Market Impact of Out-Of-Market Capacity Purchases

NYISO Installed Capacity Working Group Meeting

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Market Power

- "there is universal agreement that monopoly power is the power to exclude competition or control prices" (*U.S. v. Syufy, 903 F.2d. 659, 664 (9th Cir. 1990)*
- While all the emphasis to date has been placed on suppliers bidding practices, buyers also may exercise market power
- However, by entering into Out-Of-Market contracts that result in excess capacity (and representing that capacity at prices in the auction that are well below its actual cost) the LSE causes the prices to be artificially suppressed

LSE Market Power In The Capacity Markets

- In ISO Capacity markets, excess can be forced into the market by entering into Out-Of-Market contracts targeted at new entrants
- It is not relevant whether the excess capacity procured by the LSE is bid into the ICAP market at low prices or self certified, the result in either case is to force the price in the rest of the market to clear artificially lower
- Forcing the excess capacity to “enter” the market at anything other than its actual costs allows the LSE to artificially suppress price for all other suppliers

The Need For Market Monitoring and Mitigation Rules To Prevent LSE Market Power

- Historically, the ability of LSEs to force the market price to drop was countered by the ability of suppliers to bid in a manner to keep the price from collapsing
- Adopting additional mitigation to be applied to the DGO Bids without also adopting explicit LSE mitigation will result in increasing the ability of LSEs to exercise market power
- Accordingly, explicit buyer side market monitoring and mitigation rules must be developed and implemented in the short term as a corollary proposal to the supply side measures recently approved by the MC
- Given the likelihood that the 2006 RNA will identify reliability needs and given the findings of the 2005 CRP that market-based generation projects require some form of contract for financing, this issue must be addressed now

A Theoretical Example – Dominant LSE

- Assume LSE “A” is 50% of the NYC load
  - Capacity Requirement is ½ of total NYC requirement
  - Minimum NYC ICAP Requirement 9,302 MW
  - Minimum LSE A ICAP Requirement 4,651 MW
- LSE A Capacity before Out-Of-Market Contract – 1,684 MW
- Remaining Minimum Requirement – 2,967

A Theoretical Example – Demand Curve Parameters

- $14.34/kW-month - Price at Minimum ICAP Requirement
- $0.86/kW-month decrease in price for each 100 MW movement down the demand curve
- $4.28/kW-month decrease in the spot auction price caused by a 500 MW Out-of-market transaction for new capacity

A Theoretical Example – Impact of OOM Contract

Summer Monthly Capacity Cost

NYC Capacity Level Before OOM Contract (MW)	Demand Curve Price A Before OOM Contract $/kW-month)	LSE A Demand Curve Purchases Before OOM Contract (MW)	LSE A Monthly Demand Purchase Cost ($millions)	Demand Curve Price After OOM Contract ($/kW-Month)	LSE A Demand Curve Purchases After OOM Contract (MW)	LSE A Monthly Demand Curve Purchase Cost ($millions)
9,302	14.34	2,967	42,547	$10.06	3,217	$32,356
9,602	11.77	3,117	36,689	$7.49	3,367	$25,214
9,902	9.20	3,267	30,061	$4.92	3,517	$17,301
10,202	6.63	3,417	22,662	$2.35	3,667	$8,618

Impact On The Market

- As the previous slide shows, the impact of the 500 MW OOM Contract for new capacity is substantial
- The “Savings” from the contract could lead a market participant to be willing to pay the new generation resource substantially in excess of the resulting market clearing price
- Allowing this behavior would eviscerate the competitive market
- The new unit OOM contracts effectively become de facto RMR contracts

Impact On The Market (Cont'd)

- Allowing this behavior has several results
  - Needed existing units do not receive appropriate market based compensation
  - Demand side response is suppressed below economic levels
  - Supplemental payments become required on a one-by-one basis as the market unravels

Approach in Neighboring Markets

- Both PJM and ISO-NE have recognized the potential for LSEs to exercise market power
- The PJM Settlement includes the Minimum Offer Price Rule (“MOPR”)
- The ISO-NE New Entry Rules
- In both instances, these rules were implemented in recognition of the fact that failure to represent new entry into the market at legitimate prices would erode the market
- Both mitigation measures are based on requiring New Resource to enter minimum bids that are a relatively high percentage of net Cost of New Entry (“CONE”)

NYC Reference Resource Net CONE

- 06/07 $10.99/kW-month un-shaped ($14.34/kW-month Summer)
- 07/08 $11.32/kW-month un-shaped ($14.77/kW-month Summer)
- 75% of CONE for Summer 06 is $11.08/kW-month

ISO-NE and PJM Supply Side Rule Significance for New York

- Under both the ISO-NE and PJM methods the New Capacity that has caused the excess in the NYC market would be subject to mitigation
- The new capacity would be required to bid into the ICAP market at a floor price that was a relatively high percentage of the Net Cone