State of Minnesota Before the Public Utilities Commission

Dan Lipschultz Commissioner
Matt Schuerger Commissioner
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In the Matter of Distribution System Planning for Xcel Energy

Docket No. E002/CI-18-251

Reply Comments of the Citizens Utility Board of Minnesota

I. Introduction and Overview

The Citizens Utility Board of Minnesota ("CUB") appreciates the opportunity offered by the Minnesota Public Utilities Commission ("PUC" or "the Commission") to submit these reply comments regarding Xcel Energy's (Company) Distribution System Plan, in response to the November 19, 2018, Notice of Comment in this docket.

CUB has been in discussions with Company leadership to address consumer issues that arise from this and other dockets. As CUB has been unable to reach an agreement with the Company on how to move forward, CUB presents several issues of concern relative to the filing, each of which has been outlined by other parties; cost-benefit and articulation of consumer benefits through distribution investments. As the Company has not asked for certification of any advanced grid investments within this filing, CUB suggests the Commission should accept the filing, but request additional cost-benefit and consumer focused supplemental information be developed and filed with the Commission under this plan. The intent of this information request should be to provide the Commission better insight into how the Company plans to optimize the customer experience, ensure costs are fair and equitable, and how the Company plans to optimize its future investments to ensure customers save money and benefit from an enhanced experience. Further, the Commission should make explicit in its Order, that acceptance of this plan in no way infers the prudence, or reasonableness, of any expenditure outlined within, nor approval of cost-recovery for expenditures outlined within.

II. Cost-Benefit

As several parties have pointed out, the Company has provided insufficient data and analysis relative to cost-benefit of grid modernization.¹ Within its initial filing, the Company provided on two pages of cost-benefit analysis in a report of over three hundred pages. Similar in length was the Glossary of Terms. It was only upon discovery request by the Office of the Attorney General (OAG) were other supplemental cost-benefit documents were produced. CUB believes these components are an essential tool in determining consumer benefit of the plan. The OAG rightly outlines the shortcomings of the provided supplements as well.² CUB requests the Commission requires the Company to create a supplemental to

¹ Initial Comments of the Office of the Attorney General. Docket No. E002/CI-18-251, p. 12-17. Initial Comments of Clean Energy Economy Minnesota. Docket No. E002/CI-18-251, p. 5-6. Initial Comments of Fresh Energy. Docket No. E002/CI-18-251, p. 5-6.

² Initial Comments of the Office of the Attorney General. Docket No. E002/CI-18-251, p. 12-17.

this plan, which properly organizes and develops information related to this topic. As this is a requirement of Commission Order, this supplemental should include all supporting information relative to any statements of costs, or customer benefits.³ Further, CUB requests that the Commission reiterate in its order that all future filings include this same information.

Cost-benefit analysis is the key component for understanding consumer value. It should also be considered a primary decision-making tool when making distribution planning investments. What the Company has presented is surprisingly vague. CUB concedes that it should not be a requirement for grid modernization investment benefits to exceed customer costs. However, given what is presented, CUB must err on the conservative side of the cost-benefit equation (>1.0) until further data is produced. Without a positive cost-benefit ratio, it would be hard for CUB to support grid modernization investment with the presented methodology. Cost-benefit projections make the business case for future investments. What the Company has filed makes a weak case in support of grid modernization investments.

Further, CUB has concerns that the Company has not undertaken the proper steps to propose cost-benefit under this plan at all. Given what has been presented, CUB is unsure that the Company has invested the necessary time to even propose a benefit-to-cost ratio that can stand up to any scrutiny. The Company proposes investment in advanced metering infrastructure with a ratio below 1.0 and FLISR, which has been opposed by several parties and rejected by the Commission in the past.⁴ This does not create a foundation to have constructive discussion on these investments. Rather, it raises questions as to the seriousness of the proposed expenditures. The Company's projections for benefit-to-cost, as laid out, are dubious. It is difficult to place confidence in the articulated .05-.08 for advanced metering and 2.5-3.0 for FLISR, given the level of analysis provided to parties.⁵ As is a total package benefit-to-cost ratio of .70-1.10 relying heavily on weighting from FLISR investment.

Previously, the Commission asked for FLISR cost-benefit to be done to compare other investment options to determine if proceeding forward with this investment makes sense. As laid out in this filing, the argument for this investment seems circular, with no new data and little more insight into how customers will benefit. The case for cost-benefit of the proposed package relies heavily on Commission approval of FLISR and CUB is unsure that the Company has answered the concerns the Commission raised in E002/M-17/776 and met the statutory threshold laid out.⁶ The plan is based on less than rigorous study of cost-benefit and is also reliant on a reversal of a previous Commission decision, without so far making a compelling case for the Commission to do so. The Commission might consider requesting analysis that revisits FLISR investment as a requirement of moving grid modernization investments forward.

In addition, the case as presented, raises concerns with CUB, as historical projections nationwide on the benefits of grid modernization are generally aggressive and represent the best possible outcomes. When generous projections are presented by the Company and accepted by the Commission, it shifts burdens greatly onto customers. Aggressive projections are a symptom of capital bias and require stronger oversite, or performance measures, by the Commission to protect customers. Since the Company presented little insight into their projections of costs, or quantifiable benefits, only internal experience in

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³ Order Approving Integrated Distribution Planning Filing Requirements for Xcel Energy. Docket No. E002/CI-18-251, D.2.

⁴ Commission Order. Docket No. E002/M-17-776.

⁵ Integrated Distribution Plan for Xcel Energy. Docket No. E002/CI-18-251, p. 148.

⁶ Minn. Stat. § 216B.2425, subd. 2(e).

Public Service of Colorado, CUB sees it likely that the Company's biases are reflected in initial numbers and would also likely reflect best possible outcomes projections.⁷ This is concerning since even best-case outcomes, as presented, border on cost-effectiveness. CUB supports grid modernization efforts and believes when implemented correctly that customers can benefit greatly, the Company's plan as filed is under-developed and needs additional work.⁸

Lastly, CUB suggests additional examination of the nature of the timelines in which customers receive benefit. As the Company admits, much of the benefits delivered in grid modernization efforts are initially grid focused. Customer benefits are increased through the mid-term and into the long-term of the investment. These investments are projected over roughly the life of smart meters; 15 years. In the case laid out by the Company, in at least the first iteration of grid modernization, customers will pay for a grid upgrade and only receive the direct benefits in the waning years of the investment. Customers may only begin seeing direct benefits of lifetime grid investment in a second round of investments if implemented too early. Given the timeline presented, cost-benefit development is especially important alongside this projection. As the Company will request a rate of return on these investments, customers should be assured both indirect and direct benefits are received as soon as possible. Further, cost-benefit analysis on these investments should also include carrying costs, account for the outstanding costs of assets being removed from service, and be estimated in net present value. 10 While a push toward grid modernization is of importance, the timeline and benefit returns must be weighed as to when is the proper time to implement. The Company has presented its preferable timelines for grid modernization. The Commission should consider if the proposed timeline fits its criteria for directing benefits based of relevant cost-benefit data.

Given what has been presented to date, CUB suggests additional questions to be asked of the Company.

- 1. How will projected financial benefits be passed on to customers in a timely manner (given multi-year rate case structure)?
- 2. Will the Company guarantee benefits to levels and timeframes that they project?
- 3. Will carrying costs be included in refined projections?
- 4. Will the cost of assets removed from service be included in cost-benefit projections?
- 5. Will the Company cover the costs of overruns based on their projections?
- 6. Besides the Company's preferred plan, will the Company run additional scenarios to balance customer direct-benefits?

III. Articulation of Consumer Benefits

In its Order, the Commission set out criteria in which the Integrated Distribution Plan was to be organized. They were as follows:

- Maintain and enhance the safety, security, reliability, and resilience of the electricity grid, at fair and reasonable costs, consistent with the state's energy policies.
- Enable greater customer engagement, empowerment, and options for energy services.
- Move toward the creation of efficient, cost-effective, accessible grid platforms for new products

⁷ 9 Xcel Response to OAG Information Request 41, Exhibit 10.

⁸ Initial Comments of CUB. Docket No. E002/M-17-776.

⁹ Integrated Distribution Plan for Xcel Energy. Docket No. E002/CI-18-251, p. 152.

¹⁰ Including authorized profits on capital, income tax, interest on debt, property tax etc...

and services, with opportunities for adoption of new distributed technologies.

• Ensure optimized use of electricity grid assets and resources to minimize total system costs. 11

In CUB's view, the Commission has made it a priority to balance both system benefits and customer benefits. Often times, system benefits are termed, benefits to all customers, by the Company. CUB labels them indirect. These indirect benefits are difficult for customers to see translated to bill savings. These indirect benefits have few noticeable touch points for customers and rarely engage, empower, or present more options to the consumer. The plan as filed, is long on indirect benefits, and short to realize direct benefits for consumers until the tail end of the planning period. In previous comments to the Commission, CUB made recommendations that efforts should be continued to maximize the integration of distributed energy resources for all customers, minimize what might otherwise be stranded assets, maximize existing product life and take steps to maximize direct benefits to customers.¹² These direct benefits are where customers feel, and tangibly realize, the investments they are paying for.

The two obvious direct benefit areas customers concentrate are demand side management programs (DSM) and distributed energy resources (DER). Discussion of DSM is deferred to the future Integrated Resource Plan. CUB points out that enabling DSM with smart meters helps create positive cost-benefit for these assets. For future filings, it may be useful to integrate discussion of this topic into the plan. Robust integration of distribution infrastructure with direct benefits for customers eases concerns for CUB when grid investment benefits do not exceed customer costs. The topic of distributed energy resources was adequately highlighted in the comments of Fresh Energy.¹³ CUB concurs with these comments and adds DERs also create additional positive cost-benefits to grid modernization efforts. Without plans where DERs have meaningful impacts on system planning and operations, valuation in investments which can best enable these technologies, should be negatively valued. Similar to CUB's view on DSM, robust integration of customer sided DER helps ease concern about cost-benefit ratios that do not exceed 1.0. Further, consideration of visualization for DER hosting capacity and the like may also add to this value stack.

CUB also views customer data access as an important part of maximizing benefits of investment in grid modernization technology and infrastructure. As the company outlines, grid modernization efforts are producing, "new and voluminous data for utilities." The company states it is challenged with using this data to improve the customer experience and capture new value streams. CUB acknowledges that the Company has taken strong steps to enable customers access to data that is collected on them. This data will only grow as advance metering progresses. The Company has developed a strong plan for future looking approaches to customer data, operational data, planning data, and data security. However, CUB sees two areas unresolved in future planning. First, CUB sees the question of third-party access to aggregated and anonymized data sets as unexplored. This has been a topic of interest nationally and has been explored by the Commission over a number of years. CUB maintains that there are ways this data can be protected and made available to provide consumer benefits. Through removal of personally identifiable information and the use of aggregation standards, customers stand to leverage outside innovation to develop direct and indirect benefits the utility has overlooked. Further, this can be done without placing a third-party entity in between the Company and its customer; maintaining the current

¹¹ Order Approving Integrated Distribution Planning Filing Requirements for Xcel Energy. Docket No. E002/CI-18-251, p. 3.

¹² Initial Comments of CUB. Docket No. E002/CI-18-251. 07/06/2018.

¹³ Initial Comments of Fresh Energy. Docket No. E002/CI-18-251, p. 7-8.

¹⁴ Integrated Distribution Plan for Xcel Energy. Docket No. E002/CI-18-251, p. 150.

regulatory relationship. Secondly, the plan is silent on the Company's position on the sale, or exchange, of collected customer data by the utility. CUB maintains that the "Facebooking" of customer data to generate revenue or create new value streams for the utility is improper and should be rejected before any attempts are made. CUB supports efforts to keep customer data, either through aggregation, or collection, within the energy arena and does not see it proper to be used for marketing, or other such purposes. A commitment to keep this data for the purpose of energy consumer benefit would be a useful addition to this plan.

Lastly, consumer benefits can be articulated through the implementation of Time-Varying Rates. In the Company's current plan sophisticated pricing solutions are not realized until the mid to long-term. Through stakeholder feedback and Commission direction, the Company has taken a cautious approach to implementation of time varying rates. CUB suggests however, that through the current approach a great deal of value will be lost. First, for smart meters to be most effective and generate the greatest system benefit, large amounts of customers must be participating in time varying rates. Deployment of smart meter infrastructure without the associated time varying rates diminishes the value of the investment and burdens customers with unnecessary costs. Secondly, customers with advanced meters, but not access to time varying rates, are not empowered to take action which can provide direct benefit, realized as bill savings. CUB suggests considerations, that as smart meter infrastructure is installed, time varying rates for those customers be instituted. A commitment to high participation in these rates as these investments are made is key in delivering a positive value proposition. If this is not a key component of future distribution planning, consideration of approval for smart meter infrastructure should be questioned. Given the cost-to-benefit ratio the Company has proposed on smart meter infrastructure, this approach may be useful in tipping the investment toward a positive benefit ratio. Ample evidence exists within both the Companies territory and in other parts of the country that a super-majority of customers benefit from these rates and therefore this approach should be considered as these investments are proposed.

IV. Conclusion

CUB again thanks the Commission for the opportunity to submit comments. Further, it also thanks the Company for its efforts. CUB realizes that this is an iterative process and hopes our comments contribute to improving future planning and reporting. CUB places high value in the plans required of utilities by the Commission. These plans provide insight into the direction of utility decision making and allow organizations like CUB, the ability to target limited resources to create a robust and informed record for the Commission. Within these plans and the processes surrounding them, are the basis for consumer protections. The associated analysis, and their integrated and comprehensive nature, create a framework in which consumer benefit is best understood and supported. It is important that these plans are viewed as such. CUB has largely touted that resource planning, rate-making, cost-allocation, and system investment decisions are best made in the regulatory environment. These integrated plans are the internal framework for making these decisions. CUB looks forward to continuing to partner with interested parties to strengthen the value customers receive through integrated planning processes.

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