10 Krey Boulevard , Rensselaer, NY 12144



May 9, 2006

Magalie R. Salas Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, D.C. 20426

## Re: Seventh Quarterly Report by New York Independent System Operator, Inc. in Docket Nos. ER04-230-006, ER01-3155-006, ER01-1385-015, EL01-45-014

Dear Secretary Salas:

Pursuant to the NYISO's commitment in its Request for Rehearing and the Commission's directive in its Order on Rehearing,<sup>1</sup> the NYISO submits its *Seventh Quarterly Report* detailing its progress in pursuing changes to software modeling requirements and market rules that would improve the efficient utilization of combined cycle units within the NYISO markets. The NYISO filed its *First Quarterly Report* on November 8, 2004.

As the NYISO discussed in its *Sixth Quarterly Report*, it deployed a new combined cycle unit modeling capability, the pseudo-unit model, with the deployment of its SMD2 system in February 2005. The majority of combined cycle plants are being represented in the NYISO's existing market software using the pseudo-unit model. Since that time the NYISO has continued to work with its Market Participants ("MPs") to improve this integration. Some combined cycle facility owners have explained that their units could be better represented in existing software if the Day-Ahead Market ("DAM") commitment software could evaluate, more accurately, the actual cost (efficiency) differences between various plant configurations while also maintaining the exclusivity of each configuration. Market-design specialists at the NYISO analyzed various means by which this enhancement could be implemented in a timely manner with low or limited risk. Two approaches were identified and discussed internally, and then with combined cycle unit owners and their consultants.

<sup>&</sup>lt;sup>1</sup>111 FERC ¶ 61,468 (2005). The Commission recognized that the NYISO would not be able to conclude its work on combined cycle modeling until nine to twelve months following installation of 15-minute scheduling and required the NYISO to continue with its quarterly progress reports for the interim. The NYISO implemented 15-minute scheduling on October 11, 2005.

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The preferred approach employs a variation of the pseudo-unit model that would permit direct bidding of the cost profile for each of the several configurations of a complex plant. This approach is still under discussion with combined cycle plant owners and operators. However, early discussions indicate that, for at least some plant owners, this approach carries with it bidding restrictions that may cancel out the benefit of any added cost profile flexibility. The second approach would present the most competitive cost case for each pseudo-unit to the DAM, utilizing a supplemental cost adjustment if the DAM software chooses a less efficient configuration. This second approach that utilizes a potentially controversial cost-recovery mechanism may also be more cumbersome for combined cycle owners, but it has not yet been explored in detail with owners, operators or MPs.

The NYISO intends to complete its evaluation of options available for improving the current system architecture within the next reporting period. The NYISO anticipates that any additional improvements identified will be able to be implemented in a timely manner.

As the NYISO has previously reported, there do not appear to be any multi-state model approaches, whether designed by ABB<sup>2</sup> or others, that are both technically feasible to implement and acceptable to suppliers.<sup>3</sup> Although, PJM has added a multi-state model to its software to improve the representation of combined cycle units, neither the NYISO, nor the MPs familiar with the PJM model, believe that it provides a substantive improvement to the functionality currently in use at the NYISO.

The NYISO continues to believe that pursuing a major overhaul of its commitment and dispatch software at this time would be as time-consuming and risky as a research and development effort. Such an effort would carry a significant likelihood of protracted and costly testing and rework for the NYISO, and the owner operators of combined cycle units, with no certainty of a satisfactory outcome. It would also present operators of combined-cycle plants with a substantially more complex bidding structure. At least one combined cycle unit owner has expressed its reluctance to move in this direction because of the data-intensive bidding that would be required.

The NYISO knows of no other existing technologies that could be used to address the combined cycle modeling challenges in an LBMP market environment.<sup>4</sup> Products that are similar to the ABB implementation, as well as different approaches, have only been implemented in environments that are significantly different from, or are smaller than, the NYISO's LBMP system. The NYISO found that alternative technologies, if available at all, would present at least the same challenges as does the ABB approach if incorporated into the NYISO market.

<sup>&</sup>lt;sup>2</sup>As first discussed in the *Third Quarterly Report* filed in this docket May 6, 2005.

<sup>&</sup>lt;sup>3</sup>Sixth Quarterly Report, filed in this docket February 9, 2006.

<sup>&</sup>lt;sup>4</sup>See: Study conducted by Kinetrics, Inc. of Toronto, Ontario and managed by CEA Technologies of Montreal, Quebec, at: http://www.nyiso.com/public/webdocs/committees/bic\_mswg/meeting\_materials/2006-02-15/3103\_Commitment\_Techniques\_for\_CCGUs.pdf

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Thus, the NYISO has focused on improving, if possible, the current pseudo-unit model within the existing commitment and dispatch software. It is also continuing to work with its MPs to identify other incremental improvements to its existing market software that may improve, in other ways, the efficient utilization of combined cycle units. Part of this effort is taking place in the context of the NYISO's recently announced assessment of existing market rules to determine whether they provide the benefits originally envisioned. This review will include those market requirements, such as persistent under-generation charges and Bid Production Cost Guarantees, where certain adjustments could further improve the efficient scheduling and compensation for combined cycle unit owners.<sup>5</sup>

The NYISO will report to the Commission in its *Eighth and Ninth Quarterly Reports*, on the progress it has made in identifying options available for improvement to the current system architecture, as well as other incremental improvements in the NYISO market that may be possible. The NYISO expects that further improvement is likely.

The NYISO respectfully requests that the Commission accept this *Seventh Quarterly Report*. The NYISO intends to file its next Quarterly Report August 9, 2006.

Respectfully submitted,

<u>/s/Mollie Lampi</u> Mollie Lampi Assistant General Counsel New York Independent System Operator, Inc. 10 Krey Boulevard Rensselaer, New York 12144 (518) 356-7530 mlampi@nyiso.com

<sup>&</sup>lt;sup>5</sup>The NYISO also intends to investigate any new technology that appears capable of providing less risky and more cost-effective benefits to combine cycle unit participation in the NYISO markets, should one appear.

## **CERTIFICATE OF SERVICE**

I hereby certify that I have this day served the foregoing document upon all parties listed on the official service list maintained by the Secretary of the Commission in Docket Numbers ER04-230-006, ER01-3155-006, ER01-1385-015 and EL01-45-014 in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure 18 C.F.R. § 385.2010 (2003).

Dated at Rensselaer, New York, this 9th day of May 2006.

/s/John C. Cutting John C. Cutting New York Independent System Operator, Inc. 10 Krey Boulevard Rensselaer, N.Y. 12144