

**199—27.5(476) Engineering practice.**

**27.5(1) Requirement for good engineering practice.** The electric plant of the electric cooperative or municipal electric utility shall be constructed, installed, maintained and operated in accordance with accepted good engineering practice in the electric industry to assure, as far as reasonably possible, continuity of service, uniformity in the quality of service furnished, and the safety of persons and property.

**27.5(2) Standards incorporated by reference.** The electric cooperative shall use the applicable provisions in the publications listed below as standards of accepted good practice unless otherwise ordered by the board. The standards listed below are recommended for use by municipal electric utilities.

- a. Iowa Electrical Safety Code, as defined in 199—Chapter 25.
  - b. National Electrical Code, ANSI/NFPA 70-2014.
  - c. American National Standard Requirements for Instrument Transformers, ANSI/IEEE C57.13.1-2006; and C57.13.3-2005.
  - d. American National Standard for Electric Power Systems and Equipment Voltage Ratings (60 Hertz), ANSI C84.1-2011.
  - e. Grounding of Industrial and Commercial Power Systems, IEEE 142-2007.
  - f. IEEE Standard 1159-2009, IEEE Recommended Practice for Monitoring Electric Power Quality, or any successor standard.
  - g. IEEE Standard 519-2014, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems, or its successor standard.
  - h. At railroad crossings, rule 199—42.6(476), “Engineering standards for electric and communications lines.”
  - i. Iowa Stray Voltage Guide, located at [www.iowastrayvoltageguide.com](http://www.iowastrayvoltageguide.com), published July 2014.
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