May 25, 2005

Burl W. Haar
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101-2147

RE: **Comments of the Minnesota Department of Commerce**
Docket No. E002/M-04-2055

Dear Dr. Haar:

Attached are the comments of the Energy Division of the Minnesota Department of Commerce (Department) in the following matter:

> Petition of Northern States Power Company d/b/a Xcel Energy for Approval of a Distributed Generation Energy Tariff in Compliance with Docket No. E999/CI-01-1023.

The Petition was filed on December 27, 2004 by:

> Debra J. Paulson
> Regulatory Case Specialist
> Xcel Energy Services
> 414 Nicollet Mall
> Minneapolis, Minnesota 55401

The Department recommends **consideration be delayed until submittal of further information** and is available to answer any questions the Commission may have.

Sincerely,

CYNTHIA FANG
Rates Analyst

CF/jl
Attachment

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BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

COMMENTS OF THE
MINNESOTA DEPARTMENT OF COMMERCE

DOCKET NO. E002/M-04-2055

I. BACKGROUND

On August 1, 2001, Minnesota Statutes Section 216B.1611 became effective. Subdivision 2 of that statute directed the Minnesota Public Utilities Commission (Commission) to establish "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."

On August 20, 2001, the Commission issued its *Order Initiating Docket*, inviting parties to propose standards and to comment on the proposed standards.

Subsequent to receiving comments, on June 19, 2002, the Commission issued its *Order Organizing Work Groups and Setting Procedural Schedule* (June 19 Order). The June 19 Order directed the Department to lead two workgroups with interested stakeholders to develop a record that the Commission would use to establish guidelines for distributed generation tariffs that utilities under the Commission's jurisdiction would subsequently be required to file. The two workgroups were the Technical Work Group and the Rate Work Group. The Commission asked for periodic reports from the two workgroups as well as a final report by February of 2003.

The Department's February 3, 2003 report identified the topics that the stakeholders had agreed to and those where consensus had not been reached. The Department supplemented its February 3 filing on February 14. On May 22, 2003, the Department filed a report on technical standards for permitting distributed generators to interconnect with a utility's network.

After receiving comments on the reports, the Commission met on July 20, 2004 to consider the matter and subsequently issued their *Order Establishing Standards* on September 28, 2004 (September 28 Order) that established the guidelines for utility Distributed Generation (DG) tariffs. The September 28 Order had three main points.

First, the Commission adopted as guidelines a modified version of the July 27, 2004 joint proposal between a group of DG advocates and regulated utilities for establishing process and technical requirements for interconnecting distributed generators with no more than 10 MW of capacity to the electric grid. The joint proposal included two documents (collectively, the Technical Guidelines) from the Technical Work Group. The first document was the State of Minnesota Interconnection Process for Distributed Generation Systems. The second document was the State of Minnesota Distributed Generation Interconnection Requirements.

Second, the Commission adopted, with modifications, the February 3, 2003 Rate Work Group report entitled the State of Minnesota Guidelines for Establishing the Terms of the Financial Relationship Between an Electric Utility and a Distributed Generation Customer with No More Than 10 MW of Capacity (Rate Guidelines).

Third, as required by Minnesota Statute § 216B.1611, the September 28 Order directed utilities under its jurisdiction to file distribution tariffs consistent with the Guidelines within 90 days of the Order, which was December 27, 2004.

On December 27, 2004, Northern States Power Company d/b/a Xcel Energy (Xcel or the Company) filed a petition (Petition) with the Commission requesting that the Commission approve a Distributed Generation Energy Tariff (DG Tariff). Xcel's Petition is intended to comply with the Commission's September 28, 2004 Order. The Company's petition is described below in the following sections.

II. XCEL ENERGY'S PETITION

The following describes the main components of Xcel's petition. First, Xcel requests Commission approval of its DG tariff. Second, to support this proposed DG Tariff, Xcel proposes to use its existing Commission-approved Standby Service Rider with proposed modification that would apply specifically to applicants under this DG Tariff only. Third, Xcel proposes that upon Commission approval of this DG Tariff the Company would consolidate its various distributed generation tariff offerings according to the following: (1) close its existing 2 MW DG Tariff ("Distributed Generation Standard Interconnection and Power Purchase Tariff"), and (2) modify its existing Small Distributed Wind Generation Purchase Tariff such that a single set of interconnection requirements and standards exists for all of the Company's available distributed generation tariffs. The following sections discuss each of these components.

A. DG TARIFF

To be eligible under Xcel's proposed DG Tariff, the DG customer must satisfy the following:

- be a retail electric customer of Xcel;
- operate a qualifying distributed generating facility as defined within the tariff, with a nameplate rating of 10,000 kW or less;
- operate the DG facility in parallel with the Company's distribution system;
- ensure that the DG facility is an operable, permanently installed or mobile generation facility; and
- own the DG facility at the same site where the customer receives retail electric service from the Company.

The DG customer must also complete and submit a signed Generation Interconnection Application Form ("Interconnection Application") and pay the applicable Interconnection Application Fee.

The DG customer would be required to execute the following:

1. an Interconnection Agreement for the Interconnection of Extended Parallel Distributed Generation Systems with Electric Utilities (Interconnection Agreement) that addresses the costs and responsibilities associated with making interconnection, and

2. a Power Purchase Agreement (PPA) for the sale of energy and capacity from its DG facility.

These agreement may have terms of up to 20 years. The customer will have the option of providing DG services to Xcel under other existing tariff riders or through negotiations with Xcel. Xcel currently has two other DG tariffs: (1) its 2 MW DG Tariff ("Distributed Generation Standard Interconnection and power Purchase Tariff") that the Company proposes to close upon approval of the current proposed DG Tariff, and (2) its Small Distributed Wind Generation Purchase Tariff available to wind-powered electric generating facilities with nameplate rating of 2 MW or less.

Xcel does not propose any monthly service charges under its proposed DG Tariff. The Company identifies only two fees associated with application for service under this tariff:

(1) an Interconnection Application Fee, and
(2) fees resulting from interconnection study or studies required and conducted as part of the terms and conditions of service under the tariff.

Both proposed fees are discussed in greater detail below.

B. STANDBY SERVICE RIDER MODIFICATIONS

Under Xcel's proposal, all customers, firm and interruptible, who are eligible for the proposed DG Tariff and who use their generation to serve on-site load shall be required to contract for Standby Service from the Company under its existing Standby Service Rider and be subject to the existing terms and conditions of this Rider except as modified below:

1) Customers on this DG tariff with Standby service requirements less than or equal to 60 kW in size shall be exempted from taking service under the Standby Service Rider.

2) The Demand Charge per Month per kW of Contracted Standby Capacity reservation fee shall be reduced by $0.23, but not resulting in a charge less than zero.

3) The customer shall pay an additional Reservation Fee charge based on the Company's Open Access Transmission Tariff rate times the Contracted Standby Capacity quantity.

The Department discusses this issue further below.

C. CONSOLIDATION OF DISTRIBUTED GENERATION TARIFF OFFERINGS

Xcel currently has two existing distributed generation tariffs: (1) 2 MW DG Tariff ("Distributed Generation Standard Interconnection and Power Purchase Tariff") and (2) Small Distributed Wind Generation Purchase Tariff (Small Wind Tariff).

The 2 MW DG Tariff is available to Xcel retail electric customers who operate a qualifying distributed generating facility as defined in the tariff with a nameplate rating of 2,000 kW or less. This tariff was the result of agreements between Northern States Power and other parties regarding the merger of Northern States Power Company and New Century Energies, Inc. to form Xcel Energy. The current tariff was approved by the Commission on July 29, 2002 under Docket No. E002/M-01-937. The Company proposes to close this tariff upon approval of the current proposed DG Tariff.

The Small Wind Tariff is available to any retail customer receiving retail electric service from Xcel in Minnesota who agrees to construct, own and operate a wind-powered electric generating facility with nameplate rating of 2 MW or less. The installed electric energy capacity resulting from purchases under this tariff assist the Company in satisfying its obligations under Minnesota Statutes §216B.2423. This tariff was part of the Stipulated Agreement approved under the Commission's June 12, 2000 *Order Approving Merger as Conditioned* under Docket No. E,G002/PA-99-1031. The Company proposes to modify this tariff such that a single set of interconnection requirements and standards would remain for its distributed generation tariffs following approval of the current proposed DG Tariff.

III. DEPARTMENT ANALYSIS

The Department's comments will address the following:

A. consistency of the proposed DG Tariff with the Guidelines established in the Commission's September 28 Order;
B. comments regarding reporting related to the proposed DG Tariff; and
C. comments regarding the Company's request to close the 2MW DG Tariff and modify the Small Wind Tariff.

A. CONSISTENCY WITH GUIDELINES

On September 28, 2004, the Commission issued its Order Establishing Standards *In the Matter of Establishing Generic Standards for Utility Tariffs for Interconnection and Operation of Distributed Generation Facilities under Minnesota Laws 2001, Chapter 212* (September 28 Order) under Docket No. E999/CI-01-1023. The three Order Points from the September 28 Order are identified below. Order Points 1 and 2 list guidelines for: (1) establishing process and technical requirements for interconnecting generators, and (2) establishing the financial relationship between an electric utility and a qualified generator under the proposed tariffs. The Department examined the proposals made by each utility, including Xcel, to ensure that the Guidelines were followed. The Department's comments do not revisit the substantive issues in the Technical and Rate Guidelines approved by the Commission in its September 28 Order. Consistent with the procedure required by law, the Department uses the Guidelines in the Commission's September 28 Order as the basis for analyzing the filing.

The Technical Guidelines and Rate Guidelines (jointly, the Guidelines) adopted by the Commission are sufficiently detailed to give utilities direction in designing DG tariffs. However, as evidenced by the adoption of the Guidelines, the Commission refrained from creating a single DG tariff that all Commission-jurisdictional utilities would be required to adopt. The result is that differences exist across the proposed DG tariffs and standby service tariffs.

The Department notes that it is appropriate in some instances to allow variations in tariff language since the language in DG tariffs must also be consistent with the remainder of the utility's tariffs and rate design. While there may be some differences in DG tariffs across utilities, these differences should not be a problem since a DG customer must be a customer of the utility to which it wishes to interconnect, and thus it is unlikely that there would be a DG customer wishing to interconnect a DG system in multiple electric service territories. However, where the Department sees a state policy objective or broader public interest issue, the Department has suggested revisions in tariff language to ensure that these issues are treated similarly by utilities.

The following assesses whether Xcel's proposal is consistent with each of the Guidelines listed in the Commission's September 28 Order. The Department discusses any areas where the Company failed to address adequately the Guidelines established by the Commission and suggests tariff language as needed to clarify the proposed tariffs as needed or to make the tariffs consistent with the Guidelines.

1. The July 27, 2004 joint proposal, as amended herein and attached as Attachments 1 though 5, shall constitute guidelines for establishing process and technical requirements for interconnecting generators with no more than 10 MW of capacity to the electrical grid.

The attachments identified in the Order are:

(1) Attachment 1: Interconnection Process for Distributed Generation Systems, identified as Process.
(2) Attachment 2: Distributed Generation Interconnection Requirements, identified as Requirements.
(3) Attachment 3: Generation Interconnection Application, identified as Application.
(4) Attachment 4: Engineering Data Submittal for the Interconnection of Distributed Generation, identified as Data Submittal.
(5) Attachment 5: Interconnection Agreement for the Interconnection of Extended Parallel Distributed Generation Systems with Electric Utilities, identified as Agreement.

Xcel included these documents directly into the proposed tariff, specifically:

(1) Attachment 1: Interconnection Process for Distributed Generation Systems, identified as Process—beginning on Sheet 79;
(2) Attachment 2: Distributed Generation Interconnection Requirements—Sheet 129;
(3) Attachment 3: Generation Interconnection Application—beginning on Sheet 97;
(4) Attachment 4: Engineering Data Submittal for the Interconnection of Distributed Generation—beginning on Sheet 100; and
(5) Attachment 5: Interconnection Agreement for the Interconnection of Extended Parallel Distributed Generation Systems with Electric Utilities—Sheet 121.

In further conversations with the Company through discovery, the Department was informed that the full text of the documents from the Commission's September 28 Order were added directly to the tariff. The Department does recommenced that "Area EPS" in the tariff be replaced with "Xcel Energy" for greater clarity.

2. The February 3, 2003 Rate Work Group report, as amended herein and attached as Attachment 6, constitutes guidelines for establishing the financial relationship between an electric utility and a qualified generator with no more than 10 MW of capacity.

For compliance with these guidelines, please see detailed comments below.

3. Retail electric public utilities shall file a distribution tariff consistent with the guidelines adopted in this Order within 90 days, pursuant to Minnesota Statutes §216B.1611, subdivision 3.

The Company filed its Petition for Approval of Rider for Distributed Generation Energy Tariff on December 27, 2004, and the Order was filed on September 28, 2004, with 90 days from the Order date being December 27, 2004. The Department concludes that Xcel has met this requirement.

As stated above, the Guidelines for establishing process and technical requirements for interconnecting generators identified as Attachments 1 through 5 in the September 28th Order have been incorporated directly into Xcel's proposed DG Tariff. The following addresses the consistency of the Company's proposed DG tariff and the Company's existing Standby Service Rider with proposed modifications with the Guidelines for establishing the financial relationship between an electric utility and a qualified generator identified as Attachment 6 in the September 28 Order.

1. Availability

The Commission's September 28 Order adopted the language of the Rate Work Group that:

> *The DG customer must connect in parallel to the utility distribution system.*

Xcel's proposed Sheet 73, Availability, states:

> Available to retail electric customers at distribution voltages and who operate a qualifying distributed generating (DG) facility, as defined below, with nameplate rating of 10,000 kW or less and *is operated in parallel with the Company's distribution system*. (emphasis added.)

The Department notes that, while the language proposed by the Company varies slightly from the language in the Guidelines, this difference is small and is consistent with the discussion in the Commission's Order regarding a generator that "operates constantly … and in phase with the electricity distributed by the utility." It is also consistent with Minnesota Statute 216B.1611. For example. Subdivision 2 states that "[t]he Commission shall … establish, by order, generic standards for utility tariffs for the interconnection and parallel operation of distributed generation." Finally, this provision is intended to ensure that operation of the DG facility does not harm other customers on Xcel's system. Therefore, the Department concludes that Xcel's proposed language is reasonable.

2. Qualifications

The Commission's September 28 Order adopted the following language:

> *a) The DG facility must be an operable, permanently installed or mobile generation facility serving the customer receiving retail electric service at the same site.*

Xcel's proposed Sheet 73, Qualification, states:

> 3. The distributed generating 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. (emphasis added)

Xcel's proposal has the more stringent requirement that the facility be "owned" by the customer receiving retail electric service at that site. The Department notes that the Commission has already addressed the issue of ownership in its September 28 Order, by deciding that customers did not need to own the DG facility. Thus, the Department recommends that the Commission require the following modification so that the language more accurately reflects the language in the Guidelines:

> The distributed generating facility must be an operable, permanently installed or mobile generation facility and ~~shall be owned by~~ serving the customer receiving retail electric service from the Company at the same site. (Recommended language change identified is underlined.)

The Commission's September 28 Order also adopted the following language regarding "must buy" qualifications:

> *b) Must buy: The utility must buy all the energy offered for sale by the DG customer selling the power. Utilities that are full requirements customers of wholesale suppliers may need to require the wholesale supplier to assume this obligation in order to abide by contractual requirements with their wholesale supplier.*

Xcel's proposed Sheet 74, Contracts, states:

> … The Company *will* purchase all electricity generated and offered for sale to the Company by the DG facility pursuant to the terms, conditions and price schedule of the PPA…. (emphasis added)

The Department recommends that the Company make the following minor modification to ensure greater equivalency with the language in the Guidelines:

> … The Company ~~will~~ shall purchase all electricity generated and offered for sale to the Company by the DG facility pursuant to the terms, conditions and price schedule of the PPA. (Proposed language modification identified is underlined.*)*…

The Commission's September 28 Order also adopted the following language regarding customer options for qualifications:

> c) *Customer options: Customer may sell all the DG energy to the utility, "sell" all the DG energy to itself, or self-generate part of its needs and sell the remaining energy to the utility.*

This guideline gives a range of choices to the DG customer regarding use of energy from the DG facility. Xcel's proposed Sheet 74, Contracts, states:

> The customer may sell all of the DG energy to the Company, supply all the distributed the DG energy to itself, or self generate part of its needs and sell the remaining energy to the Company.

Therefore, the Department concludes that Xcel has fully satisfied this guideline.

Finally, the Commission's September 28 Order also adopted the following qualification language regarding transactions outside the tariff:

> d) *Transactions outside the tariff: DG owners and utilities may pursue reasonable transactions outside the DG tariff. However, such transactions are beyond the scope of the workgroup.*

While this matter is not specifically addressed in the applications, since there is no restriction on such transactions, the Department concludes that Xcel has complied with this guideline.

3. List of Supply Services to be Priced

The Commission's September 28 Order adopted the following list of supply services that a utility must offer to DG customers at tariffed rates:

a) *Energy and capacity.*

On proposed Sheet 73, Availability, the proposed DG tariff is identified as being available to retail electric customers and therefore energy and capacity would be available to the DG customer under its base rate, that is, under one of the Company's retail rate schedules. Thus, the Department concludes that Xcel has met this guideline.

b) *Scheduled maintenance service (energy, or energy and capacity, supplied by the utility during scheduled maintenance of the customer's non-utility source of electric energy supply).*

Under the Company's current tariff in Section 6, Sheet 6-5, 2.4 Standby, Supplementary, Emergency, and Incidental Services, A. Definitions:

> Standby Service is defined as service available on a *firm* (scheduled or unscheduled) basis or *non-firm* basis through a permanent connection to supply replacement electric energy and power when the customer's normal source of electric energy supply is not available. (emphasis added)

Furthermore, scheduled (and unscheduled) maintenance are identified within the Standby Service Rider and distinguished by rate. Therefore, the Department concludes that Xcel's proposal generally satisfies this guideline.

c) *Unscheduled outages (energy, or energy and capacity, supplied by the utility during unscheduled outages of the customer's non-utility source of electric energy supply).*

Please see comments regarding b. scheduled maintenance service directly above. The Department concludes that Xcel's proposal satisfies this guideline.

d) *Supplemental service (electric energy, or energy and capacity, supplied by the utility to the DG customer when the customer's non-utility source of electricity is insufficient to meet the customer's own load).*

In further conversations with the Company through discovery, the Company confirmed that supplemental service would be provided to the DG customer through its base electric rate. The Department recommends that the Commission require Xcel to clarify this point in its tariff.

e) *Other services deemed necessary.*

Xcel identifies two additional fees for service in the proposed tariff: (1) an Interconnection Application Fee, and (2) a fee schedule for engineering studies required as part of the terms and conditions of service under this tariff.

Interconnection Application Fee

Xcel's proposed Sheet 73, Application of Services, states:

> Customer seeking interconnection and to operate a DG facility in parallel, must complete and submit to Company a signed Generation Interconnection Application Form ("Interconnection Application") and the applicable Interconnection Application Fee. Company will initiate project upon receipt of complete information needed for Interconnection Application.

While neither the fee nor the basis for the fee is identified in the tariff language above, Sheet No. 89 of the proposed DG Tariff identifies a schedule for Generation Interconnection Application Fees, taken directly from page 9 of 21 of Attachment 1, Process for Interconnection from the Commission's Order. The Department concludes that Xcel Interconnection Fee is consistent with the Commission's Guidelines. However, the Department recommends the following additional language (identified in underline) for greater clarification:

> Customer seeking interconnection and to operate a DG facility in parallel, must complete and submit to Company a signed Generation Interconnection Application Form ("Interconnection Application") and the applicable Interconnection Application Fee. Please see the schedule for Generation Interconnection Application Fees under *Process for Interconnection, Step 1 Application (By Applicant)* on Sheet 89 of this section. Company will initiate project upon receipt of complete information needed for Interconnection Application.

Interconnection Study Fees

Xcel's proposed Sheet 73, Studies and Services, states:

> Interconnection study or studies are required and shall be conducted by Company as part of the terms and conditions of service under this tariff. A fee schedule for the engineering studies will be assessed as provided in this tariff. This fee schedule may be revised from time to time to reflect changes in Xcel Energy's costs of conducting the studies. Any other studies and services provided pursuant to agreement by the customer and Company may be subject to Commission review. All review and study fees are non-refundable, whether or not the customer decides to pursue the project.

The language regarding Studies and Services is extremely broad. However, greater clarification regarding the scope of these studies is provided by the utility under *Process for Interconnection*. For greater clarification, the Department recommends the following additional language (identified in underline):

> Interconnection study or studies are required and shall be conducted by Company as part of the terms and conditions of service under this tariff. Please see the *Process for Interconnection* in this section for more information regarding these studies. A fee schedule for the engineering studies will be assessed as provided in this tariff. Please see the schedule for Generation Interconnection Application Fees under *Process for Interconnection, Step 1 Application (By Applicant)* on Sheet 89 of this section. This fee schedule may be revised from time to time, upon Commission approval, to reflect changes in Xcel Energy's costs of conducting the studies. Any other studies and services provided pursuant to agreement by the customer and Company may be subject to Commission review. All review and study fees are non-refundable, whether or not the customer decides to pursue the project.

4. Rates for Services provided by DG Customers

The Commission's September 28 Order adopted the following principle regarding rates to be paid to DG customers for service the DG facility provides to the utility:

> *Rates should reflect the value of the distributed generation to the utility, including any reasonable credits for emissions or for costs avoided on the generation, transmission, and/or distribution system.*

Xcel's DG Rider provides for Energy and Capacity Purchase Payments, the rates for which are discussed in detail below (specifically Section 6. Determination of Avoided Costs and Section 7. Standby Rates). In addition, the proposed tariff identifies the following credits: Distribution Facility Credit, Renewable Resources Credit, and Tradable Emissions Credits, each of which is discussed in detail below (Section 9. Credits). The Department concludes that Xcel has generally addressed these requirements and discusses these issues further below.

5. Principle for Setting Rates

The Commission's September 28 Order adopted two sets of Guidelines regarding the calculation of avoided energy costs. First, the Commission adopted the following principle for setting rates for services provided by DG customers to utilities:

> *Rates should reflect the costs the utility expects to avoid. To the extent practical, these costs should reflect seasonal and peak/off-peak differences in costs.*

Xcel's proposal to implement this principle is discussed further below.

6. Determination of Avoided Costs

a. Avoided Energy Costs

In addition to the general principle noted above, the Commission adopted the following Guidelines regarding the calculation of avoided energy costs:

> *Distribution utilities that are full requirements customers of wholesale suppliers may use their suppliers' rate schedules to determine avoided energy costs. Other utilities should follow these steps:*
>
> *Using a production cost model the following steps are used to calculate the marginal energy rates:*
>
> *a) System-wide hourly marginal energy costs are calculated with a production model for each hour of the future year.*
> *b) Based on those costs, the average on-peak and off-peak marginal energy costs are calculated for each month.*
> *c) The on-peak monthly rate is set at the average monthly on-peak marginal energy costs. The off-peak monthly energy rate is set at the average monthly off-peak marginal energy costs. Thus, there are 24 rates set for the year, with an on-peak and off-peak rate set for every month.*
> *d) A trial period is proposed to see whether, in practice, utilities are able to forecast these energy prices sufficiently well. Depending on the trial results, a lump sum true-up may be used at the end of each year to reflect the difference between actual and estimated energy bills.*

Xcel's proposed Sheet 75, Power Purchase Agreement Terms, Energy and Capacity Purchase Payments states:

> Energy payment rate schedule shall be based on Company's expected average marginal energy costs for on-peak and off-peak periods for each month of the year.

The proposed tariff as filed further states that the energy payment rate would be updated annually. This schedule would be available to customers after signing a confidentiality agreement.

In its Petition, the Company did not provide a current energy payment schedule but did provide the description for the basis of the payment schedule identified above. The Company's general description of the energy payments is consistent with the general principles identified in the Guidelines. The Company provided its current Energy Payment rate schedule in response to Department Information Request No. 4(a) and in its response to Department Information Request

No. 4(b) noted that the schedule "is produced by production simulation modeling based on the Company's budget forecast in use at the time of the Company's most recent Cogeneration and Small Power Production filing made with the Commission (December 2004)." The information provided under the Company's Cogeneration and Small Power Production filing made with the Commission, however, only addresses estimated system incremental energy costs by season, on-peak, off-peak and average. The Guidelines for the current petition require monthly on-peak and off-peak rates.

Therefore, the Department recommends that the Company submit its determination of the Payment Schedule for Energy Delivered to Company provided in response to Department Information Request No. 4(a) for formal consideration. The Department notes that, without this information, the Department cannot recommend approval of Xcel's proposal.

The Department also notes that a recent development may affect the calculation of the avoided costs of energy. This development is the commencement of the "Day 2 market" of the Midwest Independent System Operator (MISO). Under this market, utilities have various proposals to offer their generation and load into the MISO Day 2 market, and a market-clearing price would affect the cost of energy the utility obtains to serve customers. Utilities may also have to pay for transmission congestion costs which may be offset at least in part by Financial Transmission Rights (FTRs). Finally, the utility would have to pay for a net amount of transmission line losses.

Since this market is new (began on April 1, 2005), it is not possible at this time to predict how the MISO Day 2 market will affect the cost of energy, or the avoided cost of energy. However, given this development, the Department notes that the trial period adopted by the Commission will be important to determine whether a true-up is needed on an ongoing basis.

b. Avoided Capacity Costs

The Commission's September 28 Order adopted two sets of Guidelines regarding the calculation of avoided capacity costs. First, the Commission adopted the principles listed in the section above for setting rates for capacity services provided by DG customers to utilities. In addition, the Commission adopted the following Guidelines for calculating avoided capacity costs:

i. *Calculate the installed capital cost plus fixed O&M costs plus startup costs ($/kW-year). If the next (marginal) unit is from a competitive bid, the utility must estimate these costs and fully defend the estimate.*
ii. *Calculate the Levelized Annual Revenue Requirements (LARR) ($/kW-year).*
iii. *Divide the amount in (ii) for the next year by twelve to get the capacity marginal costs (/kW-month).*
iv. *These marginal costs must be escalated annually by the expected inflation rate.*

> *(2) The need for capacity is established in the utility's most recent integrated resources plan (IRP). A need exists if the utility shows a deficit at any year of the five-year planning period.*
> *(3) Capacity payments should be made for the total fully accredited DG capacity, regardless of when the power is delivered to the system.*
> *(4) The expected life of a capacity addition is the expected life of the specific capacity addition from the utility's most recently approved integrated resource plan.*
> *(5) If the contract to purchase power from a DG source begins at the time the utility needs the capacity, then the full capacity payment is made, adjusting only as needed for the length of the contract (i.e. there is no discount for adding capacity sooner than it is needed).*
> *(6) The formula for adjustments to capacity payments is:*
>
> $$A2 = \frac{(1+i)^m - 1}{(1+i)^n - 1} * \frac{(1+i)^{n-a} - (1+e)^{n-a}}{(1+i)^m - (1+e)^m} * A1$$
>
> *Where:*
> *A1 = Levelized annual value of a capacity purchase at the time of need,*
> *A2 = Levelized annual value of the capacity paid for in a power purchase contract,*
> *m = Expected lifetime of ordinary (alternative) future capacity addition,*
> *n = Length of power purchase contract,*
> *i = Utility cost of capital,*
> *e = Escalation rate affecting value of new capacity additions,*
> *a = Length of time between beginning of contract and time of need for capacity.*

Xcel's proposed Sheet 76 states:

> Capacity payment rate schedule shall be based on the capacity *contributed* by the facility to the Company. The capacity payment shall be set for the term of the PPA agreement based on the year in which the agreement is signed and may escalate at a fixed rate through the term of the agreement. Full capacity payment will be based on the total accredited DG capacity, regardless of *when the power is delivered to the system.* (emphasis added)

The capacity benefits to the Company from the DG facility occur regardless of energy delivered. For greater clarification, the Department recommends the following modification:

> Capacity payment rate schedule shall be based on the capacity ~~contributed~~ made available by the facility to the Company. The capacity payment shall be set for the term of the PPA agreement based on the year in which the agreement is signed and may escalate at a fixed rate through the term of the agreement. Full capacity payment will be based on the total accredited DG capacity, regardless of when the power is delivered to the system.

The specific determination of capacity payments are detailed on proposed Sheet 76 and is taken directly from the Commission's Guidelines, with the identification of a fixed escalation rate of 2.5% per year to be applied on the anniversary of the commercial operation date. While the process for determining the capacity payments is consistent with the Guidelines, the Company to date has not submitted, in its Petition or in response to Department Information Request No. 5, a Capacity Payment Rate Schedule for formal consideration. Therefore, the Department recommends that Xcel submit a current Capacity Payment Rate Schedule with supporting documentation of its determination for formal consideration. The Department also notes that, without this information the Department cannot recommend approval of Xcel's petition.

7. Standby Rates

The Guidelines adopted in the Commission's September 28 Order addresses only the availability and/or obligation to buy standby power and the reservation fees for standby power. The Guidelines did not provide any direction for other aspects of a Standby tariff, such as usage rates, billable demand and energy, and monthly customer charges. The Company's petition proposes using its existing Commission-approved Standby Service Rider modified specifically for customers under the proposed DG Tariff to meet the Guidelines. Therefore, the Department's analysis considers only the Company's proposed modifications to its Standby Service Rider as they relate to the Commission's Guidelines.

Xcel proposes using its existing Commission-approved Standby Service Rider with the following modifications for DG customers under the proposed DG Tariff:

1) Customers on this DG tariff with Standby service requirements less than or equal to 60 kW in size shall be exempted from taking service under the Standby Service Rider.

2) The Demand Charge per Month per kW of Contracted Standby Capacity reservation fee shall be reduced by $0.23, but not resulting in a charge less than zero.

3) The customer shall pay an additional Reservation Fee charge based on the Company's Open Access Transmission Tariff rate times the Contracted Standby Capacity quantity.

The Company's existing Standby Service is available to any non-residential customer who has an alternative source of electric energy supply which normally serves all or a portion of the customer's electrical load requirements and who desires use of the Company's electric service for temporary backup or maintenance power. Under the existing Standby Service Rider, customers are subject to the following charges:

- Reservation Fees:
  - For both firm and non-firm Standby service:
    - a monthly customer charge,
      - The monthly customer charge is the same for all three standby services.
    - a per kW demand charge for Contracted Standby Capacity based on level of voltage service: secondary, primary, transmission transformed, and transmission.
      - No demand charge is applied to non-firm Standby for Transmission Voltage Service. The per kW demand charge for unscheduled maintenance under firm Standby Service is $0.10 greater than for scheduled maintenance. The per kW demand charge for non-firm Standby is $0.80 less than scheduled maintenance under firm Standby.
    - These charges differ for unscheduled maintenance, scheduled maintenance, and non-firm standby.
    - In addition, an Annual Allowed Grace Period of Unscheduled Use of Standby Service for Exemption from Demand Usage Rates (Hours per kW of Contracted Standby Capacity) is identified for each.

- Usage Rates:
  - Demand Charge per kW of Standby Capacity Used.
  - Energy Charge per kWh of Standby Energy Used.
  - The demand and energy charge is the same as contained in the base tariff to which the Rider is attached.

The reservation fee is applied to the customer's contracted Standby capacity specified in the customer's ESA and may differ between summer and winter months. The usage fee is applied to the smaller of the following:

(1) the amount of contracted Standby capacity less the actual demand supplied by the customer's own generating facilities, but not less than zero, or
(2) the amount of actual capacity supplied by the Company.

The Commission's September 28 Order adopted the following Guidelines regarding standby rates:

> **a. General**
>
> *DG customers do not have to buy standby power. However, if standby power is not purchased, it may not be available.*

Standby Service is to be provided under Xcel's current Standby Service Rider. Under the DG Tariff, Sheet 74, Standby Service Requirements:

> All customers eligible for this DG Tariff who use their generation to serve on-site load *shall be required to contract for Standby Service* from the Company.

Under Xcel's current proposed DG Tariff, all participants are *required* to purchase standby power, which is inconsistent with the Commission's Guidelines. Therefore, the Department recommends the following modified language with added language underlined.

> All customers eligible for this DG Tariff who use their generation to serve on-site load ~~shall be required to~~ <u>may</u> contract for Standby Service from the Company. <u>If the customer chooses not to contract for Standby Service, standby power may not be available</u>.

Please see comments under d. Physical Assurance Customer in this section for further comments.

> *DG customers do not have to buy as much standby power as necessary to equal the full amount of their own DG capacity. However, if, for example, the customer has a 5 MW DG facility and buys only 2 MW of standby power, there must be a guarantee that the facility will never take more than 2 MW of standby service.*

There is no specification of any constraints on standby power identified in the tariff. The Department recommends that the following additional language be included for greater clarification in Section 5, Standby Service Rider, on Sheet 102, with added language underlined.

> For purposes of applying the Reservation Fee, the demand will be the quantity specified in the customer's Electric Service Agreement as the maximum amount of Standby Service the Company is obligated to supply, <u>with the maximum value for a customer's Contracted Standby Capacity being the capacity of the DG facility.</u>
>
> The Department also notes that Xcel's residential customers are not eligible for Xcel's Standby Service. The Department recommends that, in its reply comments Xcel either propose a Standby tariff for residential customers or explain why the

Company believes it is in compliance with the Commission's September 28 Order.

b. Rates for Firm Standby Service:

The Commission's September 28 Order adopted the following language regarding firm standby service:

> *Generation Capacity: The monthly reservation fees are equal to the percentage of the planned reserve margin of the utility times the applicable capacity tariffed rates.*
>
> *Transmission: Terms, conditions and charges for transmission service are subject to the individual utilities. Or MISO's Open Access Transmission Tariffs or their successors as approved by the FERC.*
>
> *Local Distribution: The monthly rates equal the monthly charge under the applicable distribution charges. That is, there is no discount on the distribution charge.*

Xcel proposed the following modification to its current Standby fees, Sheet 74, Standby Service Requirements:

2) The Demand Charge per Month per kW of Contracted Standby Capacity Reservation fee shall be reduced by $0.23, but not resulting in a charge of less than zero.

3) The customer shall pay an additional Reservation Fee charge based on the Company's Open Access Transmission Tariff rate times the Contracted Standby Capacity quantity.

Through discovery in further conversations with the Company, Xcel stated that the reservations rates built in 15 percent of generation costs which represents the reserve margin. Furthermore, the adjustments identified above allow for the inclusion of transmission costs as identified in the Guidelines, with the $0.23 per kW reduction to address the transmission costs already built into the current rate. In the Company's response to Department Information Request No. 6, the Company identified Transmission Transformation as a cost component included in the rates for Firm and Non-Firm Standby reservation Fees. If the intent of the adjustment identified above is to remove the cost components associated with transmission and substitute it with "the Company's Open Access Transmission Tariff rate times the Contracted Standby Capacity quantity," it is unclear from the information provided by the Company that the cost component identified as "Transmission Transformation" should still be included.

The Department recommends that the Company clarify its proposal in its reply comments. At that time, the Department can assess whether Xcel's rates comply with the Commission's Order. Without this information, the Department cannot recommend approval of Xcel's proposal.

c. Rates for Non-Firm Standby Service:

The Commission's September 28 Order adopted the following language regarding non-firm standby service:

> *Generation (energy and capacity): There are no monthly reservation fees for energy and capacity for a non-firm DG customer.*
>
> *Transmission: There are no monthly reservation fees for transmission for a non-firm DG customer.*
>
> *Local Distribution: The monthly rates equal the monthly charge under the applicable distribution charges. That is, there is no discount on the distribution charge.*

The Commission's Guidelines specify that non-firm Standby customers should be subject only to monthly reservation fees associated with Local Distribution. As stated above, in the Company's response to Department Information Request No. 6, the Company identified Transmission Transformation as a cost component included in the rates for Firm and Non-Firm Standby reservation Fees. It is unclear from the information provided by the Company that the cost component "Transmission Transformation" should still be included in the Standby Reservation Fees for non-firm customers.

The Department recommends that the Company clarify its proposal in its reply comments. At that time, the Department can assess whether Xcel's rates comply with the Commission's Order. Without this information, the Department cannot recommend approval of Xcel's proposal.

d. Physical Assurance Customer

The Commission's September 28 Order adopted the following language regarding physical assurance customers:

> *A physical assurance customer is a customer who agrees not to require standby services and has a mechanical device to insure that standby service is not taken. The cost of the mechanical device, which must be reasonable, is to be paid by the DG customer. A utility's tariff may deal with other issues not addressed here.*

The Company's existing Standby Service Rider with the proposed modifications does not contain provisions for the physical assurance customer. Therefore, the Department recommends the following additional language to the Department's recommendation from above a.ii., Sheet 74, Standby Service Requirements:

> The customer shall be subject to the terms and conditions of the Company's Standby Service Rider except as specifically modified here. These modifications are as follows.
>
> 1) Customers on this DG tariff with Standby service requirements less than or equal to 60 kW in size shall be exempted from taking service under the Standby Service Rider.
>
> 2) <u>Customers may instead chose to be a physical assurance customer. A physical assurance customer is a customer who agrees not to require standby services and has a mechanical device to insure that standby service is not taken. The cost of the mechanical device, which must be reasonable, is to be paid by the DG customer.</u>

e. DG facilities 60 kW or less

The Commission's September 28 Order adopted the following language regarding DG facilities that are 60 kW or less:

> *A DG facility of 60 kW or less is exempted from paying any standby charges. The Commission will review this guideline within 24 months.*

Under Xcel's proposed DG Tariff, Sheet 74, Standby Service Requirements states:

> Customers on this DG tariff with Standby Service requirements less than or equal to 60 kW in size shall be *exempted from taking service* under the Standby Service Rider. (emphasis added)

The Guidelines state that "DG facility of 60 kW or less is exempted from paying any standby charges," however, Xcel's proposed tariff identifies these facilities as being "exempted from taking service" under the Standby Service Rider, i.e., not required to take Standby Service. The Department notes that there is a difference between being exempted from paying for a service and being exempted from taking a service. The Commission's Order stated only that the qualifying customers would be exempt from paying for the service, but it was the Department's understanding that the customers would still be permitted to take standby service.

Based on the current specification of this guideline, the Department recommends the following language modification for greater clarification with added language underlined.

> Customers on this DG tariff with Standby Service requirements less than or equal to 60 kW in size shall be exempted from taking service under the Standby Service Rider. <u>Standby service will be available to these customers.</u>

In addition, the Department recommends that Xcel report in 24 months on the number of customers meeting this exception and the standby usage of these customers for the Commission's review.

8. Credits

a. Distribution Credits

Regarding various issues pertaining to credits, the Commission's September 28 Order adopted the following guidelines:

> *Credits should be given to a DG customer if the installation of a DG facility reduces the utility's costs of providing the service. These lower costs could be generation, transmission, or distribution related costs.*
>
> *Distribution credits to a DG customer should equal the utility's avoided distribution costs resulting from the installation of the DG facility.*
>
> *Each utility should provide, upon request, a list of substation areas or feeders that could be likely candidates for distribution credits as determined through the utility's normal distribution planning process.*
>
> *Upon receiving a DG application, the utility will perform an initial screening study to determine if the DG project has the potential to receive distribution credits. The DG customer is responsible for the cost of such a screening study.*
>
> *If the utility's study shows that there exists potential for distribution credits, the utility must, at its own cost, pursue further study to determine the distribution credits, as part of its annual distribution capacity study.*

Xcel's proposed DG Tariff, Sheet 74, Distribution Facility Credits states:

> Customer may also be eligible for a Distribution Facility Credit (DFC). The terms and conditions of such credit shall be determined from a case specific study of avoided distribution costs. The avoided distribution costs are based on Company's annually conducted distribution capacity planning study that identifies capacity needs, upgrade and load growth on area distribution feeders. As part of the case specific study, the company will perform an initial screen of DG project to determine if the project is located on a distribution feeder that has potential for a DFC. The DG customer is

> responsible for the cost of such screening study. If the screening study shows that there exists potential for a DFC, the Company shall, at its own cost, pursue further study to determine the DFC, as part of an annual distribution capacity study. Once established by contract and accepted by Company and customer, DFC shall be fixed over the term of the contract.

The Department recommends the following modifications.

> Customer may also be eligible for a Distribution Facility Credit (DFC). Upon request, a list of substation areas or feeders that could be likely candidates for distribution credits as determined through the Company's normal distribution planning process. The terms and conditions of such credit shall be determined from a case specific study of avoided distribution costs. The value of the DFC shall be equal to the Company's avoided distribution costs resulting from the installation of the DG facility. The avoided distribution costs are based on Company's annually conducted distribution capacity planning study that identifies capacity needs, upgrade and load growth on area distribution feeders. Upon receiving a DG application, as part of the case specific study, the company will perform an initial screen of DG project to determine if the project is located on a distribution feeder that has potential for a DFC. The DG customer is responsible for the cost of such screening study. If the screening study shows that there exists potential for a DFC, the Company shall, at its own cost, pursue further study to determine the DFC, as part of an annual distribution capacity study. Once established by contract and accepted by Company and customer, DFC shall be fixed over the term of the contract.

b. Line Loss Credits

The Commission's September 28 Order also adopted the following language regarding diversity and line loss credits:

> *No additional diversity credits for energy and capacity should be given to DG customers who contract for standby service.*
>
> *No additional line loss credits (above the credits already included in the avoided cost calculations) should be paid to a DG customer with the following exception: A DG customer may request the utility to provide a specific line loss study and receive additional line loss credits if the study supports such credits. The DG customer is responsible for the cost of the study regardless of the study's outcome.*

Xcel's proposed tariff does not include provisions for Line Loss Credits as established in the guidelines detailed in the Commission's Order. The Department recommends that Xcel include the following language under DG Tariff:

Line Loss Credits

If Customer requests the Company to provide a specific line loss study, Customer may be eligible for additional line loss credits if the study supports such credits. The Customer is responsible for the cost of the study, regardless of the study's outcome.

c. Renewable Credits

The Commission's September 28 Order adopted the following language regarding renewable credits:

> *A DG customer who installs a renewable DG facility should be paid the avoided cost of "green power" to the extent that installation of the DG facility allows the utility to avoid the need to purchase "green power" elsewhere. Otherwise a renewable DG facility should be paid the utility's regular avoided costs.*

Under the proposed DG Tariff , Renewable Resource Credits:

> If the customer installs a renewable resource distributed generation system that allows the Company to avoid the need to purchase renewable energy elsewhere then the purchase of such renewable energy and capacity will *reflect* the avoided cost of renewable purchases. Otherwise, the DG customer shall be paid the Company's regular avoided costs. (emphasis added)

The above guidelines specify that "a renewable DSG facility should be paid the avoided cost of 'green power'" whereas Xcel's proposed tariff states that "the purchase of such renewable energy and capacity will *reflect* the avoided cost of renewable purchases" to the Company. To clarify the tariff, the Department recommends that the Commission require Xcel to modify the language to more directly reflect the language in the guidelines, specifically:

> If the customer installs a renewable resource distributed generation system that allows the Company to avoid the need to purchase renewable energy elsewhere then the purchase of such renewable energy and capacity ~~will reflect~~ <u>shall equal</u> the avoided cost of renewable purchases. Otherwise, the DG customer shall be paid the Company's regular avoided costs.

In addition, the Department requested in Department Information Request No. 7 that the Company provide a current schedule of renewable resource credits and the determination of that schedule. To date, the Company has not submitted that information, therefore, the Department recommends that the Company submit a current schedule renewable resource credits and the determination of that schedule for formal consideration.

Given the possible development of a renewable energy credits tracking and trading system, under Docket No. E999/CI-04-1616, the Department recommends that the following additional language be included in the Company's tariff:

> 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.

Furthermore, the Department notes that as the Commission's investigation into a tracking and trading system for renewable energy credits progresses, additional language may be necessary to address issues as they develop relating to the establishment, tracking, and trading of renewable energy credits.

In addition, the Department recommends that the following language be added:

> <u>Customer may receive either renewable credits or tradable emission credits but not both</u>.

d. Emissions Credits

The Commission's September 28 Order adopted the following language regarding tradable emissions:

> *Tradable Emissions: For tradable emissions such as SO2, if a low emission DG facility allows the utility to capture the value of the emission credit, then the DG owner should receive the credit revenues.*
>
> *A DG customer may get a green credit or an emission credit, but not both.*
>
> *The Commission's policy regarding the renewable energy objective may affect the question of whether it is reasonable for utilities to pay a credit for renewable power at the approved green-price premium even if a utility does not need the green power.*

Under the proposed DG Tariff, Tradable Emission Credits:

> If the purchase of energy and capacity from the DG customer's facility results in the Company receiving an economic value associated with tradable emissions, such tradable emissions credits shall be provided to he DG customer under terms that *reflect* the value of the tradable emissions credits.

The above guidelines specify that "if a low emission DG facility allows the utility to capture the value of the emission credit, then the DG owner should receive the credit revenues," whereas Xcel's proposed tariff states that the credit "*reflect the economic value*" of the credit to the Company. The Department recommends that Xcel modify the language to reflect more directly the language in the guidelines, specifically:

> If the purchase of energy and capacity from the DG customer's facility results in the Company receiving an economic value associated with tradable emissions, such tradable emissions credits shall be provided to he DG customer under terms that ~~reflect~~ equal the value of the revenues from the tradable emissions credits.

In addition, the Department recommends that the following language be added:

> Customer may receive either renewable credits or tradable emission credits but not both.

e. Reliability Credits

The Commission's September 28 Order adopted the following language regarding reliability credits:

> *DG owners should receive no reliability credit beyond what is already approved in the standby tariffs.*

No reliability credits were offered under the proposed tariff therefore the Department concludes that Xcel has satisfied this guideline.

B. GENERAL COMMENTS

The rate schedules under the DG Tariff, specifically the energy payment schedule and the capacity payment schedule, are likely to be subject to change each year, thereby requiring Commission approval to implement the updated rates. Therefore, the Department recommends that the Company be required to make an annual compliance filing for the upcoming year the updated energy payment schedule and capacity payment schedule for the tariff, if different from the previous year. In addition, the Department recommends that the Company include the schedule for renewable resource credits and the average emission credit for the previous year. Furthermore, the Department recommends that the Company include a discussion of the change in rates and the necessary support to substantiate the change in the compliance filing.

C. CONSOLIDATION OF DG TARIFFS

Through further discovery, the Company stated that the existing Distributed Generation Standard Interconnection and Power Purchase Tariff, identified as the 2 MW DG Tariff in the Petition, does not contain any customers and has not contained any customers since initiated. However, as stated in the Petition, the development of this tariff was the result of stipulation agreements between the Company and other parties to the merger of Northern States Power Company and New Century Energies, Inc., that formed Xcel Energy. Therefore, the Department recommends that the Commission notice parties of the proposed closure to Xcel's existing 2 MW DG Tariff. If no parties oppose the proposal to close the 2 MW DG Tariff, the Department recommends that the Commission approve the Company's request to close its current 2 MW DG Tariff.

D. FERC ORDER NO. 2006

On May 12, 2005, the Federal Energy Regulatory Commission (FERC) issued Order No. 2006 under Docket No. RM02-12-000, *Standardization of Small Generator Interconnection Agreements and Procedures*. The purpose of this Order is to amend FERC's:

> … regulations under the Federal Power Act to require public utilities that own, control, or operate facilities for transmitting electric energy in interstate commerce to amend their open access transmission tariffs to include standard generator interconnection procedures and an agreement that the Commission is adopting in this order and to provide interconnection service to devices used for the production of electricity having a capacity of no more than 20 megawatts.

The Department notes that DG transactions that are the subject of this proceeding are only those involving energy sales from a utility customer to the utility, rather than interstate commerce. It is unclear to the Department whether FERC Order No. 2006 has any impact on the proceedings current before the Commission. The Commission may wish to request comments from the utilities and other interested parties regarding the impact of FERC Order No. 2006 on the current proceedings.

IV. DEPARTMENT RECOMMENDATION

While the Department concludes that Xcel has complied with a number of provisions in the Commission's Order, at this point the Department cannot recommend approval of Xcel's petition. Xcel needs to provide the following in its reply comments:

- support for the determination of its energy payment schedule;
- the current capacity payment rate schedule and the support for the determination of this payment schedule;
- support for the inclusion of Transmission Transformation costs in its reservation fees for Standby Service;
- the current renewable resource credit schedule and the support for the determination of this schedule; and

- a proposed Standby tariff for residential customers or an explanation of why the Company is in compliance with the Commission's September 28 Order.

The Department intends to provide further comments on Xcel's proposal once this information is provided and can assess at that time whether the Commission should approve Xcel's proposed tariff as modified.

Based on the Department's review to date, the Department recommends that the Commission require Xcel to:

A. Adopt the following language modifications.

1. Sheet 73, Qualifications:

The distributed generating facility must be an operable, permanently installed or mobile generation facility and serving ~~shall be owned by~~ the customer receiving retail electric service from the Company at the same site.

2. Sheet 74, Contracts:

… The Company ~~will~~ shall purchase all electricity generated and offered for sale to the Company by the DG facility pursuant to the terms, conditions and price schedule of the PPA….

3. Supplemental Service:

The Department recommends that the Commission require Xcel to clarify in its tariff that supplemental service would be provided to the DG customer through its base electric rate.

4. Sheet 73, Application of Services:

Customer seeking interconnection and to operate a DG facility in parallel, must complete and submit to Company a signed Generation Interconnection Application Form ("Interconnection Application") and the applicable Interconnection Application Fee. Please see the schedule for Generation Interconnection Application Fees under *Process for Interconnection, Step 1 Application (By Applicant)* on Sheet 89 of this section. Company will initiate project upon receipt of complete information needed for Interconnection Application.

5. Sheet 73, Studies and Services:

The Department recommends the following additional language (identified in underline):

> Interconnection study or studies are required and shall be conducted by Company as part of the terms and conditions of service under this tariff. Please see the *Process for Interconnection* in this section for more information regarding these studies. A fee schedule for the engineering studies will be assessed as provided in this tariff. Please see the schedule for Generation Interconnection Application Fees under *Process for Interconnection, Step 1 Application (By Applicant)* on Sheet 89 of this section. This fee schedule may be revised from time to time, upon Commission approval, to reflect changes in Xcel Energy's costs of conducting the studies. Any other studies and services provided pursuant to agreement by the customer and Company may be subject to Commission review. All review and study fees are non-refundable, whether or not the customer decides to pursue the project.

6. Sheet 76:

The Department recommends the following modification:

> Capacity payment rate schedule shall be based on the capacity ~~contributed~~ made available by the facility to the Company. The capacity payment shall be set for the term of the PPA agreement based on the year in which the agreement is signed and may escalate at a fixed rate through the term of the agreement. Full capacity payment will be based on the total accredited DG capacity, regardless of when the power is delivered to the system.

7. Sheet 74, Standby Service Requirements:

The Department recommends the following modified language:

> All customers eligible for this DG Tariff who use their generation to serve on-site load ~~shall be required to~~ may contract for Standby Service from the Company. If the customer chooses not to contract for Standby Service, standby power may not be available.

8. Section 5, Standby Service Rider, on Sheet 102:

The Department recommends the following modified language:

> For purposes of applying the Reservation Fee, the demand will be the quantity specified in the customer's Electric Service Agreement as the maximum amount of Standby Service the Company is obligated to supply, with the maximum value for a customer's Contracted Standby Capacity being the capacity of the DG facility.

9. Sheet 74, Standby Service Requirements:

The Department recommends the following modified language:

> Customers on this DG tariff with Standby service requirements less than or equal to 60 kW in size shall be exempted from taking service under the Standby Service Rider.
>
> Customers may instead chose to be a physical assurance customer. A physical assurance customer is a customer who agrees not to require standby services and has a mechanical device to insure that standby service is not taken. The cost of the mechanical device, which must be reasonable, is to be paid by the DG customer.

10. Sheet 74, Standby Service Requirements:

The Department recommends the following modified language:

> Customers on this DG tariff with Standby Service requirements less than or equal to 60 kW in size shall be exempted from taking service under the Standby Service Rider. Standby service will be available to these customers.

11. Sheet 74, Distribution Facility Credits:

The Department recommends the following modifications.

> Customer may also be eligible for a Distribution Facility Credit (DFC). Upon request, a list of substation areas or feeders that could be likely candidates for distribution credits as determined through the Company's normal distribution planning process. The terms and conditions of such credit shall be determined from a case specific study of avoided distribution costs. The value of the DFC shall be equal to the Company's avoided distribution costs resulting from the installation of the DG facility. The avoided distribution costs are based on Company's annually conducted distribution capacity planning study that identifies capacity needs, upgrade and load growth on area distribution feeders. Upon receiving a DG application, as part of the case specific study, the company will perform an initial screen of DG project to determine if the project is located on a distribution feeder that has potential for a DFC. The DG customer is responsible for the cost of such screening study. If the screening study shows that there exists potential for a DFC, the Company shall, at its own cost, pursue further study to determine the DFC, as part of an annual distribution capacity study. Once established by contract and accepted by Company and customer, DFC shall be fixed over the term of the contract.

12. Line Loss Credits:

The Department recommends that Xcel include the following language under DG Tariff:

> **Line Loss Credits**
> If Customer requests the Company to provide a specific line loss study, Customer may be eligible for additional line loss credits if the study supports such credits. The Customer is responsible for the cost of the study, regardless of the study's outcome.

13. Renewable Resource Credits:

The Department recommends that the Commission require Xcel to modify the language to more directly reflect the language in the guidelines, specifically:

> If the customer installs a renewable resource distributed generation system that allows the Company to avoid the need to purchase renewable energy elsewhere then the purchase of such renewable energy and capacity ~~will reflect~~ shall equal the avoided cost of renewable purchases. Otherwise, the DG customer shall be paid the Company's regular avoided costs.

Also, given the possible development of a renewable energy credits tracking and trading system, under Docket No. E999/CI-04-1616, the Department recommends that the following additional language be included:

> In the event that Customer receives renewable credits, that is, the Customer is paid by the Company the avoided cost of renewable energy purchases, then this transaction will constitute a transfer of the property rights for those renewable attributes from the renewable energy generated from Customer to the Company.

Furthermore, the Department notes that as the Commission's investigation into a tracking and trading system for renewable energy credits progresses, additional language may be necessary to address issues as they develop relating to the establishment, tracking, and trading of renewable energy credits.

In addition, the Department recommends that the following language be added:

> Customer may receive either renewable credits or tradable emission credits but not both.

14. Tradable Emission Credits:

The Department recommends that Xcel include the following language under DG Tariff:

> If the purchase of energy and capacity from the DG customer's facility results in the Company receiving an economic value associated with tradable emissions, such tradable emissions credits shall be provided to he DG customer under terms that ~~reflect~~ equal the value of the revenues from the tradable emissions credits.

In addition, the Department recommends that the following language be added:

> Customer may receive either renewable credits or tradable emission credits but not both.

B. Require Xcel to report in 24 months on the number of DG customers meeting the exception of being 60 kW or less and the standby usage of these customers.

C. Require that the Company provide in an annual compliance filing:

- Updated energy payment schedule if different from the previous year;
- Updated capacity payment schedule if different from the previous year;
- Updated renewable resource credit schedule if different from the previous year;
- Average tradable emissions credit for the previous year; and
- A discussion and support for any and all changes in the schedules.

D. Notice parties to Xcel's merger (E,G002/PA-99-1031) regarding Xcel's proposal to close its existing Distributed Generation Standard Interconnection and power Purchase Tariff and replace it with the currently proposed Distributed Generation Standard Interconnection and Power Purchase Tariff.

E. Consider requesting comments from the utilities and other interested parties on the potential impact of FERC Order No. 2006 on the current proceedings.

/jl