199—20.3(476) General service requirements.

20.3(1) *Disposition of electricity.* The meter and associated instrument transformers shall be owned by the utility. The wiring between the instrument transformers and the meter shall be owned or controlled by the utility. The utility shall place a visible seal on all meters in customer use, such that the seal must be broken to gain entry.

a. All electricity sold by a utility shall be on the basis of meter measurement except:

(1) Where the consumption of electricity may be readily computed without metering; or

(2) For temporary service installations not otherwise metered.

b. The amount of all electricity delivered to multioccupancy premises within a single building, where units are separately rented or owned, shall be measured on the basis of individual meter measurement for each unit, except in the following instances:

(1) Where electricity is used in centralized heating, cooling, water-heating, or ventilation systems;

(2) Where a facility is designated for elderly or handicapped persons;

(3) Where submetering or resale of service was permitted prior to 1966;

(4) Where individual metering is impractical. "Impractical" means:

1. Conditions or structural barriers exist in the multioccupancy building that would make individual meters unsafe or physically impossible to install; or

2. The cost of providing individual metering exceeds the long-term benefits of individual metering; or

(5) Where the benefits of individual metering (reduced and controlled energy consumption) are more effectively accomplished through a master meter arrangement.

1. A new multioccupancy building qualifies for master metering under this subparagraph if the predicted annual energy use would result in at least a 30 percent energy savings compared to the predicted annual energy use of a new building meeting the requirements of the State of Iowa Energy Code and operating with equipment, fixtures, and appliances meeting federal energy standards for manufactured devices for a new building.

2. An existing multioccupancy building qualifies for master metering under this subparagraph when the predicted annual energy use would result in at least a 20 percent energy savings compared to the building's current annual energy usage levels.

3. Credits for on-site renewable energy generation shall not be taken into account when determining the predicted energy savings.

4. A report from a qualified, independent third party stating that the proposed building or renovation will meet the energy savings requirements of this subparagraph shall establish a rebuttable presumption of eligibility for master metering. "Qualified, independent third party" means a licensed architect or engineer, a certified residential energy services network home energy rating system (RESNET HERS) rater, or any other professional deemed qualified by the board.

If a multioccupancy building is master-metered, the end-user occupants may be charged for electricity as an unidentified portion of the rent, condominium fee, or similar payment, or, if some other method of allocating the cost of the electric service is used, the total charge for electric service shall not exceed the total electric bill charged by the utility for the same period.

c. Master metering to multiple buildings is prohibited, except for multiple buildings owned by the same person or entity. Multioccupancy premises within a multiple building complex may be master-metered pursuant to this paragraph only if the requirements of paragraph 20.3(1)*"b"* have been met.

d. For purposes of this subrule, a "master meter" means a single meter used in determining the amount of electricity provided to a multioccupancy building or multiple buildings.

e. This rule shall not be construed to prohibit any utility from requiring more extensive individual metering than otherwise required by this rule if pursuant to tariffs filed with and approved by the board.

f. All electricity consumed by the utility shall be on the basis of meter measurement except where consumption may be readily computed without metering, or where metering is impractical.

20.3(2) *Condition of meter.* Rescinded IAB 11/12/03, effective 12/17/03.

20.3(3) *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.

20.3(4) *Meter charts.* Rescinded IAB 12/5/18, effective 1/9/19.

20.3(5) *Meter register.* If it is necessary to apply a multiplier to the meter readings, the multiplier must be marked on the face of the meter register or stenciled in weather-resistant paint upon the front cover of the meter. Customers shall have continuous visual access to meter registers as a means of verifying the accuracy of bills presented to them and for implementing such energy conservation initiatives as they desire, except in the individual locations where the utility has experienced vandalism to windows in the protective enclosures. Where remote meter reading is used, whether outdoor on premises or off premises automated, the customer shall also have readable meter registers at the meter. A utility may comply with the requirements of this subrule by making the required information available via the Internet or other equivalent means.

Where a delayed processing means is used, the utility may comply by having readable kWh registers only, visually accessible.

In instances in which the utility has determined that readable access, to locations existing July 1, 1981, will create a safety hazard, the utility is exempted from the access provisions above.

In instances when a building owner has determined that unrestricted access to tenant metering installation would create a vandalism or safety hazard, the utility is exempted from the access provision above.

Continuing efforts should be made to eliminate or minimize the number of restricted locations. The utility should assist affected customers in obtaining meter register information.

20.3(6) *Meter reading and billing interval.* Readings of all meters used for determining charges and billings to customers shall be scheduled at least monthly and for the beginning and termination of service. Bills to larger customers may, for good cause, be provided weekly or daily for a period not to exceed one month. Intervals other than monthly shall not be applied to smaller customers, or to larger customers after the initial month provided above, without a waiver from the board. A waiver request must include sufficient information to comply with 199—1.3(17A,474,476). If the board denies a waiver, or if a waiver is not sought with respect to a high-demand customer after the initial month, that customer's meter shall be read monthly for the next 12 months. The group of larger customers to which shorter billing intervals may be applied shall be specified in the utility's tariff sheets, but shall not include residential customers.

An effort shall be made to obtain readings of the meters on corresponding days of each meter reading period. When the meter reading date causes a given billing period to deviate by more than 10 percent (counting only business days) from the normal meter reading period, such bills shall be prorated on a daily basis.

The utility may permit the customer to supply the meter readings by telephone, by electronic means, or on a form supplied by the utility. The utility may arrange for customer meter reading forms to be delivered to the utility by United States mail, electronically, or by hand delivery. The utility may arrange for the meter to be read by electronic means. Unless the utility has a plan to test check meter readings, a utility representative shall physically read the meter at least once each 12 months.

In the event that the utility leaves a meter reading form with the customer when access to meters cannot be gained and the form is not returned in time for the billing operation, an estimated bill may be provided.

If an actual meter reading cannot be obtained, the utility may provide an estimated bill without reading the meter or supplying a meter reading form to the customer. Only in unusual cases or when approval is obtained from the customer shall more than three consecutive estimated bills be provided.

20.3(7) *Demand meter registration.* When a demand meter is used for billing, the meter installation should be designed so that the highest expected annual demand reading to be used for billing will appear in the upper half of the meter's range.

20.3(8) *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.

20.3(9) *Petition for modification of service area and answers.* 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.

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.

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

All parties shall file an answer which complies with 199—subrule 7.5(1).

20.3(10) *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.

20.3(11) *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.

20.3(12) *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, except under tariffs approved by the board.

20.3(13) *Plant additions, electrical line extensions and service lines.*

a. Definitions. The following definitions shall apply to the terms used in this subrule:

"Advance for construction," as used in this subrule, means cash payments or equivalent surety made to the utility by an applicant for an extensive plant addition or an electrical line extension, portions of which may be refunded depending on the attachment of any subsequent service line made to the extensive plant addition or electrical line extension. Cash payments or equivalent surety shall include a grossed-up amount for the income tax effect of such revenue. The amount of tax shall be reduced by the present value of the tax benefits to be obtained by depreciating the property in determining tax liability.

"Agreed-upon attachment period," as used in this subrule, means a period of not less than 30 days nor more than one year mutually agreed upon by the utility and the applicant within which the customer will attach. If no time period is mutually agreed upon, the agreed-upon attachment period shall be deemed to be 30 days.

"Contribution in aid of construction," as used in this subrule, means a nonrefundable cash payment grossed-up for the income tax effect of such revenue covering the costs of a service line that are in excess of costs paid by the utility. The amount of tax shall be reduced by the present value of the tax benefits to be obtained by depreciating the property in determining the tax liability.

"Electrical line extensions" means distribution line extensions and secondary line extensions as defined in subrule 20.1(3), except for service lines as defined in this subrule.

"Equivalent overhead transformer cost," as used in this subrule, is that transformer capitalized cost, or fraction thereof, that would be required for similarly situated customers served by a pole-mounted or platform-mounted transformer(s). For each overhead service, it shall be the capitalized cost of the transformer(s) divided by the number of customers served by that transformer(s). For each underground service, it shall be the capitalized cost of an overhead transformer(s) with the same voltage and volt-ampere rating divided by the number of customers served by that transformer(s).

"Estimated annual revenues," as used in this subrule, shall be calculated based upon the following factors, including, but not limited to: The size of the facility to be used by the customer, the size and type of equipment to be used by the customer, the average annual amount of service required by the equipment, and the average number of hours per day and days per year the equipment will be in use.

"Estimated base revenues," as used in this subrule, shall be calculated by subtracting the fuel expense costs as described in the uniform system of accounts as adopted by the board and energy efficiency charges from the estimated annual revenues.

"Estimated construction costs," as used in this subrule, shall be calculated using average current costs in accordance with good engineering practices and upon the following factors: amount of service required or desired by the customer requesting the electrical line extension or service line; size, location, and characteristics of the electrical line extension or service line, including appurtenances, except equivalent overhead transformer cost; and whether the ground is frozen or whether other adverse conditions exist. In no event shall estimated construction costs include costs associated with facilities built for the convenience of the utility. The customer shall be charged actual permit fees in addition to estimated construction costs. Permit fees are to be paid regardless of whether the customer is required to pay an advance for construction or a nonrefundable contribution in aid of construction, and the cost of any permit fee is not refundable.

"Plant addition," as used in this subrule, means any additional plant required to be constructed to provide service to a customer other than an electrical line extension or service line.

"Point of attachment" is that point of first physical attachment of the utilities' service drop (overhead) or service lateral (underground) conductors to the customer's service entrance conductors. For overhead services it shall be the point of tap or splice to the service entrance conductors. For underground services it shall be the point of tap or splice to the service entrance conductors in a terminal box or meter or other enclosure with adequate space inside or outside the building wall. If there is no terminal box, meter, or other enclosure with adequate space, it shall be the point of entrance into the building.

"Service line," as used in this subrule, means any secondary line extension, as defined in subrule 20.1(3), on private property serving a single customer or point of attachment of electric service.

"Similarly situated customer," as used in this subrule, means a customer whose annual consumption or service requirements, as defined by estimated annual revenue, are approximately the same as the annual consumption or service requirements of other customers.

"Utility," as used in this subrule, means a rate-regulated utility.

b. Plant additions. The utility shall provide all electric plant at its cost and expense without requiring an advance for construction from customers or developers except in those unusual circumstances where extensive plant additions are required before the customer can be served. A written contract between the utility and the customer which requires an advance for construction by the customer to make plant additions shall be available for board inspection.

c. Electrical line extensions. Where the customer will attach to the electrical line extension within the agreed-upon attachment period after completion of the electrical line extension, the following shall apply:

(1) The utility shall finance and make the electrical line extension for a customer without requiring an advance for construction if the estimated construction costs to provide an electrical line extension are less than or equal to three times estimated base revenue calculated on the basis of similarly situated customers. The utility may use a feasibility model, rather than three times estimated base revenue, to determine what, if any, advance for construction is required by the customer. The utility shall file a summary explaining the inputs into the feasibility model and a description of the model as part of the utility's tariff. Whether or not the construction of the electrical line extension would otherwise require a payment from the customer, the utility shall charge the customer for actual permit fees, and the permit fees are not refundable.

(2) If the estimated construction cost to provide an electrical line extension is greater than three times estimated base revenue calculated on the basis of similarly situated customers, the applicant for the electrical line extension shall contract with the utility and make, no more than 30 days prior to commencement of construction, an advance for construction equal to the estimated construction cost less three times estimated base revenue to be produced by the customer. The utility may use a feasibility model to determine whether an advance for construction is required. The utility shall file a summary explaining the inputs into the feasibility model and a description of the model as part of the utility's tariff. A written contract between the utility and the customer shall be available for board inspection upon request. Whether or not the construction of the electrical line extension would otherwise require a payment from the customer, the utility shall charge the customer for actual permit fees, and the permit fees are not refundable.

(3) Where the customer will not attach within the agreed-upon attachment period after completion of the electrical line extension, the applicant for the electrical line extension shall contract with the utility and make, no more than 30 days prior to the commencement of construction, an advance for construction equal to the estimated construction cost. The utility may use a feasibility model to determine the amount of the advance for construction. The utility shall file a summary explaining the inputs into the feasibility model and a description of the model as part of the utility's tariff. A written contract between the utility and the customer shall be available for board inspection upon request. Whether or not the construction of the electrical line extension would otherwise require a payment from the customer, the utility shall charge the customer for actual permit fees, and the permit fees are not refundable.

(4) Advances for construction may be paid by cash or equivalent surety and shall be refundable for ten years. The customer has the option of providing an advance for construction by cash or equivalent surety unless the utility determines that the customer has failed to comply with the conditions of a surety in the past.

(5) Refunds. When the customer is required to make an advance for construction, the utility shall refund to the depositor for a period of ten years from the date of the original advance a pro-rata share for each service line attached to the electrical line extension. The pro-rata refund shall be computed in the following manner:

1. If the combined total of three times estimated base revenue, or the amount allowed by the feasibility model, for the electrical line extension and each service line attached to the electrical line

extension exceeds the total estimated construction cost to provide the electrical line extension, the entire amount of the advance for construction provided shall be refunded.

2. If the combined total of three times estimated base revenue, or the amount allowed by the feasibility model, for the electrical line extension and each service line attached to the electrical line extension is less than the total estimated construction cost to provide the electrical line extension, the amount to be refunded shall equal three times estimated base revenue, or the amount allowed by the feasibility model, when a service line is attached to the electrical line extension.

3. In no event shall the total amount to be refunded exceed the amount of the advance for construction. Any amounts subject to refund shall be paid by the utility without interest. At the expiration of the above-described ten-year period, the advance for construction record shall be closed and the remaining balance shall be credited to the respective plant account.

(6) The utility shall keep a record of each work order under which the electrical line extension was installed, to include the estimated revenues, the estimated construction costs, the amount of any payment received, and any refunds paid.

d. Service lines.

(1) The utility shall finance and construct either an overhead or underground service line without requiring a nonrefundable contribution in aid of construction or any payment by the applicant where the length of the overhead service line to the first point of attachment is up to 50 feet on private property or where the cost of the underground service line to the meter or service disconnect is less than or equal to the estimated cost of constructing an equivalent overhead service line of up to 50 feet.

(2) Where the length of the overhead service line exceeds 50 feet on private property, the applicant shall be required to provide a nonrefundable contribution in aid of construction for that portion of the service line on private property, exclusive of the point of attachment, within 30 days after completion. The nonrefundable contribution in aid of construction for that portion of the service line shall be computed as follows:

(Estimated Construction Costs) ×

$$\frac{\text{(Total Length in Excess of 50 Feet)}}{\text{(Total Length of Service Line)}}$$

(3) Where the cost of the underground service line exceeds the estimated cost of constructing an equivalent overhead service line of up to 50 feet, the applicant shall be required to provide a nonrefundable contribution in aid of construction within 30 days after completion equal to the difference between the estimated cost of constructing the underground service line and the estimated cost of constructing an equivalent overhead service line of up to 50 feet.

(4) A utility may adopt a tariff or rule that allows the utility to finance and construct a service line of more than 50 feet without requiring a nonrefundable contribution in aid of construction from the customer if the tariff or rule applies equally to all customers or members.

(5) Whether or not the construction of the service line would otherwise require a payment from the customer, the utility shall charge the customer for actual permit fees.

e. Extensions not required. Utilities shall not be required to make electrical line extensions or install service lines as described in this subrule, unless the electrical line extension or service line shall be of a permanent nature. When the utility provides a temporary service to a customer, the utility may require that the customer bear all the cost of installing and removing the service in excess of any salvage realized.

f. Different payment arrangement. This subrule shall not be construed as prohibiting any utility from making a contract with a customer using a different payment arrangement, if the contract provides a more favorable payment arrangement to the customer, so long as no discrimination is practiced among customers.

This rule is intended to implement Iowa Code section 476.8.

[**ARC 7584B**, IAB 2/25/09, effective 4/1/09; **ARC 9501B**, IAB 5/18/11, effective 6/22/11; **ARC 4171C**, IAB 12/5/18, effective 1/9/19]