

STATE OF IOWA
DEPARTMENT OF COMMERCE
UTILITIES BOARD

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| <p>IN RE:</p> <p>UPDATES AND CORRECTIONS TO BOARD SAFETY REGULATIONS [199 IAC 10.12(1), 10.17, 15.10(1), 19.2(5), 19.5(2), 19.8(3), 20.5(2), 20.6(3), 24.10(2), 25.2(1), 25.2(2), AND 25.2(3)]</p> | <p>DOCKET NO. RMU-07-1</p> |
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ORDER ADOPTING AMENDMENTS

(Issued May 2, 2007)

BACKGROUND

Pursuant to the authority of Iowa Code chapters 476, 478, and 479 and § 17A.4, the Utilities Board (Board) is adopting amendments to 199 IAC 10.12(1), 10.17, 15.10(1), 19.2(5), 19.5(2), 19.8(3), 20.5(2), 20.6(3), 24.10(2), 25.2(1), 25.2(2), 25.2(3), and 25.2(5) to update and correct the Board's natural gas and electric safety rules as described in the "Adopted and Filed" notice attached hereto and incorporated herein by reference. The safety rules include technical standards established in federal regulations and industry publications that are incorporated by reference in the Board's rules. Periodically, the Board is required to update the references as new and revised standards are developed.

A "Notice of Intended Action" with the proposed amendments was published in IAB Vol. XXIX, No. 20 (3/28/07) p. 1263, as ARC 5787B. Interstate Power and Light Company filed a letter indicating it had no comment on the proposed amendments.

The Consumer Advocate Division of the Department of Justice (Consumer Advocate) filed comments indicating it supported the effort to update the safety rules.

Consumer Advocate also pointed out that there was a 2006 update to the electric safety standards ANSI C84.1-1995 found in proposed paragraph 20.5(2)"d" that was not included in the proposed amendments.

The Board will adopt the proposed updates and corrections to its safety rules as proposed and will also adopt the 2006 update for proposed paragraph 20.5(2)"d." No comments were filed objecting to the proposed amendments and the Board considers it reasonable to include the 2006 update of the safety standards in the "American National Standard For Electric Power Systems and Equipment Voltage Ratings (60 Hertz)," ANSI C84.1. Notice was given to interested persons that the Board was amending its natural gas and electric safety rules to include the most recent standards. The ANSI C84.1-2006 is similar to the other updates. Updating the ANSI 84.1 standard is consistent with the intent of this rule making and within the scope of the notice of intended action.

The proposed amendments as published contained some non-substantive editorial corrections made by the Code Editor. Those editorial corrections have been adopted in these amendments. The amendments also include any updates of the federal safety regulations adopted in the Code of Federal Regulation (CFR) up to the effective date of this amendment, June 27, 2007. That date has been included in the adopted amendments.

To view all amendments adopted by the Board in this order, see the "Adopted and Filed" notice attached to this order. The official version of the amendments, which may contain non-substantive changes made by the Code Editor, will be published in the Iowa Administrative Bulletin (IAB) on May 23, 2007. The amendments will then be published in the Iowa Administrative Code (IAC) and become effective on June 27, 2007. Interested persons may access the IAB and IAC at <http://www.legis.state.ia.us/lowaLaw.html> for the exact wording of the amendments adopted in this rule making.

IT IS THEREFORE ORDERED:

1. A rule making identified as Docket No. RMU-07-1 is adopted.
2. The Executive Secretary is directed to submit for publication in the Iowa Administrative Bulletin an "Adopted and Filed" notice in the form attached to and incorporated by reference in this order.

UTILITIES BOARD

/s/ John R. Norris

/s/ Curtis W. Stamp

ATTEST:

/s/ Judi K. Cooper
Executive Secretary

/s/ Krista K. Tanner

Dated at Des Moines, Iowa, this 2nd day of May, 2007.

UTILITIES DIVISION[199]

Adopted and Filed

Pursuant to Iowa Code chapters 476, 478, and 479 and section 17A.4, the Utilities Board (Board) gives notice that on May 2, 2007, the Board issued an order in Docket No. RMU-07-1, In re: Updates and Corrections to Board Safety Regulations [199 IAC 10.12(1), 10.17, 15.10(1), 19.2(5), 19.5(2), 19.8(3), 20.5(2), 20.6(3), 24.10(2), 25.2(1), 25.2(2), and 25.2(3)], "Order Adopting Amendments." The Board is adopting updates to its natural gas and electric safety rules in 199 IAC Chapters 10, 15, 19, 20, 24, and 25 for the safe operation of natural gas and electric facilities. These adopted rules include technical standards established in federal regulations and industry publications that are incorporated by reference in the Board's rules.

The proposed amendments were published at IAB Vol. XXIX, No. 20 (3/28/07) p. 1263, as ARC 5787B. Comments were filed by Interstate Power and Light Company (IPL) and the Consumer Advocate Division of the Department of Justice (Consumer Advocate). Neither of the commenters objected to the proposed amendments. In addition, Consumer Advocate stated that it had discovered a 2006 update for proposed paragraph 20.5(2)"d" that had not been included in the "Notice of Intended Action." The Board is adopting the amendments as proposed and will also adopt the 2006 update for proposed paragraph 20.5(2)"d." The Board considers the 2006 update to be similar to the noticed updates and based upon the stated purpose of the rule making the adoption of this update to be reasonable. An order containing the Board's decision can be found on the Board's Web site, www.state.ia.us/iub.

These amendments are intended to implement Iowa Code chapters 476, 478, and 479 and section 17A.4.

The amendments will become effective June 27, 2007.

ITEM 1. Amend subrule 10.12(1) as follows:

10.12(1) All pipelines, underground storage facilities, and equipment used in connection therewith shall be designed, constructed, operated, and maintained in accordance with the following standards:

a. 49 CFR Part 191, "Transportation of Natural and Other Gas by Pipeline; Annual Reports, Incident Reports, and Safety-Related Condition Reports," as amended through ~~November 17, 2004~~ June 27, 2007.

b. 49 CFR Part 192, "Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards," as amended through ~~November 17, 2004~~ June 27, 2007.

c. 49 CFR Part 199, "Drug and Alcohol Testing," as amended through ~~November 17, 2004~~ June 27, 2007.

d. to f. No change.

Conflicts between the standards established in paragraphs 10.12(1)"a" through "f" or between the requirements of rule 199—10.12(479) and other requirements which are shown to exist by appropriate written documentation filed with the board shall be resolved by the board.

ITEM 2. Amend rule 199—10.17(479) as follows:

199—10.17(479) Accidents and incidents. Any pipeline incident or accident which is reportable to the U.S. Department of Transportation under 49 CFR Part 191 as amended through ~~November 17, 2004~~, June 27, 2007, shall also be reported to the

board, except that the minimum economic threshold of damage required for reporting to the board is \$15,000. Duplicate copies of any written accident reports and safety-related condition reports submitted to the U.S. Department of Transportation shall be provided to the board.

ITEM 3. Amend subrule 15.10(1) as follows:

15.10(1) Acceptable standards. Qualifying facilities and AEP facilities shall meet the applicable provisions in the publications listed below in order to be eligible for interconnection to an electric utility system:

- a. No change.
- b. ~~Requirements for Salient Pole Synchronous Generators and Condensers, ANSI C50.12-1982.~~ IEEE Standard for Salient-Pole 50 Hz and 60 Hz, Synchronous Generators and Generator/Motors for Hydraulic Turbine Applications Rated 5 MVA and above, IEEE C50.12-2005.
- c. ~~Requirements for Cylindrical-Rotor Synchronous Generators, ANSI C50.13-1989.~~ IEEE Standard for Cylindrical-Rotor 50 Hz and 60 Hz, Synchronous Generators Rated 10 MVA and above, IEEE C50.13-2005.
- d. ~~Requirements for Combustion Gas Turbine Driven Cylindrical-Rotor Synchronous Generators, ANSI C50.14-1977.~~
- e d. Iowa Electrical Safety Code, as defined in 199—Chapter 25.
- f e. National Electrical Code, ANSI/NFPA 70-2002 2005.
- g f. IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems—IEEE 519-1992.

h g. Standard for Interconnecting Distributed Resources with Electric Power Systems, ANSI/IEEE 1547–2003.

For those facilities which are of such design as to not be subject to the standards noted in paragraphs 15.10(1)"a," "b," "c," and through "d," ~~above,~~ data on the manufacturer, type of device, and output current wave form (at full load) and output voltage wave form (at no load and at full load) shall be submitted to the utility for review and approval prior to interconnection. A copy of the utility decision (whether approving or disapproving), including the data specified ~~above~~ in paragraphs 15.10(1)"a" through "d" and the exact location of the facility, shall be filed with the board within one week of the date of the decision. The utility decision, or its failure to decide within a reasonable time, may be appealed to the board. The appeal shall be treated as a contested case proceeding.

ITEM 4. Amend paragraph **19.2(5)"g"** as follows:

g. Reports to federal agencies. Copies of reports submitted pursuant to 49 CFR Part 191 as amended through ~~November 17, 2004,~~ June 27, 2007, "Transportation of Natural and Other Gas by Pipeline; Annual Reports, Incident Reports, and Safety–Related Condition Reports," shall be filed with the board. Utilities operating in other states shall provide to the board data for Iowa only.

ITEM 5. Amend subrule 19.5(2) as follows:

19.5(2) Standards incorporated by reference.

a. The design, construction, operation, and maintenance of gas systems and liquefied natural gas facilities shall be in accordance with the following standards where applicable:

(1) 49 CFR Part 191, "Transportation of Natural and Other Gas by Pipeline; Annual Reports, Incident Reports, and Safety-Related Condition Reports," as amended through ~~November 17, 2004~~ June 27, 2007.

(2) 49 CFR Part 192, "Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards," as amended through ~~November 17, 2004~~ June 27, 2007.

(3) 49 CFR Part 193, "Liquefied Natural Gas Facilities: Federal Safety Standards," as amended through ~~November 17, 2004~~ June 27, 2007.

(4) 49 CFR Part 199, "Drug and Alcohol Testing," as amended through ~~November 17, 2004~~ June 27, 2007.

(5) No change.

(6) ~~ANSI/NFPA~~ No. 59-2004, "Standard for the Storage and Handling of Liquefied Petroleum Gases at Utility Gas Plants."

(7) No change.

b. The following publications are adopted as standards of accepted good practice for gas utilities:

(1) ANSI Z223.1/NFPA 54-~~2002~~ 2006, "National Fuel Gas Code."

(2) ~~ANSI A225/NFPA~~ 501A-2003 2005, "Fire Safety Criteria for Manufactured Home Installations, Sites, and Communities."

ITEM 6. Amend subrule 19.8(3) as follows:

19.8(3) Turning on gas. Each utility upon the installation of a meter and turning on gas or the act of turning on gas alone shall take the necessary steps to assure itself that there exists no flow of gas through the meter which is a warning that the customer's

pipng or appliances are not safe for gas turn on (Ref: Sec. 4.2 and Appendix D, ANSI Z223.1/NFPA 54–2002 2006).

ITEM 7. Amend subrule 20.5(2) as follows:

20.5(2) Standards incorporated by reference. The utility shall use the applicable provisions in the publications listed below as standards of accepted good practice unless otherwise ordered by the board.

- a. No change.
- b. National Electrical Code, ANSI/NFPA 70–2002 2005.
- c. No change.
- d. ~~American National Standard Requirements for Electrical Analog Indicating Instruments, ANSI C39.1–1981 (R1992).~~
- e. ~~Rescinded IAB 11/19/97, effective 12/24/97.~~
- f d. American National Standard ~~Voltage Ratings for~~ For Electric Power Systems and Equipment Voltage Ratings (~~60Hz~~ 60Hertz), ANSI C84.1–~~1995~~ 2006.
- g e. Grounding of Industrial and Commercial Power Systems, IEEE 142–1991.
- h f. IEEE Standard 1159–1995, IEEE Recommended Practice for Monitoring Electric Power Quality or any successor standard.
- i g. IEEE Standard 519–1992, IEEE Recommended Practices and Requirements for Harmonic Control in ~~Electric~~ Electrical Power Systems or its successor standard.
- j h. At railroad crossings, 199 IAC 42.6(476), "Engineering standards for electric and communications lines."

ITEM 8. Amend subrule 20.6(3) as follows:

20.6(3) Accepted good practice. The following publications are considered to be representative of accepted good practice in matters of metering and meter testing:

a. No change.

~~b. American National Standard for Solid State Electricity Meters, ANSI C12.16-1991.~~

~~c. American National Standard for Cartridge-type Solid State Pulse Recorders for Electricity Metering, ANSI C12.17-1991.~~

ITEM 9. Amend paragraph **24.10(2)"e"** as follows:

e. Requirement for good engineering practice. The applicant shall use the applicable provisions in the publications listed below as standards of accepted good practice unless otherwise ordered by the board:

(1) No change.

(2) No change.

~~(3) Operation and Maintenance of Turbine Generators-ANSI standard C50.30-1972.~~

~~(4)(3) Power Piping-ANSI standard B31.1-1998~~ 2004.

ITEM 10. Amend subrule 25.2(1) as follows:

25.2(1) National Electrical Safety Code. The American National Standards Institute (ANSI) C2-~~2002~~ 2007 "National Electrical Safety Code" (NESC) as ultimately conformed to the ANSI-approved draft by correction of publishing errors through issuance of printed corrections is adopted as part of the Iowa electrical safety code, except Part 4, "Rules for Operation of Electric Supply and Communications Lines and Equipment," which is not adopted by the board.

ITEM 11. Amend subparagraph **25.2(2)"b"(4)** as follows:

(4) Except for clearances near grain bins, for measurements made under field conditions, the board will consider compliance with the overhead vertical line clearance requirements of Subsection 232 and Table 232–1 of the 1987 NESC indicative of compliance with the 1990 through ~~2002~~ 2007 editions of the NESC. (For an explanation of the differences between 1987 and subsequent code edition clearances, see Appendix A of the 1990 through ~~2002~~ 2007 editions of the NESC.)

ITEM 12. Amend paragraph **25.2(2)"d"** as follows:

d. Rule ~~264E.4~~ 217C.1 is changed to read:

"The ground end of anchor guys exposed to pedestrian or vehicle traffic shall be provided with a substantial marker not less than eight feet long. The guy marker shall be of a conspicuous color such as yellow, orange, or red. Green, white, gray or galvanized steel colors are not reliably conspicuous against plant growth, snow, or other surroundings. Noncomplying guy markers shall be replaced as part of the utility's inspection and maintenance plan."

ITEM 13. Amend subrule 25.2(3) as follows:

25.2(3) Grain bins.

a. No change.

b. An electric utility may refuse to provide electric service to any grain bin built near an existing electric line which does not provide the clearances required by ~~The~~ the American National Standards Institute (ANSI) C2–~~2002~~ 2007 "National Electrical Safety Code," Rule 234F. This paragraph "b" shall apply only to grain bins loaded by portable augers, conveyors or elevators and built after September 9, 1992, or to grain bins

loaded by permanently installed augers, conveyors, or elevator systems installed after December 24, 1997.

ITEM 14. Amend subrule 25.2(5) as follows:

25.2(5) Other references adopted.

a. The "National Electrical Code," ANSI/NFPA 70–2002 2005, is adopted as a standard of accepted good practice for customer–owned electrical facilities beyond the utility point of delivery.

b. "The Lineman's and Cableman's Handbook," ~~Tenth~~ Eleventh Edition; Shoemaker, Thomas M. and Mack, James E.; New York, McGraw–Hill Book Co., is adopted as a recommended guideline to implement the "National Electrical Safety Code" or "National Electrical Code," and for developing the inspection and maintenance plans required by 199 IAC 25.3(476,478).

May 2, 2007

/s/ John R. Norris

John R. Norris
Chairman