New Jersey Clean Energy Program

Technical Worksheet for Biomass Equipment – Instructions

Please carefully read all of the following information. *With the help of your Installation Contractor, fully complete Sections A through D of the attached Technical Worksheet for Biomass Equipment, as well as the New Jersey Clean Energy Program Pre-Installation Application Form.*

GENERAL TERMS AND CONDITIONS

Rebates will be processed based on the date the New Jersey Board of Public Utilities (NJBPU) approves the Final Application Form, not on the purchase date of the equipment. Program procedures and rebates are subject to change or cancellation without notice.

To qualify for a rebate, Applicant must comply with all Program Eligibility Requirements, Terms and Conditions, and Installation Requirements, and submit a completed Pre-Installation Application Form. For more information about the New Jersey Clean Energy Program, or for assistance in completing applications or forms, please contact the NJBPU (see **"Contact Information"**).

INSTALLATION REQUIREMENTS

Equipment installation must meet the following minimum requirements in order to qualify for payment under the provisions of the New Jersey Clean Energy Program; proposed changes to the requirements will be considered, but they must be documented by the Applicant or Installation Contractor and approved by the NJBPU. These requirements are not all-encompassing and are intended only to address certain minimum safety and efficiency standards.

A: Code Requirements

1. The installation must comply with the provisions of the National Electrical Code and all other applicable local, state and federal codes or practices.
2. All required permits must be properly obtained and posted.
3. All required inspections must be performed (i.e., Electrical/NEC, Local Building Codes Enforcement Office, etc.).
   Note: In order to ensure compliance with provisions of the NEC, an inspection by a state-licensed electrical inspector is mandatory.

B: Biomass Installation Requirements

1. The installation must comply with manufacturer's instructions.
2. The installation must comply with the interconnection and protection requirements of the local electric distribution company.
3. The installation must comply with provisions of IEEE 519 – Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems, as appropriate. Input and output protection functions should be in compliance with ANSI C37.2 Device Function Number specifications.
4. The system should be equipped with the following capabilities, indicators and/or controls:
   - On/off control on site
   - Operating mode setting indication – parallel vs. stand-alone
   - AC & DC overcurrent protection or equivalent
   - Operating status indication
   - Remote control and data acquisition capable
   - Electric load-following capable
5. Warning labels must be posted on the control panels and junction boxes indicating that the circuits are energized by an alternate power source independent of utility-provided power.
6. All interconnecting wires must be copper. (Some provisions may be made for aluminum wiring; approval must be received from utility engineering departments prior to acceptance.)
7. All wiring splices must be contained in UL-approved workboxes.
8. Operating instructions must be posted on or near the system, or on file with facilities operation and maintenance documents.

C: Biomass System Evaluation Criteria

Biomass projects will also be evaluated based on the following three criteria:

1. **Fuel Sustainability**
   Each project must document the sustainability of the fuel source. This information includes the percentage of fuel input that is derived from a certified, sustainable source. Landfill Gas Facilities should document that the methane fuel has a minimum availability of 5 years.
2. **Close Loop Operational Process**
   Documentation must include a description of the operational process and the associated equipment. A functional use for any refuse by-products must be documented. Landfill Gas Facilities must describe current process/use of flare gas and document incremental benefits related to the proposed application.
3. **Proper Emissions Levels**
   The project must meet the emission standards specified in the New Jersey State of the Art Manual (SOTA). The New Jersey Clean Energy Program Application will not be approved until permit approval documentation has been provided.

New Jersey Clean Energy Program

Technical Worksheet – Biomass Equipment Information

Customer Name: _____ Application Number: _____
(Corresponding to Pre-Installation Application Form) (Assigned by the NJBPU)

A: EQUIPMENT INFORMATION

1. Electric Generator Manufacturer: _____
2. Electric Generator Model Number: _____
3. Capacity Rating of each Electric Generator: _____ AC Watts
4. Number of Electric Generators: _____
5. Total System Rated Net Continuous Output: _____ AC Watts (No. of Electric Generators x Capacity Rating)

B: PROPOSED INSTALLATION/INTERCONNECTION INFORMATION

1. Generator Location: _____
2. Utility-Accessible AC Disconnect Switch Location: _____
3. System Type and Mode of Operation:
   - ☐ Grid-connected operating mode (parallel/capable of synchronizing with the electric grid; capable of automatically reducing load to prevent backfeeding the meter)
   - ☐ Grid-connected/grid-independent operating mode (parallel/capable of synchronizing with the electric grid and capable of switching automatically to independent, load-follow operation when the grid is unavailable; automatic operation and synchronization of multiple power plants connected in parallel)
   - ☐ Stand-alone load-following operation (system confined to an independent circuit, no utility backup)
   - ☐ Battery interactive capabilities, if applicable
4. A one-page site map must accompany this application. This document must indicate the location of the Generator(s), batteries (if any), lockable disconnect switch (unless otherwise approved by the electric utility, the disconnect switch shall be installed at the electric utility meter location), and point of connection with the utility system. The installation address, current account number at that address (gas and electric), and the installer's name and telephone number must also be included on the site map.

C: INCENTIVE REQUEST CALCULATION

1. Total system rated net continuous output (Section A, line 5 above): _____ AC Watts
2. Incentive Calculation (Calculate appropriate incentive based on System Rated Output):

   Small Systems –

   a. Tier I (0 to 10,000 Watts System Rated Output): _____ (Watts) x $5.00/Watt = $_____

   Large Systems –

   b. Tier I (0 to 10,000 Watts System Rated Output): _____ (Watts) x $3.00/Watt = $_____
   c. Tier II (10,000 to 100,000 Watts System Rated Output): (_____ - 10,000 Watts) x $2.00/Watt + $30,000 = $_____
   d. Tier III (100,000 to 500,000 Watts System Rated Output): (_____ - 100,000 Watts) x $1.50/Watt + $210,000 = $_____
   e. Tier IV (500,000 to 1,000,000 Watts System Rated Output): (_____ - 500,000 Watts) x $0.15/Watt + $810,000 = $_____
3. Requested Incentive (Enter the appropriate value from 2a, 2b, 2c, 2d, or 2e): $_____
4. Total Installed System Cost: $_____
   (Eligible installed system cost includes all equipment, installation, and applicable interconnection costs before the New Jersey Clean Energy Program incentive, less any other direct incentives. These costs must be documented by invoices from the vendor, as well as proof of customer purchase [copy of customer's check, credit card receipt or lease contract and documentation] submitted with the Final Application Form.)
5. Maximum allowable incentive (Multiply line C4 by 60% for small systems or 30% for large systems): $_____
6. Final incentive amount (Input the lesser of line C3 or C5): $_____

D: WARRANTY INFORMATION

1. Biiomass Technology: _____ Years 2. Installation: _____ Years 3. Parts and Labor: _____ Years

An all Inclusive 5 year warranty is required for all systems Installed through the New Jersey Clean Energy Program.