

STATE OF MINNESOTA
BEFORE THE
MINNESOTA PUBLIC UTILITIES COMMISSION

LeRoy Koppendraye	Chair
Gregory Scott	Commissioner
Ellen Gavin	Commissioner
Phyllis Reha	Commissioner
Marshall Johnson	Commissioner

In the Matter of Establishing Generic Standards
for Utility Tariffs for Interconnection and Operation
of Distributed Generation Facilities Under
MN Law 2001, Chapter 212

Docket 999-CI-01-1023

**COMMENTS OF
HENNEPIN COUNTY**

I. INTRODUCTION

A. Procedural Background

MN Laws 2001, Chapter 212 (codified in Minn. Stat. § 216B.1611) directed the Minnesota Public Utilities Commission (Commission) to initiate proceedings to establish generic standards for utility tariffs for interconnection and parallel operation of distributed generation fueled by natural gas or renewable fuel, or another similarly clean fuel or combination of fuels of no more than ten (10) MW of interconnection capacity. On August 20, 2001, the Commission issued an Order initiating these proceedings to adopt generic standards for distributed generation. The Commission established a schedule for Initial Comments and Reply Comments. Following the filing of Comments by interested parties, the Commission, by Order dated June 19, 2002,

directed the Minnesota Department of Commerce (Department) to organize and lead a Technical Work Group and Rate Work Group to facilitate the development of these generic standards.

The Technical Work Group was charged with developing the technical requirements for interconnection of the distributed generation equipment and facilities with the utilities distribution and transmission system. The Rate Work Group was charged with developing guidelines for utility services necessary to support distributed generation and ratemaking principles governing the rates charged for these services, as well as for the rates to be paid by the utilities for the electric output from distributed generations.

Both Work Groups were convened and have met over the past seven months. On February 3, 2003, the Department filed its Report on Distributed Generation Technical Standards and Tariffs (Department Report). The Department's Report addresses the work of both the Technical and Rate Work Groups, and presents recommendations and proposed guidelines. On February 18, 2003, the Commission issued a notice and schedule for the filing of Comments regarding the Department's Report. Comments are to be filed by Friday, February 21, 2003, and Reply Comments by April 4, 2003.

B. Hennepin County Facilities and Operations

Hennepin County has an estimated population of 1.1 million, over a quarter of the total population of the State of Minnesota. The County provides a variety of public services, including human services, health care services, public safety and judiciary services, library services, maintenance and construction of highways, administration of property tax assessment, collection and distribution for local governments, a comprehensive solid waste management system, hazardous waste disposal, and the issuance and oversight of various licenses. In providing these services to its residents, Hennepin County owns and operates many different

types of facilities and manages different types of physical plant operations. Some of the County's facilities provide critical services, such as hospitals and criminal justice facilities, where reliable energy is essential. Hennepin County facilities are served by multiple electric and natural gas suppliers. The County spends over \$6 million on electric service, and \$2.4 million for natural gas.

The use of distributed generation to support the functions of public institutions and regional governments has been the focus of considerable attention in recent years. This is primarily due to economics and changes in the energy industry. Institutional consumers are reassessing their energy supply options, and developing new strategies to enhance reliability, reduce costs, and meet energy needs in a more environmental responsible manner.¹

Hennepin County currently has thirty-seven (37) diesel engine generators installed in fourteen (14) separate facilities for emergency back-up power. Three of these facilities use the generators to control peak electric demand.² Hennepin County recently commissioned an engineering analysis to identify additional opportunities for development of distributed generation within the County's facilities and operations. A Report was issued which identified the opportunity for installation of a gas turbine at the Hennepin County Energy Center, with combined heat and power facilities. The Report also recommended implementing pilot projects using microturbine and fuel cell technologies at the Hennepin County Medical Center, Ridgedale Service Center, Southdale Service Center and Library and County Home School.

Hennepin County is also a member of the Metropolitan County Energy Task Force (Task Force). The Task Force was established in 1999 and consists of County Commissioners from

¹ Distributed Generation Study and Recommended Pilot Program prepared by Sebesta Blomberg & Associates, June 2001 (SB&A Report).

² SB&A Report.

each of the seven participating metropolitan counties. Since its inception, the Task Force has placed the development of clean efficient distributed generation as a priority within its annual workplans. The Task Force recognized the significant environmental and efficiency benefits associated the newly emerging generation technologies, and the benefits associated with relieving congested transmission and distribution systems. Most recently, the Task Force has initiated a comprehensive metropolitan-wide energy initiative which is intended to identify conservation and distributed generation opportunities with county facilities and operations.

Hennepin County intervened in these proceedings because of its interest in developing distributed generation. Participating in this proceeding requires considerable resources due to the complexity of the technical issues and the issues associated with developing fair and reasonable rates for utility services supporting distributed generation. For this reason, Hennepin County worked closely with the Distributed Generation Coalition, which included organizations representing a wide range of interests. Hennepin County joins in the Comments of the Distributed Generation Coalition and supports the positions set forth in their Comments. Hennepin County also independently files the following Comments regarding matters not directly addressed in the Comments of the Coalition.

II. TECHNIAL STANDARDS

A. Technical Requirements

The Technical Work Group identified three areas that needed to be addressed in order to remove the present barriers to developing distributing generation, and to adopt generic standards which will actually facilitate its development. These three areas include (1) technical electrical interconnection requirements, (2) standard procedures, and (3) standard agreement. In terms of technical requirements, the Department submitted Proposed Requirements for Interconnection of

Distributed Generation. Department's Report at 2-3. In terms of standard procedures and standard interconnection agreements, the Department has recommended that the Commission continue the work of the Technical Work Group to allow the review of the outcome of current rulemaking proceedings before the Federal Energy Regulatory Commission (FERC). The purpose of FERC rulemaking proceedings is to provide for standard procedures and agreements for distributed generation of twenty (20) MW or less. Department's Report at 3-4.

Hennepin County commends the Department on the substantial effort that went into its Proposed Requirements for Interconnection of Distributed Generation. These requirements appear to be technically sound and consistent with national and state standards. Hennepin County also supports the Department's recommendation that the Technical Work Group continue to address the standard procedures for interconnection and the standard agreements. The Commission can certainly benefit the work already completed by FERC, the International Electrical and Electronics Engineers, Texas and other states in establishing Minnesota's generic standards. The Commission must, however, consider the unique circumstances and conditions associated with Minnesota utilities and consumers, and the policy goals and objectives that have been adopted by the Minnesota Legislature.

B. Standard Procedures and Interconnection Agreement

The legislative charge to the Commission is to adopt generic standards which will eliminate unnecessary barriers, and which will actually facilitate the development of distributed generation. The procedures established for interconnection will be important in this regard. Unduly complicated procedures and requirements will delay the development of distributed generation and increase costs. The fees charged by utilities, and the resulting costs to owners and developers, will be critical to the economics of the project. Fees must be reasonable, and

limited to the actual costs incurred by the utility to interconnection facilities. The timeframe for processing requests for interconnection will be important. The time it takes from the initial request for interconnection to entering into an interconnection agreement will be critical to the project schedule. Increased costs associated with delays may have a significant affect upon the projects economics.

Hennepin County envisions a standardized process, which will include a preliminary application for interconnection. Once the preliminary application is made by a owner or developer, the utility would provide an estimated cost for interconnecting the distributed generation unit with the utility's distribution and transmission system. The owner or developer could then make a preliminary judgment as to the economic feasibility of the project. If the project appears to be feasible, a more formal application process would lead to a more extensive examination and analysis of the equipment, construction and other technical requirements required for interconnection. Final cost estimates would then permit the owner or developer to once again reassess the economic feasibility of the project, and determine whether to enter into the standard interconnection agreement.

In addition to the standards procedures and process to be used for interconnection, the standard agreements will be important. It is absolutely imperative that the business risks be fairly allocated between the parties. Risks should be allocated to the party who is in the best position to actually control the events giving rise to the risks. Requirements imposed upon owners and developers of distributed generation should be reasonable, and consistent with the actual risk exposure to the utility. Owners and developers of distributed generation should not be subject to excessive and unnecessary business risk exposure. This will only result in a

curtailment in the development of distributed generation. Finally, these standard agreements must be simplified, clear and consistent with other agreements, tariffs, riders and service rules.

C. Consistency and Overlapping Provisions

As previously noted, there are a number of rules, guidelines and standards which are being developed for distributed generation. Xcel has filed its tariff incorporating the rates, standard procedures for interconnection, and standard interconnection agreements for distributed generation projects of less than two MW. FERC is developing their own rules regarding the standard procedures and standard agreements for distributed generation of twenty (20) MW or less. The Commission, in this proceeding, will establish standard procedures and standards interconnection agreements for distributed generation of ten (10) MW or less. It is imperative that there be consistency and coordination between rates, tariffs, riders, guidelines and standards that are established for the various types of distributed generation. The Commission must also address the jurisdictional issues associated with these potentially competing standards, and determine which standards apply to specific distributed generation projects.

Not only will an owner or developer be subject to applicable rates, tariff, riders and standard service rules, the owner or developer will be required to enter into an interconnection agreement, operating agreement and power purchase agreement. It will be important for the Commission to ensure that the terms and conditions used in applicable tariffs, riders and service rules which govern interconnection, be consistent with the terms and conditions in standard interconnection agreements. Likewise, it will be important for the terms and conditions in the various standard agreements to be consistent. Duplication and inconsistencies must be eliminated.

For example, if the owner of distributed generation project is selling the electric output to the local utility, there will be a power purchase agreement (PPA). Many standard PPAs used by utilities require general liability insurance with significant policy limits, even for smaller distributed generation projects. The owner or developer of a distributed generation project may also be required to enter into interconnection agreements, or operating agreements, which again, include insurance requirements, such as liability insurance, or errors and omissions insurance for the engineering and design firm. These insurance requirements need to have reasonable policy limits, and should not be too onerous for an owner or developer of distributed generation. Duplicate or overlapping insurance requirements between standard interconnection agreements and the PPA need to be eliminated.

The same is true of other requirements imposed within the various agreements required of owners and developers. The various provisions contained in these agreements will be inter-related, and must be carefully crafted to ensure coordination and consistency. Duplication and inconsistencies will only create barriers to the development of distributed generation. There will be many different contractual provisions, including provisions relating to force majeure, indemnification, rights and remedies of the parties in the event of default, dispute resolution and others. The burdens and obligations imposed under these various provisions need to be carefully examined to determine, collectively, whether these provisions are reasonable, or impose too great a burden upon owners and developers. Again, all of the terms used in these various agreements must be carefully defined and consistently used.

II. Rate Work Group

A. Department's Report

In terms of the Rate Work Group's efforts, the Department's Report attempts to organize the issues into those issues upon which there was general consensus, and those issues on which there was not a consensus. The Department's Report suggests that there was a consensus in terms of the issues associated interconnection availability, the qualifications of the distributed generation customer, the list of supply services necessary to support distributed generation, the rate setting principles for these services, and the rate setting principles for the price to be paid for energy and capacity purchased from the distributed generation customer. The Department's Reports indicates that those issues upon which no consensus was reached, included the calculation of avoided costs, standby rates and applicable credits. Department's Report at 5-6. In regard to the Department's recommendations and proposed guidelines, Hennepin County supports the positions set forth by the Distributed Generation Coalition in their Comments, and offers the following additional comments and recommendations.

B. Availability

Hennepin County agrees that interconnection should be made available to distributed generation customers whose generating unit operates in parallel with the utility's distribution system. Hennepin County, however, would suggest that any tariff providing for interconnection ensure that any distributed generation unit serving electric load during an emergency, which would otherwise be served by the utility, be required to have a certified transfer switch. The requirement for a certified transfer switch is simply to ensure safety and proper coordination of load, when a distributed generation unit is operating under emergency conditions, and when service from the local utility is restored following the emergency.

C. Ownership Qualifications

In Section III.B. 1., the Department's Report recommends that a distributed generation facility interconnecting with utilities distribution system must be owned by a customer receiving retail electric service from the utility. Department's Report at 6. This would be an unfortunate requirement given the changes in the energy industry, and the new opportunities that exist for development of distributed generation by non-utilities, or unregulated utility affiliates. A distributed generation customer may not have the capital necessary for the development of distributed generation capacity, or may not desire to invest capital funds in assets which are not core to the customer's business, or institutional operations. The current market is seeing an increasing interest by third parties in developing, financing, owning and operating distributed generation for utility customers which has resulted in new and creative business arrangements. The Commission should not adopt distributed generation generic standards which would in any way limit how business relationships are structured. The distributed generation generic standards adopted by the Commission should provide as much flexibility as possible with respect to the business relationships between the customer and the developer. This is necessary to maximize the economic benefits associated with distributed generation.

The Department's Report also suggests that a utility must buy all energy supplied by distributed generation customers, and that a customer should be limited to selling distributed generation energy to the utility, using all of the energy itself, or self generating for part of its needs and sell the remaining energy to the utility. Again, these are unnecessary restrictions limiting the business and economic opportunities for distributed generation. The Commission's generic standards must allow owners and developers of distributed generation to realize the best use of distributed generation and to maximize the economic benefits.

Utilities participating in the Rate Work Group suggested that only distributed generation projects which are Qualified Facilities under the Public Utilities Regulatory Policies Act can transport electric power across a utilities' distribution system for consumption by third parties. It was the position of these utility's that distributed generation projects which are not Qualified Facilities cannot access the utility's distribution system for sale to third parties. This would be an unfortunate requirement which would, again, limit distributed generation opportunities. All distributed generation projects, whether a Qualified Facility or not, should be able to access utility distribution systems and sell the electric output to the wholesale market. Indeed, the objective of the Midwest Independent System Operator is to create a transparent competitive wholesale market for electricity, that is free from undue influence exercised by utilities owning distribution and transmission facilities.

D. Calculation of Avoided Cost

As the Department's Report indicates, for the most part, there was a consensus among interested parties with respect to how avoided costs should be calculated. Department's Report at 7-9. Hennepin County generally agrees with the proxy unit method of calculating energy and capacity cost. The calculation of these costs should be as close to actual capital costs as possible, including construction, fuel and O&M costs associated with a new generating unit. To the extent possible, the calculation of these costs should be verified by the cost of new generation procured through competitive bidding.

E. Standby Service and Rates

Standby services can be critical to a distributed generation project. As the Department notes, standby services include scheduled and nonscheduled outages and supplemental power services. Department's Report at 9. The manner in which these services are structured and

delivered, and the rates and rate designs for these services, can be critical both from an operational and economic standpoint. Currently, many of the tariffs used for these services by utilities create barriers to the development of distributed generation. If the Commission is to adopt generic standards which foster the development of distributed generation, in accordance with legislative policy, the Commission must address the issues associated with standby services.

Hennepin County has a concern regarding the pricing of standby services offered by Xcel Energy. Under Xcel Energy Standby Service Tariff, a distributed generation customer pays a fixed reservation charge. This charge is paid so that Xcel Energy will have available capacity in the event of a forced outage of the distributed generation unit. By paying this fixed reservation charges, the distributed generation customer pays for this capacity. Under Xcel's Standby Service Tariff, however, distributed generation customers will be charged market rates for standby capacity and energy services provided during peak control periods. This is not appropriate. The standby customer should pay only the fixed reservation fee, whether standby capacity is provided during peak or nonpeak periods, along with a pre-determined capacity and energy usage charge when a customer exceeds a pre-determined load level. Additionally, the fixed reservation charged should not be based upon standby service capacity required of any individual distributed generation customer. Rather the utilities system should be viewed as whole. The reservation charge should be based upon the diversified capacity needs of all distributed generation customers on the utilities system.

Conclusion

Hennepin County would like to commend the Department of Commerce on the tremendous leadership it has shown in terms of conducting the meetings of the Work Groups and managing the input from all of the interested parties. Hennepin County would also commend

interested parties on their cooperation and all of the effort in assisting the Commission in establishing these generic standards for distributed generation. Hennepin County is particularly grateful the Distributed Generation Coalition for all of their efforts and the opportunity to work with these specific parties. While there may not be consensus on all of the issues, a tremendous amount of progress has been made in achieving the legislative policy goals and objectives. Hennepin County looks forward to continuing working with the Commission and interested parties, and in finalizing the generic standards for distributed generation.

Dated: March 21, 2003

By _____
Peter H. Grills
O'Neill, Grills & O'Neill, P.L.L.P.
W1750 First National Bank Building
332 Minnesota Street
St. Paul, MN 55101
Telephone No.: 651-298-8300
Fax No.: 651-298-1474