

Problem Statement For Enhancements to Demand Response Registration and Frequency Capability Verification

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Background

- Emergency Demand Response (EDR) is an increasingly important element of the resource mix relied upon by PJM to meet reliability requirements
 - PJM expects EDR to be deployed with greater frequency than in the past
 - New DR Products have more rigorous performance obligations in terms of duration and frequency than Limited DR
 - Consumer willingness to support high frequency DR deployment has not been demonstrated in other regions

Current Registration Procedures Do Not Verify Frequency Capability of DR Resources

- Current registration processes do not incorporate any requirement to confirm capability of DR portfolios to satisfy frequency commitments imposed under DR product definitions
 - CSP submissions of nominated load reductions are accepted as valid for entire Delivery Year
 - PJM procedures do not require CSPs to demonstrate that DR portfolio is capable of meeting frequency obligations

Changes in DR Portfolio Frequency Capabilities During The Delivery Year Are Not Monitored

- There are no current processes or reporting requirements to provide information to PJM during the Delivery Year regarding changes in the frequency capabilities of DR customer portfolios even if a DR portfolio exhibits declining operating performance
- More frequent deployments during a Delivery Year could change customer willingness to respond during future events during that Delivery Year

DR Testing Does Not Appear To Be An Adequate Substitute For Frequency Performance Evaluation

- Enhanced testing would still be unlikely to fully address the concern
 - Frequency capability cannot be measured by one deployment or a even several deployments during a Delivery Year
 - This a particular concern for the new DR products because they could be called numerous times during a Delivery Year
 - Testing even a sample of DR customers a sufficient number of times to demonstrate capability to meet frequent deployments is not likely to be accepted as an option

Enhancements Should Be Considered to Verify DR Frequency Capability

- While many CSPs appear to have adopted their own internal practices to analyze frequency capability of DR portfolios at the time of registration and during the Delivery Year, PJM should develop formalized procedures to provide assurance that reliability needs will be met
- A wide range of options to verify DR frequency capability are available
 - Could build on current CSP practices through certification and reporting obligations
 - PJM could also verify independently based on a predetermined selection criteria or in cases in which performance issues arise
- Adopting enhancements to verify DR frequency capability would partially address concerns identified by Brattle Group that PJM should adopt procedures “to confirm that [DR] Resources can respond as often and as seasonably as claimed.”