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STATE OF MINNESOTA
BEFORE THE PUBLIC UTILITIES COMMISSION

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In the Matter of Northern States Power Co.'s, d/b/a Xcel Energy's, Petition for Approval of Large General Time of Day Service Customers and Large Peak Controlled Time of Day Service Tariffs	DOCKET NO. E-002/M-25-289 E-002/M-25-387 (HCTS) **COMMENTS OF THE OFFICE OF THE ATTORNEY GENERAL— RESIDENTIAL UTILITIES DIVISION**

INTRODUCTION

The Office of the Attorney General—Residential Utilities Division (OAG) respectfully submits the following initial comments in response to the Petition of Northern States Power Co. d/b/a Xcel Energy (Xcel or the Company) to Approve Tariffs for Large General Time of Day Service Customers and Large Peak Controlled Time of Day Service Customers.

The Legislature directed the Public Utilities Commission to evaluate these types of tariffs to ensure "all costs attributable" to very large customers (i.e. data centers) are assigned to them. Although Xcel proposes several potentially helpful risk-mitigation measures in these tariffs, such as minimum fees and exit fees, these contract provisions cannot fully protect other customers or ensure that very large customers will pay all costs attributable to them if the underlying rates are not appropriately set.

More work needs to be done than is included in Xcel's petition to ensure that very large customers pay all costs attributable to them. Xcel's proposed Incremental Cost Test is opaque and relies on Xcel's forecasts of potential costs. Further, Xcel has no plans to separately track actual costs incurred to serve very large customers, so it will not be possible to assess whether

Incremental Cost Test estimates match actuals over the contract term. Without a clear plan and transparent process for ensuring all costs attributable to very large customers will be paid by them, Xcel's proposal falls short of the criteria the Legislature required the Commission to evaluate and the parameters the Commission ordered Xcel to provide. The Commission should not approve Xcel's proposed tariff until Xcel can provide clarity on how it will transparently ensure that very large customers will pay all costs to serve them.

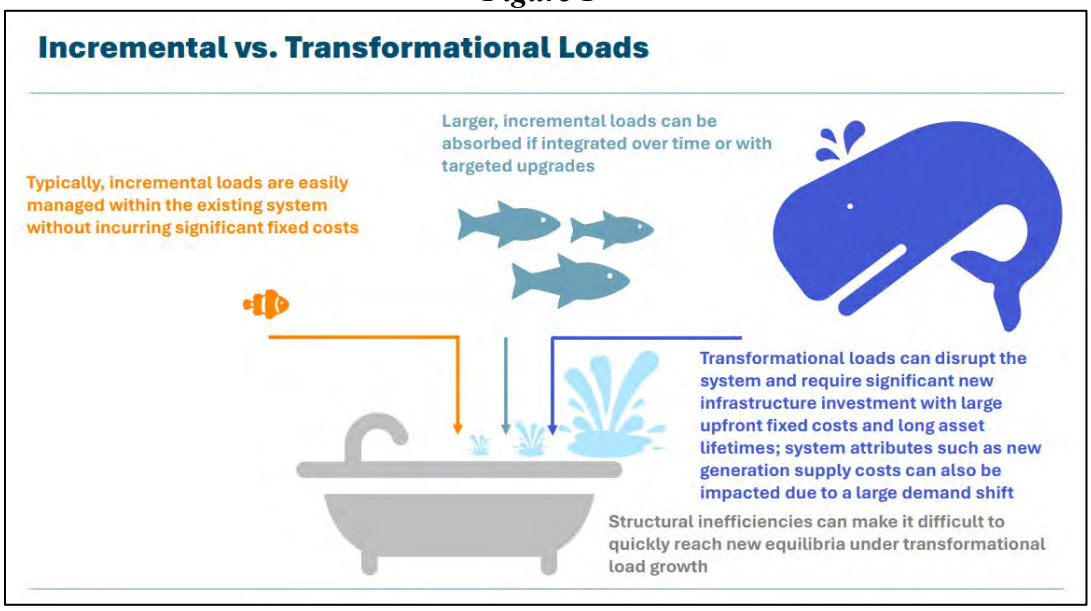
To assist the Commission in modifying Xcel's tariff and developing a clear path to serving very large customers while protecting other ratepayers, in reply comments Xcel should provide responses to the OAG's requests for further information and explanations laid out in the recommendations section. The OAG is committed to working with Xcel and stakeholders to collaboratively and creatively find solutions to present to the Commission to address these issues.

BACKGROUND

The rapid load growth presented by hyperscale data centers is a generational challenge for utilities and public utilities regulators. This potentially rapid growth driven by a handful of customers is fundamentally different from growth driven by economic development or population growth that our vertically integrated public utility system is accustomed to and has evolved to address.

The challenges of this load growth are particularly prevalent when attempting to determine fair and reasonable cost allocation. The transformational load presented by hyperscale data centers and other very large customers is unwieldy and difficult to absorb within the traditional cost allocation framework. Figure 1 helps to illustrate why transformational load additions are unlikely to benefit all ratepayers in the way that incremental load additions often have:

Figure 1[1]



Historically, most load additions have been incremental and relatively easy to manage within the existing system without incurring significant new fixed costs. Incremental loads help spread the existing fixed costs across a larger customer base and put downward pressure on rates for all customers. The rise of hyperscale data centers, however, represents a transformational load change, requiring significant new infrastructure investments with large upfront costs and long asset lifetimes. Due to the potentially rapid increase in costs, it is not assured that the addition of these customers will benefit other ratepayers, and the potential for cost shifting is high. Also, because the load is so highly concentrated, the pressure on other ratepayers will increase if any one very large customer abruptly leaves the system or if load fails to materialize as predicted.

Because these loads are both quantitatively and qualitatively different from their predecessors, it is critically important to ensure that other ratepayers are protected from cost shifts,

[1] Kush Patel et al., E3, *Virginia Data Center Study: Electric Infrastructure and Customer Rate Impacts* at 79 (Dec. 2024) ("*Virginia Data Center Study*"), https://jlarc.virginia.gov/pdfs/presentations/JLARC%20Virginia%20Data%20Center%20Study_FINAL_12-09-2024.pdf.

and new cost attribution methods may be required to do so. This challenge is what is presented by this docket.

With that general overview, some procedural background is helpful to understand how Xcel's current petition developed and subsequent changes in law that impact the Commission's analysis. Last, the OAG provides an overview of Xcel's petition.

I. IN APRIL 2025, THE COMMISSION ORDERED THE CURRENT PROCEEDING FOLLOWING XCEL'S PROJECTION OF SIGNIFICANT LOAD INCREASES FROM DATA CENTERS IN ITS INTEGRATED RESOURCE PLAN.

The Commission ordered Xcel to file the current petition to address the risks that data centers and other very large customers pose to existing customers. In Xcel's most recent Integrated Resource Plan (IRP), it forecasted average annual growth rates of 1.8 percent in peak demand and 2 percent for energy over the 2024-2040 planning period.[2] Xcel attributed this increased growth to "anticipated load coming from large new data centers and accelerated adoption of electric vehicles."[3] Given the uncertainty and difficulty of predicting where and when data centers will site their operations, the OAG and other parties raised concerns about how existing customers will be protected given the increased costs needed to serve these new very large customers.[4] For our part, the OAG requested that the Commission initiate an investigation into (1) "how it can protect

[2] Docket No. E002/RP-24-67, 2024-2040 Upper Midwest Integrated Resource Plan, ch. 1 at 7 (Feb. 1, 2024).
[3] *Id.*
[4] *See* Docket Nos. E002/RP-24-67, E-002/CN-23-212, Prairie Island Indian Community Initial Comments at 4-5 (Aug. 7, 2024) ("It is critical for both the Commission and the PIIC to better understand how these new large loads will be met and managed, including whether the Company or the State anticipates that these projects will be served by advanced nuclear systems (something that is currently prohibited by State law)."); OAG Initial Comments at 36-43 (Dec. 4, 2024) ("Because the claimed load additions from new ultra-large customers are unprecedented in recent history, the Commission must explore new potential avenues to protect ratepayers."); Distributed Solar Parties Reply Comments at 2-4 ("[W]ithin 6 months of the final order in the IRP proceeding, the DSP recommend that the Commission direct Xcel to provide a detailed quantitative analysis of the resource adequacy risks and cost implications associated with data center load growth.");

existing ratepayers from ultralarge customer load that fails to materialize, does not come online when expected, or does not stay on the system long enough to pay down the costs of building out the system to serve these customer," and (2) "how to ensure ultra-large customers pay their fair share of the costs to serve them."[5]

The Commission stated it shared concerns about data-center-driven load growth and ordered Xcel to propose a new rate class or sub-class and tariff for superlarge customers.[6] The Commission made additional requirements both for Xcel's proposal and for the proposed tariff specifically.

For the proposal, the Commission required:

- Xcel must "describe how it will ensure continued achievement of affordability, reliability, and clean energy goals and standards";
- Xcel 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"; and
- Xcel must "discuss how existing and future electric service agreements will be incorporated into a future rate case."[7]

For the proposed tariff, the Commission required Xcel to 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.

[5] Docket Nos. E002/RP-24-67, E-002/CN-23-212, OAG Initial Comments at 36-43;
[6] Docket Nos. E002/RP-24-67, E-002/CN-23-212, Order Approving Settlement Agreement with Modifications at 17, 25-26 (Apr. 21, 2025) ("Xcel IRP Order").
[7] *Id.*

- 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."[8]

The Commission required Xcel make this filing by July 16, 2025.

II. IN JUNE 2025, THE LEGISLATURE REQUIRED THE COMMISSION TO CREATE CLASSES OR SUBCLASSES FOR VERY LARGE CUSTOMERS AND TO ESTABLISH TARIFFS THAT ASSIGN "ALL COSTS ATTRIBUTABLE" TO VERY LARGE CUSTOMERS.

In June 2025 the Legislature passed and Governor Walz signed House File No. 16—captioned in part as "An act relating to data centers."[9] The bill had bi-partisan sponsorship, and the bill passed both chambers with bi-partisan support.[10] The Act contains various provisions related to coordination with Minnesota economic development agencies,[11] specific requirements for water appropriations,[12] tax provisions,[13] and provisions for treatment of "very large customers" as it pertains to public utilities regulation and energy conservation programs.[14] On the last point, the Act adds a definition for "data center" in part as "a facility that is designed to have a load of 100 megawatts."[15] Most relevant to this proceeding, the Act requires that by December 15, 2026, the Commission establish "the definition and appropriate characteristics of a very large customer

[8] *Id.* at 17, 26.
[9] 2025 1st Spec. Sess. Minn. Laws ch. 12, https://www.revisor.mn.gov/laws/2025/1/Session+Law/Chapter/12/.
[10] HF 16, 2025 1st Spec. Sess. (House Sponsors are listed as Rep. Davids and Rep. Huot). The bill passed the House with 85 yeas and 43 nays. *See* Journal of the House, 1st Day, 2025 1st Spec. Session, at 38 (June 9, 2025). The bill passed the Senate with 40 yeas and 26 nays. *See* Journal of the Senate, 1st Day, 2025 1st Spec. Sess. (June 9, 2025).
[11] 2025 1st Spec. Sess. Minn. Laws ch. 12, secs. 1-2, 5-6.
[12] *Id.*, secs. 3-4,
[13] *Id.*, secs. 17-18.
[14] *Id.*, secs. 7-16.
[15] *Id.*, sec. 7.

class or subclass for each public utility providing electric service" and sets out requirements for the Commission's review of any tariff or electric service agreements to serve these very large customers.[16] The Act dictates that "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."[17]

The Act exempts existing customers that otherwise would meet the standard of very large customer established by the Commission, provided the customer has been "actively taking electric service from the public utility prior to 2020."[18] The above provisions became effective the day following enactment—on June 15, 2025.[19]

III. OVERVIEW OF XCEL'S PETITION AND TARIFF PROPOSAL.

On July 16, 2025, as directed by the Commission, Xcel's filed its petition to create new tariffs for Large General Time of Day Service (LGTODS) and Large Peak Controlled Time of Day Service (LPCTODS) customers as subclasses of the Company's current Demand class.[20] Xcel

[16] *Id.*, sec. 9.
[17] *Id.*, sec. 9.
[18] *Id.*, sec. 9.
[19] *Id.*, sec. 9.
[20] *See* Petition to Approve Large General Time of Day Service and Large Peak Controlled Time of Service Tariffs at 3 (July 16, 2025) ("Petition").

proposes that the eligibility demand threshold for these subclasses be set at 100 MW[21] and that these customers be required to take service at "transmission transformed" or "transmission" voltage.[22] The Company's proposed tariff terms would include a number of provisions intended to reduce risk to other ratepayers, including a default contract term of 15 years,[23] a minimum bill equivalent to 75 percent of demand charges,[24] and exit fee equivalent to 75 percent of demand charges for 10 years or the remainder of the contract period,[25] a load ramp period limited to five years,[26] and direct assignment of transmission interconnection costs.[27] In the subsections below, the OAG reviews additional elements of Xcel's proposal that are relevant to our comments.

A. Proposed Rate Design.

Xcel's proposed tariffs for new LGTODS and LPCTODS customers ("very large customers") would utilize the same multi-part pricing structure used for other Commercial and Industrial (C&I) Demand class customers, comprising customer, demand, and energy charges. Xcel proposes a customer charge of $9,000 per month, intended to reflect the Company's estimates of the incremental billing, account management, and economic development costs of these customers.[28] Xcel sets the sum of demand and energy charges equal to the revenue that would be collected from the customer under current General Time of Day (TOD) Service rates.[29] The proposed share of revenue collected through the demand charge, however, would be higher than

[21] *Id.* at 9.
[22] *Id.* at 11.
[23] *Id.* at 10.
[24] *Id.* at 14.
[25] *Id.* at 11.
[26] *Id.* at 10.
[27] *Id.* at 21.
[28] *See Id.* at 3, attach. J.
[29] *Id.* at 13.

in the General TOD tariff.[30] According to the Company, "[t]his approach promotes cost recovery stability and creates a higher and more reasonable basis by which the Company can assess capacity reduction and exit fees."[31] All very large customers would be eligible for an economic development discount on all kWh in excess of 400 hours times the on-peak period billing demand, as well as energy and demand charge discounts for taking service at transmission or transmission transformed voltages.[32] Large Peak Controlled Time of Day Service customers would additionally be eligible for demand and energy charge discounts provided in return for willingness to curtail controllable load.[33]

B. Proposed Treatment of New Subclasses in Future Rate Cases.

Rates for new LGTODS and LPCTODS customers would initially be set to align with current General TOD rates, as described above. In subsequent rate cases, Xcel proposes to allocate costs to these customers using its regular class cost of service study (CCOSS) method, including them in the Transmission or Transmission Transformed voltage subclasses of the C&I Demand class and updating the allocators for those subclasses to reflect the additions of load.[34] Aside from transmission interconnection costs, which Xcel plans to assign directly,[35] costs incurred to serve these customers would not be distinguished from other system costs for cost allocation purposes.[36] That is, costs associated with these customers would be allocated to customer classes based on the functionalization, classification, and allocation assumptions utilized in the CCOSS, in the same

[30] *See Id.* at 11–12 (explaining that the energy portion of the charge was set by removing the portion of production plant and production plant O&M that is allocated to the energy function via the Stratification Method for cost classification, recovering the remaining energy-related costs through the energy charge, and recovering the remainder through the demand charge).
[31] Petition at 11.
[32] *See Id.*, attach. F.
[33] Petition at 13.
[34] Attach. 1 (Xcel Energy Response to OAG IR 003).
[35] Petition at 21.
[36] Attach. 1 (Xcel Energy Response to OAG IR 003).

manner as all other system costs. Sales and revenues from these customers would be included in totals for the C&I Demand class in revenue requirement calculations.[37] The Commission's determinations about revenue requirement and the class apportionment, which may be guided by CCOSS results, would then determine updated rates for each class. Following a rate case, rates for the very large customer subclasses would be updated to reflect rates based on the new C&I Demand class revenue requirement, and the split between demand and energy charges would be calculated on the same basis Xcel describes in its proposal.[38]

C. Proposed Incremental Cost Test.

Xcel's proposed tariff would require an Incremental Cost Test as part of each Electric Service Agreement (ESA) to assess whether the revenues exceed the incremental costs for each new very large customer.[39] Such an assessment is included as an attempt to ensure that the benefits of spreading fixed costs across a larger load are not swamped by the new costs incurred to serve that load. It is also important because Xcel does not propose directly assigning these costs or tracking them in the CCOSS, so some mechanism to track these additional costs is necessary.

To carry out the Incremental Cost Test, Xcel would provide forecasts of the customer's annual revenues and incremental costs as part of the ESA. Revenues in the Incremental Cost Test include estimated revenues from base rates (including customer, energy, and demand charges), fuel charges, and applicable riders.[40] Costs included in the test comprise incremental energy costs, capacity costs, MISO transmission-related costs, and the "jurisdictional cost allocation increase to

[37] *Id*.
[38] *Id*.
[39] Petition at 18.
[40] *Id.* at 19.

Minnesota" arising from the change in the portion of the Company's revenue requirement that would be allocated to Minnesota with the addition of very large customer load.[41]

If revenues exceed incremental costs in the Incremental Cost Test, Xcel states that this would "confirm that system customers will receive positive benefits from having this customer on the system."[42] In addition, Xcel proposes allocating any net revenue to classes in future rate cases based on each class's contribution to base revenue in the test year.[43] If estimated incremental costs exceed revenues, Xcel says that "the customer and the Company will develop a proposal in the ESA to bring additional revenues such that incremental costs are paid for and a benefit is shown for system customers."[44]

ANALYSIS

The Commission should not approve Xcel's proposed tariff until Xcel can provide clarity on how it will transparently ensure that very large customers will pay "all costs attributable" to them. The Minnesota Legislature directed the Commission to attempt to ensure that "all costs attributable" to very large customers are paid by those customers, rather than simply requiring payment of "incremental costs." Xcel's petition fails to achieve this. Xcel's proposed Incremental Cost Test includes only hypothetical projected costs that are not sufficiently supported. Further, Xcel proposes no mechanism for keeping track of actual costs incurred to serve very large customers, preventing appropriate cost attribution in future rate cases.

For the Commission to have sufficient information to approve or modify Xcel's petition, Xcel must provide further information regarding how it plans to calculate both incremental costs and ensure the remainder of attributable costs are appropriately allocated to very large customers.

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[41] *Id.* at 20.
[42] Petition at 18.
[43] *Id.* at 24.
[44] *Id.* at 18.

Xcel must also provide greater assurances and commit to providing more transparent information. Without a clear plan and transparent process for ensuring all costs attributable to very large customers will be paid by them, Xcel's proposal falls short of the criteria the Legislature required the Commission to evaluate and what the Commission ordered Xcel to provide when approving Xcel's IRP.

I. THE LEGISLATURE'S DIRECTIVE TO ASSIGN "ALL COSTS ATTRIBUTABLE" TO VERY LARGE CUSTOMERS TO THAT CLASS GOVERNS THE COMMISSION'S ANALYSIS.

In the time since the Commission ordered Xcel to propose a new rate class or sub-class and tariff for "super-large customers" in response to concerns raised in Xcel's IRP around data centers, the state enacted additional and distinct requirements for the Commission's analysis of tariffs for "very large customers."[45] As described in more detail above, the Legislature required the Commission to define "the appropriate characteristics of a very large customer class or subclass for each public utility providing electric service."[46] The Legislature also required that as the Commission evaluates tariffs for these customers it consider how best to achieve an outcome where "all costs attributable to the utility's very large customers . . . are assigned to the very large customer class or subclass."[47]

"All costs attributable," therefore, is the governing provision by which the Commission should evaluate and design a tariff for very large customers. That this analysis is distinct from

[45] The Commission's "super-large customer" requirement was required in the context of Xcel's claimed need for resources to serve data center load. *See* Xcel IRP Order at 17. Likewise, the Legislature's directive to the Commission for assessing tariffs for "very large customers" is included in "an act relating to data centers." 2025 1st Spec. Sess. Minn. Laws, ch. 12. Both of these actions were directed towards data center customers while allowing for other very- or super-large loads to also qualify for the tariffs.

[46] 2025 1st Spec. Sess. Minn. Laws ch. 12, sec. 9, subd. 1.

[47] 2025 1st Spec. Sess. Minn. Laws ch. 12, sec. 9, subd. 2. The Legislature exempted certain very large customers who were actively taking service prior to 2020. Because Xcel's petition does not seek to apply the tariff to these exempt customers, this exemption is not at issue in this proceeding.

Xcel's proposal to focus on "incremental costs" is shown by fundamentals of English usage and principles of statutory construction. The Commission should instead ensure that Xcel's very large customer tariff and any subsequent electric service agreements or rate proposals are structured to ensure that very large customers pay "all costs attributable" to that class or subclass, which may include requiring very large customers to pay incremental costs, but may not be limited to incremental costs.

"All costs attributable" to a customer is a broader and more encompassing term than the "all incremental costs" ordered by the Commission in Xcel's IRP. This is shown by basic principles of English usage. In the phrase "all incremental costs" used in the Commission's IRP order requirements, "incremental" modifies and limits "costs." On the other hand, in the phrase "all costs attributable" used in the Act, the use of "all" emphasizes, rather than limits, the expanse of the Legislature's intent to ensure that very large customers pay their fair share.

Further, if the Legislature had intended to equate "all costs attributable" with "incremental costs" it would have simply used the latter term. Indeed, Minnesota Statutes chapter 216B uses the term "incremental cost" numerous times and in various contexts.[48] Most relevant to the current docket, the Legislature in section 216B.162 permitted the Commission to authorize a competitive rate schedule for customer subject to "effective competition" to affix the "incremental cost of providing the service" as the minimum rate under the schedule.[49] The Legislature is presumed to

[48] *See, e.g.*, Minn. Stat. §§ 216B.161, subd. 3(4) (requiring that an area development rate for gas utilities to "be designed to recover at least the incremental cost of providing service to the participating customers"); 216B.163 (permitting the Commission to allow gas utilities to offer gas customers subject to "effective competition" a flexible tariff that includes a minimum rate that recovers at least the "incremental cost of providing the service"); 216B.1635, subd. 2 (permitting gas utilities to file a gas utility infrastructure cost petition to recover "only incremental costs" associated with certain infrastructure projects); 216B.2427, subd. 1(t) (defining "total incremental costs" for purposes of calculating costs for gas utility innovation plans).
[49] Minn. Stat. § 216B.162, subd. 4(1).

be aware of its own laws, and was likely keenly aware when drafting the phrase "all costs attributable in section 9 of the Act, which is to be codified as 216B.1622 (the very next section) that permitting the Commission to use "incremental costs" was an option for very large customers. Yet the Legislature choose instead to direct the Commission to consider, when evaluating a very-large-customer tariff, how to achieve an outcome that requires "all costs attributable to the utility's very large customers . . . are assigned to the very large customer class or subsclass." The Commission must be guided by the language the Legislature employed. While there can and will be debate about what "all costs attributable" encompasses, *all costs* are not limited to *incremental costs*.

While the Commission's April 2025 directive for Xcel to file a proposed tariff that ensures all "incremental costs are attributable to super-large customers are assigned to the super-large class or sub-class," the Legislature's June 2025 directive to achieve an outcome where "all costs attributable" to very large customers are assigned to them must now govern the Commission's analysis. That being acknowledged, the Commission wisely clarified in its IRP Order that its tariff requirements were non-exclusive. Xcel could therefore be required to show *both* that "all incremental costs attributable" to these very large customers are assigned to that class *and* that "all costs attributable" are assigned to that class. Specifically, "all costs attributable" includes "all incremental costs attributable" as a matter of logic and construction. But Xcel's petition's focus on incremental costs, which is insufficient for reasons provided below, leaves much to be explained regarding how Xcel will ensure that very large customers pay "all costs attributable" to that class. The specifics of these shortcomings are analyzed further in the sections below.

II. XCEL'S PROPOSAL DOES NOT ENSURE THAT ALL COSTS ATTRIBUTABLE TO VERY LARGE CUSTOMERS WILL BE ASSIGNED TO THOSE CUSTOMERS.

In this section, we explain why Xcel's proposal fails to ensure that all costs attributable to very large customers will be assigned to them. While the *actual* costs incurred to serve these customers will be included in *all* customers' base rates and rider charges, potentially for years to come, the Incremental Cost Test includes only *hypothetical projected* costs, developed by Xcel in an opaque forecasting process. Xcel proposes no mechanism for keeping track of actual costs incurred to serve very large customers, preventing appropriate cost attribution and forestalling the Company's ability to "true up" Incremental Cost Test estimates to actual costs over time. Further, the Incremental Cost Test standard does not require that these customers contribute to existing system fixed costs, as other customers do. The cost attribution methods proposed by Xcel do not ensure that very large customers will cover their costs; under Xcel's proposal, it will not even be possible to assess whether very large customers are doing so.

Xcel proposes several potentially helpful risk-mitigation measures in these tariffs, including provisions related to contract term length, minimum fees, exit fees, the direct assignment of interconnection costs, and a demand-charge-heavy rate design.[50] Yet, contract provisions cannot fully protect other customers unless the Company ensures that new very large customers are covering their actual—not hypothetical—costs.

[50] Although the OAG's initial comments are focused on Xcel's proposed Incremental Cost Test and cost allocation for very large customers, the OAG believes there is likely room for improvement in the other risk-mitigation measures proposed by Xcel. The OAG looks forward to reviewing other stakeholders comments on these provisions and may provide further analysis in reply comments.

A. Under Xcel's Current Proposal, the Actual Costs Incurred to Serve Very Large Customers Will Be Socialized to All Ratepayers.

Minnesota law requires that very large customers cover their costs.[51] In addition, the Commission ordered Xcel to detail in its proposal "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."[52] But Xcel makes clear that the costs required to serve very large customers (aside from transmission interconnection costs) will not be isolated from other system costs or assigned directly to these customers. In response to a question about cost allocation to the new subclasses, the Company 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."[53] In other words, costs caused by very large customers will not be differentiated from any other costs that enter into the Company's revenue requirement, so there will be no way to track how these customers' costs are allocated across classes or to assess whether these costs match those identified in the Incremental Cost Test.

Further, Xcel's proposal would combine very large customers with other customers in the C&I Demand class for allocation purposes, so there will be no way to ensure that very-large-customer rates align with the costs very large customers cause as distinct from other C&I Demand class customers. CCOSSes typically allocate costs to classes in proportion to class contributions to load, energy use, and/or customer numbers, on the basis that customers cause costs or benefit in proportion to these metrics. These allocation assumptions may have been appropriate for incremental load additions in the past, but they are not appropriate in the context of

[51] 2025 1st Spec. Sess. Minn. Laws ch. 12, sec. 9
[52] Xcel IRP Order at 17, 25-26.
[53] *See* Attach. 1 (Xcel Energy Response to OAG IR 003).

transformational load growth, where the higher incremental costs caused by very large customers would be unfairly shifted to other classes if allocated on the typical CCOSS basis. Unless very large customers constitute their own class in cost allocation processes, not simply under a tariff, it will be impossible to ensure that they are covering their costs.

Other jurisdictions and utilities have also struggled with the limitations of traditional cost allocation methods, such as using typical embedded CCOSS models, in ensuring that costs from adding transformational load additions, like data centers, are fairly allocated. For example, Arizona Public Service (APS), a vertically integrated, investor-owned utility (IOU) and the largest electricity provider in Arizona, recently acknowledged the inadequacy of traditional cost allocation methods in the context of transformational load growth. In recent rate case testimony, an APS witness elaborates on why traditional CCOSS allocation methods fail in the era of hyperscale data centers:

> Historically, because levels of growth among customer classes have been similar, traditional cost allocation and recovery methods—which look at class level contributions to the peak—equitably apportioned system costs caused by growth. If that method were utilized for all generation in this current environment, all new resources procured would be spread across all customer classes with costs for existing resources already embedded in rates…Because the traditional cost allocation and recovery method does not isolate the more costly incremental resources from those currently embedded in rates, some of those costs would be spread to residential and small business customers. This means that the system costs of growth on APS's system, which are being predominantly caused by large high load factor customers, would be borne by residential and small business customers.[54]

Because traditional CCOSS allocation does not isolate the more costly incremental resources built or procured largely to serve very large load customers, costs are unfairly spread to other ratepayers.

[54] *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 Scheds. 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).

A recent study of data center rate impacts in Virginia[55] also concludes that using embedded cost allocation methods increases the risk of shifting costs from very large customers to other ratepayers. The authors conclude that, "[w]hile it is possible to scale the existing, embedded (average cost based on existing infrastructure) rate structure to accommodate data center loads accounting for the marginal costs to serve that new load in a manner that is equitable for existing ratepayers, the cost shifting risk from a variety of sources makes the path to navigate that transition complex and potentially narrow."[56] Later in the study, they note more pessimistically that "[t]ransformational load growth is unlikely to benefit other ratepayers under current rate structures."[57] They draw these conclusions based on the large fixed cost impacts associated with serving large load customers, expected to endure beyond the surge in data center development, and the failure of rate case cost allocation factors to keep up with data center load growth.[58] While the projected data center demands on electric systems in Virginia are much greater than those expected in Minnesota, these concerns are applicable to any system experiencing rapid load growth paired with the need for rapid development of new infrastructure.

The ability of stakeholders to track cost shifts will be further confounded by the fact that many of the costs to serve Xcel's very large customers will show up in riders, not only in base rates. For example, costs associated with new wind, solar, or battery storage investments may be initially collected in the Renewable Energy Standard (RES) Rider. Fuel costs incurred to serve the very large customer would be recovered in the Fuel Clause Adjustment (FCA). To the extent

[55] 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).
[56] *Virginia Data Center Study* at 19.
[57] *Id.* at 100.
[58] *Id*.

that very large customers contribute to lower margins in the MISO energy or capacity markets, these will also be recovered through the FCA. Increased costs from MISO transmission projects that are incurred to serve data center load, including multi-value projects and network upgrade projects, would be recovered through the Transmission Cost Recovery (TCR) Rider. Combined with the other hurdles to assessing very large customer costs, it will be virtually impossible to assess whether the actual costs incurred by very large customers match those estimated in the Incremental Cost Test.

B. Xcel's Incremental Cost Test Is Not Transparent and Makes It Difficult to Review Whether It Captures the Actual Incremental Costs of Very Large Customers.

Since the costs caused by very large customers would not be directly attributed to them in Xcel's rate case or rider allocation processes, the Company proposes the Incremental Cost Test as a guardrail to ensure that these customers will cover their incremental costs. In a world where actual electric system costs could be easily allocated to individual customers and accurately predicted 15 years into the future, the Incremental Cost Test might provide a fair assessment of whether any one customer was paying its fair share. Yet, cost allocation among electric utility customers is notoriously complex, given the predominance of joint and common costs, and the future is unknowable. Any claim that the costs caused by one customer over a period of more than a decade can be accurately forecast in advance should be met with some skepticism.

Xcel's proposed Incremental Cost Test does far too little to allay this skepticism. First, Xcel provides little information in its petition about how costs will be estimated. Second, while Xcel may argue that more specificity is forthcoming in ESAs for specific customers, a review of Xcel's executed ESA with a current data center customer does not provide sufficient clarity to estimate whether incremental costs are reasonable. Last, Xcel has not provided assurance that the incremental costs will be updated over time—a necessity as the costs to serve customers change.

It is difficult to know whether Xcel's incremental cost estimates are likely to match actual costs in part because the proposal lacks detail on how these estimates will be derived. For example, the proposal includes one sentence describing how new capacity costs, potentially representing billions of dollars in new investments, will be attributed to very large customers. Xcel states that "[i]ncremental capacity costs are determined based on the potential need for a mix of incremental generation and energy storage resource additions, consistent with the Company's latest Integrated Resource Plan, current market price estimates of the incremental resources, and the customer's contribution to increased peak load estimated by year."[59] Costs determined according to these principles could result in a wide range of incremental capacity cost estimates, which could easily be dwarfed by the actual costs incurred by Xcel to serve new large-load customers. When asked how the Company would ensure that cost estimates in the Incremental Cost Test would accurately represent actual costs, it 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.'[60]

Xcel may argue that imprecision about costing methods is unavoidable at this stage but that the Incremental Cost Test submitted with each ESA will allow for more informed judgment. Xcel states that the Incremental Cost Test described in the proposal "is the same tool we have used when bringing forward prior ESA for large load customers in filings before the Commission."[61] After reviewing previously submitted Incremental Cost Tests, it does not seem likely that these tests submitted with future ESAs will provide enough transparency about the method or assumptions used in cost attribution to adequately assess them.

[59] Petition at 20.
[60] Attach. 2 (Xcel Energy Response to OAG IR 005).
[61] Petition at 18.

For example, the Incremental Cost Test submitted in November 2024 as part of the Meta data center compliance filing shows annual estimates of costs in each of the four Incremental Cost Test cost categories, for parties with access to information Xcel has deemed Highly Confidential Trade Secret.[62] Yet, the values in this filing alone do not provide sufficient context with which to judge whether the costs have been estimated reasonably. For example, while annual per-kW capacity cost estimates can be inferred from calculations, there is no information about the plant type assumed, the cost and timing of ongoing plant-related expenses (such as non-fuel O&M, insurance, and taxes), the sources of these estimates, or the assumed useful life of the plant. Similarly, per-kW MISO transmission costs can be inferred, but there is no information on which MISO transmission-related costs are included in this estimate or what assumptions were used to derive the estimate. Without more complete information on what goes into the cost assumptions, it will be impossible even for someone with access to the Incremental Cost Tests to judge whether the costs assigned to the customer are adequate.

The OAG was able to access additional information on this same Incremental Cost Test obtained through discovery in Xcel's most recent rate case.[63] In response to a request to explain the formulas used in the Incremental Cost Test, Xcel responded by noting that the Incremental Cost Test is a financial model that "contains tens of thousands of formulas" and that, "[g]iven the number of formulas, an explanation for each formula is not practical."[64] Yet, the spreadsheet Xcel submitted in response to this request did not contain the tens of thousands of formulas that might

[62] *See* Docket No. E-002/M-22-572 & E-002/M-22-579, Annual Compliance Filing, attach. A (Nov. 8, 2024).
[63] *See generally* Attach. 3 (Docket No. E-002/GR-24-320, Xcel Response to OAG IR 7006).
[64] Attach. 3 (Docket No. E-002/GR-24-320, Xcel Response to OAG IR 7006) (Public).

allow for some insight into the cost estimates.[65] Many of the key values—including the values underlying the capacity cost, MISO cost, and jurisdictional cost assumptions—were hard coded, forestalling further investigation. There are certainly ways to provide useful information about cost assumptions without requiring stakeholders to request workpapers in discovery and reverse engineer thousands of formulas for each ESA submitted to the Commission. Given the potential for major cost shifting to other classes, Xcel should make it much easier for other stakeholders to understand how costs will be attributed to very large customers.

Finally, Xcel's proposal contains no assurances that costs in the Incremental Cost Test will be updated over time. While it is unlikely that any of the annual cost estimates in Xcel's Incremental Cost Tests will match the actual costs incurred to serve very large customers, estimates are likely to diverge even further from actuals as time goes on. [66] While the Company states that customers would be required to pay for any gap between estimated costs and revenues found in the initial Incremental Cost Test,[67] it does not describe a mechanism for updating the ESA to require the collection of more revenues if costs are found to increase.

An important benefit of requiring utilities to serve data centers and other very large customers through tariffs, rather than through individual agreements, should be increased transparency. Referring to the information provided in the Incremental Cost Test, Xcel states that "[t]his transparency will help to ensure that these large customers will deliver benefits to all customers by providing revenues that contribute to fixed costs above the incremental costs they

[65] Attach. 3 (Docket No. E-002/GR-24-320, Xcel Response to OAG IR 7006, attach. A). Relevant information is included in the Highly Confidential Trade Secret version filed in Docket No. E002/M-25-387.
[66] Under Xcel's proposal, it will not be possible to compare cost estimates to actuals, as Xcel does not plan to separately track actual costs incurred to serve very large customers.
[67] Petition at 18.

are causing on the system."[68] Yet the current proposal is far from transparent. Actual costs associated with very large customers will not be tracked, and the costs allocated to them will not be visible, since the customers will be blended with the C&I Demand class for cost-allocation purposes in rate cases. Xcel's lack of transparency about cost estimates in the Incremental Cost Test will further confound any attempt to assess whether costs are being attributed appropriately. Xcel may argue that more transparency will interfere with the need to protect sensitive information, but the stakes are too high and the potential for cost shifts too great to accept the opacity of the current proposal.

C. The Costs Included in Xcel's Incremental Cost Test are Unlikely to Match the Actual Incremental Costs Incurred to Serve Very Large Customers Even if Further Information Is Provided.

Despite the lack of transparency, there are reasons to believe that Xcel's Incremental Cost Test will not capture all the costs incurred to serve very large customers, even beyond the impossibility of accurately forecasting costs years in advance. Generation-related costs are of special concern, due to high costs and long asset lifetimes. A recent paper from Harvard's Electricity Law Initiative (ELI) elaborates on this concern:

> As data centers shift to new tariffs, the largest potential cost shift in many states could be from the costs of new power plants built to meet data center growth. In most states, utilities are the dominant generation owners and can earn a PUC-set rate of return that they collect from ratepayers on their investments in new power plants. In general, utility expenses on new power plants are spread among ratepayer classes under the theory that all ratepayers benefit from the utility's power plants. But the staggering power demands of data centers defy this assumption. Recent tariff proceedings highlight that many utilities are proposing schemes that are not adequately shielding ratepayers from the costs of new generation for data center growth.[69]

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[68] *Id.* at 17.

[69] Eliza Martin & Ari Peskoe, Harvard Law School Environmental & Energy Law Program, *Extracting Profits from the Public: How Utility Ratepayers Are Paying for Big Tech's Power* at 25 (Mar. 2025), https://eelp.law.harvard.edu/wp-content/uploads/2025/03/Harvard-ELI-Extracting-Profits-from-the-Public.pdf.

In addition to highlighting the risk of generation-related cost shifts, this excerpt reiterates the idea introduced above that the assumptions used in traditional allocation methods (i.e., traditional CCOSS assumptions) are no longer appropriate in the context of hyperscale data centers.

Given that Xcel proposes using traditional allocation methods to allocate actual costs, it is especially important that the Company gets capacity cost estimates right in the Incremental Cost Test. Yet, Xcel provides little reassurance, writing that "[m]arket price estimates of incremental resources [in the Incremental Cost Test] will be generic resource costs based on external market price reports and internal cost estimates."[70] Similarly, in response to the Commission's directive to detail the combination of new and existing resources that the Company will use to serve the new class,[71] Xcel ambiguously asserts that the resource planning process "will include the identification of incremental generic resources necessary to serve the load."[72] Other ratepayers need assurance that the actual costs of resources built or purchased to meet data center needs will be reflected in the Incremental Cost Test, and Xcel's vague invocations of generic resource costs do not provide it.

In Xcel's latest electric Integrated Resource Plan (IRP), the Company cited its achievements in renewable energy as a draw to data centers, which are "largely seeking renewable/carbon-free energy options."[73] The Company included a "Data Center Load" resource plan with around 8,000 MW of additional capacity, compared to the base preferred plan, with wind, solar, and standalone storage comprising 77 percent of those incremental resources.[74] In

[70] Attach. 2 (Xcel Energy Response to OAG IR 005).
[71] Xcel IRP Order at 17.
[72] Petition at 22.
[73] Docket No. E-002/RP-24-67, Upper Midwest Integrated Resource Plan, ch. 5 at 42 (Feb. 1, 2024).
[74] Calculation by the author, based on Docket No. E002/RP-24-67, Upper Midwest Resource Plan, ch. 5 at 43, tbl. 5-13.

Xcel's petition for the Meta data center project, however, the generic capacity cost was estimated based on the theoretical future need for an additional combustion turbine.[75] While this points to the possibility that Xcel will underestimate actual capacity costs in Incremental Cost Tests, it more effectively highlights the difficulties inherent in estimating incremental costs on a customer-by-customer basis. The incremental capacity costs of a very large customer added when the system has enough excess capacity to absorb it would be very different from the incremental costs of a customer that spurs the addition new generation resources, and it may not be fair to assign the former customer no capacity costs and the latter the full cost of new resources. Xcel's Incremental Cost Test attempts to solve this problem by using a "generic" annualized and levelized capacity value, but such a value is unlikely to align with the actual costs incurred to serve the broader very-large-customer class. Xcel's proposal should therefore include a mechanism for tracking the actual costs of new capacity required to serve the very large customer class and fairly apportioning these costs among its members.

While failure to accurately attribute generation costs may provide the biggest threat to other ratepayers, it is equally unlikely that the fuel costs, MISO transmission-related costs, and incremental jurisdictional costs allocated to customers in the Incremental Cost Test will match the actual costs incurred over the contract term. Information in existing Incremental Cost Tests is not sufficient to determine what transmission-related cost estimates represent, for example, or to discern the assumptions used to calculate the incremental jurisdictional costs over time. Because very large customers will not constitute a separate class in rate cases or rider allocation processes, there will be no way to estimate actual costs allocated as a point of comparison, and it is extremely

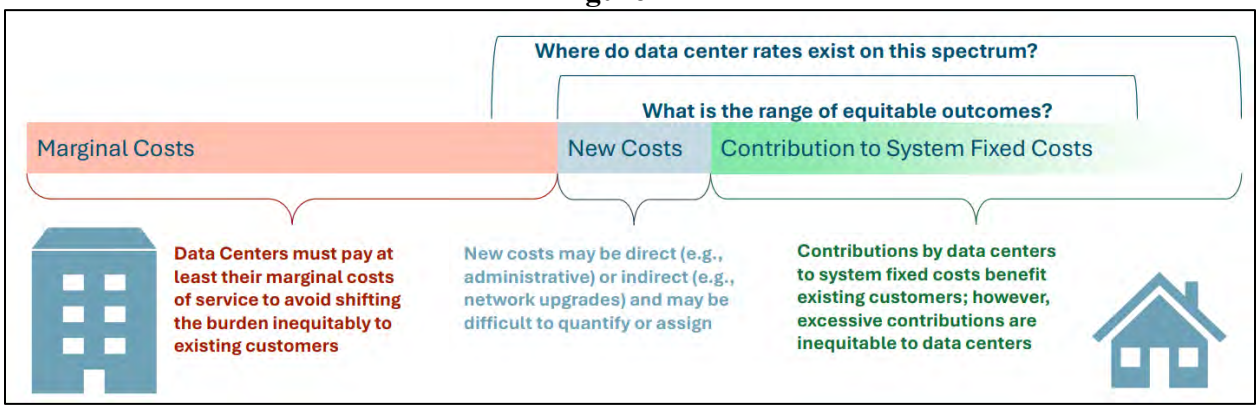
[75] Docket Nos. E-002/M-22-572 & E-002/M-22-579, Staff Briefing Papers at 14 n.12 (Oct. 4, 2023).

unlikely that the estimates made at the time of the ESA will be accurate 10 or 15 years hence. To the extent that any costs are underestimated in or missing from the Incremental Cost Test, costs will be shifted from very large customers to other ratepayers.

D. The Incremental Costs of Very Large Customers Are Not All Costs Attributable to Very Large Customers.

Even if Xcel's Incremental Cost Test were revised to more accurately reflect actual costs, the incremental cost standard does not ensure that new customers will help cover embedded costs. Figure 2 considers the question of where data centers exist on the spectrum of contributions to embedded system costs, from covering only marginal (aka incremental) costs to potentially excessive contributions:

Figure 2[76]



The Commission will decide where very large customers in Minnesota reside on this spectrum. Xcel's current proposal requires only that customers cover the incremental costs as estimated by the Company, and only in the case that the customer's load requirements and contract length do not change.[77] If the customer requires less load than forecast or exits the contract early, the minimum fee and/or exit fee payments would not guarantee full recovery of even estimated

[76] *Virginia Data Center Study* at 30.
[77] *See* Petition at 20 (explaining that the Incremental Cost Test will contain only incremental energy costs, incremental capacity costs, incremental MISO costs, and the jurisdictional cost shift resulting from the very large customer's load).

incremental costs. Still, even if minimum fees and exit fees were better tailored, there is no provision in Xcel's Incremental Cost Test requiring very large customers to pay an additional portion of embedded costs.

Other customers are not exempt from contributing to embedded costs. To provide a point of comparison,[78] the OAG asked Xcel to estimate the incremental costs for a customer with 750 kWh monthly average usage and 5 kW peak load, based on the method and assumptions used in the most recent Incremental Cost Test submitted.[79] This usage and load profile is meant to represent that of a residential customer. Xcel estimated the incremental costs in 2025 for this customer to be **[HIGHLY CONFIDENTIAL TRADE SECRET INFORMATION BEGINS** [redacted] **HIGHLY CONFIDENTIAL TRADE SECRET INFORMATION ENDS]**, which includes **[HIGHLY CONFIDENTIAL TRADE SECRET INFORMATION BEGINS** [redacted] **HIGHLY CONFIDENTIAL TRADE SECRET INFORMATION ENDS]** in incremental energy costs, **[HIGHLY CONFIDENTIAL TRADE SECRET INFORMATION BEGINS** [redacted] **HIGHLY CONFIDENTIAL TRADE SECRET INFORMATION ENDS]** in incremental capacity costs, **[HIGHLY CONFIDENTIAL TRADE SECRET INFORMATION BEGINS** [redacted] **HIGHLY CONFIDENTIAL TRADE SECRET INFORMATION ENDS]** in MISO transmission-related costs, and **[HIGHLY CONFIDENTIAL TRADE SECRET INFORMATION BEGINS** [redacted] **HIGHLY CONFIDENTIAL TRADE SECRET INFORMATION ENDS]** in costs shifted to the Minnesota jurisdiction.[80] To account for

[78] The OAG understands that there are relevant differences between residential customers and data centers, such as data centers not being directly served by the distribution system. This illustration is provided as a comparison to illustrate the differences in incremental and embedded costs and explore the limitations of cost allocation methods.
[79] *See* Attach. 4 (Xcel Energy Response to OAG IR 006).
[80] *See* Attach. 4 (Xcel Energy Response to OAG IR 006, attach. A). Relevant information is included in the Highly Confidential Trade Secret version filed in Docket No. E-002/GR-25-387.

Residential customer-related and distribution system costs, we add Xcel's 2025 Minimum System CCOSS customer cost estimate of $254 per year ($21.14 per month),[81] bringing the total to **[HIGHLY CONFIDENTIAL TRADE SECRET INFORMATION BEGINS [redacted] HIGHLY CONFIDENTIAL TRADE SECRET INFORMATION ENDS]**. According to estimates submitted by Xcel in its most recent rate case, the monthly bill for a residential customer with 750 kWh average monthly usage at current rates is $123.70 per month or $1,484 per year.[82] Based on Xcel's estimates, this residential customer's bill is **[HIGHLY CONFIDENTIAL TRADE SECRET INFORMATION BEGINS [redacted] HIGHLY CONFIDENTIAL TRADE SECRET INFORMATION ENDS]** than their incremental costs.

It could be reasonably argued that such a small customer would not impose significant additional fixed capacity, transmission, or shared distribution costs on the system and that their actual incremental costs in these categories would be close to zero. An estimate reflecting these assumptions can at least provide a lower-bound counterpart to the high-end incremental cost estimate calculated above. Assuming no incremental capacity, transmission, or shared distribution costs, the same customer's incremental costs would total **[HIGHLY CONFIDENTIAL TRADE SECRET INFORMATION BEGINS [redacted] HIGHLY CONFIDENTIAL TRADE SECRET INFORMATION ENDS]**, including **[HIGHLY CONFIDENTIAL TRADE SECRET INFORMATION BEGINS [redacted] HIGHLY CONFIDENTIAL TRADE SECRET INFORMATION ENDS]** in incremental energy costs, **[HIGHLY CONFIDENTIAL TRADE SECRET INFORMATION BEGINS [redacted] HIGHLY CONFIDENTIAL TRADE SECRET**

[81] Docket No. E-002/GR-24-320, Direct Test. of Christopher J. Barthol, Schedule 4 at 2 ln.19 (Nov. 1, 2024).
[82] This value represents the average monthly bill for a residential customer served by overhead lines. *See* Docket No. E-002/GR-24-320, Direct Test. of Nicholas N. Paluck, Schedule 6 at 1.

INFORMATION ENDS] in costs shifting to the Minnesota jurisdiction, and $120 per year ($10.04 per month) in costs related to meters, service drops, and other customer-related costs, based on Xcel's 2025 Basic Customer CCOSS estimate.[83] Using this incremental cost estimate, the residential customer's total bill is **[HIGHLY CONFIDENTIAL TRADE SECRET INFORMATION BEGINS** [redacted] **HIGHLY CONFIDENTIAL TRADE SECRET INFORMATION ENDS]** the value of their incremental costs.

Under both the low- and high-end incremental cost estimates, residential customers contribute significantly to embedded system costs, beyond the amount required to cover their incremental costs. While the Incremental Cost Test assumptions almost certainly overestimate incremental costs for very small customers, they are much more likely to *underestimate* costs for very large customers, for the reasons described above. Moreover, very large customers represent a much bigger risk to the system. If a residential customer leaves the system or has lower-than-forecast load requirements, the harm to other ratepayers is minimal. Conversely, the sudden reduction or disappearance of a very large customer's load presents a major risk to other ratepayers that cannot be fully offset by Xcel's proposed minimum fee and exit fee. Given that the risks of load reduction and under-attribution of costs are both greater for very large customers, it does not make sense hold them to a lower cost recovery standard than that used for other ratepayers.

The Incremental Cost Test also does not account for potential increases to the cost of capital that may result from the need to finance significant investments in infrastructure and/or greater

[83] As required by the Commission, Xcel filed a Basic Customer CCOSS in its initial rate case filing on Nov. 1, 2024, but filed the document as Highly Confidential Trade Secret. These numbers are therefore available to Commission staff in docket no. No. E-002/GR-24-321. At the request of the OAG, Xcel provided an updated, significantly less redacted version in response to discovery, which made these figures public.

perceived risk about cost recovery. The authors of the Virginia data center study note that a higher cost of capital would affect all ratepayers through higher rates of return on the rate base:

> The scale of investments required to meet data center load growth can place significant pressure on an investor-owned utility's balance sheet or a public utility's borrowing ability as it brings on more capital to finance these investments. This may in turn lead to increasing costs given the scale of the capital and perceived risk around the utilization and recovery of the costs including a fair return on these infrastructure investments, which could impact all utility ratepayers.[84]

Due to the size of the rate base, even a small change in the Commission-approved rate of return would have outsized effects on all ratepayers. In its most recent rate case, Xcel estimated the value of its rate base in 2025 at $13.2 billion,[85] meaning that each basis point increase in the rate of return would increase the revenue requirement by over $100,000. This is a potentially very important avenue through which large load increases could shift costs to all ratepayers and the Commission may wish to explore further.

Finally, all ratepayers will pay for rising costs caused by the data center sector more broadly. The rapidly increasing load growth, for example, is likely to prompt increased investment in regional transmission projects, and these costs will be allocated to all ratepayers.[86] Wholesale electricity prices are already being driven up by data centers. Bloomberg recently reported that wholesale prices in areas close to data centers have risen more sharply than in other places, including five-year increases of over 200 percent in some areas.[87] Capacity prices in the MISO market will likely increase further as demand outpaces supply, and while this could benefit ratepayers if Xcel is a net seller of capacity, overall benefits would depend on whether the revenues

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[84] *Virginia Data Center Study* at 21.
[85] *See* Docket No. E-002/GR-24-320, Supplemental Direct Test. of Benjamin C. Halama, Schedule 2 (Mar. 17, 2025).
[86] *See, e.g.,* Martin & Peskoe at 14–18 (explaining how transmission costs driven by data centers can creep into other consumers' bills).
[87] Josh Saul et al., *AI Data Centers are Sending Power Bills Soaring*, Bloomberg Technology (Sept. 29, 2025) https://www.bloomberg.com/graphics/2025-ai-data-centers-electricity-prices/.

from sales offset increased generation costs. Natural gas prices may rise as demand for gas-powered electricity increases, affecting non-electricity energy bills for many customers. Given the many avenues through which data centers are likely to drive up costs, it is especially important that Xcel's new very large customers are not undercharged.

III. THE COMMISSION SHOULD NOT APPROVE XCEL'S PROPOSED TARIFFS UNTIL XCEL PROVIDES GREATER ASSURANCE THAT COSTS ATTRIBUTABLE TO THE PROPOSED SUBCLASSES WILL NOT BE SHIFTED TO OTHER RATEPAYERS.

Xcel's petition does not include many relevant details regarding how very large customers will pay for all costs attributable to them. Yet the Commission must consider how best to achieve a required outcome where "all costs attributable to the utility's very large customers … are assigned to the very large customer class."[88] For the Commission to have sufficient information to approve or modify Xcel's petition, Xcel must respond to the questions included in the Recommendations section below. In addition, Xcel must provide greater assurances and commit to more transparent information including the following: (A) Xcel should model incremental cost tests and cost allocation studies for very large customers under a range of assumptions; (B) Xcel should commit to tracking the actual costs incurred to serve very large customers, provide a clear method for allocating the actual costs to very large customers, and commit to increasing the transparency of cost attribution, including in its Incremental Cost Test. Last, the Commission should require this increased clarity on how costs will be attributed to very large customers now, as it will be much more difficult to change the way costs are allocated in future rate cases if the tariff is approved without a plan and includes a rate based on an unsupported Incremental Cost Test. And future changes after tariff approval may be objected to by very large customers claiming to have relied on Xcel's current proposal.

[88] 2025 1st Spec. Sess. Minn. Laws ch. 7, sec. 9, subd. 2.

A. Xcel Should Model Incremental Cost Tests and Cost Allocation Studies for Very Large Customers Under a Range of Assumptions.

To gain insight into how costs would be attributed to very large customers, Xcel's reply comments should include model Incremental Cost Tests and class cost of service studies. Incremental Cost Test examples should show net revenue calculations for a hypothetical very large customer under Xcel's proposed pricing structure and under a range of cost assumptions. At minimum, each cost category should include Xcel's preferred cost estimates plus high-range estimates, and the assumptions driving each set of cost estimates should be clearly explained. Generation cost estimates should be accompanied by the plant type and cost, O&M cost, depreciation schedule, and any other assumptions embedded in the estimates. Likewise, the sources and assumptions used for the ranges of fuel costs, MISO transmission-related costs, and jurisdictional costs should be clearly identified. Xcel's current proposal does not provide enough information on Incremental Cost Tests, and these examples would allow for a much more informed assessment of whether these tests are adequate.

Xcel should also provide CCOSS allocations under a range of assumptions in its reply comments, to shed light on how incremental costs of very large customers are likely to be allocated across customer classes. A baseline recent CCOSS without the addition of new customer costs or load should be provided to illustrate class cost allocation prior to the introduction of new customers. Comparison CCOSS models should add the load and costs assumed in the Incremental Cost Test models, ensuring that generation costs are added to the rate base and depreciated in a manner appropriate to the CCOSS. (That is, while capacity costs are levelized and annualized in the Incremental Cost Test, they are not included in the CCOSS in that manner.) To allow for a fair comparison, the CCOSS model should include those costs that would normally be recovered via riders, so incremental fuel and transmission costs should not be removed or netted out from

the CCOSS. Importantly, Xcel should provide alternate versions 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 their own class with costs allocated to this class separately.

Because Xcel's current proposal lacks specificity and transparency, providing examples of Incremental Cost Tests and cost allocation models will help shed light on whether and under what conditions the current proposal is likely to shield other customers from the costs incurred to serve very large customers.

B. Xcel Should Commit to Tracking the Actual Costs Incurred to Serve Very Large Customers so that the Costs Can Be Attributed to Them.

As explained above, Xcel's current proposal does not attribute the actual costs incurred to serve very large customers to those customers. In fact, under Xcel's proposal, there will be no way to readily estimate what those actual costs are, making direct assignment impossible. The Incremental Cost Test is the mechanism proposed for cost attribution, but Xcel's proposal includes no provision for "truing up" these advance estimates to actual costs over time.

The Company's proposal must include a clearer plan for ensuring that very large customers cover their actual costs. Xcel should first justify its decision for not making very large customers their own class for cost allocation purposes. In addition, Xcel should commit to ensuring that actual costs incurred to serve very large customers are allocated to them and increasing the transparency of cost attribution, including in the Incremental Cost Test.

1. There is no clear reason why very large customers should not comprise their own class for cost allocation purposes.

Xcel's proposal to combine very large customers with the broader C&I Demand class for cost allocation purposes would make it very difficult to assess whether costs are attributed to these customers appropriately. It would also prevent stakeholders from seeing how costs are allocated

to these customers. Although the Commission's revenue apportionment decisions are only partially based on the class cost allocations submitted in a rate case, creating a separate customer class would both increase transparency and allow for assessment of whether the statutory cost attribution requirement is met. In other words, while creating a separate class on its own is not a sufficient condition for ensuring that costs are fairly allocated to very large customers, it is a necessary one. Otherwise, it will be very difficult to adequately assign costs caused by these customers. Further, creating a separate class would naturally allocate embedded costs to this class in a manner consistent with other classes. If Xcel believes creating a separate class for cost-allocation purposes is not feasible, it should provide a detailed explanation and support for that position.

2. Costs incurred to serve very large customers should be allocated to them.

Traditional CCOSS allocation methods were not designed to fairly address cost causation from large and sudden surges in load growth arising from a relatively small number of very large customers. Even if very large customers comprised a separate class for cost allocation purposes, using the traditional CCOSS allocation methods would inappropriately socialize costs incurred largely to serve new customers. In its most recent IRP, Xcel acknowledges that the forecast rate of load growth and the need for new resources come largely from projected new data center load.[89] If the Company can justify expensive capacity additions on the basis of its need to serve data centers, it should be required to ensure that corresponding costs are allocated to these customers.

Other jurisdictions and other utilities are taking the problem of data center cost allocation seriously and exploring creative ways to address it. For example, APS proposes allocating costs

[89] *See, e.g.,* Docket No. E002/RP-24-67, Resource Plan at 4 (explaining that the higher projected growth in electric energy requirements compared to the 2019-2022 period is due to forecasted large new data center loads).

related to new generation resources based on class shares of load and energy *growth*, rather than class load shares.[90] The utility statesthat "this growth-focused methodology will help reduce cross-subsidization risks arising from new large-customer growth."[91] The utility provides examples of how the method would work in practice, for both utility-owned resources and power purchase agreements, and also describes a method for determining which portions of new generation replace retiring generation versus serving new growth.[92]

Another way to potentially improve the attribution of costs incurred by data centers would be to require that each very large customer be registered with MISO as a separate commercial pricing node. A similar recommendation was made by Missouri Public Service Commission staff in response to a large customer (100 MW) tariff recently proposed by the electric utility Evergy.[93] The Missouri commission staff contend that individual pricing nodes would allow for simple and concise tracking of many of the regional transmission organization costs directly associated with each customer. Conversely, they note that "[a]bsent this treatment, it is difficult to isolate the expenses caused by [large load] customers that would otherwise be flowed through the FAC [fuel adjustment clause] and which may cause unreasonable impacts on captive ratepayers."[94] Wisconsin Electric Power Company also recently proposed a tariff that would pass through

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[90] *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 Test. of Jamie R. Moe at 3 (June 13, 2025), https://docket.images.azcc.gov/E000044763.pdf?i=1758556055895.
[91] *Id.*
[92] *Id*. at 16–22.
[93] *In the Matter of the Application of Evergy Metro, Inc. d/b/a Evergy Missouri Metro and Evergy Missouri West, Inc. d/b/a Evergy Missouri West for Approval of New and Modified Tariffs for Service to Large Load Customers*, Missouri Public Service Commission Docket No. EO-2025-0154, Staff Recommendation at 22 (July 25, 2025), https://www.efis.psc.mo.gov/Document/Display/840942.
[94] *Id*.

wholesale market energy and MISO transmission charges to very large customers, requiring that such customers have a dedicated pricing node.[95]

There are likely many other ways to ensure the appropriate attribution of costs, and the OAG is not specifically endorsing either of the above methods at this time. But adding very large customers to the C&I Demand class and attributing costs in the traditional way is not sufficient. Xcel's petition should not be approved until it proposes a cost allocation method that appropriately prevents the subsidization of very large customers, and the higher average costs they may bring to the system, by other ratepayers.

3. Cost attribution should be much more transparent.

Creating a new Very Large Customer class and updating allocation methods as described above would naturally help improve transparency. To the extent that cost attribution happens in Incremental Cost Tests (e.g., to ensure adequate cost recovery between rate cases) or in other processes, much more transparency is needed. As described above, Xcel's previously submitted Incremental Cost Tests contain numbers without the context necessary to interpret those numbers. In general, appropriate context would include specific descriptions of what costs are included in the estimates, the sources of the estimates, and all assumptions and calculations used to derive the estimates. For example, estimates of capacity costs should include explicit assumptions about the generation resource type, the plant cost, the source of the cost estimate, the cost and timing of other ongoing expenses (e.g, O&M, insurance, taxes), the depreciation period, the discount rate used, and any calculations employed to translate the net present value into a levelized or annualized value. Likewise, assumptions and calculations used to estimate incremental MISO costs and

[95] *Application of Wis. Elec. Power Co. for Approval of its Very Large Customer and Bespoke Resources Tariffs*, Pub. Serv. Comm'n of Wis. Docket No. 6630-TE-113, Application at 6, https://apps.psc.wi.gov/ERF/ERFview/viewdoc.aspx?docid=539747.

incremental jurisdictional costs should be included, so other parties can fairly assess them. Given that forecasts are inherently uncertain, a range of estimates should also be provided, representing different possible cost futures.

C. Cost Allocation Decisions are Embedded in Xcel's Proposed Tariff and Should Not Be Addressed Separately.

Xcel should be required to present a better method for allocating costs to very large customers before this tariff proposal is approved. While cost allocation may appear to be a separate issue from whether the tariff terms are reasonable, they are very much interlinked. Xcel's current proposal would attribute hypothetical costs to very large customers via the Incremental Cost Test and would inappropriately socialize actual costs to all customers in future rate cases through traditional CCOSS allocation methods. The OAG argues that the proposed tariff is not reasonable because these cost attribution methods are not reasonable; the two issues cannot be separated.

Approval of the tariff would represent an implicit approval of Xcel's cost attribution methods. If the tariff is approved, it will be much more difficult to change the way costs are allocated in future rate cases, especially given the many other issues that arise in a rate case. Further, changes to cost allocation methods (and revenue requirements) after the tariff is approved would be disruptive and probably unacceptable to very large customers. Ensuring appropriate cost allocation at the outset will benefit all parties.

RECOMMENDATIONS

Given Xcel's stated commitment to ensuring that new very large customers benefit the system, the Company must be clearer about its plans for ensuring that all costs attributable to these customers are allocated to them. Toward that end, the OAG asks Xcel, in its reply comments, to respond to the following questions and requests for further record development:

Cost Tracking

- How will Xcel ensure that all costs attributable to very large customers are allocated to them if their actual costs are not separately tracked?

Cost Allocation

- What is Xcel rationale for not creating a separate very-large-customer class for cost-allocation purposes?
- How will Xcel ensure that all costs attributable to very large customers are allocated to them if they do not have their own class in future CCOSSes?
- Does Xcel believe that the CCOSS allocation methods used in the Company's last rate case are suitable for allocating costs to very large customers? Why or why not?
- What alternative cost allocation or assignment methods has Xcel considered, to ensure appropriate cost allocation for very large customers?
- Given the importance of protecting other customer classes from costs incurred to serve very large customers, the Company should perform CCOSS modeling to illustrate the impact of hypothetical very large customer additions on class cost allocations.

Incremental Cost Test:

- How does Xcel plan to make cost attribution in the Incremental Cost Test more transparent, so that third parties can make informed judgments of whether cost estimates are reasonable?
- What is Xcel's rationale for not requiring that a very large customer's revenues cover a portion of embedded system costs in the Incremental Cost Test (beyond the costs that are shifted to the Minnesota jurisdiction as a result of their load addition)?
- What are Xcel's plans for updating cost estimates in the Incremental Cost Test to align with changing costs over time, and how will the Company collect additional revenues from the customer, if needed?
- How will Xcel ensure that actual costs incurred to serve very large customers are allocated to these customers, given that the Incremental Cost Test contains only estimates?
- Given the importance of shielding other customers from costs incurred to serve very large customers, the Company should include example Incremental Cost Tests for a hypothetical very large customer under a range of potential cost scenarios.

The OAG understands that fully responding to these requests may be time-consuming, but the information provided will be very valuable in assessing whether Xcel's tariff proposal meets the statutory cost attribution requirement. The OAG is committed to working with Xcel and

stakeholders to collaboratively and creatively find solutions to the issues identified above and looks forward to Xcel's response.

Dated: October 13, 2025

Respectfully submitted,

KEITH ELLISON
State of Minnesota
Attorney General

/s/ Helen Scharber
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Financial Analyst

/s/ Katherine Hinderlie
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MINNESOTA OFFICE OF THE
ATTORNEY GENERAL—
RESIDENTIAL UTILITIES DIVISION

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Xcel Energy		Information Request No.	3
Docket No.:	E002/M-25-289		
Response To:	Minnesota Office of the Attorney General		
Requestor:	Katherine Hinderlie		
Date Received:	September 19, 2025		

Question:

References: Xcel's Petition at 24:
"In future rate cases, the sales and revenues for customers qualifying for this tariff will be incorporated into the rate case. The costs of the resources procured to help serve the new load will also be included as appropriate. Any additional revenues that are required from the Large General Time of Day Service customers as a result of the incremental cost test will be allocated to class based on the test year base revenue allocator."
Xcel's Petition at 11-13 (Section V.D. Pricing)

Separately for the Large General Time of Day Service and Large Peak Controlled Time of Day Service subclasses:

A. Explain how the sales and revenues for customers in this subclass will be incorporated into future rate cases.
B. Explain how the costs of resources procured to help serve the customer's new load will be included in future rate cases.
C. Confirm or deny that customers in this subclass will be allocated costs via class cost of service studies prepared for future rate cases.
D. If the answer to part C is a denial, provide the following information:
    1. Explain how changes to incremental costs attributed a customer in this subclass will be determined, for each cost type in the incremental cost test.
    2. Explain how rate increases for a customer in this subclass will be determined.
    3. Explain how changes in rate design for this subclass will be determined.
    4. Explain how the rider revenues collected from customers in this subclass will be used.
E. If the answer to part C is anything other than an unqualified denial:
    1. Explain generally how the customers in this subclass (or costs, revenues, or sales related to these customers) will be incorporated into the CCOSS.
    2. Explain whether the Large General Time of Day Service and Large Peak Controlled Time of Day Service subclasses will constitute a separate

class or classes within the class cost of service study. If not, explain which class or classes from Xcel's 2025 Minimum System CCOSS provided in docket no. 24-320 the proposed subclasses will be part of.

3. In the context of the CCOSS, explain which costs will be directly assigned to the Large General Time of Day Service and Large Peak Controlled Time of Day Service customers and which will be allocated using Xcel's CCOSS allocation method.
4. In the first rate case after an ESA has been approved for customers in these subclasses, explain whether costs attributable to customers in the proposed subclasses will be (1) the class costs as estimated by the CCOSS(es), (2) the costs as estimated by the incremental cost test, or (3) costs determined by some other method. If (3), explain the method.
5. Explain whether the proposed revenue requirement in future rate cases for the proposed subclasses will be based on (1) class costs as estimated by the CCOSS, (2) costs as estimated by the incremental cost tests, or (3) another method. If (3), explain the method.
6. Explain whether the rate design described in the proposal (pp. 11-13) will be used after a rate case. If so, explain how the outcome of a rate case would affect the calculation methods described for the energy, customer, and/or demand charges.
7. Explain generally how the Incremental Cost Test will be used following a rate case.

Any responsive documents must be provided in their unlocked native format with all formulas and links intact.

Response:

A. In a rate case test year, forecasted sales for Large General Time of Day Service (LGTODS) and Large Peak Controlled Time of Day Service (LPCTODS) customers would be included within a subclass of the Demand class. The calculation of revenues for this load would include two parts. First, revenues would be calculated for the forecasted sales and demand under the appropriate Large General Time of Day Service rates or Large Peak Controlled Time of Day Service rates and corresponding fuel and rider rates. These revenues would be included in a subclass of the Demand class revenues. Second, a forecast of any additional revenues that the Company receives as part of the LGTODS or LPCTODS customer's Commission-approved Electric Service Agreement (ESA), which is informed by the Incremental Cost Test, would also be included as revenue. See the Company's response E below for a description of class treatment of additional revenues.

B. The Company's future rate case revenue requirement would include costs for generation procured for the system load including the LGTODS and

LPCTODS customer load, based on the Company's budget for the test year. Additionally, the rate case would also naturally incorporate any change in cost assignment for the Minnesota electric jurisdiction due to any impact that the LGTODS and LPCTODS load have on the Company's jurisdictional allocations. See the Company's response E below for a description of class treatment of costs.

C. The Company confirms that LGTODS and LPCTODS customers will be allocated costs via CCOSSs prepared for future rate cases. Class allocators will be updated to include the LGTODS and LPCTODS load information. For example, the sales allocator (E99) would include the forecasted LGTODS and LPCTODS sales in the Demand class.

D. N/A

E.

1. The LGTODS and LPCTOD sales and revenues will be included with the Transmission or Transmission Transformed subclasses of the Demand class that exist in our current CCOSS structure, based on the voltage level of service taken.

   Class allocators will be updated to incorporate the LGTODS and LPCTOD customers in the Transmission or Transmission Transformed or future additional subclasses as appropriate. All costs will be allocated to the class/sub-classes using the updated allocators.

2. Please see response to part E1 above.

3. No costs will be directly assigned to the LGTODS or LPCTODS sub-classes in the CCOSS. All resources will be system resources, and through the Incremental Cost Test, the Company will determine whether the incremental revenues from the new load are larger or smaller than the incremental costs being brought to the system to serve the customer. If the revenues are larger than the costs, then all customers are receiving a benefit through downward pressure on rates. The class allocations in the CCOSS will naturally assign costs to the subclass(es) at a level consistent with the increase in sales and demand for the customer.

   If the revenues are determined to be lower than the incremental costs, then additional revenues will be required through the ESA. For this scenario, in the CCOSS the additional revenues would be re-allocated to all classes based on the Base Revenue (R02) allocator in order to offset

the incremental costs allocated to other classes. This re-allocation of additional revenues mirrors the rate treatment for CRR discounts as discussed in our response to Information Request OAG-2 in this docket. In the case of CRRs receiving a discount, all classes are paying a portion of the cost of the discount because they are also receiving an overall benefit of downward pressure on rates. In the case of large loads paying additional revenues, all classes are being allocated a portion of the revenues because they are also receiving an allocation of the cost increase.

4. Costs included in a rate case will be assigned to class/subclass through the cost allocation within the CCOSS.

5. The Company proposed revenue requirements in future rate cases will be guided by the CCOSS consistent with today's practice. The allocation of additional revenues from large load subclasses to all classes offsets the additional cost assignment, allowing the Company to maintain base rate relationships among and within major classes similar to those that exist today. Base rate design within a rate case will continue to occur at the major class level.

6. The Company's proposed base rate design for customer charges, energy charges, and demand charges described in the Company's Petition (pages 11-13) will be used for the foreseeable future. The energy charges and demand charge would be updated with each rate case, and continue to be based on the unstratified production and production O&M costs.

7. The terms of the Electric Service Agreement may inform how the Incremental Cost Test is applied throughout the term of the contract.

Preparer:	Nick Paluck
Title:	Manager, Regulatory Analysis
Department:	Regulatory Affairs
Telephone:	612-330-2905
Date:	October 1, 2025

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Xcel Energy		Information Request No.	5
Docket No.:	E002/M-25-289		
Response To:	Minnesota Office of the Attorney General		
Requestor:	Katherine Hinderlie		
Date Received:	September 19, 2025		

Question:
Reference: Xcel's Petition at 20:
"Incremental capacity costs are determined based on the potential need for a mix of incremental generation and energy storage resource additions, consistent with the Company's latest Integrated Resource Plan, current market price estimates of the incremental resources, and the customer's contribution to increased peak load estimated by year."

For parts A through F, and separately for the Large General Time of Day Service and Large Peak Controlled Time of Day Service subclasses:

A. Explain whether the market price estimates of incremental resources will represent the specific resources added to serve customers in the subclass. If not, explain what resource type(s) the estimates refer to.
B. Provide the source of the market price estimates that will be used.
C. Explain the types of costs included in the capacity cost estimates (e.g., plant costs, return, O&M, insurance, taxes, etc.)
D. If the capacity cost estimates are annualized, explain the time period and discount rate assumptions used to achieve the annualized rate.
E. Explain how Xcel will ensure that the capacity cost estimates used in the proposed incremental cost tests accurately represent the actual cost of additional capacity needed to serve customers in the subclass.
F. Explain how Xcel will ensure that the customers in other classes will not pay for capacity costs caused by the subclass.

Any responsive documents must be provided in their unlocked native format with all formulas and links intact.

Response:

A. Market price estimates of incremental resources will be generic resource costs based on external market price reports and internal cost estimates.

B. The Company plans to utilize external market reports—such as the Trio Global Renewables Market Report and the NREL Annual Technology Baseline—as well as internal cost estimates based on the latest resource acquisitions.
C. Costs included will be: 1) capex and the plant-related expenses such as depreciation, deferred taxes, equity return, debt return, insurance and property tax expense and income taxes, 2) operating expenses , 3) and, when applicable, production or investment tax credits.
D. The costs will be annualized over the time period of the specific contract and be discounted at the blended authorized WACC of NSPM.
E. The Company will assess the actual cost of resources through the resource acquisition process, in order to confirm the capacity cost estimates are reasonable.
F. Please see the Company's response to OAG IR No. 2 Parts A & B

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Date:	October 1, 2025

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Xcel Energy		Information Request No.	7006
Docket No.:	E002/GR-24-320		
Response To:	Minnesota Office of the Attorney General		
Requestor:	Peter Scholtz		
Date Received:	June 18, 2025		

Question:
Reference: Paluck Direct at 30, Competitive Response Rider

"Yes, Exhibit _____ (NNP-1), Schedule 11 includes an incremental cost and benefit analysis for customers on the CRR in compliance with Order Point 11 in the Commission's Order dated October 18, 2023 in Docket No. E002/M-[22]-579 ."

A. Provide Schedule 11 in its native format.
B. Provide an explanation for any formula used in Schedule 11.
C. Explain how Xcel measured peak load in Schedule 11. Is the peak load listed in Schedule 11 non-coincident peak, the peak coincident with Xcel's Minnesota system, the peak coincident with MISO's system's peak, or the peak load coincident with some other system peak?

Response:
A. Please see "24-320 OAG-7006 Attachment A - NNP-1 Sch 11 - CRR-ICT - Highly Confidential Trade Secret In Entirety" attached to this information response.
B. The Competitive Response Rider's Incremental Cost Test is a financial model developed to comply with Order Point 11 in the Commission's Order dated October 18, 2023 in Docket No. E002/M-23-579. The model contains tens of thousands of formulas. Given the number of formulas, an explanation for each formula is not practical. Below is an overview of the revenue and incremental cost formulas included in the analysis.

The revenue associated with the new data center includes:

- Base rate revenue:

  - Customer charge revenue **[HIGHLY CONFIDENTIAL DATA BEGINS HIGHLY CONFIDENTIAL DATA ENDS]** included in the customer's electric service agreement (ESA);
  - Energy charge revenue based on the General Time of Day Service (A15) energy related charges, **[HIGHLY CONFIDENTIAL DATA BEGINS HIGHLY CONFIDENTIAL DATA ENDS]** and the customer's estimated usage; and
  - Demand charge revenue based on the General Time of Day Service (A15) demand charges, **[HIGHLY CONFIDENTIAL DATA BEGINS HIGHLY CONFIDENTIAL DATA ENDS]** and the customer's peak demand estimated by year;
- Rider revenue based on the current rider rates effective at the time of the calculation of the Incremental Cost Test for the Conservation Improvement Program Adjustment Rider, the State Energy Policy Rate Rider, the Renewable Development Fund Rider, the Transmission Cost Recovery Rider, Low Income Energy Discount, Sales True-up Rider and the Renewable Energy Standard Rider and the customer's estimated usage, the customer's peak demand estimated by year; and
- Fuel revenue based on the 2025 fuel forecast in Docket No. E002/AA-24-63 and the customer's estimated usage.

The incremental costs to serve the new data center include:

- **[HIGHLY CONFIDENTIAL DATA BEGINS**
-
-

-
  -
  -
  -
  -
  -

HIGHLY CONFIDENTIAL DATA ENDS]

C. Peak load included in Schedule 11 is based on the customer's forecast of the average annual peak demand. Schedule 11 is a forecast of revenues and expense and therefore customer's peak load is not measured, nor do we have information associated with future MISO system peak load or the Company's peak load in Minnesota to make the determinations included in the information request relative coincident and non-coincident peaks.

Portions of this response and the live version of Exhibit _____ (NNP-1), Schedule 11 is marked "NOT PUBLIC" as it includes confidential information. Xcel Energy maintains this model as a trade secret pursuant to Minn. Stat. §13.37, subd. 1(b) based on its economic value from not being generally known and not being readily ascertainable by proper means by other persons who can obtain economic value from its disclosure or use. Parts of the model also contain not-public data on individuals, which is protected under the Minnesota Data Practices Act. Specific customer data (including the name, address or related usage) in the model consist of "private data on individuals" and "confidential customer data" as recognized under the Minnesota Data Practices Act. As such, any unique information that can identify an individual customer is maintained by Xcel Energy as not-public data and protected from public disclosure.

The live version of Exhibit _____ (NNP-1), Schedule 11 is marked as "NOT-PUBLIC" in entirety. Xcel Energy maintains this information as a trade secret pursuant to Minn. Rule 7829.0500, subp 3.

1. **Nature of the Material:** The live version of Exhibit _____ (NNP-1), Schedule 11 is an Excel spreadsheet tool used to calculate incremental cost and benefits of serving customers under the Competitive Response Rider in compliance

with Order Point 11 in the Commission's Order dated October 18, 2023 in Docket No. E002/M-23-579.

2. **Authors:** Xcel Energy Pricing personnel
3. **Importance:** The live version of Exhibit _____ (NNP-1), Schedule 11 represents Company work product that Xcel Energy maintains as a trade secret and also includes not-public data that can identify individual customers, and thus Xcel Energy protects it from public disclosure.
4. **Date the Information was Prepared:** November 2024

Witness:	Nicholas Paluck
Preparer:	Nicholas Paluck
Title:	Manager, Regulatory Analysis
Department:	Regulatory Affairs
Telephone:	612.330.2905
Date:	July 1, 2025

Attachment A to this response is a live Excel file.

Attachment A is considered Trade Secret in Entirety.

The live version of Exhibit _____ (NNP-1), Schedule 11 is marked "NOT PUBLIC" as it includes confidential information. Xcel Energy maintains this model as a trade secret pursuant to Minn. Stat. §13.37, subd. 1(b) based on its economic value from not being generally known and not being readily ascertainable by proper means by other persons who can obtain economic value from its disclosure or use. Parts of the model also contain not-public data on individuals, which is protected under the Minnesota Data Practices Act. Specific customer data (including the name, address or related usage) in the model consist of "private data on individuals" and "confidential customer data" as recognized under the Minnesota Data Practices Act. As such, any unique information that can identify an individual customer is maintained by Xcel Energy as not-public data and protected from public disclosure.

The live version of Exhibit _____ (NNP-1), Schedule 11 is marked as "NOT-PUBLIC" in entirety. Xcel Energy maintains this information as a trade secret pursuant to Minn. Rule 7829.0500, subp 3.

1. **Nature of the Material:** The live version of Exhibit _____ (NNP-1), Schedule 11 is an Excel spreadsheet tool used to calculate incremental cost and benefits of serving customers under the Competitive Response Rider in compliance with Order Point 11 in the Commission's Order dated October 18, 2023 in Docket No. E002/M-23-579.
2. **Authors:** Xcel Energy Pricing personnel
3. **Importance:** The live version of Exhibit _____ (NNP-1), Schedule 11 represents Company work product that Xcel Energy maintains as a trade secret and also includes not-public data that can identify individual customers, and thus Xcel Energy protects it from public disclosure.
4. **Date the Information was Prepared:** November 2024

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Xcel Energy		Information Request No.	6
Docket No.:	E002/M-25-289		
Response To:	Minnesota Office of the Attorney General		
Requestor:	Katherine Hinderlie		
Date Received:	September 19, 2025		

Question:
Reference: Xcel's Petition at 18
"This Incremental Cost Test is the same tool we have used when bringing forward prior ESA for large load customers in filings before the Commission."

For comparison purposes, estimate the incremental costs for a customer with 750 kWh monthly average usage and 5 kW peak load, based on the method and assumptions used in the most recent Incremental Cost Test submitted.

Any responsive documents must be provided in their unlocked native format with all formulas and links intact.

Response:
Please see Attachment A to this Information Request.

Attachment A is marked "NOT PUBLIC" in its entirety as it includes confidential information. This file is an Incremental Cost Test and is Company work product. Xcel Energy maintains this model as a trade secret pursuant to Minn. Stat. §13.37, subd. 1(b) based on its economic value from not being generally known and not being readily ascertainable by proper means by other persons who can obtain economic value from its disclosure or use.

Attachment A is marked as "NOT-PUBLIC" in entirety. Xcel Energy maintains this information as a trade secret pursuant to Minn. Rule 7829.0500, subp 3.

1. **Nature of the Material:** Attachment A is an Excel spreadsheet Incremental Cost Test that supported the evaluation of proposed rates associated with Competitive Response Rider (CRR) customers.
2. **Authors:** Xcel Energy Pricing personnel
3. **Importance:** Attachment A represents Company work product that has economic value (actual or potential) to the Company as a result of not being

generally known to, and not being readily ascertainable by proper means, by other persons, and that Xcel Energy maintains as a trade secret.

4. **Date the Information was Prepared:** September 2025

Additionally, Attachment A has been more restrictively designated as "Highly Confidential Trade Secret" in its entirety as this information includes certain competitively sensitive Trade Secret Information. Given the sensitive nature of the Highly Confidential Trade Secret Information, the Company requests that this information should not be disclosed in this docket to any party other than government agencies. If necessary, the Company will file a motion for a Protective Order in this docket at the appropriate time after the close of the comment period.

Preparer:	Nick Paluck
Title:	Manager, Regulatory Analysis
Department:	Regulatory Affairs
Telephone:	612-330-2905
Date:	October 1, 2025

Attachment A is provided in printed form and as an Excel spreadsheet.

Attachment A is considered Highly Confidential Trade Secret in Entirety.

Attachment A is marked "NOT PUBLIC" in its entirety as it includes confidential information. This file is an Incremental Cost Test and is Company work product. Xcel Energy maintains this model as a trade secret pursuant to Minn. Stat. §13.37, subd. 1(b) based on its economic value from not being generally known and not being readily ascertainable by proper means by other persons who can obtain economic value from its disclosure or use.

Attachment A is marked as "NOT-PUBLIC" in entirety. Xcel Energy maintains this information as a trade secret pursuant to Minn. Rule 7829.0500, subp 3.

1. **Nature of the Material:** Attachment A is an Excel spreadsheet Incremental Cost Test that supported the evaluation of proposed rates associated with Competitive Response Rider (CRR) customers.
2. **Authors:** Xcel Energy Pricing personnel
3. **Importance:** Attachment A represents Company work product that has economic value (actual or potential) to the Company as a result of not being generally known to, and not being readily ascertainable by proper means, by other persons, and that Xcel Energy maintains as a trade secret.
4. **Date the Information was Prepared:** September 2025

Additionally, Attachment A has been more restrictively designated as "Highly Confidential Trade Secret" in its entirety as this information includes certain competitively sensitive Trade Secret Information. Given the sensitive nature of the Highly Confidential Trade Secret Information, the Company requests that this information should not be disclosed in this docket to any party other than government agencies. If necessary, the Company will file a motion for a Protective Order in this docket at the appropriate time after the close of the comment period.