

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN INVESTIGATION OF HENDERSON-	)	
UNION RURAL ELECTRIC COOPERATIVE	)	CASE NO.
CORPORATION'S RATES FOR	)	9974
DISTRIBUTION ELECTRIC SERVICE	)	

ORDER

By Order entered August 10, 1987, in Case No. 9885, An Investigation of Big Rivers Electric Corporation's Rates for Wholesale Electric Service, the Commission granted Henderson-Union Rural Electric Corporation's ("Henderson-Union") wholesale power supplier increased rates to be effective September 1, 1987. The Commission hereby gives notice that it intends to increase Henderson-Union's existing rates as follows:

1. For all classifications of service, except service to Alcan Aluminum Corporation, the new rates will be those set forth in Exhibit G to Henderson-Union's Compliance Report filed on August 4, 1987, adjusted to eliminate the \$0.34 per KW demand surcharge;

2. For Alcan Aluminum Corporation the new rates will be those set forth in Appendix A to this Order.

Based on the September 1, 1987, effective date of Henderson-Union's increased wholesale power supply costs, the Commission finds good cause exists for Henderson Union's new rates to be effective on and after September 1, 1987.

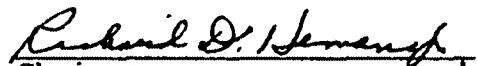
The Commission, on its own Motion, HEREBY ORDERS that a hearing be and it hereby is scheduled for August 20, 1987, at 9:00 a.m., Eastern Daylight Time, in the Commission's Offices, Frankfort, Kentucky.


The purpose of the hearing is to hear testimony and consider other evidence on the flow-through rates based on wholesale power cost increase from its supplier, Big Rivers Electric Corporation.

IT IS FURTHER ORDERED that Henderson-Union Rural Electric Cooperative Corporation shall give notice of the hearing in accordance with the provisions of 807 KAR 5:011, Section 8(5).

Done at Frankfort, Kentucky, this 10th day of August, 1987.

PUBLIC SERVICE COMMISSION

  
Chairman

  
Vice Chairman

  
Commissioner

ATTEST:

\_\_\_\_\_  
Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE PUBLIC SERVICE  
COMMISSION IN CASE NO. 9974 DATED AUGUST 10, 1987

Variable Aluminum Smelter Rate

**Section I. Availability**

This schedule is available to cooperatives for sales for resale to primary aluminum smelters within the service territory of Big Rivers Electric Corporation ("Big Rivers") and its member cooperatives. This schedule only covers purchases for primary aluminum reduction and associated administrative facilities. It does not cover purchases for later resale or use in fabrication.

**Section II. Terms of the Rate**

This rate schedule shall take effect on September 1, 1987 and shall terminate at midnight August 31, 1997. The rate schedule shall be subject to two reviews, commencing July 1, 1988 and July 1, 1990, as provided for in the August 10, 1987, Order in Case No. 9885, and such other reviews as may from time to time be established by the Public Service Commission. Upon termination of this rate schedule, the rates applicable to nonsmelter customers shall apply to the aluminum smelters.

### Section III. Rate

#### A. Initial Rate Charges Subject to Adjustments

The following rates shall apply to sales for resale to primary aluminum smelter customers that purchase power under the Variable Smelter Power Rate Schedule.

##### 1. Base Variable Aluminum Smelter Rate

###### a. Demand Charge

\$7.50 per kilowatt of contract demand.

###### b. Pivot Energy Charge

32.0 mills per kilowatt-hour of billing energy.

##### 2. Lower Rate Limit

18.1 mills per kilowatt-hour of billing energy.

##### 3. Upper Rate Limit

44.0 mills per kilowatt-hour of billing energy.

#### B. Initial Rate Parameters Subject to Adjustments

The following rate parameter shall be used in determining the power bills for customers purchasing power under the Variable Aluminum Smelter Power Rate Schedule.

##### Pivot Aluminum Price

62 cents per pound.

### Section IV. Formula

The Variable Aluminum Smelter Power Rate is a formula tied to the average monthly "MW U.S. Trans" price of aluminum as reported in Metals Week, for the month prior to the month charges are incurred ('monthly billing aluminum price'). Under this rate schedule, the monthly energy charge varies in response to changes in the monthly billing aluminum price.

**A. Demand Charge**

1. Each month the smelters purchasing under the Variable Aluminum Smelter Power Rate Schedule shall pay a Demand Charge, as stated in Section III.A.1.a. of this rate schedule, times the contracted capacity, pursuant to current contracts. For the amount of energy consumed in each month, the smelters shall pay the Energy Charge, as stated in Section IV.B. of this rate schedule, minus a Demand Charge Credit for each kilowatt-hour, computed as the Demand Charge rate converted to mills per kilowatt-hour at a 99% load factor.

**B. Energy Charge**

1. Pivot Point Charge

When the monthly billing aluminum price (described in Section VI. of this schedule) is equal to the Pivot Aluminum Price (as stated in Section III.B. of this rate schedule), the monthly energy charge shall be the Pivot Energy Charge as stated in Section III.A.1.b. of this rate schedule.

2. Reductions to Pivot Energy Charge

When the monthly billing aluminum price is less than the Pivot Aluminum Price, the monthly energy charge shall be the greater of:

a. The Pivot Energy Charge minus  $(P-MAP) \times LS$  where:

P = the Pivot Aluminum Price as stated in  
Section III.B. of this rate schedule.

MAP = the monthly billing aluminum price in  
cents per pound determined pursuant to  
Section VI. of this schedule.

LS = the lower slope or 0.8 mills per kilowatt-  
hour.

or

b. the Lower Rate Limit as stated in Section  
III.A.2. of this rate schedule.

3. Increases to Pivot Energy Charge

When the monthly billing aluminum price is greater  
than the Pivot Aluminum Price, the monthly energy  
charge shall be the lesser of:

a. The Pivot Energy Charge plus  $(MAP-P) \times US$  where:

P = the Upper Pivot Aluminum Price as stated  
in Section III.B. of this rate schedule.

MAP = the monthly billing aluminum price in  
cents per pound determined pursuant to  
Section VI.A.1. of this schedule.

US = the upper slope or 0.7 mills per kilowatt-  
hour.

or

b. the Upper Rate Limit, as stated in Section  
III.A.3. of this rate schedule.

## **Section V. Adjustments For Legislation or Regulatory Action**

Upon payment by Big Rivers for new, sudden expenditures required by legislation or regulatory action (e.g., acid rain, taxes), the Pivot Energy Charge and the Upper Rate Limit shall be adjusted to reflect these increased legislation or regulatory costs. The new Pivot Energy Charge and Upper Rate Limit shall supersede in every way the Pivot Energy Charge and Upper Rate Limit set out in Sections III.A.1.b. and III.A.3. of this schedule.

## **Section VI. Rate Parameters and Adjustments**

### **A. Monthly Average Aluminum Price Determination**

#### **1. Calculation of the Monthly Billing Aluminum Price**

The monthly billing aluminum price shall be determined monthly. For purposes of this rate schedule, the monthly billing aluminum price shall be the average U.S. Mid West Transactions Price reported for the previous month by Metals Week, in cents per pound.

#### **2. Changes in Aluminum Price Indicators**

In the event that Big Rivers Electric Corporation determines that factors outside its control have rendered Section VI.A.1. unusable as an approximation of the U.S. market price for aluminum, Big Rivers Electric Corporation shall develop and submit to the appropriate regulatory bodies a substitute indicator for determining the Monthly Billing Aluminum Price.

## Section VII. Fuel Adjustment Clause

The energy charge shall be increased or decreased by a fuel Adjustment factor as follows:

$$\frac{F}{S} - \$.01295$$

(1) The fuel clause shall provide for periodic adjustment per KWH of sales equal to the difference between the fuel costs per KWH sales in the base period and in the current period according to the following formula:

$$\text{Adjustment Factor} = \frac{F (m)}{S (m)} - \frac{F (b)}{S (b)}$$

Where F is the expense of fossil fuel in the base (b) and current (m) periods; and S is sales in the base (b) and current (m) periods, all defined below:

(2) FB/SB shall be so determined that on the effective date of the Commission's approval of the utility's application of the formula, the resultant adjustment will be equal to zero (0).

(3) Fuel costs (F) shall be the most recent actual monthly cost of:

- (a) Fossil 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, plus the cost of fuel which would have been used in plants suffering forced generation and/or transmission outages, but less the cost of fuel related to substitute generation, plus
- (b) The actual identifiable fossil and nuclear fuel costs associated with energy purchased for reasons



other than identified in paragraph (c) below, but excluding the cost of fuel related to purchases to substitute the forced outages, plus

- (c) The net energy cost of energy purchases, exclusive of capacity or demand charges (irrespective of the designation assigned to such transaction) when such energy is purchased on an economic dispatch basis. Included therein may be such costs as the charges for economy energy purchases and the charges as a result of scheduled outage, all such kinds of energy being purchased by the buyer to substitute for its own higher cost energy; and less
- (d) The cost of fossil fuel recovered through inter-system sales including the fuel costs related to economy energy sales and other energy sold on an economic dispatch basis.
- (e) All fuel costs shall be based on weighted average inventory costing.

(4) Forced outages are all nonscheduled losses of generation or transmission which require (purchase of) substitute power for a continuous period in excess of six (6) hours. Where forced outages are not as a result of faulty equipment, faulty manufacture, faulty design, faulty installations, faulty operation or faulty maintenance, but are Acts of God, riot, insurrection or acts of the public enemy, then the utility may, upon proper showing, with the approval of the Commission, include the fuel cost of substitute energy in the adjustment.

(5) Sales (S) shall be all KWHs sold, excluding inter-system sales. Where, for any reason, billed system sales cannot be coordinated with fuel costs for the billing period, sales may be equated to the sum of (i) generation, (ii) purchases, (iii) interchange in, less (iv) energy associated with pumped storage operations, less (v) inter-system sales referred to in subsection (3)(d) above, less (vi) total system losses. Utility-used energy shall not be excluded in the determination of sales (S).

(6) The cost of fossil fuel shall include no items other than the invoice price of fuel less any cash or other discounts. The invoice price of fuel includes the cost of the fuel itself and necessary charges for transportation of the fuel from the point of acquisition to the unloading point, as listed in Account 151 of FERC Uniform System of Accounts for Public Utilities and Licensees.

To facilitate the prompt mailing of bills, the fuel adjustment amount for any billing month shall be the product of the "Adjustment Factor" for the preceding month as defined above and the kilowatt-hours consumed by the Member in the preceding month.