

**199—20.9 (476) Electric energy sliding scale or automatic adjustment.** A rate-regulated utility's sliding scale or automatic adjustment of the unit charge for electric energy shall be an energy clause.

**20.9(1) Applicability.** A rate-regulated utility's sliding scale or automatic adjustment of electric utility energy rates shall recover from consumers only those costs which:

- Are incurred in supplying energy;
- Are beyond direct control of management;
- Are subject to sudden important change in level;
- Are an important factor in determining the total cost to serve; and
- Are readily, precisely, and continuously segregated in the accounts of the utility.

**20.9(2) Energy clause for rate-regulated utility.** Prior to each billing cycle, a rate-regulated utility shall determine and file for board approval the adjustment amount to be charged for each energy unit consumed under rates set by the board. The filing shall include all journal entries, invoices (except invoices for fuel, freight, and transportation), worksheets, and detailed supporting data used to determine the amount of the adjustment. The estimated amount of fossil fuel should be detailed to reflect the amount of fuel, transportation, and other costs.

The journal entries should reflect the following breakdown for each type of fuel: actual cost of fuel, transportation, and other costs. Items identified as other costs should be described and their inclusion as fuel costs should be justified. The utility shall also file detailed supporting data:

1. To show the actual amount of sales of energy by month for which an adjustment was utilized, and
2. To support the energy cost adjustment balance utilized in the monthly energy adjustment clause filings.
  - a. The energy adjustment shall provide for change of the price per kilowatt hour consumed under rates set by the board based upon the formulas provided below. The calculation shall be:

$$E_0 = \frac{EC_0 + EC_1}{EQ_0 + EQ_1} + \frac{A_1}{EJ_0 + EJ_1} - B$$

$E_0$  is the energy adjustment charge to be used in the next customer billing cycle rounded on a consistent basis to either the nearest 0.01¢/kWh or 0.001¢/kWh. For deliveries at voltages higher than secondary line voltages, appropriate factors should be applied to the adjustment charge to recognize the lower losses associated with these deliveries.

$EC_0$  is the estimated expense for energy in the month during which  $E_0$  will be used.

$EC_1$  is the estimated expense for energy in the month prior to the month of  $EC_0$ .

$EQ_0$  is the estimated electric energy to be consumed or delivered and entered in accounts 440, 442, 444-7, excluding energy from distinct interchange deliveries entered into account 447 and including intrautility energy service as included in accounts 448 and 929 of the Uniform System of Accounts during the month in which  $E_0$  will be used.

$EQ_1$  is the estimated electric energy to be consumed or delivered and entered in accounts 440, 442, 444-7, excluding energy from distinct interchange deliveries entered in account 447 and including intrautility energy service as included in accounts 448 and 929 of the Uniform System of Accounts during the month prior to  $EQ_0$ .

$EJ_0$  is the estimated electric energy to be consumed under rates set by the board in the month during which the energy adjustment charge ( $E_0$ ) will be used in bill calculations.

$EJ_1$  is the estimated electric energy to be consumed under rates set by the board in the month prior to the month of  $EJ_0$ .

$A_1$  is the beginning of the month energy cost adjustment account balance for the month of estimated consumption  $EJ_1$ . This would be the most recent month's balance available from actual accounting data.

B is the amount of the electric energy cost included in the base rates of a utility's rate schedules.

b. The estimated energy cost ( $EC_0 + EC_1$ ) shall be the estimated cost associated with  $EQ_0$  and  $EQ_1$  determined as the cost of:

(1) Fossil and nuclear fuel consumed in the utility's own plants and the utility's share of fossil and nuclear fuel consumed in jointly owned or leased plants. Fossil fuel shall include natural gas used for electric generation and the cost of fossil fuel transferred from account 151 to account 501 or 547 of the Uniform System of Accounts for Electric Utilities. Nuclear fuel shall be that shown in account 518 of the Uniform System of Accounts except that if account 518 contains any expense for fossil fuel which has already been included in the cost of fossil fuel, it shall be deducted from the account. (Paragraph C of account 518 includes the cost of other fuels used for ancillary steam facilities.)

(2) The cost of steam purchased, or transferred from another department of the utility or from others under a joint facility operating agreement, for use in prime movers producing electric energy (accounts 503 and 521).

(3) A deduction shall be made of the expenses of producing steam chargeable to others, to other utility departments under a joint operating agreement, or to other electric accounts outside the steam generation group of accounts (accounts 504 and 522).

(4) The cost of water used for hydraulic power generation. Water cost shall be limited to items of account 536 of the Uniform System of Accounts. For pumped storage projects the energy cost of pumping is included. Pumping energy cost shall be determined from the applicable costs of subparagraphs of paragraph 20.9(2) "b."

(5) The energy costs paid for energy purchased under arrangements or contracts for firm power, operational control energy, outage energy, participation power, peaking power, and economy energy, as entered into account 555 of the Uniform System of Accounts, less the energy revenues to be recovered from corresponding sales, as entered in account 447 of the Uniform System of Accounts.

(6) Purchases from AEP facilities under rule 199—15.11(476).

(7) The weighted average costs of inventoried allowances used in generating electricity.

(8) The gains and losses, as described in subrule 20.17(9), from allowance transactions occurring during the month. Allowance transactions shall include vintage trades and emission for emission trades.

(9) Eligible costs or credits associated with the utility's annual reconciliation of its alternate energy purchase program under 199—paragraph 15.17(4) "b."

c. The energy cost adjustment account balance (A) shall be the cumulative balance of any excess or deficiency which arises out of the difference between board recognized energy cost recovery and the amount recovered through application of energy charges to consumption under rates set by the board. Each monthly entry (D) into the energy cost adjustment account shall be the dollar amount determined from solution of the following equation (with proper adjustment for those deliveries at high voltage which for billing purposes recognized the lower losses associated with the high voltage deliveries).

$$D = \left[ C_2 \times \frac{J_2}{Q_2} \right] - \left[ J_2 \times (E_2 + B) \right]$$

$C_2$  is the actual expense for energy, calculated as set forth in 20.9(2) "b," in the month prior to  $EJ_1$  of 20.9(2) "a."

$J_2$  is the actual energy consumed in the prior month under rates set by the board and recorded in accounts 440, 442 and 444-6 of the Uniform System of Accounts.

$Q_2$  is the actual total energy consumed or delivered in the prior month and recorded in accounts 440, 442, 444-7, excluding energy from distinct interchange deliveries entered in account 447, and including intrautility energy service as included in accounts 448 and 929 of the Uniform System of Accounts.

$E_2$  is the energy adjustment charge used for billing in the prior month.

B is the amount of the electric energy cost included in the base rates of a utility's rate schedules.

*d.* Reserve account for nuclear generation. A rate-regulated utility owning nuclear generation or purchasing energy under a participation power agreement on nuclear generation may establish a reserve account. The reserve account will spread the higher cost of energy used to replace that normally received from nuclear sources. A surcharge would be added to each kilowatt hour from the nuclear source. The surcharges collected are credited to the reserve account. During an outage or reduced level of operation, replacement energy cost would be offset through debit to the reserve account. The debit would be based upon the cost differential between replacement energy cost and the average cost (including the surcharge) of energy from the nuclear capacity. A reserve account shall have credit and debit limitations equal in dollar amounts to the total cost differential for replacement energy during a normal refueling outage.

*e.* A rate-regulated utility desiring to collect expensed allowance costs and the gains and losses from allowance transactions through the energy adjustment must file with the board monthly reports including:

- (1) The number and weighted average unit cost of allowances used during the month to offset emissions from the utility's affected units;
- (2) The number and unit price of allowances purchased during the month;
- (3) The number and unit price of allowances sold during the month;
- (4) The weighted average unit cost of allowances remaining in inventory;
- (5) The dollar amount of any gain from an allowance sale occurring during the month;
- (6) The dollar amount of any loss from an allowance sale occurring during the month; and
- (7) Documentation of any gain or loss from an allowance sale occurring during the month.

*f.* A rate-regulated utility which proposes a new sliding scale or automatic adjustment clause of electric utility energy rates shall conform such clause with the rules.

**20.9(3)** *Optional energy clause for a rate-regulated utility which does not own generation.* A rate-regulated utility which does not own generation may adopt the energy adjustment clause of this subrule in lieu of that set forth in subrule 20.9(2). Prior to each billing cycle it shall determine and file for board approval the adjustment amount to be charged for each energy unit consumed under rates set by the board. The filing shall include all journal entries, invoices (except invoices for fuel, freight, and transportation), worksheets, and detailed supporting data used to determine the amount of the adjustment. The estimated amount of fossil fuel should be detailed to reflect the amount of fuel, transportation, and other costs.

The journal entries should reflect the following breakdown for each type of fuel: actual cost of fuel, transportation, and other costs. Items identified as other costs should be described and their inclusion as fuel costs should be justified. The utility shall also file detailed supporting data:

1. To show the actual amount of sales of energy by month for which an adjustment was utilized, and
  2. To support the energy cost adjustment balance utilized in the monthly energy adjustment clause filings.
- a.* The energy adjustment charge shall provide for change of the price per kilowatt-hour consumed to equal the average cost per kilowatt hour delivered by the utility's system. The calculation shall be:

$$E_0 = \frac{C_2 + C_3 + C_4}{Q_2 + Q_3 + Q_4} - B$$

$E_0$  is the energy adjustment charge to be used in the next customer billing cycle rounded on a consistent basis to either the nearest 0.01¢/kWh or 0.001¢/kWh. For deliveries at voltages higher than secondary line voltages, appropriate factors should be applied to the adjustment charge to recognize the lower losses associated with these deliveries.

$C_2$ ,  $C_3$  and  $C_4$  are the charges by the wholesale suppliers as recorded in account 555 offset by energy revenues from distinct interchange deliveries entered in account 447 of the Uniform System of Accounts for the first three of the four months prior to the month in which  $E_0$  will be used.

$Q_2$ ,  $Q_3$  and  $Q_4$  are the total electric energy delivered by the utility system, excluding energy from distinct interchange deliveries entered in account 447 during each of the months in which the expenses  $C_2$ ,  $C_3$  and  $C_4$  were incurred.

$B$  is the amount of the electric energy cost included in the base rates of a utility's rate schedules.

*b.* A utility purchasing its total electric energy requirements may establish an energy cost adjustment account for which the cumulative balance is the excess or deficiency arising from the difference between commission-recognized energy cost recovery and the amount recovered through application of energy charges on jurisdictional consumption.

For a utility electing to use an energy cost adjustment account the calculation shall be:

$$E_0 = \frac{C_2 + C_3 + C_4}{Q_2 + Q_3 + Q_4} + \frac{A_2}{J_2 + J_3 + J_4} - B$$

$E_0$  is the energy adjustment charge to be used in the next customer billing cycle rounded on a consistent basis to either the nearest 0.01¢/kWh or 0.001¢/kWh. For deliveries at voltages higher than secondary line voltages, appropriate factors should be applied to the adjustment charge to recognize the lower losses associated with these deliveries.

$C_2$ ,  $C_3$  and  $C_4$  are the charges by the wholesale suppliers as recorded in account 555 offset by energy revenues from distinct interchange deliveries entered in account 447 of the Uniform System of Accounts for the first three of the four months prior to the month in which  $E_0$  will be used.

$Q_2$ ,  $Q_3$  and  $Q_4$  are the total electric energy delivered by the utility system, excluding energy from distinct interchange deliveries entered in account 447 during each of the months in which the expenses  $C_2$ ,  $C_3$  and  $C_4$  were incurred.

$A_2$  is the end of the month energy cost adjustment account balance for the month of consumption  $J_2$ . This would be the most recent month's balance available from actual accounting data.

$J_2$ ,  $J_3$  and  $J_4$  are electric energy consumed under rates set by the board in the months corresponding to  $C_2$ ,  $C_3$  and  $C_4$ .

$B$  is the amount of the electric energy cost included in the base rates of a utility's rate schedules.

*c.* The end of the month energy cost adjustment account balance ( $A$ ) shall be the cumulative balance of any excess or deficiency which arises out of the difference between board recognized energy cost recovery and the amount recovered through application of energy charges to consumption under rates set by the board.

Each monthly entry ( $D$ ) into the energy cost adjustment account shall be the dollar amount determined from solution of the following equation (with proper adjustment for those deliveries at high voltage which for billing purposes recognized the lower losses associated with the high voltage deliveries).

$$D = \left[ C_2 \times \frac{J_2}{Q_2} \right] - \left[ J_2 \times (E_2 + B) \right]$$

$C_2$  is the prior month charges by the wholesale suppliers as recorded in account 555 of the Uniform System of Accounts offset by energy revenues from distinct interchange deliveries entered in account 447.

$J_2$  is the electric energy consumed under jurisdictional rates in the prior month.

$Q_2$  is the electric energy delivered by the utility system, excluding energy from distinct interchange deliveries entered in account 447 in the prior month.

$E_2$  is the energy adjustment charge used for billing in the prior month.

B is the amount of the electric energy cost included in the base rates of a utility's rate schedules.

*d.* A utility with special conditions may petition the board for a waiver which would recognize its unique circumstances.

*e.* A utility which does not own generation and proposes a new sliding scale or automatic adjustment clause of electric utility rates shall conform such clause with the rules.

**20.9(4)** *Annual review of energy clause.* On or before each May 1, the board will notify each utility as to the two months of the previous calendar year for which fuel, freight, and transportation invoices will be required. Two copies of these invoices shall be filed with the board no later than the subsequent November 1.

This rule is intended to implement Iowa Code section 476.6(11).