

STATE OF MINNESOTA
BEFORE THE PUBLIC UTILITIES COMMISSION

Katie Sieben	Chair
Joseph Sullivan	Vice-Chair
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Audrey Partridge	Commissioner
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In the Matter of Xcel Energy's Petition for
Approval of Large General Time of Day Service
and Large Peak-Controlled Time of Day Service
Tariffs

Docket No. E-002/M-25-289

Initial Comments of the Citizens Utility Board of Minnesota

The Citizens Utility Board of Minnesota ("CUB") respectfully submits the following comments pursuant to the Minnesota Public Utilities Commission's ("Commission") Notice of Extended Comment Period issued on September 19, 2025 in the above-referenced matter.

I. Background

On April 21, 2025, the Commission approved a settlement agreement resolving issues related to Northern States Power Company d/b/a Xcel Energy's ("Xcel" or the "Company") 2024–2040 integrated resource plan ("IRP Order").¹ As part of its approval, the Commission required the Company to file "a proposal for development of a new rate class or sub-class and tariff for super-large customers," with the goal of "ensur[ing] continued achievement of affordability, reliability, and clean energy goals and standards."²

Subsequently, the Minnesota Legislature adopted a slate of new laws governing the provision of energy service to data centers and very large customers.³ Among other actions, the Legislature enacted Minn. Stat. § 216B.1622, which requires the Commission to establish the definition and appropriate characteristics of very large customers, and apply certain criteria when determining whether to approve, modify, or reject the tariff or electric service agreement ("ESA") under which the utility proposes to provide service to the customer.⁴

On July 16, 2025, Xcel filed a Petition requesting approval of new sub-classes and tariffs for Large General Time of Day Service and Large Peak-Controlled Time of Day Service customers.⁵

¹ *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 (Apr. 21, 2025) (hereinafter "IRP Order").

² *Id.* at 25-26.

³ Laws of Minnesota 2025, Chapter 12 – H.F. No. 16, Section 9 (creating and enacting Minn. Stat. § 216B.1622)

⁴ Minn. Stat. § 216B.1622, Subds. 1-2.

⁵ *In the Matter of Xcel Energy's Petition for Approval of Large General Time of Day Service and Large Peak-Controlled Time of Day Service Tariffs*, Docket No. E-002/M-25-289, Xcel Petition (Jul. 16, 2025) (hereinafter "Xcel Large Load Tariff Petition").

II. Analysis

The proliferation of data centers and other energy intensive industries has raised fundamental questions about how to reliably serve new load while maintaining reliability, meeting the state's carbon free electricity standards, and mitigating harm to other customers. Data centers' energy needs are substantial, comprising approximately four percent of the United States' total electricity consumption—or 152 terawatt hours (“TWh”)—in 2023.⁶ Preliminary forecasts suggest that percentage could more than double to 9.1 percent—an average of over 400 terawatt hours per year—by 2030.⁷ Other models anticipate even more aggressive demand requirements on a shorter timeline.⁸

In Minnesota alone, high-growth models show data center demand increasing by almost 1.4 million megawatt hours (“MWh”) by 2030.⁹ Xcel forecasts data centers will contribute to annually increasing net peak demand and energy sales by 1.8 and 2.0 percent, respectively, through 2040.¹⁰ In an industry that has experienced relatively flat growth over the past several decades, this represents a monumental shift that brings with it numerous challenges and opportunities. As opposed to previous instances of demand growth, this increase in electricity consumption is primarily driven by a limited number of very large customers seeking accelerated interconnection. This introduces uncertainty into the load forecasting and resource planning processes and amplifies the potential for stranded assets.

To serve this rapidly expanding sector, new generation and transmission infrastructure will need to be constructed. Ensuring those expenses are appropriately borne by the customers who necessitated the investments will be essential to protecting other ratepayers against escalating costs and risks. These concerns are not abstract, and are already playing out in jurisdictions across the country. Following record price spikes in PJM's July 2025 capacity auction,¹¹ the grid's independent market monitor released a report finding “data center load growth [was] the primary reason for recent and expected capacity market conditions, including . . . the tight supply and demand balance, and high prices.”¹² That same report underscored the potential reliability problems associated with data centers' “almost inexhaustible demand for power,” and indicated that failure to adequately resolve those issues would result in “very high costs for other PJM customers.”¹³ The Union of Concerned Scientists raised similar alarms about billions of dollars in data center-related transmission costs being

⁶ EPRI, *Analyzing Artificial Intelligence and Data Center Energy Consumption* at 10 (May 2024).

⁷ *Id.* at 17.

⁸ See, e.g., ARMAN SHEHABI ET AL., LBNL, 2024 UNITED STATES DATA CENTER ENERGY USAGE REPORT at 5-6 (Dec. 20, 2024) (indicating that U.S. data center demand could eclipse 580 TWh by 2028).

⁹ *Id.* at 28.

¹⁰ Xcel Large Load Tariff Petition at 5.

¹¹ See Citizens Utility Board of Illinois, *PJM Capacity Auction Leads to Record Price Spike for Second Straight Year, Threatens Even Higher Com Ed Bills in 2026-27* (Jul. 22, 2025).

¹² Monitoring Analytics LLC, *State of the Market Report for PJM: January through June* at 46 (Aug. 14, 2025); see also Ethan Howland, *Data Centers 'Primary Reason' for High PJM Capacity Prices: Market Monitor*, UTIL. DIVE (Oct. 2, 2025).

¹³ Monitoring Analytics LLC, *State of the Market Report for PJM: January through June* at 46 (Aug. 14, 2025).

passed onto other ratepayers.¹⁴ Bloomberg reported that in areas near data center development, electricity costs have risen as much as 267 percent over a period of five years.¹⁵

It is with an eye towards these potential outcomes and maintaining compliance with Minnesota law that CUB has analyzed Xcel's tariff proposal. We are extremely concerned about the prospect of data centers and very large customers contributing to higher rates for residential households. Evidence of these detrimental impacts is starting to accumulate,¹⁶ and Xcel's ratepayers have begun to express strong opposition to data centers in anticipation of utility bills becoming more unaffordable than they already are.¹⁷ At a time when tens of thousands of utility customers are being disconnected from service,¹⁸ it is fundamentally important to protect residential households from the costs and risks of connecting very large customers to the grid.

Both Minnesota law and the Commission's IRP Order provide a strong framework to mitigate these concerns, requiring that very large customers cover all their own costs, including the full expense associated with constructing the assets and infrastructure needed to serve them. Some costs, however, are more difficult to trace back to individual customers. For example, MISO's wholesale energy market prices are shaped by a variety of factors, including generation supply and demand. In the case of a "data center demand surge, market prices would likely increase, at least in the short term," leading to higher consumer energy bills that are reflective of utilities' market exposure.¹⁹ As demand for new generation, transmission, and other critical energy components increase, supply chain disruptions can similarly result in longer lead times and increase costs not only for projects necessary to serve new large loads, but other customers as well.²⁰ While it may not be possible to perfectly assign all these various costs, it is essential to develop reasonable protective measures and tariff provisions to insulate existing utility ratepayers from very large customer expenses to the extent possible.

We appreciate the Commission's close attention to this very important topic. Minnesota is off to a good start, with one of the strongest ratepayer protection laws in the country. As detailed below, CUB

¹⁴ Mike Jacobs, *Data Centers Are Already Increasing Your Energy Bills. We Have the Receipts.*, UNION OF CONCERNED SCIENTISTS (Sep. 29, 2025).

¹⁵ Josh Saul et al., *AI Data Centers Are Sending Power Bills Soaring*, BLOOMBERG (Sep. 29, 2025).

¹⁶ See, e.g., Martin Stansbury et al., *Can US Infrastructure Keep Up With the AI Economy?*, DELOITTE (Jun. 24, 2025) (noting that residential energy prices in 8 of the 9 top data center markets have increased faster than the national average); ELIZA MARTIN & ARI PESKOE, HARVARD L. SCHOOL, ENV'T & ENERGY LAW PROGRAM, *EXTRACTING PROFITS FROM THE PUBLIC: HOW UTILITY RATEPAYERS ARE PAYING FOR BIG TECH'S POWER* (Mar. 2025) (explaining how upfront grid costs are being passed onto residential customers).

¹⁷ See, e.g., *In the Matter of the Application of Northern States Power Company for Authority to Increase Rates for Electric Service in Minnesota*, Docket No. E-002/GR-24-320, Public Comments of Larry Kirch (Jan. 3, 2025); Bonnie Matter (Jan. 27, 2025); Taylor Daiello (Sep. 16, 2025); Phillip Brandvold (Oct. 7, 2025) (reflecting a small sampling of public comments submitted in Xcel's rate case that express opposition to data center buildouts and concern about their impacts on utility bills).

¹⁸ See, e.g., *In the Matter of the Application of Northern States Power Company for Authority to Increase Rates for Electric Service in Minnesota*, Docket No. E-002/GR-24-320, Levenson Falk Direct at 9-11 (Aug. 22, 2025).

¹⁹ ELIZA MARTIN & ARI PESKOE, HARVARD L. SCHOOL, ENV'T & ENERGY LAW PROGRAM, *EXTRACTING PROFITS FROM THE PUBLIC: HOW UTILITY RATEPAYERS ARE PAYING FOR BIG TECH'S POWER* at 14 (Mar. 2025).

²⁰ See generally Martin Stansbury et al., *Can US Infrastructure Keep Up With the AI Economy?*, DELOITTE (Jun. 24, 2025) (noting that supply chain disruptions and rising construction material costs are a primary concern for utilities and data center operations).

has several questions and concerns about Xcel's petition, but we look forward to engaging with the Company and other stakeholders to refine the proposal to be more protective of existing ratepayers.

A. Procedural Process

As captured below, CUB has concerns about whether Xcel's proposed tariff and agreements comply with Minnesota law and protect other ratepayers from the risks of bringing very large customers online. Although the Company will have a chance to react to those concerns, their submission of reply comments would mark the end of the comment period under current procedure. In other words, CUB and other stakeholders will not have a chance to assess the reasonableness of tariff modifications offered in response to initial comments. For this reason, we do not believe the procedural process, as envisioned, will provide an adequate record from which the Commission can make an informed decision. We offer two recommendations to resolve this shortcoming.

First, CUB intends to request a supplemental comment period so stakeholders will be provided an opportunity to analyze and respond to Xcel's reply comments. This request will be filed separately from the instant comments. CUB has conferred with multiple stakeholders, agencies, and the Company in developing this request, and understands it is broadly supported.

Second, we recommend that the Commission open a new, industry-wide docket for the purpose of defining "very large customers." Minnesota law requires the Commission to establish the definition and appropriate characteristics of these customers for all publicly regulated utilities by December 15, 2026.²¹ Rather than developing parameters individually for each utility, standardizing treatment will ensure the protections detailed in statute are applied consistently for all Minnesota ratepayers. In addition, this would streamline the regulatory process and provide an efficient means to comply with Minnesota's legal requirements. If the Commission chooses to pursue this approach, the current procedural process could be temporarily delayed until the close of the industry-wide docket.

B. Length of Agreement

Xcel indicates that the initial term of an ESA taken under its proposed tariff is "subject to negotiation by the parties," but must be at least 15 years.²² Despite this minimum term length, CUB remains concerned that the infrastructure costs incurred to serve very large customers will not be fully paid down over this time period.

Minnesota law requires that all costs attributable to very large customers are assigned to them, and further directs the Commission to establish such protections as are necessary to ensure other utility customers are not placed at risk for paying stranded asset costs.²³ The Commission's IRP Order employs similar language, but specifically indicates the tariff must be designed to recover customer-related costs "over the life of the service agreement."²⁴ Xcel's tariff begins the process of recovering

²¹ Minn. Stat. § 216B.1622, Subd. 1.

²² Xcel Large Load Tariff Petition at 10.

²³ Minn. Stat. § 216B.1622, Subd. 2(1) - (3).

²⁴ IRP Order at 26.

infrastructure expenditures, but it is unclear whether certain costs may remain outstanding at the end of the 15-year ESA term, or whether the incremental cost test is sufficient to capture all expenses attributable to very large customers. We therefore request that the Company more fully explain how its incremental cost test (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.

CUB is concerned that the asset lives of investments made to serve very large customers will likely extend beyond the 15-year ESA term. In a recent report, data analytics firm Wood Mackenzie found “minimum [large load] contract terms are nearly always shorter than generation asset life,” thereby posing a substantial stranded asset risk to shareholders and other utility customers.²⁵ Xcel appears to acknowledge this possibility, noting that terms longer than fifteen years may be “appropriate based on the expected operational lifespan or financing structure of specific generation assets, particularly where such assets necessitate extended cost recovery periods or long-term contractual commitments to ensure economic viability.”²⁶ The Company further states terms up to 30 years fall within what it considers a “reasonable range” and that terms longer than 30 years may be justified by asset lives or financing requirements.²⁷ Despite this recognition, there does not appear to be any language in Xcel’s tariffs or agreements that would require longer-term contracts or alternative guarantees if necessary to guard against stranded asset risk. Leaving these terms subject to negotiation does not sufficiently protect the Company’s other customers as required by Minn. Stat. § 216B.1622, Subd. 2(3) and the Commission’s IRP Order.

To ensure infrastructure expenses and other costs are either fully paid during the ESA term or become due upon expiration of the contract, the Company should consider (1) longer minimum ESA terms; (2) exit fees to recoup outstanding infrastructure expenses upon nonrenewal of the ESA; (3) capacity reduction fees that are implemented if the customer materially lowers its demand requirements after the initial term; and (4) accelerating depreciation and amortization schedules of infrastructure constructed for very large customers so full recovery occurs within the term period. Lastly, and as more fully discussed below, the Commission could consider allowing large load entities to bring their own generation with them.

Minnesota law requires the Commission to take such measures as necessary to guarantee “other customers of the public utility are not placed at risk for paying stranded asset costs” associated with Xcel’s provision of service to very large customers.²⁸ CUB looks forward to reviewing the perspectives

²⁵ Wood Mackenzie, *Excerpt: Load Growth on Utility Terms: A Comparative Analysis of Large Load Tariffs* at 2, https://go.woodmac.com/l/131501/2025-06-04/34dsdr/131501/1749052207yNze32RU/Wood_Mackenzie_Load_growth_on_utility_terms_June0325.pdf (Jun. 2025).

²⁶ *In the Matter of Xcel Energy's Petition for Approval of Large General Time of Day Service and Large Peak-Controlled Time of Day Service Tariffs*, Docket No. E-002/M-25-289, Xcel Response to DOC IR 003 (Aug. 15, 2025) (hereinafter “DOC IR 003”).

²⁷ *Id.*

²⁸ Minn. Stat. § 216B.1622, Subd. 2(3).

and proposals of other stakeholders and revisiting these issues throughout the course of this proceeding to ensure compliance with statute.

C. Very Large Customer Definition and Aggregation Determinations

Minnesota law defines “data centers” as facilities with “a load of 100 megawatts [MW] or more and whose primary purpose is the storage, management, and processing of digital data . . .”²⁹ However, this definition is primarily employed in the issuing or modifying of water use permits.³⁰ In contrast, no definition is provided for “very large customer” as that term is used in the energy provisions of Minn. Stat. § 216B.1622. Instead, the Commission is directed to establish the definition and appropriate characteristics of a very large customer class or subclass by December 15, 2026.³¹ In its proposed tariff, Xcel applies the 100 MW threshold for data centers to all very large customers without explaining why that approach is warranted.³²

As briefly discussed above, we believe it would be appropriate to initiate a new, industry-wide proceeding for the purpose of determining what constitutes a “very large customer” for the purposes of Minn. Stat. § 216B.1622. Regardless of whether the Commission opens a new docket for this purpose, we ask that Xcel provide additional information and reasoning in reply comments for why it chose to employ a 100 MW threshold in its tariff petition. Selecting the appropriate MW and/or load factor threshold plays a pivotal role in ensuring other customer classes do not bear the costs or risks associated with bringing very large customers online. There are multiple different thresholds—primarily ranging from 25 MW to 100 MW—that have been proposed or approved for similar tariffs in other jurisdictions.³³ Without additional clarification, CUB is wary about whether the 100 MW threshold is an appropriate basis for identifying very large customers in Xcel’s service territory.

CUB further recognizes that a MW threshold alone may not be sufficient to capture all customers that require substantial infrastructure investments prior to receiving service. As Dakota Electric acknowledged in its Extension of Service Tariff proceeding, “a prospective load could fall below a fixed criteria but nevertheless require significant system modifications that warrant being included under the proposed tariff requirements.”³⁴ For example, a prospective customer may bring with it a load of

²⁹ Minn. Stat. § 216B.02, Subd. 11.

³⁰ See Minn. Stats. §§ 103G.265, Subd. 5; 103G.271, Subd. 5b.

³¹ Minn. Stat. § 216B.1622, Subd. 1.

³² Xcel Large Load Tariff Petition at 10; Att. A at Section 5, Sheet 32.2; Att. B at Section 5, Sheet 47.2.

³³ See Wood Mackenzie, *Excerpt: Load Growth on Utility Terms: A Comparative Analysis of Large Load Tariffs* at 7 (Jun. 2025); see also, e.g., *In the Matter of the Application of Virginia Electric and Power Company for a 2025 Biennial Review of Rates, Terms, and Conditions for Electric Service*, Docket No. PUR-2025-00058, Application, Direct Testimony, Exhibits and Schedules of Virginia Electric and Power Company at 11 (Mar. 31, 2025) (proposing to create a new GS-5 rate class for customers with measured or contracted demand of 25 MW or greater with an expected load factor of at least 75 percent); *In the Matter of the Verified Petition of Indiana Michigan Power Company for Approval of Modifications to its Industrial Power Tariff*, Docket No. 46097, Order of the Indiana Utility Regulatory Commission at 31, Settlement Attachment at 1 (Feb. 19, 2025) (approving tariff provisions that define large load customers as those with contract capacity of 70 MW or greater at a single plant or 150 MW or more on an aggregated basis).

³⁴ *In the Matter of the Petition of Dakota Electric Association to Modify its Extension of Service Tariff*, Docket No. E-111/M-25-178, Dakota Electric Association Reply Comments at 6 (Jul. 29, 2025); see also *In the Matter of the Petition of Dakota Electric Association to Modify its Extension of Service Tariff*, Docket No. E-111/M-25-178, Supplemental Comments of the Citizens Utility Board of Minnesota at 4 (Aug. 21, 2025) (noting that a customer “may not meet traditional size thresholds for constituting a

95 MW but require a dedicated substation or other system upgrades in the same way as customers that meet or surpass the 100 MW threshold. For this reason, additional—or alternative—parameters could be developed to determine the applicability of Xcel’s—and other utilities’—large load tariffs.

Related to this issue is whether and how facilities are aggregated together when determining very large customer classifications. As with the hypothetical discussed above, the infrastructure upgrades needed to serve two 50 MW operations may result in equal or greater costs than a single 100 MW facility. It would be improper to allow a company to bypass the ratepayer protections of Minn. Stat. § 216B.1622 solely because they separated their projects to avoid whatever size threshold is ultimately employed for very large customers. In recognition of this concern, Xcel states that it will “exercise reasonable discretion when choosing to aggregate premises . . . based on factors including, but not limited to, projects being proposed in the Company’s Minnesota service territory by the same parent or its affiliate or subsidiary.”³⁵ We appreciate Xcel’s attention to this issue, and believe premises aggregation is necessary to abide by the legislative intent of Minn. Stat. § 216B.1622 and maintain the effectiveness of the Commission’s IRP Order. However, subjecting aggregation decisions to the Company’s discretion rather than mandating them when certain conditions are met greatly diminishes the efficacy of this guardrail. If two or more facilities located in Xcel’s service territory are owned by the same parent entity, they should be aggregated together to determine whether the very large customer threshold has been reached. This does not require the exercise of discretion.

In addition to our concerns over the discretionary application of aggregation principles, we have several questions about how the Company intends to effectuate this practice. The web of parent, subsidiary, and affiliate relations can be exceedingly complex, and it is unclear if Xcel currently requests information from customers about those business structures. Although the Company has proposed requiring a Parent Guaranty in its petition, the situation contemplated here is materially different, as the various facilities under review might not meet the very large customer threshold unless they are aggregated together. To the extent that no such guaranty is required, it is unclear whether the Company will have sufficient information to identify the parent companies, subsidiaries, and affiliates associated with these loads. Further, there may be instances of third parties constructing and selling data centers which, individually, are not considered very large customers. In these situations, a portion of interconnection and infrastructure costs could be allocated to other ratepayers prior to the sale of the facility to a very large customer and its eventual aggregation with other premises under common ownership. In both these situations, 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 customers.

Ultimately, we question whether a 100 MW threshold is the most appropriate basis by which to apply Xcel’s tariff, and believe a separate, industry-wide proceeding should be initiated to define what constitutes a “very large customer.” We request that the Company discuss its rationale for employing

large load but may nonetheless require a dedicated substation or other infrastructure investments for service to be extended”).

³⁵ Xcel Large Load Tariff at 10.

the 100 MW threshold in reply comments and identify potential tariff provisions for capturing customers that, while falling short of the proposed MW threshold, nonetheless necessitate similarly substantial system upgrades. Lastly, we request that Xcel provide additional clarification about how it will identify facilities for aggregation and ensure costs are appropriately allocated throughout that process.

D. Mid-Term Expansions or Modifications

Minnesota law requires that existing customers be protected against any costs or stranded asset risks caused by very large customers.³⁶ CUB is concerned that the Company's proposed tariffs and agreements are insufficient to insulate other customers from very large customer costs if those entities seek to increase demand during the ESA term. While the proposed agreements require customers to bear the expense of upgrading their own facilities,³⁷ they do not describe how the costs of Company Facilities will be dealt with after initial interconnection is completed. While certain modifications are contemplated, the terms of those potential investments are undefined. For example, the Interconnection Agreement simply indicates that the "Parties will negotiate in good faith an amendment . . . as may be necessary to address the proposed change."³⁸ The agreement language committing Xcel to "work together in good faith [with the customer] with respect to the location, cost, and timing" of adding or modifying interconnection points is no more illustrative.³⁹ We respectfully request 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.

E. Transmission Expenses

Pursuant to the proposed tariff, ESA, and interconnection agreement, very large customers are required to pay in advance construction and interconnection costs necessary for "overhead or underground electric transmission extension facilities."⁴⁰ Further, the Company proposes to include in its Incremental Cost Test an analysis of increased MISO transmission-related costs resulting from the customer's addition to the system.⁴¹ Ensuring these costs are appropriately borne by new very large customers is essential, and we question whether the Company's proposed processes are sufficient to achieve this outcome.

Data centers will necessitate more transmission investment than would otherwise be needed to maintain the reliability and adequacy of the electricity system in their absence. A recent report published by the Union of Concerned Scientists ("UCS") found \$5 billion in transmission projects "needed only to connect data centers" had been allocated to other utility customers in PJM.⁴² Some of

³⁶ Minn. Stat. § 216B.1622.

³⁷ Xcel Large Load Tariff Petition, Att. G at 5, Att. H at 14-15.

³⁸ *Id.*, Att. H at 14.

³⁹ *Id.*, Att. H at 15.

⁴⁰ *Id.*, Att. A at Section 5, Sheet 32.6; Att. B at Section 5, Sheet 47.7; Att. G at 4.

⁴¹ *Id.* at 20.

⁴² Marc Jacobs, UNION OF CONCERNED SCIENTISTS, *Connection Costs: Loophole Costs Customers Over \$4 Billion to Connect Data Centers to Power Grid* (Sep. 2025).

these were interconnection expenses that very large customers must bear under Xcel's proposed tariffs and agreements.⁴³ However, we are concerned that such customers will necessitate additional transmission investments that will not be fully allocated to them under the proposed framework.

For example, data centers and large load entities may seek to locate facilities in close geographic proximity to generation and transmission infrastructure, thereby lowering upfront interconnection costs. However, this does not mitigate the impact of the very large customer on the overall transmission system. If the customer is drawing energy from a nearby facility, it is displacing the amount of electricity that would have otherwise been delivered to other sources of load in Xcel's service territory. New sources of generation must consequently be brought online—often at distance from population centers—and transmission capacity must be available to transmit that electricity to where it is needed. CUB worries that the costs of new transmission lines necessitated solely due the entry of very large customers may be passed onto other ratepayers in a manner that does not comply with Minn. Stat. § 216B.1622, Subd. 2(1).

The Transmission Cost Recovery (“TCR”) rider allocates Xcel's eligible transmission expenses to the Residential, Commercial and Industrial (“C&I”) Non-Demand, and C&I Demand classes “based on the demand allocation factors approved in the Company's last electric rate case.”⁴⁴ The entrance of new very large customers—and the requirement that they bear all costs attributable to them—complicates that allocation process. Even if a transmission line is solely needed to serve a very large customer or group of customers, the TCR would still allocate some level of expense to other rate classes. We do not believe this is consistent with statute or Commission Order, and request that Xcel explain how it intends to insulate other ratepayers from the costs of transmission projects that would not be necessary but for the interconnection of very large customers.

F. Rate Case Impacts

During its hearing on Xcel's 2024–2040 IRP, the Commission discussed the possibility of requiring a rate case filing whenever a new very large customer is brought online. As Commissioner Sullivan noted, “[i]f Xcel were to decide not to file a rate case, . . . the impact of those [customers] would not be [brought] back into rates, and . . . we could see significant impacts from a revenue perspective.”⁴⁵ He further explained that when new customers “have the same [energy] usage as a city, . . . it's important” to include those impacts in the class cost of service.⁴⁶ While such a requirement did not make its way into the Commission's Order, Xcel was nonetheless directed to discuss “how existing and future electric service agreements will be incorporated into a future rate case.”⁴⁷

⁴³ Xcel Large Load Tariff, Att. A, Sec. 5, Sheet 32.6; Att. G at 4; Att. H at 13.

⁴⁴ *In the Matter of Northern States Power Company d/b/a Xcel Energy-Electric's Petition for Approval of Transmission Cost Recovery Rider*, Docket No. E-002/M-24-371, Petition and Compliance Filing at 12 (Nov. 1, 2024).

⁴⁵ See Minnesota Public Utilities Commission, Recorded Webcast of Feb. 20, 2025 Hearing at 3:56:15, available at https://minnesotapuc.granicus.com/player/clip/2494?view_id=2&redirect=true.

⁴⁶ *Id.*

⁴⁷ *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 26 (Apr. 21, 2025).

In response, the Company articulated in its Petition that its tariff is designed to operate outside the confines of a rate case.⁴⁸ Xcel asserts that this process is necessary because the “short-term test year focus” and “multi-year adjudication” aspects of rate cases make it difficult to “dynamically analyze system and customer impacts and finalize ESA terms in a timely fashion.”⁴⁹ Xcel’s petition provides minimal discussion of the Company’s rate case plans, stating only that the “sales and revenues for customers qualifying for [the Large General Time of Day Service] tariff will be incorporated into” future rate cases.⁵⁰ While CUB appreciates the Company’s desire for expediency, we are concerned that without some mechanism for triggering cost allocation revisions or delivering claimed benefits, Xcel’s other customers could be stuck paying more than their fair share for the costs of interconnecting and serving new very large customers.

The idea that very large customers will lower costs for other ratepayers is premised on the notion that as new load materializes, it “has the potential to benefit existing customers by spreading costs over a greater volume of sales.”⁵¹ Without a new rate case or some other process for revising cost allocation, however, class cost of service models will not be updated to account for the new load, and other customers may not realize the purported value associated with these entities coming online.

Rate case decisions also have additional carryover effects on other recovery mechanisms utilized by the Company. As discussed above, certain riders—such as the TCR—employ allocation methodologies developed and refined through extensive testimonial evidence presented in rate case proceedings. Although those riders will continue to operate independently of any new rate case filing, the level of recovery from each class or sub-class will not accurately reflect customers’ relative contribution to system expense until class cost of service studies are updated and allocation factors are modified. Xcel’s instant petition does not adequately address how these issues will be resolved in a timely manner. We look forward to reviewing the positions of other parties and working with the Company and stakeholders to chart a reasonable pathway forward.

G. Acquisition of Energy Resources

It is unclear whether very large customers will be permitted to construct backup or onsite generation under Xcel’s proposed tariffs and agreements. Section 3 of the ESA requires very large customers to “receive and purchase from Company . . . all electric power and energy as may be required by Customer at the Site.”⁵² The Interconnection Agreement further provides “no rights to Customer with respect to any backup generation located at the premises.”⁵³ We are concerned that these provisions unnecessarily restrict power supply pathways that could alleviate stranded asset risks and lower utility costs associated with bringing these entities online.

⁴⁸ Xcel Large Load Tariff Petition at 18.

⁴⁹ *Id.*

⁵⁰ *Id.* at 24.

⁵¹ *In the Matter of the Application of Northern States Power Company for Authority to Increase Rates for Electric Service in Minnesota*, Docket No. E-002/GR-24-320, Liberkowski Direct at 21 (Nov. 1, 2024).

⁵² Xcel Large Load Tariff, Att. G at 2.

⁵³ *Id.*, Att. H at 4.

If very large customers are permitted to build their own carbon-free on-site generation, it would alleviate financial risks for existing ratepayers. Wood Mackenzie recently posited that enabling third-party power purchase agreements or employing a “bring your own generation” model might be the only way to protect both the utility’s shareholders and other customers from stranded asset risk.⁵⁴ Because these infrastructure expenses would be entirely borne by the very large customer, other ratepayers would not be subject to elevated cost recovery if the customer were to materially reduce demand or choose not to renew its ESA after the initial term. Shareholders would likewise be shielded from risk should the infrastructure investments no longer be used and useful in rendering service. The independent market monitor for PJM similarly recommended not only that on-site generation be permitted, but that it be required as a condition of very large customers coming online:

The MMU recommends that large data centers be required to bring their own generation with locational and temporal characteristics reasonably matched to their load profile and that this approach include an expedited queue option that would permit both the load and the generation to be added without delays.⁵⁵

Given the potential risk reduction inherent in allowing very large customers to construct their own carbon-free generation, we respectfully request that Xcel provide additional information in reply comments about how it envisions these contractual terms operating in practice.

H. Peak-Controlled Demand Response

Xcel’s Large Peak-Controlled Time of Day Service tariff (the “Peak-Controlled” rate) provides interruptible rate options under which data centers and other large load entities agree to “reduce their electricity usage during periods of peak demand or high energy prices” in exchange for discounted rates.⁵⁶ In proposing this rate option, the Company indicates data centers are statutorily exempt from utilities’ Energy Conservation and Optimization (“ECO”) programs and are therefore unable to participate in established demand response programs.⁵⁷

When thoughtfully designed, these programs can provide system-wide advantages by “reducing the utility’s need for additional capacity, contributing to resource adequacy requirements, and meeting ancillary service needs.”⁵⁸ However, we have several outstanding questions about how the Company’s tariff proposal will operate, and whether additional parameters should be required as a condition of approval.

Under the Peak-Controlled rate offering, customers’ firm demand will be billed in a manner consistent with the Large General Time of Day Service rate. However, on-peak controllable demand will be subject to substantially lower charges depending on the customer’s performance factor (“PF”):⁵⁹

⁵⁴ Wood Mackenzie, *Excerpt: Load Growth on Utility Terms: A Comparative Analysis of Large Load Tariffs* at 2 (Jun. 2025).

⁵⁵ Monitoring Analytics LLC, *State of the Market Report for PJM: January through June* at 42 (Aug. 14, 2025).

⁵⁶ Xcel Large Load Tariff Petition at 8.

⁵⁷ *Id.* at 8, 15-16.

⁵⁸ *Id.*

⁵⁹ Xcel Large Load Tariff, Att. B, Sec. 5, Sheet 47.3.

On-Peak Monthly Demand Charge per kW		Tier 1	Tier 2
Firm Demand			
	June - September	\$29.25	\$29.25
	Other Months	\$24.66	\$24.66
Controllable Demand (Jan - Dec)			
	Level A: < 65% PF	Not Available	\$23.06
	Level B: > 65% PF	\$21.21	\$21.93
	Level C: >85% PF	\$20.58	\$21.39
	Short Notice Rider	\$20.08	Not Available

These lower rates are provided regardless of whether the Company calls an event necessitating load curtailment. As Xcel indicates, both the “duration and frequency of control periods shall be at the discretion of the Company” and, while annual maximums are established for both Tier 1 (150 hours) and Tier 2 (80 hours), no minimum interruptible requirements are included in tariff.⁶⁰ If events are not called, the system value of interruptible loads will be limited. Given the amount of demand associated with these entities, we question whether the absence of a minimum interruptible threshold is appropriate.

Further, it does not appear that Xcel differentiates between the types of very large customers eligible to enroll in the Peak-Controlled tariff. Recent actions by cryptocurrency operations in Texas raise questions about the reasonableness of this approach. On more than one occasion, Bitcoin mining companies have reaped massive profits by utilizing demand response or selling power back to the market at inflated prices.⁶¹ While the regulatory and market structures in Minnesota differ substantially from Texas, we remain wary that certain actors could utilize the Peak-Controlled tariff in a way that shifts costs to other customers. For example, the tariff allows very large customers to select their own firm demand levels, subject to agreement by the Company.⁶² Under this approach, large load entities with flexible demand requirements—such as cryptocurrency companies—could choose a nominal amount of firm demand and pay substantially reduced prices for their remaining controllable demand. It is unclear, based on Xcel’s Petition and attached workpapers, whether such a situation was contemplated when developing the tariff or incremental cost test.

We respectfully request that Xcel provide its reasoning for not requiring a minimum number of interruptible hours, and explain how other customer classes will be financially protected under the Company’s Peak-Controlled rate.

⁶⁰ *Id.*, Att. C, Sec. 5, Sheet 49.

⁶¹ See, e.g., Kevin Vu & Emily Foxhall, *Texas Bitcoin miners profit by using less electricity; advocates say all Texans should get the same chance*, TEX. TRIBUNE (Jan. 3, 2024).

⁶² Xcel Large Load Tariff, Att. B, Sec. 5, Sheet 47.5 (noting that “firm demand” is the “lesser of Predetermined Demand or Adjusted on Peak Period Demand,” and that standard predetermined demand levels “shall be specified and agreed to by the customer and Company”).

III. Conclusion

Xcel's instant tariff petition represents a strong first step towards mitigating the costs and risks associated with serving very large customers. However, we believe additional clarification and revisions are needed to adequately protect existing ratepayers as required by Minnesota law and Commission Order. We appreciate the Commission's close attention to this issue and look forward to continuing our engagement throughout the regulatory process.

Sincerely,

October 13, 2025

/s/ Brandon Crawford

Brandon Crawford

Regulatory Advocate

Citizens Utility Board of Minnesota

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- Not-Public Document – Not For Public Disclosure
- Public Document – Not-Public Data Has Been Excised
- Public Document

Xcel Energy Information Request No. 3
 Docket No.: E002/M-25-289
 Response To: Minnesota Department of Commerce
 Requestor: Andrew Bahn, Steve Rakow, John Kundert, Rachel Wiedewitsch
 Date Received: August 05, 2025

Question:

Topic: Large General Time of Day Service and Large Peak Controlled Time of Service Tariffs

Reference(s): Petition p. 10

ESA Term Length. “The default initial term of an ESA taken under this tariff is at least 15 years. ...The Company recognizes, however, that there may be a range of reasonable term lengths, depending on the individual circumstances of each new customer and therefore the term of the ESA may be subject to negotiation by the parties.”

Regarding the above statement from the Petition, please respond to the following:

1. Please list all circumstances that may require a term of an ESA to be longer than 15 years. Provide a description for each circumstance that explains why a term greater than 15 years may be required.
2. Please provide the range for reasonable term lengths.

Response:

1. This enumeration is not intended to be exhaustive, as the justification for extending the term of an Electric Service Agreement (“ESA”) beyond fifteen (15) years may depend on a variety of project-specific, operational, and financial considerations, many of which may not even be predictable in advance. In certain cases, a customer may require a longer ESA term to ensure continuity of electric service and adequate capacity to support long-term investment at a particular site or to accommodate a planned load ramp. Additionally, the Company may determine that a term exceeding fifteen (15) years is appropriate based on the expected operational lifespan or financing structure of specific generation assets, particularly where such assets necessitate extended cost recovery periods or long-term contractual commitments to ensure economic viability and system reliability.

2. The Company considers a default ESA term of fifteen (15) years to be reasonable for large load customers. However, based on customer-specific needs, infrastructure investments, and generation resource characteristics, ESA terms ranging from **fifteen (15) to thirty (30) years** are generally appropriate. Longer terms may be negotiated when justified by asset life, financing requirements, or long-term site commitments.
-

Preparer: Justin L. Smiley
Title: Dir, Corporate Economic Development
Department: Economic Development
Telephone: 806-513-1527
Date: August 15, 2025