103 FERC ¶ 61,291
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;
William L. Massey, and Nora Mead Brownell.

New York Independent System Operator, Inc.,	Docket Nos. ER01-3155-003
Consolidated Edison Company of New York, Inc.	ER01-1385-012, EL01-45-011

ORDER ON REQUESTS FOR REHEARING AND MOTION

(Issued June 5, 2003)

Summary

1. In an order issued May 31, 2002,[1] the Commission generally accepted several compliance filings made by the New York Independent System Operator, Inc. (NYISO) and Consolidated Edison Company of New York, Inc. (ConEd) that proposed a comprehensive market power mitigation plan for New York that includes an Automated Mitigation Procedure (AMP)[2]. On July 31, 2002, Dynegy Power Marketing, Inc. (Dynegy), Edison Mission,[3] KeySpan-Ravenswood LLC (KeySpan), and the NRG Companies[4] requested rehearing of various aspects of that order. KeySpan also filed a motion for the Commission to conduct a market power analysis. For the reasons set forth

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[1]New York Independent System Operator, Inc., Consolidated Edison Company of New York, Inc., 99 FERC ¶ 61,246 (2002) (May 31 Order).

[2]The Automated Mitigation Procedure is a computer program that reviews bids submitted by generators into the day-ahead market. The AMP does not change the reference prices or the conduct and impact criteria of the market monitoring and mitigation procedures. The AMP simply eliminates the 24 hour lag that occurs when these procedures are implemented manually.

[3]"Edison Mission" refers collectively to Edison Mission Energy, Inc. and Edison Mission Marketing & Trading, Inc.

[4]"NRG Companies" refers collectively to NRG Power Marketing, Inc., Arthur Kill Power LLC and Astoria Gas Turbine Power LLC.

below, the Commission generally denies rehearing, but grants KeySpan's motion in part. This order benefits customers by providing certainty to New York markets as further experience is gained with the market mitigation measures approved by the May 31 Order.

Discussion

General Findings

2. In the May 31 Order, the Commission found that NYISO's use of the conduct and impact tests in its market monitoring and mitigation is a practical compromise. The Commission continues to believe that NYISO reasonably attempts to distinguish between market power and scarcity, although the Commission recognizes that it is difficult to anticipate all market conditions in which the market monitoring and mitigation must operate and that adjustments to it in the future may be necessary based on additional operational experience.

Effect on New Generation

3. Under NYISO's proposal, in-City[5] mitigation measures will apply to new in-City generation and to net capacity additions by existing in-City generation owners for a period of three years following commencement of commercial operation. The Reference Prices for new generation will be set at the higher of: (a) Reference Prices as calculated under the method set forth for all units specified in the proposed market mitigation measures; or (b) the average of the peak Locational Based Marginal Prices (LBMPs)[6] over the twelve months prior to the commencement of operation of the new capacity. In the May 31 Order, the Commission found that NYISO's market monitoring and mitigation proposal has sufficient flexibility, as described above, in setting reference levels for new generation so that new entry is not unduly burdened.

4. KeySpan asserts that it makes little sense to build new capacity only to withhold it from the market. It further argues that the approved mitigation measures will reduce the ability to add new generation by the Summer 2003 capability period, since there will be no incentive for any market participant to accelerate a project in time for Summer 2003. KeySpan also maintains that NYISO has not shown that new generators will exercise

[5] In-City approximates the service area of ConEd.

[6] A Locational Marginal Price is based on the cost of the marginal MW of energy to required to meet load at a given location.

market power, that a potentially higher Reference Price for three years will cause any project developer to construct new generation, or that a new generator would be able to recover its costs under the proposed in-City measures, given that the New York Power Authority recently spent over $1000/kW to install combustion turbines on an expedited basis in New York City.

5. The NRG Companies maintain that, using reasonable specified assumptions, a new unit with capital costs of $981/kW and resulting need for $160/kW of fixed cost recovery per year that is not eligible for the new generation floor would under-recover its fixed costs by $59/kW per year under the NYISO in-City mitigation proposal, and by $43/kW if it qualifies for that floor. The NRG Companies conclude that one could arbitrarily use a different set of assumptions under which a peaking unit would recover its fixed costs. The NRG Companies further point to the pervasive shortage of peaking capacity within New York City as strong evidence that there is insufficient incentive to build new capacity.

6. We agree with the NRG Companies that there could be other reasonable assumptions that would result in different, albeit equally reasonable, conclusions. As for the pervasive lack of peaking capacity, we note that New York City has not had the proposed mitigation in place, so the lack of peaking capacity cannot be caused by the mitigation measures. Thus, we are not persuaded that the proposed mitigation plan is a barrier to market entry.

7. KeySpan continues to assert that the Commission should not have imposed any different Reference Price or Thresholds on new generation or capacity additions to existing generation in-City other than would be received under state-wide market monitoring and mitigation procedures. The Commission rejected this argument in the May 31 Order, finding that NYISO has sufficient flexibility in setting Reference Prices for new generation so that new entry will not suffer. KeySpan has submitted nothing on rehearing that would cause us to change this finding.

8. Edison Mission argues that the AMP only mitigates when prices are high, which, in zones outside New York City, can only result from a temporary shortage rather than market power. Edison Mission contends that in periods of shortage, the AMP reduces the ability of a supplier to earn a greater share of its expected return on investment to balance against the periods when there is a surplus. Edison Mission maintains that, over the long run, new suppliers thus will not come into the market and/or suppliers will leave.

9. Examining the data for August 7-9, 2001, Edison Mission witness Dr. Abram Klein notes that the average day-ahead price in the top six hours for these days was $129/Mwh, $226/Mwh, and $762 Mwh and argues that while the AMP was not triggered on these days, it is clear that the AMP and NYISO's market mitigation protocols prevented market prices from rising to competitive levels when they should have.

10. Edison Mission further argues that the Threshold[7] for use in constrained areas will be a barrier to entry since, under current assumptions as to price, the amount a generator could bid above its reference price would be less than $2.30/Mwh. It maintains that such revenues do not give new suppliers sufficient incentive to overcome New York City area prices for real estate, construction service and materials. It further asserts that the proposed three-year reference level floor unfairly favors technologies that have lower than average heat rates and disfavor combustion turbines, with their higher than average heat rates. The NRG Companies make a similar argument, asserting that under NYISO's proposal it is questionable whether a developer would recover its marginal costs or earn a reasonable return on its investment.

11. Edison Mission submits no evidence that NYISO's mitigation plan keeps prices from rising to competitive levels. Edison Mission admits that the average price for the top six hours of August 9, 2001, was as high as $762 Mwh, which means that some prices were even higher than that without triggering mitigation.

12. Edison Mission's argument that the reference price[8] is a barrier to entry is incorrect. Edison Mission fails to recognize that the price that the generators receive is not the reference, but the clearance price, which is generally much higher than the reference price. Additionally, generators may also receive revenues outside of the energy market, such as sales of Installed Capacity Obligations[9] There is no evidence that the

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[7]The Threshold is the amount in dollars or percent by which a bid may exceed the reference level before a bid is subject to mitigation review. When transmission is constrained in the in-City area, NYISO determines the amount of dollars by which a bid may exceed a reference price before triggering mitigation review by comparing the bid to a figure derived from two percent of the average price for generation in the preceding year times the number of hours in a year (8,760) divided by the number of hours in which transmission was constrained in the preceding year.

[8]A reference price is a proxy for marginal cost of a resource.

[9]New York Independent System Operator, Inc., 103 FERC ¶ 61,201 (2003).

clearance price prevents generators from recovering their marginal costs or earning a reasonable return on investment.

13. Although it is true that newer technology will receive a higher reference price than older technology, this will only result in potentially higher bids, and thus, higher clearing prices for all technology.

14. The NRG Companies also assert that the Commission erred in relying on NYISO's queue of generating projects as evidence that NYISO's proposal would create sufficient incentives for the introduction of new generation into the New York energy market, since the cost of being on that list is negligible and two significant projects on the list proposed by Reliant and Sithe have recently been postponed. Dynegy adds to the list of postponed projects the Heritage, Osego, Ramapo, Bowline, and Astoria projects. NRG Companies maintain that since the bankruptcy of Enron, the investment banking and finance community has turned a more critical eye on the energy supply business.

15. We find NRG Companies' assertion misplaced. In the May 31 Order, we found that the mitigation proposal was not a barrier to entry. We did not rely on NYISO's queue of generation projects for our conclusion that the mitigation proposal "has sufficient flexibility in setting reference levels for new generation such that new entry is not unduly burdened."[10]

Reference Prices

16. Under the AMP, in order to screen bidders' conduct for potential economic withholding, NYISO uses past accepted bids to set Reference Levels as the competitive benchmark (i.e., proxy for marginal costs). Once Reference Levels are determined for each bidding unit, economic withholding is identified by observing bids at specified dollar or percentage thresholds above a unit's Reference Level for the output corresponding to the bid.

17. KeySpan argues that the Commission should have ensured that Reference Prices provide for the recovery of the actual costs of running a generator, including provisions for the recovery of intra-day fuel costs, risk premiums, opportunity costs and other costs,

[10] May 31 Order at 62,052.

and that the Reference Price associated with an SRE or other similarly dispatched unit reflects the minimum run time for the unit[11].

18. The reference price is a benchmark price that NYISO compares to a bid to determine if there is a need for further review and possible mitigation. Since the reference price does not determine compensation, but rather merely serves as a reference point for review of a bid, KeySpan's argument is misplaced.

Conduct Test Thresholds

19. KeySpan argues that the Commission should have rejected NYISO's proposal to tie the level of the Threshold to the number of hours of congestion. KeySpan believes that this is an irrational methodology that is not closely linked to the exercise of market power. It maintains that this approach may actually reduce demand responsiveness to scarcity and at the same time reduce incentives to maintain high levels of unit availability when generators' bids are being mitigated.

20. KeySpan further maintains that the Commission should have required a separate computation of constrained hours for the day-ahead market and for the real-time market and thus different Thresholds, since these are different markets.

21. KeySpan argues that, when calculating a Threshold, the Commission should have used 5 percent of the average price for generation in the preceding year rather than 2 percent of that price.[12] KeySpan maintains that the use of a lower percentage of the average price as a trigger to initiate mitigation review prevents a generator from recovering its costs.

22. The linking of mitigation thresholds to the occurrence of congestion results in a process that is self-adjusting such that, as congestion is relieved by either generation, demand side response, or transmission, the tighter mitigation review lessens and, conversely, as congestion increases, increasing the opportunity for market abuse, the mitigation review tightens. We find that the use of 2 percent of the average price for generation in the preceding year to trigger mitigation review is a reasonable balance

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[11]The Commission has approved specific NYISO market mitigation measures, including reference prices and conduct and impact criteria. KeySpan's arguments regarding reference prices and conduct and impact criteria are a collateral attack on these orders. Central Hudson Gas & Electric Corp., et al., 90 FERC ¶ 61,317 (2000), clarified, 91 FERC ¶ 61,154 (2000). See also May 31 Order at 62,035-36.

[12]See note 8, supra.

between conflicting requirements. That is, it gives generators bidding in constrained areas flexibility to reflect legitimate changes in marginal cost while limiting undue exposure of the market to locational market power.[13] We note that there is as yet no experience with the in-City mitigation, as NYISO has not implemented the proposed in-City mitigation proposal. In the May 31 Order, we directed NYISO to "review and analyze the results of the new in-city measures within the stakeholder process after gaining sufficient experience in their operation."[14] KeySpan will have opportunity to address the adequacy of the 2% level when there has been sufficient experience with that threshold level. Without contrary experience with the 2% threshold setting, we decline to alter the May 31 Order at this time.

Application of NYISO's market monitoring and mitigation procedures to in-City Markets

23. On rehearing, KeySpan renews a number of the arguments made in its April 23, 2002 protest. First, KeySpan argues that mitigation at the in-City 345 kV level is unnecessary, since there is no evidence of market power when transmission into the 345 kV system is constrained. It cites the NYISO Market Monitor, Dr. Patton, for the proposition that the New York City price could be perfectly competitive but nonetheless higher than the prices outside the City. It states that its witness, Dr. Rudkevich, after examination of several scenarios, found that none of the generators in that market could exercise significant market power.

24. KeySpan further asserts that no evidence has shown that there is market power in the real-time in-City market, and that this market is too small and either too unpredictable or too easily hedged for generators to exercise market power in the absence of special conditions, which KeySpan has defined (on p. 3 of its May 9, 2002 answer) to include a Storm Watch, Out-of-Merit dispatch or a Supplemental Resource Evaluation (SRE).

25. In addition, Keyspan maintains that the Commission should have required all forecasted loads in the City to be bid into the day-ahead market, since it authorized mitigation in the real-time market. The Commission did not address the allegations that ConEd skews the market by under-scheduling load in the day-ahead market, thereby depressing prices below competitive levels, and then is not subject to the higher prices in the real-time market resulting from its underbidding through the mitigation imposed.

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[13] See May 31 Order at 62,048.

[14] Id.

26. The record before us does not support these arguments. The thrust of Dr. Rudkevich's analysis is that mitigation is not necessary. His analysis focuses on the ConEd mitigation measures. NYISO is replacing those mitigation measures with a comprehensive market power mitigation plan, which includes the AMP. Much of Dr. Rudkevich's analysis is, therefore, inapposite to the situation before us.

27. Dr. Rudkevich concludes that localized mitigation measures focused on subpockets created by transmission congestion in the in-City area will be sufficient to address the exercise of market power within that area. We find that the AMP takes exactly this approach. We find, therefore, that the AMP as proposed should be allowed to operate, pending the review discussed in the next paragraph.

28. In the May 31 Order, the Commission required NYISO to analyze the results of the new in-City measures within the stakeholder process after gaining sufficient experience in their operation. Consistent with that order and the discussion above, the Commission will require NYISO to file on or before December 2, 2004, a report on the operation of the revised market monitoring and mitigation procedures for the period between its approval by the May 31, 2002 order and the end of the 2004 summer capability period, September 30, 2004. That report shall analyze how well the market monitoring and mitigation procedures met their goals, how often it appeared to overmitigate, with what result in terms of how much bids and the market clearing price were improperly reduced, and what revenue effect this had on generators. Similarly, the report must indicate when the AMP apparently failed to indicate market power properly, what bids and prices should have been mitigated to what level, and the financial effect on purchasers. If necessary, NYISO should propose measures to correct both the tariff and the market monitoring and mitigation procedures.

Miscellaneous Objections

29. Dynegy argues that the AMP does not allow consultation with generators. Dynegy is incorrect. The AMP does not deprive sellers bidding into the NYISO market of their opportunity to consult with NYISO and explain their bids. The bidder may take the initiative to inform NYISO of extraordinary conditions affecting its bids. If bidders submit their bids early enough, they can consult with NYISO before mitigation may occur. Even if AMP operates, there remains the opportunity to consult and to explain that the bids represent market scarcity rather than the exercise of market power and that NYISO therefore should make the bidder whole.

30. Dynegy asserts that market mitigation makes it less likely that generators will contribute energy into the market by operating at above their normal operating limits.

Dynegy is incorrect. NYISO has special bidding procedures to accommodate the bidding of generation that operates above normal operating limits.[15]

31. Dynegy also argues that the AMP should not apply to megawatt levels above the UCAP[16] amount. It asserts that before the adoption of the UCAP methodology, a generator could essentially sell up to its Dependable Maximum Net Capability in the bilateral market or in NYISO-administered auctions. Dynegy contends that, with the shift to the monthly UCAP market, the amount of capacity that a generator can sell in the capacity market is discounted by its historical forced outage rate. Yet the amount of energy that a generator must bid into the day-ahead energy market subject to the AMP is the amount that it is capable of producing or its ICAP equivalent. Thus, the AMP is applied to more megawatts than a generator has committed in unforced capacity. Dynegy believes that in times of tight supply, when there is no UCAP recognition, high potential value to the system, and high operational risk to the generator, the generator should be able to bid levels above the UCAP amount without being subject to the AMP. Dynegy has a similar concern regarding the application of the AMP to generators that are not UCAP suppliers, e.g., where the capacity has been sold outside of the New York control area.

32. We disagree. NYISO's UCAP market is a capacity market, while AMP only operates in the energy market. AMP is designed to detect economic withholding in the market. NYISO states in its May 13 answer that there is simply no link between capacity market bidding obligations and mitigation of market power in the energy market. Further, NYISO states that any generator, including those with no reliability obligation, may be capable of economic withholding. We agree with NYISO's position.

33. KeySpan argues that the Commission should have directed NYISO to identify a market-based approach to minimize out of merit (OOM) dispatch of generators due to environmental limitations. KeySpan may be seeking a bid-based merit dispatch. If so, it is overlooking the fact that generators can only operate within their environmental limitations. We assume that NYISO takes environmental considerations into account when it dispatches generation.

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[15]New York Independent System Operator, Inc., 96 FERC ¶ 61,225 (2001).

[16]Unforced Capacity or UCAP is a measure of the total capacity a specific generator may reliably supply to the installed capacity (ICAP) market under given conditions.

34. KeySpan further maintains that the Commission should not allow NYISO to continue to use the ConEd mitigation in-City without further modification. KeySpan would have required NYISO to limit mitigation of prices in the day-ahead market only to the hour in which the in-City LBMP is greater than 107 percent of the LBMP at Indian Point 2,[17] rather than in all twenty-four hours of the day-ahead market, as the current ConEd mitigation measures allow. We will direct NYISO to either correct this situation within 60 days or explain why it cannot resolve this problem.

35. KeySpan asserts that the Commission should have required NYISO to develop procedures to inform bidders when mitigation is in effect, and should have required additional monitoring of ConEd's OOM dispatch requests. In its May 13, 2002 answer to KeySpan's protest, NYISO argues that if any market participant desires additional information regarding OOMs, such a request should be brought to the stakeholder process for consideration, just like any other information posting request. The Commission agrees that, in the first instance, the stakeholder process is the appropriate forum in which to explore the issue of what additional information regarding OOMs should be provided and how.

36. KeySpan proposes that the Commission direct NYISO to inform bidders when mitigation is in effect. This would be impossible, because it is the bidding behavior that triggers mitigation review; mitigation review always occurs after bidding. We will not, therefore, adopt KeySpan's proposal.

Alternatives to AMP

37. Dynegy asserts that NYISO has stated that virtual bidding would alleviate any residual market power, rendering market interventions such as AMP superfluous. Similarly, Edison Mission renews its argument that call options may be an antidote for significant and sustained market power. The Commission rejects the proposals of Dynegy and Edison Mission concerning virtual bidding and call options to the extent that

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[17]NYISO has selected 107 percent of Locational Base Marginal Price (LBMP) at the Indian Point 2 facility as a proxy for competition. No one questions this selection. The only issue is whether, if there is mitigation as a result of a bid's exceeding 107 percent of the LBMP at the Indian Point 2 facility, the mitigation should occur only in the hour in which the bid exceeds the proxy or whether it should continue for the entire day, thus shutting the bidder out of the day-ahead market for that day. NYISO agrees that the mitigation should only occur for the hour in which the bid exceeds the proxy, but has not yet addressed the problem.

they are offered as a complete substitute for the AMP. While virtual bidding and call options may assist in the operation of competitive markets, they do not cure persistent market power, since no virtual bid or call option based on a competitive price will be executed if the underlying supply (or demand) is constrained in a market where individual suppliers or buyers have substantial market power.

Previous Operation of AMP

38. Dynegy also argues that the AMP has not worked properly in the past, and that the one claim of actual market power abuse was disproved. Dynegy refers to its October 19, 2001 protest (at 12 -15) in Docket No. ER01-3155, in which it described how on August 8, 2001 it submitted bids below the applicable threshold for its two Roseton generating units into the August 10, 2001 day-ahead market. On August 9, NYISO notified Dynegy that it had mitigated several bids, and later, after Dynegy's inquiry, stated that the mitigation was a mistake, but did not explain the mistake until an October 9, 2001 NYISO Working Group meeting. At that meeting, NYISO asserted that the AMP worked as designed but that there was an error outside of the AMP process. Dynegy further states that, contrary to the assurance NYISO provided to the Commission, as of the date of its protest NYISO had not paid Dynegy its full bids even though it had determined that the bids were not an attempt to assert market power.

39. Consistent with the NYISO Services Tariff, Dynegy submitted the August 8, 2001, mitigation to arbitration and received an award of almost one million dollars. That award is before the Commission in Docket No. EL03-26-000. Since the events of August 8, 2001, NYISO has improved the AMP to ensure that the error will not reoccur.

Procedural Arguments

40. Edison Mission asserts that NYISO's March 20 comprehensive filing was not a filing under Section 205 of the Federal Power Act (FPA) because NYISO Management Committee approval was not sought nor given for the various tariff revisions. Nor, continues Edison Mission, can such a fundamental reorientation of the NYISO markets be cast merely as a compliance filing. Edison Mission further maintains that since the filing is neither a Section 205 nor a compliance filing, the Commission must find that the pre-AMP tariff was unjust and unreasonable and determine that the proposed revisions are just and reasonable.

41. The Commission has complied with the requirements of the FPA in processing NYISO's filing. NYISO's March 20 filing is a compliance filing. It is true that it is a compliance filing of unusual breadth, in response to an order that allowed for substantial

discretion on the part of NYISO. But it is a compliance filing just the same, since the Commission orders issued November 27, 2001[18] specified in substantial detail what was to be contained in NYISO's filing. In any event, the Commission was authorized under Section 206 of the FPA to accept NYISO's filing. NYISO's filing as applied outside of the New York City area was largely a continuation of the existing market monitoring and mitigation procedures. Where modifications were proposed, the Commission found that the existing provisions had certain flaws, and thus were unjust and unreasonable, and that the proposed revisions were just and reasonable. NYISO did propose a major modification in applying the AMP in-City, but here too the Commission was authorized to approve the modification under Section 206 because the existing in-City mitigation overmitigated, and accordingly was unjust and unreasonable, while the AMP is just and reasonable in that it will provide a much closer match between market power and mitigation in-City.

42. Edison Mission also argues that the Commission erred in accepting the AMP as a permanent measure. It believes that the Commission should only do so when there is evidence of significant and sustained market power.

43. The Commission rejects this argument. The Commission did not accept AMP as a permanent measure. Rather, it explicitly allowed for modification by the Standard Market Design proceeding and for further review by NYISO and its market participants, which the Commission in this order is specifying in further detail. If the NYISO markets outside of New York City are and continue to be as competitive as Edison Mission maintains, the AMP should not be triggered and should have virtually no impact on the markets. If Edison Mission is arguing that the AMP will trigger during competitive conditions, it has not made its case. But if this happens during operation of the AMP, the Commission will require appropriate modifications.[19]

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[18]Consolidated Edison Company of New York, Inc., 97 FERC ¶ 61,241 (2001), New York Independent System Operator, Inc., 97 FERC ¶ 61,242 (2001) (the November 27, 2001 Orders).

[19]The Commission has approved AMP procedures for California and has requested comments on whether market power mitigation procedures applicable to all regions should include automated mitigation of the type adopted in New York and California. California Independent System Operator Corporation, 100 FERC ¶ 61,060, order on reh'g, 101 FERC ¶ 61,061 (2002); Remedying Undue Discrimination Through Open Access Transmission Service and Standard Electricity Market Design, FERC Stats and Regs ¶ 32,536 at 34,366-69 (July 31, 2002).

KeySpan's Motion for a Market Study

44. In the motion it filed in conjunction with its request for rehearing, KeySpan maintains that the Commission should undertake a comprehensive study of the in-City market to gather data and assess the potential for market participants, including Load Serving Entities (LSEs), to exercise market power as it implements standard market design (SMD). On September 20, 2002, Key Span withdrew its request for a Commission study of the in-City market. We will grant its motion to withdraw its request for a study of the in-City market.

The Commission orders:

(A) The requests for rehearing are hereby granted in part and denied in part as discussed in the body of this order.

(B) NYISO is hereby directed to file, on or before December 2, 2004, a report on the operation of the revised market monitoring and mitigation procedures for the period between its approval by the May 31, 2002 order and the end of the 2004 summer capability period, September 30, 2004.

(C) NYISO is hereby directed to either correct the mitigation in the in-City market to mitigate only in the hour that the clearing price exceeds the threshold of 107 percent of the Indian Point 2 LBMP within 60-days or explain why it cannot resolve this problem.

(D) KeySpan's motion to withdraw its request for a study of the in-City market is hereby granted.

By the Commission.

(S E A L)

Magalie R. Salas,
Secretary.