

## **Lanesboro Public Utility Application Procedure to Interconnect Distributed Generation to Electric Municipal Distribution**

The following is the procedure to be followed when a customer of the Lanesboro Public Utility (LPU), Lanesboro, MN desires to interconnect distributed generation (DG) to the LPU Electric Distribution.

Customers that are interested in the interconnection of DG with LPU are to provide the following to LPU:

- Completed State of Minnesota Generation Interconnection Application
- One-line diagram showing DG interconnection with utility
- Technical specifications of the generator and other equipment including the inverter showing inverter meets requirements of UL 1741 and IEEE 1547
- Application fee shown on page 9 of 20 of State of Minnesota Interconnection Process for Distributed Generation Systems (no charge for DG with nameplate rating less than 20 kW, \$250 for DG with nameplate rating 20 to 250 kW)
- Proof of insurance with an amount equal or greater than the liability coverage shown on page 5 of 20 of State of Minnesota Interconnection Process for Distributed Generation Systems

LPU reviews application and technical specifications and sends letter to the customer either approving the installation or providing reasons why the interconnection is denied. Customer signs "Agreement for Grid Connected Alternative Energy Systems". LPU installs special meter with dual register (bi-directional meter that measures energy sold to the consumer and energy delivered to the grid) and makes other changes to the service required for the interconnection and charges the Customer for the interconnection costs.

For DG units 40 kW and larger, the DG owner installs a meter socket at the DG unit and the City installs a dual register meter to measure the energy produced by the DG unit. LPU can require the DG meter for load research and reporting requirements for DG units less than 40 kW in size. This 2<sup>nd</sup> meter is required in addition to the dual register main meter. LPU inspects the final equipment by checking for a disconnect switch that is operable and accessible for the DG unit. LPU checks to make sure the DG unit shuts down automatically when the utility source is not available. The customer receives payment for the energy sold to LPU as described in the "Agreement for Grid Connected Alternative Energy Systems." The City billing department determines the bill each month by the following method:

- DG unit less than 40 kW – Energy recorded on the meter register measuring energy that flows to the grid is subtracting from the energy on the register that measures energy to the consumer. The net amount is billed according to the rate tariff for the consumer if the energy sold to the consumer exceeds the energy delivered to the grid. If the energy delivered to the grid exceeds the energy sold to the consumer, the net amount is shown as a credit and "subtracted" against future sales or is paid monthly to the consumer at the average energy retail rate.
- DG unit 40 kW or larger – Energy recorded on the meter register measuring energy that flows to the grid is shown as a credit to the consumer by multiplying the energy delivered to the grid by the "avoided cost" rate that is negotiated with the consumer. The energy on the meter register showing energy sold to the consumer is billed according to the rate tariff to the consumer. The credit from energy sales to the utility is either paid monthly to the consumer or shown as a credit and is used to off-set the bill for energy sales to the consumer.

The State of Minnesota requires information to be filed annually for DG units connected to utilities. The report is due by March 1<sup>st</sup> of each year. The information required is the number of interconnected DG units, energy source, size in kW and net energy delivered to the utility.

# Generation Interconnection Application

**WHO SHOULD FILE THIS APPLICATION:** Anyone expressing interest to install generation which will interconnect with the Area EPS (Local electric utility). This application should be completed and returned to the Area EPS Generation Interconnection Coordinator, in order to begin processing the request.

**INFORMATION:** This application is used by the Area EPS Operator to perform a preliminary interconnection review. The Applicant shall complete as much of the form as possible. The fields in BOLD are required to be completed to the best of the Applicant's ability. The Applicant will be contacted if additional information is required. The response may take up to 15 business days after receipt of all the required information.

**COST:** A payment to cover the application fee shall be included with this application. The application fee amount is outlined in the "State of Minnesota Interconnection Process for Distributed Generation Systems".

<b>OWNER/APPLICANT</b>		
Company / Applicant's Name:		
Representative:	Phone Number:	FAX Number:
Title:		
Mailing Address:		
Email Address:		
<b>LOCATION OF GENERATION SYSTEM INTERCONNECTION</b>		
Street Address, legal description or GPS coordinates:		
<b>PROJECT DESIGN / ENGINEERING (if applicable)</b>		
Company:		
Representative:	Phone:	FAX Number:
Mailing Address:		
Email Address:		
<b>ELECTRICAL CONTRACTOR (if applicable)</b>		
Company:		
Representative:	Phone:	FAX Number:
Mailing Address:		
Email Address:		
<b>GENERATOR</b>		
Manufacturer:		Model:
<b>Type (Synchronous Induction, Inverter, etc):</b>		<b>Phases: 1 or 3</b>
<b>Rated Output (Prime kW):</b>	<b>(Standby kW):</b>	<b>Frequency:</b>
<b>Rated Power Factor (%):</b>	<b>Rated Voltage (Volts):</b>	<b>Rated Current (Amperes):</b>
<b>Energy Source (gas, steam, hydro, wind, etc.)</b>		
<b>TYPE OF INTERCONNECTED OPERATION</b>		
Interconnection / Transfer method: <input type="checkbox"/> Open <input type="checkbox"/> Quick Open <input type="checkbox"/> Closed <input type="checkbox"/> Soft Loading <input type="checkbox"/> Inverter		
Proposed use of generation: (Check all that may apply) <input type="checkbox"/> Peak Reduction <input type="checkbox"/> Standby <input type="checkbox"/> Energy Sales <input type="checkbox"/> Cover Load		Duration Parallel: <input type="checkbox"/> None <input type="checkbox"/> Limited <input type="checkbox"/> Continuous
Pre-Certified System: Yes / No (Circle one)		Exporting Energy Yes / No (Circle one)

