

Exhibit No.:  
Issues: Supply Side  
Witness: Leon C. Bender  
Sponsoring Party: MO PSC Staff  
Type of Exhibit: Rebuttal Testimony  
File No.: EO-2011-0271  
Date Testimony Prepared: October 28, 2011

**MISSOURI PUBLIC SERVICE COMMISSION**

**REGULATORY REVIEW DIVISION**

**REBUTTAL TESTIMONY**

**OF**

**LEON C. BENDER**

**UNION ELECTRIC COMPANY d/b/a AMEREN MISSOURI**

**FILE NO. EO-2011-0271**

*Jefferson City, Missouri  
October 2011*



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29

A. My name is Leon C. Bender, and my business address is Missouri Public Service Commission, P. O. Box 360, Jefferson City, Missouri 65102.

A. I am a Utility Regulatory Engineer in the Energy Unit of the Regulatory Review Division.

Q. Are you the same Leon C. Bender that contributed to Staff's Report on Electric Utility Resource Planning Compliance Filing filed on June 23, 2011, in this case?

Q. Would you please summarize the purpose of your rebuttal testimony?

A. I address concerns Staff has with Union Electric Company d/b/a Ameren Missouri's ("Ameren Missouri" or "Company") Response to the Office of Public Counsel's identified Deficiencies 3 and 4 contained in Exhibit A *Response to Comments of Parties* ("Response") of the *Response of Ameren Missouri to Alleged Deficiencies and Concerns* which Ameren Missouri filed on September 15, 2011. Staff has concerns that Ameren Missouri did not model smaller increments of wind generation. Staff does not consider these concerns to necessitate rerunning the analysis at this time.

1           Q.     What is Staff's position concerning Ameren Missouri's response to The Office  
2 of Public Counsel's ("OPC") Deficiency 4?

3           A.     OPC's identified Deficiency 4 asserts that Ameren Missouri is not in  
4 compliance with 4 CSR 240-22.040(8).<sup>1</sup> 4 CSR 240-22.040(8) requires the development of  
5 ranges of values and subjective probabilities for uncertain factors related to supply side  
6 resources and with 4 CSR 240-22.070(2) which requires a preliminary sensitivity analysis to  
7 identify critical uncertain factors. OPC alleges that Ameren Missouri did not identify the full  
8 range of likely construction times or project costs for potential nuclear units and failed to  
9 conduct sensitivity analysis of the critical uncertain factors.

10           Staff has reviewed Ameren Missouri's Chapter 22 Electric Utility Resource Planning  
11 filing<sup>2</sup> and Ameren Missouri's response to OPC's Deficiency #4. Staff understands that  
12 different parties may prefer to use different information sources. It is Staff's position that  
13 Ameren Missouri met the requirement of the rules cited by using information as outlined in its  
14 Response that was available at the time of the analysis and performed the analysis as required  
15 by the rules. Ameren Missouri's preferred resource plan does not call for the construction of  
16 a new nuclear unit in the 20-year planning horizon of and using increased construction costs  
17 and construction times would likely not change the selection of the preferred resource plan in  
18 this IRP. Should any new information develop which results in a change to the preferred  
19 resource plan, Staff and stakeholders can review the new information through the annual  
20 update stakeholder meetings and annual update filing process<sup>3</sup>. Thus, no rework of this  
21 triennial compliance filing is necessary.

---

<sup>1</sup> All references to Chapter 22 Electric Resource Planning rules are to the rules in effect at the time that Ameren Missouri filed on February 23, 2011

<sup>2</sup> Filed on February 23, 2011 in File No. EO-2011-0271.

<sup>3</sup> 4 CSR 240-22.080(3) effective June 30, 2011.

1           However, a nuclear plant is included in the preferred plan that Ameren Missouri  
2 documents that it would move to if favorable legislation regarding Construction Work In  
3 Progress (CWIP) is passed. Although the plant comes on line late in the planning process, the  
4 cost impacts would be felt much sooner if Ameren Missouri is allowed to increase rates for  
5 CWIP. Therefore, Ameren Missouri should be vigilant in obtaining up-to-date, accurate  
6 estimates before it chooses to change plans. In addition, if Ameren Missouri does change its  
7 preferred plan, it will file as outlined in the revised 4 CSR 240-22.080(12) notifying the  
8 Commission and all parties to its most recent triennial filing of the change. The parties will  
9 then have the opportunity to review and comment on Ameren Missouri's change in preferred  
10 plans.

11           Q.     What is Staff's position concerning Ameren Missouri's response to OPC's  
12 Deficiency 3?

13           A.     OPC's identified Deficiency 3 takes issue with Ameren Missouri's inclusion of  
14 346 MW's of simple cycle combustion turbine generator (CTG) capacity with 800 MW of  
15 wind. OPC's criticism is that Ameren Missouri should have examined wind in smaller  
16 increments than the 800 MW used, and that it was not necessary to couple the wind with  
17 additional peaking capacity. Staff has reviewed Ameren Missouri's Chapter 22 Electric  
18 Utility Resource Planning filing and Ameren Missouri's response to OPC's identified  
19 Deficiency #3. Staff agrees with OPC that wind can be added in small increments. Ameren  
20 Missouri and other utilities in the Missouri have utilized smaller increments of wind in their  
21 generation fleets already<sup>4</sup>. Staff also agrees with OPC that Ameren Missouri presently has a  
22 robust fleet of peaking capacity resources and has no need for additional peaking capacity

---

<sup>4</sup> For Example; Pioneer Prairie Wind Farm 102MW, Gray County Wind 60MW, 30MW, Lost Creek Wind Project 150MW, Bluegrass Ridge 57MW, Meridian Way 102MW, Conception Wind 50MW, Spearville Wind 100MW.

Rebuttal Testimony of  
Leon C. Bender

1 resources at this time. However, as the years go by the forecasted load of Ameren Missouri is  
2 expected to increase, and Ameren Missouri will need additional peaking capacity resources as  
3 well as generation resources to meet this increase in load.

4 Wind is an intermittent generation resource and energy from wind may not be  
5 available when needed during periods of peak demand. Midwest Independent Transmission  
6 System Operator (“MISO”) only credits wind generation capacity at 8% capacity. Thus, wind  
7 alone cannot meet the additional capacity needs as forecasted by Ameren Missouri.

8 In addition to increased forecasted load, Ameren Missouri modeled retiring a large  
9 coal generating plant. The generation from that plant will have to be replaced. Energy  
10 generated by wind may be able to meet some of those energy needs even when installed in  
11 small increments. Staff is concerned that not analyzing smaller additions of wind energy may  
12 have precluded the modeling of wind additions in the manner in which it has actually been  
13 added in the past and is likely to be added in the future. Ameren Missouri’s preferred  
14 resource plan does not call for the addition of large amounts of wind in the 20-year planning  
15 horizon. However, Staff recommends that the Commission urge Ameren Missouri to  
16 constantly survey the availability and pricing of additional wind generation as a cost-effective  
17 energy source in increments smaller than 800 MW. This information should be part of the  
18 annual update stakeholders meetings and the annual update filing process. Thus, no rework of  
19 this triennial compliance filing is necessary.

20 Q. Does this conclude your testimony at this time?

21 A. Yes.