

Mitigation and Capacity Markets

NYISO ICAP Working Group, November 2, 2006

Capacity Critically Needed in NYC



- Critical need for new investment as cited by the ISO 2005 Comprehensive Reliability Plan
- Bilateral contracts are important component of ensuring this new investment.
 - 1200 MW of new development in NYC and Long Island identified in CRP likely to need contracts to obtain financing and move forward
- The capacity market should reflect a market based price signal to encourage new resource procurement.
 - Bilateral contracts should not distort the market outcome; they should support optimal outcomes and correct price signals for both new and existing resources.

Potential Capacity Market Distortions



Supply Side

- Issue: High concentration of supply In-City
- Solutions *in place*:
 - Demand curve with administrative CONE
 - DGO bid/price caps of \$105 per kw/year well under CONE
 - DGO must offer requirement and bilateral prohibition

Demand Side

- Issues:
 - New Self-supplied capacity (procured bilaterally or self-build) is effectively included in the supply stack at zero cost
 - Purchasers with significant market share In-City can depress prices by procuring more than IRM/LCR

Result

- Undue price discrimination between existing generation and new out of market generation
- As a result, market prices too low to sustain or incent market based investment in existing generation, demand response, and new generation
- The joint proposal is not a solution it will suppress prices even further as more bilateral capacity enters the market

The Out of Market Problem



- LSE pays for new capacity needs through long term contracts
 - These are effectively bid in at zero
 - If a net buyer, LSE can realize significant savings because of the impact of bidding in at zero on the clearing price.
- A small amount of capacity added in this manner can result in substantial clearing price reductions and net savings for the LSE.
- The result is artificially depressed prices for existing generation.
 - Price likely to remain persistently below CONE due to pressure to maintain reliability requirements
 - Sends wrong price signal for continued investment in either existing or new generation

Capacity Market & Out of Market Sales



NRG

In the auction, each existing and new resource (green) bids its opportunity cost and produces an efficient CONE clearing price P2

But the new unit, if bilaterally contracted, may be offered into the auction at a price-taking or zero offer

This shifts an existing unit onto the margin and depresses prices to P3, below the efficient CONE level, for all other resources in market

Market Efficiency & Price Suppression



NRG

The Solution



Short term:

- Reference prices at CONE for bilateral/self-build capacity in first full year of operation
- Decline to 75% of CONE in second and third year
- Pro-rate payments to existing capacity if needed
- Longer term:
 - Forward procurement to allow new resources to compete and set price
 - Consider key aspects of FCM market
 - Descending clock auction, delisting and alternative price rules, reconfiguration auctions



- New self-supplied or bilateral capacity bid bid at its reference price will be deemed to clear and will count towards satisfying the LSE's capacity obligation.
- If existing generation that would have cleared but for the above treatment does not clear, the uncleared generation will receive pro-rata payments.
 - Load will not pay more for the additional generation.
 - The total payment to existing generation will not increase.
 - The total payment (\$ * cleared MW) shall be allocated pro rata among all existing generation (resulting in effectively a lower clearing price).

Conclusions



- Bilateral and buyer's market power problems have been recognized and addressed in neighboring markets and must now be addressed in NYISO.
 - ISO-NE's approach may be best fit for NY

In the short term:

- NYISO needs to integrate self-supply bids for new entry into market
 - Establish first year reference price for bilaterals and self supply at net CONE
 - In subsequent years reference price set at 75% or other minimum CONE level

Longer Term:

 NYISO should establish a forward auction that allows existing and new generation to compete directly