

**WAC 194-40-440 Thermal RECs—Measuring.** (1) Qualifying thermal energy must be measured and tracked using the following methods:

(a) **Large facilities:** Facilities with the capacity to generate one or more thermal RECs per hour of operation must install a thermal energy measurement system to continually measure qualifying thermal energy. The thermal energy delivered to the secondary purpose must be metered. All parameters needed to determine thermal energy delivered to the secondary purpose must be directly measured.

(b) **Small facilities:** Facilities with the capacity to generate less than one thermal REC per hour of operation must install a thermal energy measurement system to measure qualifying thermal energy delivered to the secondary purpose. Calculation parameters, such as heat capacity, and directly measured parameters, such as temperature and pressure, that do not vary more than two percent for the full range of expected operating conditions may be evaluated on an annual basis and used in the calculation methodology as a constant. These parameters may be based on such sources as manufacturers' published ratings or one-time measurements, but must be clearly defined and explained in the thermal energy measurement plan required under subsection (2) of this section. All other parameters used to determine the amount of qualifying thermal energy must be continually measured. The generating facility must assess the significance of any potential error that the methodology parameters have on the total annual quantity of qualifying thermal energy and include this analysis in the thermal energy measurement plan. The generating facility must also submit to the department for approval in the thermal energy measurement plan an appropriate discount factor to be applied to the qualifying thermal energy calculation methodology, and the department may revise this discount factor to account for variance due to parameters that are not continually measured.

(c) Any thermal energy measurement system used to comply with this rule must capture sufficient data, and make necessary calculations or provide all necessary data for calculations to be made using standard engineering calculation procedures, to determine the net thermal energy used by the secondary purpose over an interval specified in the thermal energy measurement plan.

(d) The components of a thermal energy measurement system must be installed in accordance with the manufacturer's specifications.

(2) The operator of a thermal energy generating facility must submit to the department for its approval a thermal energy measurement plan that:

(a) Describes the thermal energy generating equipment, secondary purposes, data measurements to be collected, all associated measurement devices, data formats and storage, data gathering techniques, measurement system calibration, calculation methodology, discount factors, and other relevant equipment and activities that will be used to determine the quantity of qualifying thermal energy.

(b) Includes documentation, including drawings, specifications, piping and instrumentation diagrams, and other information, sufficient to verify the compliance of the system with the requirements of this rule.

(c) Is prepared by or under the supervision of a licensed professional engineer, as indicated by the engineer's stamp.

(3) The operator of a thermal energy generating facility must submit an updated thermal energy measurement plan and documentation for review and approval to the department upon the following:

- (a) Installation, removal or changes in the configuration of the thermal energy measurement system and its components;
- (b) Installation of new thermal energy generation equipment or changes in thermal energy generation capacity;
- (c) Installation or removal of secondary purpose equipment, changes to secondary purpose use, or changes in the secondary purpose maximum thermal energy demand; or
- (d) Indications the thermal energy measurement system is not performing in accordance with the thermal energy measurement plan.

[Statutory Authority: RCW 19.405.100 and 19.405.060. WSR 21-02-039, § 194-40-440, filed 12/29/20, effective 1/29/21.]