

# Demand Side Participation In Energy Markets

Seeking non-discriminatory  
treatment of demand side  
resources in organized markets

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## Potential benefits of demand response:

- Increased competition
- Operational savings
- Lower market prices
- Reduced price volatility
- Improved grid reliability
- Improved customer options
- Providing ancillary services
- Positive environmental benefits



# Goals of equal treatment for demand side resources in PJM

- Wholesale market mechanism in place of current blended wholesale/retail program
- Equal marginal payments to all resources that provide equivalent marginal system benefits
- Transparent pricing for all market participants
- Simple mechanisms that do not require sophisticated algorithms or models
- Allocation of costs to direct beneficiaries to the fullest extent possible

# Non-discriminatory treatment of demand side resources

## Basic Market Structure

- Pay full LMP for reduced MWh regardless of the level of LMP
  - Simple transparent structure that lets the market set the value for Demand Response
  - Fair and equal treatment of all marginal resources
    - Treats DR in energy market the same as treated in PJM's RPM, forward capacity market
    - “A key feature of the RPM was the ability of demand response to compete with and to be paid the same as generation” (PJM press release dated April 16<sup>th</sup>, 2007)
  - Self adjusting mechanism that automatically provides greater compensation at higher LMP values and reduced compensation at lower LMP values

# Non-discriminatory treatment of demand side resources

## Basic Market Structure (cont.)

- Allocate costs (zonal payments for reduced loads) to those market participants who are short in that zone in that market (Day Ahead or Real Time)
  - Simple allocation to the most direct beneficiaries, those market participants who were purchasing in the market to which the resource was actually provided
  - Eliminates the current potential for a “flat” or “long” LSE to be allocated costs from which they may not immediately and directly benefit

# Non-discriminatory treatment of demand side resources

## Basic Market Structure (cont.)

- Day Ahead resources settled in Real Time for deviations same as generation resources
- Self Scheduled Real Time resources charged the Real Time Operating Reserve Rate in order to be treated equivalently to self scheduled generation resources
- Total payments not capped since direct beneficiaries are the only ones who pay

# Non-discriminatory treatment of demand side resources

## Basic Market Structure (cont.)

- CBL as currently calculated until Tariff is changed as a result of CBL Subcommittee process currently under way
- All loads eligible regardless of retail supply arrangements
- Provide \$1,000 toward telemetering for each end-use site that can usually provide at least 100 kw of demand reduction (not site size).

# Non-discriminatory treatment of demand side resources

## Basic Market Structure (cont.)

