Market Redefinition: Accreditation Reforms for Load Modifying Resources

Resource Adequacy Subcommittee

January 17, 2023

Purpose & Key Takeaways

Purpose: To share detailed recommendation for Load Modifying Resource (LMR) accreditation

Key Takeaways:

- The LMR Accreditation proposal has not changed since the October RASC although MISO has provided an initial proposal on some design elements in today's presentation
- MISO will continue to discuss design elements and the longer-term efforts in 2023

LMR accreditation reform strives to address several issues

1. Disconnect between planning and operations does not ensure availability during times of need (emergencies) and even creates a disincentive to be available during times of need
2. Lack of locational information impacts the ability of operators to most efficiently manage MaxGen Alerts, Warnings and Events, and use LMRs for transmission type Emergencies
3. MISO operations cannot access LMRs without calling an Energy Emergency Alert 2 (EEA2)
    - Impacts the ability to utilize all LMRs available (i.e. notification times)
    - No mechanism for longer-lead LMRs to participate in MISO day-ahead and real-time markets
    - 4 – 5 GW of LMRs have greater than a 2-hour notification time

MISO's final recommendation for LMR accreditation consists of both near and long-term actions with the long-term requiring a multi-year implementation

NEAR-TERM

- Utilize Demand Side Resource Interface* (DSRI) to leverage availability during defined hours per season
- Require locational information through the registration/qualification process

LONG-TERM

- Redefine and create avenues for LMRs to be accessible prior to emergency conditions (non-emergency LMR)
- Emergency-only LMRs will need to be highly flexible and reliable

*Intermittent BTMG to provide hourly data over the same defined hours

MISO's final recommendation for LMR accreditation reflects recent stakeholder feedback

Design Elements		Initial Proposal
Hour Selection	Demand Side Resource Interface (DSRI)	Average of seasonal Tier 2 hours over last 3 lookback periods
	Top X% of tightest margin hours	Tier 2: MaxGen hours supplemented with top 3% of tight margin hours per season
	Regionality (N+C/S) (tight margin and MaxGen hours)	Yes
Accreditation Calculation	Annual verses seasonal	4 season
	Tiered weighting	Tier 2 100%
	Transmission Losses and PRM % add back	Yes
	Availability Considered	Available MW + Self-scheduled MW + additional fields TBD
Timing	Historical use of data	Data entered in DSRI will be used only after modifications are made to accurately capture availability
	Effective Date	TBD, MISO will work with stakeholders in 2023 on design details
DSRI	Additional fields	Redefine self-scheduled and add potential fields such as maintenance, Emergency Demand Response, and hourly loads
	Education	Prior to the use of DSRI data, MISO will educate stakeholders on how the data should be submitted

As part of the near-term proposal, MISO proposes to collect the EPNode (electrical location) for all LMRs

- Goal would be to have this information provided during the registration process
- Specific locational information will allow MISO to more efficiently use LMRs as many MaxGen Events do not align with LBA boundaries
  - During these events, MISO determines whether to include LBA Areas when deploying LMRs
  - Constraints typically occur intra-LBA, so an LBA may have resources that help or harm the issue depending on the specific substation/bus location
- MISO also has the ability under the Tariff to utilize LMRs for Transmission System Emergencies (TSEs) and Local Transmission Emergencies (LTEs)
  - EPNode information will allow MISO to more efficiently deploy LMRs for constraint management

LBA = Local Balancing Authority

LMR Next Steps

- MISO will continue the discussion with stakeholders on design details for the near-term LMR accreditation proposal and begin discussion on the long-term effort in 2023

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