



Residential DR Participation in Ancillary Service Markets

February 21, 2014

- **Problem Statement**

Demand Response is a capable Synchronized Reserve resource. Aggregations of residential demand response customers could potentially be a synchronized reserve resource. Today, the requirement to install, maintain and store the 1-minute metering infrastructure that is required to participate in that market is cost-prohibitive.

- **MIC approved issues statement 2/7/14 meeting**
 - Issue charge is up for endorsement at March MIC

- Interval metered
 - Hourly meter data
 - Aggregated meter data submitted
- Non-interval metered
 - May participate under non-interval metered pilot
 - Load reduction estimation
 - Load research study based on sample or deemed savings report for legacy programs
 - Estimate peak weather conditions
 - Sample with interval meters and use of control group or CBL
 - Switch operability study

Historically have done studies and have migrated to dynamic sample as cost of metering and load data has declined

- Interval metered
 - Hourly meter data
 - Aggregated meter data submitted
- Non-interval metered
 - May participate under non-interval metered pilot
 - Load reduction estimation
 - Load research study based on sample or deemed savings report for legacy programs
 - Actual weather
 - Sample with interval meters and use of control group or CBL
 - Switch operability study

Historically have done studies and have migrated to dynamic sample as cost of metering and load data has declined

- Current requirement for DR participation in SR:
 - 1 minute metering for location (EDC account number) load
 - Each location that participates is required to have interval metering
 - Interval load data must be submitted within 2 business days of SR event

DR metering & load data requirements are same for all end use customers that would like to participate in SR market

- Current requirements for DR participation in Regulation
 - Real-time telemetry
 - Each location that participates is required to have interval metering
 - Sub-metering permitted
 - Must be approved by PJM
 - CSP must provide 1 line diagram
 - Only if load cannot be transferred elsewhere