UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

New York Independent System Operator, Inc.)

Docket No. ER05-428-000

PREPARED STATEMENT OF JONATHAN F. WALLACH ON BEHALF OF THE CITY OF NEW YORK

March 21, 2005

My name is Jonathan Wallach. I am Vice President of Resource Insight, Inc., an economic consulting firm based in Arlington, Massachusetts. I offer this statement on behalf of the City of New York.

My comments are limited to three of the issues identified in the Notice of Staff Technical Conference in this docket: (1) the net-revenue offset to the cost of new capacity; (2) the winter-summer adjustment to the Annual Reference Value; and (3) the Zero Crossing Point for the in-City demand curve.

Before addressing these issues, I want to highlight the fact that the in-City capacity market is not workably competitive at this time, nor is it expected to be so in the near future. There are three pivotal suppliers in Zone J, all subject to bid and price caps and must-offer requirements. As I show in Attachment A, because these suppliers are pivotal, prices in the spot auctions consistently clear at the bid cap for Keyspan Ravenswood. This price trend has continued, even as the reference price has increased and the slope of the demand curve has steepened.

The fact that there are pivotal suppliers with pricing power in Zone J has a number of implications for the process of setting the demand curve. First, as we've seen, changes to the reference price will have little impact on the spot-auction clearing price. Instead, such adjustments will affect the amount of excess capacity clearing in the spot auctions. The same holds true for moderate changes to the slope of the demand curve. Finally, moderate changes to the slope of the curve will not significantly affect the incentive to withhold, since pivotal suppliers are already subject to mitigation measures that discourage withholding practices.

Net-Revenue Offset

The first issue I want to address is the NYISO's estimate of the net energy and ancillary-service revenues that a combustion turbine ("CT") in Zone J would be expected to earn under equilibrium conditions. Using the results of Levitan's simulation modeling, in combination with historical data provided by David Patton, the NYISO derived a net-revenue value for Zone J of \$50/kW-yr.

I would characterize the NYISO's estimate as representing the bottom end of a reasonable range of estimates, since the NYISO tended to adopt the most-conservative values for key parameters in its derivation of the offset value.

The NYISO derived the \$50 value for New York City based on a consideration of "lower-bound" and "upper-bound" values. The "lower-bound" value of \$43/kW-yr was derived by combining the results of Levitan's deterministic modeling with an estimate by David Patton of a scarcity adder of \$10/kW-yr. As Dr. Patton acknowledged at a meeting of the ICAP Working Group, his estimate of the scarcity adder is conservative, since it assumes only 20 scarcity hours per year under equilibrium conditions. In contrast, Levitan's stochastic modeling simulated more than 30 scarcity hours per year for years with tight supply margins.

The "upper-bound" value of \$65/kW-yr was based on a consideration of the results of Levitan's stochastic analysis, which partially captured the impact of scarcity by modeling load-forecast uncertainty, and Dr. Patton's estimate of historical net revenues in the 345kV load pocket.¹ Dr. Patton's estimate, inclusive of his \$10 scarcity adder, is \$56/kW-yr.

As the New York State Public Service Commission has noted in this docket, both the stochastic analysis and Dr. Patton's estimate are conservative.² The stochastic value is conservative, since it does not reflect the impact of unexpected generator outages. As the PSC noted, including outage uncertainty in Levitan's stochastic modeling would increase market prices in non-scarcity hours and would also increase the number of scarcity hours. Dr. Patton's estimate is conservative, since it reflects net revenues in the lowest-priced load pocket in the City. In fact, Dr.

¹ Levitan also restricted its analysis to modeling of the 345kV load pocket.

² New York State Public Service Commission, *Motion to File Answer and Answer of the New York State Public Service Commission*, Docket ER05-428-000, February 15, 2005, pp. 9-10.

Patton estimated that net revenues in equilibrium could range from \$56 in the 345kV pocket to almost \$100 in the Astoria East load pocket.

The combined effect of these various conservatisms is to drive the net-revenue offset down to the lowest value that could still be considered to fall within a reasonable range. Given the results of Levitan's analysis, the magnitude of net revenues experienced throughout the various load pockets in the City, and expectations regarding the frequency of scarcity hours under equilibrium conditions, we could reasonably expect that net revenues in equilibrium would range from \$50-\$60/kW-yr.

Winter-Summer Adjustment

The second issue I want to discuss is the NYISO's adjustment to the Annual Reference Value to reflect the impact of differences between winter and summer capacity ratings. The intent of this adjustment was to derive a demand curve that at equilibrium yields monthly clearing prices that on average equal the Annual Reference Value.

To derive the adjustment factor for the NYCA market, the NYISO first adjusted the Annual Reference Value by the ratio of winter to summer aggregate capacity, as provided in the 2004 Load and Capacity Data report ("Gold Book"). The NYISO then made an additional adjustment to reflect the fact that the Gold Book data overstates the actual seasonal difference in capacity available to and clearing in the NYCA capacity auctions. This second adjustment was appropriate and reasonable.

For Zone J, the NYISO simply increased the Annual Reference Value by the Gold Book winter-summer ratio for in-City capacity. Unlike for the NYCA market, the NYISO did not account for any differences between actual and Gold Book ratios.

In Attachment B, I compare the Gold Book ratio to the winter-summer differentials experienced in the Zone J capacity market in 2004, as calculated using data reported in the NYISO's second compliance report on the demand curve.³ That comparison shows quite clearly that the Gold Book overstates actual seasonal differentials. Whereas the Gold Book shows a winter-summer ratio of

³ New York Independent System Operator, Inc., *Second Annual Compliance Report* on Implementation of the ICAP Demand Curve and Withholding Behavior Under the ICAP Demand Curve, Docket No. ER03-647-000, December 1, 2004.

1.063, the ratio of capacity offered into the Zone J auctions is 1.026 and the ratio of capacity cleared is only $1.019.^4$

As the in-City market moves toward long-term equilibrium, I would expect that the ratio of capacity cleared in the auction would approach that of capacity offered. As such, it would be reasonable to derive the reference price from the Annual Reference Value using a winter-summer adjustment factor of 1.03.

Zero-Crossing Point

Finally, the Notice of Staff Technical Conference asks: "Should the Zero Crossing Point be changed?" The answer for the 2005/2006 demand curve is undisputed: per the terms of the Services Tariff, the Zero Crossing Point remains at existing values for the 2005/2006 curve.

For the 2006/2007 and 2007/2008 curves for New York City, however, the answer is that we don't know at this time, since the NYISO failed to develop a reasonable basis for deciding one way or the other.

In its filing in this proceeding, the NYISO cites the Levitan analysis of different Zero Crossing Points as the primary basis for its decision to retain existing values for the 2006/2007 and 2007/2008 curves.⁵ Specifically, the NYISO cites Levitan's conclusion that "at this point we do not advocate any alteration in the zero-crossing points used to define the demand curves...."⁶

However, what the NYISO fails to mention is that Levitan coupled that conclusion with a recommendation that the NYISO conduct:

⁴ As indicated in Attachment B, I reduced the amounts of summer capacity available, offered and cleared by the summer UCAP rating for the Ravenswood CC. The winter-summer ratio would be understated without this adjustment, since the Ravenswood unit entered service at the start of the Summer, 2004 capability period and was therefore not eligible for participation in the Winter, 2003/04 auctions.

⁵ New York Independent System Operator, Inc., *Tariff Revisions to Implement Revised ICAP Demand Curves*, January 7, 2005, p. 8.

⁶ Levitan and Associates, Inc., *Independent Study to Establish Parameters of the ICAP Demand Curves for the New York Independent System Operator*, August 16, 2004, p.66.

... a more complete and rigorous analysis of likely suppliers and their combined impact on regional capacity markets under alternative zero-crossing point options.⁷

Despite repeated requests by the City and other market participants during the stakeholder process for more detailed analyses, and despite the fact that separate analyses by Levitan and by the Transmission Owners indicate that a reduction in the Zero Crossing Point could be beneficial to consumers, the NYISO has so far refused to heed Levitan's counsel.

Some parties have argued that reducing the Zero Crossing Point and increasing the steepness of the demand curve will increase price volatility and the incentive for withholding. Some parties have even argued that any change to the Zero Crossing Point for 2006/2007 or 2007/2008 will increase uncertainty and harm the market. These arguments are not particularly applicable to the in-City market. As I discussed earlier, prices in Zone J spot auctions have consistently cleared at the Keyspan Ravenswood price cap, even as the Zone J curve has steepened with increases in the Annual Reference Value. Market participants can reasonably expect these price trends to continue in the near future, even with moderate changes to the Zero Crossing Point. Moreover, the price caps and must-offer requirements imposed on pivotal suppliers in Zone J severely limit these suppliers' ability to engage in physical or economic withholding.

It is for these reasons that the City recommends that the NYISO conduct a comprehensive analysis to determine the appropriate Zero Crossing Points for the 2006/2007 and 2007/2008 demand curves. There is certainly adequate time to complete the type of analysis recommended by Levitan, and there is little risk of harm to the in-City market in delaying the adoption of Zero Crossing Points for these two curves while that analysis is completed.

⁷ Id.