

**STATE OF MINNESOTA**  
**BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION**

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In the Matter of Establishing Generic Standards for Utility Tariffs for Interconnection and Operation of Distributed Generation Facilities under Minnesota Laws 2001, Chapter 212

DOCKET No.: E999/CI-01-1023

June 6, 2003

**RE: The DG Coalition Comments on the Phase II Report of the DG Technical Standards Workgroup**

**BACKGROUND**

On August 20, 2001, the Minnesota Public Utilities Commission (Commission) issued its Order Initiating Docket for the purpose of establishing generic standards for utility tariffs for interconnection and operation of distributed generation (“DG”) facilities. The Order was issued pursuant to a new law enacted in 2001 intended to obtain benefits of distributed resources by promoting their use (Minnesota Statute § 216B.1611).

On June 19, 2002 the Commission issued an Order for the formation of the collaborative Technical and Rates workgroups, headed by the Minnesota Department of Commerce, to draft documents and guidelines for the DG interconnection technical standards and tariffs.

On February 3, 2003 the Minnesota Department of Commerce filed a report of two workgroups convened to develop uniform guideline standards for DG. The workgroup report on DG tariffs was complete and final. The workgroup report on technical standards filed

proposed only technical requirements, and requested additional time to complete development of standard interconnection procedures and an agreement.

In its March 31, 2003 Notice of Revised Comments Schedule, the Commission set May 22, 2003 for the submittal of the completed Technical Standards workgroup report that includes the proposed sections on the interconnection procedures and agreement, and set June 6, 2003 for the submittal of the comments on the DG Technical Standards report.

On May 22, 2003 the Minnesota Department of Commerce submitted the Phase II Report of the DG Technical Standards – a completed DG interconnection technical standards report.

## **INTRODUCTION**

The following are the comments of the DG Coalition, a group of organizations representing a wide range of energy interests. The DG Coalition presents the consolidated view from representatives of environmental groups, distributed energy developers, renewable energy advocates, natural gas utilities, economic development interests, a large business association, and a county government. Individual groups signing on to these comments include: CenterPoint Energy Minnegasco, Hennepin County, Institute for Local Self-Reliance, Izaak Walton League of America - Midwest Office, Korridor Capital Investments LLC, Minnesota Chamber of Commerce, Prairie Gen, and The Minnesota Project.

We appreciate the opportunity to submit our comments. We also acknowledge the efforts of the Minnesota Department of Commerce (Department) for organizing the collaborative DG workgroups meetings and summarizing the outcome of the completed rates and technical sections in the Distributed Generation Technical Standards and Tariff Report and Phase II Technical Standards Report dated February 3, 2003 and May 22, 2003 respectively. We also recognize the efforts of the technical sub-workgroup for writing the Phase II Technical Standards report.

## COMMENTS ON PHASE II TECHNICAL STANDARDS REPORT

The Phase II Technical Standards Report (Phase II Report) outlines a detailed set of the DG interconnection standards for Minnesota. It addresses all of the technical issues pertinent to the DG interconnection including the procedures, requirements, and agreements. The document is almost complete except for the key contentious issues as outlined by the Department in Page 3 of the report. The DG Coalition believes the unresolved issues still pose significant barriers to apply the interconnection technical standards as outlined in the current form. Further enhancement to the document is crucial to mitigate the barriers and promote DG in Minnesota per the directive of the Minnesota Legislature.

Following is our attempt to highlights those unresolved technical issues with the recommended options for the Commission to consider in the decision process.

### **I. Engineering Studies**

Members of the DG Coalition believe that the proposed Minnesota Interconnection Standard Process is inadequate in dealing with "engineering studies". The process outlined in the Phase II Report leaves individuals and businesses who wish to interconnect a DG system wondering how long such a study will or could last, how much it will cost the customer, and ultimately what will result from such studies. Because of such uncertainty, we recommend that the Commission adopt language that creates a deadline for engineering studies and exempts some DG projects from engineering study fees.

Timelines and fee restrictions are not uncommon among other states, the national model, and proposed interconnection processes. Texas, New York, NARUC (model), Massachusetts (proposed) all include provisions that specify a timeline for engineering studies and/or allow some projects to be exempt from fees or exempt from studies<sup>1</sup>. Minnesota should join these states in limiting engineering studies timeline and exempt certain projects from fees.

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<sup>1</sup> Public Utilities Commission of Texas - Distributed Generation Interconnection Manual, May 1, 2002. Massachusetts Department of Telecommunications and Energy. Proposed Uniform Standards for Interconnecting Distributed Generation in Massachusetts, March 2003. National Association of Regulatory Utility Commissioners. Model Distributed Generation Procedures and Agreement, July 2002. New York State Public Service Commission. Standardized Interconnection Requirements, Application Process, Contract and

Minnesota Statutes (Minnesota Statute § 216B.1611) lays out the legislature's intent in ordering the Commission to establish a DG tariff and interconnection standards. The Legislature's intent is to standardize interconnections, require similar technical equipment as other states, and remove market barriers to interconnection, while protecting the integrity and safety functions of the electric distribution system.

Our proposal provides parameters on engineering studies including:

- Timelines for study completion and response to applicant

- Exemptions for some types of projects for engineering study fees

#### Study Timelines and Study Fees

The DG Coalition supports what the State of Texas established in its Distributed Generation Interconnection Manual - Public Utility Commission of Texas<sup>2</sup>. We propose amending the Department of Commerce's Phase II Report to reflect the Texas process related to the engineering studies and fees, specifically Steps 2 and 4 of the proposed Minnesota interconnection process.

We propose a process that allows utilities to study DG projects if needed, but sets deadlines for utilities to complete studies and inform applicants of the results. Our proposed language would allow utilities to conduct engineering studies on all proposed DG projects, but have four (4) weeks to complete studies for projects on non-networked systems, and six (6) weeks for projects proposed on a networked secondary.

At the four or six week deadline, a utility must inform the DG applicant that the proposed project is approved, approved with modifications, justification and cost estimates for any changes prescribed for the Area EPS system, or rejection of application with justification.

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Application Forms for New Distributed Generators, 300 kilovolt - ampres or Less, Connected in Parallel with Radial Distribution Lines. November 2002.

<sup>2</sup> Distributed Generation Interconnection Manual. Public Utility Commission of Texas. May 1, 2002. <http://www.puc.state.tx.us/electric/projects/21965/dgmanual.pdf>. Section 4 – TDU Analyses of DG Interconnection: It outlines the process and the engineering studies requirements.

In addition, we believe - as is the case in Texas - that certain projects should be exempt from paying study fees. This exemption is for projects that will likely have no significant impact on the distribution grid, and thus little need for an engineering study. Although the DOC Phase II Report outlines seven basic screening criteria in the Engineering Section (Page 4 of the Process - Attachment 1), it does not stipulate the exemption of the engineering study if these criteria are met. Therefore, adopting the Texas model allows the flexibility to conduct the engineering study while minimizing the excessive costs to the smaller DG customers.

Projects that meet all of the following criteria would be exempt from study fees:

- Proposed generator is not on a networked secondary distribution system, and;
- Proposed equipment is pre-certified, and;
- Proposed generator capacity is less than 500kW, and;
- Proposed generator will export less than 15% of the total load on a feeder, and;
- Proposed generator will not contribute more than 25% of the maximum potential short circuit current of the feeder.

In cases where a proposed project is located on a networked secondary, we propose exempting projects from study fees if the following apply:

- Proposed generating equipment is pre-certified by a nationally recognized testing organization, and;
- Aggregate generation capacity, including the proposed system, represents 25% or less of the total load on the network (based on most recent peak load demand),

and either

- Proposed DG has inverter-based protective functions, or
- Proposed DG rating is less than the load applicant's verifiable minimum load.

For projects that require an engineering study, fees should be reasonable and a pre-study estimate shall be provided to the applicant prior to initiating the study. The Department's proposed language in this area is acceptable. To the extent that the electric utilities do not meet the above timeline, there should be a burden of proof on the utilities to justify the extended timeline for the required engineering study.

Its important to reiterate that the DG Coalition proposal allows utilities to study any and every proposed project if a utility chooses to, but prescribes deadlines to keep projects moving forward expeditiously and fee exemptions for projects that do not require an in-depth engineering study.

## **II. Insurance Requirements**

The argument for the DG interconnection insurance requirements is two fold. The one deals with the amount of coverage needed for the DG project and the second is the imposed requirements that will impact the principal payments of the DG customer. Almost all facilities, commercial or residential, are covered with some form of liability coverage. Allowing for umbrella coverage and a self-insured clause in the interconnection agreement will make it easier to accept the proposed coverage levels.

However, the imposed insurance requirements, particularly the inclusion of the Area EPS Operator as an additional insured, could significantly impact the principal payments of the DG customer (Section XI.B on Page 8 of the Interconnection Agreement- Attachment 5). Currently, the only exemption to Section XI.B is for less than 40 kW residential DG facilities (Section XI.C) as outlined in the report. As long as the Point of Common Coupling is clearly defined, the liability coverage for an additional party, in this case an Area EPS Operator, is unwarranted.

Since there is complete lack of insurance claims information from DG projects around the country, the DG Coalition respectfully asks the Commission to remove Section XI.B from the DG insurance requirements section in order to mitigate the DG barriers and promote DG in Minnesota.

### **III. Operating and Maintenance Agreements**

The Operating and Maintenance agreements as outlined in the Phase II Report do not clearly define the requirements needed to decide when and how they will be executed (Exhibit D and E of the Attachment 5.). Currently, it is left in the Area EPS Operator's discretion to decide on requiring the agreements on case-by-case basis. Leaving the agreements requirements this vague will create confusion and delays.

In addition, these agreements are unnecessary depending on the mode of the DG system operation. The operating and maintenance agreements may be required when the DG is selling power to the grid, or it may be part of the electric utility dispatchable option. However, these agreements are unnecessary when the DG customer is primarily self-generating. In the self-generation mode, the only information needed periodically by the electric utility is related to an upkeep of the Point of Common Coupling, and this requirement can be easily accommodated by stating it as an information request clause within the Interconnection Agreement instead of executing two additional agreements.

Both of the above factors will impact the interconnection process, and will create time delay and unwarranted added costs to the DG customer. The DG Coalition recommends to the Commission that the Operating and Maintenance Agreements should not be made mandatory for the self-generation DG systems. In addition, the Commission should order the electric utilities to clearly define and outline the requirements, on when and how the agreements will be applicable, to prevent any delays and establish uniform standards in Minnesota. To the extent that the Commission adopts any operating and maintenance requirements, we recommend that these be rolled into the Interconnection Agreement as separate sections.

### **IV. Interconnection Agreement**

In addition to the Insurance requirements, there are other provisions in the interconnection agreement section (Attachment 5) of the Phase II Report that require further modification. The language seems one sided and leans in favor of the Area EPS. The following are the issues raised under the pertinent section of the Interconnection Agreement.

### Construction

The Section V.A of the Interconnection Agreement (Attachment 5) stipulates that the actual costs of the interconnection construction are still the responsibility of the Interconnection Customer although the electric utility may provide initial estimates in Step 5 of the Interconnection Process (Attachment 1), and it appears the customer will execute the Interconnection Agreement at this stage. It seems the customer is obligated to sign a binding agreement before knowing the actual costs. Although the last sentence in this section calls for actual costs to be justifiable, it does not provide enough protection against a cost overrun. The Area EPS must give a fixed cost to the DG Customer. The Area EPS should be responsible for any excess costs above what was provided to the DG Customer. Once the electric utility completes any required engineering study, it should be in the position of quoting the actual costs instead of an estimate in Exhibit B of the interconnection process. Ideally, the best solution would have been to define the prices in the standards if possible to avoid the risk of costs exposure to both parties.

### Responsibilities of the Parties

Although the first clause (Section 1.A) in the interconnection agreement provides for the customer to interconnect and operate, the following clause should be added under the Responsibility section since it explicitly states the responsibility: ‘The Area EPS and the Interconnection Customer agree to interconnect the Generating System interconnection, at the location described in Exhibit C in accordance with this Agreement.’

### Terms and Termination

There does not appear to be any recourse in the event the Area EPS Operator breaches the agreement. There should be a provision that the Interconnection Customer would be entitled to specific performance in the event the EPS Operator failed to live up to its obligation to interconnect the facilities.



### Operational Issues

F. Disconnection of the Unit: This provision seems a little open ended. The Area EPS Operator may disconnect the Generation System as a result of routine maintenance, repairs and modifications to the Area EPS. There should be an obligation upon the Area EPS Operator not to unreasonably interfere with the operation of the Generation System. The limitation on the recovery of damages also seems a little one sided. What, for instance, would happen if the Generation System was in breach of a Power Purchase Agreement due to the negligence of the Area EPS Operator? In addition, there should be a notice provided to the Interconnection Customer at least five business days prior to any routine maintenance, repair, and modification by the Area EPS Operator.

### Limitation of Liability

A. This indemnification provision is a little confusing. Normally, indemnification provisions provide for one party indemnifying the other party for acts of negligence. Here, however, this provision provides that a party shall indemnify the other party for claims "resulting from the party's performance of its obligations under this agreement, except to the extent that such damages, losses or claims were caused by the negligence or intentional acts of the other party." The agreement should make it clear that one party will indemnify the other party for claims arising out of acts of the party's negligence.

B. These limitations on damages provisions may be pretty standard in electric service agreements. Here, however, we have an Interconnection Customer who may have established a commercial relationship under which it is obligated to provide power. It would seem that if the Interconnection Customer was not able to meet its power purchase obligations through the sheer negligence of the Area EPS Operator, then there ought to be some recourse.

### Dispute Resolution

B. This section mandates mediation in the event of a dispute, and that in the event mediation fails, the matter may be brought to the Minnesota Public Utilities Commission. Is this an exclusive remedy? This agreement is a legal contract. Can a party commence an action to enforce the contract, or does this provision limit their ability to go to court? This should probably be made clear.

The mediation period of 90 days to resolve the dispute is excessive. This will add costs and unnecessary delays. The mediation period should be no longer than 45. In addition, the Commission should post the updated list of the state technical mediators on its website along with the other pertinent interconnection documents as suggested by the workgroup.

A dispute may arise at any point during the interconnection process whether it is related to response time, cost estimates, engineering studies, or a rejection. Although it is implied, the Phase II Report does not explicitly highlight the dispute resolution option for the DG customer to exercise when warranted. The DG Coalition recommends the addition of another clause within the dispute resolution section (Section X in Interconnection Agreement - Attachment 5) to clarify the agreement: ‘The dispute may arise from but not limited to response time, cost estimates, engineering studies, or a rejection.’

### Confidentiality

This section imposes an obligation not to disclose confidential information, but never defines confidential information. There ought to be some limits on what constitutes confidential information. We frequently see a provision requiring the person who claims confidential information to affirmatively identify what information is deemed confidential.

### **Other Issues**

#### 10 MW Limit:

The 1<sup>st</sup> paragraph – 2<sup>nd</sup> sentence in Introduction of the Phase II Report says "...rated less than 10 MW of total generation Nameplate Capacity,..." and should read "10MW or less".

This change is supported by MN statutes:

"216B.1611 Interconnection of on-site distributed generation. Subd. 2. Distributed generation; generic proceeding. (a) The commission shall initiate a proceeding within 30 days of July 1, 2001, to establish, by order, generic standards for utility tariffs for the interconnection and parallel operation of distributed generation fueled by natural gas or a renewable fuel, or another similarly clean fuel or combination of fuels of **no**

**more than ten megawatts** of interconnected capacity. At a minimum, these tariff standards must:"

#### Area EPS Generation Interconnection Coordinator

The language added in this section is unnecessary:

Each Area EPS Operator shall designate a Generation Interconnection Coordinator(s) and this person or persons shall provide a single point of contact for an Applicant's questions on this Generation Interconnection process. ~~Some Area EPS Operators may have several Generation Interconnection Coordinators assigned, due to the geographical size of their electrical service territory or the amount of interconnection applications. This Generation Interconnection Coordinator will typically not be able to directly answer or resolve all of the issues involved in the review and implementation of the interconnection process and standards, but shall be available to provide coordination assistance with the Applicant~~

#### Interconnection Process: Step 1 Application (by Applicant)

The interconnection application fee schedule for smaller projects should have a break at 40-kW rather than 20-kW. Minnesota Law contains provisions that encourage net metering for systems under 40-kW and this fee schedule would be an extension of that preference.

#### Interconnection Process: Utility Response time

The 15 day clock should never be reset to zero, it can stop and restart but not be reset. The queuing process is more applicable for the FERC process, and it does not apply to the Minnesota electric utilities.

#### Interconnection Process: Step 3 Go-No-Go Decision for Engineering Studies

Payments should be half up front, half when work is done.

#### Technical Requirement: Electrical Code Compliance

Instead of saying a specific draft of the IEEE 1547 we should refer to the latest version, the sentence should read, "...especially the latest version IEEE 1547..."

### Power Purchase Agreement:

The "separately executed power purchase agreement" must be streamlined and simplified. The fact there will be a DG Tariff in place that containing the pricing and terms means any power purchase agreement (PPA) should be simple and straightforward. Perhaps the Commission could establish a standard power purchase contract as part of the DG Tariff. If net metering customers are currently required to sign a PPA, that could be a starting point in designing a standard DG PPA. In addition, the PPA should not duplicate or contradict terms and conditions in the interconnection agreement. The interconnection agreement can be incorporated into the PPA as a reference.

### Streamlining and editing the document:

- A table of contents should be added to the process document.
- The General Information section should contain only a summary of the key points instead of detailed information. The repetition of the detailed information in the General Information section and later in the document will create confusion to the DG customer.
- The Pre-certification and the engineering section should be moved to the Step 2 of the Process. Only summary portions should be highlighted in the General Information Section.
- The defined terms should be consistent in all documents. The term Distributed Generation is not defined in the A) Definitions section yet it is used fairly often throughout Attachment 2. The term Distributed Generation is used within the definition iii) Generation System. We propose that all instances of Distributed Generation be replaced by the term Generation System.
- The entire Interconnection tariffs and technical standard documents with any applicable information should be placed on the Commission's website in order to achieve a quick access capability for the DG customer.
- In Attachment 2 – under the Generation Metering, Monitoring and Control heading, 2<sup>nd</sup> paragraph, second sentence: the word "wave" should be "waive".
- In Attachment 5 – under Section XI.C: the word “workmanlike” should be changed to “efficient”.

## **Conclusion**

The DG Coalition respectfully requests that the Commission take strong actions in this docket to promote DG development in Minnesota, through adopting the recommendations we have outlined above. We look forward to continued participation in the development of DG policy.

Please contact the DG Coalition representatives if you or your staffs have any questions:

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