

THE EMPIRE DISTRICT ELECTRIC COMPANY

P.S.C. Mo. No. 5 Sec. 4 7th Revised Sheet No. 17

Canceling P.S.C. Mo. No. 5 Sec. 4 6th Revised Sheet No. 17

For ALL TERRITORY

FUEL ADJUSTMENT CLAUSE
SCHEDULE FAC
For service in Accumulation Periods prior to [EFFECTIVE DATE OF TARIFFS]; and for service in that portion of Accumulation Period 5 prior to [EFFECTIVE DATE OF TARIFFS].

The two six-month accumulation periods, the two six-month recovery periods and filing dates will be as follows:

<u>ACCUMULATION PERIOD</u>	<u>RECOVERY PERIOD</u>	<u>ACCUMULATION PERIOD</u>	<u>RECOVERY PERIOD</u>
SEPTEMBER	JUNE	MARCH	DECEMBER
OCTOBER	JULY	APRIL	JANUARY
NOVEMBER	AUGUST	MAY	FEBRUARY
DECEMBER	SEPTEMBER	JUNE	MARCH
JANUARY	OCTOBER	JULY	APRIL
FEBRUARY	NOVEMBER	AUGUST	MAY
	April 1 st		October 1 st

Filing date:

DEFINITIONS

ACCUMULATION PERIOD:

The six calendar months during which the actual costs subject to this rider will be accumulated for purposes of determining the Cost Adjustment Factor.

RECOVERY PERIOD:

The billing months during which Cost Adjustment Factor (CAF) is applied to retail customer billings on a per kilowatt-hour (kWh) basis.

COSTS:

Costs eligible for Fuel Adjustment Clause (FAC) will be the Company's total book costs as allocated to Missouri for fuel consumed in Company generating units, including the costs associated with the Company's fuel hedging program; purchased power energy charges, including applicable transmission fees; Southwest Power Pool variable costs, and emission allowance costs during the Accumulation Period. Eligible costs do not include the purchased power demand costs. These costs will be off-set by off-system sales margin and any emission allowance revenues collected in the Accumulation Period.

BASE COST:

Company generated energy and purchased energy cost per kWh at the generator, established by season in the most recent base rate case. The base cost per kWh for the summer months of June through September is \$0.03001. For all other months the base cost per kWh is \$0.02744.

DATE OF ISSUE _____
ISSUED BY Kelly S. Walters, Vice President, Joplin, MO

DATE EFFECTIVE _____

Appendix D

THE EMPIRE DISTRICT ELECTRIC COMPANY

P.S.C. Mo. No. 5 Sec. 4 7th Revised Sheet No. 17a

Canceling P.S.C. Mo. No. 5 Sec. 4 6th Revised Sheet No. 17a

For ALL TERRITORY

FUEL ADJUSTMENT CLAUSE
 SCHEDULE FAC
 For service in Accumulation Periods prior to [EFFECTIVE DATE OF TARIFFS]; and for service in that portion of Accumulation
 Period 5 prior to [EFFECTIVE DATE OF TARIFFS].

APPLICATION

FUEL ADJUSTMENT CLAUSE

The average price per kWh of electricity generated or purchased will be adjusted subject to application of the FAC, and approved by the Public Service Commission. The price will reflect 95 percent of the accumulation period costs either above or below base costs specified below for:

1. fuel consumed in Company electric generating plants,
2. purchased energy (excluding demand),
3. off-system sales margin,
4. net of emission allowance costs and revenues.

It will also include:

5. an adjustment for the prior recovery period sales variation.
6. Interest: Interest at a rate equal to the Company's short-term interest rate will be applied to the average monthly deferred electric energy costs and will be accumulated during the accumulation period. Deferred electric energy cost shall be determined monthly. The monthly deferred amount may be negative or positive during the accumulation period.

The formula and components are displayed below.

$$FAC = \{[(F + P + E - O - B) * J] * 0.95\} + C + I$$

Where:

F = Actual total net system input cost of fuel - FERC Accounts 501 & 547

P = Actual total net system input cost of purchased energy - FERC Account 555 (excluding purchase power demand charges)

E = Actual total system net emission allowance cost and revenues - FERC Accounts 509 & 254.103

O = Actual total system off-system sales margin

B = Base cost of fuel and purchased power energy calculated as follows:

- | | |
|---|---------------------------|
| 1. For the months of June through September | B = (NSI kWh * \$0.03001) |
| 2. For all other months | B = (NSI kWh * \$0.02744) |

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THE EMPIRE DISTRICT ELECTRIC COMPANY

P.S.C. Mo. No. 5 Sec. 4 7th Revised Sheet No. 17b

Canceling P.S.C. Mo. No. 5 Sec. 4 6th Revised Sheet No. 17b

For ALL TERRITORY

FUEL ADJUSTMENT CLAUSE
SCHEDULE FAC
For service in Accumulation Periods prior to [EFFECTIVE DATE OF TARIFFS]; and for service in that portion of Accumulation Period 5 prior to [EFFECTIVE DATE OF TARIFFS].

J = Missouri energy ratio calculated as follows:

$$\text{Missouri Energy Ratio} = \frac{\text{Missouri Retail kWh sales}}{\text{Total System kWh sales}}$$

Where Total System kWh Sales excludes off-system sales

C = True-up of Under/Over recovery of FAC balance from prior Recovery period as included in the deferred energy cost balancing account. This factor will reflect any modifications made due to prudence reviews

I = Interest

COST ADJUSTMENT FACTOR

The Cost Adjustment Factor ("CAF") is the result of dividing the FAC by estimated recovery period Missouri net system input (NSI) kWh, rounded to the nearest \$.00000. The CAF shall be adjusted to reflect the differences in line losses that occur at primary and above voltage and secondary voltage by multiplying the average cost at the generator by 1.0520 and 1.0728, respectively. Any CAF authorized by the Commission shall be billed based upon customers' energy usage on and after the authorized effective date of the CAF. The formula and components are displayed below.

$$\text{CAF} = \frac{\text{FAC}}{\text{S}}$$

Where:

S = Forecasted Missouri NSI kWh for the Recovery Period. Missouri NSI kWh is calculated as:

$$\text{Missouri NSI} = \text{Forecasted NSI} * \frac{\text{Forecasted Missouri Retail kWh sales}}{\text{Forecasted Total System kWh sales}}$$

Where Forecasted Total System kWh Sales excludes off-system sales

PRUDENCE REVIEW

There shall be a periodic review of fuel and energy costs subject to the FAC, and a comparison of the FAC revenue collected. In addition, the review shall determine if the costs subject to the FAC were prudently incurred by the Company. FAC cost and the FAC charges are subject to adjustment if found to be imprudent by the Commission. The normal true-up of over/under recovery of FAC cost occurs at the end of each Recovery period. Prudence reviews shall occur no less frequently than at eighteen (18) month intervals.

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THE EMPIRE DISTRICT ELECTRIC COMPANY

P.S.C. Mo. No. 5 Sec. 4 7th Revised Sheet No. 17c

Canceling P.S.C. Mo. No. 5 Sec. 4 6th Revised Sheet No. 17c

For ALL TERRITORY

FUEL ADJUSTMENT CLAUSE
SCHEDULE FAC
For Service in Accumulations Periods prior to [EFFECTIVE DATE OF TARIFFS]; and for service in that portions of Accumulation
Period 5 prior to [EFFECTIVE DATE OF TARIFFS].

ACCUMULATION PERIOD ENDING, Feb-28-2010

1.	Total energy cost (F + P + E - O)	\$79,431,215
2.	Base energy cost (B)	\$75,540,365
3.	Missouri Energy Ratio (J)	0.8303
4.	Fuel Cost Recovery [(F + P + E - O) - B] * J	\$3,139,134
5.	Adj for Over/Under recovery for the Recovery period ending 11-30-2009 (C)	\$338,622
6.	Interest (I)	\$2,142
7.	Fuel Adjustment Clause (FAC)	\$3,479,898
8.	Forecasted Missouri NSI for the Recovery Period (S)	2,289,022,607
9.	Cost Adjustment Factor (CAF) to be applied to bills beginning 06-01-2010	\$0.00152 / kWh
10.	CAF - Primary and above (Line 9 x Primary Expansion Factor)	\$0.00160 / kWh
11.	CAF - Secondary (Line 9 x Secondary Expansion Factor)	\$0.00163 / kWh

Primary Expansion Factor = 1.0520
Secondary Expansion Factor = 1.0728

THE EMPIRE DISTRICT ELECTRIC COMPANY

P.S.C. Mo. No. 5 Sec. 4 Original Sheet No. 17d

Canceling P.S.C. Mo. No. _____ Sec. _____ Sheet No. _____

For ALL TERRITORY

FUEL ADJUSTMENT CLAUSE
SCHEDULE FAC

For service in Accumulations Periods after [EFFECTIVE DATE OF TARIFFS]; and for service in that portion of Accumulation Period 5 on and after [EFFECTIVE DATE OF TARIFFS].

The two six-month accumulation periods, the two six-month recovery periods and filing dates will be as follows:

<u>ACCUMULATION PERIOD</u>	<u>RECOVERY PERIOD</u>	<u>ACCUMULATION PERIOD</u>	<u>RECOVERY PERIOD</u>
SEPTEMBER	JUNE	MARCH	DECEMBER
OCTOBER	JULY	APRIL	JANUARY
NOVEMBER	AUGUST	MAY	FEBRUARY
DECEMBER	SEPTEMBER	JUNE	MARCH
JANUARY	OCTOBER	JULY	APRIL
FEBRUARY	NOVEMBER	AUGUST	MAY
Filing date:	April 1 st		October 1 st

The Company will make a Cost Adjustment Factor ("CAF") filing by each Filing Date. The new CAF rates for which the filing is made will be applicable starting with the recovery period that begins following the Filing Date. All CAF filings shall be accompanied by detailed workpapers supporting the filing in an electronic format with all formulas intact.

DEFINITIONS

ACCUMULATION PERIOD:

The six calendar months during which the actual costs subject to this rider will be accumulated for purposes of determining the CAF.

RECOVERY PERIOD:

The billing months during which CAF is applied to retail customer billings on a per kilowatt-hour (kWh) basis.

COSTS:

Costs eligible for Fuel Adjustment Clause (FAC) will be the Company's total book costs as allocated to Missouri for fuel consumed in Company generating units, including the costs associated with the Company's fuel hedging program; purchased power energy charges, including applicable transmission fees; Southwest Power Pool variable costs, Air Quality Control System ("AQCS") consumables, such as anhydrous ammonia, limestone, and powder activated carbon, and emission allowance costs during the accumulation period. Eligible costs do not include the purchased power demand costs. These costs will be off-set by off-system sales revenue, any emission allowance revenues collected, and renewable energy credit revenues in the accumulation period.

BASE COST:

Company generated energy and purchased energy cost per kWh at the generator, established by season in the most recent base rate case. The base cost per kWh for the summer months of June through September is \$0.----. For all other months the base cost per kWh is \$0.----.

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THE EMPIRE DISTRICT ELECTRIC COMPANY

P.S.C. Mo. No. 5 Sec. 4 Original Sheet No. 17e

Canceling P.S.C. Mo. No. _____ Sec. _____ _____ Sheet No. _____

For ALL TERRITORY

FUEL ADJUSTMENT CLAUSE
 SCHEDULE FAC
 For service in Accumulations Periods after [EFFECTIVE DATE OF TARIFFS]; and for service in that portion of Accumulation Period 5 on and after [EFFECTIVE DATE OF TARIFFS].

APPLICATION

FUEL ADJUSTMENT CLAUSE

The average price per kWh of electricity generated or purchased will be adjusted subject to application of the FAC, and approved by the Public Service Commission. The price will reflect 95 percent of the accumulation period costs either above or below base costs specified below for:

1. Fuel and AQCS consumables consumed in Company electric generating plants;
2. Purchased energy (excluding demand);
3. Off-system sales revenue;
4. Emission allowance costs and revenues; and
5. Renewable energy credit revenues.

It will also include:

6. An adjustment for the prior recovery period's over/under recovery of FAC Costs;.
7. Interest at a rate equal to the Company's short-term interest rate will be applied to the average monthly deferred electric energy costs and will be accumulated during the accumulation period. Deferred electric energy cost shall be determined monthly. The monthly deferred amount may be negative or positive during the accumulation period.

The formula and components are displayed below.

$$FAC = \{(F + P + E - O - R - B) * J\} * 0.95 + C + I$$

Where:

F = Actual total cost of fuel - FERC Accounts 501 & 547, and AQCS consumables – FERC Account 506.2.

P = Actual total net system input cost of purchased energy - FERC Account 555 (excluding purchase power demand charges).

E = Actual total system net emission allowance cost and revenues - FERC Accounts 509 & 254.103.

O = Actual total system off-system sales revenue.

B = Base cost of fuel and purchased power energy calculated as follows:

1. For the months of June through September
2. For all other months

$$B = (NSI \text{ kWh} * \$0.-----)$$

$$B = (NSI \text{ kWh} * \$0.-----)$$

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THE EMPIRE DISTRICT ELECTRIC COMPANY

P.S.C. Mo. No. 5 Sec. 4 Original Sheet No. 17f

Canceling P.S.C. Mo. No. _____ Sec. _____ Sheet No. _____

For ALL TERRITORY

FUEL ADJUSTMENT CLAUSE
SCHEDULE FAC
For service in Accumulations Periods after [EFFECTIVE DATE OF TARIFFS]; and for service in that portion of Accumulation Period 5 on and after [EFFECTIVE DATE OF TARIFFS].

- R = Renewable energy credit revenues.
- J = Missouri energy ratio calculated as follows:

$$\text{Missouri energy ratio} = \frac{\text{Missouri retail kWh sales}}{\text{Total system kWh sales}}$$

Where Total system kWh sales excludes off-system sales.

- C = True-up of over/under recovery of FAC balance from prior recovery period as included in the deferred energy cost balancing account. This factor will reflect any modifications made due to prudence reviews.

- I = Interest.

COST ADJUSTMENT FACTOR

The CAF is the result of dividing the FAC by estimated recovery period Missouri net system input (NSI) kWh, rounded to the nearest \$.00000. The CAF shall be adjusted to reflect the differences in line losses that occur at primary and above voltage and secondary voltage by multiplying the average cost at the generator by 1.0502 and 1.0686, respectively. Any CAF authorized by the Commission shall be billed based upon customers' energy usage on and after the authorized effective date of the CAF. The formula and components are displayed below.

$$\text{CAF} = \frac{\text{FAC}}{\text{S}}$$

Where:

- S = Forecasted Missouri NSI kWh for the recovery period. Missouri NSI kWh is calculated as:

$$\text{Missouri NSI} = \text{Forecasted NSI} * \frac{\text{Forecasted Missouri retail kWh sales}}{\text{Forecasted total system kWh sales}}$$

Where Forecasted Total System kWh Sales excludes off-system sales

PRUDENCE REVIEW

There shall be a periodic review of fuel and energy costs subject to the FAC and a comparison of the FAC revenue collected. Prudence reviews shall occur no less frequently than at eighteen (18) month intervals.

TRUE-UP OF FAC

After completion of each recovery period, the Company will make a true-up filing in conjunction with an adjustment to its FAC on the first Filing Date that occurs after completion of each recovery period. The true-up adjustment shall be the difference between the revenues billed in the recovery period to the costs authorized for collection in the recovery period, i.e. the true-up adjustment. Any true-up adjustments or refunds shall be reflected in item C above and shall include interest calculated as provided for in item I above.

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THE EMPIRE DISTRICT ELECTRIC COMPANY

P.S.C. Mo. No. 5 Sec. 4 Original Sheet No. 17g

Canceling P.S.C. Mo. No. _____ Sec. _____ Sheet No. _____

For ALL TERRITORY

FUEL ADJUSTMENT CLAUSE
SCHEDULE FAC

For service in Accumulation Periods after [EFFECTIVE DATE OF TARIFFS]; and for service in that portion of Accumulation Period 5 on and after [EFFECTIVE DATE OF TARIFFS].

ACCUMULATION PERIOD ENDING, (Month, Day, Year)

- | | | |
|-----|---|-------------------|
| 1. | Total energy cost $[(F + P + E - O - R) - B] * J * 0.95$ | \$XX,XXX,XXX |
| 2. | Base energy cost (B) | \$XX,XXX,XXX |
| 3. | Missouri energy ratio (J) | X.XXXX |
| 4. | Fuel cost recovery $[(F + P + E - O - R) - B] * J * 0.95$ | \$XXX,XXX |
| 5. | Adj for over/under recovery for the recovery period ending 00-00-0000 (C) | \$X |
| 6. | Interest (I) | \$XX,XXX |
| 7. | Fuel Adjustment Clause (FAC) | \$XXX,XXX |
| 8. | Forecasted Missouri NSI for the recovery period (S) | X,XXX,XXX,XXX |
| 9. | Cost Adjustment Factor (CAF) to be applied to bills beginning 00-00-0000 | \$(X.XXXXX) / kWh |
| 10. | CAF - Primary and above (Line 9 x Primary Expansion Factor) | \$(X.XXXXX) / kWh |
| 11. | CAF - Secondary (Line 9 x Secondary Expansion Factor) | \$(X.XXXXX) / kWh |

Primary Expansion Factor = 1.0502
Secondary Expansion Factor = 1.0686

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