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December 23, 2004

VIA OVERNIGHT MAIL

RECEIVED

Executive Secretary Minnesota Public Utilities Commission

121 7th Place East, Suite 350 St. Paul, MN 55101-2147

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MNPUBLIC UTILITIES COMMISSION TRADE SECRET

amission DATA HAS BEEN EXCISED

Dr. Burl W. Haar

In the Matter of Minnesota Power's Petition for Approval of Rider for

Distributed Generation Service and Rider for Standby Services

Docket No. E015/M-04- 2030

Dear Dr. Haar:

Enclosed for filing with the Commission please find Minnesota Power's Petition for Approval of a Rider for Distributed Generation Service and Rider for Standby Service ("Petition"). In accordance with Minn. Rule Part 7829.1300, Minnesota Power has included a Summary with this filing. As reflected in the attached Affidavit of Service, the Summary of the Petition has been filed on all parties on the official service list in Docket No. E-999/CI-01-1023, and Minnesota Power's General Service List.

Exhibit E to this Petition contains trade secret information and is marked as such pursuant to the Commission's Revised Procedures for Handling Trade Secret and Privileged Data, which further the intent of Minn. Stat. §13.37 and Minn. Rule Part 7829.0500. The Commission's Rules of Practice and Procedure require that six copies of the public version and the original and nine copies of the Trade Secret version be filed. As required by the Commission's Revised Procedures, a statement providing the justification for excising the Trade Secret Data is attached to this letter.

Please contact me at the number above if you have any questions regarding this filing...

Yours truly

Christopher D. Anderson

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Enc.

c:

Service List

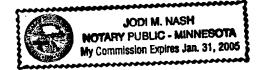
STATE OF MINNESOTA)	AFFIDAVIT OF SERVICE VIA
) ss	OVERNIGHT COURIER AND
COUNTY OF ST. LOUIS)	FIRST CLASS MAIL

Kristie Lindstrom of the City of Duluth, County of St. Louis, State of Minnesota, says that on the 23rd day of December, 2004, she served Minnesota Power's Petition for Approval of Rider for Distributed Generation Service and Rider for Standby Services to Burl Haar, Sharon Ferguson and Curtis Nelson via Overnight Courier. The persons on the attached Service List were served the Summary via First Class Mail.

Kristie Lindstrom

Subscribed and sworn to before me this 23rd day of December, 2004.

Notary Public



E999-CI-01-1023

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E999-CI-01-1023

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Statement Regarding Trade Secret Designation

Pursuant to the Commission's revised Procedures for Handling Trade Secret and Privileged Date in furtherance of the intent of Minn. Stat. 13.37 and Minn. Rule Part 7829.0500, Minnesota Power has designated Exhibit E to its Petition for Approval of Rider for Distributed Generation Service and Rider for Standby Services as Trade Secret.

Minnesota Power's filing contains detailed information related to Minnesota Power's generating costs. The disclosure of this information would be materially harmful to Minnesota Power because it provides an estimation for other electric utilities in the wholesale market the cost of energy on Minnesota Power's system. Minnesota Power and its wholesale and retail customers would be materially harmed if such information was used to Minnesota Power's disadvantage. The effect of public disclosure could affect the price Minnesota Power pays for purchased energy, a price that would be passed on to consumers through the Company's fuel clause. In order to protect itself and its customers from escalating purchased energy costs, Minnesota Power has designated the information as trade secret.

Minnesota Power respectfully requests the opportunity to provide additional justification in the event of a challenge to the trade secret designation provided herein.

STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

In the Matter of Minnesota Power's Rider for Distributed Generation Service and Rider for Standby Service Docket No. E-015/M-04PETITION FOR APPROVAL OF
RIDER FOR DISTRIBUTED
GENERATION SERVICE AND
RIDER FOR STANDBY SERVICE

SUMMARY

As required under Minnesota Statute §216B.1611, subdivision 3 and pursuant to an Order from the Minnesota Public Utilities Commission ("Commission") dated September 28, 2004 in Docket No. E-999/CI-01-1023 ("In the Matter of Establishing Generic Standards for Utility Tariffs for Interconnection and Operation of Distributed Generation Facilities under Minnesota Laws 2001, Chapter 212"), Minnesota Power hereby files for Commission approval of a new Rider for Distributed Generation Service and a revised Rider for Standby Service that supercedes Minnesota Power's existing Rider for Standby and Supplementary Service. Included with this Petition is a model electric service agreement for each customer taking service under the Rider for Distributed Generation Service. Distributed generation customers must comply with the "State of Minnesota Interconnection Agreement for the Interconnection of Extended Parallel Distributed Generation Systems with Electric Utilities" and must execute a power purchase agreement for the sale of the distributed generation capacity and energy to Minnesota Power.

STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

In the Matter of Minnesota Power's Rider for Distributed Generation Service and Rider for Standby Service Docket No. E-015/M-04PETITION FOR APPROVAL OF
RIDER FOR DISTRIBUTED
GENERATION SERVICE AND
RIDER FOR STANDBY SERVICE

I. BACKGROUND

Minnesota Statute §216B.1611, subdivision 3 required the Minnesota Public Utilities Commission ("Commission") to initiate a proceeding to establish the terms under which Minnesota utilities would permit distributed generation systems with capacity up to 10 MW to interconnect with their distribution facilities. Pursuant to the Commission's Order dated September 28, 2004 in Docket No. E-999/CI-01-1023 ("In the Matter of Establishing Generic Standards for Utility Tariffs for Interconnection and Operation of Distributed Generation Facilities under Minnesota Laws 2001, Chapter 212") (the "Order"), each utility is required to file with the Commission a distributed generation tariff consistent with the guidelines adopted in the Order within 90 days of the Order's issuance.

In compliance with the Order and the rate guidelines adopted by the Commission, Minnesota Power hereby files for Commission approval of a Rider for Distributed Generation Service ("DG Rider") that is attached as Exhibit A to this Petition. The primary purpose of the DG Rider is to govern the rates, terms and conditions for the sale of distributed generation capacity and energy from the customer to Minnesota Power. The Rider is explained in detail in Section III of this Petition.

A form electric service agreement governs service taken under the DG Rider, and Minnesota Power is requesting the Commission approve the Electric Service Agreement for Distributed Generation Service ("ESA") (and its associated form agreements) attached as Exhibit B to this Petition. The ESA includes customer-specific information for service under the DG Rider and Standby Rider. The associated form agreements include the "State of Minnesota Interconnection Agreement for the Interconnection of Extended Parallel Distributed Generation Systems with Electric Utilities" ("Interconnection Agreement"), a Power Purchase Agreement for Distributed Generation Service between Minnesota Power and Customer, and a Confidentiality and Nondisclosure Agreement for Distributed Generation Service governing the customer's receipt of its individual Capacity and Energy Payment Schedule derived from Minnesota Power's Distributed Generation Capacity and Energy Payment Schedule. Minnesota Power is requesting Commission approval of these form agreements to eliminate the requirement that each electric service agreement be filed with the Commission for approval. The form power purchase agreement governs the energy and capacity payment by Minnesota Power to the customer for accredited capacity provided from the customer to Minnesota Power. The form Confidentiality and Nondisclosure Agreement governs the confidential nature of Minnesota Power's Distributed Generation Capacity and Energy Payment Schedule.

Minnesota Power also files for Commission approval a Rider for Standby Service ("Standby Rider"), which is a revision to the existing Rider for Standby and Supplementary Service that appears at Page 61 of Minnesota Power's Rate Book and was adopted on December 31, 1974. The Standby Rider is attached as Exhibit C. There are no customers taking service under the original Rider. The Standby Rider was renamed and revised in compliance with the Order, and governs the rates, terms and conditions under which Minnesota Power will supply temporary backup of a distributed generation system that normally serves all or a portion of the customer's electric load requirements.

II. PROCEDURAL MATTERS

This Petition seeks authorization to implement the proposed Riders. The Petition is being filed in accordance with Minnesota Statute §216B.1611, subdivision 3, and complies with the requirements of Minnesota Statute §216B.05 and the rules and regulations promulgated thereunder. This filing is considered a Miscellaneous Tariff Filing and is therefore governed by the provisions of Minnesota Rule 7829.1300. Adoption of the proposed Riders does not affect or change existing rates, and Minnesota Power's revenue requirement will also not be affected. Although the Miscellaneous Tariff Filing rules spell out notice and comment time periods, the statutory provisions do not specify a time period within which the Commission must act. All of the informational requirements set forth in Minn. Rule Part 7829.1300 are contained in this Petition.

III. EXPLANATION OF THE PROPOSED RIDERS AND AGREEMENTS

Minnesota Power's Riders follow the intent of the rate guidelines adopted by the Order. In the rate guidelines, the Commission adopted two principles for setting rates:

- (1) Rates should reflect the value of the distributed generation to the utility; and
- (2) Rates should reflect the cost the utility expects to avoid.

Minnesota Power developed the DG Rider and the Standby Rider in compliance with these guiding principles.

The DG Rider utilizes avoided capacity and energy costs as the basis for the Capacity and Energy Credits provided to customers selling capacity and energy from the distributed generation system. Minnesota Power also provides credits if the distributed generation system allows Minnesota Power to avoid costs associated with distribution

¹ Minn. Rules Part 7829.0100 subp. 11 provides that a Miscellaneous Tariff Filing includes filings that do <u>not</u> require such a determination.

system investment and renewable mandates or provides an economic value connected to tradable emissions.

The Standby Rider compensates Minnesota Power for all costs incurred to backup the distributed generation system to the level requested by the customer. These charges for back-up service are also cost-based and are consistent with those costs used to develop Minnesota Power's existing rate schedules. In addition to using cost-based rates, Minnesota Power also sends the appropriate price signals to standby customers by allowing customers to choose from two options: firm service and non-firm service. The firm service option is available to those customers who would rather pay an upfront ("take-or-pay") Reservation Fee and a lower ongoing ("pay as you go") Standby Demand Usage Fee. The non-firm option is available to those customers who choose to instead pay no Reservation Fee and a higher Standby Demand Usage Fee. The Standby Rider also sends price signals that encourage customers to operate the distributed generation system to avoid higher-cost summer and winter peak months. These seasonal price signals also eliminate some of the administrative burden of requiring customers to notify Minnesota Power when they intend to take their distributed generation system down for maintenance. It also reduces the need to monitor the operating performance of the distributed generation system.

The new DG Rider, the revised Standby Rider and Minnesota Power's form agreements are described below:

A. Rider for Distributed Generation Service

1. Application:

Minnesota Power requires any retail customer interconnecting a distributed generation system to Minnesota Power's distribution system to take service under the DG Rider, except as noted below. The customer must: i) take service under one of Minnesota Power's standard rate schedules (i.e., Residential Service, General Service, Large Light and Power Service, Municipal Pumping Service, or

Large Power Service); and ii) enter into the Interconnection Agreement with Minnesota Power.

In accordance with Minnesota Statute §216B.1611, subdivision 1, the distributed generation system must be located on the customer's site of retail service and interconnected for extended parallel operation with Minnesota Power's distribution system. The distributed generation system must also be fueled by natural gas or a renewable fuel, or another similarly clean fuel or combination of fuels of no more than 10 MW of interconnected capacity at a point of common coupling to Minnesota Power's distribution system. The interconnection and operation of distributed generation systems at each point of common coupling shall be considered a separate application of the DG Rider. This provision is included to ensure that no customer exceeds the 10 MW of interconnected capacity as required by statute.

The customer shall execute an electric service agreement along with a power purchase agreement with Minnesota Power for service under the DG Rider. Customers are required to take service under the agreement for at least one year, or any longer term specified under the electric service agreement. Service under the DG Rider is subject to Minnesota Power's rules and regulations for electric service; and the customer's service under the applicable standard rate schedule remains in effect, except as noted in the DG Rider.

There are two exceptions to taking service under the DG Rider for those customers that are otherwise eligible. Any eligible customer may instead take service under Minnesota Power's existing Rider for Parallel Generation. The Rider for Parallel Generation is available to distributed generation customers of Minnesota Power with qualifying facilities under Minnesota Rules Chapter 7835 – Cogeneration and Small Power Production. A customer may also pursue power purchase arrangements outside the confines of the DG Rider as agreed to between Minnesota Power and the customer.

- 2. <u>Type of Service</u>: The distributed generation system output shall be 60 hertz, and provided at the voltage and phase relationship of Minnesota Power's existing service to the customer (or as otherwise agreed to in the power purchase agreement).
- 3. <u>Rate (Monthly)</u>: The DG Rider's charges and credits apply in addition to all charges for service taken under the customer's standard rate schedule.
 - a. Service Charge Any customer taking service under the DG Rider shall pay a monthly service charge to Minnesota Power. The Service Charge (per customer) was calculated as the total retail revenue requirements for meters and customer services less the fixed costs associated with meters (as shown in Exhibit D) using information from Minnesota Power's compliance cost of service study from the 1994 retail rate case. The Service Charge covers the incremental cost to Minnesota Power of meter operation and maintenance, meter reading, customer billing, customer accounting and customer services. This Service Charge does not include the fixed cost component associated with meters (return on rate base and depreciation). Any installed meter costs will be paid by the customer as required under the Interconnection Agreement or DG Rider.
 - b. Capacity/Energy Credits Capacity and Energy Credits are provided to those customers who sell all or a portion of the capacity and energy produced by the distributed generation system to Minnesota Power. Minnesota Power will purchase all eligible capacity and energy made available by the customer for sale from the distributed generation system. The Capacity and Energy Credits are based on Minnesota Power's avoided capacity and energy costs and will be purchased by Minnesota Power under the terms and conditions established by the power purchase agreement.

Minnesota Power's calculation of the avoided capacity cost follows the rate guidelines approved by the Order. The Capacity Credits reflect the expected avoided capacity cost of the next planned capacity addition in the 5-year action plan period of Minnesota Power's most recently approved integrated resource plan. According to the rate guidelines, Capacity Credits are calculated as the levelized annual revenue requirement of the next planned capacity addition. This levelized annual revenue requirement is adjusted for the specific distributed generation system application -- taking into account the expected lifetime of the capacity addition, the length of the power purchase agreement, Minnesota Power's cost of capital, an escalation rate affecting the value of new capacity additions and the length of time between the beginning of the power purchase agreement and the time of capacity need. The resulting Capacity Credit is provided for accredited capacity delivered to Minnesota Power from the customer's distributed generation system. The Capacity Credit in effect at the time the customer enters into a power purchase agreement with Minnesota Power shall remain in effect for the length of the agreement. Minnesota Power's avoided capacity costs will be updated in conjunction with Minnesota Power's biennial integrated resource plan filings.

The calculation of the avoided energy costs also follows the rate guidelines. The Energy Credits reflect the expected avoided energy costs, which vary by month and time period (on-peak and off-peak), for the upcoming calendar year as forecast by Minnesota Power's production cost model.

Minnesota Power's Distributed Generation Capacity and Energy Payment Schedule shows the 2005 avoided costs for use under the DG Rider and is attached as Exhibit E as a Trade Secret document. Minnesota Power will submit an annual compliance filing by December 15 updating the avoided capacity and energy costs for use under the DG Rider for the upcoming calendar year. Minnesota Power will also provide the customer with current capacity and energy information as long as the customer executes the form confidentiality agreement.

- c. Delivery Charge The DG Rider contemplates that any customer with a distributed generation system of 1 MW or greater nameplate capacity rating who enters into a power purchase agreement with Minnesota Power may need to pay a Delivery Charge to compensate Minnesota Power for any additional distribution, transmission and ancillary services provided by Minnesota Power to the customer that are not included under the DG Rider. The Delivery Charge requirement will be determined upon review of all technical and operating characteristics of the distributed generation system.
- d. Distribution Credits Distribution Credits will be provided to the customer if the distributed generation allows Minnesota Power to avoid distribution costs. Upon a written request from the customer, Minnesota Power will provide a list of distribution sites that would be the most likely candidates for Distribution Credits as determined through Minnesota Power's normal distribution planning process. Upon receiving an application from the customer, Minnesota Power will perform an initial screening study to determine if the proposed distributed generation system has the potential to benefit the distribution system. The customer will be responsible for the cost of the screening study. If that initial study shows that there is a potential for providing Distribution Credits under the DG Rider to the customer, Minnesota Power will, at its own expense, complete further study to determine the value of the Distribution Credit.
- e. Renewable Credits Renewable Credits will be provided to a customer if the distributed generation allows Minnesota Power to meet a renewable requirement (e.g., green-pricing program). The purchase of capacity and energy from the renewable distributed generation system will reflect the additional avoided cost of a comparable renewable addition or purchase, net of payment for Capacity and Energy Credits as described above.
- f. Tradable Emission Credits Tradable Emission Credits will be provided to a customer if the installation of the distributed generation system results in

Minnesota Power receiving an economic value associated with tradable credits. The purchase of capacity and energy from the distributed generation system shall reflect the economic value associated with Tradable Emission Credits.

4. <u>Service Conditions</u>: The service conditions for the DG Rider address standard conditions related to metering, the use of existing facilities, the payment for additional required facilities and liability for loss and damage resulting from service under the DG Rider.

B. Rider for Standby Service

1. <u>Application</u>: Minnesota Power requires any retail customer interconnecting a distributed generation system to Minnesota Power's distribution system to take service under the Standby Rider, except as noted below. The customer must: i) take service under one of Minnesota Power's standard rate schedules (i.e., Residential Service, General Service, Large Light and Power Service, Municipal Pumping Service, or Large Power Service); and ii) enter into the Interconnection Agreement with Minnesota Power.

The Standby Rider is required for temporary back-up of a distributed generation system which normally serves all or a portion of the customer's electric load requirements. The customer shall execute an electric service agreement with Minnesota Power for service under the Standby Rider. Customers are required to take service for at least one year, or any longer term specified under the electric service agreement. Service under the Standby Rider is subject to Minnesota Power's rules and regulations for electric service; and the customer's service under the applicable standard rate schedule remains in effect, except as noted in the Standby Rider.

There are two exceptions under which a customer is not required to take service under the Standby Rider. The first exception to the application is for any customer with distributed generation systems (as defined by Minnesota Statute

§216B.1611) that are rated at 60 kW or less. This exception follows the rate guidelines adopted in the Order. The second exception to the application is for any customer who chooses to provide physical assurance to Minnesota Power that they will not take standby service. A customer who requests physical assurance must agree to furnish and install an approved load limiting device so that the customer cannot utilize standby service under the Standby Rider. The customer is responsible for the costs of the load limiting device.

- 2. <u>Type of Service</u>: Standby service shall be 60 hertz, and provided at the voltage and phase relationship of Minnesota Power's existing service to the customer.
- 3. Rate (Monthly): The rates under the Standby Rider cover firm and non-firm back-up service from Minnesota Power to the customer. Back-up service is necessary when a customer relies on the distributed generation system to meet on-site electric load requirements. If the distributed generation system is experiencing a derate or outage and the customer does not lower its load requirements, back-up service from Minnesota Power is required. Firm service is available to any customer who elects to reserve standby service to back-up all or a portion of the distributed generation system. Non-firm service is available to any customer who does not reserve standby service under the Standby Rider.

The Standby Rider's charges apply in addition to all charges for service taken under the customer's standard rate schedule.

a. Reservation Fee – The Reservation Fee is applicable to customers taking firm standby service and compensates Minnesota Power for having generation available for delivery to the customer's site to meet the electric load requirements that the distributed generation system would normally satisfy.

The Standby Reservation Fee is calculated as the Contracted Standby Demand times the rate established for each customer class and voltage level. The Contracted Standby Demand is specified in the electric service agreement as the maximum amount of standby service which Minnesota Power is obligated

to supply. The monthly rate compensates Minnesota Power for having its generation, transmission and distribution services available to provide that level of back-up.

The generation cost component equals Minnesota Power's planned reserve margin times the generation demand revenue requirements included in Minnesota Power's 1994 compliance cost of service study for each applicable class. The transmission and distribution cost components are also calculated based on the 1994 compliance cost of service demand revenue requirements for the applicable classes. All three components are then adjusted to reflect final rate design. This calculation is shown in Exhibit E for only those customer classes most likely to take service under the Standby Rider.

- b. Standby Usage Fee The Standby Usage Fee is applicable to customers taking firm and non-firm service.
 - i) Demand: Standby Demand Usage is defined as the level of Standby Demand in excess of the Contracted Standby Demand. The Standby Demand is determined separately from the billing demand determined under the standard rate schedule to which the Standby Rider applies. For applying the Standby Demand Usage Fee, Standby Demand will be determined during the 15-minute period of the customer's greatest Standby Demand Usage during the billing month based on the smaller of two amounts: i) the nameplate capacity rating of the distributed generation system minus the actual demand supplied by the distributed generation system, less the Contracted Standby Demand, but not less than zero or ii) the amount of actual capacity supplied by Minnesota Power less the Contracted Standby Demand, but not less than zero. This calculation is shown in Exhibit E.

This calculation assumes that the maximum level of standby service is equal to the nameplate capacity rating of the distributed generation system.

The nameplate capacity rating less the actual demand supplied by the distributed generation system is equal to the amount of back-up required when the distributed generation system is operating at less than full capacity. This level of calculated back-up is compared to the actual capacity supplied by Minnesota Power to ensure that the Standby Demand Usage at any one time can not exceed the actual delivered capacity to the customer. The calculation also reflects the fact that a firm customer has already paid for Contracted Standby Demand through the Reservation Fee -- the Standby Demand is reduced by the Contracted Standby Demand. The Standby Demand Usage Fee is only paid on demand in excess of the reserved amount.

There is no Standby Demand Usage if the customer chooses to have a Contracted Standby Demand equaling the nameplate capacity rating of the distributed generation system. The customer has, by definition, already paid for the maximum level of standby service through the Standby Reservation Fee and would not pay Standby Demand Usage even if the distributed generation system has a full outage. There is also no Standby Demand Usage if the actual demand supplied by the distributed generation system is greater than the difference between the nameplate capacity rating of the distributed generation system and the Contracted Standby Demand during each 15-minute period of the billing month. In essence, the customer has over-reserved or over-insured itself against potential distributed generation system derates or outages because the customer's distributed generation system runs better than expected.

The Standby Demand Usage rates are provided by customer class and voltage level. The basis for these costs is Minnesota Power's 1994 compliance cost of service study and includes the demand components of generation and transmission. The generation component is adjusted to reflect seasonal variations in the cost of generation capacity purchased from the wholesale power market. This provides a price signal to

customers that encourages them to plan unit derates or outages in non-peak months and avoid derates and outages during the more critical times on Minnesota Power's system. The breakdown between the three time periods (summer-peak, winter-peak, and off-peak) assumes that 50% of the generation demand costs are incurred in the summer-peak months of June, July and August; 30% in the winter-peak months of December, January and February; and the remaining 20% in off-peak months. This calculation is shown in Exhibit E.

- ii) Energy: Energy provided to a customer under the Standby Rider is limited to energy used during a derate or outage of the distributed generation system. For billing purposes, Standby Energy is determined separately from the billing energy determined under the standard rate schedule to which the Standby Rider applies. For applying the Standby Energy Usage Fee, Standby Energy will be determined as the summation over the billing month on a 15-minute period basis of the smaller of two amounts: i) the nameplate capacity rating of the distributed generation system minus the actual demand supplied by the distributed generation system, but not less than zero or ii) the amount of actual capacity supplied by Minnesota Power. The rates for Standby Energy Usage, provided by customer class and voltage level, are identical for both firm and non-firm customers. These rates are also established from Minnesota Power's 1994 compliance cost of service study and include the energy components of generation and transmission. This calculation is shown on Exhibit E.
- 4. <u>Service Conditions</u>: The service conditions for the Standby Rider address standard conditions related to distributed generation system performance and Minnesota Power's obligation to supply standby service, required metering for service under the Standby Rider, the use of existing facilities and the payment for additional required facilities or stranded facilities, and liability for loss and damage resulting from service under the Standby Rider.

C. Form Agreements

In order to implement the terms of the DG Rider and the Standby Rider with distributed generation customers, Minnesota Power has attached to the ESA (which is included as Exhibit B to this Petition) the model form agreements that will be executed with distributed generation customers. The form agreements included with the ESA are the Interconnection Agreement governing the interconnection of the customer's distributed generation system to Minnesota Power's distribution system, a Power Purchase Agreement for Distributed Generation Service between Minnesota Power and Customer, and a Confidentiality and Non-Disclosure Agreement for Distributed Generation Service governing the customer's receipt of the Customer's Capacity and Energy Payment Schedule.

1. The form electric service agreement includes standard terms and conditions governing the customer's receipt of electric service from Minnesota Power as defined in Paragraphs 1-6 of the model ESA. Paragraph 7 governs the receipt of distributed generation services under the DG Rider. Under Paragraph 7, the customer must execute the Interconnection Agreement; Minnesota Power agrees to Distribution, Renewable and Tradable Emission Credits; and Minnesota Power and the Customer agree to the rates and terms surrounding Capacity and Energy Credits. The form power purchase agreement governs the capacity and energy payment by Minnesota Power to the customer for capacity and energy provided from the customer to Minnesota Power. This form follows Minnesota Power's standard form agreements for wholesale power purchases from other customers. Finally, Minnesota Power's monthly payment to customer for capacity and energy is governed by each customer's specific Capacity and Energy Payment Schedule (which is based upon Minnesota Power's Distributed Generation Capacity and Energy Payment Schedule, as filed with the Commission on an annual basis). The customer must execute the form confidentiality and non-disclosure agreement that governs the confidential nature of Minnesota Power's distributed generation capacity and energy payment schedule.

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customer chooses either physical assurance (where load limiting equipment is installed), standby service under the Standby Rider (including a designation of the distributed generation system's nameplate capacity rating, the selection of firm or

2. The customer elects standby service under the Standby Rider in Paragraph 8. The

non-firm standby service and the customer's Contracted Standby Demand), or the

customer indicates an exemption from standby service because the distributed

generation system is 60 kW or less.

IV. CONCLUSION

The Riders comply with the guidelines adopted by the Commission in the Order.

The terms and conditions of the Riders implement reasonable requirements for the

interconnection of customer distributed generation systems and provide fair compensation

for the distributed generation being provided to the Minnesota Power system. In addition,

the Riders provide Minnesota Power adequate recovery of costs for the services provided

to the interconnecting customers.

Minnesota Power respectfully requests that the Commission approve Minnesota

Power's Rider for Distributed Generation Service, Rider for Standby Service, and the

model Electric Service Agreement and form agreements for distributed generation

customers as described in this Petition.

Dated: December 23, 2004

Respectfully submitted.

Christopher D. Anderson

Associate General Counsel

Minnesota Power

30 West Superior Street

Duluth, MN 55802

(218) 723-3961

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ATTACHED HERETO IS EXHIBIT A

Form No. 888 Rev. 8/89

MINNESOTA POWER & LIGHT COMPANY ELECTRIC RATE BOOK - VOLUME I

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RIDER FOR DISTRIBUTED GENERATION SERVICE

APPLICATION

To any Customer taking service under one of Company's following standard rate schedules: Residential Service (Schedule 10, 20, 30, 12, 22, 32), General Service (Schedule 15, 25, 35), Large Light and Power Service (Schedule 55, 75), Municipal Pumping Service (Schedule 66, 67, 87) and Large Power Service (Schedule 54, 74) and who has entered into the "State of Minnesota Interconnection Agreement for the Interconnection of Extended Parallel Distributed Generation Systems with Electric Utilities" with Company for the interconnection and operation of an on-site extended parallel distributed generation system. The distributed generation system must be fueled by natural gas or a renewable fuel, or another similarly clean fuel or combination of fuels of no more than 10 MW of interconnected capacity at a point of common coupling to Company's distribution system. The interconnection and operation of distributed generation systems at each point of common coupling shall be considered as a separate application of the Rider.

Service under this Rider shall be required for any Customer who meets the Application criteria in the previous paragraph, subject to the following exceptions: (i) any Customer who takes service, as applicable, under Company's Rider for Parallel Generation as established under Minnesota Rules Chapter 7835 – Cogeneration and Small Power Production; or (ii) any Customer, in lieu of service under this Rider, who pursues reasonable transactions outside this Rider as agreed to by Company and Customer.

Customer shall execute an electric service agreement and a power purchase agreement with Company for service under this Rider. The minimum term of service taken under this Rider shall be one (1) year or such longer period as may be required under the electric service agreement. Service under this Rider is subject to Company's Electric Service Regulations and any other rules as applicable. All provisions of the applicable standard rate schedule shall apply to service under this Rider except as noted below.

TYPE OF SERVICE

Output of the distributed generation system shall be provided at 60 hertz and at the voltage and phase relationship specified under Company's applicable standard rate schedule for service to Customer or as agreed to by Company and Customer.

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RIDER FOR DISTRIBUTED GENERATION SERVICE

RATE (Monthly)

The following charges and credits are applicable in addition to all charges for service being taken under Company's standard rate schedule:

Service Charge: \$15.83

Capacity/Energy Credits:

Customer may sell all the energy produced by the distributed generation system to Company, use all the distributed generation system energy to meet its own electric load requirements or use a portion of the energy from the distributed generation system and sell the remaining to Company.

Company shall purchase all capacity and energy made available by Customer from the distributed generation system. Capacity Credits shall only be provided on that capacity delivered to Company which meets the accreditation requirements of the Mid-Continent Area Power Pool or successor organization. Such capacity and energy shall be purchased by Company under the rates, terms and conditions for such purchases as established by Company in a power purchase agreement with Customer.

Capacity and Energy Credits shall be based on Company's calculation of avoided capacity and energy costs. The Capacity Credits in effect at the time Customer enters into a power purchase agreement with Company shall remain in effect for the length of the agreement. Energy Credits for use under the power purchase agreement shall vary by month and time period (on-peak and off-peak) and shall be updated annually for the upcoming calendar year. Upon written request by Customer and after Customer signs a confidentiality agreement, Company shall provide Customer the current schedule of Capacity and Energy Credits.

Delivery Charge (\$/kw):

Company may require any Customer with a distributed generation system of 1 MW or greater nameplate capacity rating to pay a Delivery Charge. Such Delivery Charge shall compensate Company for any additional distribution, transmission and ancillary services provided by Company to Customer not included under this Rider.

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Effective Date		 Order Date		<u>-</u>
	Approved by:	 	_	

MINNESOTA POWER & LIGHT COMPANY ELECTRIC RATE BOOK - VOLUME I

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RIDER FOR DISTRIBUTED GENERATION SERVICE

Distribution Credits:

If the installation of the distributed generation system results in Company delaying or avoiding distribution investment, Company shall provide Distribution Credits to Customer that reflect the avoided distribution cost.

Company shall provide, upon Customer's written request, a list of substation areas or feeders that could be likely candidates for Distribution Credits as determined through Company's normal distribution planning process. Upon receiving an application from Customer for the interconnection and operation of a distributed generation system, Company shall perform an initial screening study to determine if the project has the potential to receive Distribution Credits. Customer shall be responsible for the cost of such screening study. If Company's initial study shows that there exists potential for Distribution Credits, Company shall, at its own expense, pursue further study to determine the Distribution Credits, as part of its annual distribution capacity study.

Renewable Credits:

If Company's purchase of capacity and energy from the distributed generation system results in Company meeting a requirement to obtain renewable capacity and energy, then Company shall provide Renewable Credits to Customer that reflect the additional avoided cost of the renewable addition or purchase. The purchase price of such Renewable Credits shall be net of payment for capacity and energy identified above.

Tradable Emission Credits:

If Company's purchase of capacity and energy from the distributed generation system results in Company receiving an economic value associated with tradable emissions, then Company shall provide Tradable Emission Credits to Customer that reflect the economic value of such Tradable Emission Credits received by Company.

SERVICE CONDITIONS

1. All electricity delivered to Company by Customer shall be measured by one or more meters installed at a single point of common coupling or as determined by Company. Company's meter for distributed generation service shall measure the flow of capacity and energy from Customer to Company only. Any flow of capacity and energy from Company to Customer shall be separately metered.

Filing Date			MPUC Docket No	
Effective Date			Order Date	
	Approved by:			

Form No. 888 Rev. 8/89

MINNESOTA POWER & LIGHT COMPANY ELECTRIC RATE BOOK - VOLUME I

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RIDER FOR DISTRIBUTED GENERATION SERVICE

- 2. Service shall be provided under this Rider if Company has sufficient capacity available in existing transmission and distribution facilities to provide such service at the location where service is requested.
- 3. Customer shall pay Company the installed cost of any additional required facilities which are not supported by this Rider.
- 4. Company shall not be liable for any loss or damage, including consequential damages, caused by or resulting from any limitation in providing service under this Rider.

Filing Date	MPUC Docket No
Effective Date	Order Date
Approved by:	

Approved by:

ATTACHED HERETO IS EXHIBIT B

ELECTRIC SERVICE AGREEMENT FOR DISTRIBUTED GENERATION SERVICE

THIS	AGREEMENT, made this	day of	,, between Minnesota Power,	
and			, hereafter called Customer, in	
cons	ideration for the covenants and	promises made herein creates the	obligation of Minnesota Power to furnish electric	
servi	ce and Customer to pay for said	l electric service in accordance with	the following terms and conditions, and to	
acco	mmodate Customer's distribute	d generation system, through	, 20	
1.	Electric service shall be furnis	ned to Customer's premises located	d at	
	in the County of	and State of Minnesota,	described as follows:	
	·			
2.	Electric service shall be furnis	ned at a point of delivery described	as	
3.	Annual revenues paid to Minnesota Power by Customer inclusive of payments for electric service received, billed at the applicable rate schedule plus any adjustments shall not be less than per year, for a period of not less than years, commencing from the date			
	Minnesota Power begins prov	ding electric service or 90 days fror	n the date of installation of said electric service, leficit to the above annual revenue guarantee.	
4.	An advance payment of shall be made to cover that portion of Minnesota Power's investment not covered by the revenue guarantee.			
5.		illed at the current applicable rate a body having jurisdiction thereof.	nd class at the time the electric service is used or	
6.	Meter-Special Conditions:			
7.		e and execute the State of Minnesc	ota Interconnection Agreement for the	
	Attachment A. B. Customer is eligible for C. Customer is eligible for D. Customer is eligible for Customer's accredited of Customer attached here that Minnesota Power's mon	Distribution Credits at \$ Renewable Credits at \$ Tradable Emission Credits apacity is as defined in the Power I to as Attachment B. Check here ill only provide Capacity Credit for a thly payment to Customer for capacity.	s at \$ Purchase Agreement between Minnesota Power and if Customer chooses not to accredit capacity (note	

Payment Schedule (attached as Exhibit C) and is based upon Minnesota Power's annual Distributed Generation Capacity and Energy Payment Schedule. Customer must execute Minnesota Power's Confidentiality and Non-Disclosure Agreement (attached as Exhibit D) in order to receive this information.

8.	Stand	lby Service (check one):	
	Customer will implement physical assurance under terms set forth in the Rider for Standby Service.		
	Customer elects to take service under the Rider for Standby Service:		
	A. The nameplate capacity rating of the Distributed Generation System iskW.		
		B. Customer elects <u>firm/non-firm</u> (circle one) standby service.	
		C. If firm service is elected above, Customer specifiedkW per month as the maximum amount of	
		firm standby service that Minnesota Power is obligated to supply during the term of this Electric Service Agreement, and such amount shall serve as Customer's Contracted Standby Demand.	
		Customer is exempt from standby service because Customer's Distributed Generation System is 60 kW or less.	
9.	Other		
	A.	The parties hereto mutually agree to abide by any and all applicable statutes, agency rules and Minnesota	
		Power's Electric Service Regulations which are hereby incorporated by reference.	
	B.	This Agreement is not assignable to any other party without the express written consent of Minnesota Power.	
	C.	This Agreement shall be in full force and effect for the term above specified and each party shall be bound	
		unless an express written release is executed by the party not requesting said release.	
MINN	NESOT	A POWER CUSTOMER	
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ATTACHMENTS TO ELECTRIC SERVICE AGREEMENT

- A. State of Minnesota Interconnection Agreement for the Interconnection of Extended Parallel Distributed Generation Systems with Electric Utilities
- B. Power Purchase Agreement between Minnesota Power and [Customer]
- C. Confidentiality and Non-Disclosure Agreement for Distributed Generation Service
- D. Customer's Capacity and Energy Payment Schedule

State of Minnesota Interconnection Agreement for the Interconnection of Extended Parallel Distributed Generation Systems with Electric Utilities

State of Minnesota

Interconnection Agreement

For the Interconnection of Extended Parallel Distributed Generation Systems With Electric Utilities

This Generating System Interconnection Agreement is er	ntered into by and between the Area
Electrical Power System Operator (Area EPS Operator) '	"" and the
Interconnection Customer "	". The Interconnection Custome
and Area EPS are sometimes also referred to in this Agre	eement jointly as "Parties" or individually
as "Party".	·

In consideration of the mutual promises and obligations stated in this Agreement and its attachments, the Parties agree as follows:

I. SCOPE AND PURPOSE

- A) Establishment of Point of Common Coupling. This Agreement is intended to provide for the Interconnection Customer to interconnect and operate a Generation System with a total Nameplate Capacity of 10MWs or less in parallel with the Area EPS at the location identified in Exhibit C and shown in the Exhibit A one-line diagram.
- B) This Agreement governs the facilities required to and contains the terms and condition under which the Interconnection Customer may interconnect the Generation System to the Area EPS. This Agreement does not authorize the Interconnection Customer to export power or constitute an agreement to purchased or wheel the Interconnection Customer's power. Other services that the Interconnection Customer may require from the Area EPS, or others, may be covered under separate agreements.
- C) To facilitate the operation of the Generation System, this agreement also allows for the occasional and inadvertent export of energy to the Area EPS. The amount, metering, billing and accounting of such inadvertent energy exporting shall be governed by Exhibit D (Operating Agreement). This Agreement does not constitute an agreement by the Area EPS Operator to purchase or pay for any energy, inadvertently or intentionally exported, unless expressly noted in Exhibit D or under a separately executed power purchase agreement (PPA).
- D) This agreement does not constitute a request for, nor the provision of any transmission delivery service or any local distribution delivery service.
- E) The Technical Requirements for interconnection are covered in a separate Technical Requirements document know as, the "State of Minnesota Distributed Generation Interconnection Requirements", a copy of which as been made available to the Interconnection Customer and incorporated and made part of this Agreement by this reference

II. DEFINITIONS

A) "Area EPS" is an electric power system (EPS) that serves Local EPS's. Note: Typically, an Area EPS has primary access to public rights-of-way, priority crossing of property boundaries, etc.

- B) "Area EPS Operator" is the entity that operates the Area EPS.
- C) "<u>Dedicated Facilities</u>" are the equipment that is installed due to the interconnection of the Generation System and not required to serve other Area EPS customers.
- D) "EPS" (Electric Power System) are facilities that deliver electric power to a load. Note: This may include generation units.
- E) "Extended Parallel" means the Generation System is designed to remain connected with the Area EPS for an extended period of time.
- F) "Generation" is any device producing electrical energy, i.e., rotating generators driven by wind, steam turbines, internal combustion engines, hydraulic turbines, solar, fuel cells, etc.; or any other electric producing device, including energy storage technologies.
- G) "Generation Interconnection Coordinator" is the person or persons designated by the Area EPS Operator to provide a single point of coordination with the Applicant for the generation interconnection process.
- H) "Generation System" is the interconnected generator(s), controls, relays, switches, breakers, transformers, inverters and associated wiring and cables, up to the Point of Common Coupling.
- "Interconnection Customer" is the party or parties who will own/operate the Generation System and are responsible for meeting the requirements of the agreements and Technical Requirements. This could be the Generation System applicant, installer, owner, designer, or operator.
- J) "<u>Local EPS</u>" is an electric power system (EPS) contained entirely within a single premises or group of premises.
- K) "Nameplate Capacity" is the total nameplate capacity rating of all the Generation included in the Generation System. For this definition the "standby" and/or maximum rated kW capacity on the nameplate shall be used.
- L) "Point of Common Coupling" is the point where the Local EPS is connected to an Area EPS
- M) "Point of Delivery" is the point where the energy changes possession from one party to the other. Typically this will be where the metering is installed but it is not required that the Point of Delivery is the same as where the energy is metered
- N) "<u>Technical Requirements</u>" "is the State of Minnesota Requirements for Interconnection of Distributed Generation."

III. DESCRIPTION OF INTERCONNECTION CUSTOMER'S GENERATION SYSTEM

A)	A description of the Generation System, including a single-line diagram showing the
•	general arrangement of how the Interconnection Customer's Generation System is
	interconnected with the Area EPS's distribution system, is attached to and made part of
	this Agreement as Exhibit A. The single-line diagram shows the following;

- 2) Point of Common Coupling
- 3) Location of Meter(s)
- 4) Ownership of the equipment.
- 5) Generation System total Nameplate Capacity _____ kW
- 6) Scheduled operational (on-line) date for the Generation System.

IV. RESPONSIBILITIES OF THE PARTIES

- A) The Parties shall perform all obligations of this Agreement in accordance with all applicable laws and regulations, operating requirements and good utility practices.
- B) Interconnection Customer shall construct, operate and maintain the Generation System in accordance with the applicable manufacture's recommend maintenance schedule, the Technical Requirements and in accordance with this Agreement
- C) The Area EPS Operator shall carry out the construction of the Dedicated Facilities in a good and workmanlike manner, and in accordance with standard design and engineering practices.

V. CONSTRUCTION

The Parties agree to cause their facilities or systems to be constructed in accordance with the laws of the State of Minnesota and to meet or exceed applicable codes and standards provided by the NESC (National Electrical Safety Code), ANSI (American National Standards Institute), IEEE (Institute of Electrical and Electronic Engineers), NEC (National Electrical Code), UL (Underwriter's Laboratory), Technical Requirements and local building codes and other applicable ordinances in effect at the time of the installation of the Generation System.

A) Charges and payments

The Interconnection Customer is responsible for the actual costs to interconnect the Generation System with the Area EPS, including, but not limited to any Dedicated Facilities attributable to the addition of the Generation System, Area EPS labor for

installation coordination, installation testing and engineering review of the Generation System and interconnection design. Estimates of these costs are outlined in Exhibit B. While estimates, for budgeting purposes, have been provided in Exhibit B, the actual costs are still the responsibility of the Interconnection Customer, even if they exceed the estimated amount(s). All costs, for which the Interconnection Customer is responsible for, must be reasonable under the circumstances of the design and construction.

1) Dedicated Facilities

- a) During the term of this Agreement, the Area EPS Operator shall design, construct and install the Dedicated Facilities outlined in Exhibit B. The Interconnection Customer shall be responsible for paying the actual costs of the Dedicated Facilities attributable to the addition of the Generation System.
- b) Once installed, the Dedicated Facilities shall be owned and operated by the Area EPS owner and all costs associated with the operating and maintenance of the Dedicated Facilities, after the Generation System is operational, shall be the responsibility of the Area EPS Operator, unless otherwise agreed.
- c) By executing this Agreement, the Interconnection Customer grants permission for the Area EPS Operator to begin construction and to procure the necessary facilities and equipment to complete the installation of the Dedicated Facilities, as outlined in Exhibit B. If for any reason, the Generation System project is canceled or modified, so that any or all of the Dedicated Facilities are not required, the Interconnection Customer shall be responsible for all costs incurred by the Area EPS, including, but not limited to the additional costs to remove and/or complete the installation of the Dedicated Facilities. The Interconnection Customer may, for any reason, cancel the Generation System project, so that any or all of the Dedicated Facilities are not required to be installed. The Interconnection Customer shall provide written notice to the Area EPS Operator of cancellation. Upon receipt of a cancellation notice, the Area EPS Operator shall take reasonable steps to minimize additional costs to the Interconnection Customer, where reasonably possible.

2) Payments

- a) The Interconnection Customer shall provide reasonable adequate assurances of credit, including a letter of credit or personal guaranty of payment and performance from a creditworthy entity acceptable under the Area EPS Operators credit policy and procedures for the unpaid balance of the estimated amount shown in Exhibit B.
- b) The payment for the costs outlined in Exhibit B, shall be as follows;
 - 1/3 of estimated costs, outlined in Exhibit B, shall be due upon execution of this agreement.
 - ii. 1/3 of estimated costs, outlined in Exhibit B, shall be due prior to initial energization of the Generation System, with the Area EPS.
 - iii. Remainder of actual costs, incurred by the Area EPS, shall be due within 30 days from the date the bill is mailed by the Area EPS after project completion.

VI. DOCUMENTS INCLUDED WITH THIS AGREEMENT.

- A) This agreement includes the following exhibits, which are specifically incorporated herein and made part of this Agreement by this reference: (if any of these Exhibits are deemed not applicable for this Generation System installation they may be omitted from the final Agreement by the Area EPS Operator.)
 - Exhibit A Description of Generation System and single-line diagram. This diagram shows all major equipment, including, visual isolation equipment, Point of Common Coupling, Point of Delivery for Generation Systems that intentionally export, ownership of equipment and the location of metering.
 - 2) Exhibit B Estimated installation and testing costs payable by the Interconnection Customer. Included in this listing shall be the description and estimated costs for the required Dedicated Facilities being installed by the Area EPS Operator for the interconnection of the Generation System and a description and estimate for the final acceptance testing work to be done by the Area EPS Operator.
 - 3) Exhibit C Engineering Data Submittal A standard form that provides the engineering and operating information about the Generation System.
 - 4) Exhibit D Operating Agreement This provides specific operating information and requirements for this Generation System interconnection. This Exhibit has a separate signature section and may be modified, in writing, from time to time with the agreement of both parties.
 - 5) Exhibit E Maintenance Agreement This provides specific maintenance requirements for this Generation System interconnection. This Exhibit has a separate signature section and may be modified, in writing, from time to time with the agreement of both parties.

VII. TERMS AND TERMINATION

- A) This Agreement shall become effective as of the date when both the Interconnection Customer and the Area EPS Operator have both signed this Agreement. The Agreement shall continue in full force and effect until the earliest date that one of the following events occurs:
 - 1) The Parties agree in writing to terminate the Agreement; or
 - 2) The Interconnection Customer may terminate this agreement at any time, by written notice to the Area EPS Operator, prior to the completion of the final acceptance testing of the Generation System by the Area EPS Operator. Once the Generation System is operational then VII.A.3 applies. Upon receipt of a cancellation notice, the Area EPS Operator shall take reasonable steps to minimize additional costs to the Interconnection Customer, where reasonably possible.
 - 3) Once the Generation System is operational the Interconnection Customer may terminate this agreement after 30 days written notice to the Area EPS Operator, unless otherwise agreed to within the Exhibit D, Operating Agreement; or

- 4) The Area EPS Operator may terminate this agreement after 30 days written notice to the Interconnection Customer if:
 - The Interconnection Customer fails to interconnect and operate the Generation System per the terms of this Agreement; or
 - b) The Interconnection Customer fails to take all corrective actions specified in the Area EPS's written notice that the Generation System is out of compliance with the terms of this Agreement, within the time frame set forth in such notice, or
 - c) If the Interconnection Customer fails to complete the Area EPS Operator's final acceptance testing of the generation system within 24 months of the date proposed under section III.A.5.
- B) Upon termination of this Agreement the Generation System shall be disconnected from the Area EPS. The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing, at the time of the termination.

VIII. OPERATIONAL ISSUES

Each Party will, at its own cost and expense, operate, maintain, repair and inspect, and shall be fully responsible for, the facilities which it now or hereafter may own, unless otherwise specified.

- A) <u>Technical Standards</u>: The Generation System shall be installed and operated by the Interconnection Customer consistent with the requirements of this Agreement; the Technical Requirements; the applicable requirements located in the National Electrical Code (NEC); the applicable standards published by the American National Standards Institute (ANSI) and the Institute of Electrical and Electronic Engineers (IEEE); and local building and other applicable ordinances in effect at the time of the installation of the Generation System.
- B) Right of Access: At all times, the Area EPS Operator's personnel shall have access to the disconnect switch of the Generation System for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement, to meet its obligation to operate the Area EPS safely and to provide service to its customers. If necessary for the purposes of this Agreement, the Interconnection Customer shall allow the Area EPS Operator access to the Area EPS's equipment and facilities located on the premises.
- C) <u>Electric Service Supplied</u>: The Area EPS will supply the electrical requirements of the Local EPS that are not supplied by the Generation System. Such electric service shall be supplied, to the Interconnection Customer's Local EPS, under the rate schedules applicable to the Customer's class of service as revised from time to time by the Area EPS.
- D) Operation and Maintenance: The Generation System shall be operated and maintained, by the Interconnection Customer in accordance with the Technical Standards and any additional requirements of Exhibit D and Exhibit E, attached to this document, as amended, in writing, from time to time.

- E) Cooperation and Coordination: Both the Area EPS Operator and the Interconnection Customer shall communicate and coordinate their operations, so that the normal operation of the Area EPS does not unduly effect or interfere with the normal operation of the Generation System and the Generation System does not unduly effect or interfere with the normal operation of the Area EPS. Under abnormal operations of either the Generation System or the Area EPS system, the responsible Party shall provide reasonably timely communication to the other Party to allow mitigation of any potentially negative effects of the abnormal operation of their system.
- F) Disconnection of Unit: The Area EPS Operator may disconnect the Generation System as reasonably necessary, for termination of this Agreement; non-compliance with this Agreement; system emergency, imminent danger to the public or Area EPS personnel; routine maintenance, repairs and modifications to the Area EPS. When reasonably possible the Area EPS Operator shall provide prior notice to the Interconnection Customer explaining the reason for the disconnection. If prior notice is not reasonably possible the Area EPS Operator shall after the fact, provide information to the Interconnection Customer as to why the disconnection was required. It is agreed that the Area EPS Operator shall have no liability for any loss of sales or other damages, including all consequential damages for the loss of business opportunity, profits or other losses, regardless of whether such damages were foreseeable, for the disconnection of the Generation System per this Agreement. The Area EPS Operator shall expend reasonable effort to reconnect the Generation System in a timely manner and to work towards mitigating damages and losses to the Interconnection Customer where reasonably possible.
- G) Modifications to the Generation System When reasonably possible the Interconnection Customer shall notify the Area EPS Operator, in writing, of plans for any modifications to the Generation System interconnection equipment, including all information needed by the Area EPS Operator as part of the review described in this paragraph, at least twenty (20) business days prior to undertaking such modification(s). Modifications to any of the interconnection equipment, including, all interconnection required protective systems, the generation control systems, the transfer switches/breakers, interconnection protection VT's & CT's, and Generation System capacity, shall be included in the notification to the Area EPS Operator. When reasonably possible the Interconnection Customer agrees not to commence installation of any modifications to the Generating System until the Area EPS Operator has approved the modification, in writing, which approval shall not be unreasonably withheld. The Area EPS Operator shall have a minimum of five (5) business days to review and respond to the planned modification. The Area EPS Operator shall not take longer then a maximum of ten (10) business days, to review and respond to the modification after the receipt of the information required to review the modifications. When it is not reasonably possible for the Interconnection Customer to provide prior written notice, the Interconnection Customer shall provide written notice to the Area EPS Operator as soon as reasonably possible, after the completion of the modification(s).
- H) Permits and Approvals: The Interconnection Customer shall obtain all environmental and other permits lawfully required by governmental authorities prior to the construction of the Generation System. The Interconnection Customer shall also maintain these applicable permits and compliance with these permits during the term of this Agreement.

IX. LIMITATION OF LIABILITY

A) Each Party shall at all times indemnify, defend, and save the other Party harmless from any and all damages, losses, claims, including claims and actions relating to injury or

death of any person or damage to property, costs and expenses, reasonable attorneys' fees and court costs, arising out of or resulting from the Party's performance of its obligations under this agreement, except to the extent that such damages, losses or claims were caused by the negligence or intentional acts of the other Party.

- B) Each Party's liability to the other Party for failure to perform its obligations under this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any punitive, incidental, indirect, special, or consequential damages of any kind whatsoever, including for loss of business opportunity or profits, regardless of whether such damages were foreseen.
- C) Notwithstanding any other provision in this Agreement, with respect to Area EPS Operator's provision of electric service to any customer including the Interconnection Customer, the Area EPS Operator's liability to such customer shall be limited as set forth in the Area EPS Operator's tariffs and terms and conditions for electric service, and shall not be affected by the terms of this Agreement.

X. DISPUTE RESOLUTION

- A) Each Party agrees to attempt to resolve all disputes arising hereunder promptly, equitably and in a good faith manner.
- B) In the event a dispute arises under this Agreement, and if it cannot be resolved by the Parties within thirty (30) days after written notice of the dispute to the other Party, the Parties agree to submit the dispute to mediation by a mutually acceptable mediator, in a mutually convenient location in the State of Minnesota. The Parties agree to participate in good faith in the mediation for a period of 90 days. If the parties are not successful in resolving their disputes through mediation, then the Parties may refer the dispute for resolution to the Minnesota Public Utilities Commission (MPUC), which shall maintain continuing jurisdiction over this Agreement.

XI. INSURANCE

- A) At a minimum, In connection with the Interconnection Customer's performance of its duties and obligations under this Agreement, the Interconnection Customer shall maintain, during the term of the Agreement, general liability insurance, from a qualified insurance agency with a B+ or better rating by "Best" and with a combined single limit of not less then:
 - 1) Two million dollars (\$2,000,000) for each occurrence if the Gross Nameplate Rating of the Generation System is greater then 250kW.
 - 2) One million dollars (\$1,000,000) for each occurrence if the Gross Nameplate Rating of the Generation System is between 40kW and 250kW.
 - 3) Three hundred thousand (\$300,000) for each occurrence if the Gross Nameplate Rating of the Generation System is less then 40kW.
 - 4) Such general liability insurance shall include coverage against claims for damages resulting from (i) bodily injury, including wrongful death; and (ii) property damage arising out of the Interconnection Customer's ownership and/or operating of the Generation System under this agreement.

- B) The general liability insurance required shall, by endorsement to the policy or policies, (a) include the Area EPS Operator as an additional insured; (b) contain a severability of interest clause or cross-liability clause; (c) provide that the Area EPS Operator shall not by reason of its inclusion as an additional insured incur liability to the insurance carrier for the payment of premium for such insurance; and (d) provide for thirty (30) calendar days' written notice to the Area EPS Operator prior to cancellation, termination, alteration, or material change of such insurance.
- C) If the Generation System is connected to an account receiving residential service from the Area EPS Operator and its total generating capacity is smaller then 40kW, then the endorsements required in Section XI.B shall not apply.
- D) The Interconnection Customer shall furnish the required insurance certificates and endorsements to the Area EPS Operator prior to the initial operation of the Generation System. Thereafter, the Area EPS Operator shall have the right to periodically inspect or obtain a copy of the original policy or policies of insurance
- E) Evidence of the insurance required in Section XI.A. shall state that coverage provided is primary and is not excess to or contributing with any insurance or self-insurance maintained by the Area EPS Operator.
- F) If the Interconnection Customer is self-insured with an established record of self-insurance, the Interconnection Customer may comply with the following in lieu of Section XI.A E:
 - Interconnection Customer shall provide to the Area EPS Operator, at least thirty (30) days prior to the date of initial operation, evidence of an acceptable plan to selfinsure to a level of coverage equivalent to that required under section XI.A
 - 2) If Interconnection Customer ceases to self-insure to the level required hereunder, or if the Interconnection Customer is unable to provide continuing evidence of it's ability to self-insure, the Interconnection Customer agrees to immediately obtain the coverage required under Section XI.A.
- G) Failure of the Interconnection Customer or Area EPS Operator to enforce the minimum levels of insurance does not relieve the Interconnection Customer from maintaining such levels of insurance or relieve the Interconnection Customer of any liability.
- H) All insurance certificates, statements of self-insurance, endorsements, cancellations, terminations, alterations, and material changes of such insurance shall be issued and submitted to the following:

Your Friendly Area EPS
Attention: Manager of Generation Insurance
12345 Utility Drive.
Anytown, MN 55000

XII. MISCELLANEOUS

A) FORCE MAJEURE

- 1) An event of Force Majeure means any act of God, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any curtailment, order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. An event of Force Majeure does not include an act of negligence or intentional wrongdoing. Neither Party will be considered in default as to any obligation hereunder if such Party is prevented from fulfilling the obligation due to an event of Force Majeure. However, a Party whose performance under this Agreement is hindered by an event of Force Majeure shall make all reasonable efforts to perform its obligations hereunder
- 2) Neither Party will be considered in default of any obligation hereunder if such Party is prevented from fulfilling the obligation due to an event of Force Majeure. However, a Party whose performance under this Agreement is hindered by an event of Force Majeure shall make all reasonable efforts to perform its obligations hereunder.

B) NOTICES

- Any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person or sent by first class mail, postage prepaid, to the person specified below:
 - a) If to Area EPS Operator
 Your Friendly Area EPS
 Attention: Generation Interconnection Coordinator
 12345 Utility Drive.
 Anytown, MN 55000
 - b) If to Interconnection Customer
 A Friendly Interconnection Customer
 Attention: Generation Coordinator
 12345 Interconnection Drive.
 Anytown, MN 55000
- 2) A Party may change its address for notices at any time by providing the other Party written notice of the change, in accordance with this Section.
- 3) The Parties may also designate operating representatives to conduct the daily communications which may be necessary or convenient for the administration of this Agreement. Such designations, including names, addresses, and phone numbers may be communicated or revised by one Party's notice to the other Party.

C) ASSIGNMENT

The Interconnection Customer shall not assign its rights nor delegate its duties under this Agreement without the Area EPS Operator's written consent. Any assignment or delegation the Interconnection Customer makes without the Area EPS Operator's written consent shall not be valid. The Area EPS Operator shall not unreasonably withhold its consent to the Generating Entities assignment of this Agreement.

D) NON-WAIVER

None of the provisions of this Agreement shall be considered waived by a Party unless such waiver is given in writing. The failure of a Party to insist in any one or more instances upon strict performance of any of the provisions of this Agreement or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or the relinquishment of any such rights for the future, but the same shall continue and remain in full force and effect.

E) GOVERNING LAW AND INCLUSION OF AREA EPS OPERATOR'S TARIFFS AND RULES.

- This Agreement shall be interpreted, governed and construed under the laws of the State of Minnesota as if executed and to be performed wholly within the State of Minnesota without giving effect to choice of law provisions that might apply to the law of a different jurisdiction.
- 2) The interconnection and services provided under this Agreement shall at all times be subject to the terms and conditions set forth in the tariff schedules and rules applicable to the electric service provided by the Area EPS Operator, which tariff schedules and rules are hereby incorporated into this Agreement by this reference.
- 3) Notwithstanding any other provisions of this Agreement, the Area EPS Operator shall have the right to unilaterally file with the MPUC, pursuant to the MPUC's rules and regulations, an application for change in rates, charges, classification, service, tariff or rule or any agreement relating thereto.

F) AMENDMENT AND MODIFICATION

This Agreement can only be amended or modified by a writing signed by both Parties.

G) ENTIRE AGREEMENT

This Agreement, including all attachments, exhibits, and appendices, constitutes the entire Agreement between the Parties with regard to the interconnection of the Generation System of the Parties at the Point(s) of Common Coupling expressly provided for in this Agreement and supersedes all prior agreements or understandings, whether verbal or written. It is expressly acknowledged that the Parties may have other agreements covering other services not expressly provided for herein, which agreements are unaffected by this Agreement. Each party also represents that in entering into this Agreement, it has not relied on the promise, inducement, representation, warranty, agreement or other statement not set forth in this Agreement or in the incorporated attachments, exhibits and appendices.

H) CONFIDENTIAL INFORMATION

Except as otherwise agreed or provided herein, each Party shall hold in confidence and shall not disclose confidential information, to any person (except employees, officers, representatives and agents, who agree to be bound by this section). Confidential information shall be clearly marked as such on each page or otherwise affirmatively identified. If a court, government agency or entity with the right, power, and authority to do so, requests or requires either Party, by subpoena, oral disposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Party with prompt notice of such request(s) or requirements(s) so that the other Party may seek an appropriate protective order or waive compliance with the terms of this Agreement. In the absence of a protective order or waiver the Party shall disclose such confidential information which,

in the opinion of its counsel, the party is legally compelled to disclose. Each Party will use reasonable efforts to obtain reliable assurance that confidential treatment will be accorded any confidential information so furnished

NON-WARRANTY

Neither by inspection, if any, or non-rejection, nor in any other way, does the Area EPS Operator give any warranty, expressed or implied, as to the adequacy, safety, or other characteristics of any structures, equipment, wires, appliances or devices owned, installed or maintained by the Interconnection Customer or leased by the Interconnection Customer from third parties, including without limitation the Generation System and any structures, equipment, wires, appliances or devices appurtenant thereto.

J) NO PARTNERSHIP.

Interconnection Customer

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

XIII. SIGNATURES

IN WITNESS WHEREOF, the Parties hereto have caused two originals of this Agreement to be executed by their duly authorized representatives. This Agreement is effective as of the last date set forth below.

interconnection oustor	nei
Ву:	
Name:	
Title:	
Date:	
Area EPS Operator	
Ву:	
Name:	
Title:	
Date:	

EXHIBIT A

GENERATION SYSTEM DESCRIPTION AND SINGLE-LINE DIAGRAM

EXHIBIT B

SUMMARY OF AREA EPS COSTS AND DESCRIPTION OF DEDICATED FACILITIES BEING INSTALLED BY THE AREA EPS OPERATOR FOR THE INTERCONNECTION OF THE GENERATION SYSTEM

This Exhibit shall provide the estimated total costs, that will be the responsibility of the Interconnection Customer. It is assumed that the Initial application has been filed and the engineering studies have been paid for and completed. So those costs are not included on this listing.

What is listed below is a general outline of some of the major areas where costs could occur. Other costs then those listed below may be included by the Area EPS, provided that those costs are a direct result from the request to interconnect the Generation System. The following list is only a guideline and each Area EPS Operator, for each installation will be creating a unique Exhibit B, that is tailored for that specific Generation System interconnection.

- A) Dedicated Facilities (equipment, design and installation labor)
- B) Monitoring & Control System (equipment, design and installation labor)
- C) Design Coordination and Review
- D) Construction Coordination labor costs
- E) Testing (development of tests and physical testing)
- F) Contingency

EXHIBIT C

ENGINEERING DATA SUBMITTAL

Attach a completed Engineering Data Submittal form from Appendix C of "State of Minnesota Interconnection Process for Distributed Generation Systems".

EXHIBIT D

OPERATING AGREEMENT

Each Generation System interconnection will be unique and will require a unique Operating Agreement. The following is a listing of some of the possible areas that will be covered in a operating agreement. The following has not been developed into a standard agreement due to the unique nature of each Generation System. It is envisioned that this Exhibit will be tailored by the Area EPS Operator for each Generation System interconnection. It is also intended that this Operating Agreement Exhibit will be reviewed and updated periodically, to allow the operation of the Generation System, to change to meet the needs of both the Area EPS Operator and the Interconnection Customer, provided that the change does not negatively affect the other Party. There may also be operating changes required by outside issues, such has changes in FERC and MISO requirements and/or policies which will require this Operating Agreement to be modified.

The following items are provided to show the general types of items which may be included in this Operating Agreement. The items included in the Operating Agreement shall not be limited to the items shown on this list.

- A) <u>Applicable Area EPS Tariffs</u> discussion on which tariffs are being applied for this installation and possibly how they will be applied.
- B) <u>Var Requirements</u> How will the Generation System be required to operate so as to control the power factor of the energy flowing in either direction across the interconnection?
- C) <u>Inadvertent Energy</u> This Operating Agreement needs to provide the method(s) that will be used to monitor, meter and account for the inadvertent energy used or supplied by the Generation System. Tariffs and operating rules that apply for this Generation System interconnection shall be discussed in this Operating Agreement.
- Control Issues Starting and stopping of the generation, including the remote starting and stopping, if applicable.
- E) <u>Dispatch of Generation Resources</u> What are the dispatch requirements for the Generation System, Can it only run during Peak Hours? Are there a limited number of hours that it can run? Is it required to have met an availability percentage? This will greatly depend upon the PPA and other requirements. Is the Interconnection Customer required to coordinate outages of the Generation System, with the Area EPS?
- F) Outages of Distribution System How are emergency outages handled? How are other outages scheduled? If the Interconnection Customer requires the Area EPS Operator to schedule the outages during after-hours, who pays for the Area EPS Operator's overtime?
- G) <u>Notification / Contacts</u> Who should be notified? How should they be notified? When should they be notified? For what reasons, should the notification take place?
 - 1) Starting of the Generation

- 2) Dispatching of Generation
- 3) Notification of failures (both Area EPS and Generation System failures)
- H) <u>Documentation of Operational Settings</u> How much fuel will the generation System typically have on hand? How long can it run with this fuel capacity? How is the generation system set to operate for a power failure? These may be issues that should be documented in the Operating Agreement. The following are a couple of examples:
 - 1) "The Generation System will monitor the Area EPS phase voltage and after 2 seconds of any phase voltage below 90% the generation will be started and the load transferred to the generator, if the generation is not already running."
 - 2) "The Generation System will wait for 30 minutes after it senses the return of the Area EPS frequency and voltage, before it will automatically reconnect to the Area EPS"
- Cost of testing for future failures If a component of the Generation System fails or needs to be replaced, which effects the interconnection with the Area EPS, what is the process for retesting, and for replacement? Who pays for the additional costs of the Area EPS to work with the Interconnection Customer to resolve these problems and/or to complete retesting of the modified equipment?
- J) Right of Access: At all times, the Area EPS Operator shall have access to the disconnect switch of the Generation System for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement, to meet its obligation to operate the Area EPS safely and to provide service to its customers, at all times. If necessary for the purposed of this Agreement, the Interconnection Customer shall allow the Area EPS Operator access to the Area EPS's equipment and facilities located on the premises.

Add Signature Section -The Operating Agreement should be set up so that it is individually signed and dated by both parties.

EXHIBIT E

MAINTENANCE AGREEMENT

Each Generation System interconnection will be unique and will require a unique Maintenance Agreement. It is envisioned that this Exhibit will be tailored for each Generation System interconnection. It is also intended that this Maintenance Agreement Exhibit will be reviewed and updated periodically, to allow the maintenance of the Generation System be allowed to change to meet the needs of both the Area EPS Operator and the Interconnection Customer, provided that change does not negatively affect the other Party. There may also be changes required by outside issues; such has changes in FERC and MISO requirements and/or policies which will require this agreement to be modified.

- A) Routine Maintenance Requirements -
 - 1) Who is providing maintenance Contact information
 - 2) Periods of maintenance
- B) Modifications to the Generation System The Interconnection Customer shall notify the Area EPS Operator, in writing of plans for any modifications to the Generation System interconnection equipment at least twenty (20) business days prior to undertaking such modification. Modifications to any of the interconnection equipment, including all required protective systems, the generation control systems, the transfer switches/breakers, VT's & CT's, generating capacity and associated wiring shall be included in the notification to the Area EPS Operator. The Interconnection Customer agrees not to commence installation of any modifications to the Generating System until the Area EPS Operator has approved the modification, in writing. The Area EPS shall have a minimum of five (5) business days and a maximum of ten (10) business days, to review and respond to the modification, after the receipt of the information required to review the modifications.

Add signature Section

Power Purchase Agreement between Minnesota Power and [Customer]

POWER PURCHASE AGREEMENT FOR DISTRIBUTED GENERATION SERVICE

between MINNESOTA POWER

and [CUSTOMER]

Selling Party:	("Customer")
Purchasing Party:	Minnesota Power
<u>Definitions:</u>	Definitions are as set forth in the Rider for Distributed Generation Service, the Rider for Standby Service, and the State of Minnesota Interconnection Agreement for the Interconnection of Extended Parallel Distributed Generation Systems with Electric Utilities (or its associated documents).
Type of Sale:	This Agreement provides for the payment to Customer for capacity and/or energy from the Distributed Generation System to Minnesota Power.
<u>Term</u> :	This Agreement shall be coterminous with the ESA between Minnesota Power and Customer.
Quantity:	Minnesota Power shall pay Customer for that eligible portion of the capacity and energy from the Distributed Generation System made available to Minnesota Power as defined in the Rider for Distributed Generation Service.
	The capacity payment shall be based upon Customer's accredited capacity, and Customer is obligated to promptly inform Minnesota Power in writing of any change to the capacity accreditation. The initial accredited capacity for Customer is kW.
	Minnesota Power shall have exclusive right to the capacity and or energy from the Distributed Generation System and no capacity or energy from the Distributed Generation System shall be sold to any party without Minnesota Power's prior consent.
<u>Demand Charge</u> :	The monthly demand charge payable by Minnesota Power to Customer for the capacity shall be \$/kW-mth, as defined in the Customer's Capacity and Energy Payment Schedule, and shall not change during the Term of this Agreement.

Energy Charge:

The energy charge payable by Minnesota Power to Customer for energy shall be based upon Minnesota Power's Distributed Generation Capacity and Energy Payment Schedule as filed annually with the Minnesota Public Utilities Commission, and shall be a variable payment by month and time period pursuant to Minnesota Power's Rider for Distributed Generation Service.

Points of Delivery:

Minnesota Power and Customer agree to utilize the Point of Delivery as described in the ESA for the delivery of the capacity and energy contemplated herein.

<u>Uncontrollable</u> <u>Forces:</u>

Neither of the parties to this Agreement shall be liable to the other party for any form of consequential damages, or for any direct damages in any way occasioned by matters beyond their control, including, but not limited to such matters as failure to perform under the terms hereof. Further, no party shall be liable either directly or consequently, for interruption in delivery of service if such interruption is necessary for repairs or changes in the plant, generating equipment, transmission or distribution system of the party whose duty it is to make delivery.

Regulatory Approval and Accreditation:

This Agreement shall be subject to the approval of applicable regulatory authority. Payment of demand charges shall be subject to continued accreditation of the Distributed Generation System pursuant to MAPP standards from the MAPP Generation Reserves Subcommittee and the Accreditation Working Group (or such appropriate successor organization), of the transactions contemplated in this Agreement as capacity purchases for Minnesota Power's benefit during the term of this Agreement.

In the event of a material change in MAPP's currently existing load and capability or accreditation responsibilities the Parties shall immediately and in good faith renegotiate the terms of this Agreement so as to maintain the respective economic benefits to each Party as set forth in this Agreement.

If any regulatory agency having jurisdiction over this Agreement revises this Agreement in a manner which either party considers substantial, or denies a petition for regulatory approval, the Parties shall immediately and in good faith renegotiate the terms of this Agreement to accommodate regulatory requirements while maintaining the respective economic benefits to each party as set forth in this Agreement.

Liability:

The electric energy furnished by Customer to Minnesota Power under this Agreement is supplied upon the express condition that, after it passes the designated Point of Delivery between Customer and Minnesota Power, the energy becomes the property of Minnesota Power.

<u>Delay in Enforcement of Rights</u>:

No delay by either party in enforcing any of its rights under this Agreement shall be deemed a waiver of any of its rights nor shall a waiver by either party of any of its rights on one occasion be deemed a waiver of such right with regard to any subsequent occasion on which it would be entitled to enforce such right.

Successors and Assigns:

This Agreement shall be binding upon the respective parties, their successors and assigns, on and after its effective date.

Confidentiality; Non Disclosure

No party hereto shall disclose any information regarding any part of this Agreement except to the extent that disclosure is required by law, required for evidentiary purposes in any legal proceeding relating to enforcement of this Agreement, required for filing reports with or furnishing information to the regulatory authorities having jurisdiction over Minnesota Power or Customer and other appropriate governmental authorities, required for purposes of obtaining financing, or upon written consent of all parties to this Agreement. All parties shall request regulatory bodies or governmental authorities to respect the confidentiality of this Agreement before making any disclosure to those bodies or authorities. Where disclosure to non-parties is required or permitted, notice shall be given to all other parties, and to the extent possible, such notice shall be given in advance of disclosure. This provision shall not prohibit disclosure to third party consultants and professional advisors provided such third parties enter into and agree to be bound by a non-disclosure agreement containing terms which the other party in its sole discretion deems to be sufficient to protect its interests hereunder. If such agreement contains terms identical to this Paragraph, it shall be considered sufficient.

Notices:

Any notices, demands or requests required or authorized by this Agreement shall be deemed properly given to Minnesota Power if mailed, postage prepaid to ________, Minnesota Power, 30 West Superior Street, Duluth, Minnesota 55802 or faxed to (218) 723-_____. Such notices, demands or requests shall be deemed properly given to Customer if mailed, postage prepaid to

The designation of the person to be notified or the address of such person may be changed at any time by similar notice. This provision shall not be deemed applicable to day-to-day communications between power coordinators or system operators of the parties unless requested in writing by either party.

Dated as of this day of		
MINNESOTA POWER	CUSTOMER	
Ву	Ву	
Title:		

Confidentiality and Non-Disclosure Agreement for Distributed Generation Service

CONFIDENTIALITY AND NON-DISCLOSURE AGREEMENT FOR DISTRIBUTED GENERATION SERVICE

THIS AGREEMENT, is made a	and entered into this	day of	, 20,
between	("Customer") and	Minnesota Power.	Customer
and Minnesota Power may be individually	referred to as the "Part	ty" or collectively ref	ferred to as
the "Parties"			

WHEREAS, Customer desires to interconnect a distributed generation system with Minnesota Power pursuant to the terms set forth in the model Electric Service Agreement for Distributed Generation Service adopted as part of Minnesota Power's Rider for Distributed Generation Service; and

WHEREAS, in connection with such Electric Service Agreement, Customer desires to receive Minnesota Power's Distributed Generation Capacity and Energy Payment Schedule ("Payment Schedule"); and

WHEREAS, Minnesota Power is willing to disclose such proprietary, non-public information regarding its Payment Schedule; and

WHEREAS, the Parties recognize the confidential nature of the information and that disclosure or unauthorized use of such information to or by third parties could result in damage to Minnesota Power and its customers;

NOW, THEREFORE, in consideration of the promises, covenants and agreements contained herein to be kept and performed by the Parties, it is mutually agreed as follows:

- 1. Minnesota Power shall furnish to Customer, by any means or medium, the proprietary, non-public information concerning Minnesota Power's Payment Schedule.
- 2. The information, knowledge and material exchanged pursuant to the preceding paragraph shall be referred to as the "Information." The Parties hereby agree to retain, and to require all respective representatives to retain, the Information provided pursuant to this Agreement in strict confidence in accordance with the terms set forth below.
- 3. It is agreed that the Information will be used by Customer only for the limited purpose of interconnecting a distributed generation system with Minnesota Power. Without the prior written consent of Minnesota Power, any disclosure or other unauthorized use of the Information by Customer is prohibited.

- 4. The term "Information" does not include information which Customer demonstrates by clear and convincing evidence:
 - a. is already known to Customer, provided that such prior knowledge can be substantiated by written records and documents; or
 - b. has become publicly known through no act of the Customer; or
 - c. has been rightfully received from a third party not subject to this Agreement; or
 - d. has been independently developed by the Customer without reliance on Information, provided that such independent development can be substantiated by written records and documents; or
 - e. has been approved for release by written authorization of Minnesota Power; or
 - f. has been disclosed pursuant to a requirement of a governmental agency or court of law through no voluntary action or inaction by the Customer.
- 5. Customer and Minnesota Power hereby acknowledge that unauthorized disclosure or use of the Information may result in irreparable harm to Minnesota Power. Accordingly, Customer agrees that Minnesota Power shall have the right to obtain a temporary restraining order enjoining disclosure or use of all Information subject to this Agreement. Customer agrees not to contest the granting of such temporary restraining order. Such order shall become permanent upon adequate showing of irreparable injury and ruling by a court of law. The Parties may participate in any contest relating to a permanent injunction.
- 6. Upon the written request of Minnesota Power, the Customer shall return to Minnesota Power all documentation and electronic media containing Information and shall provide written certification that copies of all Information have been destroyed or returned.
- 7. Customer agrees that, without the prior written consent of Minnesota Power, it will not make any statement to any competitor, customer or other third party with respect to the Information exchanged hereunder or regarding the Project itself.
- 8. In further consideration of Minnesota Power disclosing its Information hereunder, Customer agrees that it will not use the Information for any third-party's benefit or in providing services to third parties (which shall specifically include any wholesale or retail customer served by Minnesota Power).

9. This Agreement shall be effective to first written above. Notwithstanding the Partia arrangement, or any other event or occurrence, to nondisclosure (including the provisions relating to Information shall remain in full force and effect for is confidential and non-public, whichever is less, Parties hereto.	the provisions of this Agreement relating to the breach of this Agreement) or use of the years or as long as the Information
10. If one or more of the sections or illegal, or contrary to public policy or are in some o court of competent jurisdiction, this Agreement sh that paragraph or portion thereof determined to be under the contract of the sections of the section of the sectio	all remain in full force and effect except for
11. Nothing contained in the Agreeme under any patent, trademark or copyright, by lice subject to this Agreement, and that this Agreement other legal relationship between the Parties. The countries this Agreement, and all transactions under it, she Minnesota, without regard to Minnesota law gover the Parties hereto may be a resident of, or domiciled	does not create a partnership, joint venture or onstruction, interpretation and performance of all be governed by the laws of the State of rning conflict of laws, even if one or more of
12. This Agreement shall be binding up hereto and their respective heirs, successors, reconstitutes the entire agreement between the acknowledge and agree that no other statements except those outlined herein, apply to the terms and	Parties. Customer and Minnesota Powers, representations, agreements or warranties,
IN WITNESS WHEREOF, the Parties her day and year first above written.	reto have duly executed this Agreement on the
Minnesota Power	Customer
Ву	Ву
Its	

Customer's Capacity and Energy Payment Schedule

CUSTOMER'S DISTRIBUTED GENERATION CAPACITY AND ENERGY PAYMENT SCHEDULE CALENDAR YEAR 2005

Avoided Energy Costs (¢/kWh) On-Peak Off-Peak	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>
Avoided Energy Costs (¢/kWh) On-Peak Off-Peak	<u>Jul</u>	Aug	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>

ATTACHED HERETO IS EXHIBIT C

Form No. 888 Rev. 8/89

MINNESOTA POWER & LIGHT COMPANY SECTELECTRIC RATE BOOK - VOLUME I REVISED

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RIDER FOR STANDBY SERVICE

APPLICATION

To any Customer taking service under one of Company's following standard rate schedules: Residential Service (Schedule 10, 20, 30, 12, 22, 32), General Service (Schedule 15, 25, 35), Large Light and Power Service (Schedule 55, 75), Municipal Pumping Service (Schedule 66, 67, 87) and Large Power Service (Schedule 54, 74) and who has entered into the "State of Minnesota Interconnection Agreement for the Interconnection of Extended Parallel Distributed Generation Systems with Electric Utilities" with Company.

Service under this Rider shall be required for Customer who has a distributed generation system which normally serves all or a portion of Customer's electric load requirements and who desires use of Company's electric service for temporary back-up. Exceptions to this Application include: (i) any Customer with distributed generation systems rated at 60 kW or less; or (ii) any Customer, in lieu of service under this Rider, who provides physical assurance that standby service is not taken. A Customer requesting physical assurance shall agree to furnish and install an approved load limiting device which shall be set and sealed by Company to prevent Customer from utilizing standby service. The cost of the load limiting device shall be paid by Customer.

Customer shall execute an electric service agreement with Company for service under this Rider. The minimum term of service taken under this Rider shall be one (1) year or such longer period as may be required under the electric service agreement. Service under this Rider is subject to Company's Electric Service Regulations and any other rules as applicable. All provisions of the applicable standard rate schedule shall apply to service under this Rider except as noted below.

TYPE OF SERVICE

Service shall be taken at 60 hertz and at the voltage and phase relationship specified under Company's applicable standard rate schedule for service to Customer.

Filing Date		MPUC Docket No.	
		Order Date	
	Approved by:	 	

MINNESOTA POWER & LIGHT COMPANY ELECTRIC RATE BOOK - VOLUME I

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RIDER FOR STANDBY SERVICE

RATE (Monthly)

Firm standby service is available to any Customer who elects to reserve standby service to back-up all or a portion of the distributed generation system. Non-firm standby service is available to any Customer who does not reserve standby service under this Rider. The following charges are applicable in addition to all charges for service being taken under Company's standard rate schedule:

Standby Reservation Fee (\$/kW):

For purposes of applying the Standby Reservation Fee, the Contracted Standby Demand shall be the quantity specified by Customer in the electric service agreement with Company as the maximum amount of standby service Company is obligated to supply.

Customer shall pay a Standby Reservation Fee equal to the rate defined below times the Contracted Standby Demand.

Rate Schedule Voltage Level	Residential	General Service	Large Light & Power	Municipal Pumping	Large Power
Transmission	N/A	N/A	\$3.08	N/A	\$4.54
Primary Distribution	N/A	\$4.70	\$6.14	\$5.04	N/A
Secondary Distribution	\$4.27	\$6.93	\$9.74	\$7.25	N/A

There shall be no Standby Reservation Fee applied if Customer elects non-firm service.

Standby Usage Fee:

Demand (\$/kW)

Customer shall pay a Standby Demand Usage Fee equal to the rate defined below times the Standby Demand. For billing purposes, Standby Demand shall be determined separately from the billing demand determined under the standard rate schedule to which this Rider applies.

For applying the Standby Demand Usage Fee, the Standby Demand shall be determined during the 15-minute period of Customer's greatest Standby Demand Usage during the billing month based on the smaller of the following two amounts: (i) the nameplate capacity rating of the distributed generation system minus the actual demand supplied by the distributed generation system, less the Contracted Standby Demand, but not less than zero, or (ii) the amount of actual capacity

Filing Date	MPUC Docket No.
Effective Date	Order Date
Approved by:	

MINNESOTA POWER & LIGHT COMPANY ELECTRIC RATE BOOK - VOLUME I

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RIDER FOR STANDBY SERVICE

supplied by Company less the Contracted Standby Demand, but not less than zero.

There shall be no Standby Demand Usage Fee applied if: (i) Contracted Standby Demand equals the nameplate capacity rating of the distributed generation system; or (ii) the actual demand supplied by the distributed generation system is greater than the difference between the nameplate capacity rating of the distributed generation system and the Contracted Standby Demand during each 15-minute period of the billing month.

Summer-Peak (for standby service during June, July and August)

Rate Schedule Voltage Level	Residential	General Service	Large Light & Power	Municipal Pumping	Large Power
Transmission	N/A	N/A	\$16.84	N/A	\$24.75
Primary Distribution	N/A	\$12.21	19.90	\$15.55	N/A
Secondary Distribution	\$6.47	\$14.44	23.50	\$17.76	N/A

Winter-Peak (for standby service during December, January and February)

	Residential	General	Large Light	Municipal	Large
Rate Schedule		Service	& Power	Pumping	Power
Voltage Level					
Transmission	N/A	N/A	\$10.89	N/A	\$16.00
Primary Distribution	N/A	\$8.96	\$13.95	\$11.00	N/A
Secondary Distribution	\$5.52	\$11.20	\$17.55	\$13.22	N/A

Off-Peak (for standby service during March, April, May, September, October and November)

Rate Schedule	Residential Generated Service		Large Light & Power	Municipal Pumping	Large Power	
Voltage Level						
Transmission	N/A	N/A	\$4.94	N/A	\$7.25	
Primary Distribution	N/A	\$5.71	\$8.00	\$6.46	N/A	
Secondary Distribution	\$4.57	\$7.95	\$11.60	\$8.67	N/A	

Filing Date	MPUC Docket No.
Effective Date	Order Date
Approved by:	

Form No. 888 Rev. 8/89

MINNESOTA POWER & LIGHT COMPANY ELECTRIC RATE BOOK - VOLUME I

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RIDER FOR STANDBY SERVICE

Energy (¢/kWh)

Customer shall pay a Standby Energy Usage Fee equal to the rate below times the Standby Energy. For billing purposes, Standby Energy shall be determined separately from the billing energy determined under the standard rate schedule to which this Rider applies.

For applying the Standby Energy Usage Fee, the Standby Energy shall be determined as the summation over the billing month of the smaller of the following two amounts for each 15-minute period: (i) the nameplate capacity rating of the distributed generation system minus the actual demand supplied by the distributed generation system, but not less than zero or (ii) the amount of actual capacity supplied by Company.

Rate Schedule	Residential	Residential General L Service		Municipal Pumping	Large Power
	0.92	1.56	1.57	1.56	1.57

SERVICE CONDITIONS

- 1. All electricity delivered to Customer by Company shall be measured by one or more meters installed at a single point of common coupling or as determined by Company. Company's meter for standby service shall measure the flow of capacity and energy from Company to Customer only. Any flow of capacity and energy from Customer to Company shall be separately metered.
- 2. Customer shall operate the distributed generation system to avoid taking energy from Company other than under the standard rate schedule to which this Rider applies. Company reserves the right to require physical assurance in the event Customer does not operate its distributed generation system in a manner agreed to by Company and Customer.
- 3. Company shall not be obligated to supply standby service to back-up the distributed generation system at a level in excess of Contracted Standby Demand. This restriction in no way limits the electric load requirements for which Customer may require service from Company under the standard rate schedule to which this Rider is attached.
- 4. Service shall be provided under this Rider if Company has sufficient capacity available in existing production, transmission and distribution facilities to provide such service at the location where service is requested.

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Filing Date		 MPUC Docket No.	
Effective Date		 Order Date	
	Approved by:	 	

Form No. 888 Rev. 8/89

MINNESOTA POWER & LIGHT COMPANY ELECTRIC RATE BOOK - VOLUME I

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RIDER FOR STANDBY SERVICE

- 5. Customer shall pay Company the installed cost of any additional required facilities which are not supported by this Rider.
- 6. Company may be reimbursed by Customer for costs which are incurred, or which have been incurred, in providing facilities which were utilized principally or exclusively in providing service for any portion of Customer's electric load requirements which are to be normally provided from the distributed generation system.
- 7. Company shall not be liable for any loss or damage, including consequential damages, caused by or resulting from any limitation in providing service under this Rider.

Filing Date		 MPUC Docket No.	
Filing Date		 WPUC DOCKET NO.	
Effective Date		 Order Date	
	Approved by: _	 	

ATTACHED HERETO IS EXHIBIT D

MINNESOTA POWER - COST SUPPORT

Standby Rider:

Standby Reservation Fee and Usage Fees for Residential, General Service, and Large Light & Power (monthly)

								Reservation			
								Fee Demand Usage Fee			
		Rate Design						Reservation Fee	Summer-	Winter-	
	Revenue	Adjustment	Adjusted Revenue	Billing Units		Adjustment		by Voltage Level	Peak	Peak	Off-Peak
Residential	Requirements (5)	Factor (1)	Requirements	(kW) (5)	Rate	(2)	Final Rate	(\$/kW) (3)	(\$/kW) (6)	(\$/kW) (6)	(\$/kW) (6)
Generation	\$12,170,358	0.64	\$7,789,029	6,561,312	\$1.19	15%	\$0.18	NA	NA	NA	NA
Transmission	\$3,229,474	0.64	\$2,066,863	6,561,312	\$0.32	100%	\$0.32	NA (4)	NA (4)	NA (4)	NA (4)
Distribution Primary	\$21,060,167	0.64	\$13,478,507	6,561,312	\$2.05	100%	\$2.05	NA (4)	NA (4)	NA (4)	NA (4)
Distribution Secondary	\$17,662,077	0.64	\$11,303,729	6,561,312	\$1.72	100%	\$1.72	\$4.27	\$6.47	\$5.52	\$4.57
Distribution Primary	\$21,060,167 \$17,662,077	0.64	\$13,478,507	6,561,312 6,561,312	\$2.05 \$1.72	100% 100%	\$2.05	NA (4)	NA (4)	NA (4)	NA (4)

(1) Rate design/ Unit Cost Revenue Requirements = Adjustment factor (51,550,836/80,545,150=0.64002)

(2) An adjustment is made to generation for the percentage of planned reserve margin (15%).

(4) There are no transmission, subtransmission or primary distribution level Residential customers.

(5) Revenue Requirements and Billing Units are obtained from the 1994 Minnesota Power electric cost of service study (Docket # EO15/GR-94-001).

(6) Demand Usage fees are obtained from the 1994 MP electric cost of service study and are test year costs (i.e., the Generation component is not multiplied by the planned reserve margin [15%]). The base fees are adjusted to take into consideration the seasonal fluctuation in incremental capacity costs with 50% of annual capacity costs assumed to occur in 3 summer-peak months, 30% in 3 winter-peak months and 20% during the remaining 6 off-peak months. Summer-peak months are J, J, A; winter-peak months are D, J, F; off-peak months are M,A,M and S,O,N.

								Reservation			
								<u>Fee</u>	<u>Dem</u> :	and Usage	Fees
		Rate Design						Reservation Fee	Summer-	Winter-	
	Revenue	Adjustment	Adjusted Revenue	Billing Units		Adjustment		by Voltage Level	Peak	Peak	Off-Peak
General Service	Requirements (5)	Factor (1)	Requirements	(kW) (5)	Rate	(2)	Final Rate	(\$/kW) (3)	(\$/kW) (6)	(\$/kW) (6)	(\$/kW) (6)
Generation	\$8,950,798	1.0896	\$9,752,790	2,401,429	\$4.06	15%	\$0.61	NA	NA	NA	NA
Transmission (4)	\$2,375,823	1.0896	\$2,588,697	2,401,429	\$1.08	100%	\$1.08	NA (4)	NA (4)	NA (4)	NA (4)
Distribution Primary	\$6,634,948	1.0896	\$7,229,439	2,401,429	\$3.01	100%	\$3.01	\$4.70	\$12.21	\$8.96	\$5.71
Distribution Secondary	\$3,298,289	1.0896	\$3,593,816	1,608,955	\$2.23	100%	\$2.23	\$6.93	\$14.44	\$11.20	\$7.95
(1) Poto Donigo / Hait Co	set Devenue Deguire	monto - Adius	tmont factor /26 900	479/99 0C9 001	7_1 00064	١					

(1) Rate Design/ Unit Cost Revenue Requirements = Adjustment factor (36,899,473/33,863,907=1.08964)

(4) There are no transmission level General Service customers.

(5) Revenue Requirements and Billing Units are obtained from the 1994 Minnesota Power electric cost of service study (Docket # E015/GR-94-001).

⁽³⁾ The reservation charge is additive depending on the voltage level at which a customer takes service (e.g., a Primary Distribution customer's rate would include the G, T and Primary D components).

⁽²⁾ An adjustment is made to generation for the percentage of planned reserve margin (15%).

⁽³⁾ The reservation charge is additive depending on the voltage level at which a customer takes service (e.g., a Primary Distribution customer's rate would include the G, T and Primary D components).

⁽⁶⁾ Demand Usage fees are obtained from the 1994 MP electric cost of service study and are test year costs (i.e., the Generation component is not multiplied by the planned reserve margin [15%]). The base fees are adjusted to take into consideration the seasonal fluctuation in incremental capacity costs with 50% of annual capacity costs assumed to occur in 3 summer-peak months, 30% in 3 winter-peak months and 20% during the remaining 6 off-peak months. Summer-peak months are J, J, A, winter-peak months are D, J, F; off-peak months are M,A,M and S,O,N.

Standby Rider:

Standby Reservation Fee and Usage Fees for Residential, General Service, and Large Light & Power (monthly)

								<u>Reservation</u>				
								<u>Fee</u>	Demand Usage Fees		<u>Fees</u>	
		Rate Design						Reservation Fee	Summer-	Winter-		
	Revenue	Adjustment	Adjusted Revenue	Billing Units		Adjustment		by Voltage Level	Peak	Peak	Off-Peak	
Large Light & Power	Requirements (4)	Factor (1)	Requirements	(kW) (4)	Rate	(2)	Final Rate	(\$/kW) (3)	(\$/kW) (5)	(\$/kW) (5)	(\$/kW) (5)	
Generation	\$14,035,581	1.1282	\$15,834,942	2,129,500	\$7.44	15%	\$1.12	NA	NA	NA	NA	
Transmission	\$3,706,363	1.1282	\$4,181,519	2,129,500	\$1.96	100%	\$1.96	\$3.08	\$16.84	\$10.89	\$4.94	
Distribution Primary	\$4,973,957	1.1282	\$5,611,618	1,831,494	\$3.06	100%	\$3.06	\$6.14	\$19.90	\$13.95	\$8.00	
Distribution Secondary	\$2,278,328	1.1282	\$2,570,410	714,285	\$3.60	100%	\$3.60	\$9.74	\$23.50	\$17.55	\$11.60	
(4) Data design / Unit Cost Daysons Deguirements - Adjustment factor /42 DCD 241 / 29 D74 264-1 1202												

⁽¹⁾ Rate design/ Unit Cost Revenue Requirements = Adjustment factor (43,969,241 / 38,974,364=1.1282

Standby Rider:

Energy Usage Fees (1)

	Rate Design							
	Revenue	Adjustment	Adjusted Revenue	Billing Units	Rate			
	Requirements	Factor	Requirements	(kWh)	(¢/kWh)			
Residential	\$11,309,547	0.64	\$7,238,110	790,773,023	0.92			
General Service	\$8,280,201	1.0896	\$9,022,107	581,223,490	1.56			
Large Light & Power	\$13,109,601	1.1282	\$14,790,252	945,805,801	1.57			

¹⁾ Energy usage fees are based on the 1994 MP Electric Cost of Service Study unit costs and adjusted by the Rate Design Adjustment Factor in accordance with final approved rates (Docket # EO15/GR-94-001).

DG Rider:

Service Charge (monthly)

\$15.83

This cost is based on 1994 Cost of Service Study (Unbundled) costs and includes both the meter and customer services components. These charges are reduced by meter equipment depreciation costs and the allowed ROR on the meter equipment. Costs based on the COSS are \$4.31 for meters and \$13.24 for customer services. The reduction for depreciation costs and the ROR on equipment reduces the cost of the meter component to \$2.59. Customer service costs of \$13.24 plus reduced meter costs are combined for a total charge for all customer classes of \$15.83.

⁽²⁾ An adjustment is made to generation for the percentage of planned reserve margin (15%).

⁽³⁾ The reservation charge is additive depending on the voltage level at which a customer takes service (e.g., a Primary Distribution customer's rate would include the G, T and Primary D components).

⁽⁴⁾ Revenue Requirements and Billing Units are obtained from the 1994 Minnesota Power electric cost of service study (Docket # EO15/GR-94-001).

(5) Demand Usage fees are obtained from the 1994 MP electric cost of service study and are test year costs (i.e., the Generation component is not multiplied by the planned reserve margin [15%]). The base fees are adjusted to take into consideration the seasonal fluctuation in incremental capacity costs with 50% of annual capacity costs assumed to occur in 3 summer-peak months, 30% in 3 winter-peak months, and 20% during the remaining 6 off-peak months. Summer-peak months are J, J, A; winter-peak months are D, J, F; off-peak months are M,A,M and S,O,N.

ATTACHED HERETO IS EXHIBIT E

PUBLIC DOCUMENT TRADE SECRET DATA HAS BEEN EXCISED

MINNESOTA POWER'S DISTRIBUTED GENERATION CAPACITY AND ENERGY PAYMENT SCHEDULE CALENDAR YEAR 2005

Avoided Capacity Costs (\$/kW-mth)

0.00

Avoided Energy Costs (¢/kWh)

On-Peak Off-Peak

Avoided Energy Costs (¢/kWh)

On-Peak

Off-Peak

PUBLIC NO DOCUMENT NO SECRET DATA HAS BEEN EXCISED