## (Effective until July 1, 2020)

- WAC 51-11C-40904 Section C409.4—Measurement devices, data acquisition system and energy display.
- C409.4 Measurement devices, data acquisition system and energy display.
- **C409.4.1 Meters.** Meters and other measurement devices required by this section shall have local displays or be configured to automatically communicate energy data to a data acquisition system. Source meters may be any digital-type meters. Current sensors or flow meters are allowed for end use metering, provided that they have an accuracy of +/- 5%. All required metering systems and equipment shall provide at least hourly data that is fully integrated into the data acquisition and display system per the requirements of Section C409.
- **C409.4.2 Data acquisition system.** The data acquisition system shall store the data from the required meters and other sensing devices for a minimum of 36 months. For each energy supply and end use category required by C409.2 and C409.3, it shall provide real-time energy consumption data and logged data for any hour, day, month or year.
- **C409.4.3 Energy display.** For each building subject to Section C409.2 and C409.3, either a readily accessible and visible display, or a web page or other electronic document accessible to building management or to a third-party energy data analysis service shall be provided in the building accessible by building operation and management personnel. The display shall graphically provide the current energy consumption rate for each whole building energy source, plus each end use category, as well as the average and peak values for any day, week or year.
- **C409.4.4 Commissioning.** The entire system shall be commissioned in accordance with Section C408. Deficiencies found during testing shall be corrected and retested and the commissioning report shall be updated to confirm that the entire metering and data acquisition and display system is fully functional.

[Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-13-089, § 51-11C-40904, filed 6/15/16, effective 7/16/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40904, filed 2/1/13, effective 7/1/13.]

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least hourly data that is fully integrated into the data acquisition and display system per the requirements of Section C409.

- **C409.4.2 Data acquisition system.** The data acquisition system shall store the data from the required meters and other sensing devices in a single database for a minimum of 36 months. For each energy supply and end use category required by C409.2 and C409.3, it shall provide realtime energy consumption data and logged data for any hour, day, month or year.
- C409.4.3 Energy display. For each building subject to Section C409.2 and C409.3, either a visible display in a location with ready access, or a single web page or other electronic document available for access to building management or to a third-party energy data analysis service shall be provided in the building accessible by building operation and management personnel. The display shall graphically provide the current energy consumption rate for each whole building energy source, plus each end use category, as well as the total and peak values for any day, week, month, and year.
- C409.4.4 Commissioning. Energy metering and energy consumption management systems shall be commissioned in accordance with Section C408.

[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-40904, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.045, 19.27A.160, and 19.27.074. WSR 16-13-089, § 51-11C-40904, filed 6/15/16, effective 7/16/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-40904, filed 2/1/13, effective 7/1/13.]