Renewable Heat NY

Call For Qualified Technologies — Wood Pellet Boiler

NYSERDA's Renewable Heat NY Program identifies manufacturers of high-efficiency and low-emissions (HELE) wood pellet-fired boilers eligible for installation in its program. To be listed as a manufacturer with a NYSERDA-qualified technology we ask you to submit information and data as described below to **RHNY@nyserda.ny.gov**.

NYSERDA seeks to qualify residential and commercial wood pellet boilers less than 1 million Btu/h. Qualified pellet boilers must be fully automatic, low-volume, and have sensors and controls that optimize combustion performance. This is most easily achieved using a staged combustion design with lambda control. HELE pellet boiler heating systems must use bulk pellet storage (>3 tons) and be designed to be fueled by an automatic conveyance system. Effective September 10, 2020, NYSERDA will only accept applications for low-volume pellet boilers tested with thermal storage using the Integrated-Duty Cycle (IDC) protocol and hold a US EPA certification for Step-2 under the US EPA 2015 Residential Heater New Source Performance Standard (NSPS). The IDC test method can be found at www.nescaum.org/topics/test-methods

Manufacturers must submit the following information for review to RHNY@nyserda.ny.gov:

1. Cover letter that includes a description of the unit, the date and location of testing, and a primary point of contact for questions (email and phone).
2. Copy of US Environmental Protection Agency letter certifying compliance with the 2015 Residential Wood Heater New Source Performance Standards.
3. Complete official test report for pellet boilers tested with thermal storage using the IDC protocol that are certified for Step-2 of the US EPA NSPS. While no minimum thermal efficiency threshold is required for boilers tested on the IDC, manufacturers will need to submit test reports containing the overall thermal efficiency of the entire test run. No other test protocol results will be considered. Test reports must not be more than two years old at time of application. Only design parameters can be designated as confidential business information (CBI).
4. Appliance owner's manual.
5. Warranty description must include the length and limits of coverage for the boiler and components (e.g., pressure vessel, combustion chamber, computer processing unit, other components).
6. Certification by the New York State Department of Environmental Conservation for residential boilers, if the pellet boiler can be installed in locations other than within the home (ie. garage or shed).

Manufacturers must submit emissions performance verification results of the same boiler model and pellet fuel combination with the qualified technology application. Performance testing for thermal efficiency, particulate matter, and CO must have been performed by an EPA accredited laboratory using the IDC for automatic feed units using thermal storage.

Application Evaluation

Applications are being accepted through December 2021. Applications that meet Program Requirements will be reviewed using the evaluation criteria below:

1. Were all required materials submitted with the application—cover letter, owner's manual, and complete warranty information?
2. Is the pellet boiler fully automatic with sensors and controls to optimize performance?
3. Is the pellet boiler low volume with water jacket (gallons) ≤ 2 [0.18 x output capacity in kBtu/h + 5.2]?
4. Was the unit tested using external thermal storage (i.e. buffer tank)?
5. Is the unit designed to be fueled by an automatic conveyance system and use bulk pellet storage (>3 tons)?
6. Is the pellet boiler certified by the US EPA for Step-2 of the NSPS using the IDC for automatic feed units with thermal storage in the previous two years? Were both the complete official test report and the US EPA certification letter submitted?
7. Is the unit considered to be an outdoor wood boiler by the New York State Department of Environmental Conservation?

Questions may be submitted to RHNY@nyserda.ny.gov

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