

August 19, 2016

Daniel P. Wolf

Executive Secretary

Minnesota Public Utilities Commission

121 7th Place East, Suite 350

St. Paul, Minnesota 55101-2147

**RE: Comments from Midwest Cogeneration Association and Fresh Energy In
the Matter of a Commission Inquiry into Standby Service Tariffs
Docket No. E-999/CI-15-115**

Dear Mr. Wolf,

The Midwest Cogeneration Association (MCA) and Fresh Energy respectfully submit these comments on the updated standby service tariffs filed by Xcel Energy, Minnesota Power, Otter Tail Power, and Dakota Electric Association on May 19, 2016, per the Commission's Order on November 19, 2015, in the above-referenced docket. Our organizations greatly appreciate the work and effort from the Commission and staff, the Department of Commerce, and other stakeholders over the last several years on this important issue. Our comments provide clarity on the impact of the updated tariffs to customers with onsite generation, and highlight the key goals recommendations put forth by the Department of Commerce in its report released on January 30, 2015, submitted on February 3, 2015, in this docket.

MCA is a not-for-profit professional association dedicated to promoting clean and energy efficient cogeneration technologies -- Combined Heat and Power (CHP) and Waste Heat-to-Power (WHP) (collectively referred to herein as "CHP") in eight Midwest states, including Minnesota. MCA members include representatives of CHP technology manufacturers, distributors, and project developers -- many of whom have business operations in Minnesota. MCA members have expertise in CHP and WHP technologies, as well as project financing and development.

Fresh Energy is a nonpartisan, energy policy nonprofit based in Saint Paul, Minnesota with over 20 years of experience advocating for policies that increase the adoption of energy efficiency and renewable energy resources. Fresh Energy's mission is to lead Minnesota's transition to a clean energy economy through advocacy, policy analysis, and public outreach.

Both MCA and Fresh Energy submitted comments and reply comments in this docket on April 15 and May 15, 2015, respectively, describing key goals of standby rates and the benefit of a generic proceeding. Both organizations believe that Standby Rate (SBR) tariffs which impose disproportionate costs on CHP customers violate PURPA's mandate for non-discriminatory utility tariffs and create unnecessary barriers for CHP self-generation in Minnesota.

Why Standby Rates Matter For CHP Projects

MCA and Fresh Energy understand that standby rates are necessary to recover the fully allocated embedded costs that the utility incurs to provide backup and maintenance service. However, SBR tariffs can also be designed in such a way as to financially burden customers who reduce their energy demand from the grid by investing in their own on-site generation capacity. Poorly designed SBR tariffs become barriers to CHP project development.

In fact, MCA Members across the Midwest, including Members doing business in Minnesota, report that in regulated utility states such as Minnesota poorly designed SBR tariffs are the number one reason otherwise economically viable CHP projects are not built. They report complicated and opaque tariffs which, when "unpacked," impose fixed charges, ratchets, and punitive rates that result in overall monthly fees that are greatly in excess of standard tariffs on a per rata energy basis – although these customers are spending millions to provide their own CHP capacity and greatly reducing their use of utility infrastructure. Individual company negotiations with their utilities often result in frustration. After such discussions, CHP projects, which would otherwise "pencil out"

financially and benefit both the customer and the utility's other ratepayers, are often shelved.

Why should a private party invest millions of dollars to generate its own energy, taking substantial load off the grid and freeing up utility generated power and transmission for other ratepayers, if utility SBR tariffs assume the CHP customer will require grid back-up every day of the month? This is the assumption that is built into SBR tariffs when they place fixed reservation fees or demand charges which are intended to recover costs of full-time customer use of utility capacity and transmission resources. Overly conservative utility assumptions such as these are inappropriate and unnecessary for a well-established baseload technology such as CHP which operates reliably 95% of the time.¹

Best Practices for SBR

MCA and Fresh Energy believe well-crafted SBR tariffs can promote economic and energy efficiency as well as system reliability. They are characterized by fairness, simplicity, and transparency, imposing costs on the CHP customer that are proportional to the costs it imposes on the utility.

A model SBR tariff would be designed to:

1. Reward customers for optimizing their CHP systems to use grid backup service as little as possible by applying variable (rather than fixed or ratcheted) reservation or demand charges as well as variable energy charges that reflect the proportion of time the customer actually uses grid back-up energy and infrastructure. This reflects the proportionality principle that utility charges should be cost-driven, and that charges account for the benefits that highly-reliable CHP systems provide to the

¹ Forced outage rates experienced by combined heat and power systems are approximately 5% overall, with 2.5% during peak periods. See "Distributed Generation Operational Reliability and Availability Database" released by Oak Ridge National Laboratory in January 2004.
https://www1.eere.energy.gov/manufacturing/distributedenergy/pdfs/dg_operational_final_report.pdf

utility and other ratepayers through avoided transmission and distribution costs and other metrics.

2. Encourage customers to adequately maintain CHP systems and thereby minimize unplanned “forced outages” by providing lower reservation/demand charges for pre-planned maintenance that can be scheduled for off-peak hours and/or during low demand seasons. This includes differentiating between schedule and unscheduled outages.
3. Reward customers who can shift load to minimize use of back-up service during peak hours by providing rates that differentiate between peak and non-peak time of use. This includes making SBR flexible enough to provide options encouraging efficient consumption from both the customer’s and the utility’s perspective.
4. Fairly reflect the utility’s actual time-of-use energy costs, rather than applying rates that overcompensate for the utility’s costs incurred or apply fixed charges to recover costs not attributable to the individual customer.
5. Are transparent and understandable to customers with onsite generation, as well as customers considering which onsite generation technologies, systems, and operational practices are best suited to their unique needs. For example, rates and charges should be clearly and simply stated in the tariff, not hidden or otherwise left to be determined on a case-by-case basis. Furthermore, a transparent tariff promotes understanding between the customer and the utility and avoids surprises once the customer has made commitments.

Key Goals for SBR from the Department of Commerce

On page 13 of its report filed on January 30, 2015, and filed in this docket on February 3, 2015, the Department of Commerce highlighted four key goals for standby rates. Specifically, the Department recommended the following:

The scope of the generic docket on standby service should include development of a generic approach and framework for standby service that considers and incorporates the following key goals...Key goals for standby rates include:

- Transparent, flexible, and promote economically efficient consumption;
- Accurately account for all relevant value streams including both costs and benefits;
- Simplify input data sets & methodology, where possible and warranted;
- Provide neither an incentive nor a disincentive for distributed generation.

MCA and Fresh Energy agree with these goals and believe these reflect a fair approach in balancing the need for SBR to appropriately recover the utility's costs to provide service, as well as capture the benefits and operational best practices onsite generation projects provide on the utility system.

5 Lakes Energy Analysis

We are pleased to present with these comments a detailed analysis and “apples-to-apples” comparison of the four utilities’ proposed revised SBR tariffs submitted pursuant to the Commission’s request in this docket. This analysis was performed by the Michigan-based energy policy consulting firm 5 Lakes Energy. Some elements of that analysis are discussed and presented in our comments here. 5 Lakes Energy’s detailed analyses were included in Fresh Energy’s Information Request No. 4-7 sent to the four utilities on August 18, 2016, included as an

Attachment to these comments. It should be noted that the Information Requests asked the utilities to verify or correct assumptions, calculations, and conclusions made to generate the total standby bill for the example customer under different scenarios. Thus, the results provided in these comments may change based on utility responses to the Information Requests.

For each proposed utility tariff filed in this docket, 5 Lakes Energy analyzed the total standby bill for a General Service customer requiring 2,000kW of standby service at the Primary Distribution level. The analysis included five different scenarios for a billing period: no outage, scheduled 16-hour on-peak outage, scheduled 16-hour outage with 8 hours on-peak and 8 hours off-peak, scheduled 32-hour on-peak outage, and unscheduled 16-hour outage with 8 hours on-peak and 8 hours off-peak. Table 1 summarizes the estimated total bill for the hypothetical customer in each scenario.

Table 1. Summary of 5 Lakes Analysis, Estimated Total Standby Bill

Scenario	Xcel Energy	Minnesota Power	Otter Tail Power	Dakota Electric ²
No outage	\$4940 (scheduled) \$5140 (unscheduled)	\$1007	\$428	\$6560
Scheduled (16 hours on-peak)	\$5935	\$2699	\$3483	\$26,729
Scheduled (8 on-peak, 8 off-peak)	\$5935	\$2699	\$3543	\$26,729
Scheduled (32 hours on-peak)	\$7958	\$4391	\$6289	\$28,694
Unscheduled (8 on-peak, 8 off-peak)	\$6135	\$20,180 ³	\$4521	\$26,729

MCA and Fresh Energy note several broad observations on these results of the four utility SBR proposals. First, the utilities have taken different approaches to

² This does not include pass-through charges from Dakota Electric’s wholesale power provider.

³ This does not include energy charges.

structuring their SBR tariffs, as shown in the 5 Lakes Energy analysis detailed in the addendum to these comments. While each utility includes a mix of fixed and variable charges, there are significant differences in how they utilities apply these charges. This lack of uniformity is inconsistent with the goal of providing transparent tariffs that are understandable to customers, regulators, and other stakeholders. Furthermore, it makes it difficult to decipher the bottom line impact of these costs to customers, compare the utilities' charges to the actual costs incurred, and compare the SBR tariffs to charges imposed on other customers.

Second, each proposed SBR tariff includes substantial reservation and/or demand charges in addition to energy charges. Some of the tariffs incorporate a customer's variable use as a factor in calculating the reservation and/or demand charges, while others do not.

Third, as one can see, there are large differences in the bottom line total SBR tariff charges for each utility's tariff proposal. Minnesota Power and Dakota Electric's proposed standby tariffs result in significantly different total bills for the customer in some scenarios than Xcel Energy and Otter Tail power. Importantly, **the analysis provided does not reflect all the costs the may actually be imposed on the customer.** For example, Minnesota Power's tariff for an unscheduled outage does not include energy charges, as those are determined during the time of sale. On page 16 of its tariff filing, Minnesota Power states:

Energy usage during an Unscheduled Outage, the customer shall pay the Company's hourly incremental energy costs during the time of the sale including third-party transmission costs incurred by the Company plus an energy surcharge of \$0.02 per kWh (kilowatt hour). Incremental energy costs are determined after assigning lower cost energy to all firm retail and firm wholesale customers including all inter-system pool sales which involve capacity on a firm or participation basis and to all interruptible sales to Large Power, Large Light and Power, and General Service customers.

Similarly, the estimated total bill for Dakota Electric's tariff does not include pass through costs from the utility's wholesale power provider. On Section V, sheet 31.2, proposed revision 3, of its proposed tariff, Dakota Electric states:

The billing demand for applying Generation and Transmission Reservation Fees will be determined according to the terms and conditions of the Cooperative's wholesale power supplier.

MCA and Fresh Energy believe that the total standby bill estimate for Xcel Energy and Otter Tail Power in 5 Lakes Energy's analysis reflect an accurate assessment of actual costs that would be imposed on the customer (pending verification by the utilities through the abovementioned Information Requests). However, the analysis of Minnesota Power and Dakota Electric's proposed tariffs indicates that the actual total standby bill would be higher once all costs are incorporated.

Uniform approach and methodology

As referenced above, page 13 of the Department of Commerce report recommended that this docket include "development of a generic approach and framework for standby service." The 5 Lakes Energy analysis provided in these comments underscores the need for a uniform approach and methodology for calculating and communicating standby service and related tariffs across utilities. There is clear precedent for this approach regarding additional forms of customer onsite generation:

- Minnesota's Net metering standard contract provides uniform principles and requirements for net metering service across the state.
- The Value of Solar methodology provides a clear framework for calculating the value of solar across utility service territories, while maintaining flexibility in the actual rate determined to account for unique utility characteristics.
- The state's interconnection standards provide clear guidelines and templates for communicating interconnection requirements for all utilities through the state.

MCA and Fresh Energy are ready to work with all stakeholders to develop a clear and concise methodology and approach for defining standby service, determining

appropriate standby service tariff calculations, and ensuring that best practices and key goals for standby tariffs are achieved. With the clear and valuable analysis from 5 Lakes Energy, we can now properly assess the similarities and differences across proposed utility standby service tariff offerings, moving us closer to a uniform approach.

Recommendations

Based on the above comments, MCA and Fresh Energy recommend:

- That stakeholders seek to develop clear characteristics of a uniform standby tariff methodology to present to the Commission in reply comments in this docket. To the extent that this is achieved before a hearing in this docket, we recommend that the Commission adopt a process to formalize this methodology into the proposed utility standby tariffs.

MCA and Fresh Energy did not provide specific input or recommendations on the details of each proposed standby tariff in this docket. This does not mean we do not have input or recommendations. Rather, our organizations are waiting for utility responses to the attached Information Requests to inform our input and recommendations, which we will provide in reply comments in this docket.

Thank you for the opportunity to comment on this docket. Please contact us at the information below with any questions.

Sincerely,

/s/ Pat Sharkey

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