

STATE OF NEW YORK DEPARTMENT OF PUBLIC SERVICE

THREE EMPIRE STATE PLAZA, ALBANY, NY 12223-1350

Internet Address: <http://www.dps.state.ny.us>

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December 31, 2007

SENT VIA ELECTRONIC FILING
Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Room 1-A209
Washington, D.C. 20426

Re: Docket No. ER08-283-000 - New York Independent
System Operator, Inc.

Dear Secretary Bose:

For filing, please find the Notice of Intervention and Protest of the New York State Public Service Commission in the above-entitled proceeding. Should you have any questions, please feel free to contact me at (518) 473-8178.

Very truly yours,

David G. Drexler
Assistant Counsel

Attachment

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

New York Independent System) Docket No. ER08-283-000
Operator, Inc.)

NOTICE OF INTERVENTION AND PROTEST OF
THE PUBLIC SERVICE COMMISSION
OF THE STATE OF NEW YORK

Pursuant the Federal Energy Regulatory Commission's (FERC or Commission) Notice of Extension of Time, issued December 14, 2007, and Rules 211 and 214 of the Commission's Rules of Practice and Procedure, the New York State Public Service Commission (NYPSC) hereby submits its Notice of Intervention and Protest in opposition to the New York Independent System Operator, Inc.'s (NYISO) November 30, 2007 filing (NYISO Filing), which proposes revised Installed Capacity (ICAP) Demand Curves for the three Capability Years, beginning May 1, 2008, and ending April 30, 2011.

Copies of all correspondence and pleadings should be addressed to:

David Drexler
Assistant Counsel
New York State Department
of Public Service
Three Empire State Plaza
Albany, New York 12223-1350
david_drexler@dps.state.ny.us

Howard Tarler
Chief, Bulk Electric Systems
New York State Department
of Public Service
Three Empire State Plaza
Albany, New York 12223-1350
hat@dps.state.ny.us

INTRODUCTION AND SUMMARY

Pursuant to the NYISO's tariff, the NYISO is required to conduct a review every three years to determine appropriate parameters for the ICAP Demand Curves over the next three Capability Years.¹ The NYISO Filing, which is the result of the NYISO's "periodic review," proposes certain decreases in the New York City and Long Island Demand Curve reference prices. It proposes an increase, however, in the reference price for the statewide/New York Control Area (NYCA) Demand Curve. While the NYPSC would support a reasonable increase in the NYCA reference price in order to reflect increased construction costs and inflation since the last time the Demand Curve was set, the NYISO's Filing contains inappropriate assumptions that, if not corrected, will translate into unjust and unreasonable ICAP prices.

Although the NYPSC protests some portions of the NYISO's Filing, we concur with the use of the LMS-100 peaking unit technology, as opposed to the older LM6000, for the New York City and Long Island Demand Curves, given that the LMS-100 is consistent with the NYISO's tariff requirement to utilize "the unit with technology that results in the lowest fixed costs

¹ NYISO Services Tariff, §5.14.1(b), Sheet 157. The ICAP market and the Demand Curve are discussed in detail below, in the Background section.

and highest variable costs.”² Notwithstanding our support of the LMS-100 technology, however, we are concerned that the NYISO’s update of equipment costs, on October 5, 2007, did not provide sufficient opportunity for stakeholders to analyze those costs. Consequently, supplemental information, such as improved outage rates, could not be made available for the NYISO Board meeting on October 15, 2007. This process is contrary to the NYISO’s established procedures, which provide that “[a]ny stakeholder shall have thirty (30) days within which to request an opportunity to provide the NYISO Board with supplemental analysis for its consideration when acting on the proposed ICAP Demand Curves.”³ Therefore, the NYISO’s update should not be accepted at this time, and stakeholders should be afforded the opportunity to provide supplemental information, as set forth in the NYISO’s procedures.

The NYPSC also protests the NYISO’s proposed annual escalation rate used to adjust the Demand Curve reference prices for the 2009/2010 and 2010/2011 Capability Years. The NYISO’s proposed rate is 7.8 percent. This rate is unreasonable and excessive because it is based on a selective data set and produces an outcome inconsistent with historical data and

² Id.

³ NYISO ICAP Manual, section 5.6.6.

trends. A more realistic escalation rate would be 2.3 percent, which is consistent with the inflationary rate and available data.

In addition, the NYPSC opposes the NYISO's estimate of energy and ancillary services revenues used to offset the projected costs of a new peaking unit on the NYCA Demand Curve (i.e., the reference price). While the NYISO's tariff requires these revenues to be estimated under tight capacity conditions, the NYISO's estimate is derived from data during a period of substantial excess capacity. The NYISO fails to properly adjust this data to reflect tight capacity conditions. Thus, the NYISO has acted contrary to its tariff and underestimated these revenues and, as a result, overstated the NYCA ICAP Demand Curve reference price.

As an initial matter, we note that the Commission previously recognized the role the NYPSC plays in developing the ICAP Demand Curves so as to ensure that this mechanism will "adequately and reliably serve customers' needs over the short and long term."⁴ Given the State's fundamental interest in

⁴ Docket No. ER03-647, New York Independent System Operator, Inc., Order Conditionally Accepting for Filing Tariff Revisions (issued May 20, 2003).

ensuring resource adequacy,⁵ and in the enforcement of adequacy standards in a cost-effective manner, the NYPSC strongly urges that the modifications to the Filing set forth below be adopted.

BACKGROUND

To ensure the availability of adequate generation capacity reserves to meet New York's reliability needs,⁶ Load Serving Entities (LSEs) in New York are required to demonstrate that they have procured sufficient amounts of installed generation capacity (i.e., ICAP) to meet New York's IRM,⁷ and Locational Capacity Requirements (LCR), as applicable. LSEs currently meet the IRM/LCR by buying ICAP. In brief, ICAP is merely a commitment by a generator to bid energy it can produce into the

⁵ The Federal Power Act reserves jurisdiction to the States to "set and enforce compliance with standards for [the] adequacy...of electric facilities." 16 U.S.C. §824o(i)(2).

⁶ New York has implemented an Installed Reserve Margin (IRM) requirement that is designed to ensure that sufficient margins of reserve generation are installed, so that the probability of an outage, due to a lack of sufficient generating capacity, will occur no more than once every ten years. The NYPSC approved the current IRM for the New York Control Area of 16.5% of forecasted peak load. See, Case 07-E-0088, et al., Installed Reserve Margin, Order Adopting an Installed Reserve Margin for the New York Control Area (issued March 8, 2007).

⁷ The NYPSC's authority to approve and set the IRM is currently the subject of our Petition for Rehearing in Docket No. ER07-429, New York State Reliability Council, Order Granting Rehearing for Further Consideration (issued May 4, 2007).

Day-Ahead Energy Market. In exchange for committing to bid energy from this capacity into the energy market, generators are compensated as suppliers of ICAP.⁸ LSEs must demonstrate compliance with their ICAP requirements by either self-supplying (e.g, bidding into the market LSE-owned generation or ICAP obtained through a bilateral contract), or by purchasing ICAP through NYISO auctions.

The NYISO conducts several voluntary auctions and a monthly spot auction in which LSEs are obligated to purchase any remaining ICAP they need for the following month, at the quantity and price determined under the ICAP Demand Curve, based on bids to supply ICAP.⁹ The Demand Curve is set administratively, and the point on the Demand Curve at which supply meets the IRM/LCR corresponds to a price that is based on the cost of constructing a new generating peaking unit, net of expected energy and ancillary services revenues (i.e., the reference price). As quantities of ICAP greater than the minimum IRM/LCR are procured, the price of ICAP gradually diminishes. On the other hand, the price gradually increases if

⁸ Generators are compensated separately from the ICAP market for their energy product that may ultimately be produced if their bids are selected by the NYISO.

⁹ If sufficient amounts of ICAP cannot be procured in the spot market to meet the IRM/LCR, the NYISO attempts to procure additional resources to make up any deficiency, but at a price that is capped at the spot auction clearing price.

the ICAP procured falls below the reference point. This design is intended to send a price signal that additional ICAP resources are needed when available ICAP falls below the IRM/LCR, while signaling that additional resources are not needed when ICAP is available in excess of the IRM/LCR.

DISCUSSION

I. The Escalation Rate Should Be Reduced To Appropriately Reflect The Forecasted General Inflation Rate

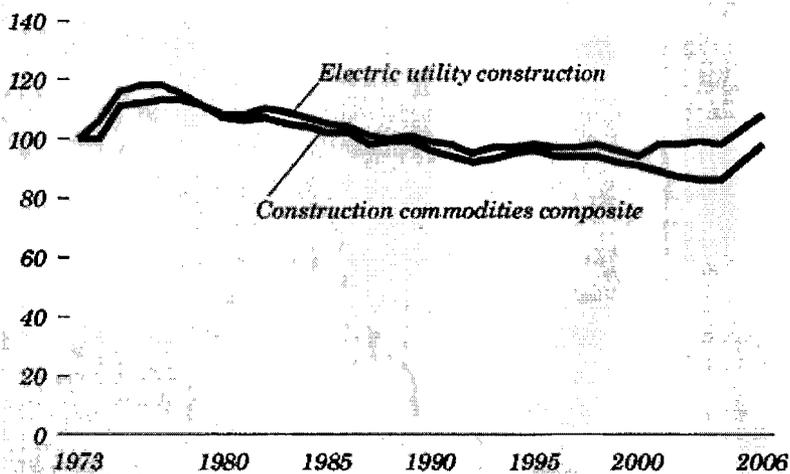
The NYISO's Filing proposes to increase the reference price on the Demand Curve during the 2009/2010 and 2010/2011 Capability Years by applying an annual escalation rate of 7.8 percent. The NYISO's 7.8 percent rate was developed from a projection of the average rate of change in the deflated Handy-Whitman Index for power plant construction during the last two years, as contained in a DOE/EIA report.¹⁰ However, the NYISO's use of only two years of that data is an inadequate data set upon which to draw conclusions. This results in a skewed projection that ignores the other 30-plus years of data reflected in the Handy-Whitman index.

The NYISO also disregards important conclusions reached in the accompanying DOE/EIA report. The data in the DOE/EIA report quantifies long-term trends in construction

¹⁰ See, <http://www.eia.doe.gov/oiaf/archive/aeo07/index.html>, Issues in Focus, pp.40-41.

commodities costs and electric utility construction costs between 1973 and 2006, adjusted for general inflation. This data shows that the Handy-Whitman index, which had a value of 100 in 1973, ranged from a low of 94 in 2000, to a high of 118 in 1976 and 1977. This data is graphically presented in "Figure 14" below from the DOE/EIA report.

Figure 14. Changes in construction commodity costs and electric utility construction costs, 1973-2006 (constant dollar index, 1973=100)



Inexplicably, the NYISO projects that utility construction costs will, by 2008, surpass the highest level they have ever been in the last 33 years, and will keep rising in the future (i.e., 119 in 2008, 125 in 2009, and 132 in 2010). This is an unrealistic assumption given past data and the DOE/EIA's own forecasts, which suggest costs will stabilize.

A more realistic assumption should recognize that construction costs tend to track general inflation, with only temporary, limited deviations. Moreover, general construction

material costs tend to closely coincide with electric utility construction costs. As the DOE/EIA has observed, "[b]ecause equipment and materials generally represent two-thirds to three-quarters of total power plant construction costs, it is not surprising that the trends are similar" (i.e., electric utility construction as compared to construction materials).¹¹

Although the two indices diverged in the early 2000's, "with electric power construction costs showing a flat to slightly increasing trend, while general construction costs continue to decline, [t]he difference coincides with a construction boom in the electric power sector from 2000 to 2004."¹² The DOE/EIA report goes on to state that the current trend is that "new construction in the electric power sector is slowing down,... likely a response to the oversupply of available capacity than a response to higher commodity prices."¹³ In this situation, one would expect the increase in electric utility construction material costs to also slow down.

Further, DOE/EIA "does not project significant increases in new generating capacity in the electric power

¹¹ Id. at 40.

¹² Id. at 40-41.

¹³ Id. at 41.

sector until after 2015."¹⁴ While some may argue that New York will need additional capacity by 2011, the markets relied upon to project the escalation rate are national, if not global, and therefore, any additions that may be needed in New York should not result in upward pressure on electric power sector construction costs.

The long-term history of construction material costs further confirms that a significant escalation rate is not warranted. As DOE/EIA states, "for the purposes of long-term planning in the energy industries, costs will revert to the stable or slightly declining trend of the past 30 years."¹⁵ A reasonable escalation rate must recognize these long-term trends in the Handy-Whitman Index.

For the 33 years of Handy-Whitman data contained in the DOE/EIA report, the average annual growth rate has been .2 percent. The 20 year average for 1986 to 2006 also shows a growth rate of .2 percent. Adding the Gross Domestic Product (GDP) Chained Price Index forecast of 2.1% (i.e., general inflation rate) for the period covering this Demand Curve reset

¹⁴ Id.

¹⁵ Id. at 36.

to the long-term average of the Handy-Whitman index would result in a total escalation rate of 2.3 percent.¹⁶

If the dramatically higher escalation rate proposed by the NYISO were adopted, it would result in excessive reference prices, and force consumers to make unjust and unreasonable ICAP payments. Not only would these payments be unjustified and unnecessary, but they would send an inaccurate economic signal to investors in new generation.

II. Estimates Of Energy And Ancillary Services Revenues Should Be Increased To Reflect Tight Capacity Conditions

Accurate estimates of net energy and ancillary services revenues, which are used to offset the projected cost of constructing a new generation facility, are a fundamental component for determining an appropriate economic signal at a time when resource adequacy needs arise. According to the NYISO's tariff, the NYISO is required to assess "the likely projected annual Energy and Ancillary Services revenues...under conditions in which the available capacity *would equal or slightly exceed* the minimum Installed Capacity requirement."¹⁷ In other words, estimates of net energy/ancillary services

¹⁶ Blue Chip Economic Indicators, Vol. 32, No. 10, October 10, 2007.

¹⁷ NYISO Services Tariff, §5.14.1(b), Sheet 157.

revenues should reflect conditions near equilibrium, when capacity markets are relatively tight.

The NYISO Filing inappropriately deviates from the tariff by utilizing revenue estimates based on historic net energy/ancillary services revenues during the period from May 2003 through December 2006, which was a time of significant excess capacity in upstate NY and the entire Northeast, as new gas-fired merchant combined-cycle plants entered service in response to the boom years of the late 1990's. In this period, historical energy and capacity prices in upstate NY were low and, generally, too low to support investment in new gas-fired peakers.¹⁸ While these were appropriate price signals, since there was no need for new upstate peakers, they do not provide a good basis for estimating what such peakers would be expected to earn in a tight market.

The NYISO Filing, by focusing on the excess capacity period of the 1990's, fails to capture the sharp increase in net energy and ancillary services revenues available to marginal units as the market becomes tight. The NYISO attempts to compensate for the impact of excess capacity on its estimate of net energy and ancillary service revenues through an econometric model. However, this approach is inherently flawed because the

¹⁸ See, Patton's 2006 State of the Market Report, p. 17, Figure 12.

NYISO assumes that there is a linear relationship between capacity levels and energy prices. Contrary to this assumption, there is a strong likelihood that the actual relationship is non-linear, particularly under the tight capacity conditions specified in the tariff, because a reduction in excess capacity will drive demand upward along the supply curve.

A typical supply curve has a "hockey stick" appearance, in which the curve tends to increase gradually until the upper end, where it jumps up steeply, reflecting the high energy costs of peaking capacity. A peaking unit's energy revenues will tend to follow this "hockey stick" projection as revenues slowly increase, until they rise sharply when the market becomes tight (i.e., near equilibrium). The NYISO fails to account for these additional revenues that accrue when the capacity markets are tight.

Moreover, there is strong evidence to indicate that, when the statewide capacity market is tight, peak-period prices for energy/ancillary services are likely to be comparable in the Capital region to those prices downstate.¹⁹ This is because the State, as a whole, is likely to be reliant upon downstate

¹⁹ An exception is ThunderStorm Alerts, which reduce transmission limits between upstate and downstate in the real-time market; this increases NYC prices but decreases Capital Zone prices. For this reason, the analysis only considers increased revenues in the day-ahead market.

peaking capacity. As such, net energy revenues for an upstate peaker are likely to move closer to NYC net energy revenues for comparable plants. As evidence of this price correlation, average on-peak energy prices by zone in 2006, a period of excess capacity, can be compared to the same prices in 2000, which was a time when upstate and regional markets were tighter (i.e., prior to the entry of new gas-fired combined cycle plants, especially in New England):

Average On-Peak²⁰ LBMPs by Zone

		Capital	NYC
Summer 2000	Average LBMP	\$73.58	\$76.55
	Ratio to NYC	96%	100%
Summer 2006	Average LBMP	\$75.08	\$109.93
	Ratio to NYC	68%	100%

According to these figures, peak-period Capital Zone prices tend to reflect downstate prices when the statewide market is tight. Thus, estimates of NYC revenues provide a better proxy for what an upstate peaker would earn when the statewide market is tight.

²⁰ Summer On-Peak periods defined as June-August weekdays, 7 AM-11 PM, excluding holidays.

The NYISO's consultant provided information as to the impact of higher peak-period prices on the energy revenues of an upstate peaking unit. This information contained day-ahead and real-time energy revenue estimates for a 7FA unit located in both the Capital region and for a similar unit in NYC. The estimated day-ahead market energy revenues are approximately \$16/kW-year higher in NYC than in the Capital region, according to the NYISO consultant's model. Because peak-period prices are likely to be just about as high in the Capital region as downstate when the statewide capacity market is tight, the \$16/kW-year adder should be included in any estimate of statewide energy/ancillary services revenues.

Therefore, the NYISO's estimates of energy and ancillary services revenues should be increased from \$9.36/kW-year to approximately \$25/kW-year, and accordingly, the NYCA reference price should be reduced by \$16/kW-year. This will provide a more accurate estimate of the likely net revenues an upstate peaking unit receives under a tight NYCA capacity market, and assures that this Demand Curve reset is consistent with the FERC-approved tariff.

Moreover, the NYPSC is promoting mandatory hourly pricing for large customers at the retail level (e.g., placing nearly 6,000 MW of large customer load on default Day-Ahead

Market prices).²¹ An increase in the prevalence of hourly pricing should lead to a flattening of the load shape. FERC agreed that "as NYPSC notes, increased use of real-time pricing at the retail level may flatten the load shape in the future."²² This should increase the number of hours during which peakers can earn significant net energy revenues.²³

In sum, the estimate of upstate net energy/ancillary services revenues should be increased significantly to better reflect conditions near equilibrium (i.e., tight upstate and regional markets) and the expected flattening of the load shape due to increased hourly pricing. To do this, the Commission should adopt a \$25/kW-year estimate of net energy/ancillary services revenues in establishing the NYCA Demand Curve. This

²¹ Case 03-E-0641, Mandatory Hourly Pricing for Commodity Service, Order Instituting Further Proceedings and Requiring the Filing of Draft Tariffs (issued September 23, 2005) and Order Denying Rehearing and Adopting Mandatory Hourly Pricing requirements (issued April 24, 2006).

²² FERC Order Accepting ICAP Demand Curves, Docket ER05-428, April 21, 2005, p. 13.

²³ Affidavit of Mark Reeder, paragraphs 36-44, in Docket No. ER05-428, March 21, 2005. Mr. Reeder quotes from Eric Hirst and Stan Hadley: "...increasing the time-of-use elasticity flattens the load duration curve. ...the flatter load duration curve leads to greater use of generators with high costs. This greater use permits them to recover more of their fixed costs from energy charges and, therefore, requires a smaller capacity payment for them to break even." (pages 41-42, Maintaining Generation Adequacy in a Restructuring U.S. Electric Industry; by Eric Hirst and Stan Hadley; October 1999; Oak Ridge National Laboratory; ORNL/CON-472).

is the estimate the NYPSC supported during the last reset of the Demand Curve in 2005.²⁴

However, in 2005, we indicated that, in lieu of an explicit excess capacity adjustment, the energy offset should be cut in half to \$12.50/kW-year. In this case, because the NYISO Filing now employs an explicit excess capacity adjustment, no downward modification is appropriate to the full \$25/kW-year net energy/ancillary services revenue offset. This would reduce the NYISO's proposed statewide reference price by approximately \$16/kW-year, which is consistent with the adjustment recommended above.

²⁴ See, Docket No. ER05-428-000, New York Independent System Operator, Inc., Notice of Intervention and Comments of the New York Public Service Commission (filed January 28, 2005); see also, Affidavit of Mark Reeder in Docket No. ER05-428, March 21, 2005, presented at the FERC Technical Conference. The \$25/kW-year estimate was based on three components: historical "actual" energy revenues from 2000 to 2003 adjusted for scarcity prices, totaling \$18.49/kW-year; ancillary services, estimated at \$0.67/kW-year; and an adder to represent the impact of a tighter statewide capacity market (compared to the period 2000-2003) of \$6/kW-year.

CONCLUSION

In accordance with the above discussion, the Commission should direct the NYISO to make the modifications identified herein.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Peter McGowan". The signature is written in a cursive, slightly slanted style.

Peter McGowan
Acting General Counsel
Public Service Commission
of the State of New York

By: David G. Drexler
Assistant Counsel
3 Empire State Plaza
Albany, NY 12223-1305
(518) 473-8178

Dated: December 31, 2007
Albany, New York

CERTIFICATE OF SERVICE

I, Ruth Tarrance, do hereby certify that I will serve on December 31, 2007, the foregoing Motion to File Answer and Answer of the New York State Public Service Commission, upon each of the parties of record indicated on the official service list compiled by the Secretary in this proceeding.

Dated: December 31, 2007
Albany, New York


Ruth Tarrance