

STATE OF IOWA
DEPARTMENT OF COMMERCE
UTILITIES BOARD

IN RE: REGULATION OF MUNICIPAL ELECTRIC UTILITIES AND ELECTRIC COOPERATIVES	DOCKET NO. RMU-2020-0027, RMU-2019-0020
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ORDER SCHEDULING WORKSHOP AND OPENING NEW RULES CHAPTER

On June 11, 2019, the Utilities Board (Board) issued an order in Docket No. RMU-2019-0020 for stakeholder comment that included a draft Notice of Intended Action (NOIA) proposing certain amendments to 199 Iowa Administrative Code (IAC) chapter 20, "Service Supplied by Electric Utilities." Docket No. RMU-2019-0020 was opened to address specific issues not addressed in the Board's five-year review of its rules. Those specific issues are:

1. Transmission-related automatic adjustment mechanisms, as codified in Iowa Code § 476.6(8)(b);
2. Applicability of certain electric service rules to municipal and electric cooperative utilities in light of the amendments to Iowa Code § 476.1A;
3. Whether utilities currently required to file reliability reports pursuant to subrules 199 IAC 20.18(7) and (8) continue to have that requirement and, if so, whether clarification is needed on the periodic filing of reliability plans versus the annual reliability reports;
4. Whether certain hedging reports that have been filed in conjunction with energy adjustment clause filings should continue to be filed on a quarterly basis or instead should be filed annually; and
5. Whether utilities should be required to make energy adjustment clause filings each billing cycle even if the charges are not changing for that cycle.

On April 21, 2020, the Board conducted a workshop to allow participants to discuss these issues. At the April 21, 2020 workshop, the participants discussed conducting a

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separate workshop for the issue of the Board's jurisdiction over municipal electric utilities and electric cooperatives. Based upon that discussion and a further review of the comments filed by the Iowa Association of Municipal Utilities (IAMU) and the Iowa Association of Electric Cooperatives (IAEC), the Board has determined that creating a separate chapter for regulation of municipal electric utilities and electric cooperatives would be a more efficient and clearer way of adopting rules for the utilities represented by those organizations than to amend chapter 20 rules.

This order opens Docket No. RMU-2020-0027 to allow consideration of rules for municipal electric utilities and electric cooperatives in a new rules chapter. A draft NOIA is Attachment A to this order and incorporated into this order by reference. Many of the proposed rules mirror the current rules in 199 IAC chapter 20 with modifications required by the Board's more limited jurisdiction over municipal electric utilities and electric cooperatives.

The Board is scheduling a workshop to allow for interested persons to discuss the proposed rules in chapter 27. An agenda which indicates the provisions the Board has identified for discussion at the workshop is included as Attachment B. Participants may discuss any of the other provisions where there are questions or concerns. The workshop will be conducted in the Board's hearing room and electronically. Social distancing, hand washing, and masks will apply at the workshop. The information for participating electronically will be available on the Board's website, iub.iowa.gov, on the Hearing and Meeting Calendar webpage.

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The Board will issue a separate order addressing the other amendments that are being proposed in Docket No. RMU-2020-0020. The Board is uploading this order into both dockets, Docket Nos. RMU-2020-0027 and RMU-2019-0020, to ensure notice of the new docket is provided to all interested persons. Filings regarding the rules in the new chapter should only be filed in Docket No. RMU-2020-0027.

ORDERING CLAUSES

IT IS THEREFORE ORDERED:

1. A workshop regarding the new chapter 27 municipal electric utility and electric cooperative rules will be held at 1:30 p.m. July 15, 2020, and conclude no later than 4:30 p.m. Persons with disabilities who will require assistive services or devices to observe or participate in the workshop should contact the Utilities Board Customer Service at (515) 725-7300 at least five days in advance to request arrangements.
2. The workshop will be held in the hearing room of the Iowa Utilities Board, located at 1375 E. Court Ave., Des Moines, Iowa. Parties wishing to participate remotely by webinar may do so. Instructions for participating via webinar will be posted on the Board's website, iub.iowa.gov, on the Hearing and Meeting Calendar webpage.

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3. Any filing regarding 199 IAC chapter 27 should be filed in Docket No. RMU-2020-0027 and not in Docket No. RMU-2019-0020.

UTILITIES BOARD

Geri Huser Date: 2020.07.01
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Nick Wagner Date: 2020.07.01
10:18:10 -05'00'

ATTEST:

Louis Vander 2020.07.01
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Richard W. Lozier, Date: 2020.07.01
Jr. 10:29:18 -05'00'

Dated at Des Moines, Iowa, this 1st day of July, 2020.

ATTACHMENT A

DRAFT NOTICE OF INTENDED ACTION CHAPTER 27 REGULATION OF MUNICIPAL ELECTRIC UTILITIES AND ELECTRIC COOPERATIVES

Item 1. Adopt the following **new** 199—chapter 27

199—27.1(476, 476.1A, 476.1B) General Information.

27.1(1) *Authorization of rules that apply to rural electric cooperatives.*

Iowa Code § 476.1A provides that electric cooperatives are not subject to the regulation of the board for rate and services, except for regulatory action pertaining to the following:

- a. Safety and engineering standards for equipment, operations, and procedures.
- b. Assigned service areas.
- c. Pilot projects of the board.
- d. Section 476.1 through 4. Disconnection of service and winter moratorium.
- e. Section 476.21. Discrimination against renewable energy.
- f. Section 476.51. Civil penalties.
- g. Section 476.56. Annual energy costs provided.
- h. Section 476.62. Energy-efficient lighting.
- i. Section 476.66. Customer contribution fund.

27.1(2) *Authorization of rules that apply to municipal electric utilities.*

Iowa Code § 476.1B provides that municipal electric utilities are not subject to rate or service regulation of the board, unless otherwise specifically provided by statute, except for regulatory action pertaining to the following:

- a. Safety standards.
- b. Assigned areas of service as set forth in section 476.22 through 476.26.
- c. Section 476.51. Civil penalties.
- d. Disconnection of service in sections 476.20(1) through (4).
- e. Section 476.56. Annual energy costs provided.
- f. Section 476.62. Energy-efficient lighting.
- g. Section 476.66. Customer contribution fund.
- h. Transmission reliability rules or standards adopted by the board, if the municipal electric utility is a member of an electric power agency as defined in chapter 28F and section 390.9.

27.1(3) *Definitions.* The following words and terms, when used in these rules, shall have the meaning 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, is a statement or question by anyone, whether a utility customer or not, alleging a wrong, grievance, injury, dissatisfaction, illegal action or procedure, dangerous condition or action, or utility obligation.

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

“Delinquent” or “delinquency” means an account for which a service bill or service payment agreement 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” is furnishing to the public for compensation any electricity, heat, light, power, or energy.

“Energy” means electric energy measured in kilowatt hours.

“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.

“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 on the customer’s meter.

“Service limiter” or “service limitation device” means a device that limits a residential customer’s power consumption to 3,600 watts (or some higher level of usage approved by the board) and that resets itself automatically, or can be reset manually by the customer, and may also be reset remotely by the utility at all times.

“Tariff” means the entire body of rates, tolls, rentals, charges, classifications, rules, procedures, policies, etc., adopted and filed with the board by an electric utility in fulfilling its role of furnishing service.

“Timely payment” is 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.

“Utility” means any person, partnership, business association or corporation, domestic or foreign, owning or operating any facilities for providing electric service or heat to the public for compensation.

27.1(4) Abbreviations. The following abbreviations may be used where appropriate:
ANSI—American National Standards Institute, 1430 Broadway, New York, New York 10018.

DOE—Department of Energy, Washington, D.C. 20426.

EPA—United States Environmental Protection Agency.

FCC—Federal Communications Commission, 1919 M Street, Washington, D.C. 20554.

FERC—Federal Energy Regulatory Commission, Washington, D.C. 20426.

NARUC—National Association of Regulatory Utility Commissioners, P.O. Box 684, Washington, D.C. 20044.

NBS—National Bureau of Standards, Washington, D.C. 20234.

NFPA—National Fire Protection Association, 470 Atlantic Ave., Boston, Massachusetts 02210.

199—27.2(476) Records, reports, and tariffs.

27.2(1) Location and retention of records. Unless otherwise specified by this chapter, municipal electric utilities and electric cooperatives shall keep records in accordance with the applicable provisions of 199—Chapter 18.

27.2(2) Tariffs to be filed with the board. Municipal electric utilities and electric cooperatives shall file tariffs for activities over which the board has jurisdiction and as required by this chapter.

27.2(3) Form and identification. All tariffs shall conform to the following rules:

a. The tariff shall be filed electronically using the board's electronic filing system. The filed tariff shall be capable of being reproduced on 8½- x 11- inch paper so customers may readily view and reproduce copies of the tariff. A tariff filed with the board may be the same format as is required by a federal agency provided that the rules of the board as to title page; identity of superseding, replacing or revision sheets; identity of amending sheets; identity of the filing utility, issuing official, date of issue, effective date; and the words "Tariff with board" shall apply in the modification of the federal agency format for the purposes of filing with this board.

b. The title page of every tariff and supplement shall show:

(1) The first page shall be the title page which shall show:

(Name of Public Utility)

Electric Tariff

Filed with

Iowa Utilities Board

(Date)

(2) When a tariff is to be superseded or replaced in its entirety, the replacing tariff shall show on the upper right corner of its title page that it supersedes a tariff on file and the number being superseded or replaced, for example:

tariff no.

supersedes tariff no.

(3) When a new part of a tariff eliminates an existing part of a tariff it shall so state and clearly indicate the part eliminated.

(4) Any tariff modifications as defined above shall be marked in the right-hand margin of the replacing tariff sheet with symbols as here described to indicate the place, nature and extent of the change in text.

—Symbols—

- (C)—Changed regulation
- (D)—Discontinued rate or regulation
- (I)—Increase in rate or new treatment resulting in increased rate
- (N)—New rate, treatment or regulation
- (R)—Reduction in rate or new treatment resulting in reduced rate
- (T)—Change in text only

c. All sheets except the title page shall have, in addition to the above-stated requirements, the following information:

(1) Name of utility under which shall be set forth the words “Filed with board.” If the utility is not a corporation, and a trade name is used, the name of the individual or partners must precede the trade name.

(2) Issuing official and issue date.

(3) Effective date (to be left blank by rate-regulated utilities).

d. All sheets except the title page shall have the following form:

(Company Name)	(Part identification)
Electric Tariff	(This sheet identification)
Filed with board	(Canceled sheet identification, if any)
	(Content or tariff)
Issued: (Date)	(Effective)
Issued by: (Name, title)	(Proposed Effective Date)

The issued date is the date the tariff or the amended sheet content was adopted by the utility.

The effective date will be left blank by rate-regulated utilities and shall be determined by the board. The utility may propose an effective date.

27.2(4) Annual, periodic and other reports to be filed with the board.

a. System map verification. The utility shall file annually a verification that it has a currently correct set of utility system maps in accordance with the general requirements of subrule 20.3(11) and a statement as to the location of the utility’s offices where such maps, except those deemed confidential by the board, are accessible and available for examination by the board or its agents. The verification and map location information shall also be reported to the board upon other occasions when significant changes occur in either the maps or location of the maps.

b. A copy of each type of customer bill form in current use shall be filed with the board.

199—27.3(476) General service requirements.

27.3(1) Meter reading records. The meter reading records shall show:

a. Customer’s name, address, and rate schedule or identification of rate schedule.

b. Identification of the meter or meters either by permanently marked utility number or by manufacturer’s name, type number and serial number.

- c. Meter readings.
- d. If the reading has been estimated.
- e. Any applicable multiplier or constant.

27.3(2) Service areas. Service areas are defined by the boundaries on service area maps. Paper maps are available for viewing during regular business hours at the board's offices and available for purchase at the cost of reproduction. Maps are also available for viewing on the board's website. These service area maps are adopted as part of this rule and are incorporated in this rule by this reference.

27.3(3) 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.

b. Any electric utility or municipal corporation may file a petition for modification of service area which shall contain a legal description of the service area desired, a designation of the utilities involved in each boundary section, and a justification for the proposed service area modification. 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 20.3(11)"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. All parties shall file an answer which complies with 199—subrule 7.5(1).

e. Utilities may agree 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.

27.3(4) Certificate of authority. Any electric utility or municipal corporation requesting a service territory modification pursuant to subrule 20.3(9) which would result in service to a customer by a utility other than the utility currently serving the customer must also petition the board for a certificate of authority under Iowa Code section 476.23. The electric utility or municipal corporation shall pay the party currently serving the customer a reasonable price for the facilities serving the customer.

27.3(5) Maps.

a. Each 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 utility's designated offices during the utility's 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.

27.3(6) Prepayment meters. Prepayment meters shall not be geared or set so as to result in the charge of a rate or amount higher than would be paid if a standard type meter were used.

199—27.4(476) Customer relations.

27.4(1) Customer information. Each utility shall:

a. Maintain up-to-date maps, plans, or records of its entire transmission and distribution systems, together with such other information as may be necessary to enable the utility to advise prospective customers, and others entitled to the information, as to the facilities available for serving prospective customers in its service area.

b. Assist the customer or prospective customer in selecting the most economical rate schedule available for the customer's proposed type of service.

c. Notify customers affected by a change in rates or schedule classification in the manner provided in the rules of practice and procedure before the board. (199—26.5(476))

d. Post a notice in a conspicuous place in each office of the utility where applications for service are received, informing the public that copies of the rate schedules and rules relating to the service of the utility, as filed with the board, are available for public inspection. If the utility has provided access to its rate schedules and rules for service on its website, the notice shall include the website address.

e. Upon request, inform its customers as to the method of reading meters.

f. State, on the bill form, that tariff and rate schedule information is available upon request at the utility's local business office. If the utility provides access to its tariff and rate schedules on its website, the bill form shall include the website address.

g. Upon request, transmit a statement of either the customer's actual consumption, or degree day adjusted consumption, at the company's option, of electricity for each billing during the prior 12 months.

h. Furnish such additional information as the customer may reasonably request.

27.4(2) Customer contact employee qualifications.

a. Each utility shall promptly and courteously resolve inquiries for information or complaints. Employees who receive customer telephone calls and office visits shall be

qualified and trained in screening and resolving complaints, to avoid a preliminary recitation of the entire complaint to employees without ability and authority to act. The employee shall provide identification to the customer that will enable the customer to reach that employee again if needed.

b. 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) 725-7321, or toll-free 1-877-565-4450, or by writing to 1375 E. Court Avenue, Des Moines, Iowa 50319-0069, or by email to customer@iub.iowa.gov."

c. The bill insert or notice for municipal utilities shall include the following statement: "If your complaint is related to service disconnection, safety, or renewable energy, and (utility name) does not resolve your complaint, you may request assistance from the Iowa Utilities Board by calling (515) 725-7321, 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."

d. The bill insert or notice for non-rate-regulated rural electric cooperatives shall include the following statement: "If your complaint is related to the (utility name) service rather than its rates, and (utility name) does not resolve your complaint, you may request assistance from the Iowa Utilities Board by calling (515) 725-7321, 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."

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 set forth above.

27.4(3) Customer bill forms. Each customer shall be informed as promptly as possible following the reading of the customer's meter, on bill form or otherwise, of the following:

a. The reading of the meter at the beginning and at the end of the period for which the bill is provided.

b. The dates on which the meter was read, at the beginning and end of the billing period.

c. The number and kind of units metered.

d. The applicable rate schedule, with the identification of the applicable rate classification.

e. The account balance brought forward and amount of each net charge for rate-schedule-priced utility service, sales tax, other taxes, late payment charge, and total amount currently due. In the case of prepayment meters, the amount of money collected shall be shown.

f. The last date for timely payment shall be clearly shown and shall be not less than 20 days after the bill is provided.

g. A distinct marking to identify an estimated bill.

h. A distinct marking to identify a minimum bill.

i. Any conversions from meter reading units to billing units, or any calculations to determine billing units from recording or other devices, or any other factors, such as sliding scale or automatic adjustment and amount of sales tax adjustments used in determining the bill.

j. Customer billing information alternate. A utility serving less than 5000 electric customers may provide the information in 20.4(9) on bill form or otherwise. If the utility elects not to provide the information of 20.4(9), it shall advise the customer, on bill form or by bill insert, that such information can be obtained by contacting the utility's local office.

27.4(4) 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 utility for residential utility service and is not in default of a payment agreement with the utility, a 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 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 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 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 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.

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

3. The 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 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 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 within twenty days of 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 utility may also require the customer to enter into a budget billing plan to pay the current bill.

(3) Additional payment agreements. The utility may offer additional payment agreements to the customer.

d. Refusal by utility. A customer may offer the utility a proposed payment agreement. If the utility and the customer do not reach an agreement, the utility may refuse the offer orally, but the 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.

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.

27.4(5) Bill payment terms. The bill shall be considered provided to the customer when deposited in the U.S. mail with postage prepaid. 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. 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 under subrule 20.3(6) may not be considered delinquent less than 5 days from the date the bill is provided. However, 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 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.

27.4(6) *Customer records.* The utility shall retain records as may be necessary to effectuate compliance with 20.4(14) and 20.6(6), but not less than five years. Records for 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.

27.4(7) *Adjustment of bills.*

a. Meter error. Whenever a meter creeps or whenever a metering installation is found upon any test to have an average error of more than 2.0 percent for watt-hour metering; or a demand metering error of more than 1.5 percent in addition to the errors allowed under accuracy of demand metering; an adjustment of bills for service for the period of inaccuracy shall be made in the case of overregistration and may be made in the case of underregistration. The amount of the adjustment shall be calculated on the basis that the metering equipment should be 100 percent accurate with respect to the testing equipment used to make the test. For watt-hour metering installations the average accuracy shall be the arithmetic average of the percent registration at 10 percent of rated

test current and at 100 percent of rated test current giving the 100 percent of rated test current registration a weight of four and the 10 percent of rated test current registration a weight of one.

b. Determination of adjustment. Recalculation of bills shall be on the basis of actual monthly consumption except that if service has been measured by self-contained single-phase meters or three-wire network meters and involves no billing other than for kilowatt-hours, the recalculation of bills may be based on the average monthly consumption determined from the most recent 36 months, consumption data.

When the average error cannot be determined by test because of failure of part or all of the metering equipment, it shall be permissible to use the registration of check metering installations, if any, or to estimate the quantity of energy consumed based on available data. The customer must be advised of the failure and of the basis for the estimate of quantity billed. The periods of error shall be used as defined in immediately following subparagraphs (1) and (2).

(1) Overregistration. If the date when overregistration began can be determined, such date shall be the starting point for determination of the amount of the adjustment. If the date when overregistration began cannot be determined, it shall be assumed that the error has existed for the shortest time period calculated as one-half the time since the meter was installed, or one-half the time elapsed since the last meter test unless otherwise ordered by the board.

The overregistration due to creep shall be calculated by timing the rate of creeping and assuming that the creeping affected the registration of the meter for 25 percent of the time since the more recent of either metering installation or last previous test.

(2) Underregistration. If the date when underregistration began can be determined, it shall be the starting point for determination of the amount of the adjustment except that billing adjustment shall be limited to the preceding six months. If the date when underregistration began cannot be determined, it shall be assumed that the error has existed for one-half of the time elapsed since the more recent of either meter installation or the last meter test, except that billing adjustment shall be limited to the preceding six months unless otherwise ordered by the board.

The underregistration due to creep shall be calculated by timing the rate of creeping and assuming that this creeping affected the registration for 25 percent of the time since the more recent of either metering installation or last previous test, except that billing adjustment shall be limited to the preceding six months.

27.4(8) Refusal or disconnection of service. A utility shall refuse service or disconnect service to a customer, as defined in subrule 20.1(3), in accordance with tariffs that are consistent with these rules.

a. The utility shall give written notice of pending disconnection except as specified in paragraph 20.4(15)“b.” 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 be not less than 12 days after the notice is provided. The date for

disconnection of service for customers on shorter billing intervals under subrule 20.3(6) shall not be less than 24 hours after the notice is posted at the service premises.

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.

b. 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.

c. Service may be disconnected or refused after proper notice:

(1) For violation of or noncompliance with the utility's rules on file with the board.

(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.

d. Service may be refused or disconnected after proper notice for nonpayment of a bill or deposit, except as restricted by subrules 20.4(16) and 20.4(17), provided that the utility has complied with the following provisions when applicable:

(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 available to the customer. Customers billed more frequently than monthly pursuant to subrule 20.3(6) 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 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) The standard form of the summary of the rights and responsibilities approved by the board. Any utility providing electric service and defined as a public utility in Iowa Code section 476.1 which does not use the standard form as shown on the board's website for customers billed monthly shall submit to the board electronically its proposed form for approval. A utility billing a combination customer for both gas and electric service

may modify the standard form to replace each use of the word “electric” with the words “gas and electric” in all instances.

(4) If the utility has adopted a service limitation policy pursuant to subrule 20.4(23), the following paragraph shall be appended to the end of the standard form for the summary of rights and responsibilities, as set forth in subparagraph 20.4(15)“d”(3):

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.

(5) 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. During the period from November 1 through 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 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 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 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 utility to contain residential units affected by disconnection must 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.

(6) Disputed bill. If the customer has received notice of disconnection and has a dispute concerning a bill for electric utility service, the 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. A 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.

(7) Reconnection. 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.

(8) Severe cold weather. 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 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.

(9) Health of a resident. 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. 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.

The 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.

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 pursuant to paragraph 20.4(15)"f."

(10) Winter energy assistance (November 1 through April 1). If the 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 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 public utility by the community action agency as eligible for either the low-income home energy assistance program or weatherization assistance program. A utility may develop an incentive program to delay disconnection on April 1 for customers who make payments throughout the November 1 through April 1 period. All such incentive programs shall be set forth in tariffs approved by the board.

(11) Deployment. If the 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.

e. 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 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.

f. A 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.

g. The 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. A 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(9) *Insufficient reasons for denying service.* The following shall not constitute sufficient cause for refusal of service to a customer:

a. Delinquency in payment for service by a previous occupant of the premises to be served.

b. Failure to pay for merchandise purchased from the utility.

c. Failure to pay for a different type or class of public utility service.

d. Failure to pay the bill of another customer as guarantor thereof.

e. Failure to pay the back bill provided in accordance with paragraph 20.4(14)"d" (slow meters).

f. Failure to pay a bill provided in accordance with paragraph 20.4(14)"f."

g. Failure of a residential customer to pay a deposit during the period November 1 through April 1 for the location at which the customer has been receiving service in the customer's name.

h. Delinquency in payment for service by an occupant if the customer applying for service is creditworthy and able to satisfy any deposit requirements.

i. Delinquency in payment for service arising more than ten years prior, as measured from the most recent of:

(1) The last date of service for the account giving rise to the delinquency,

(2) Physical disconnection of service for the account giving rise to the delinquency,

or

(3) The last voluntary payment or voluntary written promise of payment made by the customer, if made before the ten-year period described in this paragraph has otherwise lapsed.

j. Delinquency in payment for service that arose on or before September 4, 2010, pursuant to an oral contract, except in cases of fraud or deception that prevented the utility from timely addressing such delinquencies with the customer.

27.4(10) *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 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(11) Servicing utilization control equipment. Each utility shall service and maintain any equipment it uses on customer's premises and shall correctly set and keep in proper adjustment any 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(12) Customer complaints. Complaints concerning the practices, facilities or service of the utility shall be investigated promptly and thoroughly. The utility shall keep such records of customer complaints as will enable it to review and analyze its procedures and actions.

a. Each 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 hearing and review procedure shall be a filing for board resolution of the issues.

27.4(13) Limitation of service. The 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 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 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 by the utility. If the utility chooses to use the option of resetting the meter remotely, the utility shall provide a 24-hour toll-free number for the customer to notify the 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 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 pursuant to paragraph 20.4(15)“f.”

These rules are intended to implement Iowa Code sections 476.6, 476.8, 476.20 and 476.54.

199—27.5(476) Engineering practice.

27.5(1) Requirement for good engineering practice. The electric plant of the 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 utility shall use the applicable provisions in the publications listed below as standards of accepted good practice unless otherwise ordered by the board.

- 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, 199—42.6(476), “Engineering standards for electric and communications lines.”

27.5(3) Adequacy of supply and reliability of service. The generating capacity of the utility’s plant, supplemented by the electric power regularly available from other sources, must be sufficiently large to meet all normal demands for service and provide a reasonable reserve for emergencies.

In appraising adequacy of supply the board will segregate electric utilities into two classes viz., those having high capacity transmission interconnections with other electrical utilities and those which lack such interconnection and are therefore completely dependent upon the firm generating capacity of the utility’s own generating facilities.

a. In the case of utilities having interconnecting ties with other utilities, the board will, upon appraising adequacy of supply, take appropriate notice of the utility's recent past record, as of the date of appraisal, of any widespread service interruptions and any capacity shortages along with the consideration of the supply regularly available from other sources, the normal demands, and the required reserve for emergencies.

b. In the case of noninterconnected utilities the board will give attention to the maximum total coincident customer demand which could be satisfied without the use of the single element of plant equipment, the disability of which would produce the greatest reduction in total net plant productive capacity and also give attention to the normal demands for service and to the reasonable reserve for emergencies.

199—27.6(476) Metering. Each utility shall have a meter inspection and testing program that meets industry standards similar to ANSI C12.1-2014. Each utility shall retain meters removed from service for at least six months or a length of time based upon industry standards.

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

27.7(1) 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(2) Voltage limits retail. Each utility supplying electric service to ultimate customers shall provide service voltages in conformance with the standard at 20.5(2)"d."

27.7(3) Voltage balance. Where three-phase service is provided the utility 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(4) Voltage limits, service for resale. The nominal voltage shall be as mutually agreed upon by the parties concerned. The allowable variation shall not exceed 7.5 percent above or below the agreed-upon nominal voltage without the express approval of the board.

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 utility.
- 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) Each utility shall make a sufficient number of voltage measurements in order to determine if voltages are in compliance with the requirements as stated in 20.7(2), 20.7(3), and 20.7(4). All records obtained under this subrule shall be retained by

the utility 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 utility 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 utility 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 utility must have readily available at least two portable recording voltmeters with a rated accuracy of 1 percent of full scale.

27.7(9) *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 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.

27.7(11) *Power quality monitoring.* Each utility 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 utility shall implement to the extent reasonably practical the practices outlined in the standard given at 20.5(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 utility shall investigate and take actions to rectify the problem. In addressing harmonics problems, the utility and the customer shall implement to the extent practicable and in conformance with prudent operation the practices outlined in the standard at 20.5(2)"g."

This rule is intended to implement Iowa Code sections 476.2 and 476.8.

199—27.8(476) Safety.

27.8(1) *Protective measures.* Each utility shall exercise reasonable care to reduce those hazards inherent in connection with its utility 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(2) *Accident investigation and prevention.* The utility 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(3) *Reportable accidents.* Each utility shall maintain a summary of all reportable accidents, as defined in 199—25.5(476,478), arising from its operations.

27.8(4) *Grounding of secondary distribution system.* Unless otherwise specified by the board, each utility shall comply with, and shall encourage its customers to comply

with, the applicable provisions of the acceptable standards listed in 20.5(2) for the grounding of secondary circuits and equipment.

Ground connections should be tested for resistance at the time of installation. The utility shall keep a record of all ground resistance measurements.

The utility shall establish a program of inspection so that all artificial grounds installed by it shall be inspected within reasonable periods of time.

199—27.9(476) Flexible rates.

27.9(1) Purpose. This subrule is intended to allow electric utility companies to offer, at their option, incentive or discount rates to their customers.

27.9(2) General criteria.

a. Electric utility companies may offer discounts to individual customers, to selected groups of customers, or to an entire class of customers. However, discounted rates must be offered to all directly competing customers in the same service territory. Customers are direct competitors if they make the same end product (or offer the same service) for the same general group of customers. Customers that only produce component parts of the same end product are not directly competing customers.

b. In deciding whether to offer a specific discount, the utility shall evaluate the individual customer's, group's, or class's situation and perform a cost-benefit analysis before offering the discount.

c. Any discount offered should be such as to significantly affect the customer's or customers' decision to stay on the system or to increase consumption.

d. The consequences of offering the discount should be beneficial to all customers and to the utility. Other customers should not be at risk of loss as a result of these discounts; in addition, the offering of discounts shall in no way lead to subsidization of the discounted rates by other customers in the same or different classes.

27.9(3) Tariff requirements. If a company elects to offer flexible rates, the utility shall file for review and approval tariff sheets specifying the general conditions for offering discounted rates. The tariff sheets shall include, at a minimum, the following criteria:

a. The cost-benefit analysis must demonstrate that offering the discount will be more beneficial than not offering the discount.

b. The ceiling for all discounted rates shall be the approved rate on file for the customer's rate class.

c. The floor for the discount rate shall be equal to the energy costs and customer costs of serving the specific customer.

d. No discount shall be offered for a period longer than five years, unless the board determines upon good cause shown that a longer period is warranted.

e. Discounts should not be offered if they will encourage deterioration in the load characteristics of the customer receiving the discount.

27.9(4) Reporting requirements. Each rate-regulated electric utility electing to offer flexible rates shall file annual reports with the board within 30 days of the end of each 12 months. Reports shall include the following information:

a. Section 1 of the report concerns discounts initiated in the last 12 months. For all discounts initiated in the last 12 months, the report shall include:

- (1) The identity of the new customers (by account number, if necessary);
- (2) The value of the discount offered;
- (3) The cost-benefit analysis results;

(4) The end-use cost of alternate fuels or energy supplies available to the customer, if relevant;

(5) The energy and demand components by month of the amount of electricity sold to the customer in the preceding 12 months.

b. Section 2 of the report relates to overall program evaluation. Amount of electricity refers to both energy and demand components when the customer is billed for both elements. For all discounts currently being offered, the report shall include:

(1) The identity of each customer (by account number, if necessary);

(2) The amount of electricity sold in the last 12 months to each customer at discounted rates, by month;

(3) The amount of electricity sold to each customer in the same 12 months of the preceding year, by month;

(4) The dollar value of the discount in the last 12 months to each customer, by month; and

(5) The dollar value of sales to each customer for each of the previous 12 months.

c. Section 3 of the report concerns discounts denied or discounts terminated. For all customers specifically evaluated and denied or having a discount terminated in the last 12 months, the report shall include:

(1) Customer identification (by account number, if necessary);

(2) The amount of electricity sold in the last 12 months to each customer, by month;

(3) The amount of electricity sold to each customer in the same 12 months of the preceding year, by month; and

(4) The dollar value of sales to each customer for each of the past 12 months.

d. No monthly report is required if the utility had no customers receiving a discount during the relevant period and had no customers which were evaluated for the discount and rejected during the relevant period.

199—27.10(476) Customer contribution fund.

27.10(1) *Applicability and purpose.* This rule applies to each electric public utility, as defined in Iowa Code sections 476.1, 476.1A, and 476.1B. Pursuant to Iowa Code section 476.66, each utility shall maintain a program plan to assist the 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.

27.10(2) *Notification.* Each 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 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 utility's service territory. 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.

27.10(3) *Methods of contribution.* The 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 utility and the pledger. The pledge amount shall not be subject to delayed payment charges by the utility. Each utility may allow persons or organizations to contribute matching funds.

27.10(4) *Annual report.* On or before September 30 of each year, each 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 utility shall report all utility expenses directly related to the customer contribution fund.

199—27.11(476,478) Service reliability requirements for electric utilities.

27.11(1) *Applicability.* This rule is applicable to electric cooperative corporations and associations operating within the state of Iowa subject to Iowa Code chapter [476](#) and to the construction, operation, and maintenance of electric transmission lines by electric utilities as defined in subrule [20.18\(4\)](#) to the extent provided in Iowa Code chapter [478](#).

27.11(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.

27.11(3) *General obligations.*

a. Each electric utility 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 utility'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 utility 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 utility 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 utility 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 utility unable to comply with applicable provisions of this rule may file a waiver request pursuant to rule [199—1.3\(17A,474,476\)](#).

27.11(4) *Definitions.* Terms and formulas when used in this rule are defined as follows:

"Customer" means (1) any person, firm, association, or corporation, (2) any agency of the federal, state, or local government, or (3) any legal entity responsible by law for

payment of the electric service from the electric utility which has a separately metered electrical service point for which a bill is provided. Electrical service point means the point of connection between the electric utility's equipment and the customer's equipment. Each meter equals one customer. Retail customers are end-use customers who purchase and ultimately consume electricity.

"Customer average interruption duration index (CAIDI)" means the average interruption duration for those customers who experience interruptions during the year. It is calculated by dividing the annual sum of all customer interruption durations by the total number of customer interruptions.

$$\text{CAIDI} = \frac{\text{Sum of All Customer Interruption Durations}}{\text{Total Number of Customer Interruptions}}$$

"Distribution system" means that part of the electric system owned or operated by an electric utility and designed to operate at a nominal voltage of 25,000 volts or less.

"Electric utility" means electric cooperative corporations and associations owning, controlling, operating, or using transmission and distribution facilities and equipment subject to the board's jurisdiction.

"Interrupting device" means a device capable of being reclosed whose purpose is to interrupt faults and restore service or disconnect loads. These devices can be manual, automatic, or motor-operated. Examples may include transmission breakers, feeder breakers, line reclosers, motor-operated switches, fuses, or other devices.

"Interruption" means a loss of service to one or more customers or other facilities and is the result of one or more component outages. The types of interruption include momentary event, sustained, and scheduled. The following interruption causes shall not be included in the calculation of the reliability indices:

1. Interruptions intentionally initiated pursuant to the provisions of an interruptible service tariff or contract and affecting only those customers taking electric service under such tariff or contract;
2. Interruptions due to nonpayment of a bill;
3. Interruptions due to tampering with service equipment;
4. Interruptions due to denied access to service equipment located on the affected customer's private property;
5. Interruptions due to hazardous conditions located on the affected customer's private property;
6. Interruptions due to a request by the affected customer;
7. Interruptions due to a request by a law enforcement agency, fire department, other governmental agency responsible for public welfare, or any agency or authority responsible for bulk power system security;
8. Interruptions caused by the failure of a customer's equipment; the operation of a customer's equipment in a manner inconsistent with law, an approved tariff, rule, regulation, or an agreement between the customer and the electric utility; or the failure of a customer to take a required action that would have avoided the interruption, such as failing to notify the company of an increase in load when required to do so by a tariff or contract.

“Interruption duration” as used herein in regard to sustained outages means a period of time measured in one-minute increments that starts when an electric utility is notified or becomes aware of an interruption and ends when an electric utility restores electric service. Durations of less than five minutes shall not be reported in sustained outages. “Interruption, momentary” means single operation of an interrupting device that results in a voltage of zero. For example, two breaker or recloser operations equals two momentary interruptions. A momentary interruption is one in which power is restored automatically.

“Interruption, momentary event” means an interruption of electric service to one or more customers of duration limited to the period required to restore service by an interrupting device. Note: Such switching operations must be completed in a specified time not to exceed five minutes. This definition includes all reclosing operations that occur within five minutes of the first interruption. For example, if a recloser or breaker operates two, three, or four times and then holds, the event shall be considered one momentary event interruption.

“Interruption, scheduled” means an interruption of electric power that results when a transmission or distribution component is deliberately taken out of service at a selected time, usually for the purposes of construction, preventive maintenance, or repair. If it is possible to defer the interruption, the interruption is considered a scheduled interruption.

“Interruption, sustained” means any interruption not classified as a momentary event interruption. It is an interruption of electric service that is not automatically or instantaneously restored, with duration of greater than five minutes.

“Loss of service” means the loss of electrical power, a complete loss of voltage, to one or more customers. This does not include any of the power quality issues such as sags, swells, impulses, or harmonics. Also see definition of “interruption.”

“Major event” will be declared whenever extensive physical damage to transmission and distribution facilities has occurred within an 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.

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

“Metropolitan area” means any community, or group of contiguous communities, with a population of 20,000 individuals or more.

“Momentary average interruption frequency index (MAIFI)” means the average number of momentary electric service interruptions for each customer during the year. It is calculated by dividing the total number of customer momentary interruptions by the total number of customers served.

$$\text{MAIFI} = \frac{\text{Total Number of Customer Momentary Interruptions}}{\text{Total Number of Customers Served}}$$

Total Number of Customers Served

“Operating area” means a geographical area defined by the electric utility that is a distinct area for administration, operation, or data collection with respect to the facilities serving, or the service provided within, the geographical area.

“Outage” means the state of a component when it is not available to perform its intended function due to some event directly associated with that component. An outage may or may not cause an interruption of service to customers, depending on system configuration.

“Power quality” means the characteristics of electric power received by the customer, with the exception of sustained interruptions and momentary event interruptions. Characteristics of electric power that detract from its quality include waveform irregularities and voltage variations, either prolonged or transient. Power quality problems shall include, but are not limited to, disturbances such as high or low voltage, voltage spikes and transients, flickers and voltage sags, surges and short-time overvoltages, as well as harmonics and noise.

“System average interruption duration index (SAIDI)” means the average interruption duration per customer served during the year. It is calculated by dividing the sum of the customer interruption durations by the total number of customers served during the year.

$$\text{SAIDI} = \frac{\text{Sum of All Customer Interruption Durations}}{\text{Total Number of Customers Served}}$$

“System average interruption frequency index (SAIFI)” means the average number of interruptions per customer during the year. It is calculated by dividing the total annual number of customer interruptions by the total number of customers served during the year.

$$\text{SAIFI} = \frac{\text{Total Number of Customer Interruptions}}{\text{Total Number of Customers Served}}$$

“Total number of customers served” means the total number of customers served on the last day of the reporting period.

27.11(5) Record-keeping requirements.

a. Record keeping requirements.

(1) Each electric utility, other than those providing only wholesale electric service, shall record and maintain sufficient records and reports that will enable it to calculate for the most recent seven-year period the average annual hours of interruption per customer due to causes in each of the following four major categories: power supplier, major storm, scheduled, and all other. Those electric utilities that provide only wholesale electric service shall provide their wholesale customers with the information necessary to allow those customers to ascertain the cause of power supply-related outages.

The category “scheduled” refers to interruptions resulting when a distribution transformer, line, or owned substation is deliberately taken out of service at a selected time for maintenance or other reasons.

The interruptions resulting from either scheduled or unscheduled outages on lines or substations owned by the power supplier are to be accounted for in the “power supplier” category.

The category “major storm” represents service interruptions from conditions that cause many concurrent outages because of snow, ice, or wind loads that exceed design assumptions for the lines.

The “all other” category includes outages primarily resulting from emergency conditions due to equipment breakdown, malfunction, or human error.

(2) When recording interruptions, each electric utility, other than those providing only wholesale electric service, shall use detailed standard codes for interruption analysis recommended by the United States Department of Agriculture, Rural Utilities Service (RUS) Bulletin 1730A-119, Tables 1 and 2, including the major cause categories of equipment or installation, age or deterioration, weather, birds or animals, member (or public), and unknown. The utility shall also include the subcategories recommended by RUS for each of these major cause categories.

(3) Each electric utility, other than those providing only wholesale electric service, shall also maintain and record data sufficient to enable it to compute systemwide calculated indices for SAIFI, SAIDI, MAIFI, and CAIDI measurements, once with the data associated with “major storms” and once without.

b. Each electric utility shall make its records of customer interruptions and reliability index statistics available to the board upon request.

27.11(6) Notification of major events. Notification of major events as defined in subrule [20.18\(4\)](#) shall comply with the requirements of rule [199—20.19](#)(476,478).

199—27.12(476,478) Notification of outages.

27.12(1) Notification. The notification requirements in subrules 20.19(1) and 20.19(2) are for the timely collection of electric outage information that may be useful to emergency management agencies in providing for the welfare of individual Iowa citizens. Each 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. For all utilities, loss of service for more than six hours to substantially all of a municipality, including the surrounding area served by the same utility. A utility may use loss of service to 75 percent or more of customers within a municipality, including the surrounding area served by the utility, to meet this criterion;

b. For utilities with 50,000 or more customers, loss of service for more than six hours to 20 percent of the customers in a utility’s established zone or loss of service to more than 5,000 customers in a metropolitan area, whichever is less;

c. For utilities with more than 4,000 customers and fewer than 50,000 customers, loss of service for more than six hours to 25 percent or more of the utility’s customers;

d. A major event as defined in subrule 20.18(4); or

e. Any other outage considered significant by the electric utility. This includes loss of service for more than six hours to significant public health and safety facilities known to the utility at the time of the notification, even when the outage does not meet the criteria in paragraphs 20.19(1)“a” through “d.”

27.12(2) Information required.

a. Notification shall be provided regarding outages that meet the requirements of subrule 20.19(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 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 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 utility shall notify the board once service is fully restored to all customers after an outage meeting the requirements of subrule 20.19(1).

199—27.13(476) Electric vehicle charging service.

27.13(1) *Electric energy sold for the purpose of electric vehicle charging at a commercial or public electric vehicle charging station constitutes neither the furnishing of electricity to the public nor the resale of electric service.* If the electricity used for electric vehicle charging is obtained from a rate-regulated public utility, the terms and conditions of the service to the electric vehicle charging station shall be governed by and subject to the utility's filed tariff. A rate-regulated public utility shall not, through its filed tariff, prohibit electric vehicle charging or restrict the method of sale of electric vehicle charging at a commercial or public electric vehicle charging station.

27.13(2) A person, partnership, business association, or corporation, foreign or domestic, furnishing electricity to a commercial or public electric vehicle charging station shall comply with Iowa Code section 476.25.

27.13(3) Electric utilities and entities providing commercial or public electric vehicle charging shall comply with all applicable statutes and regulations governing the provision of electric vehicle charging service, including, but not limited to, all taxing requirements, and shall, if necessary, file all appropriate tariffs.

199—27.14(476) Exterior flood lighting.

27.14(1) *Newly installed lighting.* All newly installed public utility-owned exterior flood lighting shall be solid-state lighting or lighting with equivalent or better energy efficiency.

27.14(2) *In-service lighting replacement schedule.* In-service lighting shall be replaced with solid-state or lighting with equivalent or better energy efficiency when worn out due to ballast, lamp, or fixture failure for any other reason, such as vandalism or storm damage.

27.14(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 has 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 476.62.

ATTACHMENT B
WORKSHOP AGENDA
CHAPTER 27 - REGULATION OF MUNICIPAL ELECTRIC UTILITIES AND
ELECTRIC COOPERATIVES

- I. Introduction of Participants**
- II. Explanation of Workshop Procedures**
- III. Review of draft Notice of Intended Action**
- IV. Items Identified for Discussion**
 - a. 27.2(476) Records, reports, and tariffs.
 - b. 27.2(3) Form and identification.
 - c. 27.2(4) Content of tariffs.
 - d. 27.2(5) Annual, periodic and other reports to be filed with the board.
 - e. 20.3(1) Disposition of electricity.
 - f. 27.3(3) Meter reading records.
 - g. 20.3(5) Meter register.
 - h. 20.3(6) Meter reading and billing interval.
 - i. 20.3(7) Demand meter registration.
 - j. 27.3(10) Certificate of authority.
 - k. 27.3(12) Prepayment meters.
 - l. 27.4(1) Customer information.
 - m. 27.4(2) Customer contact employee qualifications.
 - n. 27.4(9) Customer bill forms.
 - o. 27.4(11) Payment agreements.
 - p. 27.4(12) Bill payment terms
 - q. 27.4(13) Customer records.
 - r. 27.4(14) Adjustment of bills.
 - s. 27.4(15) Refusal or disconnection of service.

- t. 27.4(16) Insufficient reasons for denying service.
- u. 20.4(18) Estimated demand.
- v. 27.4(20) Customer complaints.
- w. 27.5(2) Standards incorporated by reference.
- x. 27.5(3) Adequacy of supply and reliability of service.
- y. 27.6(476) Metering.
- z. 27.7(476) Standards of quality of service.
- aa.27.8(476) Safety.
- bb.27.14(476) Flexible rates.
- cc. 27.18(476,478) Service reliability requirements for electric utilities.
- dd.27.19(476,478) Notification of outages.

V. Next Steps

VI. Close Meeting