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

In the Matter of an Investigation into the	)	
Coordination of State and Federal Regulatory	)	
Policies for Facilitating the Deployment of all	)	EW-2010-0187
Cost-Effective Demand-Side Savings to	)	
Electric Customers of All Classes Consistent	)	
With the Public Interest.	)	

## MISSOURI ENERGY GROUP RESPONSES TO COMMISSION WORKSHIP QUESTIONS ON ENERGY EFFICIENCY

1. Does the term "energy efficiency" include shifting demand to off-peak periods? See Section 393.1124.2(4). Does "modify net consumption" as used in Section 393.1124.2(3) include shifting demand to off peak periods? See Section 393.1124.2(2).

Yes. Shifting demand to off-peak periods also means shifting energy to off-peak periods. Off-peak generation is cheaper than on-peak generation, as evidenced by the difference between on-peak and off-peak rates. Further, transmission and distribution line losses vary with demand, so off-peak losses are lower than on-peak. The overall effect is that shifting customer demand into the off-peak period reduces the amount of generation required and the cost of that generation. Shifting demand to off-peak periods may or may not change net consumption at the customer's meter. For example, an oven will use the same energy at 3:00 a.m. as at 3:00 p.m.

## 2. What does "load management" as used in Section 393.1124.2(3) mean?

Broadly speaking, "load management" includes any equipment or activity that is intended to shift load from one time to another. This need not include shifting from onpeak to off-peak. For example, staggering the start-up time of motors to reduce maximum demand would be load management, even though all the load takes place during the on-peak period. Replacing a still-functioning piece of equipment with a newer, more efficient piece of equipment might qualify as a load management decision, but if there is no choice (the old equipment must be replaced and all new options are more energy efficient), then it cannot really be characterized as a load management choice. 3. What is "demand savings"? How should "demand savings" be determined? See Section 393.1124.4.

Ideally, "demand savings" would mean the reduction in demand resulting from load management activity or investment. The problem is that there is no way to tell what the demand would really have been in the absence of the new activity/equipment. As a practical matter, we suggest that this be defined as a reduction in demand relative to a comparable previous period.

4. How should "energy savings" be determined? See Section 393.1124.4. Should there be a regular, standard process for determining whether a utility program achieves "cost-effective measurable and verifiable efficiency savings"? See Section 393.1124.3(3). If "yes," what should be that regular, standard process?

The answer is similar to that in No. 3. Verification of savings is inherently difficult. How much energy does a CFL bulb save? If it burns for eight hours every day, the saving is much greater than if it burns for only two hours every weekend. There is no way to tell. We can measure the number of installations, but not how they are actually used. Some gross measures might be used, such as household usage in a month compared with previous months (adjusted for weather conditions).

5. What is meant by the term(s) "rate design modifications" / "rate design modification" as it appears in Section 393.1124.5?

A rate design modification can be many things. A non-exhaustive list is: changing the relative levels of customer, demand and energy charges; de-averaging demand and/or energy charges into day/night or seasonal values; modifying any ratchet provisions; modifying credits for interruptibility, modifying pass-through adjustment clauses (like a fuel adjustment clause); and creating new rate forms (e.g., real time pricing).

6. How does a "customer" "notify" the "electric corporation" that the customer elects not to participate in demand-side measures offered by an "electrical corporation"? See Section 393.1124.7.

The MEG suggests that the utility notify each customer by mail or email and accept such elections by return mail or email. The utility should specify the conditions under which a customer may elect not to participate with any information needed by the customer

to determine eligibility and the customer should respond to the utility with any required information.

7. Is there any significance to the fact that the term "electric corporation" appears in SB 376 in addition to the term "electrical corporation," and the term "electric corporation" is not a defined term in Section 386.020?

No position.

8. What is the definition of the term "customer" as that term is used in SB 376?

A "customer" should be defined as a person or entity that receives an electric service bill from the utility or a tenant of a master-metered structure where the owner/landlord agrees to flow through any savings resulting from the tenant's load management activities or investments.

9. What is meant by the term "corporation-specific settlements" which appears in Section 393.1124.11?

No position.

10. How does, or how should, an electrical corporation propose a demand-side program pursuant to Section 393.1124? See Section 393.1124.4. How does, or should, the Commission approve demand-side programs proposed pursuant to Section 393.1124? See Section 393.1124.4.

Electrical corporations should identify potential DSM measures and present an evaluation of their cost relative to the anticipated saving, taking into account the degree of uncertainty regarding savings. To demonstrate that, the utility must compare the effect of supply-side measures with the effect of DSM to determine if DSM would be beneficial for all customers. Commission approval of demand-side programs should rest on each program passing both the Total Resource Cost (TRC) test (Is the cost of the program less than the supply-side cost that would be incurred in its absence?) and the Ratepayer Impact (RIM) test (Is the cost to each ratepayer lower with the DSM "resource" than with supply-side resources?).

11. How should the determination be made whether a demand-side program is beneficial to all customers in a customer class regardless of whether the program is utilized by all customers? See Section 393.1124.4.

Calculations can be made for representative customers of the cost with DSM and without DSM (but with supply-side resources). This will depend on the rate design used to recover DSM costs.

12. Does any Missouri statute, case law, or regulation prohibit or restrict electric utility customers from participating directly or indirectly through aggregator of retail customers (ARCs) in demand response bidding programs, as discussed in FERC's Order Nos. 719 and 719(A)?

No position.

13. Does a single retail customer or an ARC act as a public utility subject to MoPSC regulation under Missouri statute, case law, or regulation if it bids demand response into SPP's or MISO's organized energy market?

No position.

14. Does the right to furnish retail electric service under Section 393.170 give a certificated utility an exclusive right to "benefit" from demand response activities of its retail customers either directly or indirectly through an ARC?

No position.

15. How would a certificated utility and its other retail customers be affected if a single retail customer or an ARC bid demand response directly into SPP's or MISO's organized energy market?

No position.

16. What would be the effect on utility rate design if a single retail customer or an ARC bids demand response directly into SPP's or MISO's organized energy market?

No position.

17. What would be the effect on utility revenue collection if a single retail customer or an ARC bids demand response directly into SPP's or MISO's organized energy market?

No position.

18. How would utility's long-term load forecasting process change if a single retail customer or an ARC bids demand response directly into SPP's or MISO's organized energy market?

No position.

19. How would utility's budgeting process change if a single retail customer or an ARC bids demand response directly into SPP's or MISO's organized energy market?

No position.

20. Are there any other consequences of allowing participation in demand response programs by a single retail customer or an ARC?

No position.

21. How would customers' demand rates be estimated if a single retail customer or an ARC bids demand response directly into SPP's or MISO's organized energy market?

No position.

22. How would demand sales be transacted from an operation standpoint if a single retail customer or an ARC bids demand response directly into SPP's or MISO's organized energy market?

No position.

23. Would existing or planned demand response programs, and the costs associated with implementation of these programs, be undermined or cause a loss in benefits to retail ratepayers if a single retail customer or an ARC bids demand response directly into SPP's or MISO's organized energy market?

No position.

24. If the MoPSC has the authority to do so, what conditions would the MoPSC place on a single retail customer or an ARC if it bids demand response directly into SPP's or MISO's organized energy market?

No position.

25. How are efforts to encourage demand response by MoPSC jurisdictional electric utilities implicated if a single retail customer or an ARC bids demand response directly in SPP's or MISO's organized energy market?

No position.

26. How are efforts to encourage energy efficiency programs by MoPSC jurisdictional electric utilities implicated if a single retail customer or an ARC bids demand response directly into SPP's or MISO's organized energy market?

No position.