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July 8, 2004

PECLEATORY COMMISSION

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

Third Periodic Report on New York 10 Minute Non-Synchronous Reserve Market; Re: Docket No. ER03-836-003-0025

Dear Secretary Salas:

Enclosed for filing are an original and 14 copies of this letter, a draft Notice of Filing and the New York Independent System Operator Inc.'s ("NYISO") third periodic Review of the 10 Minute Non-Synchronous Reserve Market ("Report"). Also enclosed for filing is a diskette containing an electronic version of the draft Notice of Filing. Finally, enclosed are four extra copies of this letter and the Report that we request that you stamp and return to our messenger for our records.

The Report was prepared by the NYISO's Market Monitoring and Performance Department in response to ordering paragraph (C) of the Commission's July 1, 2003 Order Conditionally Accepting Proposed Tariff Revisions ("Order"), that was issued in Docket No. ER03-836-000. Ordering paragraph (C) of the Order instructed the NYISO to file reports with the Commission "on the competitiveness of the NSR market." The enclosed Report is the third such periodic report filed by the NYISO. It concludes that the New York 10 Minute Non-Synchronous Reserve Market was workably competitive during the period from July 8, 2003, through June 30, 2004.

Please contact the undersigned if you have questions regarding this letter or the enclosed Report.

Sincerely,

alex M. Schnell Kak

Alex M. Schnell New York Independent System Operator 290 Washington Avenue Extension Albany, New York 12203 518-356-8707

Enclosures

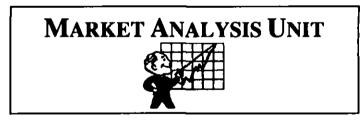
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New York Independent System Operator, Inc.



MARKET MONITORING & PERFORMANCE DEPARTMENT



REVIEW OF THE 10 MINUTE NON-SYNC RESERVE MARKET

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1 Executive Summary

In its July 1, 2003, Order Conditionally Accepting Proposed Tariff Revisions ("Order")¹ the Federal Energy Regulatory Commission ("FERC" or the "Commission") accepted for filing tariff revisions proposed by the New York Independent System Operator ("NYISO") that set in place certain protective measures and eliminated a \$2.52/MW bid cap that had previously been imposed on the New York 10 Minute Non Synchronous Reserve ("NSR") market. Ordering paragraph (C) of the Order required the NYISO to file three reports on the operation of the 10 Minute NSR market after the elimination of the bid cap. The NYISO's Market Monitoring and Performance Department ("MMP") submitted two reports in 2003 evaluating the competitiveness of the 10 Minute NSR market. The first two reports covered the first 3 and 6 months following the removal of the bid cap, respectively. This report is the third report prepared by the NYISO's MMP, extending the period covered to the first 12 months.

MMP has reviewed both the 10 Minute NSR prices as well as the offer prices by suppliers. To date, there is no evidence of any suppliers exerting undue influence in the 10 Minute NSR market. This is confirmed by the fact that 10 Minute NSR prices have continued to decrease to their lowest levels since the introduction of the NYISO markets in November 1999. Furthermore, the offer prices by generators remain at competitive levels with only a few suppliers increasing their bids in the 10 Minute NSR market. Those increased offers have had a limited impact on NSR prices in the NYISO's Day-Ahead market with only three hours over the past 12 months exceeding the previous bid cap.

¹ 104 FERC ¶ 61,002.

2 Introduction

In the spring of 2003, the NYISO submitted a filing to FERC requesting the removal of the bid cap on the offers for 10-minute non-synchronized (i.e. non-spinning) reserves ("NSR"). Since the initial imposition of the \$2.52 bid cap in the spring 2000, NYISO staff has made several changes to the 10 Minute NSR market to improve the competitiveness of that segment of ancillary services. These changes include:

- the inclusion of a mandatory offer requirement for 10 Minute NSR units east of the Central East constraint;
- the addition of Lost Opportunity cost payments to 10 Minute NSR suppliers, thereby increasing the incentive to participate in the reserve market;
- reduced locational reserve requirements;
- modeling of the Blenheim-Gilboa pumped storage plant in the NYISO's market software to allow it to offer larger quantities of 10 Minute NSR; and
- regional reserve sharing with ISO-NE implemented on June 15, 2001 that reduced the 10 Minute reserve locational requirements (east of central east).

While these changes have improved the competitiveness of the 10 Minute NSR market, suppliers of 10 Minute NSR remained highly concentrated. As such, NYISO market monitoring staff and the independent Market Advisor also recommended the following changes with the removal of the bid cap:

- For monitoring and mitigation purposes, reference prices are established for each 10 Minute NSR resource at the lower of the bid-based reference level or \$2.52/MW (the previous bid cap). This change will allow providers of 10 Minute NSR increased offer flexibility while relying on the market mitigation measures to address instances of economic withholding that significantly affect prices.²
- For a period of 12 months following the removal of the bid cap, if any 10 Minute NSR prices are determined by the NYSIO's Market Monitoring & Performance Department ("MMP") to reflect a significant abuse of market power, MMP will flag these prices and determine whether a reimposition of the bid cap is warranted.

FERC approved the filing for the removal of the \$2.52/MW bid cap for 10 Minute NSR and required that the NYISO "submit reports on the competitiveness of the NSR market at three months, six months and 12 months after the modification".³ This report is the 12 month review of the 10 Minute NSR market following the lifting of the bid cap by FERC.

² Summarized from Affidavit of David Patton in NYSIO submittal to remove bid cap.

³ Order Conditionally Accepting Proposed Tariff Revisions, 104 FERC ¶ 61,002 (July 1, 2003) (the "Order").

3 Analysis

As part of the analysis of the 10 Minute NSR following the removal of the bid cap, MMP reviewed 10 Minute NSR prices, changes in offer prices and the effects of the changes implemented in the market to improve competitiveness. NYISO reports10 Minute NSR prices by superzone (East and West) for both the Day Ahead and Hour Ahead markets ("DAM" and "HAM," respectively). While the DAM market is most relevant as the vast majority of reserves are settled in the DAM, this analysis reviews both the DAM and HAM 10 Min NSR markets.

This analysis covers the first 12 months of the 10 Minute NSR market following the removal the of the bid cap (July 8, 2003 through to June 30, 2004).

3.1 Day Ahead 10 Minute NSR Prices

By all measures, 10 Minute NSR prices have decreased following the lifting of the bid cap. While ancillary services are subject to various market influences, and NSR prices could have decreased for a number of reasons, it is unlikely that the removal of the bid cap, in and of itself, has caused NSR prices to fall. However, it remains clear after 12 months that the removal of the bid cap has *not increased* 10 Minute NSR prices.

For the first 12 months following the lifting of the bid cap, the 10 Min NSR prices have reached historic low prices (see Table 1, below) with the most recent monthly average price of \$0.33/MW set in January and February 2004. The 2004 year-to-date average monthly price has decreased 76% compared to the same time last year, the six month period just prior to the removal of the bid cap.

	Jan	Feb	Mar	Apr	May	Jun	Jut	Aug	_ Sep	Oct	Nov	D
					Monthly	/ Average I	Price					
1999											i.12	1.0
2000	9.05	65.57	27.31	1.75	2.07	1.47	2.12	2.30	2.18	1.80	1.99	2.1
2001	1.69	2.19	2.22	1.84	1.85	2.04	2.13	2.14	2.19	1.94	1.56	1.8
2002	1.68	1.58	1.64	1.55	1.52	1.46	1.47	2.09	1.46	1.37	1.15	1.1
2003	1.22	1.36	1.60	1.61	1.48	1.40	1.09	0.76	0.58	0.52	0.41	0.3
2004	0.33	0.33	0.39	0.38	0.34	0.35						
					Monthly	Minimum	Price					
1999											0.84	-
2000	1.08	39.01	1.19	1.15	0.94	-	-	-	0.72	0.10	0.92	0.8
2001	0.60	0.65	0.58	0.58	0.63	0.63	0.60	0.63	0.68	0.85	0.85	1.0
2002	0.95	0.96	0.99	1.10	0.68	0.67	0.68	0.68	0.67	0.67	0.68	0.6
2003	0.67	0.68	1.15	0.99	0.99	0.68	0.68	0.48	0.46	0.46	0.10	0.1
2004	0.11	0.15	0.15	0.16	0.10	0.10						
					Monthly	Maximum	Price					
1999											5.01	10.0
2000	95.01	302.00	90.70	2.52	70,70	28.00	25.00	25.00	2.50	2.49	2.52	2.
2001	2.52	2.52	3.30	2.52	3.50	3.80	4.00	4.00	2.52	2.52	2,51	2.
2002	2.51	2.52	2.52	2.52	2.51	2.51	3.18	45.00	2.51	2.45	2.50	2.4
2003	2.52	2.52	2.66	2.52	2.52	2,77	2.49	2.52	2.52	1.26	2.52	2.5
2004	2.54	2.52	2.54	1.40	2.52	2.52						

Table 1: Monthly Average 10 Min Non Sync Price in \$/MW

Note that the bid cap was imposed in the spring 2000, following the price rise in January – March 2000. While there have been periodic hours in which 10 Minute NSR prices have exceeded the \$2.52/MW price cap (as evidenced by the monthly max price in Table 1, above), most of these hours resulted from higher quality 10 Minute Spinning Reserves setting price for both 10 Minute Reserve products. The higher quality reserve (in this case 10 Minute Spinning Reserve) may set prices for both reserves in periods where there are constraints or deficiencies in the reserve markets.



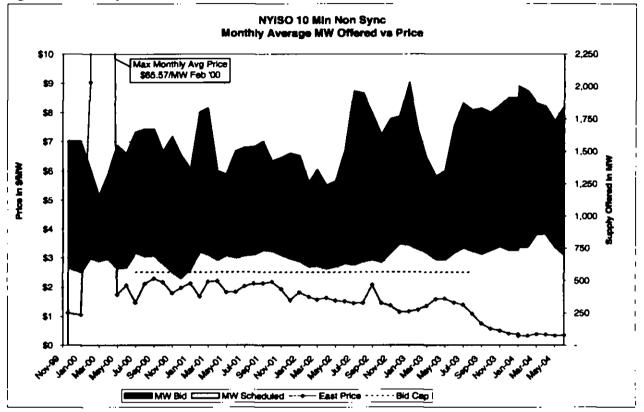


Figure 2 also depicts the overall reduction in 10 Minute NSR prices, particularly following the removal of the bid cap. This figure is a 30-day rolling average of the hourly 10 Minute NSR price, comparing prices for 2002 through year-to-date 2004.

Prices in the first part of 2002 remained above \$1.50 through much of the summer, with the exception of a price spike in August (for nine hours on August 15 and 16, 2002) when 10 Minute Spinning reserve set the price of total 10 Minute Reserve at \$45.00/MW. Excluding the price spike in 10 Minute NSR, the monthly average price for August '02 would have been \$1.55/MW. Prices in 2003 peaked in March – April at \$1.70/MW and have steadily declined to \$0.38/MW in December 2003. Since then, prices have remained below \$0.40/MW for the year. Prices in June have declined 75% since the lifting of the bid cap.

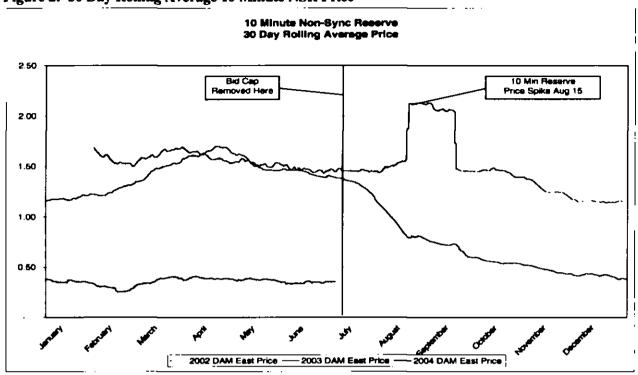


Figure 2: 30 Day Rolling Average 10 Minute NSR Price

Table 2, below, compares the monthly average 10 Minute NSR price between 2002 and 2004. In the last twelve months, the monthly average 10 Minute NSR price has decreased in each month relative to the previous year's monthly average for that month. The largest decreases have occurred in the final months of this analysis.

Table 2:	Monthly	Average 10	Minute	NSR Price
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l	<u>Mon</u>	thly Avg P	rice	Monthly Avg Price w/out Price Spikes				
	2002-'03	2003-'04	% Change	2002-'03	2003-'04	% Change		
Jul	\$1.47	\$1.09	(25.4%)	\$1.46	\$1.09	(25.2%)		
Aug	\$2.09	\$0.76	(63.8%)	\$1.55	\$0.76	(51.1%)		
Sept	\$1.46	\$0.58	(60.2%)	\$1.46	\$0.58	(60.2%)		
Oct	\$1.37	\$0.52	(62.3%)	\$1.37	\$0.52	(62.3%)		
Nov	\$1.15	\$0.41	(64.2%)	\$1.15	\$0.41	(64.2%)		
Dec	\$1.16	\$0.38	(67.2%)	\$1.16	\$0.38	(67.2%)		
Jan	\$1.22	\$0.33	(73.1%)	\$1.22	\$0.33	(73.1%)		
Feb	\$1.36	\$0.33	(75.5%)	\$1.36	\$0.33	(75.5%)		
Mar	\$1.60	\$0.39	(75.5%)	\$1.60	\$0.39	(75.5%)		
Apr	\$1.61	\$0.38	(76.6%)	\$1.61	\$0.38	(76.6%)		
May	\$ 1.48	\$0.34	(77.1%)	\$1.48	\$0.34	(77.1%)		
Jun	\$1.40	\$0.35	(74.7%)	\$1.39	\$0.35	(74.7%)		

Another measure of the health of the NSR market is the number of periods that prices reached and exceeded \$2.52/MW both prior and following the removal of the bid cap. An increase in the number of hours at or above \$2.52/MW could be attributed either to fundamental economic factors (such as scarcity) or to market power and would, therefore, warrant further investigation. However, a decrease in this frequency would tend to indicate that the removal of the bid cap has not allowed suppliers to exercise market power or otherwise manipulate the prices in this market.

For the period from July 1, 2003 to June 30, 2004, the 10 Minute NSR price has only exceeded the previous bid cap of \$2.52/MW (see Table 3, below) in the DAM for 3 hours, or 0.03% of the time. The same generator set the marginal price above the previous bid cap for the 3 hours with a bid of \$2.54/MW. Furthermore, during this period the price has equaled the bid cap for only 46 hours.

This compares to 93 and 28 hours the price equaled and exceeded the bid cap, respectively, for the same period in 2002-2003. This represents a drop in the number of hours that equaled and exceeded the bid cap by 50.5% and 89.3%, respectively.

Number of Hours the 10 Minute NSR Price Equalled or Exceed the Bid Cap of \$2.52/MW							
	Hours Equalled	Hours Exceeded	Hours Equaled & Exceeded				
July 2002 - June 2003	93	28	121				
July 2003 - June 2004	46	3	49				
Change	(50.5%)	(89.3%)	(59.5%)				

Table 3: Number of Hours Equal or Exceeding Bid Cap in DAM

This trend is further depicted graphically in the histogram in Figure 3, below. The histogram compares the number of hours or frequency of prices for July 2002 – June 2003 vs. June 2003 – July 2004. Notice the higher significant frequency of hours in the lowest price bins of \$0.60/MW or less for the last twelve months compared to the previous twelve.

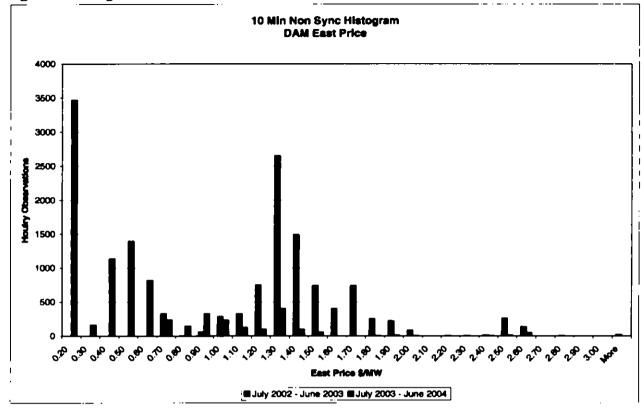


Figure 3: Histogram of 10-Minute NSR Prices 2002 - '03 vs. 2003 - '04

3.2 Hour Ahead 10 Minute NSR Prices

Because NYISO currently treats the ancillary service markets as a single settlement market,⁴ the majority of the 10 Minute NSR are contracted for in the DAM. This can be seen in the average price for 10 Minute NSR, where the bids of generators with Day Ahead schedules are passed to the HAM at \$0/MW. As such, the average HAM price for 10 Minute NSR is a fraction of the DAM price (see Figure 4, below). However, there are periods when, due to changing generator status or other circumstances, the NYISO will secure additional or replacement reserves in the HAM.

As such, MMP has also reviewed the HAM 10 Minute NSR prices. Unlike the consistent decreases in DAM prices, the monthly average HAM prices have fluctuated from July 2003 through June 2004. Of particular interest is the period November 2003 – January 2004, where HAM prices have increased relative to DAM prices. This is the result of 10 Minute Spinning Reserves setting the price for both 10 Minute Spinning Reserves and Non-Synchronous Reserves for some periods in the HAM.

⁴ Ancillary Services will become to a two-settlement market with the SMD implementation in the fall 2004.

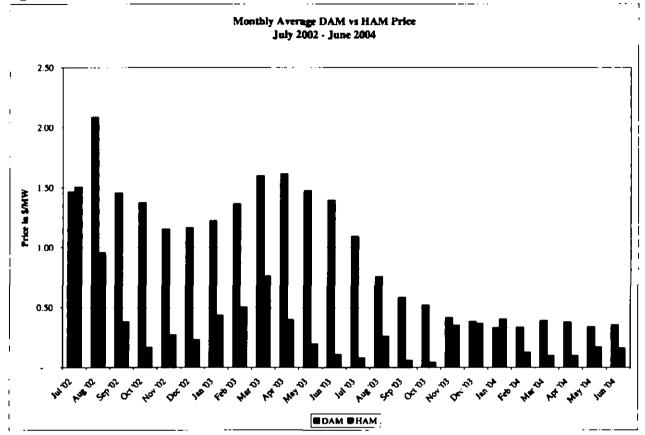


Figure 4: 10 Minute NSR DAM vs. HAM Price ⁵

While the number of HAM hours exceeding the previous bid cap of \$2.52/MW increased in the last 12 months (see Table 4, below) by 46.4% relative to the previous 12 months, this remains a small fraction of the total hours at 1.9% of the hours in the year. As mentioned previously, due to the interaction of the 10 NSR with the other reserves, it is possible that 10 Minute Spinning Reserve bids set the price for both markets during some of these periods, reflecting scarcity or constraints in the Total 10 Minute Reserve market.

Number of Hours the 10 Minute NSR Price Equalled or Exceed the Bid Cap of \$2.52/MW							
	Hours Equalled	Hours Exceeded	Hours Equaled & Exceeded				
July 2002 - June 2003	433	112	545				
July 2003 - June 2004	-	164	164				
Change	(100.0%)	46.4%	(69.9%)				

Table 4: Number of Hours Equal or Exceeding Bid Cap in HAM

⁵ The HAM price spike in April and July '02 was the result of prices being set by the total 10 Minute Reserves and not sustained higher prices in the HAM 10 Minute NSR.

Therefore, while there is evidence of generators setting price above the previous bid cap in the HAM, the fact that the majority of the ancillary service market is settled in the DAM and the infrequency of this occurrence in the HAM has minimized the impact on the overall competitiveness of the market. The few incidences when the HAM 10 Minute NSR prices exceeded the previous bid cap coincided with periods during which the entire 10 Minute Reserve market is constrained and the resulting higher prices correctly signal scarcity in the New York reserves markets.

3.3 Offer Prices for 10 Minute NSR

MMP has been actively reviewing changes in offer prices by 10 Minute NSR suppliers. The monthly average offer price⁶ has decreased by 13.7%, from \$1.82 to \$1.57/MW, over the period of July 2003 through June 2004.

Of the 59 separate units supplying 10 Minute NSR, only a few units increased their offer prices with the removal of the bid cap. In Figure 5 below, the increase in offer prices by selected groups of units are graphically compared to the average of the remaining suppliers (labeled "All Others" with the heavy blue line), the average for all supplier (labeled "Average" with the heavy red line) and the bid cap (the red dotted line). Most of the generators who have increased their bid prices have found they were no longer competitive in the 10 Minute NSR and have since decreased their bids.

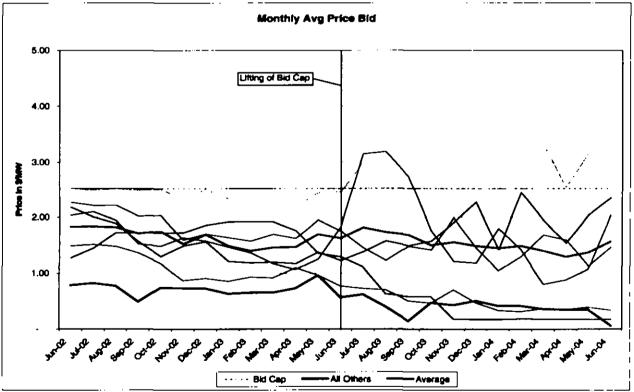


Figure 5: Monthly Average Offer Price for 10 Minute NSR

⁶ Note that some suppliers' bids for 10 Minute NSR prior to the bid cap removal may have differed from the summary in this report. The software employed by NYISO automatically replaced all 10 Minute NSR bids greater than \$2.52/MW with the bid cap. As such, some suppliers may have continued to submit bids greater than the bid cap prior to the removal and these offer prices are not available.

As noted in the introduction above, the removal of the bid cap is intended to give suppliers flexibility in bidding their units into the 10 Minute NSR market. Therefore, increases in offer prices, by themselves, do not demonstrate an ability to manipulate the market. The NYISO's MMP has specific criteria with which to evaluate increases in offer prices for the potential of withholding a unit economically. The criteria relied on by the MMP are detailed in the Market Mitigation Plan (Attachment H to the NYISO's Services Tariff) and are summarized below:

- 1. suppliers of 10 Minute NSR can increase their offer price by 300% of their reference price;
- 2. 10 Minute NSR bids below \$5/MW will not constitute economic withholding; and
- 3. the reference price is the *lesser* of the unit's average previously accepted bids in competitive periods over the last 90 days or the previous bid cap of \$2.52/MW.

Based on these criteria, units can hypothetically increase their offer price to \$10.08/MW.⁷ None of the offer prices since July 8, 2003 have exceeded the \$5/MW minimum threshold for possible mitigation, with the highest bid of \$5.00/MW occurring on March 26, 2004, HB 09 - 11.

Despite the increases in some suppliers' offer prices for 10 Minute NSR, only one unit units has set price above the former bid cap in the DAM, on one occasion, for a period of 3 hours, with a bid of \$2.54/MW. While this may in part be attributed to a more competitive market environment (as described below), some prices are also restricted by the NYISO's Tariff. Specifically, Long Island units cannot set price when a 10 Minute NSR constraint exists. In periods of constraints, the Long Island 10 Minute NSR price is replaced by the price settled for the East super zone. MMP has identified a small number of hours in which prices on Long Island in excess of the previous bid cap were superceded by the East superzone price.

3.4 Effects of Changes Implemented in the 10 Minute NSR Market

NYISO implemented some changes to the 10 Minute NSR market following the rise in prices in early 2000 and the later imposition of the \$2.52/MW bid cap. Many of these changes have corrected deficiencies used to manipulate the market. This section will review the impacts from the most significant changes made to the 10 Minute NSR market.

One of the first changes implemented was to require all Installed Capacity suppliers east of Central East to offer their capacity in the 10 Minute NSR market. As nearly 99.0% of the total 10 Minute NSR suppliers are located east of Central East, this mandatory offer requirement essentially requires all suppliers to make their capacity available to the market. This change has limited the ability of suppliers to physically withhold capacity from the 10 Minute NSR market in an effort to drive up prices.

Another change was to modify the NYISO software to allow NYPA's Bleinheim – Gilboa pump storage station to bid in the 10 Minute NSR market. Due to the nature of the operations of the Gilboa pumped storage station, it can provide large amounts of non-synchronized capacity to the market. Making this modification has increased the total capacity of the 10 Minute NSR market (east of Central East) by nearly 47%. This large addition of capacity has reduced the market power of the other suppliers of 10 Minute NSR market considerably.

⁷ Four times the bid cap of \$2.52/MW is equal to an increase of 300%.

4 Conclusion

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In conclusion, MMP has reviewed the 10 Minute NSR market for the twelve months following the removal of the bid cap. To date, there is no evidence of any suppliers exerting undue influence in the 10 Minute NSR market. This is confirmed by the fact that 10 Minute NSR prices have decreased to their lowest levels since the introduction of the NYISO markets in November 1999. While the removal of the bid cap is probably co-incident to the subsequent decrease in 10 Minute NSR prices, it certainly supports the analysis made previously by MMP staff and the Independent Market Advisor that there have been sufficient changes in the market rules to safeguard against the manipulation which characterized past behavior.

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

New York Independent System Operator Inc.

Docket No. ER03-836-003

NOTICE OF FILING

(July __, 2004)

Take notice that on July 8, 2004, New York Independent System Operator Inc. (NYISO) tendered for filing its second 10-Minute Non-Synchronous Reserve Market Report (Report). The Report is in response to Commission's July 1, 2003 Order Conditionally Accepting Proposed Tariff Revisions that was issued in Docket No. ER03-836-000.

Any person desiring to intervene or to protest this filing should file with the Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426. in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. All such motions or protests should be filed on or before the comment date, and, to the extent applicable, must be served on the applicant and on any other person designated on the official service list. This filing is available for review at the Commission or may be viewed on the Commission's web site at http://www.ferc.gov. using the eLibrary (FERRIS) link. Enter the docket number excluding the last three digits in the docket number field to access the document. For assistance, please contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll-free at (866)208-3676, or for TTY, contact (202)502-8659. Protests and interventions may be filed electronically via the Internet in lieu of paper; see 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's web site under the "e-Filing" link. The Commission strongly encourages electronic filings.

Comment Date: July __, 2004

Magalie Roman Salas Secretary

CERTIFICATE OF SERVICE

I hereby certify that copies of the New York Independent System Operator, Inc.'s transmittal letter and second periodic Review of the 10 Minute Non-Sync Reserve Market were mailed on this day to the parties appearing on the Secretary's official service list in this proceeding by first-class mail, postage prepaid.

Dated at Albany, New York, this 8th day of July, 2004.

Knhne

Alex M. Schnell New York Independent System Operator 290 Washington Avenue Extension Albany, New York 12203 518-356-8707