AmerenUE Presentation to MOPSC ARC Workshop

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Overview

- Background
  - FERC Order 719
  - MISO Tariff Filing
- Potential Concerns With ARC Participation
  - Reliability
  - Protections for Participating Customers
  - Cost Causation and Cross-Subsidization
  - Real-Time Trading / Procurement Inefficiencies
  - MISO Tariff and BPM lack specifics for implementation
    - Registration
    - Settlements
    - Communications

Background

- FERC has ordered RTOs to permit ARCs if utility delivers more than 4 million mwh's, unless the RERRA (MoPSC) specifically prohibits them.
  - "An independent system operator or regional transmission organization must not accept bids from an aggregator of retail customers that aggregates demand response…….where the relevant electric retail regulatory authority prohibits such customers' demand response to be bid into organized markets by an aggregator of retail customers…" 18 C.F.R. 35.38(g)(1)(iii)
- MISO Tariff Filing
  - Proposed June 1, 2010 effective date
  - No order received as of today

Reliability Concerns

- No communication requirement between ARC and Transmission Operator (TOP)
  - Since the ARC loads are not under TOP/LBA control it is very hard to develop plans to comply with the NERC Standard
- Insufficient communication between ARC and Local Balancing Authority (LBA)
  - Insufficient detail in Day-Ahead (DA) notification to determine each LSE's contribution.
  - Detail and timing of Real-Time (RT) communication is questionable.
  - Lack of notice that curtailed load is actually reconnecting to the system creates concerns with voltage and intra-day system planning..
- No RT communication between ARC and Load Serving Entity (LSE)
  - LSE doesn't know if load-drop is "real" DR.
  - After-the-Fact notification to the LSE(s) impairs the ability of the LSE(s) to properly forecast their load obligations, potentially understating these obligations.
- Uncertain measurement/verification of response of ARC's customers
  - No explicit, unambiguous requirement that these resources have interval metering
  - 10 minute or less interval data needed to provide ancillary services.
  - Requirements for telemetry capabilities need to be better defined
- Current registration does not permit ARC loads to be incorporated in DA, seasonal, long range planning.

Protections for Participating Customers

- MISO Tariff and BPM govern wholesale transactions and are not intended to deal with retail issues.
- MISO Tariff and BPM do not govern ARC-customer relationship
  - MISO credit requirements address MISO-ARC financial relationship, not ARC-customer financial relationship
- Concerns include lack of safeguards for:
  - Customer switching/Slamming
  - ARC-customer contracts
    - Termination fees, penalties
    - Will customer be permitted to call AmerenUE to terminate ARC relationship?
  - Statement presentment
  - Unauthorized access to customer data
    - LSEs are asked to verify customer specific data without being provided anything demonstrating that customer has a relationship with ARC.
  - ARC credit-worthiness provisions (as ARCs will owe customers).
  - Customer Confusion
    - In a state without choice, like Missouri, customer's may not understand that an ARC is not affiliated with the utility.
    - No rules exist to govern ARC sales and marketing activities.
    - ARCs may use in-person and phone sales representatives that are inadequately trained to answer customer's questions.
    - Customers may call AmerenUE or the Commission to ask questions about the ARC.

Cost Causation and Cross-Subsidization by Other Retail Customers

- Marginal Foregone Retail Rate (MFRR)
  - If MoPSC does not act ARC sets their own rate which can be zero
    - Ameren has filed comments at FERC protesting this.
  - **If MoPSC approves ARCs but does not set an MFRR the rate is set to zero.**
  - Likely will not properly compensate for demand based billing determinants.
    - If curtails during hour when peak demand would otherwise be set.
    - AmerenUE continues to have obligation to acquire adequate capacity.
  - Absent the establishment of new retail tariffs requiring the reconstitution of loads at the retail level (adding the load reduction back to the customer load and billing them as if they had consumed), the MFRR is unlikely to truly make the LSE whole.
    - Shortfalls would be included in revenue requirement determinations, raising costs for retail customers.
  - Setting the MFRR correctly may require unbundling AmerenUE's retail rates.
  - ARC is allowed to aggregate customers that are served by multiple LSEs, but settlement is performed at aggregate level.
- Increased administrative and systems costs.
  - Complexity in settlements and verification.
  - Increased complexity in load forecasting.
    - Must be able to identify "real" curtailments and reconstitute in models to avoid under -forecasting forward periods.
    - Can effect both daily and annual peak demand forecasts.
- May increase AmerenUE's program costs for future DR programs (having to in effect bid against ARC programs)

Real-Time Trading / Procurement Inefficiencies

- MISO will not notify LSE of actual curtailment until 7 days after the fact.
- LSE is left guessing if a load drop is "real."
  - When an ARC causes customer loads to be curtailed, MISO settlements adds back this load reduction to the LSE's load so that it is returned to the level it would have been without the reduction. This is called *reconstitution*. The LSE must pay for the full amount of the reconstitued load.
  - The LSE monitors their load in real time and will observe a drop in actual load, but will not know if this is due to ARC deployment or other normal customer activity.
    - If drop puts LSE below day ahead clearing, LSE may believe it is now long and seek to hedge prices for the balance of the day.
    - If drop reduces the amount that the LSE is above the day ahead clearing, the LSE may not recognize that it is in fact short and fail to hedge prices for the balance of the day.
  - As the LSE has no means of knowing if the load drop is due to ARC deployment, they must choose between acting as if the load drop is real and potentially having the load reconstituted and acting as if the load drop is due to ARC activity and potentially not having the load reconstituted.
    - Both expose the LSE to real time price risks.
  - Any negative cost impact arising from such inefficiencies will be passed through to all other customers.

MISO Registration and Settlement Processes

- ARC resources are cleared and deployed on an aggregate basis.
  - ARCs may register loads across a wide geographic area and represented by multiple LSEs.
  - MISO has not explained how they can identify before the fact which specific locations within an ARC's CpNode intend to deploy.
  - MISO has not explained how they can identify before the fact how much of the response which clears is allocated to each LSE.
- LSE
  - LSE may not challenge the use of a default baseline method by the ARC, even if they possess information that may indicate a more accurate option exists.
  - Not provided notice of curtailments of their loads until 7 days after the fact
  - Only provided with 10 days to verify data self-reported by the ARC.
    - Customers are not required to have interval metering
    - Customer meters may not have been read prior to the 10 day deadline
    - Not permitted to object to the use of default profiles by ARCs
    - ARCs may modify MFRR "on the fly"
  - Virtually impossible to shadow settle (independent verification of MISO settlement statement)
- Metering
  - No explicit, unambiguous requirement that ARC resources are required to install interval metering
    - 10 minute (or less) interval data for Ancillary Services Market
    - Hourly (or less) interval data for Energy Market
  - Daily-read meter data would be required for LSE verification

AmerenUE's Recommendation

- If ARCs are permitted to operate in Missouri, the Commission should address the concerns presented herein and by other stakeholders participating in this workshop.