### BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In re: Union Electric Company's	)	
2005 Utility Resource Filing Pursuant to	)	Case No. EO-2006-0240
4 CSR 240 – Chapter 22.	)	

#### AMERENUE'S RESPONSE TO MAY 19, 2006 REPORTS AND COMMENTS

COMES NOW Union Electric Company d/b/a AmerenUE (AmerenUE or the Company) and for its Response to the Reports and Comments filed by the Office of the Public Counsel (OPC), the Missouri Department of Natural Resources (DNR) and the Sierra Club, Missouri Coalition for the Environment, Mid-Missouri Peaceworks and the Association of Community Organizations for Reform Now (collectively, the Sierra Club), states as follows:

#### **Background**

- 1. On December 5, 2005, AmerenUE filed its Integrated Resource Plan (IRP) pursuant to 4 CSR 240-22.010 et. seq.
- 2. On May 19, 2006, the Staff of the Missouri Public Service Commission (Staff), OPC, DNR and the Sierra Club each filed their Reports and/or Comments on AmerenUE's IRP filing.
- 3. On August 4, 2006, AmerenUE, Staff, OPC, DNR and the Sierra Club made a joint filing setting forth areas where parties had reached an agreed upon resolution of alleged deficiencies and listing areas in which the parties had not reached agreement.
- 4. On August 15, 2006, Staff and AmerenUE filed a Stipulation and Agreement which resolved all alleged deficiencies contained within Staff's May 19, 2006 filing.

#### **Integrated Resource Planning Rules**

- 5. AmerenUE believes its IRP filing is in compliance with intent of the Commission's IRP rules and that it even went above and beyond the requirements of the rules in some areas. Additionally, AmerenUE spent a large amount of time and money in its efforts to develop a complete and detailed filing in compliance with the Commission's rules. However, independent from the issue of whether or not the AmerenUE IRP filing contained deficiencies, AmerenUE would like to take the opportunity to comment on the IRP rules.
- 6. There has been discussion, mostly informal, about amending the IRP rules. This discussion began as far back as 1999 when AmerenUE, along with several other Missouri electric utilities, formally asked the Commission to rescind its IRP rules. That case resulted in the suspension of the IRP rules for several years. As the suspension period came to an end, discussions on the need to modify the IRP rules resumed. In May of 2005, Staff held a workshop in which AmerenUE participated. The purpose of the workshop was to discuss the Missouri IRP rules and the types of changes which might be appropriate for the rule. Recently, the Governor's Energy Task Force Report Presentation was released. This task force was chaired by Commission Chair Jeff Davis and included Public Counsel Lewis Mills. The Task Force's recommendations include revision of the Commission's IRP rules. Finally, at a recent hearing at the Commission, Staff member Warren Wood noted that "...the resource planning rules will likely be changed as a result of upcoming rulemaking efforts." Case No. EX-2006-0472, Public Hearing Transcript, September 7, 2006, p. 14, 1. 19.
- 7. Comments in the Report filed by the Staff in this case demonstrate that Staff also believes that the rules are not completely reflective of the current utility environment and that belief impacted their review of AmerenUE's filing. "Because of these changes over the time that

the rules were suspended, AmerenUE filed, and the Commission Staff reviewed AmerenUE's filing considering, the 'intent' of the rules." Staff Report, May 19, 2006, Appendix A, p. 1.

8. AmerenUE feels that the current rules, which were written in the early 1990s and which have not been modified since, are too prescriptive for the current utility environment and that some portions are outdated. For example, the rules reference modeling software no longer used in the industry. Having rules that are flexible enough to adjust to the on-going changes in the industry is important, especially given that compliance with these rules is extremely expensive both in terms of the amount of money required to put together an IRP filing as well the large amount of time involved in its preparation. This concern isn't limited to the time required by the utility in preparing its filing. In this case, for example, all parties spent many days in discussions with multiple personnel involved in each meeting. Meetings were held first to walk through the complex filing and then to discuss the various deficiencies alleged by the parties. AmerenUE is not suggesting that this effort was not useful nor is it saying it is unwilling to invest significant time and resources into a planning process. In fact, AmerenUE feels planning is extremely important for every utility. AmerenUE merely desires an IRP process that better reflect current planning processes, better utilizes all parties' limited resources and thus is more beneficial for all involved.

### AmerenUE's Response to Deficiencies Alleged by Staff and Other Parties

9. AmerenUE and OPC were able to resolve three areas where OPC had alleged deficiencies in AmerenUE's IPR filing. Attachment A to this pleading is AmerenUE's response to the remaining eighteen unresolved deficiencies alleged by OPC.

- 10. AmerenUE and DNR were able to resolve two areas where DNR had alleged deficiencies in AmerenUE's IPR filing. Attachment B to this pleading is AmerenUE's response to the remaining six unresolved deficiencies alleged by DNR.
- 11. AmerenUE and the Sierra Club were able to resolve three areas where the Sierra Club had alleged deficiencies in AmerenUE's IPR filing. Attachment C to this pleading is AmerenUE's response to the remaining twelve unresolved deficiencies alleged by the Sierra Club.
- 12. AmerenUE and Staff were able to resolve all areas of alleged deficiencies in AmerenUE's IRP filing. The terms of that resolution are contained in the Stipulation and Agreement which was filed in this case on August 15, 2006.
- 13. Under the terms of the Stipulation and Agreement, AmerenUE agreed to prepare its 2008 filing in a manner that better conforms to Staff's interpretation of the requirements of the Commission's IRP rules. Additionally, AmerenUE agreed to immediately begin additional analysis of demand side management and energy efficiency programs (although a distinction between the two types of programs exists, this document uses 'DSM' to refer to both), including a timeline which begins with the drafting of a Request for Proposal (RFP) for the hiring of a consultant to provide additional expertise during the development of AmerenUE's programs and ends with the implementation of programs as they pass the screening process. Importantly, all parties will have input into this process through the semi-annual meetings that AmerenUE has agreed to continue. As the Commission is aware, semi-annual meetings were ordered as part of the suspension of the IRP filing requirements. Despite the fact that the suspension of the rules has expired, AmerenUE has agreed to continue the meetings as a mechanism to allow all parties in this case an opportunity to provide comment and input during the development of

AmerenUE's DSM programs as well as other aspects of resource planning including risk and uncertainty analysis, market modeling, etc. Further, these semi-annual meetings are not limited to the signatories of the Stipulation and Agreement; all parties in this case may participate.

### AmerenUE's Suggested Resolution of this Case

- 14. The IRP rules require the Missouri Public Service Commission (Commission) to issue an order which indicates "...on what items, if any, a hearing will be held..." 4 CSR 240-22.080(9). It should be noted that this language does not require the Commission to hold any hearing on the IRP plan.
- 15. AmerenUE believes the appropriate course of action in this case would be to not hold a hearing on the unresolved alleged deficiencies and instead for the Commission to issue an order based upon the extensive pleadings already filed in this case. The order, as required by the rules, would find that AmerenUE's filing either does or does not demonstrate compliance with the requirements of the rule and that its resource acquisition strategy either does or does not meet the requirements of 4 CSR 240-22.020(A)-(C). 4 CSR 240-22.080(13). The rules do not contemplate any further findings by the Commission.
- 16. It is significant to note that the deficiencies alleged by Staff are not appreciably different from those raised by OPC, DNR or the Sierra Club. The major difference appears to be the issue of timing. With the exception of DSM work, which begins immediately, the Stipulation and Agreement requires AmerenUE to make the agreed-upon changes in its 2008 IRP filing. OPC, DNR and the Sierra Club's filings did not demonstrate a willingness to recognize the unique circumstances which justify this approach and instead asked the Commission to order AmerenUE to undertake a significant rewrite of its current IRP filing. For the reasons cited

below, AmerenUE does not believe that is the appropriate manner to resolve this case and would ask the Commission to approve the Stipulation and Agreement.

- 17. AmerenUE believes its recommendation for the Commission to approve the Stipulation and Agreement is the most appropriate course of action based upon the unique set of circumstances which exit in this case. This filing is the first IRP filing for AmerenUE since 1993. Additionally, AmerenUE is the first electric utility in the State of Missouri to file under the IRP rules in six years, since the rules were suspended in 1999 in Case No. EO-99-365. Since AmerenUE's December 2005 filing, Kansas City Power & Light Company (KCPL) has filed its IRP plan and the rest of the electric utilities in Missouri will be filing their IRP plans in accordance with the schedule set forth in 4 CSR 240-22.080(3). AmerenUE would point out that KCPL's filing was much less involved than AmerenUE's filing, as KCPL's filing relied heavily upon its request for a waiver for a part of the Load Analysis and Forecasting portion of the rules as well as upon its request for a 23-month extension for the Supply-Side Resources Analysis, Integrated Resource Analysis and Risk Analysis and Strategy Selection portions. These areas constitute major sections of the IRP rules.
- 18. AmerenUE believes that proper planning on the part of a utility is extremely important. And as stated earlier, AmerenUE believes its filing is in compliance with the IRP rules and that it even went above and beyond the requirements of the rules in some areas. However, even if the Commission finds one or more areas to be deficient within the Company's IRP filing, any concern connected with the deficiency should be mitigated by the fact that AmerenUE does not face an immediate need for additional baseload or peaking generation capacity. Staff's Report acknowledged this fact as its rationale for allowing AmerenUE to make any necessary modifications or additions in its next IRP filing, due in December of 2008.

Specifically, Staff stated, "However, because of AmerenUE's recent purchase of 1390 MW of CTG capacity at a price substantially below the cost to build such new capacity, the Staff believes that excess capacity balance resulting from these purchases mitigates the Staff's concerns about the ultimate end result of deficiencies in AmerenUE's resource planning processes and provides AmerenUE another opportunity to meet the intent of the Commission's resource planning Chapter 22 in December 2008, without existing deficiencies having immediate term bad consequences." Staff Report, Appendix A, p. 6. This approach formed the basis for the Stipulation and Agreement reached between Staff and AmerenUE.

19. Taken together, there clearly exists a unique set of circumstances at this point in time which obviates any need for the Commission to hold extensive hearings on the remaining alleged deficiencies in AmerenUE's IPR filing.

WHEREFORE, AmerenUE respectfully requests the Commission, after reviewing the previously filed pleadings and the attachments to this pleading make a finding that AmerenUE's filing demonstrates compliance with the requirements of the rule and that its resource acquisition strategy meets the requirements of 4 CSR 240-22.020(A)-(C) and approve the Stipulation and Agreement. In the alternative, if the Commission determines that there are deficiencies in the IRP filing, AmerenUE asks that the Commission allow AmerenUE to fix those deficiencies in its 2008 filing, consistent with the terms of the Stipulation and Agreement.

### Respectfully submitted,

# UNION ELECTRIC COMPANY d/b/a AmerenUE

## By Thomas M. Byrne

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Dated: September 15, 2006

## Attachment A AmerenUE Response to Deficiencies Alleged by OPC

The alleged deficiencies not resolved by agreement between OPC and AmerenUE are listed below along with AmerenUE's response to each allegation. The description of each alleged deficiency is taken from the Joint Filing made on August 4, 2006.

1. 4 CSR 240-22.010(B) - Failure to use minimization of the present worth of long-run utility costs as the primary selection criterion in choosing the preferred resource plan. (OPC 5/19/06 Report, pages 2-6, 13)

Although AmerenUE will answer this deficiency allegation, it is appropriate to point out that this allegation is not an argument that belongs in a resource planning case. It is an argument OPC has made in several cases before the Commission and AmerenUE believes it is one on which the Commission has already decided. Moreover, if the Commission desires to revisit the issue, the appropriate case in which to do so is the rate case currently pending, ER-2007-0002. OPC is a party and has the ability to bring this argument up in that case.

The nexus of this allegation is the argument that AmerenUE should have included in its analysis purchased power from Electric Energy Inc. (EEInc.) at a cost equivalent to that which AmerenUE paid for this power in the past.

OPC's recitation of the historical facts is incorrect. It is true that AmerenUE previously had a long-term power supply agreement with EEInc. However, the termination of this contact was not under the control of AmerenUE. During the term of the agreement, AmerenUE paid EEInc. a price equal to EEInc.'s cost of producing the power, plus some additional fee. This agreement expired by its own terms on December 31, 2005. Following the expiration of the agreement, EEInc. elected to cease selling power on a cost plus basis and instead sought and received authority from the Federal Energy Regulatory Commission (FERC) to sell power at market prices.

Further, OPC's assertion that AmerenUE ratepayers have paid for a share of the plant is also incorrect. All of AmerenUE's stock in EEInc. was purchased with shareholder, not ratepayer, funds and has always been treated as a "below-the-line" item for ratemaking purposes. A below-the-line investment in stock, like AmerenUE's EEInc. stock, does not allow ratepayers to share in any of the revenues derived from stock ownership, nor does it expose ratepayers to the investment risk associated with owning the stock. Rather, ratepayers have simply paid the cost of power purchased by AmerenUE from EEInc. as provided for in the power supply agreements between AmerenUE and EEInc.

Finally, AmerenUE would point out that the Commission has looked at this issue previously and rejected the argument that AmerenUE has acted improperly with respect to this contract. In fact, the Commission determined that "UE's share of EEInc. is an investment owned by UE's shareholders and UE has an obligation to maximize the return on that investment." *Report and Order on Rehearing*, Case No. EO-2004-0108.

2. 4 CSR 240-22.010(A) - Failure to Give Equivalent Consideration to Demand-Side and Supply-Side Resources. (OPC 5/19/06 Report, pages 6, 12, 14, 16)

One of the issues associated with addressing demand-side resources after a 12-year hiatus in AmerenUE's filing integrated resources plans is determining how to analyze demand side initiatives. AmerenUE conducted demand-side pilot programs in the 1990's as well as extensive process and impact evaluations of each pilot program. The results of this work raise issues related to the proper determination of the cost effectiveness of proposed programs as well as the how to project the MW and MWH impacts of proposed programs. In addition, a competitive wholesale market for electricity exists today that did not exist prior to the establishment of regional transmission organizations (RTOs) such as the Midwest Independent Transmission System Operator (MISO). There are other complicating issues that impact how demand side initiatives should be considered, including the Energy Policy Act of 2005, MISO initiatives, and potential state legislation. Consequently, there are numerous issues that must be evaluated when considering demand side initiatives when resource planning in today's environment.

AmerenUE went to great lengths in its IRP filing, in the semi-annual resource planning meetings with stakeholders since the suspension of the IRP rules, and in other forums to explain the nature of its demand-side analyses and how the demand-side analyses should be considered "placeholders" pending future discussion of certain issues, including discuss of cost effectiveness metrics in a stakeholder collaborative setting. AmerenUE also expressed optimism that its preliminary analyses indicated potential load reductions attributable to demand-side initiatives over the 20-year planning horizon as high as 350 MW. However, the bulk of those initiatives was attributable to the real time pricing (RTP) "family" of potential demand side initiatives. There are significant issues to address about how to consider RTP in the context of reliability planning. For example, what if future price signals are insufficient to warrant response from customers?

Due to the plethora of unresolved issues concerning how to evaluate demand-side initiatives in today's long-term resource planning environment, AmerenUE elected to defer the implementation of a demand-side plan until overarching issues could be discussed and resolved in a collaborative stakeholder group setting. However, AmerenUE did run and include an expansion plan option in its 2005 filing that reflected the full effects of 350 MWs of load reduction.

However, in AmerenUE and Staff's Stipulation and Agreement, AmerenUE agreed to perform the appropriate benefit/cost analyses of potential DSM programs for AmerenUE's 2008 IRP filing. AmerenUE has developed a Request for Proposals (RFP) to engage a consultant to assist in the DSM analyses. This RFP has been circulated to the parties in this case for comment. AmerenUE intends to issue the RFP in the near future.

3. 4 CSR 240-22.040(1) - Failure to identify least-cost wind resource. (OPC 5/19/06 Report, p. 9)

OPC criticizes AmerenUE for using "the costs of installing and operating wind turbines in Missouri, even though it is widely known that some of the states surrounding Missouri have

proven wind characteristics that are superior to Missouri." It is true that AmerenUE's IRP filing modeled a Missouri wind resource. The modeled wind generation was based on a site in northwestern Missouri on which AmerenUE had gathered data in previous wind studies.

OPC's suggestion for modeling wind sites outside of Missouri ignores complications involved with transmission availability outside of Missouri and/or MISO. In order to determine whether AmerenUE should site wind projects outside of the state and outside of the geographic boundaries of its present service and transmission territory, a review of transmission accessibility and the associated costs and charges is required. There is a wide variation in prices, mostly related to congestion charges throughout the different regions. Transmission in and out of MISO has been extremely difficult to procure. Only a site specific interconnect and transmission service study can provide information related to transmission availability. Any potential transmission upgrades are anticipated to be time consuming and expensive. Each long term transmission service requests that requires a system impact study carries a down payment of \$25,000 and can take up to 60 days or more to complete.

Wind resources outside of MISO and PJM may require two point to point wheels in order to deliver energy to Ameren on a firm basis, thus providing a firm path from the generation source to the MISO interface or seam and then to the Ameren Load Zone. AmerenUE could use the fixed spot network on MISO for energy delivery, but it is non-firm and thus risks curtailment or denial of service due to constraints or higher priority service (firm service).

There also appear to be certain constraints in Iowa and Wisconsin that could have a significant impact on the entire region. Ultimately, transmission capability is determined by a MISO interconnection study which addresses a specific site and interconnection configuration. Without specific interconnection studies, it is difficult to determine the real capabilities of deliverability, whether in Ameren's service territory or outside of the MISO.

AmerenUE continues to study wind availability and cost effectiveness. For example, AmerenUE became involved in an initiative called the Missouri Tall Towers project. This is a DOE funded project and is a collaborative effort between Ameren, KCP&L, Aquila and the University of Missouri-Columbia (UMC) to help in the development of the next generation of wind turbines. The three utility partners have also provided funding that will allow for the installation of wind monitoring equipment to be placed on pre-existing tower structures throughout the state to gather wind data. Individuals from UMC will then evaluate the data in order to determine locations that could support wind farms for electrical generation using the next generation of wind turbines.

Currently, several specific towers have been selected, contracts allowing the placement of equipment are being negotiated and the majority of the monitoring equipment is being installed. It is estimated that at least one year's worth of data will be required for analysis before a determination can be made regarding potential sites that could support wind powered generation.

In Case ER-2007-0002, AmerenUE committed to adding 100 MWs of wind power to its generating fleet by 2010. This commitment is based on the assumption, however, that construction of such wind power generation proves to be technologically feasible, and that the

stakeholders in the above proceeding are supportive of the proposal. AmerenUE also remains willing to explore with all stakeholders ways to implement other renewable sources of energy where feasible.

4. 4 CSR 240-22.040(2)(B)2 - Failure to specify, for each pollutant identified pursuant to paragraph (2)(B)1, at least two (2) levels of mitigation that are more stringent than existing requirements which are judged to have a nonzero probability of being imposed at some point within the planning horizon. (OPC 5/19/06 Report, p. 10)

At the time this rule was finalized in the early 1990's, the Clean Air Act Amendments of 1990 had not even been implemented. Since that time additional regulations relating to NOx and SO2 emissions and mercury regulations have been proposed. These regulations build on each other to capture potential co-benefits from the installation of one control technology to reduce emissions of other pollutants. The language in this section of the IPR rules does not consider this aspect of mitigation. As a result, the methodology described in this section of the rules is outdated.

In this filing, AmerenUE used a scenario approach to evaluate the impact of additional environmental regulations. AmerenUE included four different levels of cost associated with potential CO2 regulations. In addition, it considered the impact of the new Clean Air Interstate Rule (CAIR) and Clean Air Mercury Rule (CAMR) regulations currently being finalized by the State of Missouri. AmerenUE looked at two levels of compliance with those proposed regulations, purchase of required allowances and installation of control technology. AmerenUE will assess the impact of various proposed legislation/regulations at the time of its next filing.

5. 4 CSR 240-22.040(2)(B)3 - Failure to specify, for each mitigation level identified pursuant to paragraph (2)(B)2., a subjective probability that represents utility decision makers' judgment of the likelihood that additional laws or regulations requiring that level of mitigation will be imposed at some point within the planning horizon. (OPC 5/19/06 Report, p. 10)

AmerenUE did not specify a probability for the likelihood of additional laws or regulations. As stated in its response to OPC alleged deficiency number 4 above, the language in this section of the IRP rules is outdated. AmerenUE, however, did not simply ignore these issues. The analysis included with the filing was scenario analysis, which certainly is based upon what types of regulations are expected in the future.

6. 4 CSR 240-22.050(7) - Failure to follow the required procedure for the cost effectiveness screening of potential demand-side programs. (OPC 5/19/06 Report, p. 12)

OPC's concern centers on the omission of a single potential residential energy efficiency initiative. Specifically, the concern is with the omission of an energy efficient residential air conditioning program. This concern is not about the process AmerenUE used to adhere to the Chapter 22 rules but rather about results – specifically OPC's desire for the inclusion for a single, potential demand-side option.

The Stipulation and Agreement between Staff and AmerenUE calls for AmerenUE to analyze the cost effectiveness of a wide range of potential DSM programs for AmerenUE's 2008 IRP filing. A residential efficient air conditioner replacement program likely will be one of the several programs analyzed in the context of a portfolio of potentially cost effective programs.

7. 4 CSR 240-22.060(1) and 4 CSR 240-22.060(3) - Failure to include all existing low cost resources in all of the alternative plans that were developed. (OPC 5/19/06 Report, p. 13)

This issue is directly related to OPC deficiency number 1, above. OPC feels that AmerenUE should have included purchased power from EEInc. as one of the resources available to it. As explained above, AmerenUE no longer has the ability to purchase this power at rates below market and so including purchased power from EEInc. as suggested by OPC would be to ignore the facts and would result in an inaccurate analysis.

8. 4 CSR 240-22.060(1) and 4 CSR 240-22.060(3) - Failure to include a sufficient level of wind installed capacity in the alternative plans that were developed. (OPC 5/19/06 Report, p. 13)

At the beginning of this alleged deficiency, OPC states "it would, of course, have also been useful for UE to perform some similar analysis of the performance of alternative plans with wind resources under the greenhouse gas scenarios in order to assess the extent to which wind mitigates the risk of future greenhouse gas regulations in this area." While the analysis was not in the initial IRP filing, this analysis was done and the results of this analysis were given to OPC in AmerenUE's response to data request MPSC 0003. In addition, this response was discussed with stakeholders at several meetings prior to filing by OPC of its comments.

Next, OPC states "UE did not model enough wind capacity (only 100 MWs of capacity was modeled) to be able to accurately assess the value of adding wind to its generation portfolio of 10,000 MWs of supply resources." The results of the portfolios with wind are that 100 MWs of wind increased AmerenUE's revenue requirement approximately \$70 million (AmerenUE IRP filing, Document 3, page 173, figure 8.2). As discussed in the stakeholder meetings, if adding 100 MWs of wind raises revenue requirement \$70 million, adding 200 MWs will raise revenue requirements approximately twice as much (or \$140 million).

OPC continues, "UE would need to model at least 300 to 500 MWs of wind to have a valid assessment of the value of wind under base case conditions and under the greenhouse gas scenarios." When AmerenUE requested the study, article, or basis for this statement, OPC was unable to provide any basis for this assertion. Since OPC is unable to provide any support for this statement, AmerenUE is unable to address it.

Finally, AmerenUE would note that in the Stipulation and Agreement reached with Staff, AmerenUE has agreed to analyze more than 100 MWs of wind generation.

9. 4 CSR 240-22.060(1) and 4 CSR 240-22.060(3) - Failure to model DSM efficiency programs for a sufficient period of time to properly assess the costs and risk mitigation benefits of these programs. (OPC 5/19/06 Report, p. 14)

This alleged deficiency stems from the use of placeholder analysis in the area of DSM by AmerenUE. The reasons behind this approach are discussed above, in response to OPC alleged deficiency number 2. AmerenUE has agreed, in the Stipulation and Agreement reached with Staff, to perform the appropriate benefit/cost analyses of potential DSM programs for AmerenUE's 2008 IRP filing. AmerenUE has developed an RFP to engage a consultant to assist in the DSM analyses. AmerenUE intends to issue the RFP immediately after the Commission rules on AmerenUE's IRP filing.

10. 4 CSR 240-22.060(1) and 4 CSR 240-22.060(3) - Failure to model DSM efficiency programs and DSM demand response programs separately in alternative plans that included DSM. (OPC 5/19/06 Report, p. 14)

This alleged deficiency stems from the use of placeholder analysis in the area of DSM by AmerenUE. The reasons behind this approach are discussed above, in response to OPC alleged deficiency number 2. AmerenUE has agreed, in the Stipulation and Agreement reached with Staff, to perform the appropriate benefit/cost analyses of potential DSM programs for AmerenUE's 2008 IRP filing. AmerenUE has developed an RFP to engage a consultant to assist in the DSM analyses. AmerenUE intends to issue the RFP immediately after the Commission rules on AmerenUE's IRP filing.

11. 4 CSR 240-22.060(1) and 4 CSR 240-22.060(3) - Failure to Construct Alternative Plans Containing Both DSM and Renewable Resources. (OPC 5/19/06 Report, p. 14)

This alleged deficiency stems from the use of placeholder analysis in the area of DSM by AmerenUE. The reasons behind this approach are discussed above, in response to OPC alleged deficiency number 2. AmerenUE has agreed, in the Stipulation and Agreement reached with Staff, to perform the appropriate benefit/cost analyses of potential DSM programs for AmerenUE's 2008 IRP filing. AmerenUE has developed an RFP to engage a consultant to assist in the DSM analyses. AmerenUE intends to issue the RFP immediately after the Commission rules on AmerenUE's IRP filing.

12. 4 CSR 240-22.070(2) - Failure to perform analysis required by this section of the rule for each of the uncertain factors listed in (A) - (L) of 4 CSR 240-22.070(2). (OPC 5/19/06 Report, p. 15)

The uncertain factors contained within the rule are as follows:

- (A) The range of future load growth represented by the low-case and high-case load forecasts;
- (B) Future interest rate levels and other credit market conditions that can affect the utility's cost of capital;
- (C) Future changes in environmental laws, regulations or standards;
- (D) Relative real fuel prices;

- (E) Siting and permitting costs and schedules for new generation and generation-related transmission facilities;
- (F) Construction costs and schedules for new generation and transmission facilities;
- (G) Purchased power availability, terms and cost;
- (H) Sulfur dioxide emission allowance prices;
- (I) Fixed operation and maintenance costs for existing generation facilities;
- (J) Equivalent or full- and partial-forced outage rates for new and existing generation facilities;

AmerenUE believes its filing is in compliance with this portion of the IRP rules. OPC stated it was unable to locate the section in which all of the uncertainty factors were analyzed. A review of the Missouri IRP rules shows that many of these factors are considered in different parts and phases of the analysis, so one should not expect to find each factor analyzed in the same section of the filing. For example, load growth uncertainty (A) is considered in the Load Analysis and Forecasting Section of the rule (4 CSR 240-22.030) as the rule requires; whereas, siting and permitting costs are consider in Supply-Side Resource Analysis (4 CSR 240-22.040) as the rule requires. Below is a listing of the location for each item listed in the rule (see above).

- (A) Quantitatively considered in simulation analysis (IRP Filing, Document 9, pages 32, 33, 36, 37, 39, 41, 45)
- (B) Qualitatively considered in simulation analysis (IRP Filing Document 4, Section 6 "Risk & Uncertainty Internal Vetting Process and Decision Development")
- (C) Quantitatively considered in simulation, scenarios, and sensitivity analysis (doc 9, pages 30, 31, 35, 36, 37, 38, 41, 44, 49-56, 59-60); Qualitatively considered (IRP Filing Document 4, Environmental Issues, pages 1-11)
- (D) Quantitatively considered in simulation analysis (IRP Filing Document 9, pages 27-30, 34-43)
- (E) Quantitatively considered in technology Parameter Sensitivity analysis (IRP Filing Document 9, pages 60-61)
- (F) Quantitatively considered in technology Parameter Sensitivity analysis (IRP Filing Document 9, pages 60-61)
- (G) Quantitatively considered in Off-System Market depth analysis and simulation variable analysis (IRP Filing Document 9, pages 5758)
- (H) Quantitatively considered in simulation analysis (IRP Filing Document 9, pages 30, 31, 35, 36, 37, 38, 41, 44)
- (I)Quantitatively considered in technology Parameter Sensitivity analysis (IRP Filing Document 9, pages 60-61)
- (J) Quantitatively considered in technology Parameter Sensitivity analysis (IRP Filing Document 9, pages 60-61)
- 13. 4 CSR 240-22.070(9) Failure to create an implementation plan for DSM programs. (OPC 5/19/06 Report, p. 15)

AmerenUE's implementation plan began on page 197 of Document No. 3 entitled "Integrated Resource Analysis" of its IRP filing. AmerenUE's proposed implementation plan included the formation of a stakeholder collaborative similar to that used in the KCPL regulatory

plan to develop the long range regulatory framework within which specific demand-side initiatives would be evaluated and implemented. AmerenUE's proposed stakeholder collaborative process included: (1) review of national best practices in DSM analysis; (2) identification of interactions with other state, regional and RTO initiatives; (3) establishment of cost effectiveness metrics; and (4) identification of desired rate treatment.

The Commission sponsored "Regulatory Assistance Project Workshop on Energy Efficiency" that took place on March 27, 2006. This workshop focused on the same issues that AmerenUE proposed to address through its stakeholder collaborative forum. The workshop focused on the regulatory frameworks, program funding mechanisms, and program benefit/cost parameters necessary to increase both number of demand-side initiatives as well as the rate of customer participation in demand-side initiatives in Missouri. Representatives from MidAmerican Energy in Iowa presented the Iowa regulatory model as a potential regulatory framework for Missouri's consideration.

Due to concerns of AmerenUE IRP stakeholders primarily related to time commitments involved in a collaborative stakeholder process, AmerenUE agreed to engage a consultant to both assist in the analyses of the cost effectiveness of potential DSM initiatives and to facilitate workshops with the AmerenUE IRP stakeholders on overarching DSM issues. AmerenUE will take the lead in addressing the issues, recommending resolutions to each issue and seeking input from stakeholders. In the workshops, AmerenUE will also discuss any waivers it intends to seek for existing Chapter 22 rules on DSM analyses as well as recommendations for revised Chapter 22 DSM rules.

14. 4 CSR 240-22.070(9) - Failure to explicitly identify an implementation plan for installing or enhancing emission control equipment. (OPC 5/19/06 Report, p. 15)

At the time of its 2005 IRP filing, AmerenUE had not finalized its environmental compliance plan. Rather than to file a plan that was known to be incorrect, no plan was filed. AmerenUE has agreed in the Stipulation and Agreement with the Staff to include the environmental compliance strategy as it becomes finalized in AmerenUE's resource planning. Further AmerenUE will provide a unit-by-unit update of its environmental compliance plans, including annual cash expenditures and completion dates, at the semi-annual resource planning meetings.

15. 4 CSR 240-22.070(10)(C) - Failure to specify the ranges or combinations of outcomes for the critical uncertain factors and explain how limits were determined. (OPC 5/19/06 Report, p. 16)

AmerenUE explicitly stated and documented the ranges or combinations of outcomes for the critical uncertain factors and explained how limits were determined. Below is a listing of the factors and where the required information can be found for each:

•	Coal prices	IRP Filing Document 9, page 41
•	Natural Gas	IRP Filing Document 9, page 41
•	SO2	IRP Filing Document 9, page 41
•	Peak	IRP Filing Document 9, page 41
•	Energy	IRP Filing Document 9, page 41
•	Capital cost	IRP Filing Document 9, page 61
•	Transmission cost	IRP Filing Document 9, page 61
•	Fixed O&M	IRP Filing Document 9, page 61
•	Variable O&M	IRP Filing Document 9, page 61
•	<b>Equivalent Forced</b>	
	Outage Rate	IRP Filing Document 9, page 61

The variables included in the simulation analysis exceed the requirements of the rule by quantifying the entire probability distribution, correlation, and variance parameter methods. By defining the probability distribution, AmerenUE avoided the minimal descriptive statistical parameters and used a more "real world" description (or continuous system).

In addition to the robust risk simulation analysis, AmerenUE included several scenario analyses. The scenario analysis represents the assessment of exposure based upon the discrete outcome of a particular world state (i.e. CO2 Scenario). Scenario Analysis is appropriate when exposure to randomness cannot be described mathematically by statistical methods. Scenario analysis attempts to consider multiple variables in a correlated fashion without benefit of the statistical analysis.

16. 4 CSR 240-22.070(10)(D) - Failure to specify a set of contingency options for the critical uncertain factors as part of an officially adopted resources acquisition strategy. (OPC 5/19/06 Report, p. 16)

Practically, this rule is meant to be a part of the utility's adopted resource acquisition strategy. Usually, a utility will have a strategy that is a series of resources over a span of years. For example, building a coal plant in 10 years, build a CTG in 13 years; build a combined cycle in 16 years, etc. In these situations, a contingency plan as described by the rule makes sense. An example of an uncertain factor that could be a defined contingency is extreme environmental legislation. For example, an "extreme emission price" that could cause the utility to stop development of the coal plant and trigger a contingency of building the combined cycle.

AmerenUE's resource acquisition strategy was not to build a generation resource; it was to purchase 1350 MWs of existing combined turbine generators (CTGs), a DSM/Renewable Collaborative, and to continue evaluating the development of technologies and legislation before determining the next supply-side resource option. The CTG purchase had to happen immediately in order to take advantage of market prices that were substantially below the cost of building new CTG capacity. The addition of the 1350 MW of peaking capacity will keep AmerenUE near a 17% reserve margin through 2014. During the pendency of this case, the purchase of the 1350 MWs has been approved by the Commission and the transactions are complete.

In addition, it is incorrect to state that AmerenUE failed to specify a contingency plan. On page 195 of IRP Filing Document 3, AmerenUE states that "if the acquisition of the 1350 MW of existing CTG plant is not successful, AmerenUE's alternative plan of action is to pursue both short-term strategies to acquire peaking capacity and long-term strategies to analyze options including the addition of base load capacity."

Clearly, the opportunity to purchase 1350 MWs of bargain priced CTGs was a unique opportunity. AmerenUE acknowledges that building supply-side resources, especially capital intensive resources such as coal, nuclear, pumped storage, requires a detailed and elaborate contingency plan. However, AmerenUE will not have additional capacity needs until the year 2014. Since there were no plans to build additional supply-side resources, a more detailed and elaborate contingency plan was not necessary nor was it warranted.

In addition to resource acquisition contingency planning, AmerenUE is exposed to changes in market prices for natural gas, fuel, electricity, and emission credits. These prices may fluctuate substantially over relatively short periods of time and expose AmerenUE to commodity price risk. AmerenUE attempts to manage the risk associated with these activities through enforcement of established risk limits and risk management procedures. The Ameren Corporate Risk Management (Ameren RM) Policy as well as specific strategic business units (Ameren Energy & Ameren Energy Fuels and Services) Risk Management Policies outline specific controls for hedging fuels commodities and energy commodity transactions. Our risk management policies are set by a Risk Management Steering Committee, which is comprised of senior-level Ameren officers.

Ameren's business units also use long-term purchase and sales contracts in addition to derivatives such as forward contracts, futures contracts, options, and swaps to manage these risks.

The forward hedge strategy is aligned with the corporate strategy for AmerenUE's load obligation and generating resources. Risk Management monitors and reports fuel and energy commodity forward prices to the Risk Management Steering Committee daily. In addition, hedged and open exposure positions for fuels and energy commodities are monitored and reported daily to the Risk Management Steering Committee. In the event of significant changes to any of the pertinent factors used in resource planning, daily reporting provides a mechanism to provide transparency and assist in review of contingency options.

17. 4 CSR 240-22.070(10)(E) - Failure to create and provide full documentation of a credible process for monitoring the critical uncertain factors and reporting to managers/officers. (OPC 5/19/06 Report, p. 16)

This concern relates to the process that AmerenUE has for "monitoring the critical uncertain factors on a continuous basis and reporting significant changes in a timely fashion to those managers or officers who have the authority to direct the implementation of contingency options when the specified limits for uncertain factors are exceeded."

There are basically two types of contingencies. One is for the construction of new generation and the establishment of "off-ramps" if cost assumptions change significantly during the permitting and/or construction phases of the project. The second type of contingency relates to on-going operational concerns such as interruptions in fuel delivery.

AmerenUE has a Resource Planning committee that provides inputs to the integrated resource planning modeling. The committee provides both capital and operating costs for new generation options. In the event that AmerenUE would pursue construction of new baseload generation options, contingency plans with appropriate off ramps would be developed. The resource planning committee would be the committee for monitoring and reporting significant changes to AmerenUE senior officers.

AmerenUE also has a Risk Management group that is responsible for the day to day management of electric operations including purchases and sales of electricity as well as fuel hedging strategies.

For the AmerenUE 2005 IRP filing, it was not necessary to address the process for monitoring the critical uncertain factors related to new construction since the least cost and least risk resource plan for AmerenUE was to purchase 1350 MWs of existing CTG generation facilities.

As detailed in its answer to OPC's alleged deficiency 16 above, AmerenUE continuously addresses risk management for operational issues.

18. 4 CSR 240-22.080(1)(D) - Failure to provide verification that the resources acquisition strategy has been officially approved by AmerenUE. (OPC 5/19/06 Report, p. 18)

AmerenUE has stated that the Ameren Senior Team and/or Executive Council reviewed the AmerenUE IRP at several key check points and approved the IRP that was filed in December 2005. The issue addressed by OPC is that there is not a specific AmerenUE Executive Council to approve the IRP.

In the 2008 IRP filing, AmerenUE will include a formal IRP approval document to be signed by officers of AmerenUE, thus ensuring this issue does not reoccur.

# Attachment B AmerenUE Response to Deficiencies Alleged by DNR

The alleged deficiencies not resolved by agreement between DNR and AmerenUE are listed below along with AmerenUE's response to each allegation. The description of each alleged deficiency is taken from the Joint Filing made on August 4, 2006.

1. 4 CSR 240-22.050(9) and (11)(J) – Failure to include a clear evaluation plan.

This alleged deficiency stems from the use of placeholder analysis in the area of DSM by AmerenUE. The reasons behind this approach are discussed above, in response to OPC alleged deficiency number 2 (Attachment A). AmerenUE has agreed, in the Stipulation and Agreement reached with Staff, to perform the appropriate benefit/cost analyses of potential DSM programs for AmerenUE's 2008 IRP filing. AmerenUE has developed an RFP to engage a consultant to assist in the DSM analyses. AmerenUE intends to issue the RFP immediately after the Commission rules on AmerenUE's IRP filing.

2. 4 CSR 240-22.010(2)(A) – Failure to document the criteria and data used to screen potential DSM programs.

This alleged deficiency stems from the use of placeholder analysis in the area of DSM by AmerenUE. The reasons behind this approach are discussed above, in response to OPC alleged deficiency number 2 (Attachment A). AmerenUE has agreed, in the Stipulation and Agreement reached with Staff, to perform the appropriate benefit/cost analyses of potential DSM programs for AmerenUE's 2008 IRP filing. AmerenUE has developed an RFP to engage a consultant to assist in the DSM analyses. AmerenUE intends to issue the RFP immediately after the Commission rules on AmerenUE's IRP filing.

3. 4 CSR 240-22.010(2) – Failure to engage a consultant who is knowledgeable of successful utility DSM implementation and experience meeting analysis tasks required by the IRP rules.

An RFP was issued to numerous consulting firms to assist in the preparation of evaluations of various demand-side programs as inputs to the December 2005 integrated resource plan filing. Lawrence Christensen Associates (LCA) won the bid and is an accomplished consulting firm. Additionally, in the Stipulation and Agreement reached with Staff, AmerenUE has agreed to allow all parties to review and submit comments on the RFP issued by AmerenUE for its DSM consultant in the future. Indeed, a draft of this RFP has already been circulated to all parties for their comment.

4. 4 CSR 240-22.060(2) – Failure to select the alternative resource plan with the lowest PVRR as the preferred resource plan.

AmerenUE disagrees with DNR's alleged deficiency and believes that it did select a resource plan with the lowest PVRR and lowest risk. This was the purchase of 1350 MWs of CTGs. Potential savings that might occur with DSM programs, which would affect certain resource plans, was used as a placeholder in this filing. See AmerenUE's response to OPC alleged deficiency number 2 (Attachment A) for additional information concerning how demand-side resources were treated in the integrated resource analysis.

5. 4 CSR 240-22.010(2)(A) – Failure to treat demand-side resources on an equivalent basis with supply-side resources.

This alleged deficiency stems from the use of placeholder analysis in the area of DSM by AmerenUE. The reasons behind this approach are discussed above, in response to OPC alleged deficiency number 2 (Attachment A). AmerenUE has agreed, in the Stipulation and Agreement reached with Staff, to perform the appropriate benefit/cost analyses of potential DSM programs for AmerenUE's 2008 IRP filing. AmerenUE has developed an RFP to engage a consultant to assist in the DSM analyses and a draft of this RFP has already been circulated to all parties in this case for their comment. AmerenUE intends to issue the RFP in the near future.

6. 4 CSR 240-22.050(1), (3) and (6) – *Inappropriate limitation of the number of potential demand-side programs identified for screening.* 

After reviewing prior pleadings, it appears that this issue was included in the list of unresolved DNR alleged deficiencies by mistake, as it was an issue raised by Staff and not by DNR.

# Attachment C AmerenUE Response to Deficiencies Alleged by the Sierra Club

The alleged deficiencies not resolved by agreement between the Sierra Club and AmerenUE are listed below along with AmerenUE's response to each allegation. The description of each alleged deficiency is taken from the Joint Filing made on August 4, 2006.

1. 4 CSR 240-22.040(1) – Although a portion of this alleged deficiency has been resolved, Sierra Club still believes there was a *failure to identify renewable resources as potential supply side options*.

The Sierra Club's asserts "the IRA includes only a few scenarios that include 100MW of wind installed in 2009...the IRP does not investigate any alternatives to this (except for those scenarios with no wind)."

It is true that AmerenUE modeled several resource plans with 100 MWs of wind. But, AmerenUE did not ignore other renewable alternatives. A list of potential renewable resources was developed and included in the December 2005 filing. (IRP Filing Document 15, Sections 12 through 16.) These potential renewable technologies were modeled in the screening analysis, as the rule requires. (IRP Filing Document 3, Section 6.10, pages 139-145.) Wind had the most favorable economics of the renewable resource options evaluated; therefore, it was included in the fully integrated analysis.

It appears that the nature of the concern is not about the process AmerenUE used to adhere to the Chapter 22 rules but rather about results and about the Sierra Club's desire for an end result - specifically the inclusion of a specific potential renewable option.

2. 4 CSR 240-22.040(1)(K) – Failure to consider the full range of pollutants and environmental impacts.

At the time the IRP rule was finalized in the early 1990's, the Clean Air Act Amendments of 1990 had not even been implemented. Since that time, additional regulations relating to NOx, SO2 emissions and for mercury have been proposed. These regulations build on each other to capture potential co-benefits from the installation of one control technology to reduce emissions of other pollutants. The language in this section of the IRP rule does not even consider that aspect of mitigation. As a result, the methodology described in this section of the rules is outdated.

In the current filing, AmerenUE used a scenario approach to evaluate the impact of additional environmental regulations. It included four different levels of cost associated with CO2 regulations. In addition, it considered the impact of the new CAIR and CAMR regulations currently being finalized by the State of Missouri. It looked at

two levels of compliance with those proposed regulations; the purchase of required allowances and the installation of control technology.

In the Stipulation and Agreement reached with Staff, AmerenUE agreed to make all waiver requests to the Commission at least one year in advance of its 2008 IRP filing date so the Commission can make its determination regarding the waiver far enough in advance of the 2008 filing for AmerenUE to make a good faith effort to comply with these rule provisions if the waiver request is denied. AmerenUE intends to continue assessing the impact of various proposed legislation and regulations prior to its next filing and to use that information in any waivers it may request as well as in the filing itself.

3. 4 CSR 240-22.040(2) – Preliminary screening excluded more expensive technologies on an improper basis.

AmerenUE disagrees with the Sierra Club's interpretation of this requirement. The Sierra Club asserts that "the IRA appears to have eliminated the most expensive technologies from further consideration based on their levelized cost/MWh". Consolidated Comments of Intervenors Sierra Club et al. on AmerenUE's IRP, p.6. The rule, 4 CSR 240-22.22.040(2), requires that resource options "shall be subjected to a preliminary screening analysis" with the purpose of "eliminating from further consider those options that have significant disadvantages in terms of their relative annualized utility costs." Furthermore, the rule states the screening analysis "shall be based on estimates of the installed capital costs...levelized over the useful life of the resource." The Sierra Club seems to indicate that AmerenUE should not follow the rule. AmerenUE believes it complied with both the intent and letter of this requirement.

The Sierra Club also makes three statements and then draws a conclusion from them that AmerenUE believes is factually incorrect. The three statements are as follows:

- 1) "Fuel costs are not included in the O&M costs reported in Tables 6.3-6.7." Consolidated Comments of Intervenors Sierra Club et al. on AmerenUE's IRP, p. 6. AmerenUE agrees that this statement is true. Fuel costs are not included in O&M costs, nor should they be included.
- 2) The Sierra Club acknowledges that AmerenUE's filing contains "a separate column for fuel costs in Table 6.9." Consolidated Comments of Intervenors Sierra Club et al. on AmerenUE's IRP, p. 6. AmerenUE acknowledges that this statement is true.
- 3) Finally, the Sierra Club states fuel costs "are not included in the Technology Assessment Summary." Consolidated Comments of Intervenors Sierra Club et al. on AmerenUE's IRP, p. 7. AmerenUE also agrees that this statement is true. The Technology Assessment Summary included capital, fixed O&M, variable O&M, etc. It does not, and should not, include fuel costs. The purpose is to define the technologies evaluated in the IRP, not the fuel costs. The filing contains an entire section devoted to

discussing fuel costs (IRP Filing Document 3, Section 4.1, titled "Fuels Considered in the Analysis").

The conclusion the Sierra Club draws from these three statements is that the price of fuel was not considered in AmerenUE's preliminary screening analysis as the rule directs. However, the fuel prices listed in Table 6.9 were used in the screening analysis. Since fuel costs were included in the evaluation of all technologies, the Sierra Club's error negates their conclusion that "evaluating technologies...without counting fuel costs biases the results against wind" in AmerenUE's IPR filing. Consolidated Comments of Intervenors Sierra Club et al. on AmerenUE's IRP, p. 7.

4. 4 CSR 240-22.040(2)(B) – Failure to include all appropriate probable environmental costs.

This alleged deficiency is closely related to and is addressed by AmerenUE's answer to the Sierra Club's alleged deficiency number 2, above.

5. 4 CSR 240-22.040(8)(B) – Failure to properly estimate the capital costs of nuclear generation with information from Synapse Energy Economics.

As has been pointed out, the acquisition of the CTGs will enable AmerenUE to maintain sufficient planning reserves margins through approximately 2014 and will allow AmerenUE to continue to study technology developments and demand response in order to recommend the least cost resource plan to meet AmerenUE's capacity needs after 2014. Since additional nuclear capacity is not a part of AmerenUE 2005 IRP preferred plan, whether the nuclear capital cost should have been higher is not a relevant or material factor.

However, AmerenUE feels certain of the Sierra Club statements regarding nuclear power are incorrect and thus feels compelled to address them. The Sierra Club quotes a February 2006 presentation on the Prospects for Nuclear Power that uses costs that were all incurred prior to 1978. Consolidated Comments of Intervenors Sierra Club et al. on AmerenUE's IRP, pp. 12-13, Table 1. These dollar amounts are based on the previous "nuclear generation" costs and are out of date. In the table with more recent construction costs, the costs are all trending down, with some costs 5% below the costs used by AmerenUE. Consolidated Comments of Intervenors Sierra Club et al. on AmerenUE's IRP, pp. 12-13, Table 2. Furthermore, AmerenUE performed cost sensitivities analysis for all technologies (including nuclear) in its risk analysis (IRP Filing Document 9, Section 8.3, page 60).

6. 4 CSR 240-22.050(1) – Failure to use comprehensive approach of screening end-use measures.

AmerenUE addressed the issue of why it is not necessary to repeat an end-use measure screening analysis, which AmerenUE completed at a cost of approximately \$500,000 in the 1990s, on page 3 of its IRP Filing Document No. 6. For this reason,

AmerenUE relied on the results of its earlier work in its attempt to comply with the Chapter 22 rules.

7. 4 CSR 240-22.050(2) – Failure to calculate avoided cost, instead using marginal energy costs.

Again, this alleged deficiency is a misinterpretation of the IRP rules and their application. The Sierra Club asserts that "UE has substituted the cost of energy in the market for the cost of avoided capacity." Consolidated Comments of Intervenors Sierra Club et al. on AmerenUE's IRP, p. 16. This statement is simply wrong. AmerenUE did not substitute the cost of energy in the market for the cost of avoided capacity and believes its filing to be in full compliance with this requirement.

8. 4 CSR 240-22.050(3) – Failure to properly screen end use measures by not including probable environmental mitigation costs.

This alleged deficiency is closely related to and is addressed by AmerenUE's answer to the Sierra Club's alleged deficiency number 2, above.

9. 4 CSR 240-22.050(4), (5), (6)(D) and (11)(C) – Failure to estimate technical potential of demand-side programs and failure to use cost-effectiveness screening.

It was not practical in 1993 nor is it practical today to calculate the technical potential of each measure screened given the fact that over 2,000 measures were screened. This is one portion of the rules that may need modification.

AmerenUE would point out that it did analyze the cost effectiveness of "placeholder" DSM programs from a variety of different benefit/cost tests. One of the issues that AmerenUE will address with stakeholders as part of its Stipulation and Agreement with Staff is analyzing potential DSM initiatives in cost effectiveness metrics. AmerenUE will conduct a review of national best practices and will consider additional tests such as the societal test. Discussions will include topics such as how to account for capacity equivalence, free ridership, externalities and the appropriate discount rate to use in determining costs of customer oriented programs that extend 20 years into the future.

10. 4 CSR 240-22.060(1) and (3) – Failure to develop representative alternative resource plans.

This alleged deficiency stems from the use of placeholder analysis in the area of DSM by AmerenUE. The reasons behind this approach are discussed above, in response to OPC alleged deficiency number 2 (Attachment A). AmerenUE has agreed, in the Stipulation and Agreement reached with Staff, to perform the appropriate benefit/cost analyses of potential DSM programs for AmerenUE's 2008 IRP filing. AmerenUE has developed an RFP to engage a consultant to assist in the DSM analyses. AmerenUE

intends to issue the RFP immediately after the Commission rules on AmerenUE's IRP filing.

11. 4 CSR 240-22.070(1) and (2) – Failure to model demand-side and renewable resources when analyzing risks and uncertainties.

The Sierra Club states "no effort as been made to assess the implications of DSM or wind generation on the reported risks measures." Consolidated Comments of Intervenors Sierra Club et al. on AmerenUE's IRP, p. 23. One only needs to review the IRP risk results, found in IRP Filing Document 3, Section 8.3 p. 179; Figure 8.7, p. 180; and Figure 8.8, p. 180, in order to see that this statement is inaccurate. The risk results in these figures show two potential resource plans that include wind, i.e. Figure 8.7: Wind: CT Buy 600MW and Wind: RI3. Furthermore, the AmerenUE's response to data request MPSC 0003 has results for the additional risk analysis performed for DSM and wind generation that was discussed with stakeholders on several occasions.

12. 4 CSR 240-22.070(2)(C) – Failure to analyze the uncertainty around CO2 regulation.

The Sierra Club states that "...it would be more important to quantitatively evaluate CO2 price's impact on the relative riskiness of portfolios, but this does not appear to have been done; only scenario analysis was performed for CO2 cost." Consolidated Comments of Intervenors Sierra Club et al. on AmerenUE's IRP, p. 24. It is true that "only scenario analysis" was done for CO2. But, scenario analysis is used to "quantitatively evaluate CO2 price's impact of the relative riskiness of portfolios".

AmerenUE documented its "quantitative evaluation of CO2 prices' impact on the relative riskiness of portfolios" in the Scenario Risk Analysis Section in its IRP Filing, Document 3, Section 8.4, pp. 180-182. On page 181, Table 8.1 shows various CO2 prices. Immediately following this table, there is a graph (Figure 8.9) and table (Table 8.2) with the results of the analysis that indicates 'quantitatively evaluated impact on the relative riskiness of the portfolios.' Following the graph and table, AmerenUE additionally listed observations regarding this analysis. Clearly, Sierra Club's assertion is inaccurate and potentially misleading.

Next, the Sierra Club quotes AmerenUE's IRP filing and then interprets the ramifications of the quoted statement incorrectly. They state:

"The beginning of section 8.4 asserts that this was because the 'parameter variability cannot be reasonably represented by a known statistical process.' That is not a sufficient justification for omitting from the analysis of risk measures for a risk quite likely to be a dominant factor." Consolidated Comments of Intervenors Sierra Club et al. on AmerenUE's IRP, p. 24.

It is true that AmerenUE states that CO2 prices or even a CO2 tax cannot be represented by a known statistical process. Simply put, a CO2 tax does not exist in the

United States, nor has the Federal Government passed legislation limiting CO2 emissions. Accordingly, no historical or market data is exists to be statistically analyzed.

However, one can not take this statement to mean that a CO2 tax was omitted from the analysis of risk measures, as claimed by the Sierra Club. Instead of statistically analyzing a historical CO2 price data that does not exist, AmerenUE engaged ICF Consulting, Inc. to develop a fundamental CO2 forecast based upon a Cap and Trade regulatory environment post 2010. ICF developed an expected case that is likely to be realized under a regulated or legislated future with high and low sensitivities provided around the expected case. IRP Filing Document 9, p. 50. AmerenUE did a through risk analysis on CO2 as outlined in the section titled "CO2 Scenarios." IRP Filing Document 9, Section 7 pp.49-56. The results are found in a section titled "Scenario Risk Analysis" which meets and exceeds the requirements of 4 CSR 240-22.070(2)(C). IRP Filing Document 3, Section 8.4, pp. 180-183.

#### CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing have been mailed, hand-delivered, transmitted by facsimile or electronically mailed to all counsel of record this 15<sup>th</sup> day of September, 2006.

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