STATE OF MINNESOTA

BEFORE THE PUBLIC UTILITIES COMMISSION

Katie Sieben	Chair
Dan Lipschultz	Commissioner
Valerie Means	Commissioner
Matthew Schuerger	Commissioner
John Tuma	Commissioner

In the Matter of a Commission Investigation to Identify and Develop Performance Metrics, and Potentially, Incentives for Xcel Energy's Electric Utility Operations	**PUC Docket Number E-002/CI-17-401** **COMMENTS BY THE R STREET INSTITUTE**

R Street appreciates the opportunity to provide reply comments for the Commission's continued investigation into Xcel Energy's future operations. R Street was represented at the May 15 meeting by the undersigned, and we both valued our ability to workshop the subjects at issue in this proceeding. The stakeholders are clearly engaged and serious about their task, which is to increase the quality of the record for the Commission as it identifies metrics by which to measure Xcel's performance in the coming years.

Introduction

Performance-Based Regulation (PBR) is likely to remain a major topic in utility regulation in the coming decade as the traditional cost-of-service regulatory model adapts to the modern challenges of decarbonization, customer empowerment and distributed generation. As a major economic sector, regulated utilities should be open to innovations, especially those that are non-capital-intensive and can keep electricity rates low for the average consumer.

R Street does not believe that merely creating a "dashboard" to publicly display and track Xcel's progress (or lack thereof) toward particular metrics would be a satisfactory conclusion to this proceeding. PBR is ultimately meaningful because it sets financial incentives for companies to respond to. Minnesota's regulators have an opportunity to establish meaningful change through this proceeding. R Street, like it did in its initial comments, urges the Commission to identify a handful of meaningful metrics, on the basis of which financial incentives for Xcel's performance should be established.

Reply Comments

More than a quarter of the 20 metrics listed at the end of the May 15 meeting focused on the affordability outcome as targeted by the Commission. Many stakeholders submitted comments addressing this outcome category.

Affordability Should be Measured by Average Bills for Low-Use Customer Classes and by Unit for High-Use Customer Classes

Many of the participants in the stakeholder process support a metric or metrics comparing average bills. This is compatible with R Street's recommendation that Xcel's prices be measured against national economy wide indicator, such as the consumer price index. Such a metric would amplify the incentives of a traditional rate proceeding to control costs and squeeze inefficiencies out of Xcel's operations.

We agree, based on other stakeholders' comments[1] and the May 15 meeting, that when measuring affordability for residential and smaller commercial customers, it is sensible to measure the average monthly bill. This would take account of all the various activities Xcel might engage in to make electricity service more affordable, even if it increases the rate that such customers pay. Meanwhile, we agree with the Center for Energy and Environment that for larger customers, per-unit measurements are more appropriate as a metric.[2] Large commercial and industrial customers differ widely by region and sector. A bill-to-bill comparison will not be useful because of the heterogeneity of the customer class within Minnesota and across jurisdictions.

Finally, there seems to be a view that the metric should either target the increases or decreases in the average bills or prices of Xcel year-on-year, or be based on a comparison of those things to national averages. R Street does not believe this is the appropriate metric. First, merely tracking the progress, up or down, of Xcel's average bills or prices year-on-year is too self-referential to be a meaningful metric. The costs of goods and labor change each year, and a metric that is not tied to economy-wide influences of utility costs will not establish an appropriate baseline against the utility's supply chain and the overall economy in which it exists. A national average of utilities is a superior comparison but still inadequate when compared to R Street's initial proposal, which would measure the rate of change in Xcel's average bills or prices in comparison to publicly and consistently reported economic data.[3] A valid metric on affordability must, by definition, take into account how far a consumer's dollar gets her, as well as the efficiencies that firms economy-wide are obtaining in the provision of services to those consumers. If a metric on affordability were to exist only in relation to a

[1] Comments of the Center for Energy and Environment, Docket No. E-002/CI-17-401, May 6, 2018, pp. 3–4.
[2] *Id*.
[3] For a more detailed discussion of the comparative benchmark, also known as "GPI – X," see Comments of R Street Institute, Docket No. E-002/CI-17-401, May 6, 2018, pp. 2–3.

national utility average, it would be unduly referential to a utility's costs and not to what customers can afford and are paying for elsewhere in the economy.

Measuring the Accuracy of Integrated Resource Planning's Demand Forecasts is a Useful Check on a Key Aspect of a Supply Monopoly's Function

Among the metrics that generated discussion were examples of excessive integrated resource planning in which utilities can often publish inaccurate load forecasts that allow significant capital investments to be made.[4] Xcel, in its most recent forward planning document, has a base reference case of 0.7 percent year-on-year demand growth over the next 25 years.[5] The projected demand is often a basis for the company's rate-base growth in both power generation, distribution circuits and transmission expansions. The company expects the addition of 8 gigawatts of renewable capacity and another 2 gigawatts of natural gas capacity to be built by over the same, 25-year time period.

R Street supports metrics that prioritize accuracy in load forecasting, since significant capital investments are frequently rationalized by such forecasting. As a whole, the industry continues to demonstrate a capital spending bias that has led regions such as Midcontinent Independent System Operator (MISO) to have a reserve margin that is indicative of a significant amount of overbuild. MISO was anticipated to have a 19.1 percent reserve margin.[6]

Attaching greater importance to forecast accuracy will help keep Xcel from building unnecessary facilities, thus saving costs to ratepayers. In the design of the metric, care should be given to prevent establishing perverse incentives. For example, Xcel should not be disincentivized from seeking new customer loads. An exception to the metric should therefore be made for new large loads that were not contemplated by the forecast, as well as for loads that are served not by Xcel-owned power generation but through third-party power purchase agreements (even if Xcel acts as the "buy-through" agent).

Xcel's Proposed Metric on Electric Vehicles Should be Adopted, but Not Without Revisions

Xcel's proposal to reduce carbon dioxide emissions in the transportation sector through automobile fleet electrification is forward-looking, but the Commission must attend to it with care. In its current form, Xcel's electric vehicle proposal treats the costs of carbon emissions in isolation from the costs to build new infrastructure for electrification. This compartmentalization is inappropriate. It is unnecessary to trade lower emissions for

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[4] Comments of Fresh Energy, Docket No. E-002/CI-17-401, May 6, 2018, pp. 3, 10; Comments of the Minnesota Center for Environmental Advocacy, Docket No. E-002/CI-17-401, May 6, 2018, pp. 2–3.

[5] Xcel, *2020-2034 Upper Midwest Resource Plan Workshop Presentation,* Docket No. E002/RP-15-21, April 17, 2019, pp. 25, 26.

[6] MISO was estimated to have a 19.1 percent summer reserve margin, well in excess of the margin needed for the once-in-10-year reliability metric traditionally used as a benchmark for resource adequacy. North American Electric Reliability Corporation, *2018 Summer Reliability Assessment*, May 2018. https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_SRA_05252018_Final.pdf.

potentially higher costs; both outcomes can be pursued if the utility receives the correct incentives. Doing so would involve the use of a "total resource cost" or "program administrator cost" test often used in energy efficiency proceedings in which costs are compared to benefits that include, but are not limited to, carbon abatement. In order to create a meaningful cost-benefit analysis, the costs of deploying the infrastructure and providing the kilowatt-hours of electricity must be compared against the benefits of avoided gasoline purchases and carbon emissions. A substantial amount of emissions might be prevented, but the program could still not register as a net benefit to the public if the costs of charging infrastructure are too large and the uptake of electric charging is too low. The risk of inaccurate forecasting of electric vehicle (EV) demand growth is even greater than forecasts of load demand, since the maintenance of current demand for EVs nationwide is likely dependent on the extension of federal subsidies for EVs—a subject on which Xcel Energy has little influence. Measuring the broader economic efficiency outcome of electric transportation, rather than the narrow "CO2 avoidance from EVs," is a better investment of the Commission's time. Both CO2 avoidance and affordability can be achieved at the least possible cost, which also lowers the risk burden on the general ratepayer.

The Cost-Effective Alignment of Generation to Load Requires a Comprehensive Measurement, which Most Proposed Metrics Do Not Offer

Stakeholders have proposed various metrics within the outcome category "cost-effective alignment of generation to load." R Street respectfully suggests that few of the metrics submitted in this proceeding actually attempt a holistic look at the relative performance of Xcel's portfolio. The only way to do so in a meaningful way is by studying how Xcel, as a participant in a larger wholesale market, performs relative to the market. This approach holds up a mirror to Xcel's portfolio in order to get a perspective on its valuable, and not-so-valuable, features. In other words, this metric measures how well Xcel has actually performed in its Integrated Resource Plan (IRP) and procurement exercises. R Street's metric can show whether the value of invested capital aligns properly with both customer demand and the wider MISO prices, of which Xcel is constantly in a position to avail itself for sales and purchases. In R Street's metric, which we call "Portfolio Value to Customers,"[7] the numerator is the average energy price Xcel is paid, or pays, per megawatt-hour sold into, or purchased from, the wholesale market in the past year; the denominator is the average Minnesota Hub price. This metric allows the Commission to see, and reward, outcomes for Xcel's resource planning, thus helping the Commission to both maximize the value of renewables to the system and ultimately low the cost to customers. At the May 15 stakeholder meeting, one question was raised about whether such a metric would result in perverse incentives for Xcel to acquire more self-owned generation instead of relying on the market. The metric would not lead to this outcome

[7] Comments of R Street Institute, Docket No. E-002/CI-17-401, pp. 3–4.

because the metric is not based on the quantity of megawatt-hours sold into or purchased from MISO. Instead, it is based on the average price of such sales and purchases.

R Street submits that a metric such as this is particularly important in a renewable-heavy world. It provides a clear incentive to construct clean-energy resources whose energy production has the highest value and is most well-aligned to customer load. This metric would also create a positive incentive for Xcel to better align its retail-level load curves to its portfolio's energy production curves. In short, a comprehensive metric such as this is in some fashion necessary if an outcome of "cost-effective alignment of generation to load" is to be pursued in a meaningful way.

This concludes R Street's comments on the current phase of the proceedings. R Street thanks the Commission for its attention to this very important matter and looks forward to future discussions.

Respectfully submitted,

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