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April 23, 2002

Honorable Magalie R. Salas
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Room 1-A209
Washington, D.C. 20426

Re: NYISO and Consolidated Edison Company of
New York, Inc. Docket Nos. ER01-3155-000,
EL01-45-001 and ER01-1385-001

Dear Secretary Salas:

For filing please find the Comments 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) 486-2652.

Very truly yours,

Penny Rubin
Managing Attorney

Enclosure

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.)	Docket No. ER01-3155-000
)	
CONSOLIDATED EDISON COMPANY)	Docket Nos. ER01-1385-001
OF NEW YORK, INC.)	EL01-45-001

**COMMENTS OF THE NEW YORK STATE PUBLIC SERVICE
COMMISSION ON FILING REGARDING COMPREHENSIVE
MARKET MITIGATION MEASURES AND REQUEST FOR
INTERIM EXTENSION OF THE EXISTING AUTOMATED
MITIGATION PROCEDURE**

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Dated: April 23, 2002

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**COMMENTS OF THE NEW YORK STATE PUBLIC SERVICE COMMISSION
REGARDING COMPREHENSIVE MARKET MITIGATION MEASURES
AND THE NYISO'S REQUEST FOR INTERIM EXTENSION
OF THE EXISTING AUTOMATED MITIGATION PROCEDURE**

INTRODUCTION

On March 20, 2002, the New York Independent System Operator, Inc. (NYISO) proposed in a compliance filing a comprehensive set of Market Mitigation Measures (Comprehensive Mitigation Filing). With several qualifications, the New York State Public Service Commission (NYPSC) supports the NYISO's proposal. While maintaining incentives for new generation investment in New York, the proposed mitigation measures will significantly contribute to ensuring that rates are just and reasonable.

NYPSC also supports the NYISO's request to extend the existing automated mitigation procedure (AMP) beyond its expiration of April 30, 2002 in the event the Commission is unable to complete its review of the Comprehensive Mitigation Filing by that date. Pursuant to a Notice of Extension of Time, dated April 2, 2002, and Rule 214(d)(1) of the Commission's

Rules of Practice and Procedure (18 C.F.R. §385.214), the NYPSC hereby submits its comments. Copies of all documents and correspondence should be sent to:

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I. OVERVIEW

The NYISO'S ability to mitigate market power throughout New York State should be continued. It is generally acknowledged that during the transition from a highly regulated industry to an industry that has workably competitive markets, market participants may be able to take advantage of transmission constraints or peak period conditions to drive up prices substantially higher than would result from the normal operation of a competitive market. The challenge has been to create tightly focused mitigation rules so that administrative intrusion into the market is precise, accurate and infrequent and occurs only when necessary to ensure that prices remain just and reasonable.

Apart from New York City, New York's markets are generally competitive but there are times when supplies are tight - due to constraints or high demand - and the NYISO administered-markets become non-competitive. In those instances, a large player can

withhold supply and drive up prices significantly. Accordingly, the current statewide conduct and impact methodology should be continued (Point I).

New York City markets, on the other hand, are not workably competitive a significant amount of time, and, therefore, require different, carefully crafted mitigation measures. In such a constrained environment there may be only one to four suppliers providing energy within the various load pockets. Therefore, market power protections must be narrowly tailored to address this unique environment.

The NYPSC supports the NYISO's structural congestion approach as well as its proposal to use a two percent annual price impact curve for establishing the size of thresholds for New York City, with two conditions. First, the conduct and impact thresholds applicable in New York City during constrained hours should be capped at \$20 per MWh rather than at the statewide \$100 per MWh threshold. In a constrained area that is not workably competitive due to a paucity of generation, any cushion greater than \$20 is unreasonable.

While the proposed approach, with this change, strikes a reasonable balance between protecting consumers against unreasonably high prices and providing generators with additional bid flexibility and the financial incentive to construct new generation, it will raise prices in New York City.

Consequently, any arguments to raise the two percent curve should be rejected.

Second, the procedure used by the NYISO to administratively set reference levels must allow for an efficient regulatory audit process. Valid reference prices are critical to establishing effective mitigation, and, therefore, the Commission must be able to review the underlying data to ensure that the reference levels are just and reasonable (Point II).

Next, the proposal to replace the current 24-hour mitigation in the In-City Day Ahead Market (DAM) with a more limited proposal to mitigate only select hours could result in a failure to successfully mitigate economic withholding. If the NYISO is able to properly mitigate start-up and minimum generation bids, which it has not been able to do thus far, then the proposed change could be reasonable. However, the parties should be given an opportunity to explore impacts of the change. Until then, the proposal to limit mitigation to only select hours should not be approved (Point III).

Finally, continuation of the AMP, which eliminates the one-day lag associated with manual imposition of market power mitigation in the DAM, is a critical component of the mitigation plan. The Commission should approve the proposed AMP design change which would limit mitigation to specific location-based marginal price (LBMP) zones where it is needed. However, just

as it is necessary to study the proposal to eliminate 24-hour mitigation in the In-City DAM market, so too is it necessary to put on hold the NYISO's AMP proposal to limit mitigation in the DAM to select hours. Until the NYISO is able to implement its proposal to properly mitigate start-up and minimum generation bids, mitigation for only a few hours can fail to reverse market power exercised through economic withholding via high bids for start-up costs and minimum generation costs. The NYPSC opposes expanding the 50 MW exemption from AMP mitigation to cover all generation firms unless the NYISO can demonstrate, in a subsequent filing, that on extreme high load days during the summer, a 50 MW withholding raises prices by so little that it would not be profitable for a large firm to engage in such conduct (Point IV).

I. THE STATEWIDE MITIGATION PLAN SHOULD BE ADOPTED.

The NYISO's proposal to continue using relatively high bidding thresholds (\$100 per MWh) above target levels (reference prices) is acceptable for markets that generally are workably competitive. These measures continue to be necessary because at peak times when there is a shortage of supply, a large player can withhold supply and drive the price up significantly.

A. The NYISO's Proposed Statewide Mitigation Measures Reasonably Protect Against The Occasional Exercise Of Market Power In Areas Other Than New York City.

Market mitigation measures have been part of the NYISO-administered markets from the NYISO's inception. The Comprehensive Mitigation Filing continues the NYISO's conduct and impact approach to market power detection and mitigation by setting forth specific tests for market participant conduct and resulting market impacts that warrant mitigation.¹ The existing and proposed statewide mitigation measures strike the correct balance between market power protections and the need to encourage new generation investment and bidding flexibility.²

¹ The "conduct" test examines the bidding behavior of each market participant and assesses whether its bids exceed target levels determined by the application of a specified percentage (300%) or dollar (\$100 per MWh) threshold to a set of reference levels specific to each generating unit. The "impact" test examines whether bidding at levels exceeding the conduct threshold has caused market-clearing prices to increase by more than a specified dollar (\$100 per MWh) or percentage (200%) amount. If a seller's submitted bids trigger the applicable conduct and impact tests, then those bids are mitigated by replacing the submitted bids with bids at the applicable generator-specific reference level (Comprehensive Mitigation Filing at p. 9).

² The Comprehensive Mitigation Filing also proposes new thresholds for non-price bid parameters (for example, minimum run times and ramp rates) and to exempt energy and minimum generation bids below \$25 and operating reserve bids below \$5 from imposition of mitigation measures. We have no objection to these changes provided the 10 minute non-synchronous reserve remains capped at \$2.52 until the stakeholders have had the opportunity to explore the consequences of any changes (Comprehensive Mitigation Filing at p. 58; NYISO Market Administration and Control Area Services Tariff, Rate Schedule 4 at 5.3.1).

Consequently, for upstate, they provide an insurance plan on high load days when, for example, the Central-East interface becomes constrained and the NYISO must select generating units from the steep part of the supply curve.³ They should be adopted.

II. THE NEW YORK CITY MARKET, WITH ITS NINE LOAD POCKETS, IS NOT WORKABLY COMPETITIVE DURING TRANSMISSION CONSTRAINTS AND, THEREFORE, THE STATEWIDE MEASURES ARE NOT SUFFICIENT.

Upon divestiture of most of Con Edison's New York City generation resources, the New York City market was left with five major wholesale providers, which is an insufficient number of competing sellers to yield a competitive market when the New York City market is separated from the rest of the Northeast market by transmission constraints.⁴ Market power is also a threat within New York City whenever one of its subpockets is constrained, in which case as few as one generation owner

³ The NYISO should be directed to conduct a more thorough analysis of lowering the \$100 per MWh threshold and report back to the Commission and the parties. The analysis of the effect of the \$100 per MWh threshold on an annual basis masks the behavior on those days when the market cleared on the steep part of the supply curve (Comprehensive Mitigation Filing, Patton Affidavit at ¶¶ 25-27).

⁴ In July 2001, the Commission approved revisions to these mitigation measures through October 31, 2001, stating: "[T]he Commission had already agreed that in-City sellers may have market power when there are transmission and reliability constraints and supply outside of the constrained area cannot compete for the last increment of demand." Consolidated Edison Company of New York, Inc., 96 FERC ¶ 61,095 at 61,384 (2001).

controls the units that are available within the subpocket to meet the system's needs. More specifically:

- In the Astoria load pocket, there are only three owners, NRG and NYPA, who own only gas turbines, and Orion. When one of the Astoria sub-pockets binds, there is little that constrains their bids at the margin. Since energy within the subpocket is absolutely needed in high-load conditions, the owners clearly have power over the price. Similar conditions exist in Vernon and Greenwood.
- There are only three owners of steam electric units (Orion, NRG, and KeySpan) in the 138-kV pocket.⁵ Two of those firms (Orion and NRG) and NYPA own the peakers in this pocket. Thus, the pocket is structurally non-competitive whenever it is transmission-constrained and is vulnerable to market power when short-response units are needed.
- When New York City itself is constrained, the largest four owners possess market power and can raise prices well above competitive levels by bidding above the competitive price.

⁵ The 138-kV pocket encompasses about half of the City and contains most of the small subpockets within it.

Dr. David Patton, the NYISO's Market Advisor, confirms this assessment.⁶ According to his analysis, New York City's seven subload pockets have Herfindahl-Hirschman Index Values (HHI) that range from 3,700 to 10,000, far higher than the benchmark for a highly concentrated market, which is 1800. Consequently, if the NYISO's statewide criteria were to be applied to New York City, the generators in New York City could raise their bids to four times the competitive level and could be allowed to triple competitive benchmark prices without being mitigated.

Accordingly, the fundamental premise of the NYISO's statewide market-monitoring plan - that price levels will be determined by competitive forces under normal conditions - does not apply to In-City markets. Not only are they constrained a great deal of the time but there are an insufficient number of players within the pockets and subpockets.

In the long run, we expect that this situation will change. Mitigation measures are necessary to protect customers in the short term while we pursue long-term policies that will facilitate new entry of generation and transmission to permit

⁶ Patton Affidavit at ¶¶ 41-53.

the relaxation of the mitigation measures.⁷ However, until sufficient new transmission and generation are built, the proposed New York City mitigation regime is needed to protect consumers from unjust and unreasonable rates.

A. With Modifications, The Two Percent Curve Used To Establish In-City Conduct And Impact Thresholds Is Reasonable.

Arguments can be made that mitigation of bids to marginal costs (with zero thresholds) will yield sufficient revenue streams to attract new generation to New York City, but the extra costs to consumers resulting from the proposed NYISO's approach represents an investment to secure the future. It is a risk reducing strategy; it may turn out to have been unnecessary, but it is prudent to pay for such protection.

Consequently, we generally support the two-percent curve. This curve, however, must serve as an upper bound for establishing thresholds because prices in New York City will rise as a result of other proposed changes including the

⁷ The NYPSC has worked with the NYISO and its Market Participants to establish demand side bidding and emergency load curtailment programs. These programs and other demand reduction activities provided over 1,500 MWs of load relief at peak hours statewide during the summer of 2001. In addition, the New York State Board on Electric Generation Siting and the Environment (Siting Board) has approved three applications to construct electric generating units in New York City totaling 1,450 MWs and has received applications for three additional New York City projects totaling 1,582 MWs. Moreover, three companies have filed requests with the NYPSC to site new transmission linking New York City to outside markets.

modeling of the 138-kV system, the use of the NYISO's method for setting reference levels, and increased thresholds for In-City DAM mitigation. However, two modifications are necessary. First, the thresholds must be capped at \$20 per MWh; and second, the process by which the NYISO administratively sets reference levels, which have a direct effect on market clearing prices under certain conditions, must be amenable to review by the Commission to ensure that rates are just and reasonable.

1. The NYISO Has Justified The Two Percent Curve Provided The Conduct And Impact Thresholds Are Capped At \$20 Per MWh.

The NYISO is proposing to apply conduct and impact thresholds lower than proposed for the statewide plan whenever there is congestion on the interface into New York City (the "cable interface") or on the interface to the 138-kV system within the City or on an interface into a subpocket within the 138-kV system. The NYISO will determine the existence of congestion by the presence of a shadow price greater than a threshold value on the relevant interface.⁸

The NYISO proposes to set the In-City load pocket thresholds for conduct and impact according to a formula that is inversely proportional to the number of congested hours experienced over the preceding twelve-month period. The larger

⁸ The shadow price threshold value would initially be set at zero so that the lowered conduct and impact thresholds would activate whenever an interface becomes congested.

the number of hours that an interface into a pocket is constrained, the smaller the conduct and impact thresholds that govern mitigation within that pocket.⁹ This approach permits the In-City thresholds to automatically relax as the number of congested hours decreases in response to generation or transmission additions.¹⁰

The shape of any given curve in Attachment 1 is designed so that the annual average price impact of the thresholds associated with that curve is the same for any point on the curve. For example, at any point along the curve labeled "1% Annual Curve," the annual average price impact of the thresholds is one percent.¹¹ Each of the other curves contains a set of thresholds associated with a larger annual average price impact.

We support the two percent curve because it appropriately balances the generators' needs for bidding flexibility with the need to protect against unreasonable prices. As described

⁹ Attachment 1, Patton Affidavit, Figure 1 at p. 43.

¹⁰ Comprehensive Mitigation Filing at p. 41.

¹¹ The percent price impact value represents the difference, on an annual average basis, between the price that would result from mitigation that uses a given set of non-zero conduct and impact thresholds versus the prices that would result from a more stringent mitigation that uses zero thresholds. The curve represents the price impact associated with the use of non-zero thresholds, holding everything else (fuel prices, demand, etc.) equal.

below, the proposed changes to the New York City Plan will raise prices, and, therefore, the curve must not be higher.

However, the NYISO's proposal to permit conduct and impact thresholds to rise precipitously (up to \$100 per MWh) for load pockets in which the number of constrained hours per year falls to relatively low levels is too generous. These thresholds should not be raised above \$20, even if the number of constrained hours for a pocket is relatively small.¹² Since a constrained pocket in New York City is also a pocket where there are few players, generators can exercise market power to drive the price as high as the threshold allows.

Further, the \$100 threshold is far more generous than the Commission approved for PJM and permitted in the New York In-City Mitigation Measures approved in 1998. Under the PJM approach, transmission-constrained market bids cannot be raised higher than the generating unit's cost plus an additional ten percent.¹³ Using the same approach for New York, a ten percent adder would result in about a \$3.00 to \$10.00

¹² According to the NYISO's proposal, using the two percent curve, any pocket with fewer than 429 constrained hours in a year would have conduct and impact thresholds that exceed \$20 per MWh.

¹³ Amended and Restated Operating Agreement of PJM Interconnection, L.L.C., Schedule 1 at § 6.4.2.

threshold.¹⁴ Thus, the NYISO's \$100 threshold is many times greater than the PJM approach.

On the other hand, a \$20 threshold provides a bidding opportunity well above the costs of fuel and all other non-fuel costs. For example, if the reference price of a unit is \$50 per MWh consisting of \$30 in fuel and \$20 for all other costs, the \$20 threshold amounts to 100 percent over costs not covered by the reference price.¹⁵ Clearly, there is no rational basis to permit the thresholds to be as high as the NYISO proposes for New York City.

2. Reference Prices Must Be Audited To Ensure Rates Are Just And Reasonable.

The NYISO proposes that the methodology employed to estimate reference values for use in the In-City DAM mitigation be changed from the existing formula to the NYISO's reference value determination process when a unit does not have fifteen accepted bids over a 90-day period. The existing approach is a formula with defined inputs while the proposed approach permits

¹⁴ Using the marginal cost of New York's generating units which vary from about \$30 per MWh to about \$100 per MWh.

¹⁵ The reference level is adjusted to reflect the changes in the cost of fuel. Some generators have argued that the industry is still exposed to intra-day shifts in fuel prices on certain occasions; however, the ISO has an appeal process in place to deal with special circumstances like these.

the NYISO to use its discretion to adopt a reference value that deviates from the formula for any or all generators.¹⁶

There may be benefits to the proposed approach such as addressing legitimate problems with the existing formula raised by specific generators but discretion also raises the danger of an overstatement of reference levels by the NYISO. The overall impact of high reference levels on average prices was not as significant a concern when the NYISO's reference levels were used to implement the statewide mitigation approach for the real-time market (RTM) in New York City since the RTM accounts for only a small percentage of all New York City energy purchases. But now, with the NYISO's reference values being proposed for use by In-City DAM mitigation, overstated reference levels will lead directly to unjust and unreasonable rates.

Under the proposal, the NYISO acts as the factfinder and decision-maker, yet it hears arguments from only one side, the generator. Accordingly, such a process has an inherent bias toward higher reference prices since any contested components would involve the generator's allegation that a cost higher than the NYISO's estimate should be used. Controverting arguments for a lower price would not be made. Furthermore, a NYISO oversight that caused a reference level to be too low would be

¹⁶ Significantly, the proposal includes higher reference levels for new capacity for three years following commencement of commercial operation - which we support.

flagged by the generator and corrected, whereas a NYISO oversight that led to an overstated reference value would be left unchallenged.

Consequently, the Commission should require the NYISO to provide it with sufficient generator-specific information so the Commission can audit the results of the NYISO's determination. Most significantly, the audit is the only means the Commission has for determining that reference prices are reasonable in a non-competitive market.¹⁷

3. The Customer Impacts Of Proposed Changes Could Be Significant.

Three of the NYISO's proposed changes will put substantial upward pressure on prices: (1) load pocket modeling improvements; (2) the new methodology for determining reference levels; and (3) the use of non-zero thresholds for In-City DAM mitigation in lieu of the current zero thresholds. Upward pressure from the first two changes, if approved, will be felt immediately. As we explain in Section III, the third change to In-City DAM mitigation, which cannot be implemented until the software is developed, will be felt later.

¹⁷ 16 U.S.C. §§ 824d and 824e, and 5 U.S.C. § 51 *et seq.* See, Missouri Public Service Comm'n. v. FERC, 234 F.3d 36, 41 (D.C. Cir. 2000).

a. The Proposed Changes To New York City Load Pocket Modeling May Substantially Raise Competitive Market Clearing Prices.

At this time, the NYISO's real time software, the Security Constrained Dispatch (SCD) model, does not fully model and secure the New York City 138-kV load pocket or its smaller load pockets. The NYISO indicated that, as of the later of May 1, 2002, or upon Commission approval of the proposed In-City Mitigation Measures, its SCD model will be modified to correctly model these pockets. The improved modeling will have a direct effect on units that were called to operate out-of-merit (OOM) prior to the modeling change. The SCD Model will now be able to recognize when a unit is required within the pocket due to transmission constraints and its bids will become part of the regular dispatch and could set the market clearing price in that load pocket. As a result, all of the generating units in the constrained pocket will now receive the higher price associated with the unit on the margin in the pocket, whereas the current OOM approach provides the high price only to the unit(s).

With more accurate price signals in the load pocket, developers should have a better opportunity to make economic decisions regarding siting. Consequently, the NYPSC supports

the modeling change, even though it will also have an impact on buyers of New York City electricity.¹⁸

b. The Proposed Methodology For Setting Reference Levels May Lead To Higher Prices.

If a unit does not have 15 accepted bids over a 90-day period, the NYISO determined reference levels will be used during hours in which mitigation takes place and these reference prices can set the market-clearing price. The current methodology for setting reference levels for New York City generators in such a situation is to estimate the generating unit's marginal running cost, as determined by a formula. The current formula uses each generator's heat rate combined with a fuel price from a published fuel price index to estimate the cost of fuel per MWh. To this is added \$1 per MWh for variable operation and maintenance (O&M). The \$1 per MWh value is based on an embedded cost of service study used by Consolidated Edison when it sold its in-City generation. The formula makes no provision for environmental compliance costs.

The NYISO proposes replacing the current formula with the NYISO's own approach to determining default reference values, which, in most cases, is a reference value negotiated between

¹⁸ Buyers throughout New York City face a single zonal price that equals a weighted average of all the In-City generator bus prices. Since the prices at generator busses in constrained load pockets will rise as a result of the modeling change, there will be a concomitant rise in the zonal price that consumers face.

the NYISO and the generation owner. The negotiations would be loosely based on the NYISO's own formula for determining marginal running costs. This approach will permit O&M values that deviate from \$1 per MWh, adders for environmental emissions allowances, and other components. If the allegations that have been made by generators about the inadequacy of the current formula are embraced by the NYISO, then reference levels will increase significantly as the NYISO implements this new process. This, in turn, will raise prices.

c. Introducing Non-Zero Thresholds For Day Ahead Market Mitigation Will Raise Prices.

The NYISO proposes to raise the conduct and impact thresholds that govern the mitigation of the New York City DAM market from their current level of zero to a set of higher thresholds. These higher thresholds will cause an increase in prices. While this shift to non-zero thresholds for the DAM is proposed to take place sometime after the summer of 2002, it will, if approved, add to New York City prices.¹⁹

¹⁹ There are several other proposed changes that will partially offset the expected price increases, including In-City RTM thresholds which will be lower than the generic \$100 threshold currently in effect in New York City. Also, under the proposal, the In-City DAM mitigation measures will apply to all New York City generators, whereas now they apply to only the generators that were divested by Con Edison. These offsets should not outweigh the changes which will increase prices, particularly the substantial impact of the change in modeling of the load pockets within New York City.

4. Generators Will Not Be Harmed By The Two Percent Curve And The \$20 Threshold.

New York City generators have received the highest energy prices in the Northeast for 2000 and 2001. Capping a generator's bids at a given level does not cap the prices received by the generator. Generators receive the market-clearing price based on the highest accepted bids. Thus, all generators, but the one that is on the margin, receive more than their bids. Bid caps are based on a generator's marginal operating cost which can be well above its average operating cost due to the increased marginal O&M cost that can occur as the generator's output nears or exceeds its rated capacity. Even the marginal generator, then, may receive revenues greater than its average operating cost.

Additionally, scarcity pricing can lead to \$1,000 per MWh prices for generators during shortages, which provides far higher prices than generators' average bids for any given hour. This was evidenced on a statewide basis by the \$1,000 per MWh DAM price that occurred on August 9, 2001. When the New York State market as a whole experiences scarcity, the current mitigation measures did not act to undermine the market's ability to produce scarcity prices. The same principle should apply to load pockets in which the demand within the load pocket exceeds the amount that transmission can bring into the pocket and the amount of generation that is located inside the pocket.

Moreover, despite the use of Day-Ahead mitigation in New York City with zero thresholds for conduct and impact, high energy prices in 2000 and 2001 were driven by a number of factors. With the relative paucity of surplus in New York City, the old and inefficient gas/oil-fired generators were often relied upon to set market clearing prices. In addition, New York City generators benefited from Installed Capacity (ICAP) market prices that, despite mitigation, are also the highest in the nation. Further, we estimate that new entrants into the New York City market can expect a 15 percent to 20 percent return on new generation built in New York City.

Consequently, the NYPSC supports the \$20 conduct and impact thresholds that are derived from the two-percent curve to provide additional bidding flexibility and to provide even more assurance that firms will find it economical to build new capacity in New York City. However, any arguments to move the curve higher or to permit the \$100 threshold should be rejected as unreasonable.

III. THE IN-CITY DAY AHEAD MARKET PROPOSAL TO LIMIT MITIGATION TO SPECIFIC HOURS SHOULD NOT BE APPROVED UNTIL MARKET PARTICIPANTS HAVE AN OPPORTUNITY TO EVALUATE THE CONSEQUENCES.

The market participants met with the NYISO and its Market Advisor numerous times during the winter to work on New York City real-time mitigation and the AMP. The NYISO, in leading the meetings, explicitly noted that detailed discussions about In-

City Day-Ahead mitigation would not take place, and for the most part, they did not. The proposed changes to the DAM that were fully discussed and which the NYPSC does not oppose, are: 1) the use of NYISO reference levels in lieu of the default reference level formula in the current mitigation measures; 2) changing the trigger for in-City DAM mitigation from 105 percent to 107 percent of the Indian Point bus price; and 3) applying In-City DAM mitigation to all New York City units rather than just the divested units. These were referred to as either "DAM tweaks" or "interim adjustments" and were contained in the Concept of Operations drafts that were circulated to the parties.

However, the proposal in the Comprehensive Mitigation Filing to limit mitigation to only specific hours within a 24-hour day was not discussed in any detail during the working group process. The NYISO suggested that further meetings of the working group would be held after May 1 to work out the specifics of the conduct and impact threshold approach to mitigation for the In-City DAM.

It appears, however, that the NYISO intends to forego any such further working group discussions and move straight to implementation of the new in-City approach for the In-City DAM as soon as the software is ready. The Comprehensive Mitigation Filing states (at page 51):

Accordingly, as soon as the necessary modifications to the SCUC can be developed,

tested, and implemented, the NYISO will operate the AMP for In-City units in the DAM using the same congestion trigger and reduced conduct and impact thresholds as proposed for use in the in-City real-time market.

The Commission should reject the NYISO's approach. The interaction between the mitigation of selected hours in the DAM, the importance of minimum generation and start-up costs to the DAM, and the DAM's need to make unit commitment decisions makes DAM mitigation subject to design flaws. Only after the proposal is examined in the working group should it be subject to Commission review.

A. The Current 24-Hour Approach To In-City Mitigation Should Be Retained Pending Further Study By The Working Group.

It appears that the NYISO will abandon the 24-hour approach to mitigating the In-City DAM and replace it with hour-by-hour mitigation. Such a proposal could be flawed unless the interactions between the multi-hour economics of unit commitment and the hourly application of mitigation can be fully evaluated and discussed. Until such time, the Commission should maintain the existing 24-hour approach to In-City DAM mitigation.²⁰

²⁰ The actual workings of the in-City DAM mitigation have not revealed any problems with the 24-hour approach. Specifically, the allegations of some market parties that a few nighttime hours were often triggering the full 24-hour DAM mitigation were researched by the Market Advisor and were found to be incorrect (January 11, 2002 AMP/ICM Task Force Meeting).

The factors that need to be considered when mitigating in the DAM are different from mitigating the RTM. The economics of unit commitment takes place in the DAM but does not take place in the RTM. The unit commitment in the DAM considers start-up costs, minimum run times, minimum generation costs, and minimum generation quantities of each generator. A unit with a high cost of minimum generation will tend to be too costly to commit, and will, therefore, generally be instructed to stay off-line for the following day.

One strategy available to a supplier attempting to exercise market power via economic withholding is to submit high-priced bids for minimum generation so that the cost of committing the unit will be so high that the market will reject the unit. Such a strategy will drive up the price received by the other generators in the firm's generation fleet. For example, if a generator submits \$800 per MWh bids for the minimum generation of a unit that has a 12-hour minimum run time, the cost to the system of committing the unit would most likely be prohibitive. Consequently, the economic withholding of this unit causes a material price impact during two or three hours of the afternoon. Mitigation that applies a bid cap for only those two or three hours to lower the \$800 minimum generation bid would be ineffective in reversing the economic withholding strategy. Such an attempt at mitigation would leave intact the other nine

to ten hours of \$800 bids for minimum generation, and would therefore, completely fail. It would have no effect on the decisions of the SCUC model, and would therefore have no effect on the excessive market-clearing price that this exercise of market power would produce.

Therefore, to properly mitigate market power that is being exercised through minimum generation bids, the NYISO must mitigate the high prices of the bids for minimum generation for all the hours of a unit's minimum run time unless the working group is able to establish that the more limited mitigation will not result in market abuse in the other hours.

IV. THE COMMISSION SHOULD ADOPT THE AMP, WITH MODIFICATIONS, BECAUSE IT ELIMINATES MANUAL MITIGATION'S ONE DAY LAG.

The AMP is an important component of the NYISO's measures to protect against market power and should be continued. However, the NYISO's proposal to limit its implementation to certain hours²¹ should be postponed until start-up and minimum

²¹ The AMP currently mitigates on days in which a \$100 price impact from market power occurs in one or more hours, and on those days targets its mitigation to only the subset of the 24 hours of the day in which the market-clearing price exceeds \$150. Under the new proposal, the NYISO would further narrow mitigation to only the hours with the \$100 impact.

generation costs are included in the AMP.²² The proposal to exempt 50 MW of bids from mitigation for all generation owners should be rejected until the NYISO files a more convincing case for this change.

A. The Amp Is Necessary.

The main purpose of the AMP is to eliminate the delay of one DAM cycle inherent in manual application of the market mitigation thresholds. That delay can result in tens of millions of dollars of improper prices any time market conditions permit an exercise of market power. Accordingly, the NYPSC strongly supports continuation of the AMP.

Moreover, arguments in opposition to AMP should be rejected. Generators have argued that the instantaneous implementation of the AMP does not allow them to demonstrate to the NYISO that reference levels should be adjusted upward to account for changes in such factors as fuel prices. But that is not correct. Generators know their reference prices and if anything occurs that might change them, they can contact the NYISO. Indeed, actual practice has shown this to be an unfounded concern. The NYISO informed us that there were only two instances in the entire 2001 summer period when a generator requested that the NYISO adjust its reference price upward. In

²² We support the proposed geographic change which directs mitigation only to specific zones where it is needed.

both cases, after consultation with the generator, the NYISO accepted the request.

Parties may argue the AMP is superfluous if the proposed In-City Mitigation Measures are approved. This claim is also incorrect. For example, circumstances may cause the price at the Indian Point 2 bus to be as high as prices in New York City in which case the New York City mitigation measures will not be triggered. On August 2, 2001, the AMP was implemented in New York State (including New York City) to prevent market power while the In-City Mitigation Measures were not implemented. Consequently, the two measures are not duplicative.

Opponents of the AMP may argue that with the introduction of other bidding opportunities, such as price-capped load-bidding or virtual bidding, the AMP is no longer needed. This claim is similarly without merit. Both virtual bidding and price-capped load bidding can only limit DAM prices by shifting purchases to the RTM. This may simply shift the focus of market power abuse from the DAM to the RTM. Moreover, as has been well established, it is far superior for the vast majority of load to be purchased day-ahead so that the NYISO's optimization software can commit units and dispatch the system in a manner that is optimal both for the purpose of reliability and for the purpose of economics. Accordingly, getting pricing in the DAM right is paramount. If market power exists in the DAM and is not

mitigated appropriately, costly inefficiencies occur and prices in the RTM could be pushed upward.

Finally, despite assertions to the contrary, in both design and practice the AMP focuses only on high prices caused by market power and does not limit high prices caused by scarcity. Although prices reached or surpassed the \$150 threshold level on twelve days during the summer of 2001, the AMP intervened only four times. For example, for Hours 14 and 15 on August 9, 2001, the AMP did not mitigate even though the price actually hit the \$1,000 per MWh bid cap. Thus, high prices by themselves did not cause imposition of the AMP.

B. The Commission Should Reject The Proposal To Further Limit The Number Of Hours Of AMP Mitigation Until Start-Up And Minimum Generation Costs Are Subject To The AMP.

The NYISO proposal to limit the AMP to those hours in which there is a \$100 per MWh price impact should not be adopted until other important, and necessary, changes are made. As is discussed in Point III, the DAM has the important feature of being the market where unit commitment is decided. The economics of unit commitment can depend on the full 24-hour cost of starting a unit and running it at its minimum generation levels. In such a situation, mitigating only a few hours can fail to reverse market power that is exercised through economic withholding via high bids for start-up costs and minimum generation costs.

The Comprehensive Mitigation Filing does not propose to mitigate start-up and minimum generation costs in the AMP until after May 1 because software is not ready.²³ Thus, the appropriate way to proceed is to delay the implementation of the new temporal focusing feature proposed by the NYISO until such time as the AMP is capable of mitigating minimum generation and start-up cost bids.

**C. The Commission Should Reject The Proposed
50 MW Exclusion For Large Firms.**

Currently, firms are protected in three ways from the possibility that they will be unfairly mitigated: 1) their bids cannot be mitigated unless they are more than \$100 per MWh above the reference level (conduct threshold); 2) if they think their costs are more than \$100 per MWh above their reference level, they can call the NYISO and explain why the bid is legitimate even though it is above the threshold; and 3) if the bid is more

²³ The mitigation of start-up and minimum generation costs in the AMP was discussed in the NYISO's working groups more than a year ago and was thought by many parties to have been implemented for Summer 2001. Such mitigation was contained in the Concept of Operations document that formed the basis for AMP discussions by the parties in the spring of 2001 (Automated Mitigation Procedures, Concept of Operations (Con Op), NYISO, April 24, 2001, pp. 5-6). Parties were surprised to find out, only after the summer had ended, that the mitigation of start-up and minimum generation costs had not been implemented. The development of such mitigation was once again a prominent feature discussed by the working group this winter. Its implementation is once again contained in the most recent Concept of Operations. Yet, according to the NYISO's filing, the lack of appropriate software prevents its timely implementation for the upcoming summer.

than \$100 per KWh above the conduct threshold and the generator fails to call the NYISO, the bid will not be mitigated unless the cumulative impact of that bid and other similar bids on the market-clearing price is more than \$100 per MWh.

The NYISO has proposed in the Comprehensive Mitigation Filing yet another protection. The NYISO would exempt the generation portfolio of all market participants and their affiliates from AMP mitigation if the bids that violate the conduct threshold add up to less than 50 MW.²⁴ While such an exemption may serve a useful purpose in providing a small additional amount of bid flexibility to such large firms, this small benefit is outweighed by the potential consumer harm caused by withholding and the price increases that could follow.

It is not likely that withholding 50 MW would, on its own, cause a \$100 per MWh increase in the market clearing price, but such conduct may be able to cause a large enough increase in price to be a profitable action for a large owner of generation. The AMP was designed to target its application only to instances when the market clears on the steep part of the supply curve because it is precisely at such times that market power is most likely to be profitable to those attempting to exercise it. At such times, the steepness of the supply curve can cause a fairly

²⁴ This change would expand on the existing 50 MW exemption that applies only to small firms whose total megawatt capacity is less than 50 MW.

small amount of withholding to yield a significant increase in the market-clearing price. In such cases, several generators, all acting in their own self-interest (not colluding) could cause a significant impact on market-clearing prices. For example, for a firm that is selling 1000 MWh into the NYISO's spot market at \$150 per MWh, withholding 50 MW is profitable if it causes the market price to rise by \$8 per MWh or more.

On the record before it, the Commission cannot adopt the 50 MW exemption. The NYISO has not justified that this exemption will not affect the potential of large generators to engage in market abuse. Until such time as we have more experience with virtual bidding and price-capped load bidding, the Commission should not provide a 50 MW exemption for the large firms since they are the most likely to find the exercise of market power at such times profitable. However, if the NYISO performs simulations of the DAM during the upcoming summer to test the extent to which a 50 MW withholding of power would increase prices and finds that a 50 MW withholding does not raise prices enough to be profitable for a large firm, then the 50 MW exemption should be reconsidered.

CONCLUSION

For the reasons discussed above, the NYISO's market mitigation plan with the NYPSC-proposed modifications should be adopted.

Respectfully submitted,

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Dated: April 23, 2002
Albany, New York

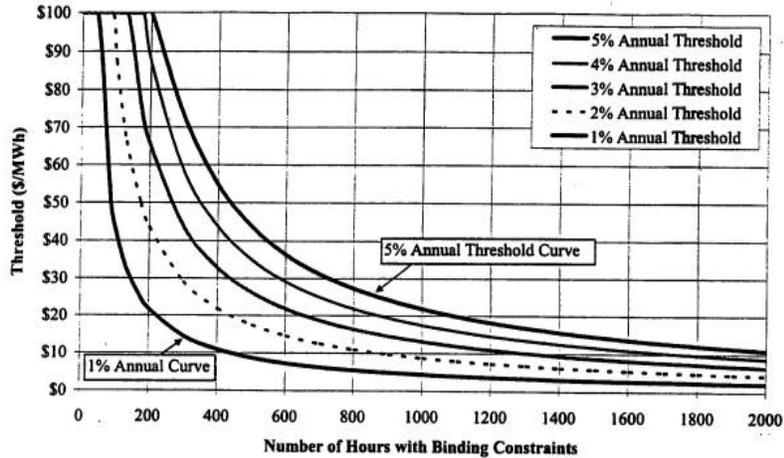
CERTIFICATE OF SERVICE

I, Jacquelynn R. Nash, do hereby certify that I will serve on April 23, 2001, the foregoing Comments of the Public Service Commission of the State of New York by depositing a copy thereof, first class postage prepaid, in the United States mail, properly addressed to each of the parties of record, indicated on the official service list compiled by the Secretary in this proceeding.

Date: April 23, 2002
Albany, New York

Jacquelynn R. Nash

Figure 1
In-City Conduct and Impact Thresholds
Alternative Scenarios



60. As the figure shows, when the number of hours in which a constraint is binding rises (raising the total exposure of the market to locational market power), the conduct and impact thresholds would be reduced to limit the overall exposure of the market to locational market power (e.g., the figure shows that the thresholds would be less than \$10 if congestion occurs in 2000 hours per year). Alternatively, when the number of hours in which a constraint is binding becomes relatively small, the thresholds would re-join thresholds for the rest of the market at \$100 per MWh. In addition, the higher state-wide thresholds would also apply in hours when constraints are not binding.
61. I recommend a 2 percent annual threshold as an appropriate balance between allowing justifiable fluctuations in bids versus protecting the market from unjustifiable exercises of market power. As described above, this 2 percent annual level represents the maximum possible price increase that could be sustained on an