Exhibit No.: 152
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

REBUTTAL TESTIMONY

OF

MATT MICHELS

CASE NO. ER-2010-0036

Q. Please state your name and business address.

A. My name is Matt Michels. My business address is One Ameren Plaza, 1901 Chouteau Avenue, St. Louis, MO 63103.

Q. By whom and in what capacity are you employed?

A. I am employed by Ameren Services Company as Managing Supervisor, Resource Planning.

Q. Please describe Ameren Services Company.

A. Ameren Services Company provides corporate, administrative and technical support for Ameren Corporation and its affiliates, including Union Electric Company d/b/a AmerenUE (AmerenUE or Company).

Q. Please describe your employment history with Ameren Services Company.

A. I joined Ameren Services Company in 2005 as a Consulting Engineer in Corporate Planning. My responsibilities included coordination and monitoring of projects implemented in connection with the integration of processes and systems following the acquisition by Ameren Corporation of Illinois Power Company in October, 2004. I subsequently was involved in the integration of combustion turbine facilities acquired by AmerenUE in 2006. I later joined the Corporate Model team, also within Corporate Planning, where my duties included the development of special financial models for analyzing specific strategic and regulatory issues. In September, 2008, I was promoted to my current position as Managing

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

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

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

Q. Please describe your qualifications.

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

Q. What is the purpose of your rebuttal testimony?

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

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

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

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

Q. What is the primary purpose of the model?

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

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

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

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

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

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

Q. What were the results of this modeling work?

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

- Average utility return on equity (ROE) achieved
- 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

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

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

A. The AmerenUE proposal would yield rates that are, on average, higher by about 2 4% over the ten-year period from 2009 through 2018 and total customer bills that are lower by approximately $170 million over that same period on a present value basis.

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

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

Q. Mr. Brubaker describes a "large inequity" resulting from the kind of expense recovery that AmerenUE is proposing compared to the capitalization proposal he advocates. What is the estimated rate impact of AmerenUE's proposal to expense DSM program costs compared to capitalizing and amortizing these costs as Mr. Brubaker proposes?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Q. Why have you included this additional case?

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

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 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

AFFIDAVIT OF MATT MICHELS

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

Matt Michels, being first duly sworn on his oath, states:

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.

2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony on behalf of Union Electric Company d/b/a AmerenUE consisting of 9 pages and Schedules MM-ER 1 through MM-ER 2, 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.

Matt Michels

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

Notary Public

My commission expires:

Debra K. Patterson - Notary Public
Notary Seal, State of
Missouri - St. Louis County
Commission #08482293
My Commission Expires 10/31/2012

SCHEDULE
MM-ER1

FILED UNDER SEPARATE COVER

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	-

AmerenUE EE Cost Recovery Model

Summary of Cost Recovery Assumptions and Results

Assumptions	Selected Method	Copied Results of Various Modeled Methods																	
Cost Recovery Method	No DSR	No DSR	Current Amortization Treatment	Forecast Expense Tracker	SNB with Current Amortization for 68% ROE Parity	SNB with Forecast Expense Tracker for 68% ROE Parity	SNB with Forecast Expense Tracker for 100% ROE Parity	Capitalize and Amortize	Capitalize and Amortize	Capitalize and Amortize	Capitalize and Amortize with SNB	Capitalize and Amortize with Evaluation Lag	Capitalize and Amortize with Evaluation Lag	Capitalize and Amortize with Evaluation Lag	Forecast Expense Tracker with Lost Revenue Recovery	Capitalize and Amortize with Lost Revenue Recovery	Capitalize and Amortize with Lost Revenue Recovery	Capitalize and Amortize with Lost Revenue Recovery
Assumptions for Current Amortization Method with No Incentive																			
Amortization Period	10	10			10														
Assumptions for Forecast Average Expense with Tracker																			
Averaging Period for Forecast Tracker	2			2		2	2								2				
Amortization Period for Forecast Tracker	3			3		3	3								3				
Assumptions for Shared Net Benefits																			
Utility Share of Net Benefits Retained	19.4%				23.3%	18.4%	23.0%												
Threshold Performance Level	70%				70%	70%	70%												
Utility Share of Net Benefits (Threshold)	12.0%				12.0%	12.0%	12.0%												
Maximum Performance Level	110%				110%	110%	110%												
Utility Share of Net Benefits (Maximum)	23.0%				23.0%	23.0%	23.0%												
Expected Performance Level	100%				100%	100%	100%												
Assumptions for Capitalize and Amortize with Return																			
Amortization Period for Capitalization	3							3	6	10	10	3	6	10		3	6	10	
Evaluation Recovery Lag (Years)	0							0	0	0	0	3	3	3		0	0	0	
ROE Adder on DSR Investment at Target	0.00%							0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.00%	
Threshold Performance Level	70%							70%	70%	70%	70%	70%	70%	70%		70%	70%	70%	
ROE Adder on DSR Investment (Threshold)	0.00%							0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.00%	
Maximum Performance Level	110%							110%	110%	110%	110%	110%	110%	110%		110%	110%	110%	
ROE Adder on DSR Investment (Maximum)	0.00%							0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.00%	
Expected Performance Level	100%							100%	100%	100%	100%	100%	100%	100%		100%	100%	100%	
ROE Adder on All Utility Inv. (Target)	0.00%							0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.00%	
ROE Adder on All Utility Inv. (Threshold)	0.00%							0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.00%	
ROE Adder on All Utility Inv. (Maximum)	0.00%							0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.00%	
Assumptions for Lost Revenue Recovery																			
Forward Averaging Period for Lost Sales (Years)															3	3	3	3	
Recovery Reset Linked to Rate Case? (Yes=1)															1	0	0	0	
Recovery Reset Frequency (if not linked to r/c)															3	3	3	3	
Model Results																			
Average ROE Achieved (2009-2018)	6.56%	6.88%	6.43%	6.83%	6.88%	6.83%	6.88%	6.81%	6.80%	6.80%	6.80%	6.47%	6.47%	6.47%	6.80%	6.82%	6.80%	6.80%	
PV Utility Earnings (2009-2018) ($B)	2.06	2.08	1.86	1.99	2.04	2.04	2.08	2.00	2.01	2.01	2.10	1.89	1.86	1.89	2.06	2.07	2.07	2.06	
PV Customer Bills (2009-2018) ($B)	21.03	21.03	20.89	20.86	20.72	20.86	20.87	20.75	20.71	20.67	20.82	20.81	20.58	20.86	20.86	20.86	20.82	20.78	
Average Retail Rate (2009-2018) (cents/kwh)	7.80	7.80	7.80	7.80	7.96	8.03	8.04	7.98	7.96	7.93	7.99	7.91	7.80	7.99	8.04	8.00	7.99	7.97	
NPV Change in FCF vs. No DSR ($MM) (2009-2018)	-	-	(349.3)	(66.2)	(274.1)	(13.5)	0.2	(202.5)	(252.6)	(300.5)	(214.2)	(336.8)	(372.8)	(391.5)	4.7	(139.3)	(189.8)	(237.3)	
Regulatory Asset Balance in 2018 ($MM)	-	-	378.6	0.0	378.6	0.0	0.0	196.2	283.1	378.6	378.6	370.0	439.1	480.7	0.0	196.2	283.1	378.6	
LBNL Model Results for Comparison																			
Shared Net Benefits Needed						19.30%	24.10%												
Average ROE Achieved (2009-2018)		7.24%		6.82%		7.16%	7.24%	6.88%	6.80%	6.75%	6.76%								
PV Utility Earnings (2009-2018) ($B)		2.18		2.05		2.14	2.18	2.06	2.05	2.05	2.05								
PV Customer Bills (2009-2018) ($B)		21.24		21.08		21.21	21.25	21.03	20.97	20.90	20.90								
Average Retail Rate (2009-2018) (cents/kwh)		8.37		8.09		8.05	8.08	8.07	8.05	8.02	8.02								
Difference (UE Model - LBNL Model)																			
Shared Net Benefits Needed						-0.80%	-1.10%												
Average ROE Achieved (2009-2018)		-0.36%		-0.27%		-0.34%	-0.36%	-0.25%	-0.20%	-0.19%	0.13%								
PV Utility Earnings (2009-2018) ($B)		(0.11)		(0.07)		(0.10)	(0.10)	(0.06)	(0.04)	(0.03)	0.05								
PV Customer Bills (2009-2018) ($B)		(0.21)		(0.22)		(0.27)	(0.28)	(0.20)	(0.26)	(0.23)	(0.08)								
Average Retail Rate (2009-2018) (cents/kwh)		(0.57)		(0.60)		(0.62)	(0.62)	(0.61)	(0.62)	(0.59)	(0.53)								

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	8.02
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	(20.80)
	(8.02)