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Witness: Shawn E. Schukar
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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2008-0318

SURREBUTTAL TESTIMONY

OF

SHAWN E. SCHUKAR

ON

BEHALF OF

**UNION ELECTRIC COMPANY
d/b/a AmerenUE**

**St. Louis, Missouri
November, 2008**

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1 A. Staff has used market prices for energy during the test year only in an attempt
2 to reflect the fluctuations that invariably occur in power prices due to variability in weather
3 patterns, day types (i.e., weekday v. weekend), seasonal effects, etc., for any given period of
4 time.

5 **Q. Do you agree with Staff's approach?**

6 A. Yes and no. I agree with Staff that the market prices and the loads utilized in
7 the production cost models should be matched-up to ensure that the modeling recognizes the
8 hour-by-hour and day-by-day changes that occur as a result of weather patterns, system
9 topology, seasonal affects, price patterns, etc. If the price and load data are not synchronized
10 to the extent possible, then the modeling results could produce abnormal outputs that would
11 not reflect off-system sales that would reasonably be expected to be achieved. However, I
12 disagree with using *normalized* loads and generation availability with *non-normalized* energy
13 prices that are from a single one-year period. This will not properly reflect conditions
14 associated with weather, fuel supply, market conditions, regulatory changes, system
15 topology, etc. Use of just one year's actual pricing data with the weather normalized loads of
16 a test year is simply not appropriate.

17 **Q. Can you elaborate on your concern with the use of only one year of actual**
18 **energy price data in combination with weather normalized test year data?**

19 A. Yes. Staff attempts to support its use of just one year of energy data on the
20 grounds that this matches loads and energy prices. However, Staff adjusts or normalizes load
21 (see its Report on Cost of Service (Appendix 3-2)), which indicates the changes in the
22 monthly usage and peaks associated with the normalized test year (the 12 months ending
23 March 31, 2008) while making no attempt to normalize the market prices which also depend

1 on temperatures, loads, and other conditions. In fact, Staff's table (in Appendix 3-2) shows
2 that loads are adjusted down (to normalize them) on average by 4% with monthly
3 adjustments between +1.06% and -14.20%, and that monthly peaks are adjusted down on
4 average by 9.48% with monthly adjustments of between +7.35% and - 16.76%. Staff does
5 not make a similar effort to adjust the energy prices, which are most certainly affected by
6 load and weather changes.¹

7 **Q. Why does adjusting loads create a problem when only one year of actual**
8 **energy price data is used?**

9 A. It's an apples to oranges approach under which market prices are no longer
10 consistent with loads. Failing to adjust the energy prices to reflect normal conditions creates
11 a disconnect between the *normalized* loads, which are adjusted for any abnormal conditions
12 affecting load, and the *unnormalized* prices, which are not adjusted for any abnormal or
13 unusual conditions affecting price. This will create fictional off-system sales opportunities
14 (based on lower normalized loads at actual high market prices) that would not be expected to
15 exist in reality under normal conditions.

16 **Q. Ms. Maloney also indicates on page 4 of her rebuttal testimony that use of**
17 **two years of energy price data (which is your recommendation), does not accomplish**
18 **the weather normalization of the prices that the Company was attempting. How do you**
19 **respond?**

20 A. First, Ms. Maloney apparently misinterprets or misunderstands my
21 normalization, which is designed to average out abnormal conditions that affect energy
22 prices. My direct testimony includes an example of how utilization of an average over a

¹ Staff witness Maloney acknowledges that energy prices are affected both by load and weather changes. Mahoney Deposition, p. 10, l. 9-23; p. 11, l. 3-5 (Oct. 31, 2008).

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1 period of two years reduces the impacts of warmer or cooler than normal weather versus
2 reliance on just a one-year period (see pp. 12-13 and Schedule SES-E1 to my direct
3 testimony). This is but one example of the many conditions that may require that energy
4 prices be adjusted to reflect a more normal or expected price level. As I mentioned in both
5 my direct and my rebuttal testimonies, the normalization of market prices was necessary to
6 average or normalize prices for several factors including weather, the impact of speculation
7 in the energy markets, overseas fuel supply disruptions, system topology, including
8 generation and transmission system outages, and changes in regulations (such as the federal
9 court's vacation of the Clean Air Interstate Rule (CAIR)), to name a few. It is necessary to
10 attempt to normalize or average out as many of the abnormal conditions affecting market
11 prices as possible to ensure that the market prices utilized to determine the appropriate level
12 of off-system sales are consistent with the other inputs to the model that have also been
13 normalized.

14 **Q. But doesn't Ms. Maloney argue that using a two-year average does not**
15 **normalize prices?**

16 A. Yes, she makes that argument, but in doing so she inappropriately looks only
17 at temperatures. To support her argument, she includes Schedule ELM-1 in her rebuttal
18 testimony. The graph in Schedule ELM-1 itself demonstrates the problem with using one
19 year vs. multiple years to set a normal energy price. While Ms. Maloney is correct that if
20 you took the average of the averages, the prices would be about the same, the one year
21 average clearly has much more volatility than the multiple year average (the one year average
22 has a 1.5 degree temperature range while the two year average has just a 0.5 degree
23 temperature range). This shows that for the one year period utilized, the temperatures used to

1 determine the level of off-system sales may vary much more from the average of the period
2 than would occur if a two-year period was utilized. This demonstrates that the use of a
3 longer period of time provides more normalized conditions and thus more normalized energy
4 prices.

5 Everyone agrees that power prices are extremely volatile. Regulatory
6 commissions very often normalize expenses or revenues that exhibit a great deal of volatility
7 so that rates can be set based upon a more normal level of those expenses or revenues. The
8 same principle requires normalization of volatile energy prices here.

9 **Q. Do you have any other observations associated with the prices from just**
10 **one year as utilized by Staff?**

11 A. Yes. The table below (reproduced from Ms. Maloney's workpapers) shows
12 the average price for each month of the year that Ms. Maloney used in the Staff's production
13 cost modeling to determine Staff's view of an appropriate level of off-system sales. As the
14 data shows, the average on-peak price for the months of February and March (labeled as
15 "Test Year", below) is *higher* than the August and July on-peak prices. This is quite
16 abnormal and leads to off-system sales opportunities that cannot be expected to exist under
17 normal circumstances. Ms. Maloney admits this is odd, but used the data anyway. (Maloney
18 Deposition, p. 15, l. 1 to p. 16, l. 6). During a normal period, one would expect on-peak
19 prices for the hot summer months of July and August to be higher than the milder months of
20 February and March. Indeed, use of two years of prices, results in higher on-peak prices in
21 July and August than in February and March, as one would expect. This is another stark
22 example of why it is inappropriate to utilize just one year of price data to determine normal

- 1 prices to be utilized in production cost modeling upon which an expected level of off-system
2 sales is being determined.

Average Monthly Market Prices							
	2006		2007		2006 & 2007 Avg		Test Year
	Pk	Off Pk	Pk	Off Pk	Pk	Off Pk	Pk
Jan	\$49.54	\$32.13	\$43.22	\$25.26	\$46.38	\$28.69	\$58.06
Feb	\$45.54	\$33.17	\$62.35	\$43.77	\$53.95	\$38.47	\$64.89
Mar	\$45.85	\$29.92	\$53.82	\$31.72	\$49.84	\$30.82	\$66.59
Apr	\$52.08	\$26.87	\$60.65	\$33.78	\$56.37	\$30.32	\$60.65
May	\$47.08	\$27.97	\$62.65	\$27.62	\$54.86	\$27.79	\$62.65
Jun	\$56.68	\$28.77	\$60.07	\$28.04	\$58.37	\$28.40	\$60.07
Jul	\$67.28	\$37.55	\$51.63	\$28.51	\$59.45	\$33.03	\$51.63
Aug	\$70.36	\$35.90	\$63.91	\$33.04	\$67.14	\$34.47	\$63.91
Sep	\$35.67	\$21.92	\$47.66	\$24.10	\$41.66	\$23.01	\$47.66
Oct	\$41.48	\$22.63	\$53.38	\$28.45	\$47.43	\$25.54	\$53.38
Nov	\$47.07	\$26.42	\$47.70	\$26.38	\$47.38	\$26.40	\$47.70
Dec	\$41.69	\$24.64	\$48.87	\$34.38	\$45.28	\$29.51	\$48.87

3 **III. RESPONSE TO OPC’S CONCERN WITH UNCERTAINTY OF THE**
4 **VALUE OF TAUM SAUK**

5 **Q. Please respond to Mr. Kind’s statement that the “TS” factor in**
6 **AmerenUE’s proposed fuel adjustment clause (“FAC”) tariff creates a “one-sided”**
7 **FAC.**

8 A. I will address some of the assumptions that Mr. Kind makes in support of his
9 claim that the TS factor is one-sided while AmerenUE witness Martin Lyons, Jr. will respond
10 to the appropriateness of the use of the TS factor in the FAC. Mr. Kind makes the statement
11 that AmerenUE’s method will “understate the value as soon as periodic adjustments start
12 occurring in 2009 because it reflects UE’s current valuation of capacity sales instead of the
13 higher value that Ameren expects capacity sales to have beyond 2008.” He appears to base
14 this allegation on a statement made in a presentation given by Ameren Corporation
15 executives to financial analysts in January 2008, where it was stated that “fundamentals

1 support capacity prices strengthening from current levels because of improving liquidity and
2 decreasing reserve margins.”

3 **Q. Is Mr. Kind correct in suggesting that capacity values will be higher?**

4 A. I don't know, and neither does Mr. Kind nor anyone else. I would note that
5 the conditions that existed in January 2008 are much different than exist today. Anyone who
6 has watched the news, looked at their 401(k), or otherwise followed the economic fallout
7 from the subprime mortgage crisis is aware of the change in conditions that has occurred.
8 Lower load growth, reduced market liquidity, increased deployment of energy efficiency
9 programs and increased renewable standards are also creating much greater uncertainty in the
10 level of capacity prices that may be expected in the future. Consequently, while capacity
11 values may increase in the future, this is definitely not certain given the recent events in the
12 world economy.

13 **Q. If capacity values do increase, does this mean that the fixed TS factor will**
14 **not properly make customers whole for the loss of the Taum Sauk plant?**

15 A. No. Mr. Kind fails to address the risk that the energy value of the Taum Sauk
16 plant included as an offset to fuel costs in the FAC could also be different than the level that
17 the Company has modeled in this case. This very real risk is significant, since there has been
18 significant volatility in the last couple months and more than 80% of the value of the Taum
19 Sauk plant is associated with energy, not capacity. Mr. Kind also assumes (improperly, as I
20 discuss in my rebuttal testimony) that every single megawatt of Taum Sauk capacity could be
21 sold if Taum Sauk was in service.

1 **Q. Why could the value of the Taum Sauk plant go down?**

2 A. The energy value created from Taum Sauk is based on the ability to pump
3 water up the mountain to the upper reservoir at night when energy prices (off-peak prices)
4 are low and then produce power during the day when energy prices (on-peak prices) are
5 higher. As the difference between the energy price received from producing power and the
6 energy price paid for electricity to pump water up the mountain increases, the margin created
7 from the energy production increases, and vice versa. In the fixed number that AmerenUE
8 has used in the TS factor, the difference between the on-peak and off-peak price (opportunity
9 for margin) is on average \$26.26 per MWh (on-peak \$57.61 per MWh and off-peak \$31.35
10 per MWh). Current forward market prices for 2009 suggest that the difference between the
11 on-peak and off-peak prices may decline nearly 25% to approximately \$21.05 (on-peak
12 \$55.15 per MWh and off-peak \$34.10 per MWh). This would result in lower levels of
13 energy margin from Taum Sauk. While forward market prices are very uncertain and are not
14 necessarily a good prediction of future market prices, the current forward market
15 expectations suggest that the energy value of Taum Sauk in factor TS may overstate the
16 energy value of Taum Sauk, and thus could over compensate customers for the loss of the
17 Taum Sauk plant.

18 **Q. Is this possible change in the energy value of Taum Sauk significant in**
19 **relation to possible changes in the capacity value of Taum Sauk?**

20 A. Yes, that is clearly possible. The Taum Sauk value in factor TS (\$25.8
21 million – see rebuttal testimony of AmerenUE witness Timothy D. Finnell at p. 11, l. 6) is
22 comprised of an energy value of \$20.9 million and a capacity value of \$4.9 million. Since
23 energy prices account for a much larger portion (more than 80%) of the value, a change in

1 the difference between on-peak and off-peak energy prices could have a much greater impact
2 on the Taum Sauk value than any change in capacity values. Thus, there is a potential that
3 changes in energy prices, as currently expected by the market, could reduce and potentially
4 offset capacity values associated with Taum Sauk. Given the current economic conditions,
5 there's even the risk that the capacity value for 2009 and 2010 could decrease below the 2008
6 value incorporated in the TS factor.

7 **IV. NON-ASSET BASED (SPECULATIVE) TRADING**

8 **Q. Mr. Kind also raises several questions related to AmerenUE's non-asset**
9 **based or speculative trading. Please describe AmerenUE's position related to these**
10 **sales.**

11 A. As noted in my response to OPC Data Request No. 2067 (attached as
12 Schedule SES-SE5), AmerenUE's FAC does not include the costs and revenues associated
13 with speculative trading conducted by AmerenUE's Asset Marketing and Trading
14 ("AM&T") group because AmerenUE believes these costs and revenues are properly
15 recorded "below the line," consistent with the requirements of the Uniform System of
16 Accounts ("USOA"), which as I understand it have been adopted by the Commission. In
17 addition, AmerenUE believes that ratepayers should not be exposed to the risks associated
18 with speculative trading, even though ratepayers receive the benefits of the increased
19 liquidity and market transparency that AmerenUE receives as a result of the speculative
20 trading activity. Ratepayers receive those benefits because this increased liquidity and
21 market transparency helps facilitate and promote asset based off-system sales, which do
22 offset AmerenUE's production costs in the FAC. However, if the Commission were to
23 determine that these costs and revenues should be included in the rates of the AmerenUE

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1 customers, AmerenUE would not object to the treatment, provided the Commission gave the
2 Company the required accounting authority to depart from the USOA by recording these
3 costs and revenues “above-the-line.”

4 **Q. Can you elaborate on how AmerenUE ratepayers benefit from**
5 **speculative trading even if the associated margins are not reflected in the cost of**
6 **service?**

7 A. Yes. As I noted, prior to AmerenUE implementing its speculative trading
8 program AmerenUE had received feedback from potential counterparties that the then
9 current level of transactions by AmerenUE in the marketplace was not sufficient to attract
10 their interest. Accordingly, the available pool of counterparties was smaller than AmerenUE
11 reasonably expected it could be with greater trading volumes. This reduced available
12 liquidity and lowered AmerenUE’s expectation for the price it could obtain in bilateral and
13 hedge transactions. By increasing its trading activity via the speculative trading program,
14 AmerenUE was able to generate greater interest from potential counterparties and thus
15 increase liquidity. Additionally, AmerenUE improved its market intelligence regarding price
16 and liquidity factors and enhanced relationships with potential counterparties. All of this has
17 combined to create higher margins for all bilateral and hedge transactions than AmerenUE
18 would have reasonably been expected to achieve otherwise. Since the margins associated
19 with those bilateral and hedge transactions are included in the cost of service determination,
20 customers are seeing a benefit from the speculative transactions.

21 **Q. Does this conclude your surrebuttal testimony?**

22 A. Yes, it does.

Ameren's Response to
OPC Data Request
MPSC Case No. ER-2008-0318
AmerenUE's Tariff Filing to Increase Rate for Electrical Service
Provided to Customers in the Company's Missouri Service Area

Requested From: Ryan Kind

Data Request No. OPC 2067

Did UE have any costs and revenues associated with non-asset based trading of wholesale capacity and energy products during the test year? If so, were these costs and revenues included in UE's test year revenue requirement? If these costs and revenues were included in UE's test year revenue requirement, please reference the workpapers that show how they were included in the revenue requirement. If these costs and revenues were NOT included in UE's test year revenue requirement, please fully explain why they were not included.

Response:

UE did have costs and revenues associated with speculative trading during the test year, however; these costs and revenues were not included in the revenue requirement. The costs were not included because FERC requires these revenues and costs to be recorded "below the line" as non-operating revenues or expenses and as a result are viewed as items to be excluded.

Prepared By: Jeff L. Dodd

Title: Mng. Supv. RTO Settlements & Fin Analysis

Date: 8/8/08