

2. The Applicant requests that the Board adopt this standard by offering net metering for on-site member generation under the circumstances and within the scope set forth herein in order to foster the development of small-scale, on-site member generation from renewable sources.

3. The Applicant has considered the purpose of conservation of energy for adoption and implementation of the Net Metering Standard. Upon information and belief, offering net metering service to Cass County Electric Cooperative (“CCEC”) members meets the purpose of conservation of energy supplied by electric utilities. Specifically, electric energy generated at the member’s premises may either offset electricity purchased from CCEC or be delivered back to CCEC, with the effect of reducing electricity purchased from Minnkota Power Cooperative (“MPC”). In other words, it is likely that net metering will permit electric utilities to produce less power by encouraging consumers to produce it while the total energy consumption remains constant.

4. The Applicant has considered the purpose of optimization of the efficiency of use of facilities and resources for adoption and implementation of the Net Metering Standard. Upon information and belief, offering net metering service to CCEC members will optimize the efficient use of facilities and resources provided that the electric energy generated at the member’s premises reduces load during system peaks and allows CCEC to avoid reliance on a high-priced market power. Unless the scope of net metering is limited, adoption of the net metering standard could negatively affect power quality,

stability, and reliability, which would not optimize the efficient use of facilities and resources. Specifically, intermittent on-site member generation of electricity may create power quality problems at the local level and lead to energy scheduling problems at the wholesale level if it comprises too large a share of the energy requirements of the utility system. Moreover, it is likely that additional utility system investments beyond the costs directly associated with net metering will be required to maintain system stability and reliability, while at the same time revenues will be decreased from those participating in the program. Accordingly, the Applicant requests that the net metering standard be adopted under the circumstances and within the scope set forth herein.

5. The Applicant has considered the purpose of equitable rates to electric consumers for adoption and implementation of the Net Metering Standard. Upon information and belief, adoption of the net metering standard could cause CCEC to pay more for on-site member generation than it pays to MPC for power supply with similar characteristics, resulting in rate inequity for members who do not have on-site generation and do not participate in net metering. To the extent that the on-site member generation has similar quality and availability as power supplied by MPC, it is reasonable to credit on-site member generation at rates similar to those paid to MPC. However, intermittent on-site member generation is less available than MPC's power supply and would likely require additional utility system investments beyond the costs directly associated with the net metering to accommodate the lack of availability. Accordingly, the Applicant

requests that the net metering standard be adopted under the circumstances and within the scope set forth herein.

6. Consistent with Cass County Electric Cooperative's commitment to the continued development of electricity generated from renewable sources and provided that adoption of the standard is not considered a violation of CCEC's all-requirements contract with MPC, the Applicant recommends that CCEC provide net metering to its members, according to policy and procedures implemented by CCEC. The Applicant recommends the following scope for net metering:

- A. Permit net metering from renewable electricity and recycled energy generated from the following sources:
 - 1. Solar, using the sun as the source of energy for producing electricity;
 - 2. Wind, using the wind as the source of energy for producing electricity;
 - 3. Biomass, using agricultural crops and agricultural wastes and residues, wood and wood wastes and residues, animal wastes, and landfill gas as the fuel to produce electricity;
 - 4. Geothermal, using energy contained in heat that continuously flows outward from the earth as the source of energy to produce electricity;

5. Hydrogen, provided that the hydrogen is generated from a source listed in this section;
 6. Recycled energy systems producing electricity from currently unused waste heat resulting from combustion or other processes into electricity and which do not use an additional combustion process. The term does not include any system whose primary purpose is the generation of electricity.
- B. Permit maximum generation capacity at a single member account up to 10 kW nameplate capacity.
 - C. Allow the cumulative maximum installed capacity on the CCEC system up to .1% of CCEC's system peak load based on the highest non-coincidental peak load from the previous three-year period.
 - C. Determine eligibility on a first-come, first-served basis.
 - E. Require compliance with CCEC's interconnection standards and policies for all on-site member generation.
 - F. Require participating members to pay costs associated with metering and interconnection, including but not limited to the cost of the meter, installation, and any other fees associated with the program.
 - G. Explore MPC's interest in purchasing qualifying excess energy at the rate set for renewable purchases under CCEC's all-requirements

contract, subject to terms and conditions agreed to by MPC and CCEC. Alternatively, the Applicant recommends CCEC purchase qualifying excess energy from participating members at CCEC's avoided cost.

II. FUEL SOURCE DIVERSITY AND FOSSIL FUEL GENERATION EFFICIENCY [16 U.S.C. § 2621(d)(12)-(13)]

7. The Fuel Source Diversity Standard requires consideration of development of a plan to minimize dependence on one fuel source and to ensure that the electric energy the utility sells to consumers is generated using a diverse range of fuels and technologies, including renewable technologies. See 16 U.S.C. § 2621(d)(12).

8. The Fossil Fuel Generation Efficiency Standard requires consideration of development and implementation of a ten-year plan to increase the efficiency of the utility's fossil fuel generation. See 16 U.S.C. § 2621(d)(13).

9. For the reasons stated, the Applicant does not recommend adoption of the Fuel Source Diversity Standard or the Fossil Fuel Generation Efficiency Standard.

10. Cass County Electric Cooperative has an all-requirements contract with MPC, under which CCEC is required to purchase all its wholesale energy from MPC. CCEC owns no generation sources itself, with the exception of small diesel generators used only for emergency purposes. As a distribution-only cooperative, CCEC has no opportunities for increasing fuel source diversity for electricity generation or for increasing the efficiency of its fossil fuel generation, as it has none. Accordingly,

PURPA's purposes would not be promoted by CCEC's adoption of the Fuel Source Diversity Standard or the Fossil Fuel Generation Efficiency Standard because, as a distribution-only cooperative, there is no opportunity to implement them.

11. Notwithstanding CCEC's status as a distribution-only cooperative, the Applicant encourages continued support of fuel source diversity, as demonstrated by CCEC in the past. For example, as a consumer, CCEC has achieved fuel source diversity for its motor vehicle fleet, requiring all new passenger vehicles and light trucks to have flex-fuel engines and to use E85 fuel, and requiring its diesel truck fleet to use B2 fuel when available. Moreover, the Board has endorsed by resolution dated May 30, 2006, MPC's 2006 Integrated Resource Plan, which addresses alternatives for fuel source diversity and a fifteen-year resource plan, including the efficient use of fossil fuel generation.

III. TIME-BASED METERING AND COMMUNICATIONS (SMART METERING) [16 U.S.C. § 2621(d)(14)]

12. The Time-based Metering and Communications Standard, otherwise known as "smart metering," requires consideration of offering and providing a time-based rate schedule to each of the utilities' customer classes and to individual customers upon customer request. Under a time-based rate schedule, the rate charged varies during different time periods and reflects the variance, if any, in the utility's costs of generating and purchasing electricity at the wholesale level. It enables the electric consumer to manage energy use and cost through advanced metering and communications technology.

Under this standard, the electric utility provides each customer requesting a time-based rate with a time-based meter capable of enabling the utility and customer to offer and receive such rate, respectively. See 16 U.S.C. § 2621(d)(14)(a).

13. The Applicant recommends adoption of the Time-based Metering and Communications Standard by continuing to offer the Incremental Pricing Program (“IPP”) to its members. IPP provides the member signals for three levels of time-responsive electricity pricing and prices the electricity purchased by the member during each level. This is available to large commercial, irrigation, and grain conditioning rate classes.

In addition, the Applicant recommends continuation of three other programs that, while not technically time-based metering, accomplish the same purpose. Those being the following:

- A. Dual heating program, which consists of a combination of electric heating and either fossil fuel heating or stored heat that allows the electric heating system to be subject to utility control in response to utility system capacity and wholesale market pricing conditions. This program is available to all member classes.
- B. Controlled water heating program, which consists of an electric water heating system with hot water storage capability allowing the water heating system to be subject to utility control in response to

utility system capacity and wholesale market pricing conditions.

This program is available to all member classes.

- C. Controlled air conditioning, which consists of a residential air conditioning system subject to on/off cycling through utility control in response to utility system capacity and wholesale market pricing conditions. This is available to residential member classes.

14. Time-based metering, for the purposes of these programs requires the use of a utility-grade meter capable of recording electricity-use data for intervals of not less than one hour and storing this data within the meter for a period of not less than 35 days or, alternatively, a utility-grade meter capable of recording electricity use for a device or group of devices that qualify for CCEC's energy management programs and are subject to automated control in response to utility system capacity and wholesale market pricing conditions.

15. The Applicant has considered the purpose of conservation of energy for adoption and implementation of the Time-based Metering and Communications Standard. In essence, time-based metering is technology that allows for the time-shifting of energy use. While time-shifting of energy use is potentially beneficial for other purposes, it does not promote conservation of energy.

16. The Applicant has considered the purpose of optimization of the efficiency of use of facilities and resources for adoption and implementation of the Time-based

Metering and Communications Standard. The technology of time-based metering enables an electric utility to track a member's energy use profile over time and provide incentive for time-shifting of energy use through discounted pricing scenarios. The ability to encourage members to time-shift energy use to better match generation capability and wholesale market price signals optimizes efficiencies and resources for both CCEC and the participating member. Accordingly, to the extent time-based metering causes members to appropriately time-shift energy use, and to the extent cost savings exceeds the costs of the required metering technology and administration, adoption of the Time-based Metering and Communications Standard meets this purpose.

17. The Applicant has considered the purpose of equitable rates for electric consumers for adoption and implementation of the Time-based Metering and Communications Standard. Generally, time-based metering is more expensive technology and involves higher administrative costs than typical watt-hour and demand metering, particularly with respect to data collection and management. However, to the extent the additional costs are allocated only to those rate classes that require time-based metering and the attendant administrative activities, time-based metering meets this purpose.

IV. INTERCONNECTION [16 U.S.C. § 2621(d)(15)]

18. The Interconnection Standard requires consideration of making interconnection services available, upon request, to any electric consumer that the electric utility serves. Interconnection service is service in which an on-site generating facility on

the consumer's premises is connected to the local distribution facilities. See 16 U.S.C. § 2621(d)(15).

19. CCEC has considerable experience with distributed generation interconnection and has developed comprehensive and effective standards and procedures. Accordingly, the Applicant recommends that the Interconnection Standard be adopted by continuing CCEC's policy governing interconnection for generation systems, as implemented by procedures.

20. The Applicant has considered the purpose of conservation of energy for adoption and implementation of the Interconnection Standard. As with the Net Metering Standard, implementation of the Interconnection Standard meets the purpose of conservation of energy in that electric energy generated at the member's premises may either offset electricity purchased from CCEC, or be delivered back to CCEC, with the effect of reducing electricity purchased from MPC.

21. The Applicant has considered the purpose of optimization of the efficiency of use of facilities and resources for adoption and implementation of the Interconnection Standard. As with net metering, a distributed generation interconnection at the member's premises is an opportunity for demand-side management of system load and an additional potential source of system capacity, which could optimize the efficient use of facilities and resources. On the other hand, intermittent on-site member generation of electricity may create power quality problems at the local level and lead to energy scheduling

problems at the wholesale level if it comprises too large a share of the energy requirements of the utility system. Moreover, it is possible that additional utility system investments beyond the costs directly associated with distributed generation interconnection will be required to maintain system stability and reliability. Accordingly, the Applicant requests that the Interconnection Standard be adopted consistent with CCEC's existing policy and procedures.

22. The Applicant has considered the purpose of equitable rates to electric consumers for adoption and implementation of the Interconnection Standard. CCEC has considerable experience with distributed generation interconnection and has developed appropriate rates for members with such an interconnection, ensuring overall equitable rates for electric consumers. Adopting the Interconnection Standard, consistent with CCEC's policy and procedures, meets this purpose.

WHEREFORE, the Applicant requests that its positions as set forth herein be adopted by the Board.

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