quickly secure replacement load and help shield other ratepayers from potentially significant stranded costs.

Staff generally agrees with the parties' analyses on ESA term length. Utility infrastructure typically has a useful life of 30 years or more, requiring sufficiently long terms to support full cost recovery. At the same time, the data center business model evolves more rapidly than other industries, increasing the risk of early customer exit. Accordingly, ESA term lengths must be long enough to justify the associated investments, in addition to the protections provided by exit fees. Consistent with the Department's recommendation, Staff agrees that a minimum 15-

year term is an appropriate starting benchmark, with the Commission determining the final term length on a case-by-case basis as individual ESAs are brought before the PUC for review.

Retail Customer Form ESA – Credit Supports

a. Xcel's Proposal

Under the Retail Customer Form ESA, Xcel requires customers to provide financial security (such as a parent guaranty or letter of credit) to ensure they can meet potentially-significant obligations under the tariff. The exact collateral and risk-mitigation terms are customized in each individual ESA that will be filed for Commission review. The Retail Customer Form ESA includes examples of acceptable security measures for credit supports^[255]. Xcel maintained the ESA already sufficiently defines the Parent Guaranty and LOC parameters (e.g., CIAC, minimum bills, and LOCs). The credit supports requirements cover:

The Parent Guaranty: a guaranty from a corporate parent or a credit-worthy affiliate (the guarantor must generally have a credit rating of at least BBB- (S&P) or Baa3 (Moody's) or, if unrated, maintain a cash balance of at least \$3000,000,000)

Guaranty Cap: The maximum liability for a guarantor is capped at 50% of the customer's total demand charges over the entire term of the ESA

Credit Events: such as a material decline in liquidity, a credit rating downgrade, or bankruptcy, that allow Xcel to demand additional security like a cash deposit or surety bond

In its reply comments, Xcel updated its ESA to clarify credit support requirements for large load customers resulted from parties comments and agreement. It now included a Parent Guaranty with a capped amount that decreases over time as project risk declines. In addition, customers may be required (at the Company's discretion) to provide a Letter of Credit equal to 90 days of billing to protect against default. If a default is not cured within that period, the parent guarantor becomes responsible for obligations and additional security.^[256]

The Company stated that it's open to third-party guarantors if they meet credit standards and believe the ESA already defines how required credit support is calculated. While full credit support is generally required upfront, the Company is willing to consider reducing the guaranty over time as operational risk decreases.

b. Tract

In its initial comment, Tract said that while Xcel is justified in requiring credit support from large load customers, its current proposal lacks transparency and predictability. Tract stated that Xcel's proposed ESA defines who can be a guarantor (only specifies eligibility criteria for guarantors and a maximum liability cap -Guaranty Cap), without detailing how the credit amount will be determined or if it will always equal the Guaranty Cap, how credit support amounts will be calculated which is difficult for customers (very large customers) to estimate

the scale or type of credit support needed. This lack of clarity makes it difficult for potential large-load customers to predict their financial obligations, which could increase investment uncertainty and make Minnesota a less attractive market for new large-load customers. Tract recommended a milestone-based credit support structure tied to Xcel's actual investments and customer payments to reduce stranded-investment risk.^[257]

In addition, Tract argued that Xcel's current assignment rules in the ESA are too restrictive and hinder project development without adding meaningful protection for ratepayers. Tract stated that assignments require prior written consent with no required response timeframe, creating uncertainty and delays. The restriction doesn't reflect how large projects are actually developed, where ownership changes are common. Tract recommended allowing assignment by right (transferring a contract to a qualified lender or credit-worthy affiliate without utility approval) adding additional language in ESA for specific cases:

(i) to an assignee with an equal or better credit rating; (ii) to an assignee if the credit support obligation of the ESA are guaranteed by a parent business with an appropriate credit rating; or (iii) due to a merger or consolidation where the large load customer's assets are being assigned to a party with a credit rating equal to or greater than the customer's^[258]

Tract also recommended revising the assignment provision requiring responses within 30 days to align with standard market practices and reduce stranded-asset risk.^[259]

In its Supplement comments, Tract remained its concerns about credit supports requirements in the ESA. Tract acknowledged Xcel's willingness to set a deadline for responding to assignment requests but argued that 90 days deadline is too long for sophisticated market participants. Tract is supportive of CloudHQ's proposal to include an assignment-by-right provision for entities that can meet the applicable credit requirements, to commercial lenders for the project, and to the customer's affiliates as long as the credit support obligations remain satisfied.^[260]

c. CloudHQ

CloudHQ argued that Xcel is too restrictive in only considering guarantees from a parent entity and does not allow for guarantees from qualified third parties. CloudHQ said the ESA excluded qualified third-party guarantors even if they meet financial standards. CloudHQ added a guarantor has strong credit or sufficient cash and is U.S.-domiciled, Xcel should not care about its relationship to the customer. Limiting guarantees to parent companies unnecessarily constrains customers' ability to meet collateral requirements. CloudHQ said allowing credible third-party guarantees would provide the same level of financial protection while offering more flexibility to large load customers and other jurisdictions have already addressed this issue, suggesting more flexible approaches are feasible and practical.^[261]

In its reply comments, CloudHQ supported Tract's proposed revisions to the reassignment language in the ESA regarding when a customer may reassign the ESA as a matter of right. It also provided revised language for Tract's proposed subpart (ii) and added new subparts (iv) and (v) to allow for a creditworthy third-party guarantor, as shown below:

*(i) to an assignee with an equal or better credit rating; (ii) to an assignee if the credit support obligation of the ESA ~~are~~ is guaranteed by ~~a parent business an~~ entity with an appropriate credit rating; or (iii) due to a merger or consolidation where the large load customer's assets are being assigned to a party with a credit rating equal to or greater than the customer's; **(iv) to the customer's lenders (or a collateral agent on behalf the customer's lenders); or (v) to an affiliate of the customer taking ownership of title from the customer if the credit support obligation under the ESA continues to be satisfied**^[262]*

CloudHQ recommended that the Commission request customer clarify that the financial security and collateral requirements need not be limited to parental guarantees but may also be satisfied by the guaranty from a credit-worthy third-party.

d. Data Center Coalition (DCC)

In its initial comments, DCC provided a whitepaper by Energy and Environmental Economics, Inc. (E3) and recommended the Company follow this modern framework for utility credit policies include:^[263]

- Differentiating Perceived vs. Actual Risk: Assessing project maturity and sponsor strength rather than applying "blanket conservatism"
- Providing Optionality: Offering a "menu" of acceptable credit tools (surety bonds, contingent equity, escrow) to reflect customer diversity
- Avoiding Redundant Mitigants: Calibrating requirements to ensure that multiple tool

In its reply comments, the DCC expressed support for Tract's recommendation that Xcel revise its ESA to allow assignment by right and require Xcel to respond to a notice of assignment within 30 days. Additionally, the DCC supported CloudHQ's recommendation that Xcel accept guarantees from qualified third parties, such as customers and tenants, not just from parent companies.^[264]

e. Decision Options

To the extent not already incorporated, the Electric Services Agreement ("ESA") needs to be modified to permit financial security and collateral provisions to be satisfied by the guaranty from a credit-worthy third-party to reflect the Company's agreement with CloudHQ in its Reply Comments. (CloudHQ)

The ESA should be revised to permit contract assignment as a matter of right

consistent with the language proposed by CloudHQ in its Reply Comments filed on November 5, 2025 (CloudHQ)

Require Xcel Energy to modify the Retail Customer Form ESA to: (Tract)

Require the non-assigning party to respond to a request for written consent for an assignment of the ESA within 90 days of receiving the request under Section 15; and

Allow customers to assign the ESA by right to:

- (i) to an assignee with an equal or better credit rating;
- (ii) to an assignee if the credit support obligation of the ESA is guaranteed by an entity with an appropriate credit rating;
- (iii) due to a merger or consolidation where the customer's assets are being assigned to a party with a credit rating equal to or greater than the customer's;
- (iv) to the customer's lenders (or a collateral agent on behalf the customer's lenders); or
- (v) to an affiliate of the customer taking ownership of title from the customer if the credit support obligation under the ESA continues to be satisfied. (CloudHQ)

Include the factors used to calculate the amount of credit support required for each customer; and

Allow the amount of the credit support to be reduced as a customer achieves defined milestones.

Require Xcel Energy modify the credit support provisions of the tariffs to: (Tract)

Include the factors used to calculate the amount of credit support required for each customer; and

Allow the amount of the credit support to be reduced as a customer achieves milestones.

Clarify that any determination by Xcel to aggregate multiple customer premises is subject to Commission review at the request of the affected customer(s). Clarify that Xcel must accept guarantees from qualified credit worthy third parties — including customers and tenants — not only from parent companies, to satisfy the ESA's collateral and security requirements. (DCC)

^[1] Xcel, Initial Petition, at 19-21.

^[2] Xcel noted its current riders as follows: Conservation Improvement Program Adjustment rider, State Energy Policy Rate rider, Renewable Development Fund rider, Transmission Cost Recovery rider, Low Income Energy Discount rider, Sales True-up rider, and Renewable Energy Standard rider.

- [\[3\]](#) Docket No. E-002/AA-25-63.
- [\[4\]](#) Docket No. E-002/RP-24-67.
- [\[5\]](#) Minn. Stat. § 216B.241, subd. 1.a(a).
- [\[6\]](#) Xcel, Reply Comments at 18 and 22.
- [\[7\]](#) Xcel, Reply Comments at 27.
- [\[8\]](#) Xcel, Supplemental Comments at 2.
- [\[9\]](#) Xcel, Initial Petition at 11 and Attachment A (Clean) at 8 of 14, sheet 32.5.
- [\[10\]](#) Xcel, Initial Petition, Attachment A (Clean) at 8 of 14, sheet 32.6.
- [\[11\]](#) Xcel, Supplemental Comments, at 2.
- [\[12\]](#) OAG, Supplemental Comments at 5.
- [\[13\]](#) OAG, Initial Comments, Attachment 2 (Xcel Energy Response to OAG IR 005).
- [\[14\]](#) OAG, Initial Comments, at 25.
- [\[15\]](#) OAG, Supplemental Comments at 11-12.
- [\[16\]](#) OAG, Supplemental Comments at 12.
- [\[17\]](#) *Id.*, at 13.
- [\[18\]](#) OAG, Supplemental Comments at 14.
- [\[19\]](#) OAG, Initial Comments at 26-27, and 29.
- [\[20\]](#) OAG, Comments at 31-32.
- [\[21\]](#) Xcel, Reply Comments at 25.
- [\[22\]](#) OAG Supplemental Comments, Attachment 1 (Xcel Energy Response to OAG IR 016).
- [\[23\]](#) Xcel, Reply Comments at Attachment B.
- [\[24\]](#) To be considered “trade secret,” data must, among other things, derive “independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use.” Minn. Stat. § 13.37, subd. 1(b). Xcel’s claim that *all* portions of this example is trade secret is merely a conclusory statement that this information meets the language of the statute. See Xcel Reply Comments, Filing Letter. Xcel includes no analysis of how all of the data meets the standard, whereas the Commission’s rules require “an accompanying statement *justifying*” the treatment of the data as protected—not public. Minn. R. 7829.0500, subp. 5 (emphasis added).
- [\[25\]](#) As noted, the Commission’s rules require an accompanying statement justifying the treatment of the data as protected. Minn. R. 7829.0500, subp. 5. Notably, the Commission’s rule refers to the “data” not the “document,” and Xcel should justify why each type of data is redacted rather than a wholesale redaction of entire spreadsheets, models, or documents.
- [\[26\]](#) OAG, Reply Comments at 3-5.

[27] *Id.*, at 25.

[28] *In the Matter of the Petition by Northern States Power Company d/b/a Xcel Energy for Approval of Contracts and Ratemaking Treatment for Provision of Electric Service to Google's Data Center Project*, Docket No. E-002/M-19-39, and *In the Matter of Xcel Energy's Petition for Approval of Contracts for Provision of Service to a New Large Customer's Minnesota Data Center Project*, Docket No. E-002/M-22-579.

[29] Department, Initial Comments at 26-27.

[30] Department, Supplemental Comments at 10.

[31] See <https://www.ucs.org/sites/default/files/2025-09/PJM%20Data%20Center%20Issue%20Brief%20-%20Sep%202025.pdf>, and ICC Docket No's. 25-0677 & 25-0679, Direct Testimony of Mike Jacobs on Behalf of the Environmental Law & Policy Center, Natural Resources Defense Council, Union of Concerned Scientists, and Vote Solar ("Joint NGOs"), at 6-7 (Sept. 26, 2025), available at <https://www.icc.illinois.gov/docket/P2025-0677/documents/371138/files/650739.pdf>.

[32] ELPC/VS, Initial Comments at 17.

[33] *In the Matter of the Application of Northern States Power Company for Authority to Increase Rates for Electric Service in Minnesota*, Docket No's. E-002/GR-24-320 & E-002/M-24-321. Kenworthy Direct, at 30-35 (Aug. 22, 2025), available at <https://efiling.web.commerce.state.mn.us/documents/%7B30B0D398-0000-CC17-A0F8-2EC87F2770D1%7D/download?contentSequence=0&rowIndex=142>.

[34] ELPC/VS, Initial Comments at 18.

[35] OAG, Reply Comments at 10-19.

[36] Fresh/MCEA, Initial Comments at 2.

[37] ELPC/VS, Supplemental Comments at 8.

[38] ELPC/VS, Supplemental Comments at 14-15.

[39] Xcel, Initial Petition at 17-18.

[40] Google, Reply Comments at 5 and 11.

[41] Google, Supplemental Comments at 6.

[42] Xcel, Initial Petition at 20. Described as the cost "based on the potential need for a mix of incremental generation and energy storage resource additions," "market price estimates," and "the customer's contribution to increased peak load estimated by year."

[43] *Id.* Described as accounting for demand increases in specific jurisdictions and the "electric expense and plant investments" costs associated with responding to the increased demand.

[44] *Id.* Described as considering the "net-increase in MISO transmission-related costs" based on the customer's peak load and energy consumption.

[45] Google, Initial Comments; Google, Reply Comments at 1– 5; DCC, Initial Comments at 21– 22; DCC, Reply Comments at 12–18.

- [\[46\]](#) CloudHQ, Supplemental Comments at 5.
- [\[47\]](#) DCC, Initial Comments at 24.
- [\[48\]](#) DCC, Supplemental Comments at 13.
- [\[49\]](#) Minn. Stat. § 216B.162, subd. 4(2).
- [\[50\]](#) DCC, Supplemental Comments at 3 and 9.
- [\[51\]](#) DCC, Supplemental Comments at 7.
- [\[52\]](#) Minn. Stat. § 216B.72(b).
- [\[53\]](#) Minn. Stat. § 216B.241, subd. 2a(c).
- [\[54\]](#) Xcel, Initial Petition at 20.
- [\[55\]](#) Xcel, Reply Comments at 29-30.
- [\[56\]](#) *Id.*, at 25.
- [\[57\]](#) Xcel, Reply Comments, at 28.
- [\[58\]](#) Xcel, Supplemental Comments, at 4.
- [\[59\]](#) Large load defined as 100 MW with incremental cost of \$50M; incremental costs allocated to all classes; and large load MW and MWh incorporated into CCOS Allocations.
- [\[60\]](#) Xcel, Reply Comments at 26-27.
- [\[61\]](#) *Id.*, at 29.
- [\[62\]](#) OAG, Supplemental Comments at 34-36.
- [\[63\]](#) *Id.*, at 20-21.
- [\[64\]](#) In Xcel's CCOSs, customers taking service at transmission voltage are not allocated any distribution system costs. Customers taking service at transmission transformed voltage are not allocated distribution system costs except for substation costs.
- [\[65\]](#) Xcel plans to include very large customers in the C&I Demand class, so the allocation of costs to this class would increase, but the revenues from very large customers will also be allocated to the C&I Demand class.
- [\[66\]](#) "Average cost" in this context serves as shorthand for costs normalized by the appropriate unit used in CCOS allocation, often load coincident with peak demand (kW) or marginal-costweighted energy use (kWh).
- [\[67\]](#) OAG, Reply Comments at 12.
- [\[68\]](#) OAG, Initial Comments at 37.
- [\[69\]](#) *Id.*, at 16-17.
- [\[70\]](#) Xcel, Reply Comments at 26-27.
- [\[71\]](#) Xcel Initial Petition, Attachment I at 2.

[72] The 366 MWh average was obtained by dividing Xcel’s annual forecasted sales for the C&I Demand class in 2025 (18,342,414 MWh) by average forecasted customers for the class in 2025 (50,133). Docket No. E-002/GR-24-320, Paluck Direct Testimony, Schedule 3 at 1.

[73] *In re Duke Energy Fla.’s Petition for a Limited Proceeding to Approve Large Load Tariff*, Fla. Pub. Serv. Comm’n Docket No. 20250113-EI, [Direct Test. of Kourtnei Yager](#) at 3–4 (Sept. 5, 2025).

[74] *In re Application of Ariz. Pub. Serv. Co. for a Hearing to Determine the Fair Value of the Util. Property of the Co. for Ratemaking Purposes, to Fix a Just and Reasonable Rate of Return Thereon, and to Approve Rate Schedules Designed to Develop Such a Return*, Ariz. Corp. Comm’n Docket No. E-01345A-25-0105, [Direct Test. of Jamie R. Moe](#) at 3 (June 13, 2025).

[75] OAG, Comments at Attachment 1 (Xcel Energy Response to OAG IR 003).

[76] OAG, Comments at Attachment 1 (Xcel Energy Response to OAG IR 003).

[77] OAG, Comments at 18.

[78] OAG, Reply Comments at 15.

[79] OAG, Supplemental Comments at 34.

[80] OAG, Comments at 33.

[81] In the Matter of the Application of Arizona Public Service Company for a Hearing to Determine the Fair Value of the Utility Property of the Company for Ratemaking Purposes, to Fix a Just and Reasonable Rate of Return Thereon, and to Approve Rate Schedules Designed to Develop Such a Return, Arizona Corporation Commission Docket No. E-01345A-25-0105, Direct Testimony of Jamie R. Moe at 3 (June 13, 2025), <https://docket.images.azcc.gov/E000044763.pdf?i=1758556055895>.

[82] OAG, Supplemental Comments at 19 and 30.

[83] *Id.*, at 30-31.

[84] OAG, Supplemental Comments at Attachment 3 (Xcel Energy Response to OAG IR 020).

[85] OAG, Reply Comments, at 7-8.

[86] *In the Matter of a Commission Inquiry into a Framework for Proactive Distribution Grid Upgrades and Cost Allocation for Xcel Energy*, Docket No. E-002/CI-24-318, ORDER ESTABLISHING FRAMEWORK FOR PROACTIVE DISTRIBUTION GRID UPGRADES at 10 (Sept. 9, 2025).

[87] Minn. Stat. § 645.16 (providing that legislative intent may be ascertained by considering factors including “the circumstances under which it was enacted,” “the mischief to be remedied,” and “the object to be attained”).

[88] OAG, Reply Comments at 16-17.

[89] Docket No. E-002/GR-24-320, [Barthol Direct Testimony](#) at 10 (Nov. 1, 2024) (stating that economic development discounts were allocated using class shares of base revenue in Xcel’s 2024 rate case.)

^[90] Xcel Petition, Attachment A (LGTODS tariff at 5-32.4) and Attachment B (LPCTODS tariff at 5-47.6).

^[91] OAG Comments, Attachment 1 (Xcel Energy Response to OAG IR 011).

^[92] Xcel, Initial Petition at 13.

^[93] OAG Comments, Attachment 1 (Xcel Energy Response to OAG IR 011).

^[94] DOC, Initial Comments, at 6, 30-31.

^[95] Xcel, Reply Comments at 29.

^[96] Minn. Stat § 216B.1622, Subd.2.

^[97] Department, Initial Comments at 26.

^[98] *Id.*, at 27-28.

^[99] Department, Initial Comments at 28.

^[100] *In the Matter of Xcel Energy's 2024–2040 Upper Midwest Integrated Resource Plan*, Docket No. E-002/RP-24-67, ORDER APPROVING SETTLEMENT AGREEMENT WITH MODIFICATIONS, at Order Point 32. April 21, 2025.

^[101] Department, Supplemental Comments at 7-8.

^[102] Department, Initial Comments at 29.

^[103] Department, Initial Comments at 29.

^[104] Department, Supplement Comments at 14.

^[105] Department, Supplemental Comments at 15.

^[106] CUB, Initial Comments at 8.

^[107] *Id.*, at 9.

^[108] *Id.*, at 10.

^[109] CUB, Supplemental Comments at 8.

^[110] Xcel, Reply Comments at 29.

^[111] Xcel, Reply Comments at 28 and 30.

^[112] CUB, Initial Comments at 8.

^[113] CUB, Supplemental Comments at 7-8.

^[114] *In the Matter of the Application of Northern States Power Company for Authority to Increase Rates for Electric Service in Minnesota*, Docket No's. E-002/GR-24-320 & E-002/M-24-321. Kenworthy Direct, at 30-35 (Aug. 22, 2025), available at <https://efiling.web.commerce.state.mn.us/documents/%7B30B0D398-0000-CC17-A0F8-2EC87F2770D1%7D/download?contentSequence=0&rowIndex=142>.

^[115] Google, Reply Comments at 9.

[\[116\]](#) *Id.*, at 10.

[\[117\]](#) In re: Application of Consumers Energy Company for ex parte Approval of Certain Amendments to Rate GPD, Case No. U-21859, “Order,” (Mich. P.S.C Nov. 6, 2025), at 114.

[\[118\]](#) In re: Application of Evergy Metro, Inc. et al for Approval of New and Modified Tariffs for Service to Large Load Customers, Case No. EO-2025-0154, “Report and Order,” (Mo. P.S.C. Nov. 13, 2025), at 44.

[\[119\]](#) Google, Initial Comments at 19.

[\[120\]](#) *Id.*, at 11-12.

[\[121\]](#) More of CloudHQ’s discussion on this matter can be found in the ICT section of this briefing paper.

[\[122\]](#) See Northern States Power Company, Minnesota Electric Rate Book – MPUC No. 2, Standby Service Rider: Section No. 5, 23rd Revised Sheet No. 101 (describing rider as “[a]pplicable to customers that use a customer-sited generation source with a capacity greater than 100 kW to serve a defined portion of the customer’s total electric energy requirements . . .”).

[\[123\]](#) See Northern States Power Company, Minnesota Electric Rate Book – MPUC No. 2, Standby Service Rider: Section No. 5, 23rd Revised Sheet No. 101 (“This Rider is not available to solar photovoltaic generation systems and is closed to new wind generation systems.”).

[\[124\]](#) DCC, Initial Comments at 21-22.

[\[125\]](#) DCC, Supplemental Comments at 6.

[\[126\]](#) Xcel, Reply Comments at 18; OAG, Reply Comments at 5.

[\[127\]](#) Minnesota Electric Rate Book – MPUC No. 2 at Section. No. 6, 1st Revised Sheet No. 22 (“The Company will install, own, and maintain on an individual project basis the distribution facilities necessary to provide permanent service. The customer will be required to pay, in addition to the applicable rate, a one-time charge of the following amounts, if applicable, to the Company.”) and 1st Revised Sheet No. 25 (“A customer electing to take transmission service for any portion of the customer’s service will be considered a transmission service customer and any additional Company investments at the customer’s location whether secondary, primary, or transmission voltage will be considered as Special Facilities.”) (Available at: <https://xcelnew.my.salesforce.com/sfc/p/#1U0000011ttV/a/8b000002yLiP/27fcisWyYTKolndzNJOZBmaAcZfAkqp ze7HiGxkTwv4>).

[\[128\]](#) DCC, Supplemental Comments at 10.

[\[129\]](#) See Xcel, Initial Petition at 21; also Xcel’s response to DOC IR-007. (Sept. 15, 2025).

[\[130\]](#) CGA, Initial Comments at 17.

[\[131\]](#) LIUNA, Supplemental Comments at 2.

[\[132\]](#) *Id.*, at 3.

[\[133\]](#) XLI, Supplemental Comments at 2.

[\[134\]](#) Ex. XLI-9 at 22:23-23:4 (Ly Surrebuttal).

[\[135\]](#) Ex. XLI-9 at 22:17-18 (Ly Surrebuttal).

[\[136\]](#) Ex. XLI-9 at 23:16-18 (Ly Surrebuttal).

[\[137\]](#) Docket No. E-002/M-19-39.

[\[138\]](#) Docket No. E-002/M-22-572.

[\[139\]](#) *In the Matter of Xcel Energy's Petition for Approval of Contracts for Provision of Service to a New Large Customer's Minnesota Data Center Project*, ORDER. Docket No. E-002/M-22-572. (October 18, 2023).

[\[140\]](#) *In the Matter of the Petition by Northern States Power Company d/b/a Xcel Energy for Approval of Contracts and Ratemaking Treatment for Provision of Electric Service to Google's Data Center Project*. ORDER APPROVING PETITION WITH CONDITIONS. Docket No. E-002/M-19-39. (July 15, 2019).

[\[141\]](#) *In the Matter of the Application of Otter Tail Power Company for Authority to Increase Rates for Electric Service in the State of Minnesota*, Docket No. E-017/GR-20-719, FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER (February 1, 2022) at 44.

[\[142\]](#) *In the Matter of the Application of Northern States Power Company, dba Xcel Energy, for Authority to Increase Rates for Electric Service in the State of Minnesota*, Docket No. E-002/GR-21-630. FINDINGS OF FACT, CONCLUSIONS, AND ORDER. (July 17, 2023), at 95.

[\[143\]](#) Xcel Initial, pg.1

[\[144\]](#) *Id.*, pg.3

[\[145\]](#) *Id.*, pg. 17

[\[146\]](#) XLI Supplemental Comments, pg. 2-3

[\[147\]](#) OAG Comments, pg. 16

[\[148\]](#) *Id.*, pg. 17

[\[149\]](#) In re Application of Ariz. Pub. Serv. Co. for a Hearing to Determine the Fair Value of the Util. Property of the Co. for Ratemaking Purposes, to Fix a Just and Reasonable Rate of Return Thereon, and to Approve Rate Schedules Designed to Develop Such a Return, Arizona Corporation Commission Docket No. E-01345A-25-0105, Direct Test. of Jessica E. Hobbick at 24-25 (June 13, 2025), <https://docket.images.azcc.gov/E000044763.pdf?i=1758556055895> (pdf at 218-19).

[\[150\]](#) Virginia's electricity market is largely vertically integrated, with retail choice available to customers with annual demands greater than 5 MW. See Energy Regulation, Virginia State Corporation Commission, <https://www.scc.virginia.gov/regulated-industries/utility-regulation/energy-regulation/> (last visited Oct 8, 2025).

[\[151\]](#) OAG Comments, pg. 18-19

[\[152\]](#) OAG Reply Comments, pg. 4-5

[\[153\]](#) OAG Supplemental Comments, pg. 25-26

[\[154\]](#) *Id.*, pg.27

[\[155\]](#) *Id.*, pg.29

[\[156\]](#) XLI Supplemental Comments, pg.2-3

[\[157\]](#) See more discussion in the “Sales True-up” section

[\[158\]](#) Department Supplemental Comments, pg. 6-7

[\[159\]](#) Google Comments, pg. 9-10

[\[160\]](#) Google Supplemental Comment (December 5, 2025), pp. 5

[\[161\]](#) Xcel Initial, pg. 3

[\[162\]](#) [Sec. 216B.1622 MN Statutes](#)

[\[163\]](#) In the Matter of Xcel Energy’s 2024-2024 Upper Midwest Integrated Resource Plan, Docket No. E002/RP-24-67, and In the Matter of Xcel Energy’s Competitive Resource Acquisition Process for up to 800 Megawatts of Firm Dispatchable Generation, Docket No. E002/CN-23-212, ORDER APPROVING SETTLEMENT AGREEMENT WITH MODIFICATIONS (April 21, 2025). (Order # 32)

[\[164\]](#) [Sec. 216B.02 MN Statutes](#) subd. 11

[\[165\]](#) Xcel Initial, pg. 10 and Attachment A

[\[166\]](#) Xcel Reply Comments, pg. 4-5

[\[167\]](#) *Id.*, footnote # 11

[\[168\]](#) Xcel Reply Comments, pg. 5

[\[169\]](#) *Id.*, pg. 6

[\[170\]](#) CUB Comments, Minn. Stats. §§ 103G.265, Subd. 5; 103G.271, Subd. 5b.

[\[171\]](#) *Id.*, pg. 6, footnote#33

[\[172\]](#) *Id.*, pg. 7

[\[173\]](#) CUB Supplement Comments, pg. 3-4

[\[174\]](#) *Id.*

[\[175\]](#) *Id.*, pg. 5

[\[176\]](#) CUB Comments, pg. 7

[\[177\]](#) *Id.*

[\[178\]](#) CUB Supplement Comments, pg. 6

[\[179\]](#) *Id.*, pg. 7

[\[180\]](#) *Id.*, pg. 3

[\[181\]](#) Department Comments, pg. 6

[\[182\]](#) Department Supplement Comments, pg. 7

[\[183\]](#) Google Comments, pg. 8

[\[184\]](#) *Id.*, pg. 10

[\[185\]](#) DCC Comments, pg. 12

[\[186\]](#) *Id.*, pg. 13

[\[187\]](#) DCC Reply Comments, pg. 26

[\[188\]](#) *Id.*, pg. 27

[\[189\]](#) *Id.*, pg. 25

[\[190\]](#) LIUNA Supplement Comments, pg. 2

[\[191\]](#) ELPC/VS Comments, pg. 4

[\[192\]](#) ELPC/VS Supplement Comments, pg. 9

[\[193\]](#) *Id.*, pg. 10

[\[194\]](#) CGA Comments, pg. 1- 2

[\[195\]](#) *Id.*

[\[196\]](#) CGA Reply Comments, pg. 6

[\[197\]](#) Staff notes on discussion at the February 25, 2026 Planning Advisory Committee: MSIO proposed 50MW and FERC is aiming to 20MW

[\[198\]](#) This decision option was inadvertently omitted by CUB in its decision options filing on March 27, 2026. Staff has confirmed via email that this was an oversight. CUB continues to support its initial recommendations submitted during the comment period.

[\[199\]](#) This decision option was inadvertently omitted by DCC in its decision options filing on March 27, 2026. Staff has confirmed via email that this was an oversight. DCC continues to support its initial recommendations submitted during the comment period.

[\[200\]](#) The Company is not proposing to eliminate stratification for class cost allocation purposes within the Class Cost of Service Study. The proposed removal of the stratification process is only for rate design purposes for the Large General Time of Day Service tariff and because the Large General Time of Day Service is designed to be revenue neutral to a stratified rate design structure. The Company does not expect a material difference in cost recovery relative to the size of the customer's bill.

[\[201\]](#) Xcel Initial, pg. 11-12

[\[202\]](#) Xcel Initial, pg. 13 and Attachment I

[\[203\]](#) Xcel Initial, pg. 12

[\[204\]](#) *Id.*, Attachment I, pg 2 of 3

[\[205\]](#) *Id.*, Attachment J

[\[206\]](#) Xcel Initial, Attachment I

[\[207\]](#) Department Comments, pg. 10

[\[208\]](#) Department Supplemental Comments, pg. 14-15

[\[209\]](#) *Id.*, pg. 11

[\[210\]](#) Department Supplemental Comments, pg. 13

[\[211\]](#) OAG Reply Comments, pg. 17-18

[\[212\]](#) Google Comments, pg. 13-15

[\[213\]](#) DCC Reply Comments, pg. 7-8

[\[214\]](#) CloudHQ Comments, pg. 5-6

[\[215\]](#) *Id.*, pp. 11

[\[216\]](#) *Id.*, pp. 25

[\[217\]](#) *Id.*, Attachment G

[\[218\]](#) *Id.*, Attachment G - ESA 3.3

[\[219\]](#) Google Comments, pg. 15-16

[\[220\]](#) Xcel Response to IR DOC-004

[\[221\]](#) Department Comments, pg. 16

[\[222\]](#) Department Comments, pg. 15

[\[223\]](#) See Department Supplemental Comments, pg. 22-23, Table 1

[\[224\]](#) The Department notes that large load customers will be assigned to the C&I Demand customer class and under Xcel's current sales true-up, the remaining 20% of costs will be picked up by this customer class, if Xcel is unable to generate the revenues apportioned to this class over a year's time period

[\[225\]](#) Department Supplemental Comments, pg. 26

[\[226\]](#) OAG Supplemental Comments, pg. 39

[\[227\]](#) Xcel Petition, Attachment I, pg. 2 of 3.

[\[228\]](#) *Id.*, pg. 40, Table 4

[\[229\]](#) *Id.*, pg. 41, Table 5

[\[230\]](#) CUB Comments, pg. 5

[\[231\]](#) CUB Supplemental Comments, pg. 15-16

[\[232\]](#) CloudHQ Comments, pg. 5

[\[233\]](#) *Id.*, pg. 6

[\[234\]](#) Google Comments, pg. 15-17

[\[235\]](#) DCC Comments, pg 26-27

[\[236\]](#) *Id.*, pg. 28

- [\[237\]](#) DCC Reply Comments, pg. 7-8
- [\[238\]](#) Tract Comments, pg. 8
- [\[239\]](#) *Id.*, pg. 9
- [\[240\]](#) Tract Supplemental Comments, pg.6
- [\[241\]](#) Xcel Initial, Attachment G, section 3.1
- [\[242\]](#) *Id.*, Attachment G, section 16.2
- [\[243\]](#) Xcel Initial, pp. 14
- [\[244\]](#) Department Supplemental Comments, pg.19-20
- [\[245\]](#) CloudHQ Comments, pg.7
- [\[246\]](#) DCC Reply Comments, pp. 10
- [\[247\]](#) Xcel Initial , pg. 10
- [\[248\]](#) CUB Comments, pg. 4-5
- [\[249\]](#) CUB Supplemental Comments, pg. 12-13
- [\[250\]](#) *Id.*, pg. 14
- [\[251\]](#) OAG Supplemental Comments, pg. 38-39
- [\[252\]](#) Department Comments, pg. 8
- [\[253\]](#) Department Supplemental Comments, pg. 12
- [\[254\]](#) Google Comments, pg. 12-13
- [\[255\]](#) Xcel Petition, Attachment G, pg. 7- 8 of 34
- [\[256\]](#) Xcel Reply Comments, Attachment A, pg. 7- 8 of 36
- [\[257\]](#) Tract Comments, pg. 6-8
- [\[258\]](#) *Id.*, pg. 10
- [\[259\]](#) *Id.*
- [\[260\]](#) Tract Supplemental Comments, pg. 7-8
- [\[261\]](#) CloudHQ Comments, pg.4
- [\[262\]](#) CloudHQ Reply Comments, pg.2
- [\[263\]](#) DCC Comments, pg. 14-15
- [\[264\]](#) *Id.*, pg.10

Economic Analysis

Peak and Energy Controlled Services

Xcel

To incorporate demand flexibility, demand response, and energy efficiency for very large customers – and because Minn. Stat. § 216B.241, subd. 1a exempts qualified data centers from participating in ECO programs – Xcel proposed two interruptible rate options and revisions which update the Company’s Tariff Book. Specifically, Xcel requests approval of the following Controlled Services tariffs and revisions:

1. the Large Peak Controlled TOD Service tariff;
2. revisions to the Tier 1 Energy Controlled Service rider; and
3. administrative revisions to the rules for the application of Peak Controlled Services.

Staff notes that the Large Peak Controlled TOD Service tariff and the Tier 1 Energy Controlled Service rider are distinct but interconnected rate structures, in that a data center customer must first be enrolled in the Large Peak Controlled TOD Service tariff.¹³ The Tier 1 Energy Controlled Service rider acts as a modification to the base Large Peak Controlled TOD tariff by, among other things, replacing the standard on-peak and off-peak energy charges and introducing a “Control Period Energy” charge.

Staff provides additional details of the tariff and rider below:

a. Large Peak Controlled TOD Service Tariff

The Large Peak Controlled TOD Service tariff is available to customers with a minimum controllable demand of 3,000 kW and offers Tier 1 (up to 150 hours of interruption) or Tier 2 (up to 80 hours of interruption) options. Below is a comparison of Tier 1 and Tier 2 from the Department’s October 13, 2025, initial comments:¹⁴

¹³ The Company’s Tariff Book states: “Availability is restricted to customers who are taking service on the Tier 1 option of the Peak Controlled Time of Day Service and the Tier 1 option of the Large Peak Controlled Time of Day Service.”

¹⁴ Staff notes that the “Predetermined Demand Level,” or PDL, is the agreed-upon demand limit that the customer’s on-peak demand must not exceed during a Company-requested control period. There are two ways a PDL can be structured under the tariff: (1) a Standard PDL, where the customer agrees to limit their load to a specific, fixed demand level during a control period; and (2) an Optional PDL, where the customer agrees to reduce their demand by a fixed amount during a control period, but the PDL fluctuates and is calculated as the customer’s monthly adjusted on-peak demand minus that fixed reduction amount.

<u>Tier 1</u>	<u>Tier 2</u>
a. A Term matching the ESA Term	a. A Term matching the ESA Term
b. The Predetermined Demand Level	b. The Predetermined Demand Level
c. Maximum 150 hours of interruption	c. Maximum 80 hours of interruption
d. Cancellation charge terms	d. Cancellation charge terms
e. Control period notice	e. Control period notice

The tariff provides discounted demand charges, with the size of the discount depending on a customer's "Performance Factor (PF)," ¹⁵ which is measure (in %) of a customer's controllable demand during peak summer months relative to their maximum annual controllable demand. Customers with higher performance factors receive larger discounts on their monthly demand charges. Based on their calculated PF, customers are grouped into three pricing levels:

- **Level A:** Less than 65% PF (This level is not available for Tier 1 customers but is priced at \$23.06 per kW for Tier 2).
- **Level B:** Greater than 65% but less than 85% PF.
- **Level C:** Greater than 85% PF (This provides the largest discount, priced at \$20.58 per kW for Tier 1 and \$21.39 per kW for Tier 2).

Customers also have the option for a "Short Notice Rider," which is a demand charge option providing a rate of \$20.08 per kW monthly, compared to the \$21.39 per kW monthly for Tier 2. The Short Notice Rider is not available to Tier 2 customers. The rider states that, "[w]ithin 10-minutes of notification from the Company, customer's controllable load shall be curtailed by Company-initiated automatic control for the duration of the control period as determined by the Company." ¹⁶

These components of the tariff are shown in the table below, which are the charges provided in the revised Company Rate Book. ^{17,18} Notably, the tariff has a fixed monthly customer charge of \$9,000. Energy charges vary based on the time of day, with Firm On-Peak Energy costing \$0.02751 per kWh and Firm Off-Peak Energy charged at a lower rate of \$0.01448 per kWh. Demand charges are separated into Firm Demand, Controllable Demand, and Off-Peak Demand in Excess of On-Peak Demand, which vary slightly based on whether the customer selects the

¹⁵ According to the redline modifications in the Large Peak Controlled Services tariff, Xcel defines "Performance Factor" as follows: "Performance factor is defined in percentage terms as a numerator for the average unadjusted maximum demand during July and August less the customer's Predetermined Demand Level divided by a denominator for the maximum annual unadjusted Controllable Demand . . ."

¹⁶ Xcel Petition, Minnesota Electric Rate Book – MPUC No. 2, Tier 1 Peak Controlled Short Notice Rider, Section No. 5, 13th Revised Sheet No. 126.

¹⁷ Minnesota Electric Rate Book – Large Peak Controlled Time of Day Service, Rate Code AXX, Section No. 5, Original Sheet No. 47.3. LARGE PEAK CONTROLLED TIME OF DAY SERVICE RATE CODE AXX

¹⁸ Staff notes that charges for the Large Peak Controlled TOD Service tariff are consistent with the Large General TOD Service tariff.

Tier 1 or Tier 2 interruption option.¹⁹ Also, if a customer's Off-Peak Demand exceeds their On-Peak Demand, the customer is billed a supplemental charge of \$3.35 for that excess demand, and this applies to both Tier 1 and Tier 2.

Table 14. Large Peak Controlled TOD Service Tariff Charges

Rate		
Customer Charge/mo.	\$9,000.00	
Service at Secondary Volt.		
Energy Charge/kWh		
On Peak Period Energy	\$0.02751	
Off-Peak Period Energy	\$0.01448	
Demand Charge per Month per kW	Tier 1	Tier 2
On Peak Period Demand		
Firm Demand		
<u>June - September</u>	<u>\$29.25</u>	<u>\$29.25</u>
<u>Other Months</u>	<u>\$24.66</u>	<u>\$24.66</u>
<u>Controllable Demand (Jan-Dec)</u>		
<u>Level A: < 65% PF</u>	<u>Not Available</u>	<u>\$23.06</u>
<u>Level B: > 65% and < 85% PF</u>	<u>\$21.21</u>	<u>\$21.93</u>
<u>Level C: > 85% PF</u>	<u>\$20.58</u>	<u>\$21.39</u>
<u>Short Notice Rider</u>	<u>\$20.08</u>	<u>Not Available</u>
<u>Off Peak Period Demand in Excess of On Peak Period Demand (Jan-Dec)</u>	<u>\$3.35</u>	<u>\$3.35</u>
	<u>January - December</u>	
<u>Voltage Discounts per Month</u>	<u>Per kW</u>	<u>Per kWh</u>
<u>Transmission Transformed Voltage</u>	<u>\$2.35</u>	<u>\$0.00334</u>
<u>Transmission Voltage</u>	<u>\$3.35</u>	<u>\$0.00329</u>

b. Tier 1 Energy Controlled Service

The Tier 1 Energy Controlled Service rider is available to customers already enrolled in the Tier 1 option of the Large Peak Controlled TOD Service tariff, or the standard Peak Controlled TOD tariff. The charges are based on the Large Peak Controlled TOD Service on- and off-peak energy charges; in fact, the rider has the same energy charge reduction amount available to Peak

¹⁹ **Firm Demand** is defined as "the lesser of Predetermined Demand or Adjusted on Peak Period Demand, except in months when the customer fails to control load to Predetermined Demand Level when requested by Company." **Controllable Demand** is defined as "the difference between Adjusted On Peak Period Demand during the billing month and the greater of contracted Predetermined Demand or firm demand during the billing month for which the bill is rendered, but never less than zero." Essentially, Firm Demand is the baseline level of power that the customer determines they need to run their operations and cannot be interrupted, whereas Controllable Demand is the flexible portion of the customer's load that they agree to reduce or curtail during a control event.

Controlled TOD Service customers that was approved in the Company’s last rate case.²⁰ The table below provides the energy rates for Tier 1 Large Peak Controlled TOD Service.

Table 15. Energy Charges under the Tier 1 Energy Controlled Service Rider

	Energy Charge per kWh
Firm On-Peak	\$0.02751
Firm Off-Peak	\$0.01448
Controllable On-Peak	\$0.02450
Controllable Off-Peak	\$0.01294
Control Period Energy	\$0.09000

While the Large Peak Controlled TOD tariff establishes the foundational demand response agreement and demand charge discounts, the Tier 1 Energy Controlled Service Rider differs in a few important ways:

- **Maximum Interruption Hours:** The Large Peak Controlled TOD Tier 1 tariff is limited to calling a maximum of 150 hours of interruption per year. When a customer opts into the Energy Controlled Service rider, Xcel may call up to 300 hours per year.
- **Control Event Triggers:** Control periods under the Large Peak Controlled TOD tariff are based on system reliability events. The Energy Controlled Service rider introduces an economic trigger, set where Xcel’s generation or purchased power costs exceed \$70 per MWh.
- **Energy Pricing and “Buy-Through” Options:** The Energy Controlled Service rider replaces the base energy charges with its own set of Firm and Controllable On-Peak and Off-Peak energy rates. Additionally, the rider features a Control Period Energy Service; if a control event is called for economic reasons (and not due to a system peak or emergency), customers have the option to “buy through” the interruption and continue using their controllable demand by paying a Control Period Energy charge of \$0.09 per kWh. Staff notes that the Control Period Energy Service buy-through option is not available when Xcel expects system peak load conditions or during declared system emergencies; in other words, during system emergency or peak event, the customer cannot simply pay the \$0.09000/kWh premium to keep running; they must fully curtail their controllable load to their agreed-upon PDL.
- **Failure to Control Penalties:** Under the Large Peak Controlled TOD Tier 1 tariff, if a customer fails to reduce their load to the agreed-upon level during an event, there is a \$10 per kW charge penalty for the excess demand. If a customer is on the Energy

²⁰ Docket No. E002/GR-21-630.

Controlled Service rider and fails to control their load, they must pay the \$10 per kW penalty plus the \$0.09 per kWh Control Period Energy charge for any energy used that is associated with their Controllable Demand during that event.

Party Comments

Several parties expressed strong support for the inclusion of demand response options for very large customers, but some recommend additional requirements. Other parties, while still generally supportive of demand response offerings, voiced concerns that warrant modifications. The table below summarizes key party positions and recommendations on the two controlled services options. Following the table, Staff will discuss the parties' positions in more detail.

Table 16. Party Positions on Peak Controlled Tariff

Party	Position/Recommendations	Xcel Response
CUB	- Establish a minimum number of load control events. - Reflect rate choices in the ICT. - Create a "Tier 3" reliability-only option.	- Opposed min. event threshold - The ICT already compares incremental costs to revenues. - No response to the Tier 3.
DCC	- Apply min. bill provision to demand charges and after the 5-year load ramp. - If premises are aggregated, their measured demand must also be aggregated for minimum bills. - Opposed min. interruptible threshold.	- Charging min. bills during the ramp period is necessary. - Opposed aggregating measured demand across different sites. - Agreed with opposing min. number of curtailment events.
Google	- Tie control events to MISO directives. - Supports PDL, interruption limits.	- Requires flexibility to curtail loads. - Confirmed energy charges are not in the minimum bill.
Dept.	Base energy charges on day-ahead energy market prices and/or a RTP rate	- Argued customers are not materially exposed to energy market prices - Xcel no longer has an RTP tariff.
ELPC/VS	Xcel should track participation (among other things) and report every six months.	A six-month reporting requirement is unnecessary
FE/MCEA	Xcel and customers to agree to tailored individual flexibility arrangements.	No response
OAG	Discounted rates are cross-class subsidies unless demand response offsets new capacity.	No response

c. CUB

CUB expressed concern that customers may receive substantial demand charge discounts regardless of whether Xcel actually calls a load curtailment event. CUB pointed to Xcel's 2024 Performance Metrics Report, in which the Company reported 860 MW of load-shedding capacity available but called 0 MW of load-shedding.

CUB also cautioned against certain actors with flexible demand requirements, such as cryptocurrency mining operations, potentially exploiting the tariff by selecting a nominal amount of "firm demand" while categorizing the rest of their substantial load as "controllable demand" to receive a price reduction. If curtailment events are not called, these customers could reap massive financial benefits without providing system benefits.

Additionally, CUB raised the possibility of revenue shortfalls; if large load customers receive discounted demand charges but provide no actual system relief, the ICT might fail to accurately capture these revenue shortfalls, leading to a situation where existing residential customers end up subsidizing the costs of serving data center customers.

To remedy these concerns, CUB recommends establishing a minimum number of load control events to ensure that the discounts provided to customers are reflective of actual system benefits. CUB suggested tying this threshold to forecasted coincident peak days to avoid calling unnecessary events while still mitigating high electricity costs and peak load generation needs.

CUB also recommends that the customer's choice of rate should be reflected in the ICT to guarantee that sufficient revenues are collected even if the customer receives a discounted demand charge.

Finally, in response to some parties' preference for a reliability-only option (discussed below), CUB suggested the creation of a "Tier 3" product, which would (1) commit customers to curtailing load only during reliability or emergency events; (2) require no minimum interruptible threshold; and (3) provide a much more modest demand charge reduction.

d. DCC

DCC, while supportive of demand response, emphasized the importance of the Peak Controlled tariff being voluntary, which is critical because data centers have varying degrees of load flexibility. However, DCC raised concerns about load control event triggers and thresholds. DCC opposed CUB's recommendation to establishing a minimum interruptible threshold, and DCC recommends that load control events only be called based on actual cost and reliability needs, or when MISO deploys similar resources during emergency procedures.

e. Google

Google generally supported Xcel's Controlled Services proposals because they will enable very large loads to: 1) efficiently interconnect; 2) provide demand response benefits; and 3) help grid operators manage the system.

However, Google was concerned that control events will be implemented "solely at the discretion of Xcel." Google prefers that control events be implemented when MISO (or another applicable regional or federal entity) deploys similar resources during system emergencies. Google clarified that it was not seeking an exemption from safety or reliability requirements, such as underfrequency load shedding (UFLS) protocols, but stressed that Xcel should not have the discretion to interrupt or curtail loads for non-operational reasons without a clear directive from MISO or a regional transmission entity.

According to Google, modifying the tariff so that control events are implemented not solely at Xcel's discretion, but rather MISO directives, would:

- Provide a clear and transparent threshold for when a control event is deployed;
- Enhance customer certainty and improve their ability to forecast control events; and
- Ensure consistency across the MISO region for large customers operating in multiple utility jurisdictions.

Despite these concerns, Google supports several features of the tariff, such as: (1) the PDL, which allows the customer and Xcel to collaboratively set a predetermined level of reduced demand during a control period;²¹ and (2) a one-hour notification time and limitations on annual hours of interruptions.²²

f. Department

The Department expressed concern that the energy charges in the Tier 1 Energy Controlled Service rider could have significant impacts on real-time marginal energy rates, and the Department was concerned about how other system customers will be protected from such impacts. The excerpt below includes the Department's concern (the excerpt was provided in the Department's analysis of the Large General TOD Service tariff section, but it also applies to the Peak Controlled tariff and Energy Controlled Service rider):

The Department's concern rests on these Large General TOD Service customers significantly impacting marginal energy costs. If the marginal energy costs are greater than the marginal energy revenues collected from these large load customers, then there is a significant risk that Xcel's other, non-data customers

²¹ Google, initial comments, p. 11.

²² Google, initial comments, p. 11.

may be negatively impacted by Large General TOD Service customers usage on the system. The Department believes this concern may be alleviated with an energy charge based on the day ahead energy market prices and/or a Real Time Pricing (RTP) rate. Xcel's Advanced Metering Infrastructure (AMI) capabilities should have the capabilities for linking to MISO energy prices.²³

g. ELPC/VS

ELPC/VS noted that Xcel failed to provide a detailed description of the combination of new and existing resources, including demand flexibility, demand response, and energy efficiency, that it will use to serve super-large customers. Instead, Xcel merely indicated it would rely on its general IRP analysis. Because Xcel has not modeled how often it expects very large customers to choose interruptible service options, and there is no specific data on this topic, it will be difficult for the Commission to ensure the tariffs are functioning as expected. Therefore, ELPC/VS recommend that the Commission require Xcel to file a report every six months detailing very large customer participation in the Large Peak Controlled TOD Service tariff and the Tier 1 Energy Controlled Service rider. Specifically, these reports should track:

1. The number of new very large customer requests and their expected capacity;
2. The number of customers with signed ESAs and their total capacity;
3. The number of customers participating in load flexibility tariffs and the total amount of flexible load; and
4. Participation numbers and capacity for the CECT.

h. OAG

The OAG raised a concern that because these discounted rates are allocated across all customer classes, they function as subsidies unless the demand response genuinely offsets the need for expensive new capacity investments.

Xcel Responses to Parties

a. Response to CUB

Xcel's responses to CUB are summarized below:

First, Xcel (like DCC) opposed minimum interruptible thresholds. Xcel clarified that it requires a minimum of one test event annually but otherwise will not curtail a customer unless it is operationally necessary. Xcel also noted that the new Large Peak Controlled tariff is patterned directly after its existing peak controlled tariffs, which similarly do not require a minimum number of interruption hours.

²³ Department initial comments, p. 10.

Second, in response to CUB’s concern that certain actors might reap profits without providing system benefits, Xcel stated that it was “unsure what type of customer differentiation CUB might be proposing,”²⁴ but the Company’s proposal does not require further differentiation because it relies on the ICT to assess the costs to serve each specific customer.

Third, in response to CUB’s concern over revenue shortfalls and recommendation that the ICT should reflect the customer’s choice of rate, Xcel stated that the ICT directly compares the specific incremental costs caused by a customer against the revenues that customer will generate. Customers will be required to make up any revenue shortfall through additional revenue mechanisms negotiated in their individual ESA.

Finally, Xcel did not respond to CUB’s proposal to create a Tier 3 reliability-only option because CUB first proposed this in its supplemental comments.

b. Response to DCC

Regarding the minimum interruptible threshold and load control event triggers, Xcel agreed with DCC in opposing a mandatory minimum number of curtailment events but disagreed with DCC’s recommendation to limit control events exclusively to times when MISO declares a regional emergency.

c. Response to Google

In response to Google’s opposition to Xcel’s sole discretion over calling control events – and Google’s recommendation to instead tie control events to MISO-declared emergencies – Xcel stated that it has a regulatory obligation to maintain grid stability at all times. Because large loads pose unique, localized operational risks, the Company needs the flexibility to curtail a load independently of MISO to effectively manage the local system.

In response to Google’s suggestion to clarify language pertaining to minimum billing, Xcel confirmed that energy charges are not included in the minimum bill provision, but the Company does not believe tariff changes are necessary, or helpful. Xcel argued that amending the tariff as Google recommends would be confusing, and the current language already specifies “other applicable Tariff related charges,” which Xcel pointed out “is meant to capture the calculation of any other charges identified in the ESA for inclusion in the minimum bill.”²⁵

d. Response to the Department

In response to the Department’s concern about the impact of very large loads on real-time marginal energy rates, Xcel argued that, first, since the Company serves its customers using its own owned and contracted resources, customers are minimally exposed to energy market

²⁴ Xcel, reply comments, p. 31.

²⁵ Xcel, reply comments, p. 8.

prices. Second, Xcel will add sufficient generation resources to serve all customers alongside the new large loads, so the overall system exposure to market energy prices will not materially change. Third, Xcel clarified that it no longer has an RTP tariff. Fourth, Xcel's proposed base rate energy charges are designed to recover administrative, general, and conservation expenses, not marginal energy or fuel-related costs. Fifth, Xcel noted that large load customers will pay the standard fuel clause rates just like any other retail customer. Lastly, Xcel argued that it would not be appropriate to charge large load customers based on MISO market prices.²⁶

e. Response to ELPC/VS

In response to ELPC/VS's concern that Xcel failed to detail the specific combination of resources it will use to serve super-large customers, Xcel stated that it intends to use system resources consistent with its existing IRP, and the next IRP should contain the information to satisfy ELPC/VS's request.

Regarding the six-month reporting requirement, Xcel does not believe this is necessary because the requested program information, including participation numbers and load values, is already available through existing public reports, specifically the Company's Demand-Side Management (DSM) status reports, as well as general rate cases.

Staff Discussion

On Controlled Services, the main issues the Commission will need to consider include:

- modifying the tariff so that control events are not implemented solely at Xcel's discretion, but rather when MISO deploys similar resources during emergency events, as recommended by Google and DCC;
- adding a third tier focusing purely on reliability/emergency curtailment, as recommended by CUB in response to DCC's and Google's comments; and
- establishing a minimum interruptible threshold to ensure events are actually called and system benefits are commensurate with discounts received, also recommended by CUB.

As described in the previous section, Google's position appears to center on predictability and consistency for business operations; by tying control events to MISO emergency procedures, data center operators will have a clear, objective threshold for deployment. DCC supports Google's recommendation because this predictability will encourage more large customers with flexible loads to take service under the interruptible tariff.

Xcel opposed this recommendation, arguing that data center loads pose unique, localized operational risks to the system, which can occur in the absence of a broader MISO-wide

²⁶ Xcel, reply comments, p. 8.

emergency. CUB agreed, noting that very large loads pose unique reliability risks that exist regardless of a regional MISO emergency.

For context, Staff notes that Xcel's proposed interruptible options are, in part, a response to legislation exempting qualified large-scale data centers from contributing to, and participating in, Xcel's ECO programs. Therefore, the tariffs enable data centers to reduce their electricity usage during periods of peak demand or high energy prices in exchange for discounted energy and demand rates. In other words, Xcel designed the Controlled Services programs specifically to be used for economic curtailment as well as for load-shedding during system emergency events; when viewed in this way, it appears that Google's and DCC's position does not align with Xcel's overall demand response objectives.

For example, under the tariff, Xcel will be able to call control events when production costs or purchased power prices exceed \$70 per MWh. Under Google's recommendation, because the \$70 per MWh threshold is an economic curtailment trigger, which is based on Xcel's production costs rather than a MISO-declared grid emergency, adopting Google's recommendation would effectively eliminate Xcel's authority to curtail load during these economic conditions. Xcel argued this is unreasonable because the Company intends to use the tariff to protect ratepayers from high wholesale market prices.

While Staff does not believe Google's recommendation is inherently unreasonable, Staff supports Xcel's proposal to introduce an economic curtailment component, as it aligns with the Company's objectives to: (1) provide data centers with a demand flexibility and conservation tool; (2) reduce wholesale market price risk; and (3) improve localized reliability.

Staff also agrees with CUB that limiting control events exclusively to MISO emergencies raises new concerns about the demand charge discounts, which may be less justifiable if the system would not be receiving proportional value in the form of economic control.²⁷ By restricting Xcel's discretion to call interruptions, other ratepayers could arguably be subsidizing data centers' discounted rates without allowing Xcel to utilize the facilities' load flexibility to avoid high wholesale energy costs or resolve local grid constraints.

To offer a compromise solution, CUB proposed adding a third tier to the Peak Controlled Services tariff, which CUB reasoned would preserve the economic and reliability curtailment options for Tiers 1 and 2 but add another option that would be limited to reliability or MISO emergency events. CUB explained:

we are not opposed to a curtailment option focused solely on reliability concerns, so long as the offering does not replace the tariff framework currently under consideration. Instead, the Company could offer a third "tier" that provides a modest demand charge reduction, requires no minimum interruptible threshold,

²⁷ CUB, supplemental comments, pp. 11-12.

and commits customers to curtailing only during events called for reliability or emergency purposes.²⁸

The creation of third tier appears to be a policy decision for the Commission, and therefore Staff takes no position on this issue. However, Staff notes that, on the one hand, adding a third tier could meaningfully take customers away from enrollment in the Tier 1, economic control option. As indicated by their comments, Google and DCC seem to prefer a demand response product reflective of the reliability-only third tier, rather than be subject to the Xcel-controlled, economic controls of Tier 1; further, as CUB noted elsewhere in its comments, it could be quite likely that no demand response is called in any given year. This brings into question both the value of the demand response product (if fails to capture load flexibility opportunities among data centers) and the subsidization of discounted rates from other classes.

Aside from participation, the Commission may agree with Xcel and CUB that, since localized reliability issues can occur independently of a regional MISO-wide emergency, removing Xcel's authority to curtail specific, large loads during local system strain may impair the Company's ability to manage local grid reliability effectively.

Rather than creating a MISO-based third tier, the Commission can adopt the solution proposed by FE/MCEA and ELPC/VS, which would allow Xcel and large load customers to negotiate individually-tailored load flexibility arrangements. According to FE/MCEA, through additional reliability modeling, Xcel can determine the appropriate amount and timing of load flexibility required from a specific facility to avoid alternatives such as building new gas plants or triggering expensive transmission upgrades. Xcel has already confirmed it is willing to work with potential customers on a case-by-case basis to identify these specific flexibility benefits, and these agreements may be able to offer more precise system benefits than a standardized third tier.

Regarding the minimum interruptible threshold, CUB argued that without a minimum requirement for control events, a super-large customer could receive substantial demand charge discounts without ever actually being curtailed. DCC and Xcel opposed a minimum interruptible threshold, arguing that load control events should be based on objective cost and reliability needs. Xcel added that the new tariff is patterned directly after the Company's existing peak-controlled tariffs, which have operated successfully for years and also do not require a minimum interruptible threshold. Moreover, Xcel maintained that retaining total discretion over when to call events is standard operating procedure and the most effective way to manage the system.

First, as a point of clarification, Staff notes that CUB challenged DCC's characterization of CUB's position that a minimum implies arbitrarily-called events. CUB noted that it "is not suggesting

²⁸ CUB, supplemental comments, p. 12.

that load control events be needlessly or arbitrarily called,”²⁹ and CUB suggested criteria such as forecasted coincident peak days to establish the minimum threshold.

Second, the Commission must balance CUB’s valid concerns about the potential for free-ridership – where large load customers receive discounted rates without providing commensurate grid benefits – against the potential business risks identified by DCC and Xcel, where data centers could be curtailed when the grid is not under strain.

Behind-the-Meter (BTM) Generation

Summary

In the context of the instant proceeding, BTM generation refers to power generation or energy storage resources that are located on the data center’s side of the meter and which supplies part or all of the facility’s electricity load. Several parties contended that, rather than a data center contracting all of its power needs from Xcel, data centers can utilize BTM generation to produce power locally. Parties discussed several types of BTM generation:

1. **Backup Generation:** Xcel’s tariffs allow very large load customers to include BTM resources only as backup generation for use during emergencies or outages. The proposed ESA defines “backup generation” as generation that a customer creates to serve its own load only in situations where Xcel cannot provide energy to it.³⁰
2. **Co-located generation:** Co-located generation refers to pairing data center load with geographically-proximate generation. Geronimo, for example, emphasized that co-locating data centers alongside wind and solar facilities would deliver substantial system-wide benefits, such as reducing transmission congestion, optimizing the use of existing or new infrastructure, promoting the rapid development of clean energy resources, and bringing economic benefits to local communities.
3. **Energy Storage and Virtual Power Plants (VPPs):** Some parties referred to both energy storage and Virtual Power Plants (VPPs) as types of BTM generation or load flexibility

²⁹ CUB, supplemental comments, p. 10.

³⁰ In response to requests for clarification from the Department and the CUB, Xcel proposed an amendment to Paragraph 3 (“Service Provided Pursuant to Tariffs”) of its proposed Retail Customer Form ESA to explicitly define “backup generation” by adding the redline language: “Company shall deliver and sell to Customer, and Customer shall receive and purchase from Company, during the term of, and subject to, the provisions of this Agreement and as set forth in the Company’s Tariff, all electric power and energy as may be required by Customer at the Site—other than backup generation that Customer may provide for itself after it has a DER interconnection agreement for the backup generation where the backup generation may operate in parallel to the Company’s system. In this context, “backup generation” means generation that the Customer creates to serve its own load in situations where the Company cannot provide energy to it.”

initiatives. ELPC/VS, for example, characterized VPPs as “grid-integrated, dispatchable aggregations of distributed energy resources such as batteries, electric vehicles, smart thermostats, and other connected devices” that function as load flexibility arrangements.³¹ ELPC/VS referenced Voltus’s “Bring Your Own VPP” program, which “allows hyperscale data center operators to aggregate and monetize their flexible load capacity through VPP frameworks, enabling these customers to provide grid services while managing their energy costs.”³²

4. **Wholesale Export Generation:** CGA discussed BTM generation that not only serves the customer’s on-site load but is also capable of exporting surplus energy back over the point of interconnection onto Xcel’s system for wholesale sale.

Several parties commented that BTM generation and BYOG could mitigate the grid impacts of data centers and encourage super-large customers to be financially responsible for their own clean energy generation, which would insulate other ratepayers from bearing the costs of new power plants.

Xcel’s initially-proposed IA and ESA required customers to purchase all their electric power from the Company, and BTM generation was prohibited from feeding energy over the point of interconnection onto Xcel’s broader system. Some parties perceived this as a strict ban on BTM generation, and Xcel later clarified that the agreements allow the operation of backup BTM generation that operates in parallel with the Company’s network. However, Xcel confirmed that a super-large customer cannot “replace the firm service portion of the service it has contracted for with its own generation.”³³

BTM Generation

f. Party Positions

As noted above, parties cited numerous benefits of BTM generation, with perhaps the five main benefits being:

1. **System-wide grid support:** BTM generation can provide peak load shaving and emergency response, operating as Load Modifying Resources (LMR) during capacity and transmission emergencies. For example, CGA objected to allowing BTM generation solely for backup generation, stating “[t]his prohibition does not maximize the potential of any Large Load Customer-owned BTMG assets that could otherwise benefit the Company’s system more broadly, such as through peak load shaving and emergency

³¹ ELPC/VS, supplemental comments, p. 8.

³² ELPC/VS, initial comments, p. 6.

³³ Xcel, reply comments, p. 31.

response.”³⁴

2. **Stranded asset risk mitigation:** By generating their own power, super-large customers reduce their reliance on Xcel’s firm service, meaning less new generation infrastructure is required, which insulates ratepayers from stranded asset risk. Several parties, including CGA, CUB, Geronimo, and ELPC/VS discussed the relationship between BTM generation and stranded asset risk.
3. **Transmission congestion relief:** Co-locating generation directly with load avoids the overuse of critical transmission assets and helps minimize both existing and new transmission congestion. Geronimo argued that “co-location arrangements can reduce transmission congestion and/or the need to invest in additional transmission infrastructure, which likewise reduces costs.”³⁵
4. **Grid outage hedge:** BTM generation provides a reliable, continuous source of backup power for data centers to protect against wider system outages. CGA asserted that “regardless of whether the Company permits BTMG to access its system, it is widely apparent that data center developers will pursue on-site backup resources as a hedge against wider system outages.”³⁶
5. **Advancement of clean energy mandates:** Incentivizing clean BTM generation aligns data center load growth with the state’s clean energy and decarbonization requirements.

Parties’ recommendations on BTM generation include:

- CGA recommends that the Commission incentivize clean BTM generation, rewrite the IA so it does not prohibit BTM generation exports, and prioritize the interconnection queue for data centers deploying clean BTMG.
- ELPC/VS recommend the Commission endorse clean BTM resources as a primary tool to decrease the firm service data centers must contract from Xcel and urge Xcel to prioritize interconnection for customers deploying BTM generation or storage.
- The Department recommends modifying the IA to explicitly define “backup generation” and eliminate the overbroad categorical ban on feeding BTM energy onto the grid, thereby aligning the technical rules with the updated ESA.

³⁴ CGA, initial comments, p. 14.

³⁵ Geronimo, initial comments, p. 7.

³⁶ CGA, initial comments, p. 15.

- CUB recommends allowing super-large customers to build their own carbon-free BTM generation to insulate existing ratepayers from various financial risks.
- Geronimo recommends that the tariffs authorize and encourage co-located BTM generation and create an expedited “fast lane” interconnection study process for data centers paired with generation. Geronimo also recommends that Xcel modify its proposed tariffs to explicitly authorize and incentivize data center customers to serve their load through BTM or front-of-the-meter (FTM) co-located generation that is geographically proximate to the load. Geronimo also asked for additional clarity on what specific proposals or measures it will implement to protect other ratepayers if a new data center customer's ICT shows that the costs to serve them will be greater than the revenues they generate.
- LIUNA opposed prioritizing interconnection based on BTM generation or mandating backup generation plans, arguing it complicates the process, deters beneficial development, and is a waste of resources given Minnesota’s highly reliable grid.

g. Xcel Response

To address the Department’s concerns about the scope of BTM restrictions, Xcel proposed an amendment to paragraph 3 of the ESA to explicitly define “backup generation.” The proposed language states that backup generation is “generation that the Customer creates to serve its own load in situations where the Company cannot provide energy to it.”³⁷ The Department’s supplemental comments appreciated Xcel’s revision to the ESA but recommends also revising the Form IA to reflect Xcel’s proposed updated additional language, thereby making it consistent with the Retail Customer Form ESA.

Xcel opposed integrating co-located BTM generation and BTM wholesale exports into this specific tariff proceeding, stating that proposals related to co-located generation and BTM exports are outside the scope of the present docket and would be better handled in a separate docket so that all appropriate parties can participate.

Resource Procurement

a. Party Positions

Under Xcel’s proposal, the Company retains sole responsibility for resource procurement and relies on system resources consistent with its IRP. CGA, CUB, Geronimo, and ELPC/VS did not support this approach and suggested alternative resource procurement strategies.

CGA argued that Xcel’s resource procurement approach is overly restrictive and introduces undue risk. As discussed previously, CGA advocated for the BYOG concept, in which a super-

³⁷ Xcel, reply comments, p. 32.

large customer may bring their own clean energy generation to Xcel, possibly in exchange for a faster interconnection process. The BYOG model is intended to protect ratepayers from stranded asset risk and cross-subsidization; it addresses the problem of building generation assets with an economic life of 25-30 years to serve a data center, but the data center leaves or reduces its demand after a 15-year contract with the remaining ratepayers left with the remaining costs.

BYOG would not only insulate existing ratepayers from this risk, but also accelerate the clean energy transition, allow data center companies to invest directly in carbon-free resources, and fulfill regulatory and statutory mandates, such as Xcel's requirement under Minn. Stat. § 216B.1623 to offer an optional CECT.

According to CGA, other utilities have successfully implemented BYOG through various mechanisms.³⁸ Type of BYOG models include direct agreements/incremental costs, which can involve the utility delivering the full capacity of a new project to a data center company, and the data center company pays the incremental costs beyond what standard solar or wind would have cost. Second, dedicated renewable facilities not considered part of the utility's general system resources can serve the customer's load. Third, optional riders can allow large customers to financially support the procurement of new clean energy resources in lieu of, or in addition to, the utility's IRP.

CGA also discussed "ownership splits" of BYOG, where instead of the utility owning 100% of the newly built generation assets, ownership (and the associated stranded cost risk) is divided among the utility, the very large customer, and independent power producers.

CUB stated that it is "concerned with Xcel's insistence on treating all generation resources as system resources, and its reliance on the IRP process to make all decisions about new generation procurements." Supporting alternative approaches discussed by other parties, CUB added that they "fear that Xcel's current approach could foreclose opportunities that would reasonably insulate the Company and its existing customers from the costs of new generation necessitated by very large customers." CUB identified the CECT as "one possible option for carrying out these innovative approaches to resource procurement."³⁹

ELPC/VS recommend enabling super-large customers to procure their own resources rather than placing the burden entirely on Xcel's system, and they recommended allowing customers to separately procure clean energy through a CECT, BTM generation, or VPP arrangements.

³⁸ In Nevada, NV Energy and Google signed a Clean Transition Tariff agreement where NV Energy delivers the full capacity of a new geothermal project to Google. Duke Energy Indiana established a special agreement for a data center where it contracts output from dedicated renewable facilities specifically to serve the customer's load. Also, utilities like Evergy and Ameren Missouri offer optional riders that allow large customers to financially support or subsidize the procurement of new clean energy resources or storage systems

³⁹ CUB, supplemental comments, p. 10.

Geronimo agreed that the Commission should vet and approve new resources through transparent, competitive acquisition processes, but advocated for Xcel to incorporate alternative supply arrangements rather than relying solely on the traditional, utility-procured process. Geronimo recommended that Xcel implement a scoring metric in future procurements that establishes a preference for generating resources that are carbon-free and co-located with, or geographically proximate to, the new data center load.

b. Xcel Response

Xcel opposes recommendations for alternative resource procurement models within the context of the current large load tariff docket, preferring the vertically-integrated, comprehensive IRP process. Xcel stated that its IRP modeling analysis incorporates the forecasted load from new large customers, and when new incremental resources are identified as necessary to serve this load, Xcel intends to acquire them through its existing, Commission-approved competitive acquisition processes, such as Track 1 and Modified Track 2. Xcel continued that the IRP framework is fully aligned with Commission’s directives and Minnesota’s statutory requirements, including its 100% carbon-free by 2040 obligation.

Xcel further opposed creating a CECT within this docket, arguing that Minn. Stat. § 216B.1623 requires the Commission to mandate a CECT for all utilities statewide. Xcel believes a CECT should be developed in a coordinated, statewide process. That said, Xcel stated it is willing “to work with any new [LLC] and specific goals they may have to procure new renewable or carbon-free resources.”

Interconnection and Queue Management

a. Party Positions

Interconnection and queue management was one of the main BTM generation-related issues parties discussed. Several parties recommend that Xcel reform its interconnection queue management to provide greater transparency, establish firm timelines, and prioritize projects that offer systemic grid benefits, such as clean BTM generation. The table below summarizes the parties’ primary concerns and recommendations, then Staff will discuss the parties’ comments in further detail.

Table 17. Party Positions on Interconnection and Queue Management

Party	Main Concern(s)
Tract	Transparency is essential to make Minnesota a competitive market for large loads like data centers; recommends that Xcel modify its tariffs to provide transparent queue management, including the steps, timing, and criteria for interconnection.
ELPC/VS	Prioritize interconnection for customers who lower risks by deploying clean BTM generation, procuring clean energy, or participating in demand response; recommend developing new, tailored large-load interconnection standards to mitigate technical engineering risks.

CGA	Supports prioritizing interconnection for large loads that utilize clean backup generation, co-locate with clean energy, and incorporate demand flexibility.
Geronimo	Recommends Xcel develop an expedited “fast lane” study process for data centers that utilize co-located generation resources. This would evaluate load and generation simultaneously, bypassing redundant studies and reducing queue backlogs.
CUB	Xcel should explore alternative procurement models like renewable PPAs or co-ownership rather than treating all generation as system resources.
DCC	Supports prioritizing interconnection for very large customers that bring their own generation or offer flexibility attributes, but these arrangements must remain voluntary.
Google	Supports parties’ recommendations to expedite clean energy programs associated with very large loads.
LIUNA	Opposes complex requirements or prioritizing interconnection based on co-location, BYOG, or demand-side management.

Tract argued that Xcel’s proposal lacks sufficient detail regarding the interconnection timeline, the sequencing of queue requests, and how the utility will manage multiple requests simultaneously. Providing transparent queue management and timing details is a common feature of large load tariffs in other jurisdictions, and Tract emphasized it is necessary to make Minnesota a competitive market for data centers and other large loads.

Tract recommends that Xcel modify its tariffs to include:

- The number and description of the steps in the interconnection process and the approximate timing of each step; and
- The criteria used to manage the interconnection queue.

ELPC/VS recommend that the Commission incentivize BTM generation to manage super-large loads and prioritize interconnection for customers that have:

1. “less risk or cost to serve, including customers that have deployed clean, behind-the-meter (or co-located) generation and/or storage
2. procured clean energy resources separately, such as through the CECT; or
3. agreed to participate in demand response or other load flexibility arrangements.”⁴⁰

ELPC/VS emphasized that “the interconnection of very large load customers also raises particular technical risks that utilities’ traditional interconnection processes do not typically address.”⁴¹ Therefore, ELPC/VS recommend the Commission require Xcel to work with stakeholders to develop new, tailored large-load interconnection standards to mitigate these

⁴⁰ ELPC/VS, initial comments, p. 15.

⁴¹ ELPC/VS initial comments, p. 13.

engineering risks. As part of the development of these standards, ELPC/VS support the concept of “flexible load interconnection,” and “ELPC/VS recommend that the Commission specifically require Xcel Energy to consider modified prioritization as part of any consideration of new large-load interconnection standards.”⁴²

CGA also supports an interconnection process that prioritizes very large load customers that:

1. utilize clean back-up generation;
2. co-locate with existing clean energy generation; and
3. incorporate demand flexibility.

To demonstrate the federal and regional interest in reforming interconnection queues for large loads and hybrid facilities, CGA discussed FERC’s Advanced Notice of Proposed Rulemaking (ANOPR) and the Southwest Power Pool’s (SPP) recently-implemented “provisional load process.” CGA further noted that SPP is seeking federal approval to expedite studies for large loads co-located with generating resources.

Geronimo focused on the regulatory and logistical hurdles of the interconnection study process, specifically regarding the delays caused by coordinating load and generation studies. Geronimo explained that, currently, a customer must undergo System Impact Studies and Facilities Impact Studies with Xcel (taking up to five months or more), followed by an independent review by MISO. As a potential solution, Geronimo recommends establishing a “fast lane” for customers who bring their own resources to serve their load would directly offset the need for additional utility-owned generation and reduce both network upgrade costs and regional queue backlogs.

To explain further, Geronimo’s “fast lane” concept is an expedited load interconnection study process designed for new data center loads that plan to utilize existing or new co-located generation resources. While Geronimo did not propose a specific, step-by-step procedure or timeline for a fast lane, Geronimo recommended that the Commission direct Xcel to review its existing load interconnection processes and develop the expedited framework itself. As Staff understands it, the fast lane would work by studying the co-located load and the generation together at the same time, rather than processing their interconnection requests separately, which could allow Xcel to bypass redundant or sequential studies, thus creating a much more efficient path to bringing the data center online.⁴³

CUB focused on ratepayer protections and mitigating stranded asset risks. CUB is concerned by Xcel’s proposal to treat all generation as system resources procured through the IRP process and argued that, to insulate existing customers from the generation costs driven by data centers, Xcel should consider alternative procurement models, such as co-ownership of generation or renewable PPAs.

⁴² ELPC/VS initial comments, p. 15.

⁴³ Geronimo, initial comments, pp. 5-6.

DCC “supports exploring reducing time to power for large customers that support clean energy and other flexibility arrangements on a voluntary basis.”⁴⁴ However, DCC emphasized that these arrangements should remain strictly voluntary for the customers.

Google also supports “the recommendation by other parties to expedite clean energy programs associated with very large loads.”⁴⁵

LIUNA opposed proposals that would prioritize interconnection requests based on co-location, BYOG, or DSM, arguing that businesses should not be forced into complex utility planning just to connect to the grid.

b. Xcel Response

Xcel opposed the creation of an expedited “fast lane.” Xcel stated that it is “actively reviewing the potential for prioritization,” but setting formal large-load interconnection standards is outside the scope of this specific tariff docket.⁴⁶ Also, the Company’s retail interconnection requests have historically been handled on a first-come, first-serve basis. Any prioritization should be based on an objective consideration of operational factors – such as readiness for construction, timing of in-service needs, and creditworthiness – rather than an automatic “fast lane” specifically for co-located generation.

Wholesale Export

As noted previously, several parties perceive Xcel’s policy on BTM generation to be an overly strict ban on BTM generation from feeding any energy over the point of interconnection (POI) onto the utility system.

CGA, for example, urged the Commission to allow clean BTM generation to export power, pointing out that MISO allows BTM generation to act as LMRs during capacity and transmission emergencies.

The Department noted that, if a data center’s BTM generation satisfies the criteria of a qualifying facility under the federal Public Utility Regulatory Policies Act (PURPA), the customer has a statutory right to enter into a contract to sell that energy to Xcel and feed it onto the grid.

In reply comments, Xcel clarified that the IA neither prohibits nor authorizes the export of BTM for wholesale sale; however, any interconnection or export of BTM generation for wholesale sale would be subject to FERC rules and regulations. Because wholesale exports involve federal jurisdiction and MISO rules, Xcel maintained that proposals to explicitly authorize BTM

⁴⁴ DCC, reply comments, p. 6.

⁴⁵ Google, reply comments, p. 14.

⁴⁶ Xcel, reply comments, p. 33.

generation to feed power back onto the grid are outside the scope of the present retail tariff docket.

Xcel further clarified that very large load customers are permitted to own and operate backup generation once they execute a DER interconnection agreement, but emphasized they cannot “replace the firm service portion of the service it has contracted for with its own generation.”⁴⁷

Following the Company’s clarification, CGA responded that the current language of the Form IA still “appears to prohibit both BTMG interconnection and exports over Xcel’s system,” and the Company “should modify the language of the IA to clarify that LLCs are not prohibited from exporting BTMG for wholesale sale, subject to their compliance with applicable laws, regulations, and MISO tariffs.”⁴⁸

Staff Discussion

Staff agrees with parties’ comments on the benefits BTM generation can provide, which includes, first, that there is an added layer of financial risk protection for existing ratepayers if super-large customers can be financially responsible for part or all of their own generation. Second, existing ratepayers are insulated from some of the costs of building new power plants, since BTM generation can reduce the amount of firm service a customer needs to contract from Xcel. Third, BTM resources can enhance load flexibility, and resources like energy storage and backup BTM resources can provide data centers with operational flexibility.

At the same time, Xcel and LIUNA provided reasonable counterpoints that BTM export rules and/or interconnection reforms involves highly complex technical, safety, and regulatory aspects (including state versus federal jurisdictional issues), which could be outside the scope of the instant docket.

Staff also agrees with the numerous parties who argued that Xcel’s proposed tariff structure is very limiting in enabling BTM generation; for example, under the proposed Retail Form ESA, while large load customers are permitted to have backup BTM generation that operates in parallel with Xcel’s system, these resources would strictly be for use in situations where Xcel cannot provide energy to the site. In other words, the tariff does not allow existing customer to replace the firm service portion of its contracted service with its own generation. One primary consideration, therefore, is whether these limits foreclose potential benefits to ratepayers.

Additionally, parties raised valid concerns about relying too heavily on the IRP process, to the point where decarbonization could be delayed, innovation stifled, or opportunities missed if data center companies are to invest their capital in clean energy resources now.

⁴⁷ Xcel, reply comments, p. 31.

⁴⁸ CGA, supplemental comments, p. 6.

The IRP process generally requires a significant amount of time, and utilities commonly file once every 2-4 years. If data center operators have aggressive corporate sustainability commitments and may desire a much faster transition to clean energy than Xcel's IRP trajectory provides, and if the traditional IRP approach forces Xcel to take on a great deal of risk through substantial resource procurement, alternative resource procurement strategies would be reasonable to explore.

On the other hand, the Commission may agree with Xcel that there are too many issues involved that are either too complex or outside the scope of this proceeding to be addressed in this docket, such as interconnection queue reforms, and the IRP process is the most reasonable forum to address parties' concerns.

At a minimum, Staff believes the Commission could approve the Department's recommendation to require Xcel to explicitly define "backup generation" in the ESA, which Xcel has already agreed to do. If the Commission wishes to go further on BTM generation, it could explore opening a separate docket related to interconnection issues such as Geronimo's proposed "fast lane" approach.

Clean Energy and Capacity Tariff (CECT)

Summary and Party Positions

Multiple stakeholders advocate for the development and implementation of a voluntary CECT, or, similarly, a carbon-free electricity (CFE) procurement program. Parties differ slightly, however, on the timelines and specific features of the program.

The CECT is discussed largely in the context of Minn. Stat. § 216B.1623, which requires each public utility to offer a CECT for C&I customers. The statute states that the CECT "shall require a special contract between the utility and one or more customers that shall:

- (1) be optional for participating customers;
- (2) permit participating customers to elect to serve some or all of their energy or capacity usage from new clean energy or capacity resources as long as reliability is maintained;
- (3) require the participating customers to pay all proportional costs associated with the addition of the new clean energy or capacity resources, including any utility costs caused by the addition of the new clean energy or capacity resources to the grid;
- (4) develop an appropriate energy and capacity credit;

(5) prohibit cost shifting from the participating customers to other utility customers or vice versa; and

(6) allow a utility with an applicable tariff on file to demonstrate their existing tariff's compliance with this section.”

The CECT facilitates voluntary CFE procurement for very large load customers, such as data centers, and is designed to meet some or all of their energy or capacity needs. A core component of the statute is the prohibition on cost-shifting. While Xcel argued a CECT does not apply to this specific proceeding, several parties argued that a CECT is a natural fit because it will encourage super-large customers to procure their own clean resources such as BTM generation to meaningfully reduce the amount of firm service needed to contract from Xcel.

Common arguments supporting the rationale for Xcel filing a CECT or voluntary CFE were:

1. advancing Minnesota’s decarbonization goals;
2. protecting existing ratepayers from stranded assets, since Xcel intends to treat all new generation resources built to serve large loads as system resources;
3. meeting customer demand and timelines, which aligns with data center developers’ corporate sustainability goals, and setting a deadline ensures the tariff is fully developed and available exactly when these new large load customers are expected to come online; and
4. reducing need for utility firm service.

The table below briefly summarizes parties’ main points on this issue, then Staff will summarize their comments in more detail.

Table 18. Party Positions on a CECT

Party	Position
CGA	A BYOG concept to shift financial risks onto large load customers, and a CECT will help data centers companies fund carbon-free technologies.
CUB	CECT is a vital consumer protection measure for the broader residential ratepayer base. Recommends that Xcel file a CECT by December 1, 2026.
Department	Supports a CFE program. Disagrees with Xcel that implementation must wait for a coordinated, statewide process. Recommends Xcel issue an RFI or RFP.
ELPC/VS	CECT is an essential tool for very large customers to procure their own clean electricity transparently and avoid shifting costs to other ratepayers. Recommends making the CECT a condition for approving current large load tariffs and requiring Xcel to file it within 90 days of the final order.

DCC	Voluntary clean energy tariffs are critical for its members' commitments, and they encourage data center companies to invest capital in Minnesota. Recommends directing Xcel to begin stakeholder discussions to develop a CECT for approval in the near future.
Google	Supports the CECT as a vehicle for investing in clean technologies.

CGA advocated for a BYOG concept, which allows data centers to offset all or a portion of their load with BTM generation. According to CGA, BYOG shifts a portion of the financial and stranded asset risk away from existing retail customers and places it onto the large load customers. In addition, BYOG assists data center companies in meeting their corporate sustainability goals and allows them to directly fund carbon-free technologies. CGA also argued that BYOG addresses Xcel's requirements under Minn. Stat. § 216B.1623.

CUB views the CECT as a crucial mechanism for carrying out innovative resource procurement approaches, such as co-ownership of generation or renewable PPAs, rather than treating all new generation as system resources. By utilizing these alternative procurement structures through a dedicated tariff, Xcel can meet the extensive energy needs of new large loads while minimize the financial exposure of the broader residential ratepayer base.

CUB also stated that Minn. Stat. § 216B.1623 contains critical consumer protection measures, such as the prohibition on cost-shifting and requirement that participating very large customers pay for "all proportional costs associated with the addition of the new clean energy or capacity resources." Because the CECT offers vital financial protections and creative resource procurement pathways, CUB recommends that it be established promptly so its availability aligns with the timeline for bringing new large load customers online. CUB recommends that Xcel file a CECT proposal no later than December 1, 2026.

The Department supports the development of a voluntary CFE procurement program for large load customers. The Department noted that the IRP/Firm Dispatchable Order required Xcel to consult with the Department to consider filing such a program to help customers achieve their annual carbon-free energy goals. Xcel and the Department held initial discussions in July 2025, but the Department noted that these conversations were general and lacked specific details regarding what the program would look like in practice. A Commission requirement in this proceeding for Xcel to develop a specific program proposal may assist the development of a CFE program.

The Department also disagreed with Xcel's interpretation of Minn. Stat. § 216B.1623. While Xcel argued that the implementation of the statute should be handled in a coordinated, statewide process for all utilities, the Department countered that Minn. Stat. § 216B.1623 does not require the Commission to effectuate the statute with all utilities. Based on the Department's interpretation, and given the need to address the needs and emissions of new large loads, the Department recommends the Commission to move forward without waiting for

a statewide process. Specifically, Xcel should issue a request for information (RFI) or request for proposals (RFP) to gather input from stakeholders.

ELPC/VS advocated for the prompt development of a CECT, viewing it as an essential tool to ensure that very large customers can meet their extensive resource needs through clean generation, energy storage, and load flexibility. Furthermore, ELPC/VS echoed CUB's position that the tariff is a critical consumer protection mechanism, as it would allow large load customers to separately procure their own clean electricity and capacity, thereby transparently avoiding the shifting of costs onto other utility ratepayers.

ELPC/VS did not oppose Xcel's recommendation to develop the tariffs in a coordinated process, and ELPC/VS recognized the value of achieving consistency in these tariffs across the various utilities to the extent possible. That said, ELPC/VS emphasized that the CECT must still be established expeditiously, and Xcel should engage with stakeholders to design the program. ELPC/VS requests the Commission's requirement for Xcel to develop a CECT a condition for the approval of any large load tariffs in the current docket, and ELPC/VS recommends that Xcel file a CECT within 90 days of the final order in the proceeding.

Google supported the CECT and pointed to its own corporate sustainability targets, including its goal to match its hourly consumption with clean energy for every hour of the year by 2030. Google views voluntary clean energy tariffs as a crucial vehicle for investing in clean firm technologies, wind, and solar power, and Google referred to its past success collaborating on similar tariffs, such as the Clean Transition Tariff in Nevada that it proposed jointly with NV Energy.

DCC emphasized that voluntary clean energy tariffs are critical tools for its members, many of whom have explicit corporate clean energy procurement commitments. DCC views voluntary clean tariffs as a highly effective mechanism to encourage data center companies with clean energy goals to invest their capital in Minnesota. DCC also supported stakeholder engagement in developing a CECT, stating it "agrees with the [Department, ELPC/VS, and CGA] that the Commission should direct Xcel to begin stakeholder discussions to develop a clean energy and capacity tariff for filing and approval in the near future."⁴⁹

Xcel and LIUNA response

Xcel opposed the development of a CECT as part of this proceeding. Xcel interpreted Minn. Stat. § 216B.1623 as a directive that a CECT should be implemented systemically rather than individually, and the Commission should effectuate the new law through a coordinated, statewide process that applies to all Minnesota utilities.

Xcel highlighted its ongoing efforts to provide clean energy options to its large load customers and noted that it currently offers voluntary clean energy products through its

⁴⁹ DCC, reply comments, p. 6.

Renewable*Connect programs. The Company has also begun working with the Department to develop a 24/7 clean energy option in compliance with the IRP/Firm Dispatchable Order. Furthermore, the Company's approved IRP already plans for new large customer loads and ensures resource acquisitions align with the state's mandate to achieve 100% carbon-free electricity by 2040.

Finally, Xcel stated it is willing to engage with stakeholders through a formal Commission process. The Company is also willing to work directly with any individual new large load customer to help them meet their specific corporate sustainability goals by procuring new renewable resources, carbon-free energy, or innovative technologies.

LIUNA cautioned against creating regulatory bars so high that they chase away beneficial, job-creating developments. LIUNA argued that Minnesota already sets a higher bar for clean energy than neighboring states, and adding complex clean energy procurement hurdles risks pushing data centers to higher-emitting states with fewer regulatory barriers.

Staff Discussion

Minn. Stat. § 216B.1623 requires public utilities to offer an optional CECT for C&I customers, which is intended to allow very large customers to serve a portion or all of their electricity needs with clean energy resources, provided they pay the proportional costs of bringing those resources onto the system and prevent cost-shifting to other ratepayers. Xcel did not propose a CECT in this proceeding, and parties debate whether this constitutes an omission, a missed opportunity, or both. The Commission will need to interpret the statute and weigh the advantages of developing a CECT in a statewide process against the potential benefits to requiring a CECT as an outcome of this proceeding—for example, by leveraging data center developers' appetite to invest in clean energy resources now.

In Staff's view, parties raised valid concerns that relying on the IRP process to serve super-large customers exclusively with system resources may foreclose opportunities such as recognizing data center companies' willingness to invest their own capital, which, in turn, could meaningfully reduce the amount of firm service the customer needs to contract from Xcel and mitigate financial risks for existing ratepayers.

Whether through a CECT, encouraging BTM generation, or providing additional demand flexibility opportunities, Staff agrees with the underlying premise that there are potential ratepayer benefits that could be missed by using system resources only. One benefit of developing a CECT is that the statute includes strict ratepayer protections, such as the prohibition on cost-shifting and the requirement that participating large load customers pay for "all proportional costs associated with the addition of the new clean energy or capacity resources." While Xcel stated that it is willing to work with any data center company to procure their own clean energy, a CECT may establish a more specific, ratepayer protection-focused framework.

On the other hand, the Commission can reasonably decide that a CECT is outside the scope of this proceeding. Xcel pointed out that Minn. Stat. § 216B.1623 applies to *all* public utilities, so it might be procedurally inappropriate to develop the CECT in a single utility's large load tariff docket. Additionally, because Xcel is already working collaboratively with the Department to develop a 24/7 CFE option in compliance with the IRP/Firm Dispatchable Order, and because Xcel already offers voluntary clean energy products, the Commission may decide that a CECT for this proceeding is unnecessary.

The Commission could, but does not need to, address the timing of the development of a CECT and/or initiate a formal stakeholder engagement process, as recommended by several parties. Again, the statute has no deadline for the Commission to approve a CECT. In Staff's view, one limitation of Xcel's argument to follow the route of a coordinated, all-utilities process is that Xcel provided no indication of when such a process may begin or how much time such a process would be required to complete such a process. In other words, Xcel's response does not directly address parties' concerns about proactively providing an opportunity, through a CECT, for data center companies to deploy their own capital to invest in clean technologies and absorb some financial risks.

If the Commission wishes to pursue the development of a CECT, Staff notes that a December 1, 2026 deadline as recommended by some might be too soon for Xcel to hold a meaningful, robust stakeholder process and develop a filing based on those discussions. Given the passage of time since comments were filed, parties may offer alternative dates at the agenda meeting.

As a procedural note, the Commission will notice that many of the decision options regarding this issue contain very similar language. As discussed above, several stakeholders, including CGA, DCC, the Department, and ELPC/VS, recommend that Xcel develop some form of a voluntary clean energy tariff or CFE procurement program.⁵⁰ To achieve this, stakeholders emphasized the need for Xcel to initiate a stakeholder process to gather input during the design of these programs. The Commission may either choose to combine elements of the various recommendations into a single decision option or select one of options offered.

Interconnection Agreement

Relationship to the ESA

The Interconnection Agreement (IA) addresses the terms and conditions for constructing the facilities needed to physically connect a customer to Xcel's system. Specifically, it governs the technical, engineering, safety, and regulatory aspects of the connection and defines the responsibilities of both the customer and Xcel regarding the interconnection infrastructure.

⁵⁰ The Department suggests shaping this procurement program through a RFI or RFP, which is unique from other party recommendations.

The IA works closely in tandem with the ESA. For example, while the IA covers the aspects of interconnecting the facility to the grid, the ESA sets forth the financial obligations, rates, and overarching terms of the retail electric service that will be delivered over that connection.

Also, to take service under the proposed large load tariffs, a customer is required to execute both an IA and an ESA, so both executed agreements must be submitted together to Commission for review and approval before the customer can be served.

The legal and operational terms of the two contracts are also linked. For example, an uncured default by the customer under the IA is considered a default under the ESA, subjecting the customer to the ESA's termination and penalty provisions.

Relationship to BTM Generation

Xcel explained that customers can have back-up BTM generation, provided that they also have a DER interconnection agreement in place where the back-up generation may operate in parallel with the Company's network. However, an existing customer may not replace the firm service portion of the service it has contracted for with its own generation.

Several parties criticized the proposed IA for having overly restrictive language regarding BTM generation. For example, CGA pointed to Section 1.03(e) of the IA, excerpted below, which stated that the IA provides the customer with "no rights" regarding backup generation:

This Interconnection Agreement provides no rights to Customer with respect to any backup generation located at the premises used to support the Data Center. Under no circumstance, whatsoever, including without limitation during an Emergency (except as may be necessary to prevent damage to the Company Facilities and the Company System), will Customer's backup generation at the Data Center be allowed to feed any energy over the Point(s) of Interconnection onto the Company System.^{51,52}

Parties such as CGA and the Department objected to this prohibition, arguing that a restriction on grid exports was overly broad and would stifle the deployment of BTM generation, which could otherwise provide system-wide benefits.

In response to parties' concerns, Xcel clarified the relationship between the IA and BTM generation. Xcel explained that the IA "does not prohibit, nor does it authorize" the interconnection or export of BTM generation for wholesale sale. However, exporting BTM generation for wholesale sale involves FERC-jurisdictional issues and MISO tariffs, which Xcel argued are outside the scope of this specific state docket.

⁵¹ CGA, initial comments, p. 14.

⁵² Petition, Attachment H, "IA, Section 1.03(e)", p. 4.

Following Xcel's clarifications and its agreement to amend the ESA to explicitly allow BTM generation under a separate DER agreement, the Department recommended that the Commission require Xcel to also modify Section 1.03 of the IA to reflect these updated terms.

CGA maintained its recommendation that Xcel modify the Form IA to explicitly clarify that large load customers are not prohibited from exporting BTM generation for wholesale sales, provided they comply with applicable laws, regulations, and MISO tariffs.

Staff Discussion

Staff supports (as does Xcel) the Department's recommendation that Xcel modify Section 1.03(e) of the Form IA to explicitly define "Backup Generation" and mirror the clarifying language Xcel proposed for the ESA. This language confirms that super-large customers are permitted to install BTM generation, subject to the execution of a separate DER interconnection agreement and compliance with MISO wholesale market rules.

CUB recommends that the Commission require explicit language in the IA stating that the full costs of all interconnection studies (System Impact and Facilities studies), as well as any subsequent system upgrades necessitated by the large load customer's interconnection or expansion, will be borne entirely by the customer and not incurred by other rate classes.

Xcel did not explicitly support or object to CUB's recommendation but clarified that:

Customers requesting interconnection under the Large General Time of Day Service tariff cover the full costs associated with both the Facility Study and the System Impact Study which are performed prior to negotiating the load IA and ESA. Each study is governed by a separate agreement that outlines the applicable costs and requires advance payment prior to the commencement of the respective study.⁵³

The Company notes that System Impact Studies and Facilities Studies identify the transmission system network upgrades and transmission owner interconnection facility costs occurring as a result of the large load, and are borne by the large load customer.⁵⁴

While Xcel confirmed that system upgrades will be borne by the customer, Xcel appears to only address the cost studies prior to bringing the customer online. Notably, CUB's recommendation refers to subsequent system upgrades necessitated by the large load customer's interconnection or expansion. CUB noted that the ESA and IA "do not describe how the costs of

⁵³ Xcel reply comments, p. 16.

⁵⁴ Xcel reply comments, p. 22.

Company Facilities will be dealt with after initial interconnection is completed.”⁵⁵ CUB continued that “the Interconnection Agreement simply indicates that the ‘Parties will negotiate in good faith an amendment . . . as may be necessary to address the proposed change.” Therefore, CUB recommends “that Xcel make explicit in its tariffs and agreements that any system modifications, upgrades, or expansions necessitated by the service provided to very large customers will be borne solely by those entities, and not by other ratepayer classes.”⁵⁶

Aggregation

Tariff Language on Aggregation

In the context of the instant proceeding, “aggregation” refers to combining the load of multiple separate data center premises owned by the same customer, parent company, affiliate, or subsidiary within Xcel’s Minnesota service territory. Aggregation is included in the Applicability section of Xcel’s proposed Large General TOD Service tariff and Large Peak Controlled TOD Service tariff, and it is used to determine if a customer’s combined facilities meet the 100 MW threshold required to be placed on the tariffs.

Xcel explained that aggregation acts as a guardrail to ensure that very large customers pay the costs they cause on the system. Without aggregation, a data center company could intentionally divide its operations – for example, building two 50 MW data centers instead of one 100 MW data center – specifically to bypass the 100 MW threshold and therefore evade the ratepayer protections and surcharges in the tariffs.

Notably, the tariff states that Xcel will exercise “reasonable discretion” when choosing whether to aggregate multiple premises for the purpose of determining tariff eligibility. Xcel’s discretion to aggregate premises will be based on factors including, but not limited to, whether the separate projects are proposed by, or considered under, the “same customer parent name or affiliate/subsidiary.”⁵⁷

Party Positions on Aggregation

CUB supports aggregation as a ratepayer protection mechanism but objects to Xcel having “sole discretion” to determine eligibility. CUB asserts that aggregation should be mandatory when certain conditions, such as common parent ownership, are met. Therefore, CUB recommends that if these conditions are met but Xcel uses its discretion not to aggregate them, Xcel must submit a compliance filing so stakeholders can review and challenge Xcel’s decision.

⁵⁵ CUB, initial comments, p. 8.

⁵⁶ CUB, initial comments, p. 8.

⁵⁷ Xcel Petition, Minnesota Electric Rate Book, Large General Time of Day Service, Rate Code AXX, Section No. 5, Original Sheet No. 32.2.

Similarly, ELPC/VS expressed concern that the 100 MW threshold may incentivize super-large customers to intentionally “disaggregate their facilities” to avoid the 100 MW threshold, yet Xcel provided insufficient detail regarding how it would apply its discretion:

Since Xcel Energy retains full discretion to address aggregation of customer loads under the proposed Tariff, without much detail on how it will apply this discretion, it is difficult to know how well the Company will mitigate this concern.⁵⁸

CGA supported Xcel’s approach to permit aggregation of premises at the Company’s discretion, but noted in its reply comments that load characteristics, demand thresholds, and load aggregation criteria merit further consideration.

DCC initially did not oppose mandatory aggregation, provided the Commission would review any disputed decisions. However, DCC argued that if Xcel forces a customer to aggregate multiple premises to qualify for the tariff, Xcel must also aggregate the measured demand of all those premises when calculating the minimum bill; otherwise, a customer operating one facility at 100% capacity and another at 60% capacity could be subject to an unfair minimum bill penalty on the second facility, even though their combined total usage exceeds the minimum threshold. Ultimately, after Xcel clarified that the primary purpose of aggregation was to subject customers to the ICT, DCC recommended that the Commission reject Xcel’s aggregation proposal entirely, as DCC strongly opposes the ICT.

Xcel Response

Xcel opposed CUB’s recommendation to make aggregation mandatory, in part because in some instances aggregation would be impractical. For example, a customer’s two facilities might be located in different parts of the state and served by entirely different generation or transmission resources, or a customer might own numerous small facilities that happen to add up to 100 MW.

Xcel also opposed DCC’s proposal to aggregate demand across premises for minimum billing purposes, explaining that aggregating contracted load to determine tariff eligibility is done to ensure the customer pays for the overall, system-wide generation resources acquired to serve them. However, a demand charge and the minimum bill is specifically designed to recover infrastructure costs incurred at a specific, physical location. Allowing a customer to aggregate the billing of different premises could result in the customer not paying for the site-specific costs they cause on the local grid.

Staff Discussion on Aggregation

Staff disagrees that aggregation should be required; as Xcel argued, two facilities could be owned by the same parent company but be served by entirely different transmission lines and

⁵⁸ ELPC/VS, initial comments, p. 4.

generation resources. However, because CUB and ELPC/VS made valid points about the possibility for prospective data center companies deliberately dividing their projects into multiple, smaller facilities to evade Xcel's strict provisions within the tariffs, Staff believes it would be reasonable adopt CUB's compromise solution to (a) allow Xcel to make the initial aggregation determination but (b) require a compliance filing when a parent company's total footprint exceeds the 100 MW threshold but Xcel chooses not to aggregate them. This provides Xcel the flexibility it needs while giving the Commission and stakeholders an opportunity to review Xcel's decision.

Socioeconomic Impacts

The primary socioeconomic benefits recognized by industry stakeholders, labor unions, and utilities include job creation; tax revenue through the construction and ongoing operation of data centers; direct community investment;⁵⁹ reduction in utility rates;⁶⁰ and dedicated funding from data centers for low-income weatherization through Minn. Stat. § 216B.72.⁶¹

LIUNA noted that the construction and operation of data centers "have the potential to create tens of thousands of construction jobs building facilities and associated generation assets; hundreds millions of dollars in tax revenues and efficiency programs investment; and new beneficial load that can help spread existing fixed costs and fund critical clean energy projects."⁶² LIUNA recommends that each ESA include specific information on the socioeconomic benefits the project will bring, including the anticipated quantity and quality of construction and permanent jobs.

Some parties expressed concerns about adverse socioeconomic impacts of data centers. For example, CUB emphasized the importance of energy affordability, noting that "ratepayers have begun to express strong opposition to data centers in anticipation of utility bills becoming more unaffordable than they already are," and it is imperative that "very large customers cover all their own costs, including the full expense associated with constructing the assets and infrastructure needed to serve them."⁶³

ELPC/VS and CGA raised environmental concerns. ELPC/VS "are worried about the environmental impact of this growth in data centers and other very large customers,

⁵⁹ Google notes that its Iowa data centers contribute \$629 million annually to the local economy and have provided hundreds of thousands of dollars in direct community grants.

⁶⁰ Adding very large loads to the grid allows the utility to spread its existing fixed costs over a much greater volume of electricity sales.

⁶¹ Minn. Stat. § 216B.72 requires data center to pay annual fees to the Department, with the amount based on their peak demand, which will be deposited into the Department's energy and conservation fund and may only be used on low-income programs.

⁶² LIUNA, initial comments, p. 1.

⁶³ CUB, initial comments, p. 3.

particularly the impact on clean energy mandates and associated emissions reductions.”⁶⁴ CGA raised the possibility that data centers could rely on fossil-fuel backup generation, pointing to an instance in which a data center developer attempted to bypass the state permitting process to install 250 diesel generators.⁶⁵

Compliance Filings/Reporting Requirements

Parties recommended several types of compliance filings and reporting requirements to track the impact, costs, and benefits of very large load customers. These generally fall into the following categories:

- Socioeconomic and Job Reporting
- Tariff Participation and Load Tracking
- Compliance Filings for Thresholds and Aggregation
- Compliance Filings for Capacity Increases
 - Rate Case and Cost of Service Filings
 - ESA and ICT Filings

Socioeconomic and Job Reporting

LIUNA recommends reporting the socioeconomic benefits of new large loads, including the anticipated quantity and quality of construction and permanent jobs. However, LIUNA recommends that this information be filed as part of each individual ESA. DCC, while not opposing this information, requested that socioeconomic reporting be submitted as a separate informational document accompanying the ESA filing, rather than being included within the ESA contract itself. This is because, in DCC’s view, the reported socioeconomic information should not influence the approval or denial of the ESA.

Tariff Participation and Load Tracking

ELPC/VS recommend that Xcel file a report every six months that includes:

- the number of new very large customer requests;
- the total expected capacity of these requests;
- the number of customers that have signed ESAs under its very large customer tariff;
- the total capacity of these signed ESAs;
- the number of customers participating under the load flexibility tariffs;
- the total flexible load subject to the load flexibility tariffs;
- the number of customers participating in the Clean Energy and Capacity Tariff; and

⁶⁴ ELPC/VS, initial comments, p. 2.

⁶⁵ CGA, initial comments, p. 15.

- the total energy and capacity associated with the customers participating in the Clean Energy and Capacity Tariff.

Size Thresholds and Aggregation

CUB recommends that Xcel submit a compliance filing whenever a new customer with a load of 50 MW or more (but below the 100 MW applicability threshold) seeks to interconnect. In this filing, Xcel would explain its reasoning for whether the customer is “system intensive” and should be subject to the large load tariffs. Second, CUB recommends that Xcel submit a compliance filing whenever the total load of a parent company and its subsidiaries exceeds the large load threshold, but Xcel chooses not to aggregate the facilities, or if the customer disputes Xcel's aggregation determination. This would allow stakeholders to review the reasonableness of the decision.

Capacity Increases

CUB recommends that Xcel submit a compliance filing or modification request if a customer seeks to increase capacity during the term of their ESA. Xcel agreed to this recommendation and offered to explain whether the existing terms of the ESA, including pricing, can still be met with the capacity increase.

Rate Case and Cost of Service Filings

The OAG recommends that Xcel file multiple CCOS and revenue requirement proposals in subsequent rate cases showing the distributional effects of different cost allocation choices. These would include scenarios where very large customers are kept within the standard C&I Demand class versus being treated as a separate class for cost allocation and rate design.

ESA and ICT Filings

ELPC/VS recommended that Xcel file the actual ICT analysis in tandem with the ESA and any other relevant agreements to ensure proper evaluation of costs and revenues. Additionally, the OAG recommended that Xcel submit updated ICTs annually.

Xcel Response

The table below lists the compliance filings and reporting requirements discussed above and includes Xcel's position on the parties' recommendations, as well as the Company's reasoning.

Table 19. Xcel Response to Requests for Filing Requirements

Compliance Filing / Reporting Req.	Proposed By	Xcel Position	Xcel's Reasoning & Proposed Action
Compliance filings for mid-term capacity increases	Department, CUB	Agreed	Xcel will make a compliance filing if a customer's capacity increase meets all existing terms and pricing of their ESA. If the expansion requires a new

			ICT or significant changes, Xcel will file a request to modify the ESA.
Tracking actual costs and true-ups	OAG	Agreed	Xcel agreed to include specific provisions for cost true-ups within each customer's ESA to confirm they are paying actual incremental costs. Xcel also committed to applying changes in large load characteristics to class allocations for annual rider filings as the load comes online.
Annual ICT updates	OAG	Opposed	A mandatory annual schedule is not appropriate. Instead, the appropriate cadence for these true-ups will vary for each individual customer based on several factors, including the customer's size, their specific load ramp period, and the timing of resource additions
Filing multiple CCOS models	OAG	Opposed	Producing these hypothetical studies is unachievable under the proceeding's timeframes and unhelpful because the Company currently possesses no data to distinguish the approaches.
Biannual reporting on large load customers and tariff participation	ELPC/VS	Opposed	This is unnecessary because program information, including participation numbers and load values, can already be found in its existing public DSM status reports and in its rate cases
Reporting on the resources used to serve large loads	ELPC/VS	Opposed	Xcel's next IRP will provide details on anticipated new large loads and how they affect the energy system and resource mix, which it believes satisfies the Commission's directives without a separate report.
Compliance filings for aggregation	CUB	-	Did not address, as CUB made this recommendation in supplemental comments.

DECISION OPTIONS

A. Approve/Reject/Modify

Large General TOD Service

1. Approve the Company's proposed Large General Time of Day Service Tariff (Xcel)

OR

2. Approve Xcel's proposed Large General Time of Day Service Tariff with the modifications identified below. (Department, Google, ELPC/VS)

Large Peak Controlled TOD Service

3. Approve the Company's proposed Large Peak Controlled Time of Day Service tariff; (Xcel)

OR

4. Approve Xcel's proposed Large Peak Controlled Time of Day Service tariff with the modifications identified below. (Department, ELPC/VS)

OR

5. Approve Xcel's Large Peak Controlled Time of Day Service Tariff, modified so that the qualifications to implement a control event are based on a directive from the Midcontinent Independent System Operator or other applicable regional or federal entity overseeing the transmission system. (Google)
6. Approve the Company's proposed revisions to the Rules for the Application of Peak Controlled Services tariff. (Xcel, Department, Google)
7. Approve the Company's proposed revisions to the Tier 1 Energy Controlled Service rider tariff. (Xcel, Department, Google)
8. Approve the Company's proposed revisions to the CIP Adjustment Rider Tariff. (Xcel, Department, Google)
9. Approve the Company's proposed administrative revisions to the Company's Tariff Book. (Xcel, DOC, Google)
10. Approve the proposed Retail Customer Form ESA as amended in Xcel's comments. (Xcel, Google)

OR

11. Approve Xcel's proposed Retail Customer Form ESA with the modifications identified below.

(Department)

12. Clarify that the approval of this tariff for Xcel Energy may inform Commission decisions on the proposed large load tariffs of other utilities, but approval of this tariff should not be viewed as precedent for other utility large load tariffs. (LIUNA)
13. Clarify that approval of Xcel Energy's tariff does not preclude future proposed modifications to the tariff in recognition of changing market dynamics or other factors relevant to the public interest. (LIUNA)

B. Retail Customer Form ESA

14. Modify the ESA to permit financial security and collateral provisions to be satisfied by the guaranty from a credit-worthy third-party. (CloudHQ, DCC)
15. Modify the ESA to permit contract assignment as a matter of right consistent with the language proposed by CloudHQ in its Reply Comments filed on November 5, 2025. (CloudHQ)
16. Require Xcel to explicitly state in its tariffs and agreements that the costs of system upgrades or modifications necessitated by the expansion of service to the very large customer will be borne by that customer and not other ratepayer classes. (CUB)
17. Modify the tariff to include the following term: "Nothing in the tariff prohibits Xcel and a large load customer from including additional terms or conditions, so long as such terms and conditions do not contradict the tariff and comply with the Large Load Statute." (Google)
18. Require Xcel Energy to modify the Retail Customer Form ESA to:
 - A. Require the non-assigning party to respond to a request for written consent for an assignment of the ESA within 90 days of receiving the request under Section 15; and
 - B. Allow customers to assign the ESA by right:
 - (i) to an assignee with an equal or better credit rating;
 - (ii) to an assignee if the credit support obligation of the ESA is guaranteed by an entity with an appropriate credit rating;
 - (iii) due to a merger or consolidation where the customer's assets are being assigned to a party with a credit rating equal to or greater than the customer's;

(iv) to the customer's lenders (or a collateral agent on behalf the customer's lenders); or

(v) to an affiliate of the customer taking ownership of title from the customer if the credit support obligation under the ESA continues to be satisfied

C. Include the factors used to calculate the amount of credit support required for each customer; and

D. Allow the amount of the credit support to be reduced as a customer achieves defined milestones. (Tract)

C. Incremental Cost Test (ICT)

19. Reject the Incremental Cost Test. (CloudHQ, DCC, Google)

OR

20. Approve the Incremental Cost Test as a tool to compare the costs imposed by and revenues derived from the addition of a new large load customer.. (Xcel)

OR

21. Approve the ICT only on an interim basis, to be revisited in Xcel's next general rate case. Any revenues collected above the tariff's applicable rates due to an ICT shall be subject to true-up via a regulatory account, tracker, deferred accounting mechanism, or any other process that reconciles actual costs with actual revenues. To the extent an ICT is used, Xcel must properly allocate all costs, considering all costs, benefits, revenues, and expenses, and this allocation and all costs will be reviewed in a general rate case. (Google alternative, CloudHQ alternative if ITC is approved)

22. Address the allocation of costs associated with the new sub-classes in a future rate case. (CloudHQ)

23. Modify Xcel's proposed Large General Time of Day Service (Rate Code AXX) and the Large Peak Controlled Time of Day Service (Rate Code AXX) as follows:

INCREMENTAL COST TEST

An Incremental Cost Test is required prior to service under this tariff. Each customer-specific Incremental Cost Test is subject to approval by the Minnesota Public Utilities Commission.

24. Require Xcel Energy to file the actual ICT analysis for Commission review in tandem with the ESA and other relevant agreements. (ELPC/VS)

OR

25. Require Xcel Energy, for each filing of an ESA and associated Incremental Cost Test, to demonstrate:

- A. that all incremental generation, transmission, and distribution investments required to serve a very-large-load customer are fully assigned to that customer or subclass;
- B. that the Company has conducted a class cost-of-service impact analysis showing no cost shift to residential or small-commercial classes; and
- C. that these allocations are reconciled in the Company's next general rate case to maintain transparency and ensure ratepayers remain held harmless. (ELPC/VS)

26. Require Xcel to file information with each Incremental Cost Test submission sufficient to allow for interpretation and replication of the results, including but not limited to the following:

- A. the EnCompass analysis used to determine resources required;
- B. the sources, assumptions, and methods used to arrive at all cost and revenue estimates; and
- C. upper and lower bound ranges for all estimates. (OAG)

27. For any values and calculations identified as protected data in the Incremental Cost Test, Xcel must provide specific explanations of why protected status is necessary. (OAG)

28. Require Xcel to report costs and revenues in the Incremental Cost Test over the full useful life of any generation assets included in the Incremental Cost Test, including:

- A. Estimated generation costs and revenues by year for each year of useful life of any relevant generation assets, with costs disaggregated by the generation-related rate base and expense categories used in Xcel's CCOSSES;
- B. All estimated costs and revenues by year for each year of useful life of any relevant generation assets, with costs disaggregated by Xcel's proposed categories of generation/capacity costs, energy costs, MISO costs, and transmission costs; and
- C. Net present value estimates of net revenues over relevant generation asset lifetimes, for at least the following scenarios: (1) the customer takes service throughout the useful life of relevant generation assets; (2) the customer takes service through the end of the contract term; (3) the customer takes service through the end of the contract term, but

the customer reduces load to the minimum billing demand after the ramp period; and
 (4) the customer terminates the contract after five years and pays the exit fee. (OAG)

29. Require Xcel to file updated Incremental Cost Tests annually. (OAG)
30. Require Xcel to include an appropriate share of embedded system costs in the Incremental Cost Test and rename it the Very Large Customer Cost Test to reflect this change. (OAG)
31. Require Xcel Energy to modify the ICT to provide sufficient details on how each cost factor will be calculated and how costs will be balanced against the revenue elements to allow customers to reasonably predict the cost of service. (Tract)
32. Clarify that approval of proposed very-large-load customer tariffs does not constitute approval of cost recovery from other rate classes. (ELPC/VS)

D. Aggregation

33. Reject Xcel's proposal to aggregate multiple customer premises for the sole purpose of subjecting a customer to the ICT. (DCC)

OR

34. If Xcel aggregates any customer premises, Xcel must aggregate the measured demand of all aggregated premises for purposes of determining whether the minimum bill applies. Any determination by Xcel to aggregate multiple customer premises is subject to Commission review at the request of the affected customer. (DCC alternative if aggregation is permitted)
35. Allow customers to seek review of any Company determination to aggregate their premises for purposes of applying the Large Peak Controlled Time of Day Service Tariff. (DCC)

E. Key Terms/Rate Design

1. General

36. Authorize the Executive Secretary to open an industry-wide docket to establish standardized terminology regarding the definition and characteristics of "very large customers" prior to the Minn. Stat. § 216B.1622, subd. 1 deadline of December 15, 2026. (CUB)

OR

37. Authorize the Executive Secretary to open new dockets for each public utility providing electricity for the purpose of establishing the definition and characteristics of "very large customers" prior to the Minn. Stat. § 216B.1622, subd. 1 deadline of December 15, 2026. (CUB)

38. Require Xcel to incorporate revised allocation factors into annual rider filings as new very large customers come online. (CUB)
39. Require Xcel to use a minimum of 85 percent of contract capacity to calculate the minimum bill, with potentially higher minimums if the Commission deems it appropriate. (OAG)
40. Find that customers taking service under the proposed tariffs are not eligible for the competitive response rider (CRR). (OAG)
41. Require Xcel Energy modify the Minimum On Peak Demand Charge to:
 - A. Be the actual costs incurred by serving the customer; and
 - B. Grant customers credits on months when demand exceeded contract capacity to be applied on months when demand is lower than the contract capacity. (Tract)

2. Size Threshold

42. Approve the Company's proposed application of the tariffs to new loads sized 100 MW or greater. (Xcel, Google, DCC)
43. Require Xcel to consider load factor criteria in making eligibility determinations under the Tariff. (CGA)
44. Establish an applicability threshold that treats new loads of at least 75 megawatts as "very large customers" that must receive service under Xcel's Large General Time of Day Service Tariff or Large Peak Controlled Time of Day Service Tariff. (CUB, CGA)
45. Establish a "system intensive" threshold that allows new loads of at least 50 megawatts or more to be considered for inclusion as "very large customers" if they are expected to have an outsized impact on the Company's system. (CUB, ELPC/VS)
46. Require Xcel to submit a compliance filing whenever a customer meeting or exceeding 50 MW of load—but falling below the automatic applicability threshold—seeks to interconnect to the Company's system. As part of this filing, Xcel must explain its reasoning for whether the new customer is "system intensive." System intensive customers are those that will require significant system modifications, design, engineering, or other expenditures prior to receiving service. Require Xcel to treat each customer designated as system intensive as a "very large customer" for the purpose of Minn. Stat. § 216B.1622 and require such customers to take service under Xcel's Large General Time of Day Service Tariff or Large Peak Controlled Time of Day Service Tariff. (CUB)
47. Require that Xcel propose another Large Load General (TOD) service tariff(s) for a subclass

of Large Load Customers that are Larger than 5 MW and less than 100 MW, in addition to the proposed tariffs for Very Large customers. (Department)

3. Term Length

48. Approve the Company's proposed default initial term of an ESA taken under the tariffs of at least 15 years. (Xcel)
49. Establish a minimum term-length for Xcel's energy supply agreements of between 18 and 20 years. (CUB)
50. Establish a minimum ESA term of ten years, plus a separate load ramp period of up to five years (the "10+5 construct"). (DCC)
51. Approve Xcel's Retail Customer ESA Form and tariffs with modifications noting the Commission will determine the specific ESA Term Length at such times as each customer-specific ESA is brought before the Commission for approval.
52. Modify Section 10 of the Retail Customer Form ESA as follows:

10. Effective Date; Term. This Agreement shall be in full force and effect from the date the Commission deems it approved (i) in form and substance satisfactory to both Company and Customer, inclusive of all Exhibits, and (ii) is not the subject of (a) a petition or application for reconsideration or rehearing, (b) a request for judicial review, or (c) a petition for preliminary injunction, and (iii) Company's Facilities are capable of being energized. This Agreement shall remain in full force and effect for at least fifteen (15) years (the "Term") unless terminated by either Party pursuant to Article 16 or as otherwise provided herein.*

**The final customer-specific ESA Term Length is subject to approval by the Minnesota Public Utilities Commission.* (Department)

53. Modify Xcel's proposed Large General Time of Day Service (Rate Code AXX) and the Large Peak Controlled Time of Day Service (Rate Code AXX) as follows:

TERM

Customers subject to this tariff must enter into an ESA with an initial term of at least fifteen (15) years*, inclusive of any Load Ramp Period of up to a maximum of five (5) years. For electrical service beyond the initial term, customers with demand equal to or

greater than 100,000 kW have the option of remaining on Large General Time of Day Service or moving to Large Peak Controlled Time of Day Service. A subsequent ESA will be required.

*The final customer-specific ESA Term Length is subject to the approval of the Minnesota Public Utilities Commission.
(Department)

- 54. Approve a 15-year contract period, inclusive of an optional 5-year load ramp. (Google)
- 55. Set a minimum ESA term of 15 years, exclusive of an optional 5-year ramp period, with the option for a longer term if the Commission deems it appropriate. (OAG)
- 56. Require Xcel to file any decreases to the initial default contract term length negotiated in ESAs in docketed proceeding open to other stakeholders. (CGA)

4. Customer Charge, Demand Charge, Energy Charge

- 57. Approve Xcel's proposed rate design and methodologies for determining the customer, demand, and energy charge for Large General Time of Day customers. (Xcel, Department)
- 58. Require Xcel to design the rates for these new sub-classes consistent with cost causation. (CloudHQ)
- 59. Require Xcel to reduce the minimum billing demand from seventy-five percent (75%) to sixty percent (60%) of a customer's contract capacity. (CloudHQ)
- 60. Clarify that the minimum bill provisions in both tariffs apply only to demand charges and not to energy charges. (DCC, Google)
- 61. Clarify that the minimum bill provision of the Large Peak Controlled Time of Day Service applies only after the load ramp period has concluded; bills during the load ramp period must be based on actual demand. (DCC)

5. Changes in Contract Demand

- 62. Approve the Company's proposed rate design in the new tariffs. (Xcel)
- 63. Approve the Company's proposed tariff terms that address changes in customer contract demand. Any increases to the contract capacity after the execution of the ESA are subject to generation and transmission capacity availability, as determined at the sole discretion of the Company. (Xcel)

64. The Company must permit up to a twenty percent (20%) capacity reduction without triggering the Capacity Reduction Fee. (CloudHQ)
65. If a Capacity Reduction Fee is required, the Company must provide a bridge period of up to 12 months where a customer can pay monthly minimums rather than the full Capacity Reduction Fee. This 12-month period would give the customer time to secure an off-taker. After the 12-month period, if an off-taker or mitigation is not obtained during the bridge period, then the full Capacity Reduction Fee, less the minimums paid over the bridge period, would be due in full. (CloudHQ)
66. Allow large customers to assign their ESAs by right if the assignee (i) has an equal or better credit rating, (ii) has a guarantee from a parent with an appropriate credit rating, or (iii) is taking on the ESA through a merger or consolidation with an equal or better credit rating. Require Xcel to respond to a notice of assignment within 30 days. Direct Xcel to provide an optional 12-month bridge period after the 24-month notice period, during which a customer would continue to pay minimum bills before paying any remaining exit fee or capacity reduction fee. (DCC)
67. Modify Section 3.1.1 of the Retail Customer Form ESA as follows:
- 3.1.1 Contract Capacity Increases. The effective Contract Capacity will be increased, subject to generation and transmission capacity availability as determined at the sole discretion of the Company and not to exceed the Connected Load (as described in Exhibit E), if either of the following occur: (a) if the prior year actual average monthly on-peak demand exceeds the effective Contract Capacity plus nine percent (9%); or (b) in the event that a Customer Load Forecast of monthly on peak demand provided pursuant to Section 3.5 exceeds the effective Contract Capacity as described in Exhibit E, the parties will meet and confer regarding an increase to the effective Contract Capacity. Any updates to the applicable terms in the ESA, including Exhibit E, are subject to approval by Minnesota Public Utilities Commission. (DOC)
68. Modify Xcel's proposed Large General Time of Day Service (Rate Code AXX) and the Large Peak Controlled Time of Day Service (Rate Code AXX) as follows:
1. Contract Capacity Increase. The effective Contract Capacity will be increased if either of the following occur: (a) if the monthly average of the prior consecutive 12 month period Actual On Peak Demands exceeded the effective Contract Capacity plus 9 percent (9%), Company reserves the right to revise the Contract Capacity percentage margin based on future wholesale capacity market conditions and/or policy changes. (b) Increases to Contract Capacity after the execution of an ESA are subject to generation

and transmission capacity availability as determined at the sole discretion of the Company and subject to the Customer and Company agreement and approval by the Minnesota Public Utilities Commission. (Department)

69. Modify the tariff to require Xcel to mitigate the capacity reduction fee for the entire reduction period, not just 24 months. Require Xcel to reduce the fee or reimburse a customer for the value of successful mitigation efforts for the entire duration of the fee period. (Google, DCC)

6. Exit Fee

70. Approve the Company's proposed terms for an exit fee, including its 24-month notice period and its calculation. The calculation is the current effective demand charges, times seventy-five percent (75%), times the lesser period of ten (10) years or the remainder of the ESA term, plus remainder of revenues required through the Incremental Cost Test. (Xcel)
71. The Company must allow a 12-month bridge period after the end of the 24-month notice period in which a customer can pay monthly minimums rather than the full Exit Fee. This 12-month period would give the customer time to secure an off-taker. After the 12-month period, if an off-taker or mitigation is not obtained during the bridge period, then the full Exit Fee, less the minimums paid over the bridge period, would be due in full. (CloudHQ)
72. Require Xcel to incorporate language in its tariffs and agreements which clarifies that customers exercising early termination must pay the applicable exit fees "plus the remaining incremental cost fee(s) that may be due and owing as of the Termination Date as provided in Exhibit C." (CUB)
73. Define the Termination Fee Period as the lesser of 36 months or the remaining months in the ESA. for the entire duration of the fee period, not only for 24 months. Preclude Xcel from imposing an exit fee or capacity reduction fee upon nonrenewal of an ESA at the end of its term. (DCC)
74. Modify section 16.2 and 16.3 of the Retail Customer Form ESA as follows:
- 16.2 Contract Capacity Reduction Payment. In the event of Customer Contract Capacity Reduction under Section 3.3 and subject to the Termination Notice required in 16.1(ii), Customer shall pay to Company an Early Contract Capacity Reduction Payment as of the date of the Customer Notice of Capacity Reduction, calculated as follows: In addition to any revenue or other fees that may be due and owing, Customer shall pay within 30 days of the Termination Date the total of (i) the difference between the effective Contract Capacity and reduced Contract

Capacity or the difference between the effective Load Ramp Capacity and reduced Load Ramp Capacity multiplied by (ii) the current effective Tariff rates on peak demand charges contained in Exhibit C multiplied by (iii) not less than ~~eightyseven~~-five percent (~~8575~~%)* multiplied by (iv) the “Termination Fee Period,” defined for this Section 16.2 as ~~the lesser of the remaining contract months in Article 10 or 120 months from the date of the Termination Notice~~, as liquidated damages and not as a penalty.

*The final customer-specific percentage of the “Termination Fee Period” is subject to approval by the Minnesota Public Utilities Commission.

16.3 Exit Fee. In the event of termination by Customer under Section 16.1 (ii)(b) and termination by Company due to Customer breach under 16.1(iii), Customer shall pay to Company an Exit Fee (a) in the case of termination pursuant to 16.1(ii)(b) 24 months from the date of the Termination Notice, or (b) in the case of termination pursuant to 16.1(ii) within 30 days of the Termination Date, calculated as follows: In addition to any revenue or other fees that may be due and owing, the total of (i) the current effective Tariff rates on-peak demand charges contained in Exhibit B multiplied by (ii) ~~not less than eightyseven~~-five percent (~~8575~~%)* of the Contract Capacity multiplied by (iii) the “Termination Fee Period” defined for this Section 16.3 as the lesser of the remaining contract months in Article 10 ~~or 120 months~~, as liquidated damages and not as a penalty.

*The final customer-specific percentage of the “Contract Capacity” is subject to approval by the Minnesota Public Utilities Commission. (DOC)

75. Modify Xcel’s proposed Large General Time of Day Service (Rate Code AXX) and the Large Peak Controlled Time of Day Service (Rate Code AXX) as follows:

9. Exit Fee and Contract Capacity Reduction Payment. Early termination or Contract Capacity reduction shall incur fees calculated as the total of (i) the Effective Contract Capacity multiplied by (ii) the on peak demand charges contained in this rate schedule multiplied by (iii) ~~not less than eightyseven~~-five percent (~~8575~~%)* multiplied by (iv) the “Termination Period,” defined as the lesser of the remaining contract months of the ESA Term. ~~or 120 months from the date of the Termination Notice as defined in the ESA.~~; and

*The final customer-specific percentage of the “Termination Period” is subject to approval by the Minnesota Public Utilities Commission. (DOC)

76. Modify the tariff to require Xcel to mitigate the Exit Fee for the entire duration of the termination fee period, rather than limited to 24 months. Require Xcel to reduce the fee or reimburse a customer for the value of successful mitigation efforts for the entire duration of the fee period. (Google, DCC)
77. Approve that the minimum bill, exit fee, and capacity reduction fee shall be based on 75 percent of contract capacity. (DCC)
78. Modify Xcel’s proposed Large General Time of Day Service (Rate Code AXX) and the Large Peak Controlled Time of Day Service (Rate Code AXX) as follows:

Adjusted On Peak Period Demand in kW for billing purposes shall be determined by dividing the Maximum Actual On Peak Period Demand by the power factor expressed in percent but not more than 95%, multiplying the quotient so obtained by 95%, and rounding to the nearest whole kW. In no month shall the on peak period demand to be billed be less than the current month's Adjusted On Peak Demand in kW, or no less than 8575%* of the Load Ramp Capacity or Contract Capacity as defined for that time period in the ESA.

*The final customer-specific percentages of either the “Load Ramp Capacity” or the “Contract Capacity” are subject to approval by the Minnesota Public Utilities Commission.

CUSTOMER LOAD RAMP AND MINIMUM BILL

The maximum Load Ramp Period is up to five (5) years. Pursuant to the ESA, in each month after Company’s Facilities are capable of energization, the Customer will be billed equal to the greater of: (a) the on peak period demand; or no less than (b) 8575%* of the Load Ramp Capacity, multiplied by the effective monthly demand charge plus the effective customer charge and other applicable Tariff related charges, as calculated pursuant to the Terms and Conditions of Service herein. After the Load Ramp Period, the Customer will be billed equal to the greater of: (a) the actual metered on peak period demand to be billed; or no less than (b) the Adjusted 8575%* of the Contract Capacity, multiplied by the effective monthly demand charge plus the effective customer charge and other applicable Tariff related charges as calculated pursuant to the terms and Conditions of Service herein.

*The final customer-specific percentages of either the “Load Ramp Capacity” or the “Contract Capacity” are subject to approval by the Minnesota Public Utilities Commission.

Terms and Conditions of Service

10. Security/Risk Mitigation: At a minimum, the following security and risk mitigation requirements will be included in the ESA.

a. Sufficient credit report;

b. Minimum On Peak Demand Charges. The Minimum On Peak Demand Charges during and after the Load Ramp Period shall be equal to the greater of (i) on peak period demand to be billed or no less than (ii) ~~85~~75%* of the Effective Contract Capacity, multiplied by the effective firm demand charge during the month for which the bill is rendered; and

*The final customer-specific percentages of either the “Load Ramp Capacity” or the “Contract Capacity” are subject to approval by the Minnesota Public Utilities Commission. (DOC)

79. Approve the tariff’s 75% minimum demand charges. (Google)

F. Class Cost of Service

1. Definition of a Class or Subclass

80. Confirm that the large customer class or subclass is defined based on customer demand (over 100 MW) and not based on load factor or business type. (DCC)

81. Define the very large customer class to only include customers taking service under either the Large General TOD Service and Large Peak Controlled TOD Service. (Department)

82. Approve the classification of 100 MW and larger for this large user class or sub-class. (Google)

OR

83. Require Xcel to create a separate very large customer class for cost allocation and rate design purposes. (OAG, XLI, Google alternative)

2. Cost Attribution

84. Approve the Company’s proposed treatment of large load customers under Large General Time of Day Service and the Large Peak Controlled Time of Day Service as incremental sub-

classes within the Demand class. (Xcel)

85. Approve Xcel's proposed treatment to allocate any additional revenue accruing from the large load customer to all other customers to offset incremental costs. (Xcel)
86. Direct Xcel to directly assign the costs of dedicated facilities (e.g., interconnection facilities) to the customer that benefits from them. Direct Xcel to assign the costs of shared system resources to the large customer class or subclass through a CCOS in a rate case, not through customer-specific surcharges. (DCC)
87. Require Xcel to design a sales true-up for the Very Large customer class in its next rate case. (Department)
88. Require Xcel to conduct a class cost of service study for the large customer class or subclass in each future general rate case. (Google, DCC)
89. Require that each very large customer taking service under the proposed tariffs register with MISO as a separate commercial pricing node and require Xcel to pass through locational marginal price-based charges associated with that node directly to the customer. (OAG)
90. Direct Xcel to assign the costs of shared system resources to the large customer class or subclass through a CCOS in a rate case, not through customer-specific surcharges. (DCC)
91. Large customers shall be treated as a collective group for cost allocation purposes, with costs assigned to the large customer class or subclass as a whole and not on a customer-by-customer basis. (DCC)
92. Require Xcel to explicitly state in its tariffs and agreements that the costs of system upgrades or modifications necessitated by the expansion of service to the very large customer will be borne by that entity and not other ratepayer classes. (CUB)

3. Class Cost Allocators

93. Approve the Company's proposed treatment to allocate any additional revenue accruing from the large load customer to all other customers to offset incremental costs. (Xcel)
94. Require Xcel to ensure that class cost allocators incorporate very large customer demand by:
 - A. Constructing demand allocators using the greater of a very large customer's actual forecasted demand or its minimum billing demand,

- B. Updating Transmission Cost Recovery Rider allocation factors with recent forecast data in each Transmission Cost Recovery Rider filing, and
 - C. Allocating Renewable Energy Standard Rider costs analogously to how those costs are allocated in Xcel's CCOSSES. (OAG)
95. Require Xcel to allocate any incremental revenues collected from new large load customers to customer classes in the same manner as its production and transmission plant. (XLI)
 96. Require Xcel to incorporate revised allocation factors into annual rider filings as new very large customers come online. (CUB)
 97. Require Xcel to track and refund the difference in rider recovery between when a very large customer comes online and when new allocation factors are adopted by the Commission. (CUB)
 98. Require Xcel to design a sales true-up for the Very Large customer class in its next rate case. (Department)

4. Relationship to Future Rate Cases

99. Large General Time of Day Service customers shall be assigned rates according to standard regulatory treatment of a) assessing a revenue requirement for all customers, b) identifying a just and reasonable cost allocation that assigns revenues to the appropriate classes and sub-classes, and c) designing rates for each class and sub-class in accordance with sound regulatory principles and state policy goals. Actual costs and revenues should be utilized as a basis for ratemaking in subsequent rate cases. (Google)
100. Direct Xcel to demonstrate in all future rate cases that rates paid by the large customer class or subclass cover the full cost of service, including incremental costs, embedded system costs, and rider costs, and do not result in cross subsidies between customer classes. (DCC)
101. Require Xcel to allocate any incremental revenues collected from new large load customers to customer classes in the same manner as its production and transmission plant. (XLI)

G. Compliance with IRP Order and Minn. Stat. § 216B.1622

102. Find that the Company's proposal complies with the IRP Order (April 21, 2025, Order in Docket Nos. E002/RP-24-67 and E002/CN-23-212), and Minn. Stat. § 216B.1622. (Xcel)
103. Find that Xcel's incremental cost test proposal is inconsistent with the IRP Order, which directed Xcel to ensure that all incremental costs attributable to large customers are assigned to the large customer class or subclass—not on a customer-by-customer basis.

(DCC, Google)

104. Find that the best method for ensuring all costs attributable to large customers are assigned to the large customer class or subclass, as required by Minn. Stat. § 216B.1622, subd. 2(1), is through general rate cases using class cost of service studies. (DCC)
105. Find that Xcel's incremental cost test proposal is inconsistent with Minn. Stat. §§ 216B.03 and 216B.07 because it results in rates that are not consistent in application to the large customer class or subclass and subjects customers to unreasonable prejudice or disadvantage. Find that Minn. Stat. § 216B.72 already requires large data center customers to subsidize low-income energy programs through annual fees and, as a result, no additional cross-subsidy mechanism is warranted. (DCC)
106. Approve the Retail Customer Form ESA. The Commission will determine compliance with the IRP Order and Minn. Stat. § 216B.1622, Subd. 2 when each customer-specific ESA is brought before the Commission for approval. (Department)
107. Approve Xcel's proposed terms and conditions, other than the ICT, combined with standard ratemaking practices in ongoing rate case, as compliant with the IRP Order and Minn. Stat. § 216B.1622. (Google)

H. Clean Energy and Demand-Side Management

1. General

108. Approve the Company's proposed amendment to Article 3 of the form ESA as described in the Company's Reply Comments. (Xcel)
109. Require Xcel Energy to enable all potential pathways for clean energy for very large customers, including both voluntary carbon-free procurement, as well as clean, behind-the-meter generation and load flexibility. (ELPC/VS)
110. Require Xcel to perform Encompass or other modeling analysis in ESA filings that shows the level of load flexibility that would be required (amount of load, duration, etc.) to change the size/type/timing of new infrastructure needed to serve the large load customer. Require Xcel to perform a similar analysis to determine the level of load flexibility required to avoid any transmission upgrades needed to serve the large load customer. (FE/MCEA)
111. Require Xcel to modify the tariff to allow Xcel and the customer to agree to individually-tailored load flexibility arrangements separate and distinct from existing demand response options. (FE/MCEA)
112. Direct Xcel to modify the proposed tariffs to explicitly authorize and encourage data center customers to meet their load through bringing their own new capacity. The tariffs shall provide flexibility to accommodate collocated or grid connected self-supply, PPA,

VPPA, or other alternative arrangements that are consistent with Minnesota's regulated retail electric service market. (Geronimo)

113. Direct Xcel to review its load interconnection processes and implement an expedited load interconnection study process for new data center loads that would be co-located with new generation. (Geronimo)

2. Behind the Meter Generation (BTMG) / Bring Your Own Generation (BYOG)

114. Require Xcel to provide avenues for large load customers to “bring their own” clean energy resources, including but not limited to BTMG arrangements and sleeved PPAs. (CGA)
115. Direct Xcel to clarify that, except for resources procured through a tariff under Minn. Stat. § 216B.1623, large customers will be served by system resources and not by specific, identifiable generation resources dedicated to individual customers. (DCC)
116. Require Xcel to modify Section 1.03 of its Form IA to reflect Xcel’s proposed updated additional language in *3. Service Provided Pursuant to Tariffs* of the Retail Customer Form ESA. (Department)
117. Require Xcel Energy to explore innovative load flexibility opportunities, such as Virtual Power Plants, with its very large customers, and include these arrangements in future ESAs submitted for Commission review. (ELPC)

3. Interconnection Issues (e.g. fast lane, queue management)

118. Require Xcel to prioritize large load customers’ interconnection requests based on a prospective customer’s voluntary plans to develop clean behind-the-meter generation or to procure clean energy resources in partnership with the Company, collocate with existing clean energy generation, operate flexibly, or undertake other activities falling within an umbrella bring-your-own generation effort. (CGA)
119. Direct Xcel to explore reducing time to power for large customers that support clean energy and other flexibility arrangements, on a voluntary basis. Any prioritization benefits for flexible or clean energy customers should apply regardless of whether the supporting resources are located onsite, adjacent to the customer’s premises, or elsewhere in Xcel’s service territory. (DCC)
120. Require Xcel to work with stakeholders to develop new large-load interconnection standards appropriately tailored to the specific characteristics of very large customers in a timely manner.

As part of any consideration of new large-load interconnection standards, Xcel Energy shall consider modified prioritization, including specifically prioritizing very large customers that present less risk to other customers, such as those that have deployed clean behind-the-meter generation and energy storage, load flexibility, and other demand-side management, and/or

customers that are obtaining their own energy supply, including through the forthcoming Clean Energy and Capacity Tariff. (ELPC/VS)

121. Require Xcel Energy to modify the tariffs to include:

The number and description of the steps in the interconnection process and the approximate timing of each step; and

The criteria used to manage the interconnection queue. (Tract)

122. Require Xcel to begin stakeholder discussions to develop the voluntary clean energy and capacity tariff required by Minn. Stat. § 216B.1623. (CGA, DCC, CGA, ELPC/VS, Google)

OR

123. Direct Xcel to use either a request for information (RFI) or request for proposal (RFP) to develop a specific voluntary carbon-free electricity procurement program, and to discuss with and receive input from interested stakeholders at a scheduled meeting before filing with the Commission for approval by December 1, 2026. (DOC)

124. Require Xcel to (1) include and evaluate BYOG opportunities within its voluntary 24/7 carbon-free program; and (2) procure some level of carbon-free generation through PPAs. (CGA)

125. Reject calls to establish a minimum load control threshold for the Large Peak Controlled Time of Day Service; load control events should shall be called based on cost and reliability needs. (DCC)

126. Require Xcel Energy to file a Tariff within 90 days of the Commission's final order in this proceeding. (ELPC/VS)

I. Procedural Issues and Reporting Filings

127. Require Xcel to track and refund the difference in rider recovery between when a very large customer comes online and when new allocation factors are adopted by the Commission. (CUB)

128. Direct Xcel to demonstrate in all future rate cases that rates paid by the large customer class or subclass cover the full cost of service, including incremental costs, embedded system costs, and rider costs, and do not result in cross subsidies between customer classes. (DCC)

129. Direct Xcel to file each ESA with the Commission for approval and to include, as a separate document accompanying the ESA filing, information on the anticipated socioeconomic benefits of each new large customer, including estimated construction and

permanent jobs. Clarify that such socioeconomic information is for informational purposes only and will not influence approval or denial of any particular ESA. (DCC)

130. Require Xcel Energy to file a report every 6 months with the following information:
 - A. the number of new very large customer requests;
 - B. the total expected capacity of these requests;
 - C. the number of customers that have signed ESAs under its very large customer tariff;
 - D. the total capacity of these signed ESAs;
 - E. the number of customers participating under the load flexibility tariffs;
 - F. the total flexible load subject to the load flexibility tariffs;
 - G. the number of customers participating in the Clean Energy and Capacity Tariff; and
 - H. the total energy and capacity associated with the customers participating in the Clean Energy and Capacity Tariff (ELPC)
131. Require Xcel to file multiple CCOSSES and revenue requirement proposals in subsequent rate cases representing different treatments of the very large customer class, including ones in which:
 - A. Very large customers are included as part of the C&I Demand class for cost allocation and rate design purposes and all resources are treated as system resources (Xcel's preferred version),
 - B. Very large customers are treated as a separate class for cost allocation and rate design purposes and all resources are treated as system resources, and
 - C. Very large customers are treated as a separate class for cost allocation and rate design purposes and costs attributable to very large customers, including but not limited to incremental costs, are directly assigned to this class. (OAG)
132. Require Xcel to submit a new and revised CCOSS, either in Docket No. 24-320, or in subsequent rate case dockets, whenever Xcel's incremental peak demand exceeds 250 MW from its previously approved CCOSS. (XLI)
133. Require Xcel Energy to Modify the credit support provisions of the tariffs to:
 - A. Include the factors used to calculate the amount of credit support required for each customer; and

- B. Allow the amount of the credit support to be reduced as a customer achieves milestones. (Tract)
134. Require the Company to submit a compliance filing any time the total load of a parent company and its subsidiaries exceeds the applicability threshold for very large customers, and either the Company chooses not to aggregate facilities or the customer disputes the Company's aggregation determination. The compliance filing should explain and justify the Company's aggregation decision. If both the Company and the customer agree to aggregate, no separate filing would be needed, as information on that determination would be included with the ESA. (CUB)