

Demand Response Programs

IRMA Energy Summit

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Available Programs

- PJM Economic Program
- PJM Emergency Program
- PJM Ancillary Services Program
- ComEd T&D Program
- MISO programs coming soon

Role of a Curtailment Service Provider (CSP)

- Select appropriate programs for your facility
- Register for programs
- Identify demand response strategies for your facility
- Notify facility managers of an event
- Submit settlement data after an event
- Provide payment for event performance
- Provide tools to view and analyze your load

Economic Program

- Payment is based on hourly market price
- Locational Marginal Price (LMP) is the hourly market price of power at various nodes on the system
- PJM offers economic programs that utilize the Day Ahead and Real Time markets
- Customer options for Real Time market
 - Decide day of event based on facility and LMPs
 - Preset strike price

Emergency Program

- Capacity + Energy Option
- Capacity Only Option

- Capacity payment based on capacity auction price
 - Planning Year 2009 capacity price = \$104.09/MW-day
 - Payment based on having this capacity resource available all 365 days of planning year (Jun - May)
 - Facility must demonstrate load reduction
 - Penalties for non performance

Ancillary Services

- PJM programs available for Regulation, Spinning Reserves, and Day Ahead Operation Reserves
- Facility must be able to react in 5 minutes or less
- Requires direct load control
- Requires meter capable of reading 1 minute intervals
- Payment based on hourly or daily market prices
- Events not necessarily during peak summer demand

Program Rules

- Registration deadlines will vary by CSP
- One facility can register for multiple programs
- In some cases payment can be made for multiple programs for same hour and for same load reduction

The Future of Demand Response

- Exelon Energy to offer programs
- MISO to develop programs in Ameren
- Smart meters to enable greater participation
 - 2-way communication
 - Integration with building control systems
 - View/analyze your data in near-real time
 - Ancillary Services Program - ready