## COMMONWEALTH OF KENTUCKY

## BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN EXAMINATION BY THE PUBLIC SERVICE COMMISSION	)
OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF	) CASE NO.
BIG RIVERS ELECTRIC CORPORATION AS BILLED FROM	) 96-327
OCTOBER 1, 1995 TO MARCH 31, 1996	)

## ORDER

IT IS ORDERED that Big Rivers Electric Corporation ("Big Rivers") shall file an original and 10 copies of the following information with this Commission, with a copy to all parties of record. Each copy of the data requested should be placed in a bound volume with each item tabbed. When a number of sheets are required for an item, each sheet should be appropriately indexed, for example, Item 1(a), Sheet 2 of 6. Include with each response the name of the witness who will be responsible for responding to questions relating to the information provided. Careful attention should be given to copied material to ensure that it is legible. The information requested herein is due no later than September 27, 1996.

1. Refer to the response to Item 1 of the Commission's July 12, 1996 Order, page 2 of 7. Big Rivers' determination of its total under-recovery and billing factor adjustment is based on eight months of surcharge activity. This review covers the surcharge billings from October 1, 1995 to March 31, 1996, and the corresponding expense months of August 1995 to January 1996. Information for February and March 1996 is required because of the difference between expense and billing months. Resubmit page 2 of 7, showing the total over- or under-recovery and appropriate billing factor adjustment based on the expense months of August 1995 through January 1996.

- 2. Refer to the response to Item 1 of the Commission's July 12, 1996 Order, page 3 of 7. On the October 1995 expense month ES Form 4.0, Big Rivers reported that the environmental surcharge revenues of \$424,187.62 equaled the sum of the August surcharge of \$345,264.78 and the September surcharge of \$78,922.84. At page 3 of 7, Big Rivers reports the environmental surcharge collected for these months as \$322,844.08 and \$101,343.54, respectively.
- a. Which amounts correctly reflect Big Rivers' surcharge collections for the expense months of August and September?
- b. Do the amounts reported on ES Form 4.0 as environmental surcharge revenues reflect actual collections? If no, do these amounts reflect a calculation of amounts to be billed?
  - 3. Provide Big Rivers' weighted average cost of debt as of:
    - a. January 31, 1996.
    - b. March 31, 1996.
    - c. September 27, 1996.
- 4. Refer to the response to Item 3(c) of the Commission's July 12, 1996 Order, Exhibit 4, page 8 of 8.
  - a. Why was an interest correction needed (Column i) on this schedule?
- b. Does Big Rivers agree that since its first surcharge filing was for the August 1995 expense month, ratepayers did not receive the originally planned July 1995 amortization? If no, explain why.
  - c. Prepare a revised Exhibit 4, page 8 of 8, reflecting the following:

- (1) The monthly accrual of the carrying charge on the unrefunded portion of the net proceeds from the 1993 allowance sale, from the date of the final Order in Case No. 94-032¹ through and including August 1996, the first surcharge expense month.
- (2) The amortization of sale proceeds and carrying charges corresponding to the 1995 vintage year over 5 months rather than 6.
  - 5. In its final Order in Case No. 94-032, the Commission stated:

Therefore, Big Rivers should accrue a carrying charge on the unrefunded portion of the \$22.9 million net proceeds from the date of this Order and until the full \$22.9 million has been amortized to Account No. 411.8. From the date of this Order until July 1995, the carrying charge should be a fixed rate equal to Big Rivers' weighted average cost of debt as of the Order date. From July 1995 until the \$22.9 million has been fully amortized to Account No. 411.8, the carrying charge should be the rate of return used in computing the surcharge. This carrying charge will be added to the balance of the \$22.9 million and returned to ratepayers in subsequent surcharge calculations.

The unamortized balance in Account No. 254 related to the 1993 allowance sale and the related monthly amortization should be treated as offsets in the calculation of the current period environmental costs. Big Rivers should reduce the current period environmental rate base by the *unamortized* 

Case No. 94-032, Application of Big Rivers Electric Corporation to Assess a Surcharge Under KRS 278.183 to Recover Costs of Compliance with Environmental Requirements of the Clean Air Act, final Order issued August 31, 1994.

balance of Account No. 254 to calculate the debt service component . . . . 2

- a. Does Big Rivers' treatment of the unamortized balance of Account No. 254 related to the 1993 sale of allowances in the calculation of the monthly debt service component comply with the Commission's Order? If yes, explain how.
- b. Why is Big Rivers' treatment of the unamortized balance of Account No. 254 related to the 1993 sale of emission allowances in the calculation of the monthly debt service component reasonable?
- 6. Refer to the response to Item 4(a) of the Commission's July 12, 1996 Order. Big Rivers indicated that during 1995 it returned to ratepayers \$188,480 in proceeds from three Environmental Protection Agency ("EPA") allowance auctions. However, Big Rivers actually received \$226,175 from these auctions. Why was no adjustment in the calculation of over- or under-recovery made to return the remaining auction proceeds to ratepayers?
- 7. Refer to the response to Item 5 of the Commission's July 12, 1996 Order. What efforts has Big Rivers made since 1994 to renegotiate its 1977 lime contract with Dravo Lime Company? What were the results of those efforts? If Big Rivers did not attempt to renegotiate the contract, explain why.
- 8. Refer to the response to Item 6 of the Commission's July 12, 1996 Order, page 3 of 3.
- a. Reconcile the reported and revised inventory balances. Describe the types of stock items removed from the reported amounts and explain why their removal was necessary.

<sup>&</sup>lt;sup>2</sup> <u>ld.</u> at 20-21 (emphasis added).

- b. How were materials and supplies inventory in excess of \$1.1 million routinely miscategorized as being environmental compliance items? What action has Big Rivers taken to prevent recurrence of this miscategorization?
- c. For every month except one, the reported inventory balance for the base period exceeded the reported inventory balances for the current expense months. However, for the revised inventory balances, each current expense month exceeds the base period amount. Explain why the results in the reported inventory balances did not also appear in the revised inventory balances.
  - 9. Refer to the response to Item 8 of the Commission's July 12, 1996 Order.
- a. During calendar year 1994, what was the SO<sub>2</sub>/MMBTU content of the coal burned at the Coleman Station? If the content was not constant, what range of values was experienced?
- b. For each month of calendar year 1995 and January 1996, state the percentage of the Coleman Station coal inventory which exceeded 2.60 lbs. SO<sub>2</sub>/MMBTU. The percentage should be determined as of the last day of the month.
- 10. On page 4 of 42 in its response to Item 8, Big Rivers states that the purpose of allowing bidders to offer coal with an SO<sub>2</sub> content up to 4.65 lbs. SO<sub>2</sub>/MMBTU with offsetting emission allowances was to lower fuel costs.
- a. For the expense months of August 1995 through January 1996, what were the total fuel cost savings at the Coleman Station resulting from this strategy?
- b. For the expense months of August 1995 through January 1996, what was the total expense reported for Account No. 509?

- c. For each expense month for the period August 1995 through January 1996, prepare a schedule showing the results of multiplying the emission allowance inventory balance by the monthly weighted average cost of debt used to determine the current period environmental revenue requirement.
- d. With the exception of allowances acquired through Coleman Station coal purchases, is Big Rivers emission allowance inventory composed entirely of allowances awarded by the EPA? If not, what additional allowances have been purchased by Big Rivers and what were the circumstances surrounding the purchase?
- e. When evaluating the cost effectiveness of this strategy, why did Big Rivers exclude the impact of purchased allowances?
- 11. As part of its filing in Case No. 94-032, Big Rivers included its "Clean Air Act Amendments of 1990 Compliance Plan Reassessment Report" (dated November 19, 1993). Identify the pages in this report which indicate:
- a. Big Rivers modeled the alternative of higher sulfur coal combined with emission allowances for the Coleman Station.
- b. Big Rivers determined that such a strategy was reasonable and costeffective.
- 12. Describe how Big Rivers allocated the coal contract purchases for the Coleman Station between fuel costs and emission allowance costs.
- 13. On page 8 of 42 in the response to Item 8, Big Rivers states that it uses the monthly Cantor Fitzgerald Environmental Brokerage Services market price index ("CF-MPI") to value allowances obtained through a coal purchase.

- a. Why doesn't Big Rivers require the coal bidders to quote the price of emission allowances separately from the coal price?
- b. Describe the background of Cantor Fitzgerald Environmental Brokerage Services. Indicate if this firm is affiliated with the coal industry.
- c. Why is information from the Chicago Board of Trade not used to value these allowance purchases?
- d. Refer to page 29 of 42 in the response to Item 8. The CF-MPI contains the following disclaimer:

All prices are merely indications of interest, do not represent firm bids and offers and their terms are subject to change without notice. The ability to effect transfer of allowances is subject to the final procedures governing the transfer of allowances within the Environmental Protection Agency's Allowance Tracking System.

Given the disclaimer, why is it reasonable to use the CF-MPI to value these allowance purchases?

- e. Identify the regulatory commissions which have recognized the CF-MPI as a reliable indicator of emission allowance prices and have approved the use of this index to determine the incremental cost of allowances associated with interchange power sales.
- 14. At page 12 of 42 in its response to Item 8, Big Rivers states that no impact on income tax needs to be considered relevant to allowance utilization. Describe the differences between the income tax treatment and the book accounting treatment prescribed for allowances.

- 15. Refer to the responses to Items 15(a) and 15(b) of the Commission's July 12, 1996 Order.
  - a. Provide the requested information.
- b. Why were these costs originally included in the surcharge calculations?
- 16. Refer to the response to Item 15(c) of the Commission's July 12, 1996 Order.
- a. Provide a copy of the final cumulative invoice for the Commission's consultant.
- b. Explain why, in light of KRS 278.183(4), Big Rivers did not include an adjustment for these fees when it determined its over- or under-recovery for the review period.
- 17. Refer to the response to Item 22 of the Commission's July 12, 1996 Order. For each capital investment listed below, state whether the upgrade or modification was exclusively related to environmental compliance. If the investment was also used in other operations, explain how Big Rivers allocated the investment costs.
  - a. A-1, C-3 Burner Management System Coleman.
  - b. A-2, Umbilical Stack Sampling Coleman.
  - c. A-7, IUCS Building Sump Pump & Piping Green.
  - d. A-9, Umbilical Line HMP&L 2.
  - e. A-13, Pipe, Thickener Overflow, G-1 Green.
  - f. A-14, Pipe, Support, Thickener Overflow, G-2 Green.
  - g. A-15, TEMS Umbilical Stack Sampling Green.

- h. A-16, TEMS Umbilical Stack Sampling Reid.
- i. A-19, Piping, from Thickener to CSA Wilson.
- j. A-21, Precipitator Controls Wilson.
- k. A-22, Software for Wilson CEM Data Acquisition Wilson.
- A-23, Umbilical Line for Stack Testing HMP&L 2.
- 18. Refer to the response to Item 22 of the Commission's July 12, 1996 Order. Big Rivers has indicated that several of the capital investments listed were replacements of existing plant. For each capital investment listed below, state whether the replacement was exclusively related to environmental compliance? If the investment was also used in other operations, explain how Big Rivers allocated the investment costs.
  - a. A-4, Ash Sluice Pump Discharge Valve, Plug, Tufline Green.
  - b. A-24, HMP&L Ash Sluice Pump "B" HMP&L 2.
  - c. D-1, Valve, 6 inch, Fly Ash, Hydrovactor Inlet HMP&L-Reid-Green.
- 19. Capital investment A-10 involved the purchase of tools for scrubber employees.
- a. What is the nature of these tools (i.e. general purpose or specialized for scrubber operations)?
- b. If these are general purpose tools, did Big Rivers change the investment cost to environmental compliance in total? Why?
- 20. The description for capital investment A-11 indicates that the equipment is used at the Henderson Station scrubber and the balance of the plant. Was the cost of this investment charged totally to environmental compliance? Why?

## 21. KRS 278.183(1) states in part:

[A] utility shall be entitled to the current recovery of its costs of complying with the Federal Clean Air Act as amended and those federal, state, or local environmental requirements which apply to coal combustion wastes and by-products from facilities utilized for production of energy from coal in accordance with the utility's compliance plan as designated in subsection (2) of this section. (emphasis added)

Capital investment A-20 is a pond, landfill runoff, with dike at the Wilson Station. Big Rivers' approved compliance plan did not include the construction of these facilities. Explain why, in view of KRS 278.183(1), this investment should be included in the environmental surcharge.

Done at Frankfort, Kentucky, this 6th day of September, 1996.

**PUBLIC SERVICE COMMISSION** 

For the Commission

ATTEST:

**Executive Director**