UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Ensuring Sufficient Capacity Reserves in Today's Markets	**)** **)**	**Docket No. EX01-1-000**

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.'S
COMMENTS ON NEW WAYS TO ENSURE SUFFICIENT CAPACITY RESERVES

On September 27, 2001, the Commission requested comments in response to the Staff Study Team Discussion Paper entitled "Ensuring Sufficient Capacity Reserves in Today's Energy Markets" (the "Discussion Paper"). The New York Independent System Operator (the "NYISO") welcomes the opportunity to consider new ideas regarding the design of capacity markets, and submit comments based on its experience in New York and consultations with its Independent Market Advisor, Dr. David Patton.

I. New Ways to Ensure Adequate Capacity Reserves Must Strengthen the Financial Market for Capacity

Competitive energy markets should allow suppliers to capture sufficient scarcity rents over time to attract capital investments to build new generation. In practice, however, commentators have demonstrated the necessity of establishing capacity markets to compensate for the imperfections of energy markets.[1] Hence, energy markets without adequate parallel capacity markets are prone to price spikes. Further, the price signals provided by a capacity market are generally far more stable and predictable than energy market revenues, making it a preferred facilitator for new investment.

The ISO Services Tariff establishes an ICAP market in New York to provide long-term economic incentives for capital investments in new generation and meet applicable reliability requirements. The NYISO allocates the New York Control Area's ICAP requirement between LSEs on the basis of each LSE's contribution to the New York Control Area's annual peak load. LSEs are required to procure

---

[1] See generally Cambridge Energy Research Association, Special Report — Beyond California's Power Crisis: Impact, Solutions and Lessons, 13 (Mar. 1, 2001) ("A properly structured power market does not rely on a periodic shortage and reliability crisis to provide price spikes as the means to recover capital costs and stimulate investment. The proper solution—a two commodity market mechanism—simply reflects one of the requirements of a properly structured power market."); Joseph E. Bowring and Robert E. Gramlich, The Role of Capacity Obligations in a Restructured Pennsylvania-New Jersey-Maryland Electricity Market, Elec. J. 57, 66 ("PJM capacity markets have been critical to maintaining a reliable system").

sufficient ICAP *before* each month.[2] The NYISO qualifies Resources in accordance with an Unforced Capacity methodology, which provides an incentive for generation owners to improve their assets. The NYISO administers six-month and monthly auctions where resources, including ICAP marketers and aggregators, may offer ICAP. Resources may also sell ICAP through bilateral transactions.

Alternatives to the current ICAP mechanisms in the Northeast should be based on financial characteristics that will strengthen the financial market for capacity. The capacity markets that existed under pool agreements have been modified significantly to incorporate features that reflect the new competitive environment of wholesale electricity. As a step toward increasing the competitiveness of its ICAP market, the NYISO is currently considering ways to qualify additional resources in its ICAP market. They include resources located in New England, which the NYISO is prepared to qualify as soon as the Commission approves New England's filing in Docket ER01-2534.

II. There May Be Significant Issues With Forward Contracts for Reserves

Based on the short description provided in the Discussion Paper, the NYISO believes that a market based on forward contracts for operating reserves may raise significant issues. Under these contracts, the value of the call option should reflect the revenue that could be earned in the energy market at prices above the strike price. The value of this call option, like all other options currently traded in today's energy markets, would be directly determined by prices in the energy market. Hence, this proposal apparently relies completely on energy prices (including derivative energy options) as the sole incentive for new construction. In this respect, it will send the same price signals as if there were no capacity requirement and serve no additional reliability objective.

Additionally, the NYISO believes that peak and baseload generation equally contribute to the maintenance of capacity reserves even though one class of generation is dispatched much more frequently. Hence, the capacity value of each class of generator is the same and payments to the owners of capacity should reflect this fact. A capacity market design that biases its price signals in favor of peak generation is

[2] Under the ICAP market administered by the NYISO, deficiency charges have always been allocated to all market participants (not only LSEs with an ICAP surplus) to remove the incentive for withholding. New York makes an exception for New York City and Long Island deficiency charges that are allocated among

(continued…)

not desirable because it may inefficiently shift capital investments over the long run toward this class of generation at the expense of more economic baseload generation..

III. New Capacity Market Designs Must Effectively Address Markets That Are Capacity Short at the Outset

Sufficient supply is a necessary prerequisite for a stable and fluid market. In New York, there is currently insufficient supply available to justify a move to a financial securing of capacity without significantly jeopardizing reliability. Historically, regulated electric power systems were designed to be short in "equilibrium."[3] The advent of deregulation has not yet changed this situation in New York. Between 1995 and 2000, statewide generating capacity increased by only 1,060 MW, while demand for electricity rose by 2,700 MW.[4] Under an optimistic scenario, sufficient supply will not be available in New York before 2005. Until then, the NYISO believes that it is appropriate to retain and improve the current ICAP market design to make it more competitive and fluid, while exploring alternatives as suggested by the Discussion Paper with a long term perspective.

In order for the economic incentives provided by capacity markets to be fully effective in facilitating new investment in generating facilities, a market design must be relatively stable and reliable. The stability is necessary for generators to form reasonable expectations of the capacity market revenues necessary to support the financing of the new projects. Therefore, the Commission should place a premium on establishing regulatory certainty related to the capacity markets.

IV. An ICAP Market Is Currently Appropriate to Ensure Sufficient Capacity in New York

The Discussion Paper identifies the "regulatory flexibility from the range of options available to modify the specifics of the ICAP obligation" as one important advantage of an ICAP requirement. Discussion Paper at 6. In New York, this market feature was a fundamental consideration in establishing an ICAP market. New York City and Long Island are load pockets and the current ICAP market allows for the mitigation of market power In-City, while ensuring the existence of price signals for specific locations (*i.e.,*

---

all LSEs in these respective localities. These exceptions were approved by the Commission and are known as "targeted rebates."

[3] Roy J. Shanker, PJM ICAP Market Design: Some Basic Considerations, Presentation at NYISO's Sept. 24, 2001 ICAPWG Meeting, slide 12 (July 12, 2001) http://www.nyiso.com/services/documents/groups/bic_icap_ group/meeting_materials.html.

[4] New York Independent System Operator, Inc., Power Alert: New York's Energy Crossroads, 1 (2001).

locality capacity requirements).

Experience demonstrates that this market feature is effective. During the NYISO's first summer of operation in year 2000, the ICAP market sent a clear signal that deficiencies existed in two localities. By the summer of 2001, market participants had provided in excess of 1000 MW of additional resources to the New York control area through new capacity additions, re-starting of retired units, unit upgrades and expansion of demand response. These additional resources made all the difference during the week of August 6, 2001 when New York experienced an historical peak load. This response demonstrated that an ICAP market can respond in a very short order of time when the right price signals are provided. ICAP is a very important reliability product in New York.

In NYISO's experience, an ICAP market design must require ICAP Suppliers to bid the energy associated with their ICAP sales in the energy market, subject to penalties. The absence of such requirement defeats some of the ICAP market's purpose by allowing LSEs to meet their ICAP requirements without assurances that sufficient energy will be available to meet load when required. Furthermore, an ICAP market design must require LSEs to meet ICAP requirements that are established *annually, i.e.* with no variation for monthly peak loads. LSEs must meet these requirements *before* the obligation procurement period as a *post facto* settlement would completely prevent the establishment of an efficient forward market for energy.

V. Market Power Is Not the By-Product of the ICAP Market and Will Not Be Alleviated by a Forward Market for Capacity Reserves

ICAP markets may be subject to market power. This situation is not necessarily the result of the existence or the design of an ICAP market, however, and New York's situation must be distinguished from the experience in PJM. In PJM, a daily ICAP obligation procurement period provided market fluidity, but also an opportunity for gaming because it was too close to the delivery date of the energy associated with ICAP.

Structural issues associated with the geography of New York City and the size of the net capacity position of many of the sellers in New York State (capacity holdings – capacity obligations) creates the potential for market power in capacity markets. Generally, these concerns can be mitigated by the presence of long-term capacity contracts that would be attached to generating assets when they are divested by LSEs.

In addition, the fundamental supply shortage contributes to an increased potential for market power issues in the capacity market in New York, even in a six-month auction. Therefore, any new capacity market designs should effectively mitigate market power concerns.

The shortage of capacity does not mean that the ICAP market fails to achieve its objective. In addition to the 10 gas turbine generators built in New York City for the summer 2001 and responding to the price signals provided by the ICAP market, project sponsors have moved aggressively and proposed numerous generating projects in New York.[5] The lengthy, cumbersome New York State Article X siting process, however, takes up to two years to complete and currently acts as a bottleneck for projects over 80 MW.

VI. ICAP Markets Allow for the Participation of Demand-Side Resources

The NYISO agrees with the conclusions of the Discussion Paper that demand-side resources play an important role in increasing capacity and improving reliability. In February 2001, the NYISO implemented significant changes to its ICAP market design to allow demand-side resources to qualify as ICAP suppliers. During summer 2001, the NYISO also implemented the Day-Ahead Demand Reduction Program and the Emergency Demand Response Program, which allow demand-side resources to participate in the energy markets. As of August 2001, interruptible load resources qualified for approximately 475 MW of ICAP in New York.

Thus, the NYISO submits that the most effective means for securing adequate reserves capacity is through a well-designed ICAP market that promotes reliability and mitigates price spikes. Going forward, control areas must improve the competitiveness and the financial strength of the current ICAP markets by allowing new players into the markets. These additional features will further harness market forces and lead to strong, liquid markets for capacity.

Respectfully submitted,

_____

Counsel for New York Independent System Operator, Inc.

[5] NYISO Transmission and Interconnection Study Queue (Sept. 2001) http://www.nyiso.com/services/documents/planning/pdf/t_i_study_queue_090701.pdf. See also other documents under "Transmission Expansion and Interconnection" at http://www.nyiso.com/ services/planning.html.

Kathy Robb
Hunton & Williams
200 Park Avenue
New York, NY 10166
October 17, 2001

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in the above-captioned proceedings in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure 18 C.F.R. § 2010 (1999).

Dated at Washington, D.C. this 17th day of October, 2001.

_____

Catherine A. Karimi
Senior Professional Assistant
Hunton & Williams
1900 K Street, N.W.
Washington, D.C. 20006-1109