

March 20, 2003

Mr. Burl Haar, Executive Secretary  
Minnesota Public Utilities Commission  
121 7<sup>th</sup> Place East, Suite 350  
St. Paul, MN 55101-2147

**Subject: Comments on Report on Distributed Generation Technical Standards and Tariffs Submitted to the Minnesota Public Utilities Commission by the Minnesota Department of Commerce Docket No. E-999/CI-01-1023**

Dear Mr. Haar:

On June 19, 2002, the Minnesota Public Utilities Commission (MPUC or Commission) issued its Order Organizing Work Groups and Setting Procedural Schedule in the Matter of Establishing Generic Standards for Utility Tariffs for Interconnection and Operation of Distributed Generation Facilities. This Order directed the Minnesota Department of Commerce (Department or DOC) to establish work groups to propose technical standards and rate standards governing interconnection of distributed generation facilities with utility electric distribution systems. On February 3, 2003, the Department issued its Report on Distributed Generation Technical Standards and Tariffs summarizing the results of the work groups, including independent recommendations from the Department. On February 18, 2003, the Commission issued a Notice of Comment Periods in this matter.

Following are the consolidated comments of Connexus Energy (Ramsey, Minnesota), East Central Energy (Braham, Minnesota), Minnesota Valley Electric Cooperative (Jordan, Minnesota) and Wright-Hennepin Cooperative Electric Association (Rockford, Minnesota). These four electric distribution cooperatives will be referred to collectively as Cooperatives.

### **Background**

The Minnesota Energy Security and Reliability Act, passed by the 2001 Minnesota Legislature, directed the implementation of a number of provisions regarding electric utility system safety, reliability and service quality. Among these provisions, Article 3 of this Act deals with the interconnection of on-site distributed generation. Specifically, Subdivision 1 of Article 3 states that "the purpose of this section is to:

1. Establish the terms and conditions that govern the interconnection and parallel operation of on-site distributed generation;
2. To provide cost savings and reliability benefits to customers;
3. To establish technical requirements that will promote the safe and reliable parallel operation of on-site distributed generation resources;

4. To enhance both reliability of electric service and economic efficiency in the production and consumption of electricity; and
5. To promote the use of distributed resources in order to provide electric system benefits during periods of capacity constraints.”

Subdivision 2 of Article 3 directs the Commission to establish, by order, generic standards for utility tariffs for the interconnection and parallel operation of distributed generation. At a minimum, these tariff standards must:

To the extent possible, be consistent with industry and other federal and state operational and safety standards;

2. Provide for the low cost, safe and standardize interconnection of facilities;
3. Take into account differing system requirements and hardware, as well as the overall demand load requirements of individual utilities;
4. Allow for reasonable terms and conditions, consistent with the cost of operating characteristics of the various technologies, so that a utility can reasonably be assured of the reliable, safe, and efficient operation of the interconnected equipment;
5. Establish: i) a standard interconnection agreement that sets forth the contractual conditions under which a company and a customer agree that one or more facilities may be interconnected with a company’s utility system; and ii) a standard application for interconnection and parallel operation with the utility system.

While municipal and cooperative electric utilities are not regulated by the Minnesota Public Utilities Commission (with the exception of Dakota Electric Association), this Act does require that such utilities must adopt a distributed generation tariff that addresses the issues included in the Commission’s Order in this matter. With this statutory requirement in mind, the Cooperatives offer the following comments in the above-referenced docket. We have limited our comments to major issues where we have either questions or concerns.

### **Cooperative Comments**

The Cooperative comments will address the areas of qualifications, threshold for standby charges and distribution credits.

#### Qualifications

The Report on Distributed Generation Technical Standards and Tariffs summarizes four qualifications that were supported as a general consensus among the Rate Work Group. The first qualification states “The DG facility must be an operable, permanently installed or mobile generation facility and shall be owned by the customer receiving retail electric service from the company at the same site.” The Cooperatives have two observations regarding this qualification. First, we believe the definition or understanding of what a customer is should be clarified. While this qualification indicates that the customer will be “receiving retail

electric service from the company at the same site” we are uncertain as to whether such retail electric service could simply be incidental to this site. That is, will the DG facility be installed to primarily meet the load requirements of the customer or will the DG facility be significantly larger than the customer load with the primary intent of selling power to the utility? The size of customer load compared to generation load and potential sales is important since it could have a direct impact on the required capacity of the distribution system. This, in turn, could impact the adequacy of existing facilities and the need for installing new distribution facilities including substation capacity to serve these DG customers. The second question concerning this qualification deals with DG ownership. This qualification indicates that the DG facility should be owned by the customer. The Cooperatives believe that there are broad ownership possibilities for DG facilities beyond strict ownership by the customer. Accordingly, we suggest that this qualification acknowledge ownership beyond direct ownership by the customer.

The second qualification summarized in the DG report deals with “must buy” situations and states that “the utility must buy all the energy supplied by the DG customer that sells power under the tariffs to be developed.” This must buy requirement raises a concern for the Cooperatives. The Cooperatives are under contract to purchase all electric requirements from our wholesale power supplier, Great River Energy. With the exception of power purchased from co-generation and small power production facilities (see Minnesota Rules, Chapter 7835) the Cooperatives’ ability to purchase such DG power is contractually prohibited. We note, however, that we will work with Great River Energy to facilitate such purchases but any such purchase decisions will ultimately be determined by Great River Energy.

The fourth qualification deals with transactions outside the scope of the DG tariff. Specifically, this qualification states that “DG owners and utilities may pursue reasonable transactions outside the DG tariff. However, such transactions are beyond the scope of the work group.” The Cooperatives note that the September 18, 2002, minutes from the DG Rate Work Group meeting indicates that “The issue was raised whether this group is discussing sales of power from distributed generation to the wholesale market in general (i.e., selling power to entities other than the electric utility of which they are a customer). The Department clarified that the scope of the Work Group, as indicated in the Commission’s June 19, 2002 Order, is focused on two aspects of distributed generation: utilities providing interconnection and backup service to DG customers, and utilities buying power services from DG customers.” The Cooperatives concur with this scope of the DG tariff. Specifically, utilities will not be required to facilitate wholesale market transactions. Instead, DG facilities seeking such wholesale transactions can pursue such efforts as an exempt wholesale generator.

### Non-firm Standby Service

The report indicates that the customer can choose whether or not they want to purchase firm standby power. The majority of our customers are residential or commercial accounts which have the expectation of firm power. We are concerned that these customers may choose non-firm to economize while at the same time hoping that the utility will have low cost backup power available at all times. Should this happen, customers will be upset when power is not available, or alternatively, if power is available, it may result in cross-subsidies. To prevent such problems, we suggest that consideration be given to:

- 1) Establishment of criteria that customers need to meet before they can take non-firm standby power.
- 2) When non-firm standby customers rely on utility power during an outage of their facilities, the price of the power should be such that it will not result in other customers subsidizing the replacement power.

### Threshold for Standby Charges

The Report on Distributed Generation Technical Standards and Tariffs indicates that the Rate Work Group did not reach a consensus on a threshold below which standby charges would not be applied for customers with distributed generation facilities. However, the Department recommends that DG facilities of 100 kW or less be exempted from paying any standby charges. This threshold for exempting DG facilities from paying standby charges concerns the Cooperatives. The Department accurately points out that "on pure economic principals, the 100 kW exemption is not justified." While the Cooperatives appreciate the Departments attempt to use this threshold to "encourage" the installation of DG facilities in Minnesota, we are concerned that this proposal will have unexpected financial impacts on other electric customers. Exempting such DG facilities from standby charges means that the utility would not collect any distribution revenue for plant investment required to provide standby service to these customers. A 100 kW threshold poses concerns for the Cooperatives especially if new technologies such as fuel cells become more common place in the market. In such cases, utilities could be faced with installing distribution facilities capable of providing service to customers and yet receive no distribution revenue to pay for these plant investments and associated operation and maintenance expenses. Instead, all other remaining customers would be forced to pay for these costs. This could pose a significant financial hardship on other customers and hence we do not recommend an exemption threshold.

Beyond the matter of establishing a threshold for exempting standby charges, the Cooperatives believe that the Commission should also consider and address potential market manipulation by small distributed generation facilities. Specifically, the Cooperatives have a concern that certain distributed generation facilities could be intentionally turned off at times when their fuel costs are high. This, in turn, could result in unexpected cost shifting to electric utilities that are required to provide standby services. For example, fuel cells powered by natural gas could intentionally be turned off on the coldest days in winter when natural gas prices are spiking. Such systematic gaming could require electric utilities to incur higher costs at the time of electric winter peaking conditions. Given this concern, the Commission may wish to consider penalties or other provisions to avoid such systematic gaming or market manipulation.

### Distribution Credits

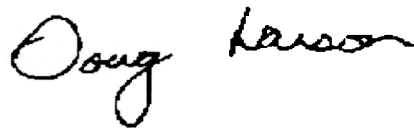
The Cooperatives appreciate the interest by potential DG customers in receiving distribution credits. This is a matter that the Cooperatives have already considered for various DG applications on our systems. In our experience, we have determined that the benefit of DG facilities does not generally impact the distribution system until such facilities reach a size of at least one megawatt. Accordingly, the Cooperatives recommend that if distribution credits are pursued, the Commission consider establishing a capacity threshold (e.g., one megawatt) or a specified percentage of distribution substation capacity before such distribution credits would be explored further. Establishing such minimum thresholds could provide a more realistic expectation for potential DG customers and would reduce unnecessary study and evaluation cost for smaller installations. Also, just meeting the threshold would not mean that a distribution credit would be received. The credit would have to be justified on avoided distribution costs, if any. Finally, we note that any potential distribution credits should only be available to DG facilities that are dispatchable or operating during peak distribution system load conditions.

The report suggested publishing information on the internet that would infer "weak areas" of the distribution system. We do not believe information about critical public infrastructure should be put on the internet due to security reasons.

### **Conclusion**

The Cooperatives appreciate the opportunity to submit comments on this important matter. We believe that distributed generation holds the promise to provide important benefits to our members and distribution systems. We look forward to further Commission developments in this matter and our ultimate implementation of appropriate DG Interconnection Standards and Tariffs in compliance with the provisions the Minnesota Energy Security and Reliability Act. If you or your staff has any questions regarding these comments, please me at 763-755-5122.

Sincerely,



Douglas R. Larson, Vice president  
Power System Engineering, Inc.  
On behalf of  
Connexus Energy  
East Central Energy  
Minnesota Valley Electric Cooperative  
Wright-Hennepin Cooperative Electric Association

STATE OF MINNESOTA

SS

COUNTY OF ANOKA

AFFIDAVIT OF SERVICE

I, Joyce Lubbesmeyer, being first duly sworn, deposes and says:

That on the 20<sup>st</sup> day of March 2003 I served the attached Comments on Report on Distributed Generation Technical Standards and Tariffs Submitted to the Minnesota Public Utilities Commission by the Minnesota Department of Commerce.

Docket No. E999/CI-01-1023

X by depositing in the United States Mail at the City of Blaine, a true and correct copy thereof, properly enveloped with postage prepaid

by personal service

by delivery service

by express mail

to all persons at the addresses on the attached list:

\_\_\_\_\_  
Joyce Lubbesmeyer

Subscribed and sworn to before me  
this 20<sup>st</sup> of March 2003.

\_\_\_\_\_  
Shelley J. Almeida

In the Matter of All Electric  
Companies Establishing Generic Standards  
for Utility Tariffs for 1 Service List  
Docket No. E-999/CI-01-1023

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