Forward Capacity Market Design

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Presentation Objectives

- Explore comments received on the market design concepts discussed to date:
  - *Voluntary (extension of existing strip auction)*
  - *Partial mandatory load purchase requirement*
  - *Full mandatory purchase requirement*
- Review NYISO objectives
- Identify design issues needing resolution
- Compare and contrast ISO-NE and PJM designs, focusing on administrative constructs

Voluntary Market

- Pros:
  - *More flexibility for energy efficiency and DR*
  - *Provides forward hedge, price signals, flexible eligibility*
  - *Less need for mitigation*
  - *Easy to implement*
- Cons:
  - *Redundant w/bilateral markets*
  - *May not elicit offers for new entry*
  - *Possibly no market clearing price*

Partial Mandatory Market

- Pros:
  - *Promotes liquidity*
- Cons:
  - *Treatment of bilaterals*
  - *No new capacity signal at low % mandatory*

Full Mandatory Market

- Pros:
  - *Focused on reliability*
  - *Greater customer certainty, improved competitiveness*
  - *Better integration w/PJM, ISO-NE markets*
  - *Aligns procurement obligation with RNA timeframe*
  - *Less reliance on demand curve adjustment process*
- Cons:
  - *Potentially inhibits near-term demand response*
  - *Significant market power issues*
  - *PJM, ISO-NE designs not proven*
  - *Need to modify NYSRC process*

NYISO Design Objectives

- Continue to work with existing market elements that have proven successful
- Reduce the administrative process associated with demand curve update
- Provide meaningful forward capacity price signals
- Align capacity market more closely with CRPP

NYISO Design Objectives

- Rules and parameters must rest on strong economic and engineering fundamentals
- Preserve objectivity and market orientation by minimizing administered elements
- Must avoid pitfalls experienced in neighbors' design effort – especially a protracted settlement that results in a negotiated outcome

NYISO Design Objectives

Negotiated/ Administered Attributes of ISO-NE FCM

- Price-floor of 0.6 CONE for auction
- Formula for determining CONE, e.g. for 2nd auction: \$3.75 + 0.5 x Previous MCP; for 3rd auction: \$1.88 + 0.75 x average MCP from 1st & 2nd; for all remaining auctions, if new capacity sets the price: (0.7 x $CONE_{t-1}$) + (0.3 x MCP_{t-1}), otherwise $CONE_t = CONE_{t-1}$.
- Transition prices
- Target price thresholds (0.8 CONE – 1.25 CONE)
- Rules for delisted resources and eligibility subject to discretion of market monitor
- Auction process outsourced – that has implication for appeals, disputes
- Individual zone prices depend on overall market conditions;

NYISO Design Objectives

Some Issues related to PJM's RPM

- Contentious settlement process involving 150 individuals, representing more than 65 parties engaged in more than 25 days of discussions with Settlement Judge
- Template of going-forward costs calculations that incorporates negotiated ratios/parameters
- CONE fixed for four years followed by a negotiated update rule

Forward Market Elements

- 3-year planning horizon
- 1-year commitment period (existing resources)
- 3-5-year commitment period (new resources)
- Allow certification of bilaterals (as in current system)
- Use existing auction algorithm (spot market)

Issues to Resolve

- Resource qualification
- Credit requirements
- Demand curve – which auctions?
- Demand curve update rules
- Mechanism to allow forward market offers to update demand curve reference value
- Mitigation rules
- Forward IRM, LCRs, load forecasts
- Forward market import rights process

Issues to Resolve (cont'd)

- EFORd rules
- Timing and number of reconfiguration auctions
- Reconfiguring LSE commitments prior to commitment period
- Seasonal or annual market?
- Interaction with deliverability rules / timing
- Interaction with demand curves in various auctions
- Demand response rules
- Phase-in mechanism

NEW YORK INDEPENDENT SYSTEM OPERATOR

The New York Independent System Operator (NYISO) is a nonprofit corporation that began operations in 1999 to facilitate the restructuring of New York's electric industry. The NYISO operates the state's bulk electricity grid and administers New York's wholesale electricity markets.

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