

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN EXAMINATION BY THE PUBLIC )  
SERVICE COMMISSION OF THE )  
APPLICATION OF THE FUEL )  
ADJUSTMENT CLAUSE OF KENTUCKY ) CASE NO. 2002-00224  
UTILITIES COMPANY FROM )  
NOVEMBER 1, 2001 TO APRIL 30, 2002 )

O R D E R

Pursuant to Commission Regulation 807 KAR 5:056, the Commission on June 27, 2002 established this case to review and evaluate the operation of the fuel adjustment clause ( FAC ) of Kentucky Utilities Company ( KU ) for the 6 months ended April 30, 2002. Kentucky Industrial Utility Customers, Inc. ( KIUC ) was the sole intervenor in this proceeding. A public hearing was held on October 24, 2002.

The Commission previously established KU s base fuel cost at 12.59 mills per kWh.<sup>1</sup> A review of KU s monthly fuel clause filings shows that its actual fuel cost incurred for the 6-month review period ranged from a low of 13.29 mills in both January 2002 and February 2002 to a high of 14.66 mills in April 2002, with a 6-month average of 13.75 mills.

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<sup>1</sup> Case No. 2000-00497, An Examination By the Public Service Commission of the Application of the Fuel Adjustment Clause of Kentucky Utilities Company from November 1, 1998 to October 31, 2000, Order dated May 17, 2002.

## ISSUES

KIUC takes issue with the level of line loss-related fuel costs that KU assigns to off-system sales in calculating the fuel costs to charge native load customers. KU has, since 1999, assigned line losses of 1 percent (and related fuel costs) to incremental off-system sales per the results of an incremental line loss study performed by Paul Normand ( the Normand study ), a consultant specializing in load flow and line loss studies. KIUC was party to the FAC cases in which the Commission first required that KU use its wholesale jurisdictional line loss of 3 percent included in its Open Access Transmission Tariff ( OATT ), but later approved the use of a 1 percent loss factor based on the results of the Normand study. However, it now questions using the 1 percent loss factor in light of a recent line loss study for the Midwest Independent System Operator ( MISO ), which reflects an average loss factor for all transactions, firm and non-firm, for power leaving the Louisville Gas and Electric Company ( LG&E ) control area, of 2.22 percent.<sup>2</sup>

## DISCUSSION

KIUC argues that the results of the Normand and MISO studies are inconsistent and recommends that the Commission retain an independent outside consultant to perform a new line loss study. KIUC claims that the results of the two studies, plus the results of an EEI report, support a conclusion that losses increase exponentially as loads increase.<sup>3</sup> Since incremental sales increase the overall load on a system, KIUC

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<sup>2</sup> KU and its affiliate, LG&E, both members of MISO, make up the LG&E control area.

<sup>3</sup> Direct Testimony and Exhibits of Lane Kollen on Behalf of the Kentucky Industrial Utility Customers, Inc., pages 10-11.

reasons that incremental line losses must therefore be greater than average line losses, a claim which directly contradicts the results of the Normand incremental study.

KU provided rebuttal testimony addressing the purpose and results of the Normand incremental study and the MISO study. KU explained that KIUC's reliance on the EEI report was misplaced since the report identifies the loss characteristics of an individual transmission line in which power enters at one end and travels to the other end, as opposed to the characteristics of an integrated system with power entering at multiple points, with various interconnections, and with generation sites and generation levels impacting the level of line losses.

In its brief, KIUC cites Kentucky Power/AEP, which uses its OATT system average line loss factor to assign fuel costs to off-system sales in its FAC calculation. It argues that unless the MISO average loss factor is used for KU's off-system sales fuel cost calculation, the Commission will be treating the utilities under its jurisdiction inconsistently in applying the FAC regulation.

### ANALYSIS

Our review of the evidence supports the continued use of a 1 percent loss factor for KU's off-system sales. As pointed out by KU, the two line loss studies were performed for different purposes. The MISO study reflects average annual line losses for all transactions, both firm and non-firm, while the Normand study reflects incremental line losses on non-firm, incremental, off-system sales. However, both the MISO and Normand studies show higher line losses occurring in the winter when loads are less than in the summer, which contradicts KIUC's position that average losses must increase as loads increase. KU also pointed out that losses identified by MISO are

included as an increase in off-system sales volumes in its After-the-Fact-Billing system, to which the 1 percent loss factor is applied.

KU previously included a 3 percent loss factor in its OATT for firm long-term wholesale sales. Now the MISO loss factor for transactions within the LG&E control area is 2.22 percent. Although a line loss study has been performed for MISO, nothing has changed to impact the line loss allocation for KU's incremental, non-firm off-system sales since the 1 percent loss factor was first approved by the Commission.

As to how Kentucky Power/AEP calculates line losses for off-system sales, the Commission finds no merit to KIUC's claim of inconsistency. Prior to reviewing the Normand incremental study, we had required that KU use the average wholesale loss factor contained in its OATT, as Kentucky Power/AEP now does. The difference for the two utilities is that KU has had an incremental study performed while Kentucky Power/AEP has not. Without the Normand incremental study, KU's situation would mirror that of Kentucky Power/AEP. Hence, it is a given that, in the absence of an incremental line loss study, electric generating utilities will be expected to use an average wholesale loss factor to allocate fuel costs to off-system sales.

We can find no basis to reject the results of the Normand incremental line loss study and require that KU use the MISO loss factor to allocate fuel costs to its off-system sales. Furthermore, KIUC has not made a convincing argument for engaging an outside consultant to perform the line loss study it contends is needed to reconcile the differences in the results of the Normand incremental study and the MISO study.

## FINDINGS AND ORDERS

The Commission, having considered the evidence of record and being otherwise sufficiently advised, finds that:

1. There is no evidence of improper calculation or application of KU's FAC charges or improper fuel procurement practices for the period November 1, 2001 to April 30, 2002.
2. KU should continue to apply a 1 percent loss factor to allocate fuel costs to off-system sales in the determination of its Kentucky jurisdictional retail fuel costs.
3. In the absence of an acceptable incremental line loss study, electric generating utilities will be expected to use an average wholesale loss factor to allocate fuel costs to off-system sales.

IT IS THEREFORE ORDERED that the charges and credits billed by KU through its FAC for the period November 1, 2001 to April 30, 2002 are approved.

Done at Frankfort, Kentucky, this 25<sup>th</sup> day of March, 2003.

By the Commission

ATTEST:

  
Executive Director