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| Witness: | William R. Davis |
| Sponsoring Party: | Union Electric Company |
| Type of Exhibit: | Supplemental Dir. Test. |
| Case No.: | EO-2012-0142 |
| Date Testimony Prepared: | |

**MISSOURI PUBLIC SERVICE COMMISSION**

**CASE NO. EO-2012-0142**

# SUPPLEMENTAL DIRECT TESTIMONY

**OF**

**WILLIAM R. DAVIS**

**ON**

**BEHALF OF**

**UNION ELECTRIC COMPANY**
**d/b/a Ameren Missouri**

**St. Louis, Missouri**
**February, 2011**

**SUPPLEMENTAL DIRECT TESTIMONY**

**OF**

**WILLIAM R. DAVIS**

**CASE NO. EO-2012-0142**

**Q. Please state your name and business address.**

A. My name is William R. Davis. My business address is One Ameren Plaza, 1901 Chouteau Avenue, St. Louis, MO 63103.

**Q. Are you the same William R. Davis who filed direct testimony in this case?**

A. Yes, I am.

**Q. What is the purpose of this testimony?**

A. The purpose is to respond to the request of parties in this case to provide additional analysis that they have indicated they would like to see in light of one of the requests for a variance contained in Ameren Missouri's MEEIA filing.

**Q. Ameren Missouri made several variance requests, to which one are you referring?**

A. I am referring to the variance request related to the retrospective treatment of the Demand-Side Investment Mechanism (DSIM)[1]. Other parties in the case have indicated that further analysis would be helpful in evaluating Ameren Missouri's MEEIA proposal.

**Q. Could you provide a summary of your key conclusions?**

[1] 4 CSR 240-20.093(2)(H), 4 CSR 240-20.093(2)(H)3, 4 CSR 240-20.093(1)(EE), 4 CSR 240-20.094(1)(Z), 4 CSR 240-3.163(1)(A), 4 CSR 240-20.093(1)(C), 4 CSR 240-20.094(1)(C), 4 CSR 240-3.163(1)(F)5, 4 CSR 240-20-093(1)(M)5, 4 CSR 240-20.094(1)(J)5

A. Yes, in order to value demand-side investments on an equivalent economic footing with supply-side alternatives, it is imperative not to delay recovery of the throughput disincentive. The recovery of program costs and the initial 15.4% share of net benefits is to simply make the utility whole. It doesn't provide any additional utility earnings. The Company's proposal already delays recovery of the remaining 4.8% portion of net benefits until the three year performance has been completely measured.

The conclusions of the additional quantitative modeling I discuss herein were predictable and consistent with the information presented in the Company's MEEIA Report. Simple logic tells us that delaying recovery causes additional financing costs which must be borne by customers. We also know, from evidence in prior cases as well as analysis in the MEEIA Report, that energy efficiency causes immediate cash losses to the Company. Those cash losses are a significant economic disincentive and need to be addressed. We also know that the Company is sensitive to other changes in recovery risk associated with delayed recovery of significant dollar amounts. The analysis contained in this supplemental testimony puts more specificity to the impact of those issues. For example, the additional financing costs are an additional $36 million, which is more than another year of the 15.4% sharing, yet does not provide any additional benefit to customers. I also used data from the MEEIA Report to quantify the approximately $70 million of pre-tax cash drain from the first three years without recovery in rates.

Finally, I note several important non-quantifiable reasons why delayed recovery is problematic. Among those additional reasons is the creation of a barrier that will prevent customers from revoking their opt-out and the potential to derail future DSIM proposals.

**Q. What additional analysis have you performed to support your waiver request?**

A. I evaluated a hypothetical case that delays the recovery of the 15.4% shared net benefits from 2013-2015 to 2016-2018. This hypothetical case mimics what the Company's proposal would look like if it were designed to obtain recovery retrospectively. During the first three years of the plan, the cash recovery that is being delayed will be accrued in a regulatory asset along with the carrying costs at the AFUDC rate. At the end of 2015, the regulatory asset will be $108 million. My analysis presumes that the regulatory asset is then included in rate base and amortized over three years (2016-2018).

**Q. Is it necessary to accrue financing costs and then capitalize the regulatory asset?**

A. Yes, those costs are necessary to accurately reimburse the additional financing costs incurred because of the delayed recovery. In fact, the additional financing costs exceed $36 million dollars, which is more than an additional year of shared net benefits recovery. Delaying recovery of the 15.4% will cost customers an extra 12.5% as compared to Ameren Missouri's proposal.

**Q. Do these additional financing costs impact the net benefits to customers?**

A. Yes, I have estimated that while the Company's proposal results in customers retaining 91% of net benefits (from a revenue requirements perspective), this hypothetical case would reduce the portion retained by customers to 87.9%. Table 1 below shows the annual customer costs for the first ten years as well as the ongoing benefits beyond year ten. Figure 1 is a graphical representation of the data in Table 1 and also includes a cumulative net customer cost line. Whenever the cumulative net customer cost goes below zero it means the total benefits have exceeded the total costs. Table 1 is directly comparable to Table 2.10 of the MEEIA Report (page 36), Figure 1 is directly comparable to Figure 2.7 in the MEEIA Report (page 35.), Figure 2 is directly comparable to Figure 2.8 in the MEEIA Report (page 36), and Figure 3 is directly comparable to Figure 2.9 in the MEEIA Report (page 37).

**Table 1 Total Customer Cost ($MM)**

| | Lifetime Present Value | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Ongoing (Present Value) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Program Cost Recovery | $136 | $48.4 | $48.4 | $48.4 | $0.0 | $0.0 | $0.0 | $0.0 | $0.0 | $0.0 | $0.0 | $0 |
| Performance Mechanism | $134 | $0 | $0 | $0 | $63.3 | $58.1 | $52.9 | $0.0 | $0.0 | $0.0 | $0.0 | $0 |
| | | | | | | | | | | | | |
| Retail Non-Fuel Revenues | ($94) | ($8.2) | ($22.4) | ($39.0) | ($25.7) | ($11.7) | ($1.5) | $0.0 | $0.0 | $0.0 | $0.0 | $0 |
| FAC Sharing | $3 | $0.2 | $0.6 | $1.2 | $0.9 | $0.5 | $0.1 | $0.0 | $0.0 | $0.0 | $0.0 | $0 |
| Net Fuel Savings | ($461) | ($3.9) | ($13.3) | ($26.7) | ($43.0) | ($52.0) | ($60.7) | ($66.6) | ($70.8) | ($71.6) | ($78.3) | ($130) |
| Avoided T&D | ($37) | ($1.0) | ($2.4) | ($4.6) | ($4.7) | ($4.8) | ($4.9) | ($4.9) | ($4.6) | ($4.3) | ($4.2) | ($8) |
| | | | | | | | | | | | | |
| Net Customer Cost | ($320) | $35.5 | $11.0 | ($20.7) | ($9.1) | ($9.9) | ($14.1) | ($71.4) | ($75.5) | ($75.9) | ($82.4) | ($138) |

**Figure 1 Customer Costs**

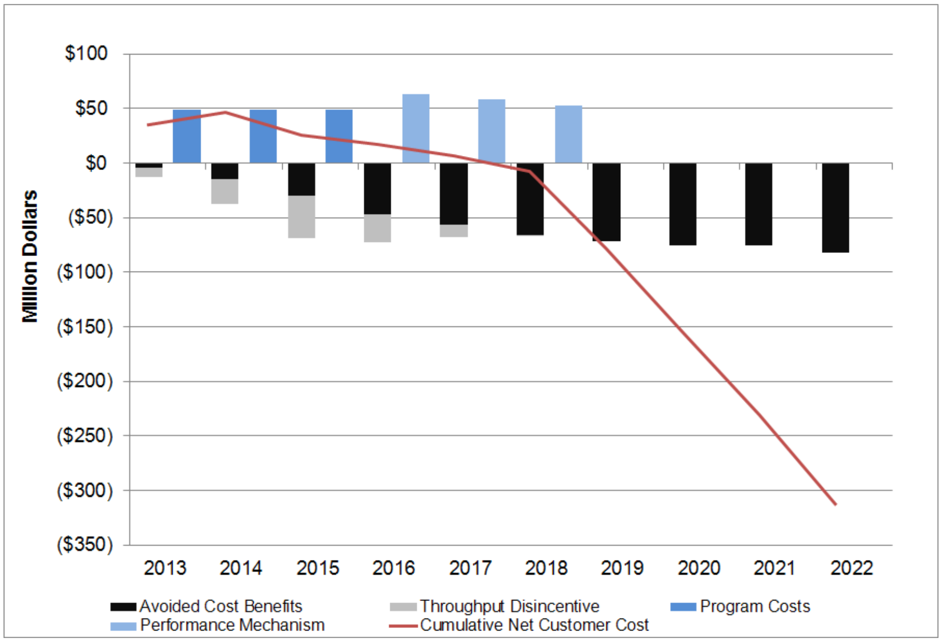



**Figure 2 Average Annual Bill Impact (% Change)**

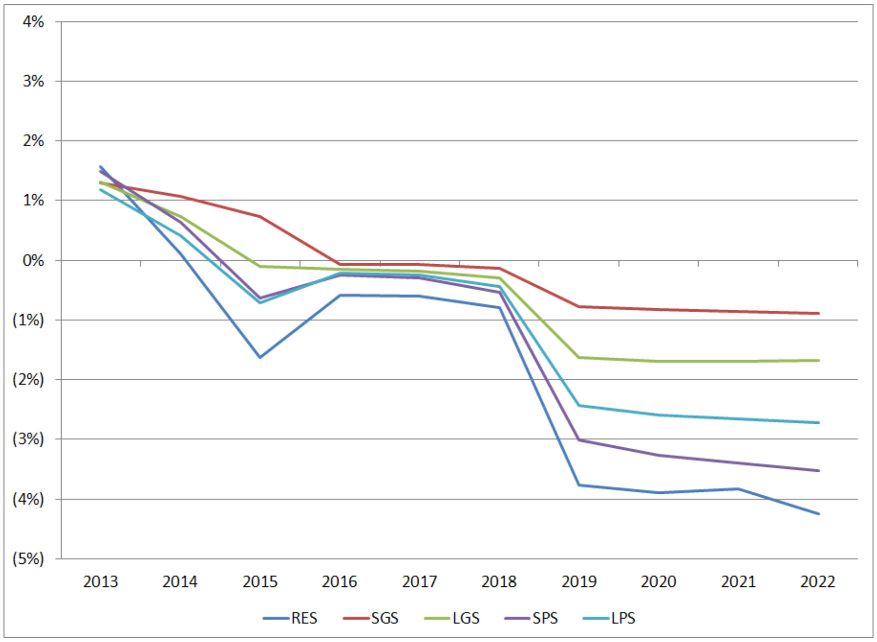
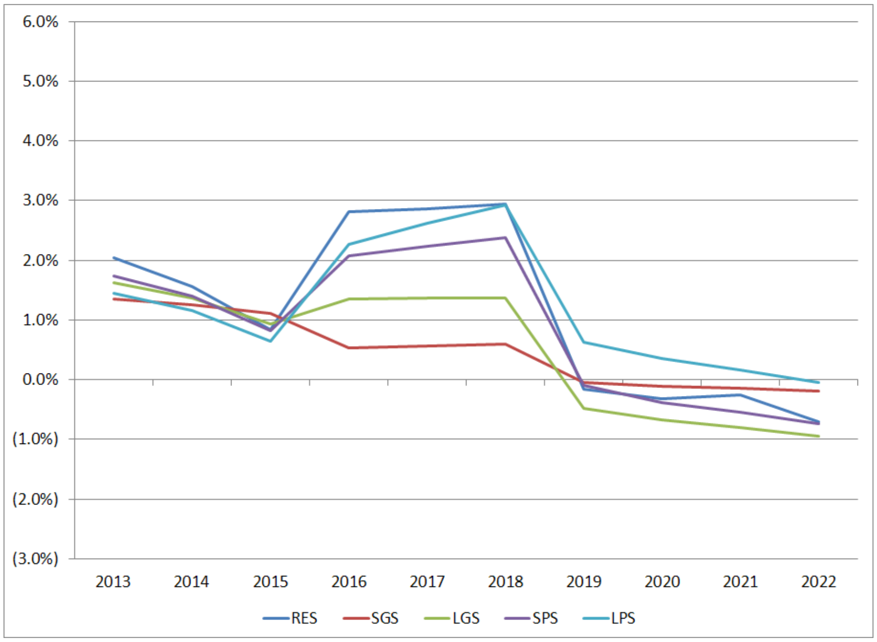


**Figure 3 Average Annual Rate Impact (% Change)**




As expected, the hypothetical case's costs are lower initially because recovery of the costs is delayed. However, the additional financing costs cause the net customer cost to be higher by $36 million.

**Q. Does the delay in recovery of the requested 15.4% sharing mean that customers will not see as large of an impact to the revenue requirement?**

A. No, it simply delays the revenue requirements impacts. If we only look at this three year plan, it may suggest that it is possible to limit the revenue requirement impact by collecting the program costs in years 1 through 3 then collecting the shared net benefits in years 4 through 6. However, that would incorrectly ignore the effects of the next three year plan. When the subsequent three year plan starts, customers will be paying the overlap of the delayed shared net benefits from years 1 through 3 and the new program costs of years 4 through 6. The overlapping revenue requirement impacts of program costs and the shared net benefits are inevitable, so delaying recovery only adds costs and mixes the costs across the implementation plans. Later in this testimony I describe other unintended consequences of overlapping the cost collection of different implementation periods.

**Q. Is there a negative impact to utility earnings by delaying the recovery?**

A. Possibly. The delay in cash would necessitate a review of the basis on which revenues can be booked. It is not necessarily the case that a delay in recovery would mean that the revenue could not be booked. Clearly the inability to book the revenues would cause a significant and immediate negative earnings impact and therefore a strong disincentive to pursue energy efficiency. Table 2.2 of the MEEIA Report shows the earnings impact without the proposed Performance Mechanism. The first three years earnings loss would total $41.65 million if the Company was unable to book the revenues.

**Q. Besides a potential negative earnings impact to the utility, what other problems are casued by delaying recovery?**

A. There are several problems. An immediate problem from a utility's perspective is the drain on cash flow. The impact to cash flow is important as it is a primary measure in key credit metrics and directly impacts borrowing costs.

**Q. Can you please describe the cash flow issues?**

A. Yes. If the Company delays recovery three years, the Company's pre-tax cash flows will be reduced by $67.6 million. This can be observed in Table 2.2 of the MEEIA Report by summing up the first three years of the retail non-fuel revenues and the FAC sharing revenues. The after-tax impact on cash flows (or Funds From Operations "FFO") is a $41.65 million reduction.

**Q. How does the hypothetical case impact the key credit metrics you included in Table 2.4 of the MEEIA Report?**

A. The two key credit metrics I originally analyzed in Table 2.4 of the MEEIA Report were cash flow metrics. That analysis showed the impact of the proposed DSIM both with and without the Performance Mechanism. Table 2 below shows the impact to those metrics from the hypothetical case in addition to the cases evaluated in the MEEIA Report. As would be expected, by delaying cash recovery the first three years look the same as the case without a Performance Mechanism. Although the credit metrics bounce back in the following years, there is more volatility in the hypothetical case than the credit metric impacts associated with Ameren Missouri's proposal.

**Table 2 Change in Key Credit Metrics (Absolute Change in Metric)**

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---|---|---|---|---|---|
| **With Performance Mechanism** | | | | | | |
| FFO/Debt | 0.6% | 0.2% | (0.4%) | (0.2%) | 0.0% | 0.2% |
| FFO/Interest | 0.02 | 0.01 | (0.01) | (0.01) | 0.00 | 0.01 |
| **Without Performance Mechanism** | | | | | | |
| FFO/Debt | 0.2% | (0.2%) | (0.9%) | (0.4%) | (0.2%) | (0.0%) |
| FFO/Interest | 0.01 | (0.01) | (0.03) | (0.01) | (0.01) | (0.00) |
| **Hypothetical Case** | | | | | | |
| FFO/Debt | 0.2% | (0.2%) | (0.9%) | 0.5% | 0.6% | 0.7% |
| FFO/Interest | 0.01 | (0.01) | (0.03) | 0.02 | 0.02 | 0.02 |

**Q. Are there other non-quantitative credit metrics?**

A. Yes. For example, Moody's uses two subjective categories: "Regulatory Framework" and "Ability to Recover Costs and Earn Returns" and each have a 25% weighting factor (50% total weight). For “Regulatory Framework”, Ameren Missouri is currently rated at Ba, which is a sub-investment grade rating (one full notch below Baa). For “Ability to Recover Costs and Earn Returns”, Ameren Missouri is currently rated Baa, which is the low side of the investment grade rating scale. The Company's proposal is new in Missouri and was designed to neutralize the impact of energy efficiency on business risk.

It is important to send positive signals to the rating agencies that regulatory policies are aligned with the intent of the MEEIA law and ultimately supportive of the implementation of energy efficiency. In doing so, any approved plan must not unnecessarily delay recovery, increase risk of recovery, negatively impact the utility's ability to recover its costs, and/or adversely impact the utility's opportunity to earn a fair return. Given Ameren Missouri's existing weakness in these two credit measures, any regulatory treatment that could significantly decrease operating cash flow would be of concern.

**Q. Is a reduction in cash flows and degradation in associated credit metrics a disincentive for the utility to engage in energy efficiency?**

A. Yes. In fact, delayed recovery of the throughput disincentive frustrates any proposal designed to maximize energy savings. Even with Ameren Missouri's proposal, increases to energy savings beyond those in the plan will cause additional negative cash pressures. Those additional negative consequences are proportional to its performance. For instance, from 2009-2011 Ameren Missouri exceeded its energy savings goals from energy efficiency by nearly 30%. While that indicates superior performance, it also increased the negative implications to cash flows by 30%. Those 30% extra energy savings would mean another $21 million of pre-tax cash losses in the aggressive plan Ameren Missouri has proposed. So, while we have proposed a framework that mitigates the planned negative consequences of energy efficiency, there is still a disincentive to maximize performance. The proposed tracker ensures that recovery would not be lost forever but does not mitigate the immediate cash losses. Stacking on a delay of a base amount to be included in rates initially would be a large economic barrier to overcome.

**Q. But doesn't the utility experience negative cash flows when building a supply-side resource?**

A. This is a great example of comparing apples and oranges. There are very important differences between supply-side and demand-side resources that make these types of comparisons meaningless. First, as mentioned in the MEEIA filing application, as program costs are spent the effects are, for practical purposes, immediate. For example, a business customer receives a rebate after the energy efficiency project is complete – meaning after the energy efficiency measure has been installed. Because of this, energy efficiency should be thought of as a continuous stream of demand-side resources becoming "used and useful" as they are installed. It is simply impossible to file monthly rate cases (each taking 11 months) to provide an opportunity for timely recovery. Second, the Company is requesting 15.4% of the shared net benefits to be included in rates when they are set in the Company's pending rate case. This amount offsets the throughput disincentive, which means it is not the recovery of energy efficiency program costs but rather the recovery of already approved fixed costs that are being collected in volumetric rates. It is incorrect to compare the delayed recovery of the throughput disincentive to the construction costs of a supply-side resource. The recovery of program costs and the initial 15.4% sharing simply make the utility whole and do not provide any additional utility earnings. Ameren Missouri has proposed collection of the remaining 4.8% portion of net benefits be delayed until the three year performance has been completely measured.

**Q. Does the delayed recovery impact the utility's business and regulatory risk?**

A. Yes, first there is concern about the size of the regulatory asset, which is not backed-up by any physical property. In the hypothetical case, the regulatory asset will be $108 million by 2015. In addition, the utility will have another regulatory asset of over $30 million associated with the remaining 4.8% of shared net benefits. There are also the regulatory assets still being amortized from previous energy efficiency cycles and, if this hypothetical case were to persist, there would be ongoing regulatory assets of considerable size accruing.

Furthermore, as time progresses, it is expected that other parties will continually attempt to prolong the recovery of those regulatory assets. In fact, there could be a debate about extending recovery five years from now. A few examples from the Company's recent rate cases are the two year extensions of the following trackers: Y2K Costs, Merger Costs, 2006 Storm Costs, RSG Resettlement Costs, and SO2 Costs. The element of uncertainty regarding the timing or extent of the recovery of regulatory assets represents an incremental risk from the perspective of investors.

Ameren Missouri's proposal was designed to neutralize the impacts of energy efficiency on business risk. The hypothetical case could have a big enough impact that the Company's requested equity return rate is no longer valid (i.e. it is too low). At this stage in the analysis I have not tried to quantify the impact to return on equity. Any commensurate increase to the return on equity would translate into additional costs to customers as a direct result of delayed recovery.

**Q. Have Ameren Missouri's energy efficiency programs been successful?**

A. Yes and parties in this case have already admitted this freely. It is an important fact for the Commission to recognize. The proposed energy efficiency programs are mostly comprised of the same programs that were in effect from 2009-2011. There is no evidence or reason to believe that these programs will not continue to be successful. Therefore any perceived risk that the Company will somehow materially underperform is simply unsubstantiated.

**Q. Has Ameren Missouri proposed anything to reduce risks to customers?**

A. Absolutely. First, Ameren Missouri has proposed a tracker with interest. This ensures that both the utility and its customers are made whole when final performance is determined. Second, the proposed Technical Resource Manual reduces evaluation risk.

**Q. How does program evaluation affect customers?**

A. Our research indicates there is a lot of uncertainty when it comes to measuring the effects of energy efficiency measures and programs. This is simply unavoidable because the entire evaluation purpose is to measure something (energy use) that never happened. Given this uncertainty, the evaluation results can over- or under-value the performance of Ameren Missouri's programs. For example, if programs are over-valued then customers will face more costs associated with a higher recorded performance level. However the company has proposed its TRM to specifically address this uncertainty. By agreeing to measure attributes and net-to-gross factors up-front, there is protection from after-the-fact over- or under-valuing the effects of the programs caused solely by the limitations of evaluations. In addition, the proposed TRM is largely based on historical evaluations from Ameren Missouri programs. And as mentioned earlier, the proposed programs are primarily an extension of those historical programs. In short, the TRM represents the best available, in many cases Missouri specific, information at this time. Using a TRM as proposed vastly simplifies the evaluation process and protects both the utility and its customers while providing added transparency.

**Q. Does sharing of net benefits also provide an incentive for the utility to perform well?**

A. Absolutely. The sharing of net benefits rewards the utility for maximizing customer net benefits or, to put it another way, it rewards the Company for achieving more savings at less cost. The shared net benefits proposal provides strong economic signals to the utility to meet and exceed its performance goals. This, again, provides additional comfort that customer interests are protected and that they will not pay up front without the assurance of good performance.

**Q. Does the Company have regular reporting requirements?**

A. Yes, the MEEIA rules require annual reporting requirements which will keep all parties abreast of its progress towards meeting goals. The rules also have tolerances that could require the utility to make additional filings to modify its plan if it is too far off track. These requirements are helpful to prevent surprises in performance. These processes help ensure worst case situations do not go too long without giving the Commission an opportunity for corrective action.

**Q. Are there any other implications of delayed recovery?**

A. Yes, two more important things to consider are the impact to customers who can opt out and the impact on decisions about future DSIM proposals.

**Q. How would delayed recovery impact customers who can opt out? Aren't they exempt from the costs?**

A. Delayed recovery creates a strong barrier that will prevent customers from revoking their opt out. Currently there is one line item on customer bills that reflects all energy efficiency costs. If a customer opts out then that customer is exempt from the entire line item charge. The MEEIA Report describes why it is important to have program costs collected contemporaneously, so opt-out customers can neither avoid the energy efficiency charges for which they are responsible nor be required to pay energy efficiency charges for which they are not responsible. Under the hypothetical case, if a large customer opts-out and later desires to revoke that privilege, then the customer will be burdened with all the historical program costs being deferred into the later periods. It is simply impractical, and perhaps not allowed under MEEIA, for the Company to try to administer several energy efficiency line items on customer bills or to try to exempt some customers from some portion of the charge based on when they were and were not participating in the programs.

**Q. How would delayed recovery impact decisions on future DSIM proposals?**

A. At this time there is no telling what future proposals will be made and whether any rate design modification proposals will be made. As a hypothetical example, consider the straight fixed variable (SFV) rate design. In this rate design all of the fixed costs are being collected in a fixed monthly charge. This rate design would eliminate the throughput disincentive. If SFV were implemented, then customers would be providing contemporaneous recovery of the throughput disincentive similar to the Company's current proposal. However, if that were proposed for the next program cycle then customers would be providing full recovery of fixed system costs for that current period and all of the throughput disincentive costs from the prior three years. Discovering this type of overlapping problem later will likely become an unintended barrier to adoption of a future proposal.

**Q. Would you support the adoption of the hypothetical retrospective recovery case?**

A. No. As I previously mentioned, I have only provided the additional analysis discussed in this testimony at the request of other parties in the case. For all the reasons enumerated in this testimony and the MEEIA report, there will still be significant economic barriers that make it clear that the financial interests between the utility and its customers are not properly aligned.

**Q. Aren't you asking the Commission to reverse its position taken during the MEEIA rulemaking?**

A. No, I am asking the Commission to grant a variance from the default reflected in the MEEIA rules (retrospective recovery) based upon the circumstances reflected in the Company's MEEIA filing. It is unavoidable that the delayed recovery implications are a disincentive to the implementation of energy efficiency. At the time of the rulemaking, there were no proposals with accompanying evidence to quantify this problem in front of the Commission. Good cause has been shown for the requested waivers and I urge the Commission to approve Ameren Missouri's MEEIA proposal as it is overwhelmingly beneficial to customers and compliant with the MEEIA statute.

**Q. Does this conclude your supplemental direct 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 Filing to Implement Regulatory Changes in ) File No. EO-2012-0142
Furtherance of Energy Efficiency as allowed by MEEIA. )

**AFFIDAVIT OF WILLIAM R. DAVIS**

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

William R. Davis, being first duly sworn on his oath, states:

1. My name is William R. Davis. I work in the City of St. Louis, Missouri, and I am employed by Ameren Services Company as Senior Corporate Planning Analyst.

2. Attached hereto and made a part hereof for all purposes is my Supplemental Direct Testimony on behalf of Union Electric Company d/b/a Ameren Missouri consisting of 15 pages, 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.

William R Davis
William R. Davis

Subscribed and sworn to before me this 22nd day of February, 2012.

Julie Donohue
Notary Public

My commission expires:

Julie Donohue - Notary Public
Notary Seal, State of
Missouri - St. Louis City
Commission #09753418
My Commission Expires 2/17/2013