

## 2013 Special Contemporary Issues Ameren Missouri Comments

### Introduction and Summary

The Missouri Public Service Commission's ("Commission") Chapter 22 rules governing electric utility resource planning include consideration of special contemporary issues {4 CSR 240-22.080(4)} as ordered by the Commission. 4 CSR 240-22.080(4) characterizes special contemporary issues generally as, "evolving regulatory, economic, financial, environmental, energy, technical, or customer issues," that utilities must adequately address in their resource planning. The Commission has provided additional guidance on the assessment of proposed special contemporary issues in its order in Docket EO-2012-0039. Staff and other parties have filed proposed special contemporary issues pursuant to 22.080(4)(A). Ameren Missouri provides these comments pursuant to 22.080(4)(B), which allows the subject utility and other parties to file comments on the proposals of Staff and the other parties no later than October 1, 2013.

In making its decision about what specific issues utilities must address, the Commission must consider the significance and urgency of issues and the time available in which to address them, both individually and in total. As a basic test, such issues must be "special", they must be "contemporary", and they must, in fact, be "issues". This means that the issues must not only meet a threshold of significance in terms of their potential effect on resource decisions, but that the potential effect must also be imminent.

The Company's review of the suggested special contemporary issues proposed by the parties indicates that some of the issues proposed by the parties merit treatment as special contemporary issues by the Commission. For those issues that are determined by the Commission to be special contemporary issues, it is important to define how the Company will address them. Following is a list of the issues suggested by Staff and other parties and the Company's recommendation for the Commission's determination as to whether each issue should be treated as a special contemporary issue and how the Company would plan to address those issues determined to be special contemporary issues. Ameren Missouri looks forward to the Commission's decision on this matter.

### Issues Proposed by the Parties and the Company's Assessment

- **Staff Issue a:** Describe and document the process Ameren Missouri used to quantify *all cost-effective demand-side savings* in its upcoming, October 1, 2014, triennial compliance filing;

**Ameren Missouri's Assessment and Recommendation:** While Ameren Missouri's 2014 IRP will not be its first triennial compliance filing following the passage of the Missouri Energy Efficiency Investment Act ("MEEIA"), there has been growing interest among stakeholders regarding the

determination of the theoretical future portfolio that would satisfy the goal of MEEIA to achieve “all cost-effective demand side savings.” There are two key reasons why such a determination can be considered little more than an interesting academic exercise. First, mass predictions of customer behavior and decisions many years into the future are subject to significant change over time as the customer base changes and as individual usage patterns change to adapt to new technologies, new choices and economic conditions. Second, the established cycle under MEEIA of program development, implementation, and evaluation is appropriately focused on successive short-term (3-year) plans. In large part, this short-term focus recognizes the limitations described above regarding long-term predictions of customer behavior.

Nonetheless, because of the interest in understanding the potential for achieving the policy goals of MEEIA, Ameren Missouri agrees that this should be considered a special contemporary issue. To address this issue, Ameren Missouri will evaluate one or more additional portfolios, as appropriate, that yield energy savings between the levels defined by Maximum Achievable Potential (“MAP”) and Realistic Achievable Potential (“RAP”) as determined in the Company’s updated DSM Potential study. The energy savings, demand savings, and costs associated with the additional portfolio(s) will be determined by interpolation between RAP and MAP. Ameren Missouri will assess both the cost-effectiveness of this/these portfolio(s) and the feasibility of achieving them based on the results of its DSM potential study.

- **Staff Issue b.** Describe and document the quantification of *all cost-effective demand-side savings* for Ameren Missouri in its upcoming, October 1, 2014, triennial compliance filing;

**Ameren Missouri’s Assessment and Recommendation:** As this issue is very closely related to Staff issue a, the assessment of that issue and the Company’s plan to address it applies to this issue as well.

- **Staff Issue c:** Describe and document how Ameren Missouri’s portfolio of demand-side resources in its upcoming adopted preferred resource plan is - or is not - designed to achieve *a goal of all cost-effective demand-side savings* during the 3-year implementation plan period and during the 20-year planning horizon.

**Ameren Missouri’s Assessment and Recommendation:** As described previously with respect to Staff issue a, the determination of “all cost-effective demand-side savings” over a 20-year time horizon must be viewed as little more than an interesting academic exercise. As such, it should not be assumed that the preferred resource plan of Ameren Missouri, or any other utility, is going to achieve this theoretical ideal over such a long period of time. Rather, Ameren Missouri’s planning process will focus on achieving cost-effective demand-side savings in each 3-year MEEIA program plan, adjusting its expectations through time based on continual assessment of program effectiveness and future potential. Any assessment of the savings achieved by a 3-year MEEIA program is necessarily part of proceedings pursuant to MEEIA. Therefore, this should not be considered a special contemporary issue for an IRP.

- **Staff Issue d:** Describe and document generally Ameren Missouri's plans and timing to replace the Ventyx Midas® model currently used to perform its integrated resource plan and risk analysis required in 4 CSR 240-22.060;

**Ameren Missouri's Assessment and Recommendation:** Ameren Missouri has notified Staff and other stakeholders of its intent to transition from the MIDAS platform for IRP analysis. This is due largely to the plans of MIDAS vendor Ventyx to phase out support and use of MIDAS over an undetermined timeframe. Because the models used for IRP analysis are integral to the planning process, Ameren Missouri agrees that this should be considered a special contemporary issue. To address the issue, Ameren Missouri will describe and document its plans to replace the MIDAS model used to perform its integrated resource plan and risk analysis required in 4 CSR 240-22.060.

- **Staff Issue e:** Describe and document generally Ameren Missouri's plans to work collaboratively with Staff, the Office of the Public Counsel and other parties to consider the possible transition - over time - to a common software platform to perform the analyses required by 4 CSR 240-22.060;

**Ameren Missouri's Assessment and Recommendation:** This issue is closely related to Staff issue d above. Beyond the general interest in understanding Ameren Missouri's planning process and the tools used to conduct it, the Company understands that Staff has devoted time and resources to the use of the MIDAS model in large part because it has been used by all of the investor owned utilities who file IRP's in Missouri. Because of Staff's desire to coordinate its modeling efforts and capabilities with those of the utilities, Ameren Missouri agrees that this should be considered a special contemporary issue. To address this issue, Ameren Missouri will describe and document its plans to work with stakeholders to consider the possible transition to a common software platform to perform the analyses required by 4 CSR 240-22.060.

- **Staff Issue f:** Analyze and document the impacts of opportunities for Ameren Missouri to implement distributed generation, DSM programs, combined heat and power (CHP), and micro-grid projects in collaboration with municipal, agricultural and/or industrial processes with on-site electrical and thermal load requirements, especially in targeted areas where there may be transmission or distribution line constraints.

**Ameren Missouri's Assessment and Recommendation:** Ameren Missouri's potential study has included analysis of distributed generation, DSM programs, combined heat and power, and micro grid projects as applicable within the Ameren Missouri service territory. This includes specific case studies of areas where potential opportunities are known to currently exist, with the ability to expand study results across Ameren Missouri service territory. There are two important points to consider in making a determination as to whether this should be treated as a special contemporary issue. First, the potential to employ these kinds of resources is not new. For example, Ameren Missouri included an evaluation of distributed generation potential, performed by Navigant, in its 2011 IRP. Second, most of these resources, if not all of them, are already required to be evaluated in some way by the IRP rules. Staff has provided no evidence

or explanation to support the consideration of these resources beyond what is already required. Therefore, this should not be considered a special contemporary issue.

- **DED Division of Energy Issue 1:** DSM, Combined Heat and Power (CHP) and Distributed Generation (DG) - Analyze and document the impacts of opportunities to implement distributed generation, DSM programs and CHP projects in collaboration with municipal water treatment plants and other local waste or agricultural/industrial processes with on-site electrical and thermal load requirements, and large institutional customers, especially in targeted areas where there may be transmission or distribution line constraints.

**Ameren Missouri's Assessment and Recommendation:** This issue is very similar to Staff issue f above. For the reasons outlined in Ameren Missouri's assessment of Staff issue f, this should not be considered a special contemporary issue.

- **DED Division of Energy Issue 2:** Adjusting its load forecast to reflect current economic conditions - Analyze and document load forecast adjustments to reflect the existing and projected economic and demographic conditions. The analysis should describe and document any changes in the components of the load forecast made to account for changes in the economic situation and demographic changes.

**Ameren Missouri's Assessment and Recommendation:** Ameren Missouri's current and prior approaches to load forecasting already reflect consideration of existing and projected economic and demographic conditions since the driver variables for the load forecast consist of existing and projected economic and demographic conditions, among other things. Division of Energy has provided no evidence or explanation as to a need to go beyond what is currently required or analyzed in the development of the Company's load forecast. Therefore, this should not be considered a special contemporary issue.

- **DED Division of Energy Issue 3:** Customer Information/Behavior Modification DSM Programs - Analyze and document alternative methods of customer information/behavior modification and education programs to increase customer awareness and encourage more efficient use of energy.

**Ameren Missouri's Assessment and Recommendation:** Ameren Missouri has previously assessed and continues to assess the potential for customer information and behavior modification programs as part of its ongoing assessment of DSM Potential. Division of Energy has provided no evidence or explanation as to a need to go beyond what is currently required or analyzed in the development of the Company's DSM potential study with respect to these kinds of programs. Therefore, this should not be considered a special contemporary issue.

- **DED Division of Energy Issue 4:** Demand rate mechanisms - Analyze and document the impact of opportunities to implement demand rate mechanisms and effects on the DSM portfolio in response to changing wholesale electricity prices. Analysis should consider implementation of such mechanisms compared to traditional real-time load forecasting and operational procedures.

**Ameren Missouri's Assessment and Recommendation:** Ameren Missouri's DSM potential study has included analysis of demand rate mechanisms and effects on the DSM portfolio and will be included as part of the Ameren Missouri's 2014 Integrated Resource Plan filing. Division of Energy has provided no evidence or explanation as to a need to go beyond what is currently required or analyzed in the development of the Company's DSM potential study with respect to these kinds of programs. Therefore, this should not be considered a special contemporary issue.

- **Sierra Club Issue 1:** Developing and documenting the impact of demand-side management programs on future load growth, under low, base, and high projections.

**Ameren Missouri's Assessment and Recommendation:** The development and documentation of the impact of demand-side management programs on future load growth is the subject of the DSM Potential Study being finalized this month and will be included as part of Ameren Missouri's 2014 Integrated Resource Plan filing. Sierra Club has provided no evidence or explanation as to a need to go beyond what is currently required or analyzed in the development of the Company's DSM potential study. Therefore, this should not be considered a special contemporary issue.

- **Sierra Club Issue 2:** Developing and documenting for use in all economic modeling and resource planning low, base, and high projections for natural gas prices, CO2 prices, and coal prices;

**Ameren Missouri's Assessment and Recommendation:** The Company is required to describe and analyze its selection of critical uncertain factors pursuant to 4 CSR 240-22.060(5). Therefore, this is part of the standard resource planning process, is subject to the guidance provided by the Commission's rules as to how critical uncertain factors are to be determined, and cannot be determined in advance. While the variables listed by Sierra Club are certain to be included among those evaluated as required by the IRP rules, Sierra Club has provided no evidence or explanation as to a need to go beyond what is currently required or analyzed. Therefore, this should not be considered a special contemporary issue.

- **Sierra Club Issue 3:** The prospects for the future price of electricity in the wholesale market, and the impact of any changes in wholesale market prices on Ameren's ability to generate revenue through off-system sales;

**Ameren Missouri's Assessment and Recommendation:** Ameren Missouri, as part of its ongoing resource planning process, develops scenarios that yield varying wholesale market prices for power as a function of natural gas prices, load growth, and impacts of environmental regulation on the resource mix and performance in the broader power markets. The changes in off-system sales/purchases due to changes in wholesale market prices are included in the Company's detailed dispatch modeling and are also included in the revenue requirements as part of the ongoing resource planning process. Sierra Club has provided no evidence or explanation as to a need to go beyond what is currently required or analyzed with respect to power prices. Therefore, this should not be considered a special contemporary issue.

- **Sierra Club Issue 4:** Analyzing and documenting low, base, and high scenarios of projected off-system sales revenues under a range of assumed natural gas prices, CO2 prices, and coal prices;

**Ameren Missouri's Assessment and Recommendation:** As explained in the Company's assessment of Sierra Club issues 2 and 3 above, Ameren Missouri already evaluates scenarios for power prices as a function of several key variables, performs detailed dispatch modeling under a range of these variables and power market prices, and includes all associated effects in the development of revenue requirements and other results as part of its IRP analysis. Sierra Club has provided no evidence or explanation as to a need to go beyond what is currently required or analyzed in this regard. Therefore, this should not be considered a special contemporary issue.

- **Sierra Club Issue 5:** Analyzing and documenting the future capital and operating costs faced by each Ameren coal-fired generating unit in order to comply with all existing, pending, or potential environmental standards, including:
  - a. Clean Air Act New Source Review provisions;
  - b. 1-hour Sulfur Dioxide National Ambient Air Quality Standard;
  - c. National Ambient Air Quality Standards for ozone and fine particulate matter;
  - d. Cross-State Air Pollution Rule, in the event that the rule is reinstated;
  - e. Clean Air Interstate Rule;
  - f. Mercury and Air Toxics Standards;
  - g. Clean Water Act Section 316(b) Cooling Water Intake Standards;
  - h. Clean Water Act Steam Electric Effluent Limitation Guidelines;
  - i. Coal Combustion Waste rules;
  - j. Clean Air Act Section 111(d) Greenhouse Gas standards for existing sources;
  - k. Clean Air Act Regional Haze requirements.

**Ameren Missouri's Assessment and Recommendation:** The Company already includes in its normal IRP planning process an assessment of the need for environmental controls to comply with existing, pending and expected future environmental regulations. This was an integral part of the Company's 2011 IRP preferred plan selection, in which compliance requirements were assessed under two different scenarios for future environmental regulation. Ameren Missouri provided an update to its environmental compliance assessment as part of its 2012 IRP Annual Update, which was reaffirmed in the Company's 2013 IRP Annual Update. Ameren Missouri fully intends to continue to include assessment of the need for environmental compliance measures at the appropriate level for compliance, whether it be compliance at the unit level, the plant level, or the fleet level. Sierra Club has provided no evidence or explanation as to a need to go beyond what is currently required or analyzed in this regard. Therefore, this should not be considered a special contemporary issue.

- **Sierra Club Issue 6:** Analyzing and documenting the cost of any transmission grid upgrades or additions needed to address transmission grid reliability, stability, or voltage support impacts that could result from the retirement of any existing Ameren coal-fired generating unit;

**Ameren Missouri's Assessment and Recommendation:** The Company is already analyzing potential transmission upgrades required in the event of retirement of any of its existing coal-

fired units and will include the results of this analysis in its 2014 Integrated Resource Plan filing. Ameren Missouri has included the costs of upgrades needed in connection with the addition of new resources or the retirement of existing resources for quite some time. Sierra Club has provided no evidence or explanation as to a need to go beyond what is currently required or analyzed in this regard. Therefore, this should not be considered a special contemporary issue.

- **Sierra Club Issue 7:** Analyzing and documenting on a unit-by-unit basis the net present value revenue requirement of the relative economics of continuing to operate each Ameren coal-fired generating unit versus retiring and replacing each such unit in light of all of the environmental, capital, fuel, and O&M expenses needed to keep each such unit operating as compared to the cost of other demand side and supply side resources.

**Ameren Missouri's Assessment and Recommendation:** In its report and order in the Company's 2011 IRP, the Commission found that Ameren Missouri should evaluate the potential to replace existing coal plants with demand-side resources. What Sierra Club describes, a unit-by-unit analysis, is far beyond what is reasonable or necessary. Such an analysis would require arbitrary and detailed allocations of costs for common facilities and costs. It would unnecessarily complicate the very kind of environmental compliance analysis that Sierra Club says it desires in its issue 5, and which the Company already performs in conjunction with its IRP analysis, by introducing countless combinations of retired and operating units for which compliance must be determined largely at the plant and fleet levels. Rather than confuse the direction that the Commission has already provided to Ameren Missouri in this regard, the Company recommends that the Commission reject Sierra Club's call to include this as a special contemporary issue.

- **Sierra Club Issue 8:** Analyzing and documenting the technical, maximum achievable, and realistic achievable energy and demand savings from demand side management, and incorporating each level of savings into Ameren resource planning process;

**Ameren Missouri's Assessment and Recommendation:** Ameren Missouri's potential study includes analysis of technical, maximum achievable, and realistic achievable energy and demand savings projections which, as part of Ameren Missouri's standard practice, will be included within Ameren Missouri resource planning process. Sierra Club has provided no evidence or explanation as to a need to go beyond what is currently required or analyzed in this regard. Therefore, this should not be considered a special contemporary issue.

- **Sierra Club Issue 9:** Analyzing and documenting the levels of achievable combined heat and power and incorporating such achievable CHP into Ameren's evaluation of demand side management;

**Ameren Missouri's Assessment and Recommendation:** Ameren Missouri's potential study includes analysis of achievable, combined heat and power (CHP) projections which, as part of Ameren Missouri's standard practice, will be included within Ameren Missouri resource planning process. Sierra Club has provided no evidence or explanation as to a need to go beyond what is

currently required or analyzed in this regard. Therefore, this should not be considered a special contemporary issue.

- **Sierra Club Issue 10:** Analyzing and documenting cost and performance information sufficient to fairly analyze and compare utility-scale wind and solar resources to other supply-side alternatives.

**Ameren Missouri's Assessment and Recommendation:** This is a basic requirement of IRP rules and is already part of Ameren Missouri's IRP planning process. Sierra Club has provided no evidence or explanation as to a need to go beyond what is currently required or analyzed in this regard. Therefore, this should not be considered a special contemporary issue.