

Minnesota Public Utilities Commission

Staff Briefing Papers

Meeting Date: **September 29, 2005** Agenda Item # _____

Company(s): Minnesota Power

Docket No. E015/M-04-2030

In the Matter of the Petition of Minnesota Power for Approval of Rider for Distributed Generation Service and Rider for Standby Services

Issue(s): **A.** Should Minnesota Power's Distributed Generation Rider and Standby Services Rider be Approved, Modified or Rejected?

B. What other requirements if any should be established in this proceeding?

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Relevant Documents

Commission Order Establishing Standards (E999/CI-01-1023) Sept. 28, 2004(#132)
MP Petition to Approve Riders December 27, 2004(#1)
DG Coalition Comments May 25, 2005(#18)
DOC Comments June 30, 2005(#22)
MP Reply Comments August 4, 2005(#29)

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Statutory Background

On August 1, 2001, Minn. Stat. § 216B.1611 became effective. The Commission was directed under this statute to implement a proceeding with the following purposes: 1) establish the terms and conditions that govern interconnection and parallel operation of on-site, distributed generation; 2) provide cost savings and reliability benefits to customers; 3) establish technical requirements that will promote the safe and reliable parallel operation of on-site distributed generation resources; 4) enhance both the reliability of electric service and economic efficiency in the production and consumption of electricity ; and 5) promote the use of distributed resources in order to provide electric system benefits during periods of capacity constraints.¹

Generic Distributed Generation Proceeding

On August 20, 2001, the Commission initiated a generic proceeding in Docket No. E999/CI-01-1023 to implement the requirement of Minn. Stat. § 216B.1611. The Commission organized work groups under the guidance of the DOC to develop guidelines for technical standards and tariffs and also established a procedural schedule.

On February 3, 2003, DOC filed a report and supplemented it on February 14 which identified topics and guidelines for establishing technical standards and tariffs. Participants involved in the development of the report filed comments agreeing in part and disagreeing in part with the report's recommendations.

On May 22, 2003, the DOC filed a second report on technical standards for permitting distributed generators to connect to a utility's network. Comments from numerous parties were filed. The Parties filed proposals for the resolution of technical issues.

The Commission considered all of the work groups reports and comments in July 2004.

On September 28, 2004, the Commission issued its *Order Establishing Standards*² after consideration of all the work group reports and comments. In that order, the Commission amended and adopted a joint proposal that established process and technical requirements for interconnecting generators with no more than 10 MW of capacity. The Commission also amended and adopted a Rate Work Group report that established the financial relationship between an electric utility and a qualified generator with no more than 10 MW of capacity.

¹Minn. Stat. §216B.1611, Subd. 1

²Docket No. E999/CI-01-1023

General Description of Distributed Generation Tariff Requirements

The Commission, in its September 28, 2004 Order in Docket No. E999/CI-01-1023, adopted the majority of recommendations of two workgroups that were formed to develop guidelines for the DG tariff requirements. The workgroups included numerous interested parties including electric utilities, various organizations that promote wind and solar generation, environmental organizations, and the DOC. The first workgroup developed recommendations on technical requirements for interconnecting with the electric grid. The second workgroup was the Rate Work Group that provided guidelines for the financial relationship between an electric utility and a qualified generator.

In the September 28, 2004 *Order Establishing Standards*, the Commission adopted tariff guidelines that are contained in the following documents.

- Interconnection Process for Distributed Generation Systems
- Distributed Generation Interconnection Requirements
- Generation Interconnection Application
- Engineering Data Submittal
- Interconnection Agreement
- Guidelines for Establishing the Terms of the Financial Relationship

In accordance with Minn. Stat. § 216B.1611, Subd. 3, DG Tariffs were required to be filed 90 days after the Commission established its guidelines. The tariffs would apply to interconnecting DG generators with no more than 10 MW of capacity.

MP Distributed Generation Filing

On December 27, 2004, Minnesota Power (MP) filed a rider for distributed generation and a rider for standby service in this Docket.

On May 25, 2005, the Distributed Generation (DG) Coalition filed initial comments on MP's riders for distributed generation and standby service.

On June 30, 2005, DOC filed initial comments on MP's riders for distributed generation and standby service.

On August 4, 2005, MP filed reply comments.

Issue A. Should MP's Distributed Generation Tariff be Approved, Modified or Rejected?

Commission Options

1. Approve the distributed generation tariff as filed by MP.
2. Approve the riders for distributed generation and standby service with one or more modifications as discussed in the following tables (issue items 1 through 13). Require MP to file revised tariff riders complying with the Commission's modifications within 30 days of the date of the Commission's Order and allow parties 10 days to file comments on MP's compliance filing.
3. Reject MP's riders for distributed generation and standby service filing.

Staff Note

The Commission should be aware that four other utilities have filed DG tariffs, which are pending Commission review and approval in accordance with the statute and Commission order. While MP is the subject of this docket, the other utilities may seek to provide oral comments in this docket because they may be affected by any precedent established by the Commission in this matter.

The following tables identify the rider sections (Issues 1 through 13) that were the subject of comments by the parties. Other issues (Issues 14 -21) related to MP's DG tariff riders were also raised by DOC and the DG Coalition and are explained in these tables.

Reference to MP Rider and Headings or Attachments	DOC Comments	DG Comments	MP Reply	Staff Comment
<p>Issue 1 <u>DG Rider</u> APPLICATION</p>	<p>Add the following language: <u>The distributed generation system must be an operable, permanently installed or mobile generation facility serving the customer receiving retail electric service at the same site.</u></p>		<p>MP agrees with DOC's recommended language.</p>	<p>Making the change would conform with the Order.</p>
<p>Issue 2 <u>DG Rider</u> RATE (Delivery Charge)</p>	<p>Delivery was not among the types of services that the Order identified. However, the Order does permit "other services deemed necessary." MP should provide support and obtain approval of its proposed delivery charge.</p>		<p>The Delivery charge was developed by MP to recover additional costs for distribution, transmission and ancillary services provided by MP that are not recovered elsewhere and are related to MISO charges. Certain municipal generators currently incur some of these costs based on the individual characteristics of the generators. The charge would only apply to DG systems greater than 1 MW.</p>	<p>As DOC explained, the Order does allow other costs that are deemed necessary. MP explained that the charges relate to MP's participation in MISO which charges MP for such things as scheduling and system control. MP also explained that some but not all muni generators pay for such services. MP should explain further why some generators would pay and others would not.</p>

Reference to MP Rider and Headings or Attachments	DOC Comments	DG Comments	MP Reply	Staff Comment
<p>Issue 3 <u>DG Rider</u> RATE (Service Charge)</p>	<p>The service charge recovers 1)variable meter costs; and 2)customer service costs. A. DOC questioned whether MP’s use of a system average is appropriate for the variable meter costs in its new DG service. MP should explain why its proposed service charge is reasonable or, in the alternative, the Commission may wish to assume zero cost. For customers with no additional metering requirement, MP’s charge for variable metering would be unreasonable. B. DG customer service costs included in the service charge should only recover incremental customer costs for DG related services. MP should further explain and itemize costs for DG customers versus non-DG customers.</p>		<p>A & B. MP calculated the charge to recover incremental cost to MP for meter O&M, meter reading, customer billing, customer accounting and customer services. It does not include the fixed installation costs associated with meters which are separately recovered under the Interconnection Agreement or DG Rider. MP used historical average costs to estimate the incremental service costs for this new DG service.</p>	<p>A. The Order did not address metering and customer service costs. Staff supports DOC’s recommendation for MP to provide further explanation why a system average is appropriate to assess DG customers for variable metering costs. B. Staff supports DOC’s recommendation to further explain and itemize incremental costs that would apply to DG customers and non-DG customers.</p>
<p>Issue 4 <u>DG Rider</u> RATE (Capacity/Energy Credits)</p>	<p>A. Change language to state that: Capacity payments shall only be provided on that capacity (delete: <u>delivered</u>); (add: <u>available</u>) to Company...</p>	<p>B. Pricing for energy buyback should not be proprietary. At a minimum, the final rates should be public while keeping the calculation proprietary.</p>	<p>A. MP agrees with DOC proposed language change. B. MP did not comment on DG Coalition’s recommendation.</p>	<p>A. Making the change would conform with the Order. B. The Order does not address trade secret info. Normal industry practice should govern whether this type of information is trade secret.</p>

Reference to MP Rider and Headings or Attachments	DOC Comments	DG Comments	MP Reply	Staff Comment
<p>Issue 5 <u>Standby Rider RATE</u> (Standby Reservation Fee, pg. 61.1)</p>	<p>Add language after first paragraph under Standby Reservation Fee to state: <u>The Contracted Standby Demand shall be no greater than the nameplate capacity rating of the distributed generation system.</u></p>		<p>MP agrees with DOC's proposed language change.</p>	<p>Making the change would conform with the Order.</p>
<p>Issue 6 <u>Standby Rider APPLICATION</u></p>	<p>A. Add language for clarification: <u>For any Customer with distributed generation systems rated 60 kW or less, standby service will be available to customers through their base rates.</u> B. MP should report in 24 months on the number of customers meeting the 60kW or less exemption and how much standby usage was taken by those customers.</p>		<p>A. MP proposed a modified version of DOC language as underlined as follows: For any customer with distributed generation systems rated 60 kW or less, standby service will be available to customers through <u>their standard rate schedules</u>. This clarifies that qualifying customers are exempt from paying for standby service rather than being exempt from taking the service. B. MP agrees to report on DG customers meeting the 60 kW or less exception. Currently MP has 23 DG customers that meet the exception. Most have photovoltaic units.</p>	<p>A. Staff supports MP's modified DOC recommended language for clarity. B. The Order states that the Commission will review the 60 kW exemption within 24 months. 24 months from the date of the Order would be September 28, 2006. Staff recommends that the Commission clarify this or an alternate date such as December 31, 2006 for the filing of MP's report.</p>

Reference to MP Rider and Headings or Attachments	DOC Comments	DG Comments	MP Reply	Staff Comment
<p>Issue 7 <u>DG Rider</u> RATE (Renewable Credits)</p>	<p>A. Modify language (underlined) to follow guidelines: “If Company’s purchase of capacity and energy ...(Delete: <u>then</u>) Company shall provide Renewable Credits to Customer that (Delete: <u>reflect</u>) (Add: <u>equal</u>) the additional avoided cost...” B. MP should provide a current schedule of renewable resource credits and support for its calculations.</p>	<p>B. MP should also provide calculations and prices for the renewable resource credit. C. MP proposes that the renewable credit would “... be net of payment for capacity and energy...” Depending on how the renewable credit is applied this may not be appropriate and MP should clarify. D. Its assumed that MP’s renewable pricing recognizes that different types of DG projects such as biomass and wind will have different levels of renewable pricing increments for energy and capacity. If not MP should explain why not.</p>	<p>A. MP agrees with DOC’s proposed language change. B. There is no state-wide methodology to calculate renewable credits. MP would support establishment of a DOC workgroup for such a task. C and D. MP did not reply to the DG Coalitions comments on the application of the renewable credits and renewable credits for different types of DG projects.</p>	<p>A. DOC’s proposed change would be consistent with the Order. B. The Order directs the use of avoided cost to determine renewable credit values. Staff supports DOC’s recommendation that MP provide a current schedule of renewable resource credits and support. The Commission could also require utilities to propose guidelines on how to calculate credits and then allow other parties to comment. C and D. Staff supports the need for further explanation regarding the calculation of renewable credits by MP as recommended by the DG Coalition.</p>

Reference to MP Rider and Headings or Attachments	DOC Comments	DG Comments	MP Reply	Staff Comment
<p>Issue 8 <u>DG Rider</u> RATE (Renewable Credits)</p>	<p>A. Add following: <u>In the event that Customer producing the power receives renewable energy credits, that is, the Customer is paid by the Company the avoided cost of renewable energy purchases, then this transaction will constitute a transfer from the Customer to the Company of the property rights for those renewable attributes specific to the renewable energy generated by the Customer and for which the Company paid renewable energy credits.</u> B. (Add: Customer may receive either renewable credits or tradable emission credits but not both.</p>	<p>A. Ownership of tradable resource credits (TRCs) should remain with the DG customer if customer is paid for the regular avoided cost. If DG customer is paid a renewable energy avoided cost that is higher than the regular avoided cost then the payment is covering TRCs. If Xcel is not explicitly paying for TRCs the DG customer should retain the TRC. C. Tying the value of the renewable energy credit to Green Pricing is in the public interest and fair. Costs to administer a green pricing program can be subtracted from the premium between renewable and non-renewable energy so that green pricing premium reflects the utility’s actual incremental costs. D. DG customer should have option of choosing between the regular or renewable avoided cost. Legislative intent for DG was to facilitate deployment of clean energy.</p>	<p>A. MP would modify DOC’s proposed language as follows: (delete: the first and last use of the word “energy” in the sentence), (add parenthesis around “that is, the Customer is paid by the Company the avoided cost of renewable energy purchases”),(restate: “then...the transaction represented by the power purchase agreement will constitute a transfer...” These changes address the DG Coalition’s recommendation also. B. MP agrees with the DOC’s proposed language. C & D. MP did not respond to these DG Coalition comments.</p>	<p>A. Staff supports the modifications proposed by MP. B. DOC’s proposed language would comply with the Order. C and D. MP should respond to the DG Coalitions comments/recommendation.</p>

Reference to MP Rider and Headings or Attachments	DOC Comments	DG Comments	MP Reply	Staff Comment
<p>Issue 9 <u>DG Rider</u> RATE (Tradable Emission Credits)</p>	<p>A. Modify language (underlined) as follows: “If Company’s purchase of capacity and energy from the distributed generation system results in Company receiving an economic value associated with tradable emissions, (Delete: <u>then</u>) Company shall provide Tradable Emission Credits to Customer that (Delete: <u>reflect the economic value</u>) (Add: <u>equal the credit revenues associated with the DG facility</u>)...” B. (Add: <u>Customer may receive either renewable credits or tradable emission credits but not both.</u>)</p>		<p>A. MP agrees with DOC proposal with following (underlined) modification: “...Company shall provide Tradable Emission Credits to Customer that equal the credit revenues associated with the (Delete: <u>DG facility</u>) (Add: <u>distributed generation system of such Tradable Emission Credits received by Company.</u>” B. MP agrees with DOC proposed language. C. MP also proposed to add the (underlined) following language: <u>In the event that Customer producing the power receives tradable emission credits, then the transaction represented by the power purchase agreement will constitute a transfer from the Customer to Company of the property rights, if any, for those tradable emission credits received by Customer and for which Company paid tradable emission credits.</u></p>	<p>A. Staff believes that either DOC or MP’s proposed language would comply with the Order. B. DOC’s proposed language would comply with the Order. C. MP’s proposed language is not specifically addressed in the Order, but it appears appropriate for ownership of tradable credits to pass on to the utility if the Customer were compensated for them. Also note that DOC recommended this language for Xcel’s tariff.</p>
<p>Issue 10 <u>DG Rider</u> RATE (Line Loss Credits)</p>	<p>MP has supplemented its tariff filing to include language regarding line loss credits. DOC agrees with this new language.</p>		<p>MP proposed the line loss credit language which is included in Exhibit 2 attached to its reply comments.</p>	<p>DOC agreed with MP’s proposed language which is consistent with the Order.</p>

Reference to MP Rider and Headings or Attachments	DOC Comments	DG Comments	MP Reply	Staff Comment
<p>Issue 11 <u>Standby Rider RATE</u> (Standby Reservation Fee)</p>	<p>A. MP should explain the large differences between the distribution capacity component of the reservation fee for the residential class in this docket (72% of the residential revenue requirement) and the most recent cost disclosure information (62% of residential revenue requirement) in Docket E999/CI-01-1127.</p>	<p>B. Standby charges, in particular reservation fees, are a barrier to DG development.</p>	<p>A. MP explained that the primary reason for the percentage differential of distribution capacity costs as a percent of class revenue requirement is that energy-related costs are not included in the total revenue requirement used to calculate the reservation fee in this docket. Therefore, distribution capacity costs used in the calculation of reservation fee is a much higher percentage of the lower total revenue requirement used for this docket when compared to the 01-1127 docket. B. The service charge is not a barrier to DG development because it assigns the costs to the cost causer rather than subsidizing DG customer.</p>	<p>A. MP’s mathematical explanation is plausible. DOC should confirm whether this explanation satisfies their concern. B. MP’s explanation that the reservation fee should not result in a subsidy is consistent with the Order.</p>

Reference to MP Rider and Headings or Attachments	DOC Comments	DG Comments	MP Reply	Staff Comment
<p>Issue 12 <u>Standby Rider</u> RATE (Standby Usage Fee - Demand)</p>	<p>MP should explain why its standby demand usage fee for non-firm (interruptible) customers is reasonable given that it is applied the same as for firm customers.</p>		<p>Customers have two standby options - firm and non-firm. Firm service customers must pay a standby reservation fee plus a standby demand usage fee. Non-firm customers do not pay a reservation fee; they only pay for the standby demand usage which is at the same rate as firm customers. While the rates are the same, a firm customer only pays for standby demand usage above its contracted demand. In a similar usage situation, the non-firm customer will pay for more usage than the firm customer even though the rates are the same.</p>	<p>The Order does not address how demand usage fees should be set. MP's explanation, to set the standby demand usage fee the same for firm and non-firm customers, appears reasonable.</p>
<p>Issue 13 <u>Standby Rider</u> RATE (Standby Usage Fee - energy)</p>	<p>There is no fuel cost adjustment in MP's proposed standby energy rate. A fuel cost adjustment should be include in the standby rider for energy to avoid subsidization of DG customers by other customers.</p>		<p>MP agrees with DOC's recommendation to apply the fuel cost adjustment to energy consumed under the standby rider.</p>	<p>The Order does not address the fuel cost adjustment. DOC's recommendation appears reasonable and appropriate to avoid subsidization.</p>

Issue B. What other requirements if any should be established in this proceeding?

Commission Options

1. Adopt one or more of the recommendations discussed in the following tables (issue items 14 through 21).
2. Do not adopt any of the recommendations discussed in the following tables.

Non-Tariff Issues	DOC	DG Coalition	MP Reply	Staff Comment
<p>Issue 14 Annual Rate Compliance Filings</p>	<p>A. DOC recommended annual rate compliance filings for energy and capacity payments that would apply for the following year. Also, MP should file for renewable resource credits and average tradable emission credits for the previous year. Changes should be explained. B. MP's proposed December 2005 update of its DG avoided capacity and energy costs should provide the details supporting the updated values.</p>		<p>A. MP agrees with the DOC recommendation for an annual compliance filing. B. MP agrees with DOC recommendation to provide details of avoided capacity cost values in its December 15, 2005 compliance filing.</p>	<p>A and B. The Order does not address annual compliance filings. MP should make a specific proposal that includes dates and types of schedules.</p>

Non-Tariff Issues	DOC	DG Coalition	MP Reply	Staff Comment
<p>Issue 15 Electric Service Agreement (ESA)</p>	<p>Items 7A - 7C regarding distribution, renewable, and tradable emission credits identified in the ESA should be modified to explain: 1) the eligibility for credits by the DG facility; 2) the number of credits the DG facility is eligible for and how it is determined; and, 3) how the value for each credit is to be calculated. Also, parallel information regarding Line Loss Credits should be addressed.</p>		<p>MP has incorporated DOC's recommendations in its revised ESA attached to its Reply Comments. Eligibility for and identification of the number of credits available for distribution, renewable and tradable emission credits are shown on the ESA. The ESA explains that credits are based on avoided cost to MP. Details to determine renewable or tradable emission credit values will be provided in MP's annual compliance filing. Also added to the ESA is a section for line loss credit eligibility based on a line loss study.</p>	<p>DOC's recommendation and MP's response would help to clarify the credit availability for DG Customers in the ESA.</p>
<p>Issue 16 Power Purchase Agreement (PPA)</p>	<p>The PPA should address dispute resolution between the parties, indemnification of the parties, and default and remedies when default occurs.</p>		<p>MP has incorporated DOC's recommendations in its revised PPA attached to its comments. Now included is language for dispute resolution, indemnification, default and remedies upon default.</p>	<p>DOC recommendations and MP's response appear to be appropriate for power purchase agreement.</p>
<p>Issue 17 Confidentiality and Non-Disclosure Agreement</p>	<p>Non-disclosure of avoided cost information provided by MP is appropriate, however, MP should address the disclosure limitations and whether the limitations would hinder the ability of the DG customer to arrange for financing.</p>	<p>A DG project developer should not be required to make additional contacts with MP and sign a non-disclosure agreement.</p>	<p>MP explained that the non-disclosure agreement prevents the dissemination of MP's avoided costs. MP committed to consent to a customer's request to release information for financing if the DG customer is in compliance with the Confidentiality Agreement.</p>	<p>Staff recommends that MP's commitment to allow access of avoided cost information for financing purposes be clarified in the Confidentiality Agreement.</p>
<p>Issue 18 FERC Order 2006</p>	<p>The Commission may wish to request comments from interested parties to address the impact of FERC Order 2006 on the DG tariff proceedings.</p>		<p>MP would support establishing a separate docket to solicit comments on this FERC docket and its impact on parties.</p>	<p>The Order does not address this issue. Staff supports MP's proposal.</p>

Non-Tariff Issues	DOC	DG Coalition	MP Reply	Staff Comment
<p>Issue 19 Annual DG Interconnection Report</p>		<p>According to Minn. Stat. §216B.1611, Subd. 4, a DG interconnection report is required annually. If no reports have yet been filed the Commission should order that they be filed to establish a base line of information and posted or linked on a website.</p>	<p>MP believes that it has met all reporting requirements under Minn. Stat. §216B.1611.</p>	<p>Staff recommends that MP's first report be filed for the calendar year 2005. This report, if possible, should be submitted with other annual reports as discussed in Issue No. 14.</p>
<p>Issue 20 Excessive Metering</p>		<p>A. DG projects eligible for net metering for Qualified Facilities (QF) should be exempt from monthly metering charges to promote DG. B. DG projects that are non-QF facilities of 40kW and under should have only a single, reasonable monthly metering fee. C. If MP wishes to use two meters to measure energy flow in each direction, MP, not the DG customers should pay for the second meter and associated monthly metering charges. D. Similarly, multiple customer charges should not be allowed on a single DG project.</p>	<p>MP did not address the DG Coalition's metering comments.</p>	<p>A, B, C, and D. The Order did not address the metering issues raised by the DG Coalition. Staff believes a reasonable approach would assign costs for a second meter to the party who requests or needs it.</p>

Non-Tariff Issues	DOC	DG Coalition	MP Reply	Staff Comment
<p>Issue 21 Process and Technical Documents</p>	<p>A. The process and technical documents that the Commission adopted in its September 28, 2004 Order should be placed on MP's website. B. Replace "Area EPS" in the process and technical documents with "MP." C. Include in the DG Rider a reference to the location of the documents on MP's website and also non-website contact information.</p>		<p>A. MP agrees to post the process and technical documents on its website. B. MP proposed that "Area EPS" be clarified by referencing it to MP when first used in each document rather than throughout all of the documents. C. MP proposed to annually place a notice in each MP customer bill/newsletter to advise customers how to obtain additional information rather than including it on the website and in the DG Rider.</p>	<p>A. DOC's recommendation is reasonable. B. MP's proposal is reasonable. C. Because website addresses can sometimes change frequently, MP's proposal appears more reasonable to avoid potential confusion if web addresses and tariffs are not updated simultaneously.</p>