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
Synchronized Reserve market

• 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