

# Increasing Demand Response in Missouri

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# Outline

Purpose: Explore frameworks for increasing demand response (DR) in Missouri

- Overview DR in Missouri
- Benefits of DR and DR aggregators
- Potential models for collaboration
  - Indiana & Michigan Power (AEP subsidiary) tariff in Indiana
  - Bilateral contracts

# Advanced Energy Management Alliance

*Empowering consumers through distributed energy resources, including demand response and advanced energy management*

We are providers and consumers united to overcome barriers to nationwide use of distributed energy resources. We advocate for and educate on policies that empower and compensate consumers to have cost-effective, efficient, resilient, reliable, and environmentally-sustainable choices.



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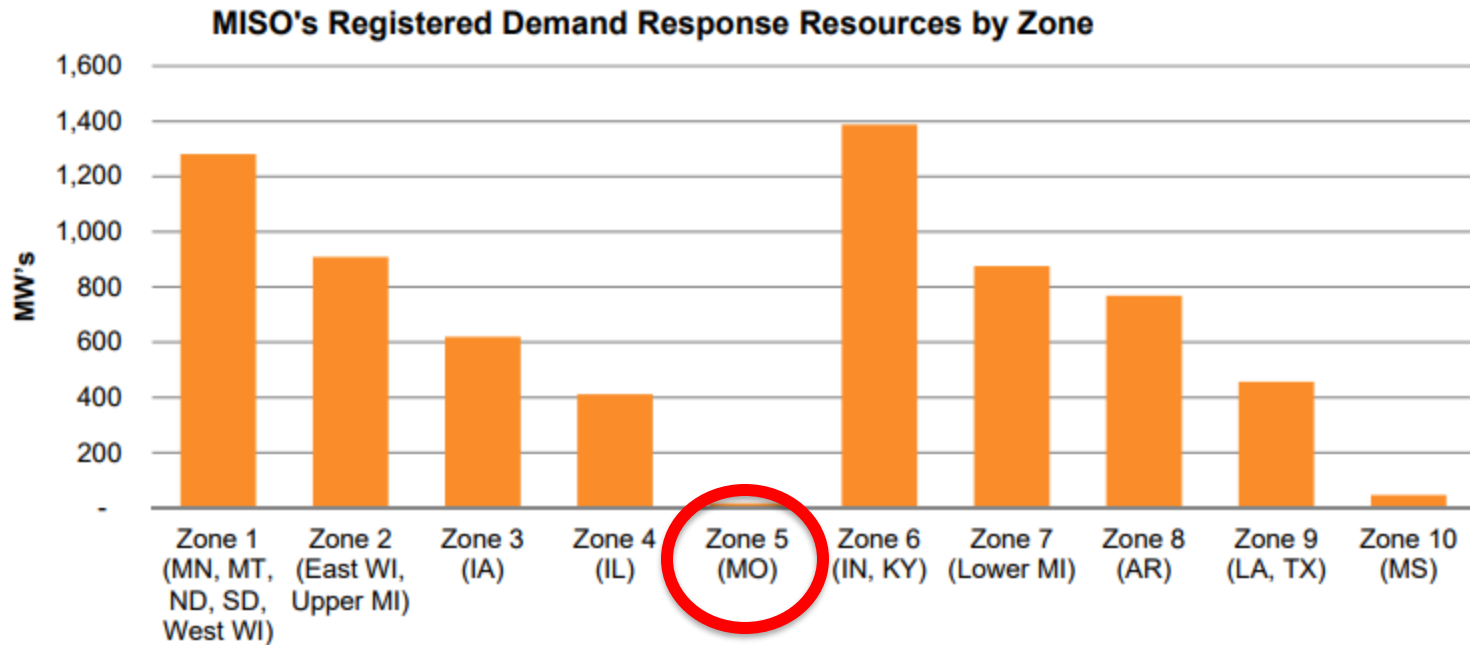


\*This presentation represents the collective consensus of AEMA as an organization, although it does not necessarily represent the individual positions of the full diversity of AEMA member companies.

# Demand Response in Missouri

- Strong policy support to drive benefits from cost-effective DR programs:
  - “The commission shall permit electric corporations to implement commission-approved demand-side programs proposed pursuant to this section with a goal of achieving all cost-effective demand-side savings.” [§ 393.1075\(4\)](#)
  - Ameren Missouri’s 2016 DSM potential study indicates cost-effectiveness of DR
  - DR can drive cost savings to all customers

# Untapped Potential for DR in Missouri



<http://www.marc-conference.org/2017/MARC2017Presentations/SeymourMARC2017.pdf>, page 4.

# Reliability and Resilience Benefits

- Demand response helped stabilize the Florida electric grid post-Irma
  - With generator outages, and power quickly becoming restored, balance of supply and demand was in jeopardy
  - Demand response dispatched by large Florida utility to maintain grid reliability and prevent blackout at a critical time
  - Illustrates the value of “fuel” diversity, as generator outages can be correlated (e.g., frozen coal piles)



# Benefits of DR Providers

- Significant private capital investments in advanced technology that provides real-time resource visibility; supplements utility capabilities while being efficient with ratepayer dollars.
- Expertise in discovering and maximizing customer flexibility; harness potential from a diverse pool of C&I customers, not just the largest, to lower costs for all customers; provide market interface.
- Portfolio aggregation enables reliable performance while shielding individual customers from out-of-pocket penalties that serve as barrier to entry; can also play “tetris” with limited duration customers who may not be able to participate individually.



# AEMA is Seeking Collaboration with MO Utilities

- AEMA is not seeking to overturn the ban on ARCs
- Goal is to develop a model that maximizes reliable, cost-effective customer participation through ARC-utility collaboration, and rewards utilities for program success and customer savings.
- Options include bilateral contracting or a utility tariff. Indiana & Michigan Power Company's tariff for DR in IN is a strong example of a successful tariff.

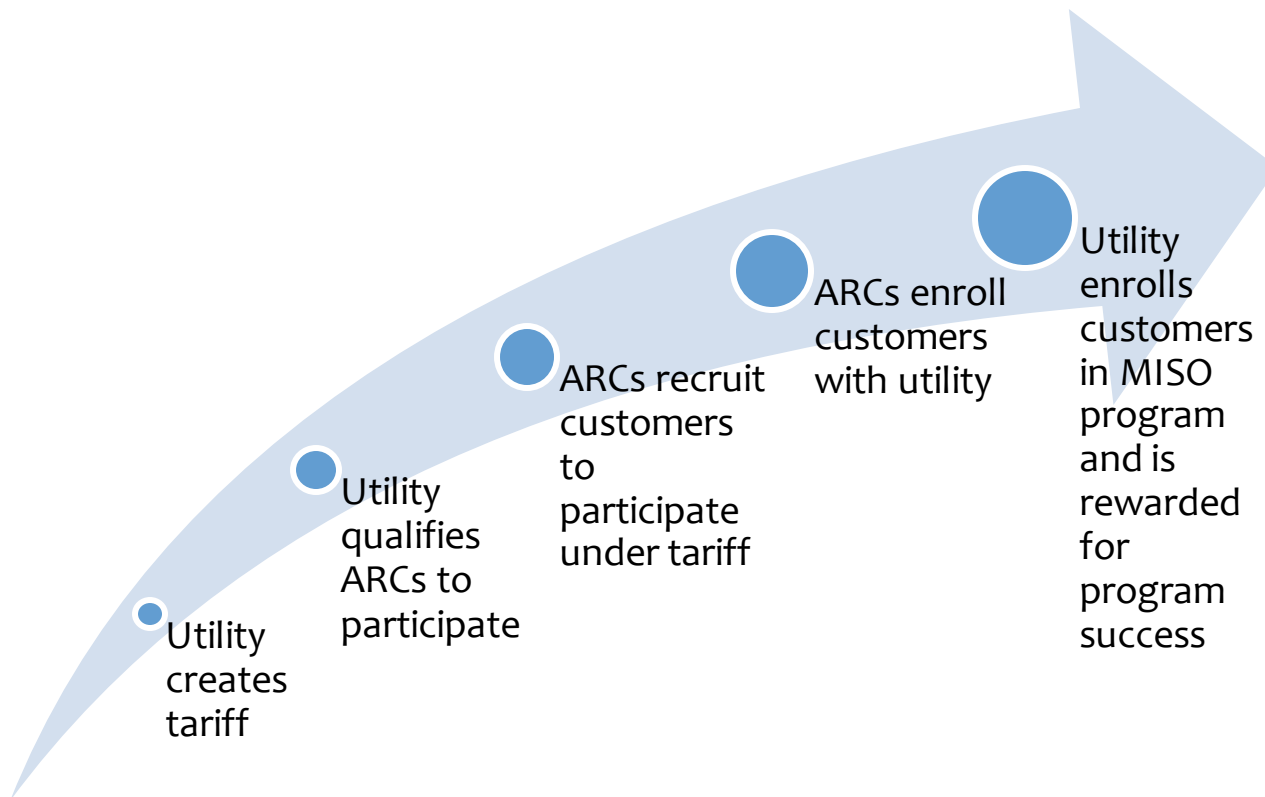
# Potential Models: I&M Tariff in Indiana

- Tariff allows qualified DR providers to recruit C&I customers to participate in wholesale capacity program, but enrollment must happen through utility;
- Enables I&M to account for DR in their system planning and exercise control, while leveraging capabilities of DR providers;
- Compensation is higher of average wholesale capacity price for last four years or 35% of Net CONE (cost of new generation);
- Tariff is compatible with ban on ARCs, as utilities enroll customers in the market, not the ARC. ARCs bear underperformance risk, **not** customers; and
- Won the “Program Pacesetters” award from the Peak Load Management Alliance.

# Using I&M Model in Missouri

- Develop a single-purpose (capacity) or multi-purpose (capacity, energy, ancillary, distribution-level) tariff, and qualify a limited number of DR providers to participate;
- Base compensation off avoided costs of target value streams;
- Align regulatory framework to ensure proper incentives (MEEIA credit) for program success; and
- Use as a platform for broader DER deployment.

# I&M Model in Missouri



# Potential Models: Bilateral contracts

- Competitively solicit for DR resources through 3<sup>rd</sup> party service providers to drive competitive outcomes;
- Can contract for DR capacity to meet wholesale (e.g., MISO capacity credit) and retail (e.g., peak shaving) needs;
- Utility receives full oversight of DR resources and pre-determined quantity of dispatchable demand;
- Contract terms can be determined based on unique circumstances / needs and tailored to utility service area; and
- Utility should receive incentives for procuring DR when it has higher net benefits to all customers than traditional infrastructure.

Thank you.

Questions?

[www.aem-alliance.org](http://www.aem-alliance.org)



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