

In re: Union Electric Company's 2011
Utility Resource Filing Pursuant to
4 CSR 240 – Chapter 22.

parties in the comments and testimony, add up to an IRP that fails to meet the level of completeness required by the Commission and one which minimizes rather than optimizes demand side options that were identified in Ameren's own studies. Consequently, Ameren's IRP does not ensure that it will be able to "provide the public with energy services that are safe, reliable and efficient, at just and reasonable rates, in a manner that serves the public interest," as required by 4 CSR 240-22.020.

These shortcomings were exacerbated by Ameren's decision to further slash, then totally eliminate the DSM option in its Change of Preferred Plan filed in Case No. EO-2012-0127 (consolidated with this case on December 12, 2011). In 4 CSR 240-22.010(2) of its new IRP rules, which apply to the Ameren's Change of Preferred Plan, the Commission indicates that one of the fundamental objectives of the resource planning process is to provide the public with energy services in a manner that "is consistent with state energy and environmental policies." Achieving all cost-effective demand side savings is a primary state energy policy, as set out in the Missouri Energy Efficiency Investment Act (MEEIA), section 393.1075.3 RSMo, and Commission regulation 4 CSR 240-22.050 (purpose statement). A preferred plan that provides no demand-side resources after its first year is not consistent with the State's energy policy of achieving all cost effective demand side savings. The IRP and the new preferred plan are so far and so flagrantly askew from the policy objectives of the IRP rules, the public interest, and good energy policy, that MDNR must now ask the Commission to hold Ameren out of compliance with the IRP rules regarding both its IRP and its Change of Preferred Plan, and to provide directions on how the deficiencies of each should be resolved.

1. Ameren did not use minimization of costs as the “primary selection criteria” as required by 4 CSR 240-22.010(2)(B).

Section 10 CSR 240-22.010(2)(B) of the IRP rules states that a utility shall: “Use minimization of the present worth of long-run utility costs as the primary selection criterion in choosing the preferred resource plan.” Ameren used six different selection criteria to determine its preferred plan, each weighted individually. These were: environmental/renewable/resource diversity, energy efficiency spending, financial/regulatory, customer satisfaction, economic development and cost.¹ Even though Ameren was required to make cost its primary selection criteria, cost was only given 25 percent weighting in comparison to 75 percent for the other five criteria. In its response to the parties’ criticisms, Ameren said that it changed that weighting to 30 percent in the final scorecard;² however this weight was not used in selection of the preferred plan.³ Either percentage is so low when compared with the weighting given to other criteria, that it cannot satisfy the requirement of 4 CSR 240-22.010(2)(B).⁴ The low weight given to cost causes lower cost plans that rely primarily on energy efficiency to be passed over by higher cost plans that rely on new generation. This further undermines the IRP rules by allowing supply-side alternatives to be valued on a higher plane than demand-side resources despite the clear mandate in 4 CSR 240-22.010(2)(A) that both classes of resources be considered “on an equivalent basis.”⁵

2. Ameren failed to analyze a “constraint” as required by 4 CSR 240-22.010(2)(C).

¹ Ex. 1, Ameren IRP, Ch. 9: 7-13

² Ex. 2, Ameren Response to Comments, p. 95

³ Ex. 5, Michels Surrebuttal, p. 9, 13-16

⁴ Ex. 19, GDS Report, p. 36, Ex. 22, Fratto Rebuttal p. 4-6

⁵ Ex. 19, GDS Report, p. 32

In addition to considering demand-side measures on an equivalent basis with supply-side alternatives and using minimization of the present worth of long-run utility costs as the primary selection criteria, IRP rule 10 CSR 240-22.010(C) requires utilities to:

Explicitly identify and, where possible, **quantitatively analyze** any other considerations which are critical to meeting the fundamental objective of the resource planning process, but which may constrain or limit the minimization of the present worth of expected utility costs. The utility shall **document the process and rationale used by decision-makers to assess the tradeoffs and determine the appropriate balance between minimization of expected utility costs and these other considerations** in selecting the preferred resource plan and developing contingency options. [emphasis added.]

Ameren identified “DSM Cost Recovery” as an “other consideration” that was a constraint upon NPVRR and used it as a “Decision Factor” when selecting its preferred plan.⁶ Ameren later stated that this constraint specifically referred to shareholders potentially losing 0.2 percent to 0.7 percent return on equity in the short term, should the Commission deny Ameren’s choice of DSM cost recovery in future filings under MEEIA.⁷ Ameren’s use of DSM Cost Recovery as a “Decision Factor” effectively resulted in Ameren ignoring the entire NPVRR analysis, and choosing a more costly preferred plan with little DSM over lower cost plans with higher DSM.

In taking this path, Ameren did not provide the required quantitative analysis of this constraint. Nor did it document the process or rationale it used to assess tradeoffs and determine the appropriate balance between NPVRR and DSM cost recovery, as required by 4 CSR 24-

⁶ Ex. 1, Ameren IRP, 10, 3.

⁷ Ex. 5, Michels, p. 12, 17-19

22.010(2)(C). Consequently, Ameren skipped one of the most important steps in the IRP process.⁸ While Ameren did provide the anticipated losses its shareholders might see should the lowest NPVRR plan be selected and should the Commission then deny Ameren’s requested DSM cost recovery,⁹ this all or nothing approach was far from the assessment of tradeoffs that the rule contemplates. Ameren failed to analyze the impact on shareholders that the lowest NPVRR plan would have should the Commission accept all or even a portion of its cost recovery plan.¹⁰ Further, this analysis looked at only one of the two considerations that Ameren is required by rule to balance (the other being minimization of cost). This left the analysis entirely void of any attempt to balance the two interests. By failing to adequately analyze this constraint, Ameren is out of compliance with the IRP rules with respect to its original Preferred Plan and its change in Preferred Plan, and has acted in a way that undermines the planning process.

3. **Ameren failed to comply with the contingency planning rules in 4 CSR 22-240.070(10)(C)-(D).**

The IRP rules require “contingency planning” in which the utility considers how its preference in plans might change with “critical uncertain factors.” This contingency planning serves a valuable policy goal in preparing utilities for a broad range of possible scenarios, from fuel price swings to environmental regulation changes to natural disasters. IRP rule 4 CSR 240-22.070(10)(C)-(D) specifically requires the utility to create a range of outcomes for critical uncertain factors that define the limits under which the preferred plan is still deemed appropriate and a set of contingency options that are appropriate responses to extreme outcomes of the critical uncertain factors.

⁸ See also Ex. 18, MDNR Comments, pp. 21-23.

⁹ Ex. Michels, p. 12 l. 17-19

¹⁰ See also Ex. 18, MDNR pp. 11-13

Ameren did not conduct the analysis required by 4 CSR 240-22.070(10)(C)-(D) with respect to its demand-side cost recovery decision factor,¹¹ based upon its claim that “there are no values of uncertain factors that would cause the company to select a different plan as the preferred plan.”¹² This failure flies in the face of this important contingency planning requirement. The company did not identify the “extreme outcomes” or any other possible outcomes for the demand-side cost recovery decision factor and therefore it has not taken even the first step toward applying the requirements of 4 CSR 22.070(10)(C)-(D) to contingency planning based on this particular decision factor.¹³

While technically Ameren did not skip this step in its entirety, its attempt to comply with this provision was wholly inadequate. Ameren witness Matt Michels said the reason such analysis was not undertaken was because: “there was no assurance at all that any of the structures analyzed would comply with the rules that were ultimately adopted.”¹⁴ In regards to the throughput disincentive, Michels added “it is not so important how they are addressed as it is that they are addressed.” Therefore, Michels reasoned: “establish(ing) the need to address the (throughput) disincentive is all that is required and all that can be meaningful as part of an IRP.” The effect is to insulate the preferred plan from any impact of critical uncertain factors and the Company’s contingency analysis from the requirements of 4 CSR 240-22.070(10)(C) and 10(D).¹⁵ Ameren’s assumption undermines the IRP rules by failing to provide adequate contingency planning for an important decision factor, and as a result Ameren’s planning process is out of compliance with the IRP rules.

¹¹ The use of “decision factors” in this context is an example of Ameren using terms that are not defined in the IRP rules. *See* Ex. 25, Bickford Rebuttal, p. 6-9.

¹² Ex. 2, Ameren Response, p. 105

¹³ Ex. 26, Noller Rebuttal p. 18.

¹⁴ Ex. 5, Michels Surrebuttal p 16.

¹⁵ *See also* Ex. 26, Noller Rebuttal, p 18.

4. Ameren failed to analyze future coal prices as an uncertain critical factor as required by 4 CSR 240-22.040(8).

Ameren acknowledged that it was required to identify the effect of critical uncertain factors that affect future coal prices under 4 CSR 240-22.040(8)(A).¹⁶ Ameren claims that it met this requirement through modeling by its consultant, CRA.¹⁷ Specifically, Ameren stated that future load growth, natural gas prices and federal greenhouse gas regulation are the critical uncertain factors that affect the range of future coal prices in the model.¹⁸ This analysis leaves out the uncertainty that coal transportation costs and coal production costs would have on the possible range of future coal prices.¹⁹ It is MDNR's position that without considering the uncertainty in these two common sense factors, that this rule requirement could not be satisfied.

5. Ameren failed to analyze fuel price uncertainty as required by 4 CSR 240-22.040(8)(A)(2).

IRP rule 4 CSR 240-22.040(8)(A)(2) requires the utility to "consider the accuracy of previous forecasts in selecting providers of fuel price forecasts." Ameren used CRA's model to make projections regarding fuel prices for its IRP evaluations.²⁰ Ameren provided information regarding CRA's reputation, including testimonials by other parties.²¹ However, there is no evidence or information in the IRP or Ameren's response to comments that Ameren considered the historical accuracy of CRA's forecasts, as the rule requires.²²

¹⁶ Ex. 5 Michels, pp. 66-7

¹⁷ *Id.* p. 67

¹⁸ *Id.*

¹⁹ Ex. 26 Noller Rebuttal, p 30.

²⁰ Ex. 1, Ameren IRP, Ch. 2

²¹ Ex. 2, Ameren Response, pp. 85-6.

²² Ex. 24, Smith Rebuttal, p. 5

6. **Ameren failed to analyze the possibility of using purchase power agreements to meet demand as required by 4 CSR 22-240.040(5).**

In the evaluation of potential supply side resources, IRP rule 4 CSR 22-240.040(5) requires the utility to:

“identify and evaluate potential opportunities for new long-term power purchases and sales, both firm and nonfirm, that are likely to be available over all or part of the planning horizon.”

Despite this requirement, Ameren relied solely on its trading organization’s judgment in dismissing the possibility of any long-term purchase power agreement (PPA.)²³ Consequently, Ameren did not subject the future price of purchased power to sensitivity analysis as required by 4 CSR 22-240.040(5), to determine whether it is a critical uncertain factor that must be analyzed under the requirements of 4 CSR 240-22.080(12).

Ameren’s trading organization determined that there were “no reasonable opportunities for PPA’s to include in the supply side analysis.”²⁴ There is no discussion of the type of research performed, data gathered, or steps taken by Ameren.²⁵ There is no assurance that Ameren has actually evaluated the options; therefore Ameren has not complied with the rule. Also, in light Ameren’s position on the purchased power option in its IRP, how can Ameren explain the sudden availability of PPAs and how that option became its priority in its change in preferred plan?

²³ Ex 2, Ameren Response to Comments of Parties, p. 76.

²⁴ *Id.*

²⁵ Ex. 24, Smith Rebuttal, p 4, all 52-60.

7. Ameren failed to properly analyze wind power as previously agreed.

Ameren was bound by a Stipulation Agreement from EO-2009-0437 to undertake certain analysis and considerations regarding wind resources. Specifically:

Demonstrate that its assumptions regarding capacity factors are consistent with the most recent data on capacity factors for the best commercially available wind sites;

Demonstrate that its assumptions regarding the timing of transmission capacity upgrades, and the allocation of the costs associated with those upgrades, are based on the most recent system planning studies and currently effective transmission cost allocation principles;

Present scenarios for acquiring wind resources that identify the region being considered utilizing multi-county areas, with a characterization of the wind resources available for each. To make a meaningful comparison of the regions under consideration, the information presented should include estimates at various turbine hub heights (e.g., 80, 100 or 120 meters, where practical) of wind density, transmission upgrades required and the levelized cost of energy per MWh under a Purchase Power Agreement and/or an ownership arrangement.

AmerenUE (Ameren Missouri) will provide cross references for information whenever possible in its next IRP filing.²⁶

²⁶ Ex. 19, GDS Comments, pp. 23-4

Ameren has failed to comply with this agreement in four ways. First, Ameren did not look at the capacity factors for the *best* commercially available wind sites; instead they just used the average capacity across several states.²⁷ This analysis is inadequate, as Ameren's own analysis shows that some of the states averaged together produce more capacity than others. Further, a county-by-county analysis can be done allowing for a true analysis of where the best wind potential is rather than just relying on a broad average for a region.²⁸ Second, Ameren failed to address documentation of its assumptions regarding the timing of transmission capacity upgrades as it relates to the potential wind energy resources.²⁹ Third, Ameren did not identify multi-county regions with a characterization of the wind resources available to each, not the transmission upgrades required to access those resources.³⁰ Finally, Ameren did not address a PPA or ownership agreement.³¹

Despite Ameren's claim that their analysis satisfies the stipulation agreement,³² MDNR takes the position that it falls far short of what could reasonably be considered sufficient under the terms of the stipulation and agreement. MDNR asks that the Commission find that Ameren has not complied with the stipulation and agreement, has not adequately evaluated wind resources, and instruct Ameren to complete a sufficient analysis of wind resources.

8. **Ameren's October 25, 2011 Change of Preferred Plan fails to comply with the IRP rules.**

On October 25, 2011, Ameren filed a notice of change in its preferred resource plan, which reflects the further reduction and imminent elimination of demand side management in

²⁷ Ex. 19, pp. 24-5.

²⁸ Ex. 21, Hasselmann Rebuttal, pp 5-7

²⁹ Ex. 19, GDS Report p. 25.

³⁰ Id. p. 26.

³¹ Id. p. 27.

³² Ex. 2 Ameren Response, pp. 62-5.

favor of purchasing more energy.³³ The Notice of Change in Preferred Plan is not in compliance with 4 CSR 240-22.080(12) or 4 CSR 240-22.010(2), and MDNR requests the Commission order Ameren to bring the filing into compliance. The Commission should not accept the new preferred plan as that would imply that the IRP preferred plan was compliant.

There are numerous deficiencies with the new preferred plan. First, as addressed on pages 2-3 above, the new preferred resource plan is not in compliance with 4 CSR 240-22.010(2) of the current IRP rules. Second, Ameren relies on the same “all or nothing” evaluation of the likelihood of acceptable cost recovery for DSM as it did in the IRP,³⁴ and Ameren’s choice moves even further from the realistic achievable potential (RAP) level of DSM, which its own analysis ranked as the lowest NPVRR option.

Third, the new preferred plan is deficient in that it does not document the impact to all other performance measures as required 4 CSR 240-22.080(12). MDNR concurs in Staff’s evaluation of this issue and its recommendation that the Commission require Ameren to bring the filing into compliance³⁵

Fourth, the new preferred plan includes purchased power as a resource, despite the fact that in its IRP, the future price of purchased power was not subjected to sensitivity analysis as required by 4 CSR 22-240.040(5), as discussed above. In the Notification of Change filing, the Company states, “Capacity purchases/sales were updated to reflect changes in capacity position associated with the change in the DSM portfolio. This change was made to account for the increase in peak demand associated with the reductions in DSM load impacts, which reduces the

³³ Case No. EO-2012-0127, Notification of Change in Ameren Missouri’s Preferred Resource Plan, p 2, October 25, 2011

³⁴ *Id.* at p. 1

³⁵ Case No. EO-2012-0127, Staff’s Notice of Ameren Missouri’s Non-Compliance

amount of capacity available for sales and/or increases the amount needed to be purchased.”³⁶

With its selection of a new preferred plan that includes purchased power as a resource, the company should have subjected this uncertain factor to sensitivity analysis to determine whether it is a critical uncertain factor that must be analyzed under the requirements of 4 CSR 240-22.080(12). If the Commission finds that Ameren’s IRP plan is defective, and makes the further finding that Ameren should bring the plan into compliance, MDNR requests that this additional sensitivity analysis be ordered to be conducted.

CONCLUSION

In addition to holding Ameren as out of compliance with the IRP rules, MDNR requests that the Commission order Ameren to cure all remaining deficiencies identified by MDNR and, as the Commission finds appropriate, all other parties who submitted comments on Ameren’s IRP, and to submit an Integrated Resource Plan that complies with the Commission’s rules.

Respectfully submitted,

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³⁶ Case No. EO-2012-0127, Notification of Change in Ameren Missouri’s Preferred Resource Plan, page 2, October 25, 2011)

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing have been e-mailed to all counsel of record
this 20th day of January 2012.

/s/ Jennifer S. Frazier
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