Exhibit No.:
Issue(s): Production Cost Modeling
Witness: Mark J. Peters
Sponsoring Party: Union Electric Company
Type of Exhibit: Rebuttal Testimony
Case No.: ER-2012-0166
Date Testimony Prepared: August 14, 2012

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2012-0166

REBUTTAL TESTIMONY

OF

MARK J. PETERS

ON

BEHALF OF

UNION ELECTRIC COMPANY
d/b/a Ameren Missouri

St. Louis, Missouri
August, 2012

NP

REBUTTAL TESTIMONY

OF

MARK J. PETERS

CASE NO. ER-2012-0166

Q. Please state your name and business address.

A. Mark J. Peters, Ameren Services Company ("Ameren Services"), One Ameren Plaza, 1901 Chouteau Avenue, St. Louis, Missouri 63103.

Q. What is your position with Ameren Services?

A. I am a Managing Supervisor in the Corporate Planning department of Ameren Services.

Q. Are you the same Mark J. Peters who filed direct testimony in this case?

A. Yes, I am.

Q. What is the purpose of your rebuttal testimony in this proceeding?

A. The purpose of my rebuttal testimony is to address certain recommendations and concerns of Missouri Industrial Energy Consumers ("MIEC") witness Nicholas Phillips; in particular, his proposal to establish the unit minimum generation capability assumption at the "as offered" level, his concern related to the startup fuel ratio for the Rush Island Energy Center and his recommended reduction in Ameren Missouri's net base fuel costs ("NBFC")[1] by $7.4 million resulting from updates to fuel and wholesale energy prices which replace some forecasted values with actual

[1] As discussed in the rebuttal testimony of Ameren Missouri witness Wilbon L. Cooper, the Staff has proposed to change the terminology in the fuel adjustment clause ("FAC") from "NBFC" to "NBEC" or "Net Base Energy Costs," and the Company agrees with this proposal. I will continue to refer to it as "NBFC" in my testimony since that is the term used in the current FAC.

data.

Q. Please summarize your testimony and conclusions.

A. My testimony will demonstrate that Mr. Phillips' recommendation regarding the minimum generation capability assumption would result in an inappropriate understatement of NBFC through a "double dipping" associated with Ameren Missouri's sales of Regulating Reserve (defined below). I provide the results of an analysis regarding the amount of Regulating Reserve provided by Ameren Missouri's units and provide an alternative method of establishing these minimums if the methodology used in the production cost modeling discussed in my direct testimony is not deemed appropriate.

I also discuss the Rush Island startup fuel issue, and offer a proposal to recalculate this value.

Finally, I note that given that the factors used in the production cost model will be updated as part of the true-up phase of this case (as has been done in several recent cases), Mr. Phillips' recommended reductions in NBFC are premature. Instead, the appropriate values to use in calculating NBFC will be those reflecting data used in the true-up process.

Q. Mr. Phillips recommends that the minimum generation capability assumptions for Ameren Missouri's coal-fired generation facilities be set to the level at which these units are offered into the Midwest Independent Transmission System Operator, Inc. ("MISO" or "Midwest ISO") market. Do you agree with this recommendation?

A. I do not. Adopting Mr. Phillips' recommendation would result in an inappropriate understatement of Net Base Fuel Costs through a "double dipping" associated with Ameren Missouri's sales of Regulating Reserve.[2]

Q. Please explain "Regulating Reserve."

A. Regulating Reserve is an ancillary service in the MISO market. Generators are paid for their ability to raise or lower their output as necessary to follow the moment-by-moment changes in demand and frequency. As indicated, a unit that is cleared[3] for Regulating Reserve must be able to move up and down from the level at which it is operating as instructed by the MISO.

Q. Why do you emphasize this latter point?

A. The fact that a unit cleared for Regulating Reserve must be able to move both up and down is the reason that Mr. Phillips' recommendation is inappropriate.

If a unit were dispatched at its minimum level, it would not be able to provide Regulating Reserve, as it would be unable to move down when instructed by MISO to do so. As a consequence, a unit which is cleared for Regulating Reserve, by necessity, must operate at a level above its normal minimum. When it operates at this higher level it must consume additional fuel (as compared to the fuel it would consume at its normal minimum) to do so. If we were to model the units as suggested by Mr. Phillips, the model would allow the units to be dispatched to their normal minimum level and we would not properly account for the additional fuel consumed by any units that regularly clear for Regulating Reserve.

[2] The revenues received for providing Regulating Reserve are accounted for in the determination of the NBFC.

[3] "Cleared" in the Day-Ahead market means that MISO has designated that unit to provide the given service. In simple terms, that unit is being told that its offer to sell that service for a specific time period has been accepted.

Q. Do Ameren Missouri's coal fired units regularly clear for Regulating Reserve in the MISO market?

A. Yes they do. More importantly, they frequently do so during those hours when units are dispatched at the bottom end of their dispatch range. As is shown in Table 1 below, the listed units cleared for Regulating Reserve more than 50% of the time on average during these periods for the twelve months ending June 30, 2012.

TABLE 1

	MIN HRS	REG HRS	%
LAB 1	**		
LAB 2			
LAB 3			
LAB 4			
MER 1			
MER 2			
RI 1			
RI 2			
SX 1			
SX 2			
			**

Q. Why did you only look at those particular hours?

A. These are the hours when the unit would be dispatched to its normal minimum level in the absence of clearing for Regulating Reserve. Since we are trying to establish a reasonable level at which to set the unit minimums, the other hours (when the market price would have the unit dispatched above minimums) are irrelevant to the calculation.

Q. How would Mr. Phillips' recommendation result in double dipping?

A. His recommendation would result in double dipping because it lowers NBFC by failing to recognize the cost of fuel required to provide Regulating Reserve, even though the customers have been given full credit for the revenues received from

selling that very service.

Basically, the customer would receive all of the benefit of selling Regulating Reserve, without bearing all of the associated cost.

Q. Did you perform any additional analysis on this issue?

A. Yes. I calculated the average amount of Regulating Reserve for which a given unit was cleared during the same time periods identified above, and compared these amounts to both the unit minimums included in our original model, and the normal minimums – what is referred to in the MISO market as the "Economic Minimums."

Q. What was the purpose in making that calculation?

A. I wanted to see how the original minimums in the model compared to the level which would be set by using an alternative approach – that being setting the unit minimum using the average amount of Regulating Reserve that these units clear for when operating at the bottom of their dispatch range.

Q. What were the results of this comparison?

A. This comparison showed that the Labadie and Meramec Units cleared for less Regulating Reserve on average than would be indicated by the original levels used in the model, while the Rush Island and Sioux Units cleared for more.

Q. How can the results of this analysis be used in this proceeding?

A. They can provide an alternative method of establishing unit minimums, by adding the average amount of Regulating Reserve which a unit cleared for to its normal minimum level. The one exception to this is the Meramec Units, which are unable to move all the way down to their normal minimum when they are “regulating.” For these units, the average amount of Regulating Reserve provided would be added to this adjusted minimum. I would note here that the appropriate normal minimums to use are

those effective as of the cut-off date for the true-up period, and not those in place last fall when the model inputs were first developed. This is particularly important for the Sioux units which have been able to reliably reduce their normal minimum levels by ** ** megawatts ("MW").

Q. Have you calculated what these alternative values would be?

A. Yes. These values are shown in column G of Table 2 presented below.

TABLE 2

	A	B	C	D	E	F	G
			A-B			(E+(D-B)-B	A+F
	Initial Model Min	As of 6/30/12 Econ Min	Delta	Reg Min	Avg. Reg Award (MW)	DIF	Indicated Model Minimum
LAB 1	** **	** **	20	** **	** **	(10.2)	** **
LAB 2	** **	** **	20	** **	** **	(10.6)	** **
LAB 3	** **	** **	20	** **	** **	(19.8)	** **
LAB 4	** **	** **	20	** **	** **	(12.7)	** **
MER 1	** **	** **	12	** **	** **	(2.5)	** **
MER 2	** **	** **	12	** **	** **	(8.6)	** **
RI 1	** **	** **	-	** **	** **	0.2	** **
RI 2	** **	** **	-	** **	** **	5.2	** **
SX 1	** **	** **	60	** **	** **	(47.1)	** **
SX 2	** **	** **	60	** **	** **	(48.0)	** **

Q. Based on the analysis presented above do you have a recommendation?

A. Yes. I believe that the methodology that underlies the production cost modeling I sponsored with my direct testimony was reasonable (and need only be updated with data through the end of July, 2012), as it was based upon a review of the minimum levels actually being achieved by these units. Should it be determined that a different methodology would be more appropriate to use, then it is my opinion that the alternative methodology outlined above – utilizing the actual average day-ahead

NP

awards for Regulating Reserve – is significantly superior to Mr. Phillips' recommendation to simply use the as offered levels, which do not account for the operating realities associated with providing Regulating Reserve.

Q. Mr. Phillips expresses a concern with the startup fuel blend ratio for the Rush Island facility. Do you care to comment on this concern?

A. Yes. I believe that the methodology used to set this value is sound. However, upon review, it is clear that the value itself, which was calculated in conjunction with a previous fuel budget model run, is not necessarily appropriate to use for subsequent modeling, where other critical characteristics have changed – in particular the number of unit starts. The methodology used to establish this value was intended to ensure that a normalized level of oil burn was recognized in the models. It was developed as a review of prior model results indicated that oil consumption was being understated in light of actual experience. By fixing the ratio and not recalculating for a specific run however, a model which has a higher projected number of unit starts in a given year than the model for which the value was initially created will have projected oil consumption in excess of the historical average.

Q. What solution would you propose for this factor?

A. As indicated above, it is my belief that the underlying methodology itself is sound. I would propose that we utilize the same methodology that was used to develop the initial value; however, rather than relying upon the prior model's value, a new value specific for the rate case model should be developed. This will ensure that differences in the number of unit starts between the two models do not adversely affect the results as they relate to oil consumption.

Q. Mr. Phillips also recommends a reduction in Ameren Missouri's NBFC of $7.4 million resulting from updates to fuel and wholesale energy prices which replace some forecasted values with actual data. Do you agree with his recommendation?

A. I believe Mr. Phillips' recommendation is premature given that these factors will be updated as part of the true-up process, and will necessarily change. The appropriate values to use are those that are the result of the ultimate true-up period calculations.

Q. Are there factors which should be updated in the true-up period model run other than fuel and wholesale energy prices?

A. Yes. It is appropriate to update input assumptions for which known changes exist, to include additional data applicable to the true-up period, as well as to correct for any errors which have been identified.

These additional factors include:

- Updating the normalized loads received from Ameren Missouri witness Steven Wills.
- Replacing the CSAPR-based assumptions for emissions costs with assumptions reflecting costs under CAIR.[4]
- Updating the fuel blend for the Sioux plant to reflect the current target blend ratio of ** [redacted] ** versus the ** [redacted] ** used in the original model.

NP

[4] CSAPR stands for Cross-State Air Pollution Rule and CAIR stands for Clean Air Interstate Rule. The new CSAPR rule was suspended by the federal courts at the end of 2011, and it is uncertain if or when the issue will be finally resolved. When the courts suspended CSAPR, CAIR remained in effect. Consequently, it is more appropriate to use modeling assumptions for emission-related costs under CAIR.

- Updating unit minimums as described above.
- Updating the non-fuel startup and no-load costs for the combustion turbine generators to reflect levels currently utilized for offering these units into the MISO market as described above.
- Correcting the normalized refueling outage length for the Callaway facility from 27 days to 24 days to account for a mathematical error.
- Updating the startup fuel blend ratio for the Rush Island station.
- Updating the equivalent unplanned outage rate and scheduled outages.

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to Increase Its Revenues for Electric Service.	)))	Case No. ER-2012-0166

AFFIDAVIT OF MARK J. PETERS

STATE OF MISSOURI)
) **ss**
CITY OF ST. LOUIS)

Mark J. Peters, being first duly sworn on his oath, states:

1. My name is Mark J. Peters. I work in the City of St. Louis, Missouri, and I am employed by Ameren Services Company as Managing Supervisor in the Corporate Planning department

2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony on behalf of Ameren Missouri consisting of 9 pages, and Schedule(s) N/A, all of which have been prepared in written form for introduction into evidence in the above-referenced docket.

3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct.

Mark J. Peters

Subscribed and sworn to before me this 14th day of August, 2012.

Mary Hoyt
Notary Public

My commission expires: 4-11-2014

Mary Hoyt - Notary Public
Notary Seal, State of
Missouri - Jefferson County
Commission #10397820
My Commission Expires 4/11/2014