



Smart Grid Communication Standards for Demand Response

**Presentation to NAESB
October 27, 2009**

Project Goals and Scope

- GOALS

- Identify common business process and information requirements for the Smart Grid resources in ISOs and RTOs
- Focus on the integration of ISOs/RTOs with market participants and aggregators (for distributed generation, renewable resources, electric vehicles, demand resources, etc.)
- Consistent with NERC and regional reliability coordinators
- First priorities are the development and support of Demand Response via bids/awards or Dynamic Pricing at the wholesale level (Phase 1), followed by support of energy storage technologies (Phase 1A).
- Coordination with NIST and cyber security requirements as appropriate
- Focus on leveraging existing resources and standards where possible, such as NAESB, CIM, OpenADR

- SCOPE

- Use Cases to support existing Demand Response Products/Services and examples of new products/services
- Information Models for each Business Process supported by Use Cases
- Standards covering the common denominators for the Information models

Participants

- **Alberta Electricity System Operator (AESO)**
- **California Independent System Operator (CAISO)**
- **Electricity Reliability Council Of Texas (ERCOT)**
- **Independent Electricity System Operator (IESO)**
- **ISO New England (ISO-NE)**
- **Midwest Independent Transmission System Operator (MISO)**
- **New York Independent System Operator (NYISO)**
- **PJM Interconnection (PJM)**
- **Southwest Power Pool (SPP)**

Project Documents

- Glossary
 - Adopt standard industry terms where possible
 - Develop new terms as necessary
- Use Case List
 - List of potential use cases based on four dimensions:
 - Product
 - Dispatch
 - Deployment
 - Performance Evaluation
- Base Cases
 - Two base cases from Use Case List cover most commonly implemented demand response products

Project Timeline

- October
 - Glossary
 - High Level Business process
 - Base Use Case List complete
- November
 - Updates based on full Use Case List
- December
 - Information models
- January
 - Recommendations for standards