

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Dan Lipschultz	Commissioner
Matthew Schuerger	Commissioner
Katie J. Sieben	Commissioner
John A. 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

ISSUE DATE: January 8, 2019

DOCKET NO. E-002/CI-17-401

ORDER ESTABLISHING
PERFORMANCE-INCENTIVE
MECHANISM PROCESS

PROCEDURAL HISTORY

On June 12, 2017, the Commission issued an order in Xcel Energy’s (Xcel) most recent general rate case approving a multi-year rate plan and opening this docket to “identify and develop performance metrics and standards, and potentially incentives, to be implemented during the multi-year rate plan.”¹

On September 22, 2017, the Commission issued a notice in this docket soliciting comments on topics related to performance-based utility regulation.

On December 21, 2017, the Commission received comments from the following:

- Minnesota Chamber of Commerce
- Midwest Cogeneration Association
- Minnesota Center for Environmental Advocacy
- Advanced Energy Management Alliance
- Citizens Utility Board of Minnesota
- Alliance for Industrial Efficiency
- Institute for Local Self-Reliance
- Fresh Energy
- Center for Energy and the Environment
- Great Plains Institute
- Xcel Energy
- Minnesota Office of the Attorney General (the OAG)
- Department of Commerce (the Department)

¹ *In the Matter of the Application of Northern States Power for Authority to Increase Rates for Electric Service in the State of Minnesota*, Docket No. E-002/GR-15-826, Finding of Fact, Conclusions, and Order (June 12, 2017).

On March 6, 2018, the Commission received reply comments from the following:

- Citizens Utility Board of Minnesota
- Midwest Cogeneration Association
- Suburban Rate Authority
- Great Plains Institute
- Center for Energy and the Environment
- Xcel
- OAG
- the Department

On October 11, 2018, the OAG filed a letter with two updates to its comments.

On October 19, 2018, the Center for Energy and the Environment filed a letter in response to the OAG's letter.

On October 25, 2018, the Citizens Utility Board filed a letter in response to the OAG's letter.

On October 30, 2018, the Great Plains Institute filed a letter to clarify its role as a neutral participant, and non-party, in this proceeding.

On October 31, 2018, the OAG filed proposed decision alternatives for Commission consideration.

On November 1, 2018, the matter came before the Commission.

FINDINGS AND CONCLUSIONS

I. Introduction

Minn. Stat. § 216B.16, subd. 19, authorizes the Commission to require a utility proposing a multi-year rate plan “to provide a set of reasonable performance measures and incentives that are quantifiable, verifiable, and consistent with state energy policies.” The statute also authorizes the Commission “to initiate a proceeding to determine a set of performance measures that can be used to assess a utility operating under a multiyear rate plan.” Xcel is currently operating under a four-year multi-year rate plan through 2019.

In the Company's last general rate case, Xcel filed new performance metrics addressing customer satisfaction, customer choice, environmental stewardship, and customer outage experience. In response, the Department recommended, and the Commission concurred, that a separate proceeding should be initiated to evaluate Xcel's proposed metrics, create any new metrics, and explore the possibility of tying incentives or penalties to performance under those metrics. As a result, the Commission initiated this proceeding

To facilitate discussion of possible performance measures, the Commission solicited comments on the following topics:

1. Key goals of utility regulation, traditional or performance-based, include reasonable, affordable rates, reliable service, customer service and satisfaction, and environmental performance. Identify and discuss any additional key goals for the electric utilities for which performance metrics should be developed.
2. How should performance with respect to specific goals be measured? Identify and discuss the areas of utility performance that should be measured and reported to the Commission, why they should be measured and their importance to the public interest.
3. Identify and discuss the extent to which those areas are currently measured or evaluated either by the utility or an independent third party and whether the current measurements or evaluations are sufficient to adequately evaluate the utility's performance in those areas.
4. Discuss how each identified area of utility performance should be measured, and the extent to which they can be cost-effectively verified. Please include any examples of how those areas are currently measured by Xcel or by other utilities and discuss specific proposals—including specific metrics—for measuring Xcel's performance in areas not already measured.
5. Identify and discuss areas of performance that would be aided by a study of achievable potential needed to establish performance targets.
6. Identify established metrics where it could be appropriate to move sooner on potential targets and incentives.
7. Are there other issues the Commission should consider in the first phase of this docket?

II. Comments

A. Xcel

Xcel stated that Minnesota's regulatory system is sound and that performance-based rates are currently in place, but that it would work together with stakeholders on opportunities for improvements. The Company recommended that the Commission use this process to identify changes that would improve the existing system without overhauling it.

Xcel noted that its current multi-year rate plan is a type of performance-based tool that strengthens a utility's incentives to contain costs by locking in rates for the multi-year term of the plan. Xcel also identified other areas that demonstrate a robust regulatory system, including its quality of service plan tariff (QSP tariff) that measures performance on issues such as reliability and billing accuracy, among others. The Company also stated that there are important environmental mandates in place, such as the Conservation Improvement Program and renewable energy standards, as well as requirements for increasing production of solar energy. The Company has also taken steps toward grid modernization to increase customer satisfaction and system efficiency.

The Company recommended that the Commission set forth key metric design principles, including:

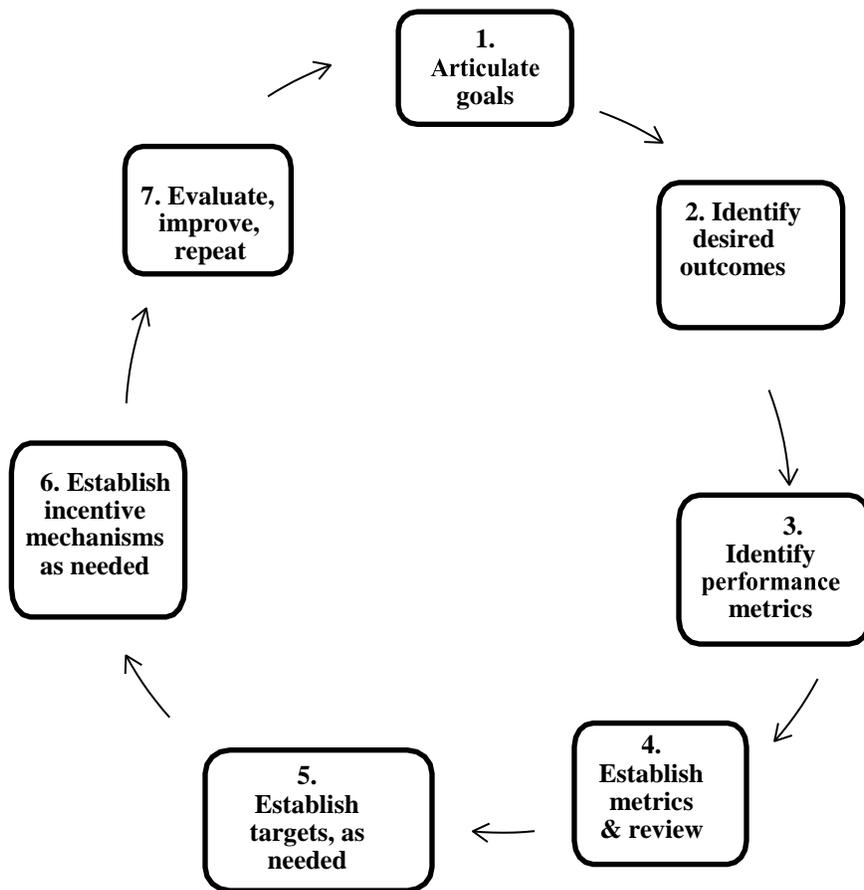
- Tied to the policy goal. A metric should clearly reflect whether or not the underlying policy goal is being met. That is, it should seek and evaluate data that is specifically tied to the particular policy goal underlying the metric.
- Clearly defined. The method of calculating a metric should be precise and unambiguous to enable meaningful comparisons and to reduce potential disputes.
- Able to be quantified using reasonably available data. Using already reported data or data that is readily available will reduce administrative burden and the costs associated with implementing the metric.
- Sufficiently objective and free from external influences. Metrics should seek to measure behaviors that are within a utility's control and free from exogenous influences, such as weather or market forces.
- Easily interpreted. Metrics should exclude the effects of factors outside a utility's control so they provide a better understanding of utility performance and should use measurement units that facilitate comparisons across time and utilities (i.e., "per kWh" or "per customer").
- Easily verified. Straight-forward data collection and analysis techniques should be used, and independent third-party evaluators can further ensure accurate verification with respect to performance metrics.
- Should complement and inform evaluation of utility performance. Performance metric systems should be designed to complement – not replace – other parts of a utility's regulatory system such as multi-year rate plans and cost trackers.

Xcel also recommended that the Commission make efforts to avoid unintended consequences and uncertainty. The Company identified several areas for discussion in this proceeding, including ways electrification could reduce carbon emissions in other industries; incentivizing reductions in peak load; and measuring the effectiveness of the Company's interconnection distribution resources.

B. The OAG

The OAG recommended that the Commission utilize a performance incentive mechanism (PIM) process to make high-level regulatory goals actionable by tying them to regulatory outcomes. The OAG stated that strong financial incentives drive a utility's decision-making and that regulatory tools are necessary to incentivize a utility to meet policy objectives, such as energy conservation.

The OAG stated that a goals-outcomes-metrics process offers an effective method for seeking stakeholder input and developing performance metrics. The OAG recommended that the Commission begin this process by taking the first four steps, but with emphasis on the first four, as shown in the diagram below.



For the first step, the OAG identified four goals:

- Customer Focus: ensuring adequate and reliable service at reasonable rates.
- Operational Effectiveness: avoid unnecessary duplication of facilities which increase the cost of service to ratepayers.
- Public Policy: emerging public policy concerns such as energy efficiency and renewable energy procurement.
- Utility Performance: return on equity, rider revenue, and productivity.

For the second step, the OAG identified numerous possible outcomes, some of which include the following:

- Affordability
- Reliability, including from both customer and system perspectives
- Service quality
- Customer satisfaction
- Environmental performance, including carbon reductions

C. The Department

The Department recommended that the Commission be clear in identifying goals and be mindful of how new metrics could affect the existing regulatory framework. The Department also recommended that the Commission use an independent consultant in this proceeding to facilitate the development of performance metrics.

Further, the Department recommended that the Commission consider possible refinements to the Company's service quality standards and that a scorecard be developed to assess Xcel's performance. The Department also supported use of the OAG's proposed performance incentive mechanism process for considering and developing possible metrics.

D. Alliance for Industrial Efficiency

The Alliance for Industrial Efficiency (the Alliance) recommended that the Commission include, as one objective throughout this proceeding, a discussion of targets for deploying systems that generate electricity using combined heat and power, and waste heat to power. The Alliance stated that increasing use of these resources in the commercial and industrial sectors would correspondingly increase the amount of cost-effective, energy-efficient, and reliable distributed generation resources, and would reduce the need for new power plants and other distribution resources.

E. Minnesota Chamber of Commerce

The Chamber of Commerce (Minnesota Chamber) recommended that the Commission consider three additional metrics to track performance, without requiring any incentives or penalties.

The first metric would measure the competitiveness of the Company's electric rates by examining whether those rates meet the legislative policy objective to keep electric rates in Minnesota at least five percent below the national average.²

The Minnesota Chamber's second recommended metric would measure the carbon intensity of power generation to facilitate better decisions on what facilities to build and what sources of energy to use. The third metric the Minnesota Chamber recommended would measure the frequency with which customers experience momentary interruptions in service. Measuring these outages would enable consumers to better understand outage causes and take steps to prevent or limit outages.

F. Midwest Cogeneration Association

The Midwest Cogeneration Association (MCA) recommended that the Commission set a goal to "expand and diversify baseload generation resources in Minnesota by increasing cost-effective, energy-efficient, and reliable customer-based baseload distributed generation (DG) in the commercial, industrial, and institutional sectors."

² Minn. Stat. § 216C.05, subd. 2 (4).

The MCA stated that adopting this goal would increase economic development, reduce electricity costs, increase energy savings, and reduce carbon and other harmful emissions. This metric would be measured by determining, on an annual basis, whether the number of kilowatts of customer-based distributed generation capacity in these industries has increased or decreased. As part of the analysis, the MCA recommended scrutinizing Xcel's existing plans and policies, including the following:

- Integrated Resource Plans
- Inventory of Customer DG Potential By Sectors
- Standby Tariff Rate Design
- Standby Tariff Cost Allocation
- Interconnection policies and agreements
- Power Purchase Agreements and Net-Metering Incentive Programs
- Incentive Programs

G. Institute for Local Self-Reliance

The Institute for Local Self-Reliance (ILSR) recommended that the Commission measure three areas of performance: renewable energy; energy efficiency; and distributed energy resources. ILSR recommended establishing incentives to meet target goals and implement penalties if goals are not met.

ILSR recommended that the Commission be guided by existing state standards to measure performance. For example, the state's goal to achieve 80 percent greenhouse gas emissions reduction by 2050 would be a way to measure energy efficiency metrics. Establishing a goal related to this metric is one way to measure current performance and incentivize improvements.

ILSR also stated that studying performance potential is another mechanism that could be used to develop reasonable metrics.

H. Minnesota Center for Environmental Advocacy

The Minnesota Center for Environmental Advocacy (MCEA) identified three key performance metrics to drive down greenhouse gas emissions.

First, MCEA stated that performance related to meeting the state's greenhouse gas emissions reduction goal is fundamentally important, and recommended tracking Xcel's performance in reducing carbon emissions in furtherance of that goal.

Second, MCEA recommended incentivizing electrification of other industries, such as the transportation sector to increase use of electric vehicles. MCEA recommended developing a methodology for tracking electrification and setting targets for increased electrification.

Third, MCEA supported a shift away from centralized fossil-fuel plants toward a more distributed system of renewable energy and storage using incentives as a means of encouraging this change.

MCEA stated that an immediate priority should be to establish a tracking system to measure performance in these areas to further the state’s broad policy goal of de-carbonization.

I. Fresh Energy

Fresh Energy stated that it is imperative to shift away from carbon emitting technologies toward wind and solar, which requires a change in a utility’s compensation model from one of earnings on capital investments to performance-based earnings.

To facilitate this change, Fresh Energy recommended applying the following principles:

1. Tie metrics to policy goals, focusing on outcomes.
2. Clearly define metrics and the calculation methodologies.
3. Ensure metrics can be readily quantified and independently verified using accessible public data, and avoid reliance on counterfactuals during measurement.

Fresh Energy identified several areas in which performance metrics should be adopted. These include: system efficiency (load factor, peak load, load shape, electricity savings); affordability (average customer bills, savings vs. spending forecasts, load forecast accuracy, and non-wires alternatives); environmental performance (carbon emissions reductions); and beneficial electrification (electrical vehicle charging and space/water heating).

J. Citizens Utility Board of Minnesota

The Citizens Utility Board (CUB) recommended that the Commission establish performance metrics in seven key areas:

- Affordability of utility bills;
- Reliability of service;
- Customer satisfaction;
- Energy efficiency;
- Environmental performance;
- Reducing peak energy usage; and
- Open data access.

CUB stated that the metrics should align with each other to further legislative policy goals and objectives, and that the Commission should first establish a performance metrics framework. Fundamentally, this requires access to the utility’s data, which is essential for understanding how well the utility is, in fact, performing and how to incentivize improved performance.

CUB also echoed support for the OAG’s proposed performance incentive mechanism process for considering and developing possible metrics.

K. Center for Energy and the Environment and Great Plains Institute

The Center for Energy and the Environment (CEE) and Great Plains Institute (GPI) stated that they initiated and co-directed the e21 initiative (21st century electric system), which brought

together interested stakeholders “to develop principles, ideas, and proposals that foster a more customer-centric and sustainable framework for utility regulation in Minnesota that better aligns how utilities earn revenue with public policy goals, new customer expectations, and the changing technology landscape.” Based on their work throughout 2015 and 2016, they prepared a white paper that examined several possible approaches to a performance-based compensation framework.

They explored how to meet the following objectives:

- Shift away from a business model that provides customers few options (everyone gets the same grid electricity produced largely with coal, natural gas, or nuclear power at large central stations) toward one that offers customers more options in how and where their energy is produced and how and when they use it, while maintaining fair and competitive pricing, reliability, and minimal environmental impacts.
- Shift away from a regulatory system that rewards the sale of electricity and building large, capital-intensive power plants and other facilities toward one that reasonably compensates utilities for achieving an agreed-upon set of performance outcomes that the public and customers want.

Ultimately, they did not recommend a single framework but offered three models for regulators to consider:

- Current cost-of-service model. In this scenario, earnings from capital investment remain the primary driver for utility shareholder value. Any performance- or outcome-based financial incentives would be in addition to the utility’s cost-based revenue requirement and considered separately from a rate case.
- Partial shift to a performance-based compensation framework. In this scenario, the regulator-authorized return on equity is reduced, and utility earnings are driven by a combination of performance outcomes and capital investments. The relative share of earnings coming from each would be determined over time. Shareholder earnings may also include potential new revenue streams from providing new products and services.
- Shift to performance-based compensation framework. Here, there is no automatic, regulator-authorized return on equity; utilities still recover their costs, but shareholder returns would be earned through a combination of utilities achieving performance goals and possible new product and service revenue opportunities.

Both entities stated that they supported the OAG’s proposed performance incentive mechanism process for considering and developing possible metrics.

L. Advanced Energy Management Alliance

Advanced Energy Management Alliance (AEMA) focused its comments on the benefits of demand response, including:

- Lower customer bills: It costs less to incent customers to reduce their consumption for a limited number of hours per year than it does to retain existing peaking generation, or to construct new generation. DR also can reduce transmission and distribution spending.
- Economic development: Instead of buying energy from out-of-state fuel producers, DR results in energy dollars flowing to the businesses, school districts, and institutions that participate in DR, and is reinvested in the local economy.
- Increased reliability and resiliency: Recent storms have demonstrated the need for a resilient electric grid and not relying exclusively on central station generation and long transmission lines. DR stabilized the Florida electric grid after Hurricane Irma, and could be deployed in Minnesota in the case of a major weather event.
- Environmental benefits: A Navigant Consulting report found that DR could reduce carbon emissions by as much as one percent directly and another one percent indirectly through facilitating the integration of renewable energy.
- Low risk and noncontroversial: DR avoids the need to build new infrastructure, which prevents controversial siting proceedings. Moreover, unlike a 30-year investment, as is the case with new infrastructure, DR can be scaled up or down quickly. This benefits ratepayers (and regulators by extension), so that they are not responsible for paying for infrastructure for 30 years if the perceived need for the infrastructure build (e.g., load growth) does not materialize.

AEMA stated that a process for considering performance-based metrics should be guided by the following principles: align utility interests with customer interests; apply performance incentives holistically and avoid “lowest cost” comparisons; and encourage utilities to leverage third party capital.

AEMA also noted that other states, including New York, Missouri, and Indiana, have implemented policies that incentivize and encourage performance goals, including an increase in demand response, and that these examples could be used to further inform the development of performance-based metrics.

M. Suburban Rate Authority

The Suburban Rate Authority echoed the comments of the Minnesota Chamber of Commerce, stating that it concurs on addressing momentary interruptions and taking steps to reduce carbon emissions.

III. Commission Action

The comments reflect a range of stakeholder perspectives and priorities for developing performance-based metrics. While some commenters have recommended a narrower scope than others, the Commission’s priority at this juncture is to facilitate a broad and robust discussion, using a process that is sufficiently structured but necessarily flexible. Encouraging parties to openly exchange ideas at this early stage of the process is integral to generating useful and

measurable outcomes, while avoiding an overly prescriptive framework that could hinder the development of meaningful performance metrics.

The Commission concurs with many of the parties that the OAG's proposed PIM process is a reasonable approach to the first phase of this process. That proposal sets forth a solid structure, as well as specific categories (described as goals in the OAG's outline) and outcomes that will foster a discussion that is guided and organized but not constrained. The Commission also concurs with the design principles identified by Xcel and will incorporate those principles into the OAG's PIM process as a way to add further guidance and clarity to the process.

In addition to that framework, the Commission's overarching goals in overseeing the rates, investments, and returns made by the investor-owned utilities are to promote the public interest by ensuring environmental protection; adequate, efficient, and reasonable service; reasonable rates; and the opportunity for regulated entities to receive a fair and reasonable return on their investments.

A key purpose of this docket is to further align the Company's performance with the public interest. The Commission seeks to streamline metric reporting, to better align it with the other parts of the utility's regulatory system, and to use this process to identify where existing metrics do not adequately meet the metric design principles.

The Commission will therefore establish the OAG's proposed PIM process, as detailed in the ordering paragraphs set forth below.

A third-party facilitator can aid the Commission in constructively moving forward the process for determining appropriate performance metrics. To conduct an orderly, efficient, and effective process, the Commission will direct the Executive Secretary to select Great Plains Institute to facilitate workshops, including completion of workshop summary report(s) for the Commission. The Commission expects that the overall process will include workshops and opportunities for written comments, and anticipates that the record and comments on steps 3 and 4 (establishing performance metrics and a reporting process) of the PIM process will come in front of the Commission within approximately nine months of the date of this order. The Commission will also delegate administrative authority to the Executive Secretary to set schedules and comment periods, and to issue notices to facilitate record development.

ORDER

1. The Commission hereby adopts the OAG's Performance Incentive Mechanism Process and associated Goals-Outcomes-Metrics hierarchy, with an initial focus on steps 1 through 4.
2. The Commission establishes the following for the PIM process:
 - A. Goals:
 - The goals in overseeing the rates, investments, and returns made by the investor-owned utilities in Minnesota are to promote the

public interest by ensuring environmental protection; adequate, efficient, and reasonable service; reasonable rates; and the opportunity for regulated entities to receive a fair and reasonable return on their investments.

B. Outcomes (related to three categories: customer focus, utility performance, and public policy):

- Affordability;
- Reliability, including both customer and system-wide perspectives
- Customer service quality, including satisfaction, engagement and empowerment;
- Environmental performance, including carbon reductions and beneficial electrification; and
- Cost effective alignment of generation and load, including demand response.

C. Metric Design Principles:

- Tied to the policy goal. A metric should clearly reflect whether or not the underlying policy goal is being met. That is, it should seek and evaluate data that is specifically tied to the particular policy goal underlying the metric.
- Clearly defined. The method of calculating a metric should be precise and unambiguous to enable meaningful comparisons and to reduce potential disputes.
- Able to be quantified using reasonably available data. Using already reported data or data that is readily available will reduce administrative burden and the costs associated with implementing the metric.
- Sufficiently objective and free from external influences. Metrics should seek to measure behaviors that are within a utility's control and free from exogenous influences, such as weather or market forces.
- Easily interpreted. Metrics should exclude the effects of factors outside a utility's control so they provide a better understanding of utility performance and should use measurement units that facilitate comparisons across time and utilities (i.e., "per kWh" or "per customer").
- Easily verified. Straight-forward data collection and analysis techniques should be used, and independent third-party evaluators can further ensure accurate verification with respect to performance metrics.
- Should complement and inform evaluation of utility performance. Performance metric systems should be designed to complement – not replace – other parts of a utility's regulatory system such as multi-year rate plans and cost trackers.

3. The Commission hereby delegates authority to the Executive Secretary to issue notices, set schedules, and designate comment periods for the development of PIM steps 3 and 4 (establish performance metrics and reporting process). The Executive Secretary will select Great Plains Institute as the facilitator, schedule workshops, and notice comments to develop the record more fully. This process should include several stakeholder workshops and several opportunities for written comments. It is anticipated that the Commission will consider the record and comments on PIM steps 3 and 4 within 9 months of this order.
4. This order shall become effective immediately.

BY ORDER OF THE COMMISSION

Daniel P. Wolf
Executive Secretary



This document can be made available in alternative formats (e.g., large print or audio) by calling 651.296.0406 (voice). Persons with hearing loss or speech disabilities may call us through their preferred Telecommunications Relay Service or email consumer.puc@state.mn.us for assistance.