

Exhibit No.:
Issue(s): DSM Cost Recovery
Witness: Matt Michels
Sponsoring Party: Union Electric Company
Type of Exhibit: Rebuttal Testimony
Case No.: ER-2010-0036
Date Testimony Prepared: February 11, 2010

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2010-0036

REBUTTAL TESTIMONY

OF

MATT MICHELS

ON

BEHALF OF

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

**St. Louis, Missouri
February 11, 2010**

1 Supervisor of Resource Planning. Prior to joining Ameren Services, I worked for 15 years at
2 Illinois Power Company and held positions of varying responsibility related to resource
3 planning, strategic planning, and business and financial planning.

4 **Q. Please describe your duties and responsibilities as Managing Supervisor of**
5 **Resource Planning.**

6 A. My primary responsibility as Managing Supervisor of Resource Planning is the
7 development and preparation of AmerenUE's Integrated Resource Plan. In addition I am
8 responsible for ongoing resource planning and economic analyses and modeling to support
9 AmerenUE's business planning processes.

10 **Q. Please describe your qualifications.**

11 A. I earned a Bachelor of Science degree in Electrical Engineering from the
12 University of Illinois at Urbana-Champaign in May of 1990. I have been employed by Ameren
13 and one of its predecessor companies, Illinois Power, since June of 1990 in various positions
14 related to resource and business planning. During most of that time, my responsibilities have
15 included the development and use of various planning models for purposes such as production
16 costing, acquisition evaluation, corporate restructuring, financial forecasting and resource
17 planning.

18 **Q. What is the purpose of your rebuttal testimony?**

19 A. The purpose of my rebuttal testimony is to describe the model used by AmerenUE
20 to evaluate the effects of demand-side management (DSM) cost recovery mechanisms and to
21 present the results of the model when simulating the cost recovery proposals made by parties to
22 this case, specifically those proposed by Staff witness John Rogers and Missouri Industrial

1 Energy Consumers (MIEC) witness Maurice Brubaker in their respective direct testimonies and
2 the proposal made by Company witness Stephen Kidwell in his rebuttal testimony.

3 **Q. Please describe the model used by AmerenUE to evaluate the effects of DSM**
4 **cost recovery mechanisms.**

5 A. The model is a Microsoft Excel spreadsheet that takes DSM portfolio data for
6 demand and energy reductions and the associated costs, calculates the revenue requirement and
7 financial statement impacts related to those energy and demand reductions and costs, and applies
8 these effects to a set of forecasted financial statements for AmerenUE as a whole. The model
9 currently is set to produce a forecast that spans the years 2009 through 2018 and assumes the
10 DSM portfolio presented in AmerenUE's last resource plan filing in Case No. EO-2007-0409.
11 All model assumptions and results are presented and used as annual values.

12 **Q. What is the primary purpose of the model?**

13 A. The model is intended to demonstrate the relative impacts of various cost
14 recovery mechanisms as compared to a case in which no DSM portfolio is implemented. This
15 provides for the kind of equivalent evaluation of demand-side and supply-side resources
16 contemplated in the Missouri Energy Efficiency Investment Act (MEEIA) and described in the
17 rebuttal testimony of Mr. Kidwell. As the focus of the model is on relative comparisons of the
18 effects of cost recovery assuming a particular DSM portfolio, it is not intended to evaluate the
19 merits of a particular portfolio or resource plan, to evaluate the risks around such portfolios or
20 plans, or to serve as a definitive presentation of the expected financial outlook of the Company.

21 **Q. What kinds of cost recovery mechanisms is the model able to evaluate?**

22 A. While the model could conceivably evaluate nearly any potential cost recovery
23 approach with some additional modification to the model logic, it is currently designed to

1 evaluate various combinations of specific program cost recovery, lost revenue recovery, and
2 incentive structures. For program cost recovery, the model includes expense treatment or
3 capitalization and amortization with a user-defined amortization period. The model includes an
4 option for recovery of lost revenues attributable directly to implementation of DSM programs.
5 For incentive structures the model includes options for shared net program benefits, adds to the
6 return on DSM investments, or performance-based penalties or rewards as a percentage of lost
7 revenue. The options can be used in various logical combinations and with varying assumptions
8 for each option to represent a number of complete cost recovery and incentive schemes. I have
9 attached a fully executable version of the model as Schedule MM-ER1.

10 **Q. Have you modeled any of the proposals presented in this case?**

11 A. Yes. I have modeled the proposal presented in the rebuttal testimony of Company
12 witness Stephen Kidwell, the proposal presented in the direct testimony of MIEC witness
13 Maurice Brubaker, and the proposal presented in the direct testimony of Staff witness John
14 Rogers. For purposes of providing a comparison to a supply-side only alternative, I have also
15 modeled a case with no DSM portfolio. This No DSM case establishes a benchmark for utility
16 earnings and customer bills against which alternative cost recovery proposals can be measured
17 and assessed.

18 **Q. What were the results of this modeling work?**

19 A. The model results are summarized in the attached Schedule MM-ER2. This
20 schedule presents the following values for each proposal or alternative cost recovery and
21 incentive scheme for the period 2009 through 2018:

- 22 • Average utility return on equity (ROE) achieved
- 23 • Present value utility earnings (net income) in billions of dollars

- Present value of total customer bills in billions of dollars
- Average retail electric rate in cents per kilowatt-hour
- The balance, in millions of dollars, of the regulatory asset for DSM program expenses not yet recovered at the end of year 2018

Q. Why are these particular values important to the comparison of DSM cost recovery proposals?

A. The utility ROE and present value earnings provide a means of assessing the financial equivalence of pursuing DSM versus supply side resource options from the utility's perspective. Present value customer bills and average retail rates provide a means of assessing the equivalence from a customer perspective. The balance of the regulatory asset provides a simple assessment of the regulatory risk to the utility of recording DSM program expenses on the balance sheet and amortizing them over some period

Q. What can be concluded from the results of the modeling?

A. The following table is a summary of the modeling results from Schedule MM-ER2.

	No DSM	AmerenUE Proposal	MIEC Proposal	PSC Staff Proposal
Average ROE Achieved (2009-2018)	6.88%	6.65%	6.60%	6.47%
PV Utility Earnings (2009-2018) (\$B)	2.06	1.99	2.01	1.98
PV Customer Bills (2009-2018) (\$B)	21.03	20.86	20.67	20.56
Average Retail Rate (2009-2018) (cents/kwh)	7.80	7.99	7.93	7.89
2018 Regulatory Asset Balance (\$MM)	-	-	377	481

These modeling results yield several important conclusions. First, program expense recovery alone, whether expensed or capitalized, is not sufficient to produce the same level of earnings and ROE with implementation of DSM as is available to the utility without DSM. This is due primarily to the lost revenue that results from reductions in sales during periods between general rate cases. Second, recovery of DSM program costs as expenses leaves

1 a smaller gap in utility ROE compared to no DSM implementation than does capitalizing and
2 amortizing these costs over a period of time. Third, capitalizing DSM program expenses results
3 in a regulatory asset balance that approaches, and in the case of Staff's proposal exceeds, \$400
4 million. Finally, total utility bills are lower with DSM than without DSM and average rates are
5 higher regardless of which approach to cost recovery and incentives is chosen.

6 **Q. Based on these results, what is the estimated expected impact on customer**
7 **rates and bills of AmerenUE's proposal as outlined by Mr. Kidwell in his rebuttal**
8 **testimony compared to the No DSM case?**

9 A. The AmerenUE proposal would yield rates that are, on average, higher by about
10 2.4% over the ten-year period from 2009 through 2018 and total customer bills that are lower by
11 approximately \$170 million over that same period on a present value basis.

12 **Q. In his direct testimony, MIEC witness Maurice Brubaker proposes that DSM**
13 **program costs be capitalized and amortized over ten years with the utility's allowed rate of**
14 **return applied to the unamortized balance. What can be concluded from the results of**
15 **modeling this proposal?**

16 A. The results of modeling MIEC's proposal are shown in column c of Schedule
17 MM-ER2. MIEC's approach results in an average utility ROE over the 10-year period that is 28
18 basis points lower than that achieved without implementing DSM. The MIEC proposal also
19 results in the accumulation of approximately \$377 million in unrecovered program expenses by
20 the end of year 2018. Taken in total, the MIEC proposal falls far short of producing equivalence
21 between implementing DSM and implementing supply side resource alternatives from a utility
22 perspective while increasing regulatory risk to the utility.¹

¹ The increase in regulatory risk is discussed in the direct testimony of AmerenUE witness Stephen Kidwell.

1 **Q. Mr. Brubaker describes a “large inequity” resulting from the kind of expense**
2 **recovery that AmerenUE is proposing compared to the capitalization proposal he**
3 **advocates. What is the estimated rate impact of AmerenUE’s proposal to expense DSM**
4 **program costs compared to capitalizing and amortizing these costs as Mr. Brubaker**
5 **proposes?**

6 A. The modeling results in Schedule MM-ER2 show that the difference in average
7 rates over the 10 years between 2009 and 2018 is about 6 one-hundredths of a cent per kilowatt-
8 hour, or less than 1 percent, when comparing MIEC’s proposal in column c to the results of
9 expensing alone in column b, the AmerenUE proposal.

10 **Q. The proposal made by MIEC appears to produce an ROE that is not much**
11 **lower than that produced by AmerenUE’s proposal. Are the two proposals roughly**
12 **equivalent from the utility’s perspective?**

13 A. No. The 28 basis point difference in ROE under MIEC’s proposal, relative to the
14 No DSM case, translates into approximately \$50 million less shareholder value created over the
15 10-year analysis period, on a present-value basis. In addition, MIEC’s proposal does not address
16 the regulatory risk introduced by the accumulation of hundreds of millions of dollars in a
17 regulatory asset that is inherent in any capitalization approach to DSM cost recovery. As shown
18 in Schedule MM-ER2, the regulatory asset is nearly \$400 million at the end of the 10-year
19 period.

20 **Q. What is the proposal made for DSM cost recovery by Staff witness John**
21 **Rogers in his direct testimony?**

22 A. Mr. Rogers proposes that DSM program expenses be accumulated in a regulatory
23 asset and amortized over a period of ten years with the utility’s allowed rate of return applied to

1 the unamortized balance. With one key exception, this proposal is the same as that presented by
2 Mr. Brubaker. The exception is that in Mr. Rogers' proposal, amortization of the costs
3 accumulated in the regulatory asset could not commence until final evaluation has been
4 completed on the programs for which the costs were incurred.

5 **Q. How does this additional provision affect the model results?**

6 A. This provision results in an additional lag in cost recovery and deterioration of
7 utility earnings that is significantly worse than MIEC's proposal. The model results for the
8 proposal by Staff witness Rogers are presented in column d of Schedule MM-ER2. These results
9 show that the utility ROE is 41 basis points lower than in the case without DSM and present
10 value utility earnings are lower by \$80 million. The results further show that the regulatory asset
11 for unrecovered DSM program costs grows to a balance of approximately \$481 million by the
12 end of year 2018.

13 **Q. Please summarize your conclusions with respect to the proposals of MIEC**
14 **witness Brubaker and Staff witness Rogers.**

15 A. As demonstrated by the model results, neither proposal comes close to achieving
16 the kind of equivalence for DSM with supply side resources contemplated in MEEIA. Both
17 result in significantly lower utility earnings and returns and the accumulation of hundreds of
18 millions of dollars in unrecovered DSM program expenses in a regulatory asset with no
19 assurance of future recovery.

20 **Q. You've also modeled the proposal presented by Company witness Stephen**
21 **Kidwell in his rebuttal testimony. What are the results of modeling this proposal?**

22 A. The results of modeling this proposal are presented in column b of Schedule
23 MM-ER2 and in the above table. These results show that the proposal made by Mr. Kidwell

1 minimizes the gap in utility earnings and ROE when compared to the case without DSM
2 implementation while lowering customer bills and avoiding regulatory risk related to program
3 cost recovery as measured by the regulatory asset balance for unrecovered program expenses.
4 While average rates increase in every case including DSM implementation, total customer bills
5 still decrease. Finally, by expensing DSM program costs, the utility avoids the disincentive to
6 aggressive implementation of demand-side programs created by the growing regulatory asset
7 that, in part, characterizes the capitalization approaches proposed by MIEC and Staff.

8 **Q. In addition to the proposals made in this case, have you also modeled other**
9 **approaches to DSM cost recovery?**

10 A. Yes. Specifically I have modeled a case that modifies the AmerenUE expense
11 tracker proposal by also including a lost revenue tracker. The results of this case are shown in
12 Schedule MM-ER2 in column e.

13 **Q. Why have you included this additional case?**

14 A. Although this approach has not been proposed by a party in this case, it serves as
15 one example of how the disincentives to implementation of DSM can be addressed, as has been
16 done in other states. Mr. Kidwell discusses other states' approaches more fully in his rebuttal
17 testimony.

18 **Q. Does this conclude your rebuttal testimony?**

19 A. Yes, it does

In the Matter of Union Electric Company d/b/a AmerenUE's Tariffs to Increase its Annual Revenues for Electric Service.) Case No. ER-2010-0036
) Tracking No. YE-2010-0054
) Tracking No. YE-2010-0055

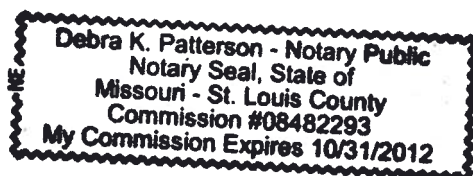
STATE OF MISSOURI)
) ss
CITY OF ST. LOUIS)

1. My name is Matt Michels. I work in the City of St. Louis, Missouri, and I am employed by Ameren Services Company as Managing Supervisor, Resource Planning.

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

Subscribed and sworn to before me this 10th day of February, 2010.

My commission expires:



SCHEDULE
MM-ER1

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AmerenUE DSM Cost Recovery Model
Summary of Cost Recovery Proposal Results

	a	b	c	d	e
	No DSM Portfolio	AmerenUE Proposal -- Forecast Expense Tracker	MIEC Proposal --Capitalize and Amortize over 10 years	Staff Proposal - Capitalize and Amortize over 10 years Following Evaluation	Forecast Expense Tracker with Lost Revenue Recovery
1 Average ROE Achieved (2009-2018)	6.88%	6.65%	6.60%	6.47%	6.89%
2 PV Utility Earnings (2009-2018) (\$B)	2.06	1.99	2.01	1.98	2.06
3 PV Customer Bills (2009-2018) (\$B)	21.03	20.86	20.67	20.56	20.98
4 Average Retail Rate (2009-2018) (cents/kwh)	7.80	7.99	7.93	7.89	8.04
5 2018 Regulatory Asset Balance (\$MM)	-	-	377	481	-