CALL FOR QUALIFIED TECHNOLOGIES – ADVANCED CORDWOOD BOILER

RENEWABLE HEAT-NY

NYSERDA has launched the Renewable Heat NY Program, and needs to identify manufacturers of high-efficiency, low-emissions (HELE) advanced cordwood boilers that will be eligible for installation under this program. To be listed as a manufacturer with a NYSERDA-qualified technology, manufacturers must submit information and data (see Application Requirements below) to **RHNY@nyserda.ny.gov**.

NYSERDA is seeking to qualify residential and commercial advanced cordwood boilers. To become qualified for Renewable Heat NY, all advanced cordwood boilers must be low-mass (low-volume) and have sensors and controls to optimize combustion performance. This result is most easily achieved using a staged combustion design with lambda control. The advanced cordwood boiler must have a minimum annual thermal efficiency of 60% using the higher heating value (HHV) of cordwood and tested on the US Environmental Protection Agency (EPA) Method 28 Wood Hydronic Heater – Partial Thermal Storage (M28 WHH-PTS) developed by Brookhaven National Laboratory (BNL). All advanced cordwood boilers must be certified by the EPA and tested using the EPA Method 28 WHH-PTS test method.

Application Requirements

Applications are being accepted through December 2019. Manufacturers must provide the following to apply:

1) A cover letter

2) M28 WHH-PTS test method report completed by an EPA Accredited Laboratory and a letter of certification and hang-tag by the US EPA

   Manufacturers must submit energy and emissions performance verification results of the same boiler model and cordwood fuel combination with the qualified technology application. Performance testing for thermal efficiency, particulate matter, and CO must have been performed by the EPA M28 WHH-PTS Test Method for boilers with partial thermal storage and all results for the categories tested must be contained in the report and include start-up, steady-state, and end-phases of the burn. No alternative test method results will be considered for Advanced Cordwood Boilers in the Renewable Heat NY program.

3) Warranty information

   The warranty description should include the length and limits of coverage for the boiler and components (e.g., pressure vessel, combustion chamber, computer processing unit, other components).

4) Owner's Manual

5) If necessary, convert any alternative units in any part of the supporting information and data to the units as shown:

High-Efficiency and Low-Emissions Advanced Cordwood Boiler Performance	
Thermal Efficiency (HHV)	≥60%
Annual Particulate Matter Emissions	<0.32 lb/mmBtu
Annual CO Emissions	ppm at 7% O_2

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Application Evaluation

Applications that fulfill the Application Requirements will be reviewed according to the following evaluation criteria:

1. Does the cordwood boiler meet the basic requirements of an advanced technology, namely low-mass (low-volume) and sensors and controls to optimize combustion performance? Does it utilize auxiliary thermal storage?
2. Was the performance evaluation conducted using the EPA M28 WHH-PTS test method?
3. Was the M28 WHH-PTS conducted by an EPA Accredited Laboratory?
4. Is a cover letter provided converting test results to appropriate units of thermal efficiency (HHV), PM (lb/mmBtu), CO (ppm, 7% O_2)?
5. Does the technology meet the requirements for annual thermal efficiency (HHV) using the M28 WHH-PTS?
6. Does the technology meet the requirements for fine particle emissions using the M28 WHH-PTS?
7. Does the application report annual carbon monoxide emissions using the M28 WHH-PTS?
8. Was a complete test report in the application that reports results for the categories tested and include energy and emission results for start-up, steady-state, and end-phases of the burn?
9. Does the application include an EPA certification letter and hang-tag?
10. Does the application provide complete warranty description?
11. Does the application include an owner's manual?

Applications are being accepted through December 2019. Questions may be submitted to **RHNY@nyserda.ny.gov**