

Exhibit No. 7
Issue: Asbury SCR In-Service
Heat Rate Testing Procedures
Witness: Blake A. Mertens
Type of Exhibit: Surrebuttal Testimony
Sponsoring Party: Empire District Electric
Case No. ER-2008-0093
Date Testimony Prepared: April 2008

**Before the Public Service Commission
of the State of Missouri**

Surrebuttal Testimony

of

Blake A. Mertens

April 2008

Empire Exhibit No. 7
Case No(s). ER-2008-0093
Date 5-12-08 Rptr KF

SURREBUTTAL TESTIMONY
OF
BLAKE A. MERTENS
THE EMPIRE DISTRICT ELECTRIC COMPANY
BEFORE THE
MISSOURI PUBLIC SERVICE COMMISSION
CASE NO. ER-2008-0093

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. Blake A. Mertens. My business address is 602 Joplin Street, Joplin, Missouri.

3 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

4 A. The Empire District Electric Company ("Empire" or "Company"), as Manager of Strategic
5 Projects.

6 **Q. ARE YOU THE SAME BLAKE A. MERTENS WHO PREVIOUSLY FILED**
7 **DIRECT AND REBUTTAL TESTIMONY IN THIS CASE ON BEHALF OF THE**
8 **COMPANY?**

9 A. Yes.

10 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY IN THIS**
11 **CASE BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION**
12 **("COMMISSION")?**

13 A. In this testimony I will respond to the rebuttal testimonies of Staff witnesses Mark L.
14 Oligschlaeger, Lena M. Mantle, and Michael E. Taylor. Specifically, I will address Staff's
15 position to NOT include the Asbury Selective Catalytic Reduction ("SCR") project in its
16 revenue requirement calculation. Also in response to Staff rebuttal testimony I will address

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1 the current status of the drafting of heat rate testing procedures for Empire's generating
2 units in order to comply with Commission Rule 4 CSR 240-3.161(2)(P).

3 **Asbury SCR In-Service**

4 **Q. PLEASE DESCRIBE THE ASBURY SCR PROJECT.**

5 A. As explained in my direct and rebuttal testimonies, to help meet Clean Air Interstate Rule
6 ("CAIR") NOx requirements, Empire constructed a SCR at its Asbury Power Station. The
7 SCR was tied into the existing unit during our scheduled 2007 major outage. Our current
8 cost estimate for the SCR at Asbury is \$31 million (excluding AFUDC). This project was
9 also contemplated as part of our Experimental Regulatory Plan approved by the
10 Commission in Case No. EO-2005-0263.

11 **Q. WHY HAS STAFF ASSERTED THAT THE COST OF THE ASBURY SCR**
12 **PROJECT NOT BE INCLUDED IN THE REVENUE REQUIREMENT**
13 **CALCULATION?**

14 A. On page 5, lines 10 -12 of Mr. Oligschlaeger's Rebuttal Testimony he states "the Asbury
15 SCR equipment was unable to meet the in-service criteria spelled out in Empire witness
16 Mertens' direct testimony as of the case cut-off at year-end 2007. Accordingly, the Staff has
17 not included the Asbury SCR project in its rate base in this case."

18 **Q. WHAT IS THE "CUT-OFF AT YEAR-END 2007" TO WHICH MR.**
19 **OLIGSCHLAEGER REFERS?**

20 A. As Mr. Oligschlaeger states in his rebuttal testimony, the Commission's Test Year Order
21 provides for a cut-off of December 31, 2007 for inclusion of known and measurable costs
22 in this case, and for this reason the SCR project cost should not be allowed rate recovery in
23 this case.

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1 **Q. DO YOU AGREE WITH STAFF'S POSITION?**

2 A. No.

3 **Q. WHY NOT?**

4 A. Empire asserts the Asbury SCR should be included in rate base for the following reasons:

- 5 • The Asbury SCR has met "the in-service criteria before the costs for the equipment
6 will be included in Empire's rate base", a stipulation agreed to by all Parties in
7 Empire's Experimental Regulatory Plan (Case No. EO-2005-0263).
- 8 • Construction of the Asbury SCR was complete and the equipment useful by
9 December 31, 2007. It was only due to other issues that arose during the Asbury
10 maintenance outage, unrelated to the construction of the SCR, which caused the
11 outage to be extended thus not allowing the SCR to be tested by December 31,
12 2007.
- 13 • Empire is only requesting that those Asbury SCR construction costs incurred as of
14 December 31, 2007 be included in its rate base, thus complying with the agreed
15 upon test year update period in this case.
- 16 • Empire was proactive during the planning phases of the SCR, deciding to install the
17 Asbury SCR prior to a construction boom in the utility industry thus allowing the
18 Asbury SCR to be installed at lower capital costs relative to what other utilities
19 installing this type of equipment are facing today.
- 20 • If the Asbury SCR is not recognized in Empire's rate base, not only will Empire and
21 its shareholders not receive a timely return on its investment, but Empire will also
22 be unable to pass on the annual property tax, depreciation, and operating and

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1 maintenance expenses associated with the Asbury SCR which are currently
2 estimated to total \$1.8 million annually on a Missouri jurisdictional basis.

3 **Q. HOW DO YOU CHARACTERIZE STAFF'S POSITION ON THE ASBURY SCR IN-**
4 **SERVICE ISSUE?**

5 A. It is inconsistent with other positions Staff has taken in this case.

6 **Q. PLEASE ELABORATE.**

7 A. In Mr. Oligschlaeger's Rebuttal Testimony, on page 6 line 21 through page 7 line 2, when
8 discussing the possibility that the Asbury SCR be included in rates as an isolated adjustment,
9 he argues:

10 Inclusion of the Asbury SCR project as an isolated adjustment in Empire's rates
11 would mean that Empire's rate base would not be properly matched in time with
12 its revenue, expense or cost of capital revenue requirement components.
13 (emphasis added)

14 Meanwhile, in Ms. Mantle's Rebuttal Testimony when addressing those costs that should be
15 included in a possible Fuel Adjustment Clause ("FAC") in this case on page 5 lines 15 – 17
16 she states:

17 Staff recommends emission allowance purchases be included in the FAC. If
18 purchases are included, then Staff recommends that revenues from the sale of
19 emission allowances also be flowed through the FAC.

20 These are inconsistent positions because the addition of the Asbury SCR directly affects the
21 amount of NOx allowances that will have to be purchased or possibly sold in the future in
22 order to meet Empire's NOx allowance requirements. On one hand the Staff does not want
23 to recognize the investments Empire and its shareholders have made to mitigate
24 environmental regulations and costs, but on the other hand the Staff wants Empire's
25 customers to benefit from the offset in expenses and/or additional revenue from the potential

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1 sale of extra allowances created by the addition of the investment. This inconsistency does
2 not satisfy the "matching principle" Mr. Oligschlaeger cites in support of his position.

3 **Q. ARE YOU SUGGESTING THAT THE COST OF EMISSION ALLOWANCE**
4 **PURCHASES OR REVENUE FROM THE SALE OF EMISSION ALLOWANCES**
5 **NOT BE INCLUDED IN THE FAC?**

6 A. No. I agree with Ms Mantle's testimony and previous Commission Orders (Aquila Case No.
7 ER-2007-0004, Order Rejecting Tariff, Granting Clarification, Directing Filing and
8 Correcting Order Nunc Pro Tunc) which recognize that emission allowance costs are
9 variable based upon the amount of fuel burned and the cost of the allowances themselves.
10 As Empire and other utilities continue to face increased environmental regulation at
11 generating facilities, the inclusion of emission allowance costs and revenue from sales of
12 allowances in the FAC becomes even more vital.

13 **Q. THEN WHAT IS YOUR RECOMMENDATION IN LIGHT OF THE STAFF'S**
14 **REBUTTAL?**

15 A. I continue to recommend that the Asbury SCR be included as plant in-service when
16 calculating Empire's revenue requirement in order to match the emission allowance revenue
17 and/or costs with the investments made to mitigate any risk related to emission allowances.
18 As addressed in my rebuttal testimony, this recommendation is based on the fact that the
19 Asbury SCR has met the in-service criteria agreed to by all Parties to Empire's Experimental
20 Regulatory Plan and that Empire is only including capital costs related to this project that
21 were incurred prior to December 31, 2007.

22 **Heat Rate Testing Procedures**

23 **Q. WHAT ARE THE REQUIREMENTS OF 4 CSR 240-3.161(2)(P)?**

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1 A. As Mr. Taylor describes in his rebuttal testimony, this subsection of the rule sets forth
2 requirements for heat rate tests and/or efficiency tests for generating units. Specifically, it
3 requires an electric utility that files to establish a rate adjustment mechanism to include in
4 the filing:

5 A proposed schedule and testing plan with written procedures for heat rate tests
6 and/or efficiency tests for all of the electric utility's nuclear and non-nuclear
7 generators, steam, gas, and oil turbines and heat recovery steam generators
8 (HRSG) to determine the base level of efficiency for each of the units;

9 **Q. WILL EMPIRE COMPLY WITH THIS SUBSECTION OF THE RULE?**

10 A. Yes. Empire has been working diligently with Staff to develop heat rate testing procedures
11 and a testing schedule for all of its generating units.

12 **Q. ARE THE HEAT RATE TESTING PROCEDURES COMPLETE?**

13 A. Not at this time, but as Mr. Taylor states in his rebuttal testimony, significant progress has
14 been made. In fact, as of the submittal of this surrebuttal testimony, Empire contends that
15 documented heat rate testing procedures are complete for all of its generating units except
16 Riverton Units 7 and 8. The heat rate testing procedures for these two units lag the others
17 because of the special procedures that had to be developed for these units due to their age
18 and antiquated fuel measurement and control systems. I believe Staff would agree with this
19 assessment with respect to the status of the procedures and would also agree that the
20 procedures for Units 7 & 8 are substantially complete with only minor details that remain
21 outstanding.

22 **Q. DOES THIS CONCLUDE YOUR TESTIMONY**

23 A. Yes, it does.

AFFIDAVIT OF BLAKE A. MERTENS

STATE OF MISSOURI)
) ss
COUNTY OF JASPER)

On the 25 day of April, 2008, before me appeared Blake A. Mertens, to me personally known, who, being by me first duly sworn, states that he is the Manager of Strategic Projects of The Empire District Electric Company and acknowledges that he has read the above and foregoing document and believes that the statements therein are true and correct to the best of his information, knowledge and belief.



Blake A. Mertens

Subscribed and sworn to before me this 25 day of April, 2008.



Notary Public

My commission expires: June 27, 2009.

