

UTILITIES DIVISION[199]

Adopted and Filed

Rule making related to regulation of municipal electric utilities and electric cooperatives

The Utilities Board hereby adopts new Chapter 27, “Regulation of Electric Cooperatives and Municipal Electric Utilities Under Iowa Code Chapter 476,” Iowa Administrative Code.

Legal Authority for Rule Making

This rule making is adopted under the authority provided in Iowa Code section 476.2.

State or Federal Law Implemented

This rule making implements, in whole or in part, Iowa Code sections 476.1A, 476.1B and 476.2.

Purpose and Summary

The purpose of this rule making is to adopt a separate chapter of Utilities Board rules that create requirements to implement Board jurisdiction over electric cooperatives and municipal electric utilities. Current Board rules over these utilities are in 199—Chapter 20, and the electric cooperatives and municipal electric utilities requested that the Board adopt a separate chapter.

Public Comment and Changes to Rule Making

Notice of Intended Action for this rule making was published in the Iowa Administrative Bulletin on November 18, 2020, as **ARC 5281C**. The Board conducted an oral presentation on February 4, 2021, at 9 a.m. in the Board Hearing Room, 1375 East Court Avenue, Des Moines, Iowa.

The Iowa Association of Electric Cooperatives (IAEC), the Iowa Association of Municipal Utilities (IAMU), the Office of Consumer Advocate (OCA), and Iowa Legal Aid filed comments. IAEC, IAMU, and OCA expressed different opinions on the legislation passed in 2018 that addressed the Board jurisdiction over electric cooperatives and municipal electric utilities. The comments were about the limitations placed on the Board’s jurisdiction. IAMU especially argued that the Board’s jurisdiction is very limited, while OCA argued that the Board’s jurisdiction was only limited in specific areas. IAEC took a different position than IAMU because the statutory requirements are different for electric cooperatives than municipal electric utilities.

In addition to the written comments filed in response to the Notice, the Board allowed the public to file additional written comments before and after the oral presentation. The Board also held a workshop to allow for a more in-depth discussion of some of the issues in the rules. The written comments and comments from the workshop were similar to those made at the oral presentation. The Board also sent out a draft Adopted and Filed document with the rules the Board proposed to adopt. IAEC, IAMU, OCA, and Legal Aid commented on the draft Adopted and Filed rules.

The Board issued an order adopting new rules on August 3, 2021. The order is available on the Board’s electronic filing system, efs.iowa.gov, under Docket No. RMU-2020-0027.

The rules have been significantly revised since publication of the Notice based upon written comments and the discussions at the oral presentation and workshop. Through review of comments made by IAMU and OCA, the Board has been able to narrow the focus of the rules to those specific safety standards that a municipal electric utility will be required to follow. The revisions from the Notice reflect those revisions made based upon the comments.

Adoption of Rule Making

This rule making was adopted by the Board on August 3, 2021.

Fiscal Impact

This rule making has no fiscal impact to the State of Iowa. The rules that are adopted in the new Chapter 27 were already applicable to municipal electric utilities pursuant to 199—Chapter 20.

Jobs Impact

After analysis and review of this rule making, no impact on jobs has been found.

Waivers

No waiver provision is included in the amendment because the Board has a general waiver provision in rule 199—1.3(17A,474,476) that provides procedures for requesting a waiver of the rules in this chapter.

Review by Administrative Rules Review Committee

The Administrative Rules Review Committee, a bipartisan legislative committee which oversees rule making by executive branch agencies, may, on its own motion or on written request by any individual or group, review this rule making at its [regular monthly meeting](#) or at a special meeting. The Committee's meetings are open to the public, and interested persons may be heard as provided in Iowa Code section 17A.8(6).

Effective Date

This rule making will become effective on September 29, 2021.

The following rule-making action is adopted:

Adopt the following **new** 199—Chapter 27:

CHAPTER 27

REGULATION OF ELECTRIC COOPERATIVES AND MUNICIPAL ELECTRIC UTILITIES
UNDER IOWA CODE CHAPTER 476

199—27.1(476) General information. Iowa Code section 476.2(1) provides that the Iowa utilities board shall have authority to establish all needful, just and reasonable rules, not inconsistent with law, to govern the exercise of its powers and duties, the practice and procedure before it, and to govern the form, content and filing of reports, documents and other papers provided for in Iowa Code chapter 476 or in the board's rules.

27.1(1) Application of rules. The rules shall apply to electric cooperatives and municipal electric utilities operating within the state of Iowa subject to Iowa Code sections 476.1A and 476.1B, and to the construction, operation and maintenance of electric transmission lines to the extent provided in Iowa Code chapter 478, and shall supersede all tariffs on file with the board that are in conflict with these rules.

27.1(2) Regulation of electric cooperatives. Iowa Code section 476.1A provides that electric cooperatives are not subject to the regulation of the board, except for regulatory action pertaining to the following:

- a. Assessment of fees for the support of the board and the office of consumer advocate pursuant to Iowa Code section 476.10.
- b. Safety and engineering standards for equipment, operations, and procedures.
- c. Assigned service areas.
- d. Pilot projects of the board.
- e. Assessment of fees for the support of the Iowa energy center and the center for global and regional environmental research. This paragraph is rescinded July 1, 2022, unless extended by statute.
- f. Filing of alternative energy purchase program plans with the board, and offering such programs to customers, pursuant to Iowa Code section 476.47.
- g. Disconnection of service and winter moratorium pursuant to Iowa Code sections 476.20(1) through 476.20(4).

- h. Discrimination against renewable energy pursuant to Iowa Code section 476.21.
- i. Civil penalties pursuant to Iowa Code section 476.51.
- j. Annual energy costs to be provided pursuant to Iowa Code section 476.56.
- k. Energy-efficient lighting pursuant to Iowa Code section 476.62.
- l. Customer contribution fund pursuant to Iowa Code section 476.66.
- m. Certification requirements for electric power generation and transmission pursuant to Iowa Code chapter 476A, to the extent applicable.
- n. Franchise requirements for electric transmission lines pursuant to Iowa Code chapter 478, to the extent applicable.
- o. Prohibition against the making or granting of any unreasonable preferences or advantages as to rates or services to any person or subjecting any person to any unreasonable prejudice or disadvantage pursuant to Iowa Code section 476.1A(3).

27.1(3) Regulation of municipal electric utilities. Iowa Code section 476.1B provides that municipal electric utilities are not subject to regulation by the board under Iowa Code chapter 476 unless otherwise specifically provided by statute, except for regulatory action pertaining to the following:

- a. Assessment of fees for the support of the board and the office of consumer advocate.
- b. Safety standards.
- c. Assigned areas of service as set forth in Iowa Code sections 476.22 through 476.26.
- d. Civil penalties pursuant to Iowa Code section 476.51.
- e. Disconnection of service in Iowa Code sections 476.20(1) through 476.20(4).
- f. Encouragement of alternative energy production facilities pursuant to Iowa Code sections 476.41 through 476.45.
- g. Annual energy costs to be provided pursuant to Iowa Code section 476.56.
- h. Energy-efficient lighting pursuant to Iowa Code section 476.62.
- i. Customer contribution fund pursuant to Iowa Code section 476.66.
- j. Assessment of fees for the support of the Iowa energy center and the center for global and regional environmental research. This paragraph is rescinded July 1, 2022, unless extended by statute.
- k. Electric power agencies, as defined in Iowa Code chapter 28F and section 390.9, that include as a member a city or municipally owned utility that builds transmission facilities after July 1, 2001, are subject to applicable transmission reliability rules or standards adopted by the board for those facilities.
- l. Filing alternative energy purchase program plans with the board, and offering such programs to customers pursuant to Iowa Code section 476.47.
- m. Iowa Code chapters 476A and 478, to the extent applicable.

27.1(4) Definitions. The following words and terms, when used in these rules, shall have the meanings indicated below:

“*Board*” means the utilities board.

“*Capacity*” means the instantaneous rate at which energy can be delivered, received, or transferred, measured in kilowatts.

“*Complaint*,” as used in these rules, means a statement or question by any person, whether a utility customer or not, alleging a wrong, grievance, injury, dissatisfaction, illegal action or procedure, dangerous condition or action, or obligation of an electric cooperative or municipal electric utility.

“*Customer*” means any person, firm, association, or corporation; any agency of the federal, state or local government; or any legal entity responsible by law for payment for the electric service or heat from the electric cooperative or municipal electric utility.

“*Delinquent*” or “*delinquency*” means an account for which a service bill or service payment agreement bill has not been paid in full on or before the last day for timely payment.

“*Distribution line*” means any single or multiphase electric power line operating at nominal voltage in either of the following ranges: 2,000 to 26,000 volts between ungrounded conductors or 1,155 to 15,000 volts between grounded and ungrounded conductors, regardless of the functional service provided by the line.

“*Electric plant*” includes all real estate, fixtures and property owned, controlled, operated or managed in connection with or to facilitate production, generation, transmission, or distribution, in providing electric service or heat by an electric utility.

“*Electric service*” means furnishing electricity to the public for compensation for use as heat, light, power, or energy.

“*Energy*” means electric energy measured in kilowatt hours.

“*Engineering standards*” means standards adopted by the American National Standards Institute (ANSI), or the Institute of Electrical and Electronics Engineers (IEEE), Rural Utilities Service (RUS), or similar type of engineering organizations or engineering standards adopted by the board.

“*Major event*” means when an event results in extensive physical damage to transmission or distribution facilities within an electric cooperative or municipal electric utility’s operating area due to unusually severe and abnormal weather or event and:

1. Wind speed exceeds 90 mph for the affected area, or
2. One-half inch of ice is present and wind speed exceeds 40 mph for the affected area, or
3. Ten percent of the affected area total customer count is incurring a loss of service for a length of time to exceed five hours, or
4. 20,000 customers in a metropolitan area are incurring a loss of service for a length of time to exceed five hours, or
5. A regional transmission organization or independent system operator declares an energy emergency alert that the organization can no longer provide expected energy requirements or has lower than required reserves, implements procedures up to shedding load, declares a maximum generation warning, declares conservative operations, or calls a maximum generation alert event in compliance with North American Electric Reliability Corporation requirements.

“*Meter*” means, unless otherwise qualified, a device that measures and registers the integral of an electrical quantity with respect to time.

“*Power*” means electric power measured in kilowatts.

“*Safety standard*” means a set of policies, procedures, or specifications formally adopted by a governmental agency, an accrediting agency, or standards developing organization, the purpose of which is to ensure the safe generation, transmission, or distribution of electric energy to customers or electric utilities, including electric cooperatives and municipal electric utilities. “*Safety standard*” includes, but is not limited to, the safety standards in rule 199—27.8(476), the electrical safety code in 199—Chapter 25, the National Electrical Safety Code, the American National Standards Institute, and the Institute of Electrical and Electronics Engineers.

“*Secondary line*” means any single or multiphase electric power line operating at nominal voltage less than either 2,000 volts between ungrounded conductors or 1,155 volts between grounded and ungrounded conductors, regardless of the functional service provided by the line.

“*Service limitation*” means the establishment of a limit on the amount of power that may be consumed by a residential customer through the installation of a service limiter device on the customer’s meter.

“*Tariff*” means, for the purposes of this chapter, the service classifications, rules, procedures, and policies filed with and approved by the board.

“*Timely payment*” means a payment on a customer’s account made on or before the date shown on a current bill for service, or on a form which records an agreement between the customer and a utility for a series of partial payments to settle a delinquent account, as the date which determines application of a late payment charge to the current bill or future collection efforts.

“*Transmission line*” means any single or multiphase electric power line operating at nominal voltages at or in excess of either 69,000 volts between ungrounded conductors or 40,000 volts between grounded and ungrounded conductors, regardless of the functional service provided by the line.

27.1(5) Abbreviations. The following abbreviations may be used in this chapter where appropriate:

ANSI—American National Standards Institute, www.ansi.org.

IEEE—Institute of Electrical and Electronics Engineers, www.ieee.org.

NESC—National Electrical Safety Code.

NFPA—National Fire Protection Association, www.nfpa.org.
RUS—United States Department of Agriculture Rural Utilities Service,
www.rd.usda.gov/about-rd/agencies/rural-utilities-service.

27.1(6) *Electric cooperative service rules tariffs.* Electric cooperatives subject to the board's jurisdiction under Iowa Code section 476.1A shall maintain tariffs which are consistent with the rules in this chapter and shall file those tariffs with the board for approval.

a. Electric cooperatives shall file those portions of their tariff or tariff pages regarding matters over which the board has jurisdiction with strikethroughs for the language deleted and underlining of the language that is added.

b. If an electric cooperative chooses to file a revised tariff with provisions which are not subject to board jurisdiction, the electric cooperative shall identify which provisions are jurisdictional either in the cover letter or elsewhere in the filing. The provisions that are not jurisdictional need not include strikeouts of deleted language and underlining of new language.

c. An electric cooperative association may file a model tariff for board approval that may be adopted by an electric cooperative with any revisions the electric cooperative proposes to the model tariff.

d. An electric cooperative may file a revised tariff adopting the model tariff approved by the board. The electric cooperative shall include the docket number and date of board approval with the revised tariff.

e. Electric cooperatives shall make tariffs filed with the board available to all customers.

27.1(7) *Municipal electric utilities service rules.* Municipal electric utilities shall not be required to file tariffs with the board implementing the provisions in this chapter; however, municipal utilities shall adopt service rules or other legally enforceable provisions that are consistent with the provisions in this chapter.

a. A municipal electric utility shall make rules or other legally enforceable provisions implementing the requirements of this chapter available to all customers.

b. A municipal electric utility may adopt a model ordinance prepared by a municipal utility association that has been approved by the board.

c. A municipal electric utility shall provide a copy of its ordinance, or other legally enforceable document, that implements the rules in this chapter within 15 days of a request from the board.

27.1(8) *Notice of rate increases.* Electric cooperatives and municipal electric utilities shall provide notice of rate increases to all affected customers at least 30 days in advance of the rate increase taking effect. The notice may be sent by U.S. mail or electronically.

199—27.2(476) Assigned area of service and maps.

27.2(1) *Service areas.* Service areas are defined by the boundaries on service area maps. Electronic maps are available for viewing during regular business hours at the board's offices. Maps are also available for viewing on the board's website. These service area maps are the official electric service territory maps as required pursuant to Iowa Code section 476.24 and shall be presumed to be accurate; however, the presumption may be rebutted by filing a request with the board.

27.2(2) *Modification of service area and answers.*

a. An exclusive service area is subject to modification through a contested case proceeding which may be commenced by filing a petition for modification of service area with the board. The board may commence a service area modification proceeding on its own motion. The board may grant a modification if the modification promotes the public interest. In determining whether the modification is in the public interest, the board will consider the factors described in Iowa Code section 476.25(1) and any other relevant factors.

b. Any electric cooperative or municipal electric utility may file a petition for modification of service area, which shall contain: (1) a legal description of the service area desired, (2) a designation of the utilities involved in each boundary section, (3) a justification for the proposed service area modification, and (4) in addition to the PDF (Portable Document Format) map required in 199—subrule 14.8(1), an electronic file of the proposed service area boundaries, in a format designated by the

board, as described on the electronic filing system (EFS) homepage under EFS filing standards. The justification shall include a detailed statement of why the proposed modification is in the public interest. A map showing the affected areas which complies with paragraph 27.2(4) “a” shall be attached to the petition as an exhibit.

c. Filing of the petition with the board, and service to other parties, shall be in accordance with 199—Chapter 14.

d. An answer to a petition for a service area modification shall comply with 199—subrule 7.9(2).

e. Electric cooperatives and municipal electric utilities may agree with other electric utilities to service territory modifications by contract pursuant to Iowa Code section 476.25(2). Contracts to be enforceable require board approval. The board shall approve a contract if the board finds that the contract will eliminate or avoid unnecessary duplication of facilities, will provide adequate electric service to all areas and customers affected, will promote the efficient and economical use and development of the electric systems of the contracting utilities, and is in the public interest.

27.2(3) Certificate of authority. Any electric cooperative or municipal electric utility requesting a service territory modification pursuant to subrule 27.2(2) which would result in service to a customer by a public utility other than the public utility currently serving the customer shall also petition the board for a certificate of authority under Iowa Code section 476.23. Unless voluntarily agreed otherwise, the electric cooperative or municipal electric utility shall pay the party currently serving the customer a reasonable price for the facilities serving the customer.

27.2(4) Maps.

a. Each electric cooperative and municipal electric utility shall maintain a current map or set of maps showing the physical location of electric lines, stations, and electric transmission facilities for its service areas. The maps shall include the exact location of the following:

- (1) Generating stations, with capacity designation.
- (2) Purchased power supply points, with maximum contracted capacity designation.
- (3) Purchased power metering points if located at other than power delivery points.
- (4) Transmission lines, with size and type of conductor designation and operating voltage designation.
- (5) Transmission-to-transmission voltage transformation substations, with transformer voltage and capacity designation.
- (6) Transmission-to-distribution voltage transformation substations, with transformer voltage and capacity designation.
- (7) Distribution lines, with size and type of conductor designation, phase designation and voltage designation.
- (8) All points at which transmission, distribution or secondary lines of the utility cross Iowa state boundaries.
- (9) All current information required in Iowa Code section 476.24(1).
- (10) All county boundaries and county names.
- (11) Natural and artificial lakes which cover more than 50 acres and all rivers.
- (12) Any additional information required by the board.

b. All maps, except those deemed confidential by the board, shall be available for examination at the designated offices of the electric cooperative or municipal electric utility during regular office hours. The maps shall be drawn with clean, uniform lines to a scale of one inch per mile. A large scale shall be used where it is necessary to clarify areas where there is a heavy concentration of facilities. All cartographic details shall be clean cut, and the background shall contain little or no coloration or shading.

199—27.3(476) Customer relations.

27.3(1) Notification to customers by bill insert.

a. Each utility shall notify its customers, by bill insert or notice on the bill form, of the address and telephone number where a utility representative qualified to assist in resolving the complaint can be reached. The bill insert or notice shall also include the following statement: “If (utility name) does not resolve your complaint, you may request assistance from the Iowa Utilities Board by calling

(515)725-7300, or toll-free 1-877-565-4450, by writing to 1375 E. Court Avenue, Des Moines, Iowa 50319-0069, or by email to customer@iub.iowa.gov.”

b. The bill insert or notice shall be provided to customers at least annually. Any utility which does not use the standard statement described in this subrule shall file its proposed statement for board approval. A utility that bills by postcard may place an advertisement in a local newspaper of general circulation or a customer newsletter instead of a mailing. The advertisement must be of a type size that is easily legible and conspicuous and must contain the information required in paragraph 27.3(1) “a.”

27.3(2) Payment agreements.

a. *Availability of a first payment agreement.* When a residential customer cannot pay in full a delinquent bill for utility service or has an outstanding debt to the electric cooperative or municipal electric utility for residential utility service and is not in default of a payment agreement with the electric cooperative or municipal electric utility, an electric cooperative or municipal electric utility shall offer the customer an opportunity to enter into a reasonable payment agreement. The offer of a payment agreement shall be made prior to disconnection. The electric cooperative or municipal electric utility is not required to offer a customer who has been disconnected from service a payment agreement consistent with these rules, unless the utility did not comply with these rules prior to disconnection.

b. *Reasonableness.* Whether a payment agreement is reasonable will be determined by considering the current household income, ability to pay, payment history including prior defaults on similar agreements, the size of the bill, the amount of time and the reasons why the bill has been outstanding, and any special circumstances creating extreme hardships within the household. The electric cooperative or municipal electric utility may require the person to confirm financial difficulty with an acknowledgment from the department of human services or another agency.

c. *Terms of payment agreements.*

(1) First payment agreement. The electric cooperative or municipal electric utility shall offer the following conditions to customers who have received a disconnection notice and are not in default of a payment agreement:

1. For customers who received a disconnection notice in conformance with these rules, the electric cooperative or municipal electric utility shall offer an agreement with at least 12 even monthly payments. The utility shall inform customers they may pay off the delinquency early without incurring any prepayment penalties. A customer shall not be charged interest, or a late payment charge, on a payment agreement where the customer is making payments consistent with the terms of the payment agreement, and the customer will not be required to pay a portion of the delinquent amount to enter into a payment agreement.

2. The agreement shall also include a provision for payment of the current amount owed by the customer.

3. The electric cooperative or municipal electric utility may also require the customer to enter into a budget billing plan to pay the current bill.

4. When the customer makes the agreement in person, a signed copy of the agreement shall be provided to the customer.

5. The electric cooperative or municipal electric utility may offer the customer the option of making the agreement over the telephone or through electronic transmission.

6. When the customer makes the agreement over the telephone or through electronic transmission, the electric cooperative or municipal electric utility shall provide to the customer a written document reflecting the terms and conditions of the agreement within three days of the date the parties entered into the oral agreement or electronic agreement.

7. The document will be considered provided to the customer when addressed to the customer’s last-known address and deposited in the U.S. mail with postage paid. If delivery is by other than U.S. mail, the document shall be considered provided to the customer when delivered to the last-known address of the person responsible for payment for the service.

8. The document shall state that unless the customer notifies the utility otherwise within ten days from the date the document is provided, it will be deemed that the customer accepts the terms as stated

in the written document. The document stating the terms and conditions of the agreement shall include the address and a toll-free or collect telephone number where a qualified representative can be reached.

9. Once the first payment required by the agreement is made by the customer or on behalf of the customer, the oral or electronic agreement is deemed accepted by the customer.

10. Each customer entering into a first payment agreement shall be granted at least one late payment that is four days or less beyond the due date for payment, and the first payment agreement shall remain in effect.

11. The initial payment is due on the due date for the next regular bill.

(2) Second payment agreement. The utility shall offer a second payment agreement to a customer who is in default of a first payment agreement if the customer has made at least two consecutive full payments under the first payment agreement.

1. The second payment agreement shall be for a term at least as long as the term of the first payment agreement.

2. The customer shall be required to pay for current service in addition to the monthly payments under the second payment agreement and may be required to make the first payment up front as a condition of entering into the second payment agreement.

3. The electric cooperative or municipal electric utility may also require the customer to enter into a budget billing plan to pay the current bill.

(3) Additional payment agreements. The electric cooperative or municipal electric utility may offer additional payment agreements to the customer.

d. Refusal by electric cooperative or municipal electric utility. A customer may offer the electric cooperative or municipal electric utility a proposed payment agreement. If the electric cooperative or municipal electric utility and the customer do not reach an agreement, the electric cooperative or municipal electric utility may refuse the offer orally, but the electric cooperative or municipal electric utility must provide a written refusal to the customer, stating the reason for the refusal, within three days of the oral notification. The written refusal shall be considered provided to the customer when addressed to the customer's last-known address and deposited in the U.S. mail with postage prepaid. If delivery is by other than U.S. mail, the written refusal shall be considered provided to the customer when handed to the customer or when delivered to the last-known address of the person responsible for the payment for the service.

e. Customer request for assistance. A customer may ask the board for assistance in working out a reasonable payment agreement. The request for assistance must be made to the board within ten days after the written refusal is provided. During the review of this request, the utility shall not disconnect the service.

27.3(3) Bill payment terms. The bill shall be considered provided to the customer when deposited in the U.S. mail with postage prepaid or sent by electronic mail to the customer, if agreed to by the customer. If delivery is by other than U.S. mail, the bill shall be considered provided when delivered to the last-known address of the party responsible for payment, or to the last-known electronic mail address of the customer. There shall not be less than 20 days between the providing of a bill and the date by which the account becomes delinquent. Bills for customers on more frequent billing intervals may not be considered delinquent less than 5 days from the date the bill is provided, and a late payment charge may not be assessed if payment is received within 20 days of the date the bill is provided.

a. The date of delinquency for all residential customers or other customers whose consumption is less than 3,000 kWh per month shall be changeable for cause; such as, but not limited to, 15 days from the approximate date each month upon which income is received by the person responsible for payment. In no case, however, shall the utility be required to delay the date of delinquency more than 30 days beyond the date of preparation of the previous bill.

b. In any case where net and gross amounts are billed to customers, the difference between net and gross is a late payment charge and is valid only when part of a delinquent bill payment. A utility's late payment charge shall not exceed 1.5 percent per month of the past due amount. No collection fee may be levied in addition to this late payment charge. This rule does not prohibit cost-justified charges for disconnection and reconnection of service.

c. If the customer makes partial payment in a timely manner, and does not designate the service or product for which payment is made, the payment shall be credited pro rata between the bill for utility services and related taxes.

d. Each account shall be granted not less than one complete forgiveness of a late payment charge each calendar year. The utility's rules shall be definitive that on one monthly bill in each period of eligibility, the utility will accept the net amount of such bill as full payment for such month after expiration of the net payment period. The rules shall state how the customer is notified that the eligibility has been used. Complete forgiveness prohibits any effect upon the credit rating of the customer or collection of late payment charge.

27.3(4) Customer records. The electric cooperative or municipal electric utility shall retain records not less than five years. Records for each customer shall show where applicable:

- a. kWh meter reading.
- b. kWh consumption.
- c. kW meter reading.
- d. kW measured demand.
- e. kW billing demand.
- f. Total amount of bill.

27.3(5) Adjustment of bills for meter error. Electric cooperatives and municipal electric utilities shall establish meter testing standards and procedures for customers who have complaints about the accuracy of the customer's meter. The meter testing standards shall be made available to a customer upon request.

199—27.4(476) Disconnection of service.

27.4(1) Disconnection procedures and notice. Electric cooperatives and municipal electric utilities shall only disconnect service to customers in compliance with the following procedure and requirements:

- a. Service may be disconnected without notice:
 - (1) In the event of a condition on the customer's premises determined by the utility to be hazardous.
 - (2) In the event of customer use of equipment in a manner which adversely affects the utility's equipment or the utility's service to others.
 - (3) In the event of tampering with the equipment furnished and owned by the utility. For the purposes of this subrule, a broken or absent meter seal alone shall not constitute tampering.
 - (4) In the event of unauthorized use.

b. The electric cooperative or municipal electric utility shall give written notice of pending disconnection except as specified in paragraph 27.4(1) "a." The notice shall set forth the reason for the notice and the final date by which the account is to be settled or specific action taken. The notice shall be considered provided to the customer when addressed to the customer's last-known address and deposited in the U.S. mail with postage prepaid. If delivery is by other than U.S. mail, the notice shall be considered provided when delivered to the last-known address of the person responsible for payment for the service. The date for disconnection of service shall not be less than 12 days after the notice is provided. The date for disconnection of service for customers on shorter billing intervals shall not be less than 24 hours after the notice is posted at the service premises.

c. One written notice, including all reasons for the notice, shall be given where more than one cause exists for disconnection of service. In determining the final date by which the account is to be settled or other specific action taken, the days of notice for the causes shall be concurrent.

- d. Service may be disconnected after proper notice:
 - (1) For violation of or noncompliance with the utility's rules.
 - (2) For failure of the customer to furnish the service equipment, permits, certificates, or rights-of-way which are specified to be furnished, in the utility's rules filed with the board, as conditions of obtaining service, or for the withdrawal of that same equipment, or for the termination of those same permissions or rights, or for the failure of the customer to fulfill the contractual obligations imposed as conditions of obtaining service by any contract filed with and subject to the regulatory authority of the board.

- (3) For failure of the customer to permit the utility reasonable access to the utility's equipment.

e. Service may be disconnected after proper notice for nonpayment of a bill or deposit provided that the electric cooperative or municipal electric utility has complied with the following provisions:

(1) Given the customer a reasonable opportunity to dispute the reason for the disconnection or refusal.

(2) Given the customer, and any other person or agency designated by the customer, written notice that the customer has at least 12 days in which to make settlement of the account to avoid disconnection and a written summary of the rights and responsibilities set out in subrule 27.4(2). Customers billed more frequently than monthly shall be given posted written notice that they have 24 hours to make settlement of the account to avoid disconnection and a written summary of the rights and responsibilities. All written notices shall include a toll-free or collect telephone number where a utility representative qualified to provide additional information about the disconnection can be reached. Each electric cooperative or municipal electric utility representative must provide the representative's name and have immediate access to current, detailed information concerning the customer's account and previous contacts with the utility.

(3) If the electric cooperative or municipal electric utility has adopted a service limitation policy, the following paragraph shall be appended to the end of the standard form of the summary of rights and responsibilities:

Service limitation: We have adopted a limitation of service policy for customers who otherwise could be disconnected. Contact our business office for more information or to learn if you qualify.

(4) When disconnecting service to a residence, made a diligent attempt to contact, by telephone or in person, the customer responsible for payment for service to the residence to inform the customer of the pending disconnection and the customer's rights and responsibilities. Between November 1 and April 1, if the attempt at customer contact fails, the premises shall be posted at least one day prior to disconnection with a notice informing the customer of the pending disconnection and a copy of the rights and responsibilities available to avoid disconnection.

If an attempt at personal or telephone contact of a customer occupying a rental unit has been unsuccessful, the electric cooperative or municipal electric utility shall make a diligent attempt to contact the landlord of the rental unit, if known, to determine if the customer is still in occupancy and, if so, the customer's present location. The landlord shall also be informed of the date when service may be disconnected. The electric cooperative or municipal electric utility shall make a diligent attempt to inform the landlord at least 48 hours prior to disconnection of service to a tenant.

If the disconnection will affect occupants of residential units leased from the customer, the premises of any building known by the electric cooperative or municipal electric utility to contain residential units affected by disconnection shall be posted at least two days prior to disconnection, with a notice informing any occupants of the date when service will be disconnected and the reasons for the disconnection.

If the customer has received notice of disconnection and has a dispute concerning a bill for electric service, the electric cooperative or municipal electric utility may require the customer to pay a sum of money equal to the amount of the undisputed portion of the bill pending settlement and thereby avoid disconnection of service. An electric cooperative or municipal electric utility shall delay disconnection for nonpayment of the disputed bill for up to 45 days after the providing of the bill if the customer pays the undisputed amount. The 45 days shall be extended by up to 60 days if requested of the utility by the board in the event the customer files a written complaint with the board in compliance with 199—Chapter 6.

f. Disconnection of a residential customer may take place only between the hours of 6 a.m. and 2 p.m. on a weekday and not on weekends or holidays. If a disconnected customer makes payment or other arrangements during normal business hours, or by 7 p.m. for utilities permitting such payment or other arrangements after normal business hours, all reasonable efforts shall be made to reconnect the customer that day. If a disconnected customer makes payment or other arrangements after 7 p.m., all reasonable efforts shall be made to reconnect the customer not later than 11 a.m. the next day.

g. A disconnection may not take place where electricity is used as the only source of space heating or to control or operate the only space heating equipment at a residence when the actual temperature or the 24-hour forecast of the National Weather Service for the residence's area is predicted to be 20

degrees Fahrenheit or colder. If the electric cooperative or municipal electric utility has properly posted a disconnect notice but is precluded from disconnecting service because of severe cold weather, the utility may immediately proceed with appropriate disconnection procedures, without further notice, when the temperature in the residence's area rises above 20 degrees Fahrenheit and is forecasted to remain above 20 degrees Fahrenheit for at least 24 hours, unless the customer has paid in full the past due amount or is otherwise entitled to postponement of disconnection.

h. Disconnection of a residential customer shall be postponed if the disconnection of service would present an especial danger to the health of any permanent resident of the premises.

(1) An especial danger to health is indicated if a person appears to be seriously impaired and may, because of mental or physical problems, be unable to manage the person's own resources, to carry out activities of daily living or to be protected from neglect or hazardous situations without assistance from others. Indicators of an especial danger to health include but are not limited to: age, infirmity, or mental incapacitation; serious illness; physical disability, including blindness and limited mobility; and any other factual circumstances which indicate a severe or hazardous health situation.

(2) The electric cooperative or municipal electric utility may require written verification of the especial danger to health by a physician or a public health official, including the name of the person endangered; a statement that the person is a resident of the premises in question; the name, business address, and telephone number of the certifying party; the nature of the health danger; and approximately how long the danger will continue. Initial verification by the verifying party may be by telephone if written verification is forwarded to the utility within five days.

(3) Verification shall postpone disconnection for 30 days. In the event service is terminated within 14 days prior to verification of illness by or for a qualifying resident, service shall be restored to that residence if a proper verification is thereafter made in accordance with the foregoing provisions. If the customer does not enter into a reasonable payment agreement for the retirement of the unpaid balance of the account within the first 30 days and does not keep the current account paid during the period that the unpaid balance is to be retired, the customer is subject to disconnection.

i. Winter energy assistance (November 1 through April 1). If the electric cooperative or municipal electric utility is informed that the customer's household may qualify for winter energy assistance or weatherization funds, there shall be no disconnection of service for 30 days from the date the electric cooperative or municipal electric utility is notified to allow the customer time to obtain assistance. Disconnection shall not take place from November 1 through April 1 for a resident who is a head of household and who has been certified to the electric cooperative or municipal electric utility by the community action agency as eligible for either the low-income home energy assistance program or the weatherization assistance program.

j. Military service deployment. If the electric cooperative or municipal electric utility is informed that one of the heads of household as defined in Iowa Code section 476.20 is a service member deployed for military service, as defined in Iowa Code section 29A.90, disconnection cannot take place at the residence during the deployment or prior to 90 days after the end of the deployment.

k. Abnormal electric consumption. A customer who is subject to disconnection for nonpayment of bill, and who has electric consumption which appears to the customer to be abnormally high, may request the utility to provide assistance in identifying the factors contributing to this usage pattern and to suggest remedial measures. The electric cooperative or municipal electric utility shall provide assistance by discussing patterns of electric usage which may be readily identifiable, suggesting that an energy audit be conducted, and identifying sources of energy conservation information and financial assistance which may be available to the customer.

l. An electric cooperative or municipal electric utility may disconnect electric service after 24-hour notice (and without the written 12-day notice) for failure of the customer to comply with the terms of a payment agreement.

m. The electric cooperative or municipal electric utility shall, prior to November 1, mail customers a notice describing the availability of winter energy assistance funds and the application process. The notice must be of a type size that is easily legible and conspicuous and must contain the information set out by the state agency administering the assistance program. A utility serving fewer than 25,000

customers may publish the notice in a customer newsletter in lieu of mailing. An electric cooperative or municipal electric utility serving fewer than 6,000 customers may publish the notice in an advertisement in a local newspaper of general circulation or shopper's guide.

27.4(2) Notice of customer rights and responsibilities. The standard form of the summary of the rights and responsibilities to be provided to customers is set out below, and all electric cooperatives and municipal electric utilities providing electric service shall provide the notice with all disconnection notices. If an electric cooperative or municipal electric utility does not use the standard form as set out below, the electric cooperative or municipal electric utility shall submit to the board for approval an alternative notice. The standard customer rights and responsibilities notice is as follows:

CUSTOMER RIGHTS AND RESPONSIBILITIES TO AVOID SHUTOFF OF ELECTRIC SERVICE FOR NONPAYMENT

1. What can I do if I receive a notice from the utility that says my service will be shut off because I have a past due bill?

- a. Pay the bill in full; or
- b. Enter into a reasonable payment plan with the utility (see #2 below); or
- c. Apply for and become eligible for low-income energy assistance (see #3 below); or
- d. Give the electric cooperative or municipal electric utility a written statement from a doctor or public health official stating that shutting off your electric service would pose an especial health danger for a person living at the residence (see #4 below); or
- e. Tell the utility if you think part of the amount shown on the bill is wrong. However, you must still pay the part of the bill you agree you owe the utility (see #5 below).

2. How do I go about making a reasonable payment plan? (Residential customers only)

- a. Contact the electric cooperative or municipal electric utility as soon as you know you cannot pay the amount you owe. If you cannot pay all the money you owe at one time, the utility shall offer you a payment plan that spreads payments evenly over at least 12 months. The plan may be longer depending on your financial situation.
- b. If you have not made the payments you promised in a previous payment plan with the utility and still owe money, you may qualify for a second payment agreement under certain conditions.
- c. If you do not make the payments you promise, the utility may shut off your electric service on one day's notice unless all the money you owe the utility is paid or you enter into another payment agreement.

3. How do I apply for low-income energy assistance? (Residential customers only)

- a. Applications are taken at your local community action agency. If you are unsure where to apply, dial 2-1-1 or 1-800-244-7431, or visit humanrights.iowa.gov/dcaa. To prevent disconnection, you must contact the utility prior to disconnection of your service.
- b. To avoid disconnection, you must apply for energy assistance or weatherization before your service is shut off. Notify your utility that you may be eligible and have applied for energy assistance. Once your service has been disconnected, it will not be reconnected based on approval for energy assistance.
- c. Being certified eligible for energy assistance will prevent your service from being disconnected from November 1 through April 1.

4. What if someone living at the residence has a serious health condition? (Residential customers only)

Contact the electric cooperative or municipal electric utility if you believe this is the case. Contact your doctor or a public health official and ask the doctor or health official to contact the utility and state that shutting off your electric service would pose an especial health danger for a person living at your residence. The doctor or public health official must provide a written statement to the electric cooperative's or municipal electric utility's office within five days of when your doctor or public health official notifies the utility of the health condition; otherwise, your electric service may be shut off. If the utility receives this written statement, your service will not be shut off for 30 days. This 30-day delay is to allow you time to arrange payment of your utility bill or find other living arrangements. After 30 days, your service may be shut off if payment arrangements have not been made.

5. What should I do if I believe my bill is not correct?

You may dispute your bill. You must tell the electric cooperative or municipal electric utility that you dispute the bill. You must pay the part of the bill you think is correct. If you do this, the utility will not shut off your service for 45 days from the date the bill was mailed while you and the electric cooperative or municipal electric utility work out the dispute over the part of the bill you think is incorrect. You may ask the Iowa Utilities Board for assistance in resolving the dispute (see #9 below).

6. When can the electric cooperative or municipal electric utility shut off my electric service because I have not paid my bill?

a. Your electric cooperative or municipal electric utility can shut off service between the hours of 6 a.m. and 2 p.m. Monday through Friday.

b. The electric cooperative or municipal electric utility will not shut off your service on nights, weekends, or holidays for nonpayment of a bill.

c. The electric cooperative or municipal electric utility will not shut off your service if you enter into a reasonable payment plan to pay the overdue amount (see #2 above).

d. The electric cooperative or municipal electric utility will not shut off your service if the temperature is forecasted to be 20 degrees Fahrenheit or colder during the following 24-hour period, including the day your service is scheduled to be shut off.

e. If you have qualified for low-income energy assistance, the electric cooperative or municipal electric utility cannot shut off your service from November 1 through April 1. However, you will still owe the electric cooperative or municipal electric utility for the service used during this time.

f. The electric cooperative or municipal electric utility will not shut off your service if you have notified the electric cooperative or municipal electric utility that you dispute a portion of your bill and you pay the part of the bill that you agree is correct.

g. If one of the heads of household is a service member deployed for military service, electric service cannot be shut off during the deployment or within 90 days after the end of deployment. In order for this exception to disconnection to apply, the electric cooperative or municipal electric utility must be informed of the deployment prior to disconnection. However, you will still owe the electric cooperative or municipal electric utility for service used during this time.

7. How will I be told the electric cooperative or municipal electric utility is going to shut off my service?

a. You must be given a written notice at least 12 days before the electric service can be shut off for nonpayment. This notice will include the reason for shutting off your service.

b. If you have not made payments required by an agreed-upon payment plan, your service may be disconnected with only one day's notice.

c. The electric cooperative or municipal electric utility must also try to reach you by telephone or in person before it shuts off your service. From November 1 through April 1, if the electric cooperative or municipal electric utility cannot reach you by telephone or in person, the electric cooperative or municipal electric utility will put a written notice on the door of or another conspicuous place at your residence to tell you that your electric service will be shut off.

8. If service is shut off, when will it be turned back on?

a. The electric cooperative or municipal electric utility will turn your service back on if you pay the whole amount you owe.

b. If you make your payment during regular business hours, or by 7 p.m. for electric cooperatives or municipal electric utilities permitting such payment or other arrangements after regular business hours, the electric cooperative or municipal electric utility must make a reasonable effort to turn your service back on that day. If service cannot reasonably be turned on that same day, the utility must do it by 11 a.m. the next day.

c. The electric cooperative or municipal electric utility may charge you a fee to turn your service back on. That fee may be higher in the evening or on weekends, so you may ask that your service be turned on during normal utility business hours.

9. Is there any other help available besides my electric cooperative or municipal electric utility?

If the electric cooperative or municipal electric utility has not been able to help you with your problem, you may contact the Iowa Utilities Board toll-free at 1-877-565-4450. You may also write

the Iowa Utilities Board at 1375 E. Court Avenue, Des Moines, Iowa 50319-0069, or by email at customer@iub.iowa.gov. Low-income customers may also be eligible for free legal assistance from Iowa Legal Aid and may contact Iowa Legal Aid at 1-800-532-1275.

27.4(3) *When disconnection is prohibited.*

a. No disconnection may take place from November 1 through April 1 for a resident who has been certified to the public utility by the local community action agency as being eligible for either the low-income home energy assistance program or weatherization assistance program.

b. If the electric cooperative or municipal electric utility is informed that one of the heads of household as defined in Iowa Code section 476.20 is a service member deployed for military service, as defined in Iowa Code section 29A.90, disconnection cannot take place at the residence during the deployment or prior to 90 days after the end of the deployment.

27.4(4) *Servicing of utilization control equipment.* Each electric cooperative or municipal electric utility shall service and maintain any equipment it uses on a customer's premises and shall correctly set and keep in proper adjustment any utility-owned thermostats, clocks, relays, time switches or other devices which control the customer's service in accordance with the provisions in the utility's schedules.

27.4(5) *Customer complaints.* Complaints concerning the practices, facilities or service of the electric cooperative or municipal electric utility shall be investigated promptly and thoroughly. The electric cooperative or municipal electric utility shall keep such records of customer complaints as will enable it to review and analyze its procedures and actions.

a. Each electric cooperative and municipal electric utility shall develop a fully informative procedure for the resolution of customer complaints.

b. The utility shall take reasonable steps to ensure that customers unable to travel shall not be denied the right to be heard.

c. The final step in a complaint review procedure, if the utility and customer are not able to agree on a resolution of the complaint, shall be a filing for board resolution of the issues if the board determines it has jurisdiction.

27.4(6) *Limitation of service.* The electric cooperative or municipal electric utility shall have the option of adopting a policy for service limitation at a customer's residence as a measure to be taken in lieu of disconnection of service to the customer. The service limiter policy shall be set out in the utility's tariff, or other legal document, and shall contain the following conditions:

a. A service limitation device shall not be activated without the customer's agreement.

b. A service limitation device shall not be activated unless the customer has defaulted on all payment agreements for which the customer qualifies under the board's rules and the customer has agreed to a subsequent payment agreement.

c. The service limiter shall provide for usage of a minimum of 3,600 watts. If the service limiter policy provides for different usage levels for different customers, the tariff or rules shall set out specific nondiscriminatory criteria for determining the usage levels. Electric-heating residential customers may have their service limited if otherwise eligible, but such customers shall have consumption limits set at a level that allows them to continue to heat their residences. For purposes of this rule, "electric heating" shall mean heating by means of a fixed-installation electric appliance that serves as the primary source of heat and not, for example, one or more space heaters.

d. A provision that, if the minimum usage limit is exceeded such that the limiter function interrupts service, the service limiter function must be capable of being reset manually by the customer, or the service limiter function must reset itself automatically within 15 minutes after the interruption. In addition, the service limiter function may also be capable of being reset remotely. If the option of resetting the meter remotely is available, the utility shall provide a 24-hour toll-free number for the customer to notify the electric cooperative or municipal electric utility that the limiter needs to be reset and the meter shall be reset immediately following notification by the customer. If the remote reset option is used, the meter must still be capable of being reset manually by the customer or the service limiter function must reset itself automatically within 15 minutes after the interruption.

e. There shall be no disconnect, reconnect, or other charges associated with service limiter interruptions or restorations.

f. A provision that, upon installation of a service limiter or activation of a service limiter function on the meter, the electric cooperative or municipal electric utility shall provide the customer with information on the operation of the limiter, including how it can be reset, and information on what appliances or combination of appliances can generally be operated to stay within the limits imposed by the limiter.

g. A provision that the service limiter function of the meter shall be disabled no later than the next working day after the residential customer has paid the delinquent balance in full.

h. A service limiter customer that defaults on the payment agreement is subject to disconnection after a 24-hour notice.

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, published July 2014.

199—27.6(476) Metering. Each electric cooperative and municipal electric utility shall have a meter inspection and testing program that meets industry standards similar to ANSI C12.1-2014.

199—27.7(476) Standards of quality of service.

27.7(1) Applicability. The quality of service standards in this rule apply to electric cooperatives. Subrules 27.7(2), 27.7(3), and 27.7(10) apply to municipal electric utilities.

27.7(2) Standard frequency. The standard frequency for alternating current distribution systems shall be 60 cycles per second. The frequency shall be maintained within limits which will permit the satisfactory operation of customer’s clocks connected to the system.

27.7(3) Voltage limits retail. Each electric cooperative and municipal electric utility supplying electric service to ultimate customers shall provide service voltages in conformance with the standard in paragraph 27.5(2)“*d.*”

27.7(4) Voltage balance. Where three-phase service is provided the electric cooperative shall exercise reasonable care to assure that the phase voltages are in balance. In no case shall the ratio of maximum voltage deviation from average to average voltage exceed .02.

27.7(5) Exceptions to voltage requirements. Voltage outside the limits specified will not be considered a violation when the variations:

- a. Arise from the action of the elements.
- b. Are infrequent fluctuations not exceeding five minutes' duration.
- c. Arise from service interruptions.
- d. Arise from temporary separation of parts of the system from the main system.
- e. Are from causes beyond the control of the electric cooperative.
- f. Do not exceed 10 percent above or below the standard nominal voltage, and service is at a distribution line or transmission line voltage with the retail customer providing voltage regulators.

27.7(6) *Voltage surveys and records.* Voltage measurements shall be made at the customer's entrance terminals. For single-phase service, the measurement shall be made between the grounded conductor and the ungrounded conductors. For three-phase service, the measurement shall be made between the phase wires.

27.7(7) *Voltage measurements.* Each electric cooperative shall make a sufficient number of voltage measurements in order to determine if voltages are in compliance with the requirements as stated in subrules 27.7(3), 27.7(4), and 27.7(5). All records obtained under this subrule shall be retained by the electric cooperative for at least two years and shall be available for inspection by the board's representatives. Notations on each chart shall indicate the following:

- a. The location where the voltage was taken.
- b. The time and date of the test.
- c. The results of the comparison with a working standard indicating voltmeter.

27.7(8) *Equipment for voltage measurements.*

a. *Secondary standard indicating voltmeter.* Each electric cooperative shall have available at least one indicating voltmeter maintained with error no greater than 0.25 percent of full scale.

b. *Working standard indicating voltmeters.* Each electric cooperative shall have at least two indicating voltmeters maintained so as to have as-left errors of no greater than 1 percent of full scale.

c. *Recording voltmeters.* Each electric cooperative must have readily available at least two portable recording voltmeters with a rated accuracy of 1 percent of full scale.

27.7(9) *Handling of standards and instruments.* Extreme care must be exercised in the handling of standards and instruments to assure that their accuracy is not disturbed. Each standard shall be accompanied at all times by a certificate or calibration card, duly signed and dated, on which are recorded the corrections required to compensate for errors found at the customary test points at the time of the last previous test.

27.7(10) *Planned interruptions.* Planned interruptions by electric cooperatives and municipal electric utilities shall be made at a time that will not cause unreasonable inconvenience to customers, and interruptions planned for longer than one hour shall be preceded by adequate notice to those who will be affected, when advance notice can reasonably be provided.

27.7(11) *Power quality monitoring.* Each electric cooperative shall investigate power quality complaints from its customers and determine if the cause of the problem is on the utility's systems. In addressing these problems, each electric cooperative or municipal electric utility shall implement to the extent reasonably practical the practices outlined in the standard given in paragraph 27.5(2) "f."

27.7(12) *Harmonics.* A harmonic is a sinusoidal component of the 60 cycles per second fundamental wave having a frequency that is an integral multiple of the fundamental frequency. When excessive harmonics problems arise, each electric cooperative shall investigate and take actions to rectify the problem. In addressing harmonics problems, the electric cooperative and the customer shall implement to the extent practicable and in conformance with prudent operation the practices outlined in the standard in paragraph 27.5(2) "g."

199—27.8(476) Safety.

27.8(1) *Iowa electrical safety code compliance.* Each electric cooperative and municipal electric utility shall be subject to 199—Chapter 25 under this subrule.

27.8(2) *Interconnection compliance.* Each electric cooperative and municipal electric utility shall be subject to rule 199—15.10(476) under this subrule.

27.8(3) Protective measures. Each electric cooperative and municipal electric utility shall exercise reasonable care to reduce those hazards inherent in connection with its electric service and to which its employees, its customers, and the general public may be subjected and shall adopt and execute a safety program designed to protect the public and fitted to the size and type of its operations.

27.8(4) Accident investigation and prevention. Electric cooperatives and municipal electric utilities shall give reasonable assistance to the board in the investigation of the cause of accidents and in the determination of suitable means of preventing accidents.

27.8(5) Reportable accidents. Electric cooperatives and municipal electric utilities shall maintain a summary of all reportable accidents, as defined in rule 199—25.5(476,478), arising from operations.

27.8(6) Grounding of secondary distribution system. Unless otherwise specified by the board, each electric cooperative and municipal electric utility shall comply with, and shall encourage customers to comply with, the applicable provisions of the acceptable standards listed in subrule 27.5(2) for the grounding of secondary circuits and equipment.

a. Ground connections should be tested for resistance at the time of installation. Each electric cooperative and municipal electric utility shall keep a record of all ground resistance measurements.

b. Each electric cooperative and municipal electric utility shall establish a program of inspection so that all artificial grounds installed shall be inspected within reasonable periods of time.

199—27.9(476) Customer contribution fund.

27.9(1) Applicability and purpose. This rule applies to each electric cooperative and municipal electric utility, as defined in Iowa Code sections 476.1A and 476.1B. Pursuant to Iowa Code section 476.66, each electric cooperative or municipal electric utility shall maintain a program plan to assist the electric cooperative's or municipal electric utility's low-income customers with weatherization and to supplement assistance received under the federal low-income home energy assistance program for the payment of winter heating bills.

27.9(2) Notification. Each electric cooperative or municipal electric utility shall notify all customers of the customer contribution fund at least twice a year. The method of notice which will ensure the most comprehensive notification to the electric cooperative's or municipal electric utility's customers shall be employed. Upon commencement of service and at least once a year, the notice shall be mailed or personally delivered to all customers, or provided by electronic means to those customers who have consented to receiving electronic notices. The other required notice may be published in a local newspaper(s) of general circulation within the service territory of the electric cooperative or municipal electric utility. A utility serving fewer than 6,000 customers may publish its semiannual notices locally in a free newspaper, utility newsletter or shopper's guide instead of a newspaper. At a minimum, the notice shall include:

a. A description of the availability and the purpose of the fund.

b. A customer authorization form. This form shall include a monthly billing option and any other methods of contribution.

27.9(3) Methods of contribution. The electric cooperative or municipal electric utility shall provide for contributions as monthly pledges, as well as one-time or periodic contributions. A pledge by a customer or other party shall not be construed to be a binding contract between the electric cooperative or municipal electric utility and the pledger. The pledge amount shall not be subject to delayed payment charges by the electric cooperative or municipal electric utility. Each electric cooperative or municipal electric utility may allow persons or organizations to contribute matching funds.

27.9(4) Annual report. On or before September 30 of each year, each electric cooperative or municipal electric utility shall file with the board a report of all the customer contribution fund activity for the previous fiscal year beginning July 1 and ending June 30. The report shall be in a form provided by the board and shall contain an accounting of the total revenues collected and all distributions of the fund. The electric cooperative or municipal electric utility shall report all utility expenses directly related to the customer contribution fund.

199—27.10(476,478) Service reliability requirements for electric utilities.

27.10(1) Applicability. This rule is applicable to electric cooperatives and associations operating within the state of Iowa subject to Iowa Code section 476.1A. Paragraph 27.10(3) “g” is applicable to both electric cooperatives and municipal electric utilities.

27.10(2) Purpose and scope. Reliable electric service is of high importance to the health, safety, and welfare of the citizens of Iowa. The purpose of this rule is to establish standards of reliability of the transmission and distribution systems and facilities that are under the board’s jurisdiction.

27.10(3) General obligations.

a. Each electric cooperative shall make reasonable efforts to avoid and prevent interruptions of service. However, when interruptions occur, service shall be reestablished within the shortest time practicable, consistent with safety.

b. The electric cooperative’s electrical transmission and distribution facilities shall be designed, constructed, maintained, and electrically reinforced and supplemented as required to reliably perform the power delivery burden placed upon them in the storm and traffic hazard environment in which they are located.

c. Each electric cooperative shall carry on an effective preventive maintenance program and shall be capable of emergency repair work on a scale which its storm and traffic damage record indicates as appropriate to its scope of operations and to the physical condition of its transmission and distribution facilities.

d. Each electric cooperative shall keep records of interruptions of service on its primary distribution system and shall make an analysis of the records for the purpose of determining steps to be taken to prevent recurrence of such interruptions.

e. Each electric cooperative shall make reasonable efforts to reduce the risk of future interruptions by taking into account the age, condition, design, and performance of transmission and distribution facilities and providing adequate investment in the maintenance, repair, replacement, and upgrade of facilities and equipment.

f. Any electric cooperative unable to comply with applicable provisions of this rule may file a waiver request pursuant to rule 199—1.3(17A,474,476).

g. Each electric cooperative and municipal electric utility shall adopt and have approved by its board of directors or governing authority a reliability plan. The reliability plan shall be updated not less than annually. A copy of the annual report shall be filed with the board for informational purposes.

199—27.11(476,478) Notification of outages.

27.11(1) Notification. The notification requirements in subrules 27.11(1) and 27.11(2) are for the timely collection of electric outage information that may be useful to emergency management agencies in providing for the safety and welfare of individual Iowa citizens. Each electric cooperative and municipal electric utility shall notify the board when it is projected that an outage may result in a loss of service for more than six hours and the outage meets one of the following criteria:

a. Loss of service for more than six hours to substantially all of a municipality, including the surrounding area served by the same electric cooperative or municipal electric utility. An electric cooperative or municipal electric utility may use loss of service within the utility’s service territory to 75 percent or more of customers within a municipality, including the surrounding area served by the utility, to meet this criterion;

b. A major event as defined in subrule 27.1(4), except for notifications of emergency alerts from regional transmission organizations or independent system operators; or

c. Any other outage considered significant by the electric cooperative or municipal electric utility. This includes loss of service for more than six hours to significant public health and safety facilities known to the electric cooperative or municipal electric utility at the time of the notification.

27.11(2) Information required.

a. Notification shall be provided regarding outages that meet the requirements of subrule 27.11(1) by notifying the board duty officer by email at dutyofficer@iub.iowa.gov or, in appropriate circumstances, by telephone at (515)745-2332. Notification shall be made at the earliest possible time

after it is determined the event may be reportable and should include the following information, as available:

- (1) The general nature or cause of the outage;
- (2) The area affected;
- (3) The approximate number of customers that have experienced a loss of electric service as a result of the outage;
- (4) The time when service is estimated to be restored; and
- (5) The name of the electric cooperative or municipal electric utility, the name and telephone number of the person making the report, and the name and telephone number of a contact person knowledgeable about the outage. The notice should be supplemented as more complete or accurate information is available.

b. The electric cooperative or municipal electric utility shall provide to the board updates of the estimated time when service will be restored to all customers able to receive service or of significant changed circumstances, unless service is restored within one hour of the time initially estimated.

c. The electric cooperative or municipal electric utility shall notify the board once service is fully restored to all customers after an outage meeting the requirements of subrule 27.11(1).

199—27.12(476) Electric vehicle charging service. Electric cooperatives and municipal electric utilities shall comply with the requirements in rule 199—20.20(476) with regard to providing service to electric vehicle charging stations.

199—27.13(476) Exterior flood lighting.

27.13(1) *Newly installed lighting.* All newly installed exterior flood lighting owned by an electric cooperative or municipal electric utility shall be solid-state lighting or lighting with equivalent or better energy efficiency.

27.13(2) *In-service lighting replacement schedule.* In-service lighting shall be replaced with solid-state lighting or lighting with equivalent or better energy efficiency when worn out due to ballast, lamp, or fixture failure or for any other reason, such as vandalism or storm damage. Electric cooperatives and municipal electric utilities shall file with the board, as part of the utility's annual report required in 199—Chapter 23, a report stating the progress in converting to higher pressure sodium lighting or lighting with equivalent or higher energy efficiency. The information shall be provided as part of board 24/7 requirements.

27.13(3) *Efficacy standards.* Lighting other than solid-state has equivalent or better efficacy if one or more of the following can be established:

- a.* For fixtures, the mean lumens-per-watt lamp rating is greater than 100; or
- b.* The new lighting uses no more energy per installation than comparable, suitably sized solid-state; or
- c.* The new lighting luminaries have a mean efficacy rating equal to or greater than 100 lumens per watt according to a Department of Energy (DOE) Lighting Facts label, testing under the DOE Commercially Available LED Product Evaluation and Reporting Program (CALiPER), Design Lights Consortium (DLC) or any other testing agency that follows Illuminating Engineering Society of North America LM-79-08 test procedures.

These rules are intended to implement Iowa Code sections 476.1A, 476.1B and 476.2.

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EDITOR'S NOTE: For replacement pages for IAC, see IAC Supplement 8/25/21.