

Exhibit No.:
Issues: Fuel and Purchased Power
Witness: David W. Elliott
Sponsoring Party: MO PSC Staff
Type of Exhibit: Surrebuttal Testimony
Case No.: HR-2009-0092
Date Testimony Prepared: April 9, 2009

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY OPERATIONS DIVISION

SURREBUTTAL TESTIMONY

OF

DAVID W. ELLIOTT

KCP&L GREATER MISSOURI OPERATIONS COMPANY

CASE NO. HR-2009-0092

**Jefferson City, Missouri
April 2009**

****Denotes Highly Confidential Information****

NP

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of the Application of)
KCP&L Greater Missouri Operations)
Company for Approval to Make Certain)
Changes in its Charges for Steam Heating)
Service)

Case No. HR-2009-0092

AFFIDAVIT OF DAVID W. ELLIOTT

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

David W. Elliott, of lawful age, on his oath states: that he has participated in the preparation of the following Surrebuttal Testimony in question and answer form, consisting of 7 pages of Surrebuttal Testimony to be presented in the above case, that the answers in the following Surrebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.

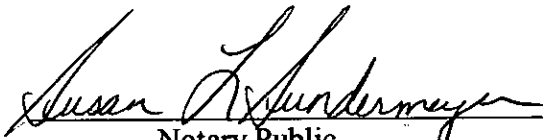


David W. Elliott

Subscribed and sworn to before me this 9th day of April, 2009.



SUSAN L. SUNDERMEYER
My Commission Expires
September 21, 2010
Callaway County
Commission #06942086



Notary Public

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DAVID W. ELLIOTT

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Q. Please state your name and business address.

A. David W. Elliott, 200 Madison Street, Jefferson City, Missouri 65102.

Q. Are you the same David W. Elliott employed by the Missouri Public Service Commission (Commission) that contributed to Staff's Cost of Service Report filed on February 13, 2009 in this case?

A. Yes.

Q. What is the purpose of your surrebuttal testimony?

A. The purpose of my surrebuttal testimony is to identify a change in the Staff production cost model results due to a software issue, and to address the criticism by KCP&L Greater Missouri Operations Company (GMO or Company) witness Timothy M. Nelson of Staff production cost model results.

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Lake Road Plant Fuel Allocation

Q. Why is the fuel used to fire six boilers at the Lake Road Plant allocated between the electric and steam operations of GMO?

A. The six boilers produce steam used to generate electricity and to supply steam directly to customers. The fuel used by the boilers must be allocated between the generation of electricity and the supply of steam to customers because the steam

1 produced by the boilers is not physically designated to either generate electricity or
2 supply steam to customers.

3 Q How does Staff allocate the fuel used by these six boilers between the
4 generation of electricity and the supply of steam to customers?

5 A. The fuel is allocated by determining the percentage of the steam from the
6 boilers that is used to generate electricity and the percentage that is used to supply steam
7 directly to customers, and applying these percentages to the total amount of fuel used by
8 the boilers.

9 Q. How is coal fuel allocated at the Lake Road Plant?

10 A. The percentages of steam that is used to generate electricity and the
11 percentage used for supplying steam to customers is applied to the amount of coal fuel
12 burned by the only boiler that can burn coal, Lake Road Boiler No 5, to obtain the
13 amount of coal used by each.

14 Q. Does the amount of MWhrs generated by Lake Road Units 1, 2, and 3
15 which use steam from the boilers affect the amount of coal allocated to supplying steam
16 to customers?

17 A. Yes. For example, if on a particular day there was no electricity generated
18 by Lake Road Units 1, 2, or 3, then all the coal burned to produce steam that day would
19 be used to supply steam directly to the customers and, therefore, be allocated to the steam
20 customers. The more electricity generated on Lake Road 1, 2, or 3 the less coal is
21 allocated to steam customers.

22 **Staff Production Cost Model Result Change**

23 Q. Has the Staff production cost model result changed?

1 A. Yes. The revised result for the steam case is \$11,023,445.

2 Q. Why has the Staff production cost model result been revised for the steam
3 case?

4 A. Staff was informed on April 2, 2009 by The Emelar Group, owner of the
5 Realtime® software production cost model Staff and GMO are using, that the version of
6 Realtime® Staff used had an error in it. Upon learning of the problem with this version,
7 the Staff used an earlier version of Realtime® to obtain revised production cost model
8 results.

9 Q. Did this change to an older version of Realtime® impact the amount of
10 electricity generated by Lake Road Units 1, 2, and 3?

11 A. Yes. The net generation of Lake Road Units 1, 2 and 3 is now
12 ** _____ ** MWhrs.

13 **Company Witness Nelson's Criticisms**

14 Q. What are Company witness Nelson's criticisms of Staff's production cost
15 model results?

16 A. His criticisms are:

17 a) Staff's production cost model results for Lake Road Units 1, 2, and 3
18 electricity generation is too low compared to the test year actual generation; and

19 b) Staff's production cost model results for allocation of coal fuel to
20 steam sales is higher than the coal standard in the Quarterly Cost Adjustment Rider of the
21 steam tariff.

Surrebuttal Testimony of
David W. Elliott

1 Q. Please discuss the Company's criticism that the results of Staff's
2 production cost model results for electricity generation are too low and should match test
3 year generation.

4 A. Company witness Nelson states;

5 Staff's total net generation for Lake Road Units 1, 2, and 3 is too low
6 compared with the test year. This results in an under allocation of coal
7 mmBtu to the electric division and overstates the coal mmBtu available to
8 the steam division. (Nelson rebuttal page 1, lines 16 through 18)
9

10 Q. Do the Company and the Staff use the same production cost model?

11 A. Yes. We both use Realtime®.

12 Q. Did you run the Staff's production cost model with the Company's
13 production cost model inputs used for its direct filing to determine if there was any
14 difference in the results?

15 A. Yes. The difference in total cost between the Company's estimate and
16 Staff's estimate was only 0.0022% for the electric run and only 0.0017% for the steam
17 run.

18 Q. Did Staff's production model run with the Company's inputs produce the
19 same amount of MWhrs for Lake Road Units 1, 2, and 3, as well as the same amount of
20 coal mmBTUs allocated to the steam customers in comparison to GMO's results?

21 A. Yes. Staff's run with the company's inputs produced the same MWhrs for
22 Lake Road Units 1, 2, and 3, and slightly less mmBTU of coal allocated to steam sales
23 (0.032%).

24 Q. Did Staff reconfirm these minor differences between the Staff's and
25 Company's model results after Staff used an earlier Realtime® model version?

26 A. Yes. The differences are less than 1%.

Surrebuttal Testimony of
David W. Elliott

1 Q. Was this your starting point in Staff's analysis of the production costs?

2 A. No. On November 11, 2008, I received a revised steam fuel allocation
3 spreadsheet from the Company. This is the spreadsheet Staff and the Company used to
4 allocate the coal and gas fuel between the Lake Road Units 1, 2, and 3 electricity
5 generated and steam supplied to customers.

6 Q. Did this allocation spreadsheet result in a different amount of coal
7 mmBTUs allocated to supply steam to customers?

8 A. Yes. It increased the amount of coal allocated by 1.5%.

9 Q. Have you reviewed the historical amount of electricity generated by Lake
10 Road Units 1, 2, and 3?

11 A. Yes, I reviewed the data provided by the Company to the Staff on a
12 monthly basis under 4 CSR 240-3.190(1)(E). The net generation in the test year was
13 ** _____ ** MWhrs, and the average net generation of Lake Road Units 1, 2, and 3 for
14 the period of 2005 through 2008 was ** _____ ** MWhrs.

15 Q. What was the result of Staff's production cost model for electricity
16 generation by Lake Road Units 1, 2, and 3?

17 A. The results of Staff's production cost model showed Lake Road Units 1, 2,
18 and 3 generating ** _____ ** MWhrs.

19 Q. Were there any changes made by Staff to specifically increase or decrease
20 the amount of electricity generated by Lake Road Units 1, 2 or 3?

21 A. No.

22 Q. Does Staff believe that the results of the production cost model should
23 match the electricity generated by Lake Road Units 1, 2, 3 during the test year?

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Surrebuttal Testimony of
David W. Elliott

1 A. Staff does not believe that the amount of electricity generated by Lake
2 Road Units 1, 2, and 3 during the test year is a target to match with the results of the
3 model. The model is developed with normalized hourly loads, normalized maintenance
4 outage schedules, normalized forced outage rates, and representative fuel prices. This is
5 done to prevent abnormal conditions in a test year from skewing the results of the model.
6 Staff enters representative data and reviews the output for reasonableness. Staff does not
7 make adjustments to match the electricity generated in the test year. Therefore, the
8 model results will often differ from the test year data because the model loads are
9 normalized, the maintenance outages are averaged, and the forced outage rates are
10 averaged.

11 However, Staff does compare the results of its model to the actual amount of
12 electricity generated as a check for reasonableness. Staff's revised model results were
13 close to the average net generation of Lake Road Units 1, 2, and 3 for 2005 through 2008.

14 Q. Please discuss the Company's criticism that Staff's production model
15 results produce a higher allocation of coal to steam sales than the amount in the coal
16 standard in the Quarterly Cost Adjustment Rider (QCA) to the steam tariff.

17 A. Company witness Nelson states;

18 In Staff's model 2,312,765 mmBTU of coal are allocated to steam sales.
19 This is even higher than the coal standard which has been demonstrated to
20 be too high. (Nelson rebuttal page 3, lines 13 and 14)

21 Q. Do you believe that the coal standard of the QCA is a reasonable
22 benchmark for the production cost model in setting rates for the electrical customers and
23 steam customers?
24

Surrebuttal Testimony of
David W. Elliott

1 A. I do not believe that the production cost model used to set rates in a rate
2 case should be modified to match the negotiated benchmark number in the QCA. The
3 total amount of coal allocated to steam sales is affected by the amount of electricity
4 generated by Lake Road Units 1, 2, and 3. Company witness Nelson does not state that
5 Staff's total amount of coal fuel burned is incorrect, or that any of Lake Road Plant
6 operating conditions or restraints modeled by Staff are incorrect. He only asserts that the
7 allocation of the amount of coal fuel used to supply steam to customers is incorrect
8 because it does not match the coal standard of the QCA.

9 Q. Why do you believe Staff's model result is reasonable?

10 A. Because Staff uses the production cost model to estimate an economic
11 dispatch of the generating units and the boilers, and not to match a target.

12 Q. Does this conclude your surrebuttal testimony?

13 A. Yes, it does.