

ARC / RTO / DR workshop notes, 1-26-2011, EW-2010-0187

1. Introductions

2. Definitions:

- a. Angie & Ken(Walmart (W)) – b. add (s), plural option
- b. Ken (Enernoc (E)) – comment – question of being careful about the definition of utility. Wants to make sure that there is nothing in the definition to make the ARC a utility by definition. If they fall under the def of ARC, they do not want to fall under the def of a utility. This may make MISO and SPP a Missouri utility.
- c. Angie & Ken(Walmart) – support b. above.
- d. Ken (Enernoc) – doesn't necessarily want a definition change, but just wants to confirm that an ARC would not fall under this definition.
- e. Adam – We could tweak the rule or use some suggested language to clarify
- f. Mark Peters (Ameren (A)) – b. does not see an exclusion for traditional utilities under the ARC definition. Utilities should be excluded. To avoid additional administrative work etc....
- g. David Linton (SPP (S)) – Goal of the rules? To help clarify our discussion.
- h. Adam – Framework for more DR online, in order to have a more efficient resources choice. Staff and Commission do not necessarily have the same feelings. Any IOU over 4 TW hours, ARC's are allowed unless RERRA(us) says no. So that leaves us in a position to make a ruling so there is a framework. If things go well, open it up more, if not, fix the issues. This is just a draft to use so aid in conversation. Need framework language to build on, a starting place.
- i. Ryan Kind (OPC) – under the new FERC regs, this will just happen if the PSC & Commission does not have a rule?
- j. Adam – yes. Not anything goes necessarily; the ARC would have to adhere to MISO / SPP BPM.
- k. Ken(Enernoc) – Currently Missouri has a restraining order, so as of now there are no ARC's allowed in Missouri. EW-2010-0187.
- l. Mark Peter's (A) - MFRR is a MISO specific item.
- m. Adam – there are some draft rules that are specific to MISO
- n. Lots of MFRR comments back and forth between Mark Peter's (A) / Adam / and Ken(Enernoc)
- o. Charles (KCP&L (K)) – a. excludes spinning reserves, reserve, supplemental reserve which should be included --- b. excluding utility from that definition is fine, as long as it is clarified that they can participate as ARC to aggregate their own customers.
- p. Angie (W) – They would like to have a choice between the IOU and the ARC. Wants to be able to go direct to SPP or MISO
- q. Ken (W) – they are providing a service so they should have the choice of who to use to provide said service.
- r. Adam – is there anything in the rule that would prevent Walmart from acting as an ARC themselves
- s. Angie(W) – They just want a choice between the ARC and between the IOU
- t. Ken(w) – there is nothing that specifically allows or denies this.
- u. Adam – if you have any language please provide it and we would be willing to consider it.

- v. Ken(w) – will get you something after the call
- w. Charles (kcpl) – Only wants the utility to not be precluded as an DR provider.
- x. Mark P. (A) - If you don't put the utilities exclusion in (1)b. then parts (2)b. and will not work.
- y. David (S) –If there were freedom of choice for the ARC to go directly to the RTO, then would they not have to interact with the utility ?
- z. Angie (W) – no.
- aa. Charles (kcpl) - Thinks there should be some sort of agreement or understanding between the ARC and IOU. The local utility should at least be aware that the ARC is operating in the area. Charles thinks that Staff should require in the rule that the ARC would have to inform the local IOU.
- bb. Adam – When an ARC registers it goes to Staff and IOU.
- cc. Ken (E) – At the customer registration level, when a customer is registered the IOU and LSE are notified (In this case the LSE and IOU will be the same).
- dd. Jeff (CU-Springfield ?)– the state commission's do not have direct oversight or authority in the ISO New England, New York ISO, & PJM ARC industry. DC and LSE do not have authority to deny participation, but just provide validation of the information provided.
- ee. Charles (K) – agree that the utility does not have to approve, just notification (with the extent of the load) for planning purposes.
- ff. Mark P. (A) – Clarification – prohibition of customer participating with an ARC and DR with LSE. If the LSE or ARC already has a contract, then the registration should reject.
- gg. Jim Lowery (Ameren) – [Request comment from Ameren here, not captured during meeting]
- hh. Jeff (?) – Notifications provide additional eyes to make sure everything is correct and to verify and validate. **Who carries the day?**
- ii. Adam – where do we want to be? Far sides or in the middle?
- jj. Mike Barber(MISO (M)) – With one entity or another with your load, but in the future, there may be multiple loads going with multiple ARC's. Just something to think about.
- kk. Adam – Do you think proposed MISO framework would be able to handle this issue?
- ll. Mike (M)– would have to check.
- mm. Adam – At the very start, let's keep it simple.
- nn. Ken (E) – hypo- There are situations where a company could use an ARC and another provider (interruptible rate, etc...)
- oo. Mark p. (A) - if it was interruptible and ancillary services – they could double dip. Have to make sure the definitions would define what specific programs are and how they interact. If the utility has the first call then the other ARC may not be able to provide same day demand response services, may only be able to provide demand response on a one day's notice basis.

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- pp. Charles (K) – c,d are circular – should consult NERC definitions

- qq. Adam – okay – onto e,f
- rr. Charles (K) – In SPP market rules are in a separate manual called the Market Protocols. NAESB?
- ss. Joyce(MISO) – It would depend on whether or not it is necessary.
- tt. David (S) – the BPM is the procedures to how you get to the oatt, not the oatt itself.
- uu. Charles (K) – Another possibility would be to define a new term ex. Market Rules Document...
- vv. Mark P. (A) – If you name something specifically, what will be done if those documents change?
- ww. Adam – that is a topic of concern, and a reason why we try to make rules reasonable flexible.
- xx. Jim (A) – Not oatt anymore thinks ?....
- yy. Adam – Approved FERC tariff
- zz. Jim – whether or not you can be an approved market participant if you follow oatt rules but not BPM. If you make a rule that references these documents then your rule may change as the documents change.
- aaa. Adam – we do recognize this issue.
- bbb. Mark P. (A) – If you like certain characteristics of some rules should we use those specific rules and not reference the documents they are currently in?
- ccc. Adam – That is an issue we are aware of and an issue we will continue to discuss and something that will be determined.
- ddd. Ken(E) – Should be noted the jurisdictional difference between FERC and the state of Missouri. There may be some limits on the ability of MOPSC to change any ISO rules because “we don’t like it”.
- eee. Adam - this is more of a “yes , but” document. What conditions are they operable? There will be a push and pull, and if it becomes more legal then it will be left to legal staff.
- fff. Janet Wheeler – It would be helpful to have legal guidance early on instead of further along.
- ggg. F. - Commercial Customer**
- hhh. Adam – any input? Will probably be discussed under S. res customer. Input for either.
- iii. Ken (E) – two definitions – res and non – res.
- jjj. Ken(W) – we agree with Ken above.
- kkk. Adam – Good comment. Any concern if we go with commercial and residential? Sometimes we got into the questions of apartment buildings etc...which could be considered res or commercial
- lll. Mike (MISO) – trying to define commercial, leads to more issues, especially since we have a commercial market. Since we are targeting an end use, we need to define it accordingly.
- mmm. Mark P. (A) - customer means an account,
- nnn. Adam – So we may wish to specify
- ooo. Keith (Ameren) – agree with ken – there should be res and non-res. Caviat – apartment building would be ineligible and defined as residential. It would make it more clear.

ppp. Ken (w) – The way it is written as a specific def for com customer that there is potential in a rulemaking for going back and alleviating customer choice, unless it is specifically stated that customer choice is available.

qqq. Adam – any suggested language would be appreciated and considered.

rrr. Mike (M)– hybrid situations where a home and business occupy the same location? Additional nuances.

sss. Adam – we will take a shot at developing res and non-res, but please feel free to offer comments and suggestions.

#### **ttt. G. Demand Response**

uuu. Mark P. (A) – issue with normal consumption – issue with the wording. Would like to more specificity in “normal”

vvv. Adam – any objections to using baseline.

www. Mark P. (A) – Using this to define what the ARCs are aggregating, but to me the idea of DR is a change in what they would use

xxx. Greg P(E) – Is this from FERC ?

yyy. Ken( W) – Thinks it misses the spirit of DR. DR from a ratepayer is that it is a service requested for curtailment in return for a payment.

zzz. Adam – Would one of your concerns be about incentive? “Yes”. In response to changes in the price of electricity over time?

aaaa. Ken(w) – changes in the price of electricity is a precursor to DR, but the service that the company provides would be the DR.

bbbb. Ken(E) – It is similar but different from FERC. Agrees with Ken above, FERC has also defined DR.

cccc. Mike (M) – Also need to incorporate behind the meter generation (Angie likes that too). The actual DR is an act of altering the load on the system do we need to explain why that act is done? Concentrate on the ends not the reason for the end. Could be price or emergency,

dddd. Adam – purpose is superfluous.

eeee. Mark (A) – has to be for a reason, but should not happen for something that is going to happen anyway. Ex. If a company is going down for a day or two, should they be paid DR for that?

ffff. Adam – ARC’s will work in response to requests from the RTO / ISO

gggg. Ken(E) – ARC may have uses on the distribution level as well as the transmission side.

hhhh. Mark P. (A) – voltage issues

iiii. Keith(Ameren) – under that situation we have the authority to take action. Had not considered the possibility of contracting an ARC to alleviate those situations, but it could be an option. Not sure if the rule would be applicable to that. It could, but the rule does not appear to be going in that direction.

jjjj. Jason(kcpl) - Agree –

kkkk. Ken(E) – agree with both above – but if there are more prohibitions that the prohibition does not pertain to the bilateral between the ARC and the IOU.

#### **lll. Demand Response Program**

mmmm. Adam – Would look for feedback from utilities on this issue on how they define it.

nnnn. Mark P. (A) – Approved and not just filed?

oooo. Adam –How about an effective commission tariff. Approved or effective but, prefer effective.

pppp. David (S) – two definitions possible? One for ARC and one for IOU.

qqqq. Adam – any feedback?

rrrr. Barry(Empire) – Agree with David.

ssss. Ken(E) – thinks it could work either way. There are RTO programs that are not bidding into if you will. ERCOT has something similar. It is a separate service, an RTO will pay for, “

tttt. Adam – What is the best verb to describe how the ARC interacts with the ISO / RTO?

uuuu. Ken(E) – participate

vvvv. Angie(W) – agree

www. Jim (A) – what does it take for an ARC to bid in?

xxxx. Ken(E) – Enernoc became a member of MISO, they will be an ARC when FERC agrees the MISO tariff. As an ARC the MISO tariff sets for guidelines

yyyy. Mike (M) – will qualified member

zzzz. Adam – difference between being a member of MISO and MISO market participant.

aaaa. Keith(A) – yes – Member is thought of as a Transmission Owner(TO)?.

bbbb. Ken(E) – market participant

cccc. David (S) – Member is a larger

dddd. Ken(E) – you do not have to pay and become a member to participate in ERCOT, but in MISO you have to become a member to become a market participant.

eeee. Mark P. (A) – Don’t need Demand Response Program defined, it is not used anywhere else in the document. The ARC participates in MISO program.

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ffff. Adam – read definition from FERC filing definition of DR.

ggggg. **Definition of Economic Demand Response?**

hhhhh. Ken(E) – Economic and Ancillary DR are essentially one in the same, different from emergency DR.

iiii. Marie Panesik(ECS-?) – agree

jjjjj. Charles (K) – Current definition would indicate that Ancillary DR is not Economic DR, which is not the case

kkkkk. Adam – we are working on the language. Do we need another category?

llll. Mike (M)– Basic DR definition with subheadings a, b, c...

mmmmm. Adam – Other thoughts?

nnnn. Mark P(A). (Comment not captured)

oooo. Adam back to h. **Retail customer, is this the proper term?**

ppppp. Ken(E) – utility could consider voltage reduction,

qqqqq. Mark P. (A) – it’s appropriate, there are wholesale customers, utilities may have contracts with them, so would like to change def of Retail Customer to be defined under state and muni jurisdiction.

rrrrr. Keith (A) – def of RERRA – PSC is not RERRA for entire state – ex city of Kirkwood. Board of Alderman would be RERRA(check). Nothing prohibits

customer in city of Kirkwood from entering contact with ARC in other (MISO, SPP)

- sssss. Mark P. (A) – same thought
- ttttt. Adam – we are not the RERRA for the customer, for the utility
- uuuuu. Keith (A) – added wording to h.
- vvvvv. Janet – On DRP – MEEA has DR language, and should note that should not use any language that takes the language out of context from MEEA.
- wwwww. Adam – there is a concurrent rulemaking that is in a draft stage
- xxxxx. Janet – Just wanted to make sure the paths won't collide
- yyyyy. Adam – this may be an issue
- zzzzz. Dan (Ameren) – If there are mandates to come from the MEEA area will they come out and influence this area.
- aaaaa. Janet – The Commission has not ruled on MEEA, but it should be back on the agenda soon.
- bbbbb. Dan(Ameren) – not sure if there are mandates from that that would make the DR more burdensome on the utility side
- ccccc. Ken(E) – In Ohio – if it is a utility distribution customer the utility gets credit for the peak load reduction from the area in their service area. Same in PN but the utilities pay the ARC to go further and get more reductions to get credit for those reductions.
- dddddd. Adam – not sure how the ARC activity would affect the numerator or denominator. But it would be open for discussion. If we can get this ideas figured out I would like to get this to the commission.
- eeeee. Janet – Comment not a roadblock, just need to look at the whole forest
- fffff. Mark P. (A) – When an ARC obtains a customer it does not remove utility obligation to serve said customer.
- ggggg. Adam – Yes, that will be discussed further as/ if this rulemaking proceeds
- hhhhh. Def J – Electric Utility**
- iiiii. Janet – not preferable to reference statues in rulemaking
- jjjjj. Ken(W) – question – Does it require an independent vendor of renewable energy to be under the jurisdiction of the PSC?
- kkkkk. Adam – I'm not a lawyer, but I think not. I am not aware of the Commission moving in that direction.
- lllll. Def K – Good Utility Practice**
- mmmmm. David (S) – do you want to make a reference to the electric industry in the region?
- nnnnn. Def L – don't need to discuss due to res vs non-res def.**
- ooooo. Def M ISO / RTO**
- ppppp. ***Clarification required from Keith Bell of MISO to find out if they are an RTO.***
- qqqqq. Joyce (M)– are they both defined by FERC in order 2000?
- rrrrr. David (S) – An ISO was a term that preceded RTO, but once RTO came around it kind of took over RTO. FERC accepts or approves an RTO, could add *and is approved by FERC as an RTO.
- sssss. Adam – Any other comment?
- ttttt. Def N – Load Serving Entity**

uuuuuu. Adam, do we need both LSE and electric utility?

vvvvvv. Janet – Yes. LSE is from FERC, electric utility is defined in MOPSC.

wwwwww. Keith (A) – Kirkwood is an electric distribution company that is connected to Ameren’s transmission.

xxxxxx. Adam – A municipal

yyyyyy. Janet – Commission does not have jurisdiction over muni and city

zzzzzz. Mark P. (A) – an LSE is end use load,

aaaaaaa. Keith (A) -you are only an LSE if you have an obligation to serve load.
It doesn’t have to be clarified, the LSE has the obligation to serve. Market participant doesn’t have the obligation, the LSE has the obligation.

bbbbbbb. Mark P. (A) – If there is a clarification at the beginning that this only applies to MO, there is no need to have LSE terminology

cccccc. David (S) – strike “within a Local Balancing Authority area”

ddddddd. Adam – we are going to have to put out feelers to MISO and SPP to make sure there are not issues

eeeeeee. Keith (A) - if we keep LSE, it’s pretty good. The LSE and the IOU are the same entity in the context of this rulemaking

ffffff. Joyce(M) – in the upfront statement, if we state who this is for, then it may address some of Mark’s concerns. If we specify that this is for Missouri.

ggggggg. Ken(W) – disagree with MFRR is that demand is subtracted. Do not think the method of payment is adequate.

hhhhhhh. Adam – financial compensation mechanism where if an ARC is paid, the ARC pays the LSE (although LSE may no longer be used)

iiiiiii. Ken(E) – It is not a rate, it is a determination by the RERRA that would be accepted by MISO that would be an offset to LMP. It could be the supply portion of the generation, but it is completely up to the commission to set the MFRR. It is completely a local policy decision.

jjjjjjj. Adam – before we move on, do you believe the definition takes a position on that?

kkkkkkk. Ken(E) – No,.

lllllll. Adam-Any other thoughts?

mmmmmmm. Mike (M) – We have a definition on file... 1.373a MFRR

nnnnnnn. Adam – my concern is that if FERC comes back and changes the def, then we have to come back and change our def.

ooooooo. Mark P. (A) – PSC cannot redefine the MFRR def for the MISO tariff.
What you have is appropriate.

ppppppp. Ken(W) – If FERC is the ultimate entity that decides what the MFRR is and or will contain, why not change the language to just reference FERC’s wording / decisions.

qqqqqqq. Adam – ARC proposes an MFRR and the state has a set limit of time to respond, if no response then the MFRR is approved. But the LSE/ IOU can “file a complaint”

rrrrrrr. Mark P. (A) – IF FERC accepts the MISO tariff then it is up to the state to set the MFRR

sssssss. Adam – 3 entities – ARC gets first chance, then state, then resolution process from LSE / IOU.

ttttttt. Ken(E) – determined by the RERRA or by the ARC and verified by the LSE.

uuuuuuu. Ken(W) – during rulemaking would we be able to discuss the appropriate MFRR?

vvvvvvv. Adam – yes. As of now, this draft says the MFRR has the right to set the MFRR or any successor or equivalent to the MFRR. This is open to discussion.

wwwwwww. Mark P. (A) – If this rule is adopted as written and the MISO tariff is adopted that would currently set the MFRR to 0.

xxxxxxx. Joyce (M) – Doesn't the state commission have the right to set the issue?

yyyyyyy. Mark P. (A) – IF state has no rule to prohibit ARC, ARC sets and state agrees or disagrees, and IOU can protest. If state approves the ARC and does not take action to set the rate then the rate would set at 0. Do not think it is appropriate to approve ARC's without setting an MFRR.

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### Round table

zzzzzzz. Keith (A) – MFRR for Ameren overall is probably the main issue – re transmission – main concern is reliability – want some dialogue to discuss rules about metering and deployment. Less than 20 MW they would be okay, but more than 20 MW, they would need to know. Don't need real time metering, but some sort of notification.

aaaaaaa. Adam – do you have draft language?

bbbbbbbbb. Keith (A) – yes.

ccccccc. Mike (S) – Notification outside of the normal operator call?

ddddddddd. Keith (A) – we don't have real – time awareness of when and where deployment is. We know the customers in the ARC program, but we don't know specifically who and where is responding. Which is a problem

eeeeeeee. Mark P. (A) – the instruction from MISO to curtail would go to the ARC , not to Ameren.

fffffffff. Ken(E) – I don't disagree, but I would suggest that it is a MISO issue, not a Missouri issue. Ameren would be a market based rate authority according to FERC which would require MISO to disclose the deployment of DR.

ggggggggg. Adam – To summarize Ken - It would be better addressed by MISO than by a rule, and affiliates should trade information.

hhhhhhhhh. Ken(E) – there may be a conflict with wholesale market requirements if

iiiiiii. Keith (A)– run several groups to manage this information daily. It is why there are so many controls in place to manage the data coming from all customers and they are represented and they all have commercial concerns. It's not a new challenge due to ARCs, it is an evolution of the processes in place.

jjjjjjjjj. Adam – In your opinion, does MISO BPM and tariff take care of this issue?

kkkkkkkkk. Keith (A) – No

lllllll. Dana – Is the information you are asking for readily available currently, or would it stifle the process? Or would it be a burden on the ARCs to provide this information.



mmmmmmmm. Keith (A)– So previous programs always involve communication between the customer and utility, about what the behavior is going to be. Not residential customers, but non-res customers it is reasonable. Real-time metering data is not the only way to satisfy the needed data. If the ARC provided data ahead of time it would alleviate much of the concern.

nnnnnnnn. Gaye (A) – Who would have jurisdiction over that?

oooooooo. Jeff (?) – What is the purpose of the notification, which may preclude certain activities that would be beneficial?

pppppppp. Keith (A) – Main concern is closer to real-time. When they observe behavior on their system they would like to know why. There are differences from load reductions in DR / weather patterns / etc...

qqqqqqqq. Ken(E) – Sounds more like an issue for MISO. Commission would not have the ability to develop a reliability rule related to this.

rrrrrrrr. Jeff (?)– Grid operator is notified for dispatches already. Is it a BA responsibility or some other mechanism?

ssssssss. Keith (A) – from transmission operation, regarding the integrity of the transmission system, the real-time system. IF customers are reconnecting loads when the system is decreasing load, it could be an issue, and of concern to the reliability of the system.

ttttttt. Mark P. (A) – It would be nice if BP for MISO addressed these concerns. If the Commission addresses this topic, if the MISO rules are inadequate to protect the local transmission reliability questions, then do they want to set these conditions to a rulemaking? Is it appropriate to prohibit it until it is believed the MISO rules are deemed adequate?

uuuuuuuu. Keith (A) – There are some areas where MISO has steered clear, if the com deems that the protections are not adequate that is something the com should consider.

vvvvvvvv. Adam – write out your concerns and what language you would like, as well as other ISO approaches they like / dislike.

wwwwwww. DNR – encouraging the process

xxxxxxx. Ken(E) – Biggest issue is the 100 MW cap. It is much easier said than done. Many of the services are dynamic. Difficult to count. They would have to have MISO build a restraint into their operating system algorithm, to prevent that resource from clearing. And it would have to make sure it only captured customers in a certain area. Don't know if MISO would do that, or if it could be done. It would be imposing costs on other MISO customers and it may encroach on FERC jurisdiction. How would they determine which 100 MW to allow? There could be a more expensive ancillary service replacing a different demand service. Don't think it is needed because you won't see rapid growth in this area. But if it is done, reserve the right to set a cap, don't actually set it. If it is set in a rule, then it would make it very hard to change as regulations are hard to change.

yyyyyyyy. Adam – The intent of the cap is that it was an idea discussed by IOU and

zzzzzzzz. Charles (kcpl) –{long statement, Staff asked it to be submitted in written comments}

aaaaaaaa. Ken(W) - #3pg3 – nationwide and international companies would be unable to work with this due to the wording. Language needs to be revised so

bbbbbbbbb. Adam – how about locking it down to LBA area.

cccccccc. Ken(W) – that would work

ddddddddd. Jeff (?)– 100 MW cap – Cap is intended to provide a transition so if things were not working it would remove a lot of issues. If the cap is removed or tiered, the commission should have the ability / flexibility to go in and change things.

eeeeeeeee. Marie (?)– When are comments due to the commission?

fffffff. Adam – 2 weeks from today in the commission docket. Comments from notes will be reviewed and then posted. Then those can be reviewed by the parties involved and then blah.

ggggggggg. Adam – send out an email to the distribution list