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

Staff Exhibit No. 14
Date 12/15/11 Reporter File No. EO-2011- 0271

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union Electric Company's)	
2011 Utility Resource Filing Pursuant to)	File No. EO-2011-0271
4 CSR 240 - Chapter 22)	

AFFIDAVIT OF LEON C. BENDER

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Leon C. Bender, of lawful age, on his oath states: that he has participated in the preparation of the following Rebuttal Testimony in question and answer form, consisting of $\frac{1}{2}$ pages of Rebuttal Testimony to be presented in the above case, that the answers in the following Rebuttal 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.

Leon C. Bender

Subscribed and sworn to before me this 27th day of October, 2011.

SUSAN L. SUNDERMEYER
Notary Public - Notary Seal
State of Missouri
Commissioned for Callaway County
My Commission Expires: October 03, 2014
Commission Number: 10942086

Notary Public

REBUTTAL TESTIMONY

OF

LEON C. BENDER

UNION ELECTRIC COMPANY d/b/a AMEREN MISSOURI

FILE NO. EO-2011-0271

- Q. Please state your name and business address.
- A. My name is Leon C. Bender, and my business address is Missouri Public Service Commission, P. O. Box 360, Jefferson City, Missouri 65102.
 - Q. What is your present position at the Missouri Public Service Commission?
- 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?
 - A. Yes, I am.
 - 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.

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

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

Staff has reviewed Ameren Missouri's Chapter 22 Electric Utility Resource Planning filing² and Ameren Missouri's response to OPC's Deficiency #4. Staff understands that different parties may prefer to use different information sources. It is Staff's position that Ameren Missouri met the requirement of the rules cited by using information as outlined in its Response that was available at the time of the analysis and performed the analysis as required by the rules. Ameren Missouri's preferred resource plan does not call for the construction of a new nuclear unit in the 20-year planning horizon of and using increased construction costs and construction times would likely not change the selection of the preferred resource plan in this IRP. Should any new information develop which results in a change to the preferred resource plan, Staff and stakeholders can review the new information through the annual update stakeholder meetings and annual update filing process³. Thus, no rework of this triennial compliance filing is necessary.

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

² Filed on February 23, 2011 in File No. EO-2011-0271.

³ 4 CSR 240-22.080(3) effective June 30, 2011.

Rebuttal Testimony of Leon C. Bender

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

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

A. OPC's identified Deficiency 3 takes issue with Ameren Missouri's inclusion of 346 MW's of simple cycle combustion turbine generator (CTG) capacity with 800 MW of wind. OPC's criticism is that Ameren Missouri should have examined wind in smaller increments than the 800 MW used, and that it was not necessary to couple the wind with additional peaking capacity. Staff has reviewed Ameren Missouri's Chapter 22 Electric Utility Resource Planning filing and Ameren Missouri's response to OPC's identified Deficiency #3. Staff agrees with OPC that wind can be added in small increments. Ameren Missouri and other utilities in the Missouri have utilized smaller increments of wind in their generation fleets already⁴. Staff also agrees with OPC that Ameren Missouri presently has a robust fleet of peaking capacity resources and has no need for additional peaking capacity

⁴ 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.

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

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

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

- Q. Does this conclude your testimony at this time?
- A. Yes.