



# Demand Response Subcommittee Final Proposal Report

August 2014

## Issue Summary

### [Demand Response Residential Participation in the PJM Synchronized Reserve Market Submittal Deadlines Problem Statement/Issue Charge](#)

Problem Statement brought forward by Enerwise Global Technologies, Inc.

Problem Statement/Issue Charge approved at March 5, 2014 MIC

Number of Meetings covering this topic: 7

### [Demand Response Residential Capacity and Energy Measurement and Verification Submittal Deadlines Problem Statement/Issue Charge](#)

Problem Statement brought forward by PJM

Problem Statement/Issue Charge approved at May 7, 2014 MIC

Number of Meetings covering this topic: 5

## 1. Recommended Proposal

One proposal is recommended by the DRS for both of the issues listed above.

The proposed solution is for residential customers with non-interval meters to participate in SR, economic energy and Load Management by using a statistical sample of interval-meter data. This provides the following benefits to PJM:

- **Synchronized Reserve Market:** Addition of fast responding resources. The average time from a PJM SR call to curtailment for residential direct load control is 2 minutes 15 seconds, which is substantially below the 10 minute requirement for an SR resource.
- **Load Management and Economic Energy:** Compliance and energy settlement values will be more accurate, consistent and robust. Currently, compliance and settlements for non-interval metered residential direct load control are based on load research studies from prior years or the Deemed Savings Report. The Deemed Savings Report estimates are based on data from 2001 – 2005 in Maryland and New Jersey, but can be used to for reductions today anywhere in the PJM footprint. The current proposal will require that data for compliance and settlement be obtained during the event from a statistically representative sample of customers,

**Qualifications for participation in sampling:** Residential locations that do not have interval meters where the load curtailment is controlled directly by the Curtailment Service Provider or its agent. The locations/registration must otherwise qualify for the Load Management, Economic energy or Synchronized Reserve markets.

**Sample Requirement:** 90% confidence with 10% accuracy. The sample will be stratified to ensure it is representative of the population. The sample will be selected from the participating locations. The sample



size will be based on a variance study. A Measurement and Verification Plan is to be submitted to PJM annually. The sample will be recalibrated annually.

**Switch Operability:** For switches that have two way communication an operability factor for each event that is based on actual performance will be used. For switches with one way communication the switch operability rate is implicit in the sample and switches in the sample cannot be repaired without repairing switches in the population.

**Churn:** If a customer moves or leaves the program they may be replaced with a comparable customer (applicable to residential registrations with interval meters as well).

**LSE:** LSE not required on residential registrations if not participating in DA market.

**Transition:** Statistical sampling is effective June 1, 2015. Traditional DLC, Deemed Savings Report, Load Research Studies cannot be used after June 1, 2016. Transition mechanism for MW that cannot meet new requirements for DY16/17 and DY17/18. Same transition mechanism will be used as 30 minute Load Management transition.

## 2. Standing Committee Results

The Market Implementation Committee endorsed this proposal on 10/8/2014 with 13 objections and 3 abstentions.

The Operating Committee endorsed this proposal on 11/6/2014 with 19 objections and 14 abstentions.

The Markets and Reliability Committee endorsed this proposal on 11/20/2014 with 4.03 in favor and 0.97 against.

### Appendix I: Proposals Not Meeting the Threshold

No additional packages were proposed for consideration to meet the 3:2 threshold.

### Appendix II: Supplemental Documents

[Detailed Proposal Summary](#)

### Appendix III: Stakeholder Participation

Both issues were actively discussed at every month DRS meeting since the issue charges were approved at the MIC. See DRS meeting minutes for list of participants.