

ARC/RTO Workshop

May 18, 2010

Room 316 Governor Office Building

Revised June 8, 2010

1 Does any Missouri statute, case law or regulation prohibit or restrict electric utility customers from participating through an ARC in demand response bidding programs?

A. MO PSC – Steve clarifies workshop format and responses to the questions are not official unless specifically stated. Staff has not filed any official position on these questions. Referenced 393.70.

(1) Joyce Davidson – SPP is certificated in AR.

(2) David Linton – SPP not certificated in KS.

B. KCPL – did officially submit comments in EFIS and reiterated their response. In general, there is no restriction.

C. Ken Schisler – Agrees, FERC has said that DR provider is not a public utility. A customer who injects energy back to the grid may be a public utility under federal law. Most states don't regulate DR providers as public utilities either. Energy Connect Order – neither customer nor ARC is a public customer unless the customer injects energy. If the customer injects energy, then under FERC guidelines they may consider the customer and not the DR provider to be a utility, but not per state requirements.

D. Ameren – Looks at themselves as a facilitator.

E. Janet Wheeler – We have responsibility to give safe/reliable service, if that is disrupted that can be an issue. How do they judge the market for resource planning?

F. Ken – Some regulations of ARCs would be warranted, but to be classified as a public utility is a concern

G. Wal-Mart – . Expressed concern over being a public utility. If we have a store that is 100% renewable, pursued to our company goals, and I provide a service to the ISO or to the utilities with the extra power, then I shouldn't be classified as a utility.

2 Does a single retail customer or ARC act as a public utility subject to the Commission's regulation if it bids demand response into the SPP or MISO market?

A. MO PSC – 386.020 defines public utility, is broad.

B. Charles, KCPL– reiterates response submitted in EFIS. Conclusion was that as long as used for private use, it would not be a public utility.

C. Wal-Mart – Disagrees, not reselling electricity into the market but provided a service to the utility or ISO. Service covers DR and regulation.

D. MISO anyone can register as long as they meet the criteria. Identified in their presentation on May 17. No requirement to register as a PU to participate with the MISO.

E. SPP – agrees with MISO.

F. Randy PSC – Would anyone disagree that this does not classify you as a PU?

G. MISO – not saying that you don't have to be a PU, but there is no requirement.

H. SPP – part of certification is that the participant must certify that they are not precluded from participating.

I. Janet Wheeler – moving forward specifically with two ISO/RTOs could block us in, not much flexibility. Don't lose the fact that this could change as we move forward.

J. Adam – Can it be split that some want it in part of the state and not in others? Do we want to identify protections that need to be in place to move forward in ARCs?

K. Janet – some rules lack elasticity to move forward.

L. MISO – some generic criteria are appropriate to create a platform that doesn't prohibit ARC participation.

M. Steve – the rules are supposed to be general.

N. Adam – Rules should be clear with some flexibility

O. Ameren - If the rules are outside the specification – what would the conditions be? Providing specific info, would they facilitate or would we have to go outside

P. MISO – Whatever the criteria is we should hear from the RERRA (Commission).

Everyone's involvement is required for it to work correctly.

Q. SPP – SPP has to give the service – bottom line. It has to work for the utilities. Not exactly sure how it would be implemented.

3 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 through an ARC?

A. KCPL – reiterates EFIS submission, they said no, they don't have exclusive right.

B. Steve – they don't have to be certificated specifically. PSC does have overlaps of co-ops. Specially referenced 393.170.

C. Wal-Mart – based on experience with DR, there are opportunities for encouragement for customer to retain benefits, whether be white certificates, or energy efficiency. Customers are the ones making sacrifices, their efforts complete the success. Any benefit should return to customers.

i) White certificates, Nevada, Penn, Conn. – bid in energy efficiently and DR. Many attributes for customers to do more to reduce costs. Lots of opportunity and benefits. Will see more in the markets in the future.

D. Ken - Purchasing a white tag item can be used to offset peak loads or energy efficiently purposes.

E. Steve – For some reason other than the rational, functioning

F. Ken –ACT 129 – aggressive requires peak load reduction and ARC participation to participate in state program.

G. Steve – Does anyone see the specific detail of SB376

H. Adam – SB376 requires all cost effective demand side savings, is ARC a part of that? Is there is a ban is that contrary to SB376?

I. Steve – Will get to that at the end of the day. What will evolve from these workshops, what the MO Commission needs to do to implement 719A, does that have any spillover effect to the rulemaking on energy efficiency.

4 How would a certificated utility and its retail customers be affected if a single retail customer or an ARC bid demand response directly into the SPP or MISO market?

A. Ameren – If DR is operated by MISO, what does it mean to them? Because MISO reconstitutes the load, they behave like it will be there. From a practical matter, it will be there. They had bidding little effect. A large load that's real-time bid 50/60 MegaWatts.

B. Ken – The MISO construct is a way to convert a fixed retail rate into real-time pricing. This is a real-time program. Reiterated from May 17 presentations on pricing. MISO motto – nothing more than real-time pricing.

C. Ameren – agrees with most, the responsibility that the LSC has and the real-time. Reiterated yesterday's presentation. Nearly all of what was said yesterday is not part of MISOs responsibilities. Has a different concern than what MISO has.

D. Adam – will those concerns exist regardless?

E. Ameren – There are responsibilities that are charged to them that are taken seriously, whoever is making rules, and those concerns are to be addressed. The info isn't received, they can't comply. Ideas need to be considered by commission before moving forward.

If everyone agrees they get real-time info, it is a simple thing to put in place.

F. Tom CPower- Recommends issues with protocols be resolved at MISO workshop.

G. Ameren – State should consider as a condition. Trying to get real-time communication to ILCs. If it doesn't happen, doesn't mean that the current concern doesn't exist.

H. Ameren - If MISO doesn't address concerns, it can affect the customers. Low-forecasting issues are very important. This need to be a matter of MISOs tariff. If FERC approved it today, who's going to insure that the concerns are addressed?

I. Adam – how specific do we want to make some sort of order about ARC.

J. KCPL has a lot of the same concerns as Ameren. 'Real-time loads.' Another issue – can participate in both retail and RTO? Who has the first call?

K. CPower – if the MFRR is set appropriately, retail billings should be taken care of.

L. KCPL - If responded to load in when wholesale is approve the retail, response levels energy on demand.

M. Adam - Would it be easier to adjust customer's bill?

N. MISO, Mike – Reiterated discussion from yesterday's presentation.

O.

P. SPP – The ARC is buying and selling into the market, and expectation is a purchase of electricity that the retail customer is buying from the utility. SPP sees that relations and pays the ARC the LMP. For customer to have the right to sell in wholesale market, it has to buy into the PU. IF the PSC says we authorize that ARC can operate in the MISO system, but doesn't give the MFRR, MISO sets the MFRR to zero, it leave the commission open to do what is expected.

Q. Adam, if the RERRA, declines to act then LSE can protest. Won't default to zero unless the ARC sets it to zero.

R. MISO – the RERRA has to allow for participation. The ARC will establish the MFRR LSE can reject.

S. Wal-Mart – disagrees, provides a service, what she bids in, what service she provides. MFRR comes out of DR proceeds; she's reducing her load so no new generation is required. Why pay back monies. Has copies of provided comments. Doesn't think anything should be taken away from the proceeds that help co. pay for more energy efficiency investments. Wants MFRR set to zero.

T. Ken – Power of 5%, 5% of demand can reduce 35%. Set MFRR at zero, MISO would charge LSE full. Puts utility in negative position. Would be appropriate for then charge customer the cost of paying for DR, they're getting net benefit to serve low. Legit for some able customer to do DR. if you lower cost and don't give incentive to utility, revenue sharing between rate payer and utility shareholders create incentive we need to lower the cost to customers.

U. Jeff, Springfield – If SPP gives to drop 10 Mw, for co to work, they still have to make the 10 mw. How does the utility get reimbursed that cost? Should the utility be part of the contract between the RTO and participant?

V. Tom CPower– The load would drop a bit.

W. Ken – the price of electricity is higher than the retail rate. You collect from customers and reducing the cost to serve the load.

X. MISO – If an island, should drop load 10mw

Y. Ken – should be treated as a DR.

Z. Adam – not sure if PSC is RERRA for a muni or coop.

AA. Ameren – The loads are reconstituted. DR lowered LMP in marketplace, if being that seller passes through the load.

BB. Ken – If utility is long, customers are harmed by lowering the LMP. If customers paid for generators, lowering the cost is less revenue to customers overall. Long term, lowering the cost to serve load is beneficial

CC. Ameren – if you continue to bill customer at full rate at reconstituted load, over the long term, that is incorporated in future rate cases. There is benefit to all customers. In short term, the diff between the LMP and the full retail is appropriate because most are fixed cost.

DD. Ameren – the current program that the tariff is for, the payment is described as LMP – the rate paid. Not a straight reconstitution of load replicated.

EE. Do you bill consumers for load?

FF. Ameren – we pay them the agreed to amount minus the MFRR?

GG. KCPL – real-time pricing similar to Ameren's. Using a baseline and customers are credited at real-time price. Customer gets the benefit of the reduced usage.

HH. Ken - Reference to CC. Agrees ex instead of billing the customer, the costs of reconstituted load should be billed to all customers. Otherwise agree with everything NCC.

II. Ameren – the potential benefit is that Arcs have a lot more flexibility and afforded more creativity in programs. Create programs that are more suited to specific needs.

JJ. Wal-mart – As a ratepayer – different benefits from different avenues. At a rate proceeding, sometimes have to pay for lost sales – how long will that continue? Do we pay incentives for amount of DR? Consider what is paid in to make the program work. Would like a choice to look at different benefits from different programs. Where is the most rate payer benefits.

KK. Adam - Is there a benefit for DR?

LL. Ameren – If all going on in RTO, how will this go with bill 376, how's it paid for, who pays? How will it affect the Ameren customer? They're easier to sort in retail rather than

MM. Adam – how do we proceed with bill 376?

NN. Ken – Gain experience from Virginia and Vermont as regulated states in a wholesale market that have active ARC participation

OO. SPP – KS and AR are also one step ahead in this process. Could be worthwhile for MO to watch KS and AR.

PP. KCPL – Kansas does have an open docket, maybe not one step ahead. Things are at a stand still.

QQ. Joyce MISO – 8 of 13 states have open dockets to look at the issues. Have to compare statutes – all have different positions.

RR. Tom – Referred to yesterday's presentation.

SS. Ameren – verification, ensuring that responses verify on the same basis, MISO BPM, can use a linear per provide resources.

one requires 10 second scanned data / would like revenue meter requirement instead of just data as currently req'd in the MISO protocols.

TT. Wal-mart – is it classified as energy market? As technology evolves with customer, want to make sure they aren't limited to future opportunities.

UU. Ken - There are no state issues. Can set MFRR to anything – can we get temporary restriction lifted?

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

A. KCPL – one DR estimated accurately, assuming all done right, should continue to operate as it does today. May need to design some interruptible tariffs. If it's opened up in SPP, they're moving from tariffs over to an energy only from a capacity/energy customer. It's a loss that has to be replaced by some other means of capacity.

i) How does it roll through rates if you lose the capacity?

B. Ameren - If reconstituted at retail, there would be no need for an additional MFRR.

C. Tom – Would like to see how regenerating capacity would be useful to the facility.

D. SPP – The capacity market may not be something that the RTO implements.

E. Adam – Would generated capacity be transferred to a utility?

F. SPP – could bid it in to the voluntary option process.

G. Tom – Should be able to transfer them to the utility.

H. Ameren – Not sure to what extent it can be incorporated into the IRP.

I. Adam – Could be looked at as a possible benefit to the ARCs.

J. Ameren – Benefit is the long term capacity to the utility to the generation of resources. The IRP is a fundamental process in terms of rate design.

K. Adam – Does look at these resources on the short/long term?

L. Ameren – Do you contract directly with the customer or to a third party for DR?

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

A. KCPL – If all estimates are made correctly, there shouldn't be a substantial impact on revenue collected. Utility would reconstitute each customer loads to bill.

B. Ken – Rates collected through rider and not billed to customer. Day Ahead Load Response Program, NYISO in PJM was billed to zone level. The difference between the

retail rate and the LMP to the load serving entity, the cost of the retail rate was billed to all customers in the zone. Can't charge to customer and expect DR.

C. Brendan, ECS – Ontario has a similar program and has a lot of ARC activities.

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

A. Ameren – The issues isn't with the bidding, but with the impacts. You have to be able to put the load back in. Long term – the profile data is used than what is metered, would have some impact.

B. If the ARCs went away utility could do it themselves.

C. Ameren – You are held responsible for what happened vs. what was forecasted.

D. Tom – Agree in general. Would be prudent for them to adjust their long term forecast.

E. Ken – Rely on PPA,

F. Ameren – You cannot reduce your load for a registered DRR. If were to create a program and you didn't register as a DRR you can still claim it as a Demand Reduction.

G. Ryan OPC – if you have utility with strong DR program then it would be reflected in the load forecast. Customers could migrate from the utility to the RTO would impact forecast.

H. Ameren – Agrees, if these programs are more cost effective, the load forecast would go up.

I. KCPL – this could be to an impact that would increase the load forecast.

J. SPP – Clarifies - If you don't have the right to control, you don't take it into your load forecast, but if you have the right to control, take it into your load forecast?

K. Brendan – we have to make firm commitments similar to PPA

L. Ken – capacity markets have replaced integrated resource planning in the east.

M. Adam – Forward capacity market reduces long term forecasting?

N. Tom – Switch to DR being treated on the supply side rather than demand. Should buy DR to meet load.

8 How would a 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?

- A. Ameren – There will be a need for minor accounting changes, any charge coming through MISO should be accounted for.
- B. Would it flow through FAC?
- C. Ameren - Yes, make sure it's not an off system sales.
- D. KCPL – If it's retail revenue it will not go through the FAC.
- E. Adam – Could see it being an issue.
- F. Ryan – MISO proposing there being a charge if LSE pays it goes through FAC
- G. Ameren – will receive MFRR that is intended to replace the customer revenue.
- H. KCPL – minor accounting changes – would have to track the energy (flowing through the marketing settlements) that's related to DR.

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

- A. KCPL – As with any DR Program, there is problem with estimation of the response. Ensure the amount of response is pretty accurate.
- B. Ryan – what are the consequences?
- C. KCPL – If systematic, there will be a problem – over or under paid. Affects all parties if there is a bias. State should look at the protocols as being reasonable means of dealing with the impact and if not the commission should speak to the issue.
- D. Tom – Participating in multiple programs – no reason why both (Capacity or reserve markets) can't be provided.
- E. Adam – how would we or the LSE know what type of program they're participating in.
- F. Tom – The LSE has this info.
- G. Ameren – Once registered it would include you offering everything it's entitled.
- H. Ameren –
- I. Ken – You couldn't have the same resource claiming both ancillary and resource services.
- J. KCPL – There is only energy in the real-time market.

Bullet one of nine: Do we need rulemaking?

- A. Ameren – Depends on the whether is was addresses appropriately by the RTOs, FERC, and other entities.
- B. Adam - Will allow ARCs if 'blah blah blah' occurs.
- C. SPP – Define goal chart path.
- D. Adam - What would the goal of the rulemaking be?
- E. Natelle - What should be the next step? If there are ARCs in MO would the commission be required to set up the framework.
- F. Ameren – Will the staff have to take a position?
- G. Adam – Goal is to get the info to give a well-thought out answer.
- H. Natelle - The commission is interested in transparency so everyone including them can see the information
- I. Ameren – reiterated discussion on 376. Issues of a cross over from DR into the 376 rules. Some of the DR issues maybe resolved as a result of 376
- J. Ken – 1. Commission move toward lifting restriction for ARC participation in the ancillary services. 2. Ask utilities to establish what MFRR is for each customer class. 3. put it out for comment, 4the commission could finalize MFRR for each customer. 5. What MFRR could be is a matter of policy. 6. capacity issue should belong term resource adequacy issue and probably have a rulemaking in chapter 22
- K. Larry – tariff – 11 month suspension? single issue ratemaking? Full blown rate case?
- L. Ken – not a retail rate
- M. Ameren – Process have to be lawful no matter how it's done.
- N. SPP – Reconstituted load and how you do it?
- O. KCPL – Should follow SPP Tariff.
- P. SPP – Can express that is its tariff but utility has to have the authority to bill.
- Q. Ryan – Need to know objectives in rulemaking. Are benefits to MO customers, regulated customers as a whole? Benefits beyond that with respect to if its allowed? Can it be done on a trial basis and be evaluated later on? Benefits for individual customers?
- R. KCPL – Benefits for customers a whole is fundamental. The depth of the market – being contemplated for large customers only or all the way down to small residential customers?

- S. Adam – Large customers, understanding the offer
- T. Ken – Work being done in Berkley about DRPs. Pilot programs don't lend themselves to have customers make long term investments.
- U. Ryan – Research has been on restructured markets

10. What other states or RTOs are doing that we should look at and what are they doing right?

11. Can we split energy, ancillary services and capacity and address them as different issues?