

103 FERC ¶ 61, 201  
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 No. ER03-647-000

ORDER CONDITIONALLY ACCEPTING FOR FILING TARIFF REVISIONS

(Issued May 20, 2003)

1. In this order, the Commission accepts for filing, with modifications, revisions that incorporate into the New York Independent System Operator, Inc.'s (NYISO's) Market Administration and Control Services Tariff (Services Tariff) an Installed Capacity (ICAP) Demand Curve in the ICAP market. The Commission finds that the proposed modification to NYISO's ICAP market will benefit customers because it will provide better price signals to investors for the construction of new generation, encourage the formation of long-term bilateral transactions, and reduce incentives to withhold capacity.

**Background**

2. On March 21, 2003, NYISO filed a proposal to modify the rules governing the requirement for load serving entities (LSEs) in New York to procure installed capacity (ICAP). Currently, according to NYISO, each load serving entity (LSE) must procure resources equal to 118 percent of its peak load,<sup>1</sup> and each LSE is assessed a fixed deficiency charge of 3 times the annualized cost of a new peaking unit per MW for each MW that it is deficient.<sup>2</sup> Under NYISO's proposal, the ICAP requirement would no longer be fixed at 118 percent of peak load. Rather, it would vary depending on the

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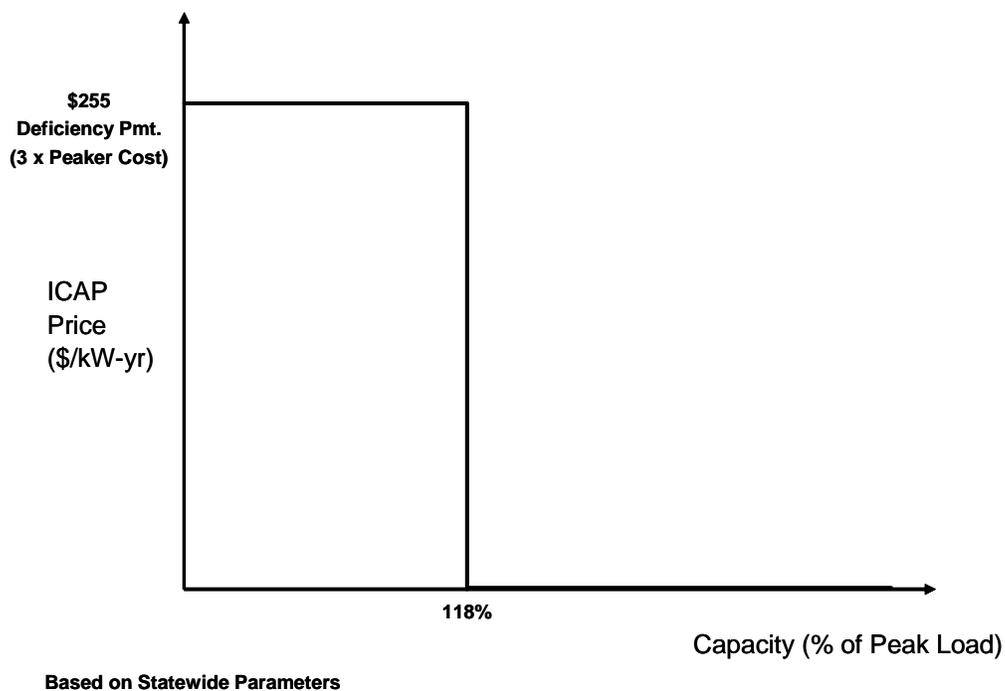
<sup>1</sup>This minimum statewide capacity requirement was established by the New York State Reliability Council. In addition to the statewide minimum requirement, New York City and Long Island have locational ICAP requirements of 80 percent and 95 percent of their peak load levels, respectively, which must be met with resources located within those areas.

<sup>2</sup>LSEs may meet their capacity requirements by self-supplying from their own resources, with capacity acquired through bilateral contracts, or by purchasing capacity through the NYISO's deficiency procurement auctions.

market price for ICAP determined using a "Demand Curve for ICAP" in a monthly auction. In addition, the current fixed deficiency charge would effectively be replaced with a variable charge equal to the ICAP price that results from the monthly auction, and would decrease as the quantity of ICAP offered into the market increases.

3. NYISO proposes to replace the existing rules for ICAP because those rules have created a market that can produce volatile prices and does not signal investment beyond the minimum ICAP requirement. NYISO also believes that the proposed changes will increase investment. NYISO argues that the current rules for ICAP yield a market value of installed capacity above the minimum 118 percent requirement near zero, and below the requirement at the deficiency price. The reason is that LSEs must pay the deficiency

**Figure 1**  
**Current NYISO ICAP Demand Curve**



charge if they purchase less capacity than the 118 percent requirement, but pay no penalty for procuring capacity above the 118 percent requirement. In other words, market participants experience a vertical demand curve at 118 percent of capacity (See Figure 1).

4. The NYISO believes that this vertical demand curve discourages new generation investment and increases volatility in energy markets. The volatility occurs because the

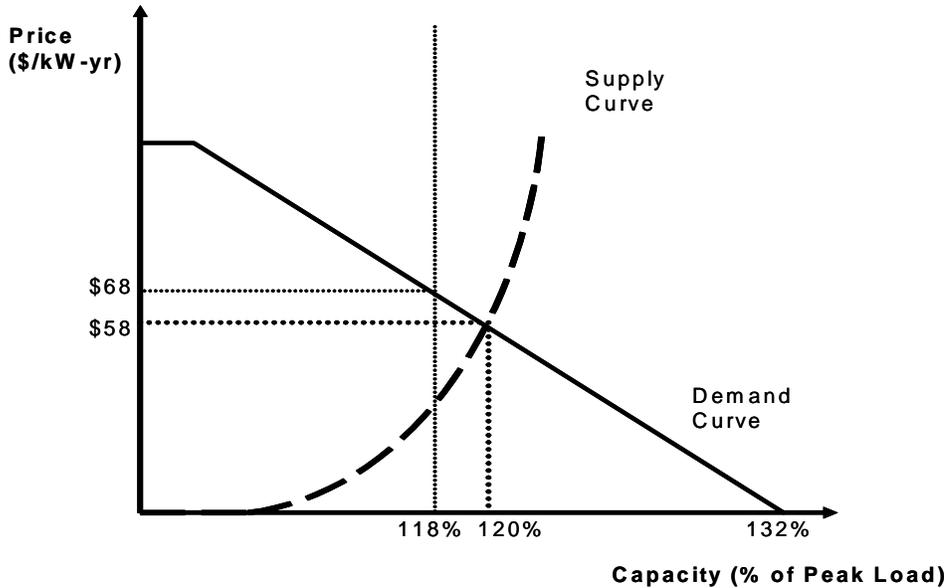
market value of ICAP rises above \$200 per kW-year (the deficiency charge, which is three times the cost of a new peaking unit) when aggregate ICAP supply is less than the 118 percent requirement, and falls to near \$0 when aggregate ICAP supply exceeds 118 percent. This volatility increases risk and reduces the ability of new generation to obtain financing. The NYISO explains that financing for new generating facilities in New York has become scarce because investors do not perceive a reasonably reliable stream of revenues destined for those facilities. As a result, the rate of capacity additions has not kept up with needs and there is the potential for a capacity deficiency.

5. The proposed ICAP Demand Curve would replace the vertical demand curve with a sloped demand curve, and would be used to determine both the amount of the ICAP requirement as well as the market price for ICAP. The NYISO proposes that, at a capacity of 118 percent of peak load, the demand price would be set equal to the annualized cost of a new peaking unit for each area.<sup>3</sup> The demand price would gradually fall for amounts of capacity beyond 118 percent of peak load until, at 132 percent of peak load, the demand price would be \$0. In addition, the demand price would gradually rise above the annualized cost of a new peaking unit for levels of capacity below 118 percent of peak load to a maximum of about two times the annualized cost of the new peaking unit. (See Figure 2 for NYISO's illustrative Demand Curve).

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<sup>3</sup>There are 3 areas: Long Island, New York City, and the rest of New York state.

**Figure 2**  
**Proposed NYISO ICAP Demand Curve**  
**(Illustrative)**



**Based on NYPSC Graphic; Statewide Parameters**

6. The proposed ICAP Demand Curve would be used in monthly ICAP spot market auctions, which would replace current LSE bids in deficiency procurement auctions. The ISO would account for bilateral contracts and self-supply in its assessment of the aggregate supply of ICAP. The NYISO would use the ICAP Demand Curve and the results of the monthly ICAP supply (or bid) auction to define the amount of Installed Capacity each LSE must obtain for the following month (which can be no less than the 118 percent minimum capacity reserve requirement). The Demand Curve will phase-in

over a three year period such that in year one, the Demand Curve reflects a cost less than the cost of entry. In years two and three the Demand Curve will pivot up to the point at which it reflects the full cost of new construction.<sup>4</sup> The proposed Demand Curve is based on a phased-in cost of new entry over three years to ameliorate rate impacts.

7. Suppliers of ICAP resources would bid into the ICAP market. LSEs that have procured ICAP resources in advance would also offer their resources into the ICAP auction market. The aggregate ICAP requirement and the associated ICAP price would be established at the point where the supply curve of bids crosses the ICAP Demand Curve. Thus, it is possible that the ICAP obligation could exceed 118 percent of peak load, unlike under the current system.<sup>5</sup> The Demand Curve has been designed so that the total cost of purchasing quantities in excess of the 118 percent Reliability Requirement in the spot market does not exceed the total cost of purchasing the 118 percent Reliability Requirement at the ICAP Demand Curve price in the spot market.<sup>6</sup> All ICAP resources accepted in the auction, including resources offered by LSEs, would be paid the applicable market-clearing ICAP price. All LSEs would pay the applicable market-clearing ICAP price for the amount of their requirement. The ICAP price effectively becomes the "deficiency charge" per MW for the net amount of required ICAP resources that an individual LSE has not procured in advance of the auction.<sup>7</sup>

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<sup>4</sup>The ICAP Demand Curve will be established at the following points for each area: rest of state \$56.24/kW-yr and \$67.49/kW-yr for years one and two respectively; Long Island at \$104.37/kW-yr and \$123.94/kW-yr; and New York City using \$127.89/kW-yr and \$151.14/kW-yr. In the third year, the costs assigned to the NYCA minimum ICAP requirement will be defined by the results of the independent review conducted pursuant to Section 5.14.1(b).

<sup>5</sup>For example, if the market clears at 120 percent, each LSE would be required to procure ICAP resources equal to 120 percent of its peak load. Any LSE that had procured less than 120 percent prior to the auction would be required to purchase the difference at the monthly auction's ICAP price, and any LSE that had procured more than 120 percent would be paid the auction price for the excess. This assumes that LSEs purchase 100 percent of their requirement in the auction.

<sup>6</sup>For example, the Demand Curve has been established so that the total cost of purchasing 120 percent at the specified price would be less than the total cost of purchasing 118 percent at the resulting price.

<sup>7</sup>The NYISO filing states (at page 9 of the Transmittal Letter, and on Fourth  
(continued...)

8. NYISO proposes an additional feature for instances where the monthly auction clears at less than 118 percent of peak load. That is, each LSE would be assessed an additional charge - called the Supplemental Supply Fee - for its deficiency in ICAP resources below 118 percent. The per MW supplemental supply fee would be 1.5 times the cost of a new peaking unit. The NYISO would use the revenue collected from the supplemental supply fee to purchase (outside of the auction market) additional ICAP resources so as to meet a 118 percent target. Resources purchased out-of-market could receive payments of up to 1.5 times the auction's clearing price. Thus, resources sold outside the auction could receive higher payments than those sold in the auction.

9. The potential benefits include: enhancing system and resource reliability; promoting greater stability in the ICAP market, resulting in more effective price signals for new investment; and a reduction in the frequency of price spikes in the energy and ancillary services markets. The NYISO expects that movement to long-term equilibrium levels of capacity will be relatively rapid, and that, once reached, consumers are likely to realize significant savings compared to what could be expected under the current system. The NYISO estimates that increasing capacity in New York by 1 percent would result in average savings for consumers of \$100 million per year.

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<sup>7</sup>(...continued)

Revised Sheet No. 153 of Volume 2 of the NYISO Tariff) that the ISO will accept offers to supply capacity into the ICAP auction from LSEs to the extent that the LSE's own capacity is in excess of their minimum capacity requirement. This statement seems to suggest that the supply curve in the ICAP auction will exclude ICAP resources procured by an LSE in advance of the auction that would be needed to meet the LSE's minimum ICAP requirement. However, the proposed demand curve used in the ICAP auction would reflect the total ICAP requirements at various price levels. The ICAP capacity requirement is proposed to be determined in the monthly ICAP auction, at the point where the ICAP supply curve crosses the ICAP demand curve. If some of the ICAP resources procured by an LSE in advance of the auction were to be excluded from the auction, the LSE would be forced to buy its full ICAP requirement through the auction, despite the fact that it had procured some of its requirement in advance of the auction. This would not be a reasonable result, and we do not think that this is the result that NYISO intended. Therefore, we will direct NYISO to revise its Tariff to clarify that ICAP capacity procured by an LSE in advance of the monthly auction will be counted towards meeting its ICAP requirement as determined through the monthly ICAP auction, and to revise the description of the auction process as necessary to achieve this result.

10. The proposal includes tariff revisions that describe the role of market monitoring in implementing the ICAP Demand Curve, and requires a periodic independent review of the Demand Curve every three years to determine whether adjustments are warranted. The NYISO requests that the Commission expedite its review of the filing to permit the proposed changes to be implemented prior to the upcoming Summer Capability Period. Thus, it seeks an effective date of the date the Commission issues an order accepting the proposal, or May 21, 2003, whichever is earlier.

### **Notice of Filing, Interventions and Protests**

11. Notice of the NYISO's filing was published in the Federal Register, 68 Fed. Reg. 16,014 (2003), with motions to intervene and protests due on or before April 11, 2003. Timely motions to intervene were filed by the entities listed on Appendix A. New York State Electric & Gas Corporation and Rochester Gas and Electric Corporation (Energy East) filed a joint motion to intervene out-of-time. The Pennsylvania Public Utilities Commission (Pennsylvania Commission) also filed a motion to intervene out-of-time. Energy East along with Consolidated Edison Company of New York, Inc., and Orange and Rockland Utilities, Inc. (collectively, the Utilities) jointly filed an answer (Joint Answer) in response to comments filed in support of the proposal, and NYISO and the New York Public Service Commission (NYPSC) filed answers responding to the protests. KeySpan-Ravenswood, LLC (KeySpan) filed a motion to strike the Joint Answer, arguing that it merely repeated the arguments in the parties' protests. The Utilities responded to the motion to strike.

### **Discussion**

#### **Procedural Matters**

12. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2003), the timely, unopposed motions to intervene of the entities listed on Appendix A make them parties to this proceeding. Given their interest in this proceeding, the early stage of this proceeding, and the absence of any undue prejudice or delay, we will grant Energy East's and the Pennsylvania Commission's motions to intervene out-of-time for good cause shown. Although Rule 213 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213 (2003), generally prohibits answers to protests or comments, we will accept NYISO's and the NYPSC's answers and the Joint Answer because they assist our understanding of the issues raised in this proceeding. Accordingly, we will reject KeySpan's motion to strike.

### Overview

13. We will accept the proposal, with the modification described below, to become effective May 21, 2003. We agree with the NYISO that the proposal will encourage greater investment in generation capacity and thus improve reliability, by reducing the volatility of ICAP revenues. We also agree with the NYISO that the proposal, with the modification described below, will reduce the incentive for suppliers to withhold ICAP capacity from the market. We also find here that the ICAP Demand Curve will provide net benefits especially compared with the existing vertical demand curve.

14. The NYISO's ICAP demand curve proposal embodies two major features. First, it would replace the current ICAP requirement with a requirement that varies with market prices. Second, it would effectively replace the existing fixed deficiency charge with a charge that varies with market conditions and that equals the price arising from the monthly ICAP auction.

15. With regard to the establishment of an ICAP requirement that is not fixed at the traditional 118 percent, we note that NYISO, along with input from the Northeast Power Coordinating Council and the NYPSC, determines the ICAP requirement in accordance with the New York State Reliability Council (Reliability Council) criteria and standards.<sup>8</sup> The NYPSC is, among other things, charged with ensuring that residents of the state have access to reliable utility service. The ICAP Demand Curve was initially proposed by the NYPSC in May 2002 and reflects a year of negotiations and discussions among the NYPSC, participants, and NYISO. The Commission considers the NYPSC's role in developing the ICAP proposal to be an important factor in our ruling. The NYPSC and NYISO have determined that the ICAP Demand Curve proposal will adequately and reliably serve customers' needs over the short and long term. The Commission also believes that these entities are better placed to establish the appropriate ICAP quantity New York requires to serve those customers over the short and long term. Finally, they have had nearly a year to craft this proposal with the benefit of participant input.

16. With regard to the second feature, we are persuaded by NYISO that it is reasonable to establish a price for ICAP that declines as the chosen ICAP requirement level increases. We agree with NYISO that resources above the traditional 118 percent of peak load would provide additional reliability value to the market. We also agree with NYISO that successive incremental resource additions above 118 percent provide

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<sup>8</sup>In New York, the Reliability Council conducts state reliability studies and sets the state's installed reserve margin.

declining incremental reliability value, and that it is reasonable for the price of ICAP to reflect this relationship.

17. The ICAP Demand Curve is a novel proposal. Determining the specific parameters of the proposal – e.g., the slope and position of the Demand Curve for each of the three areas of New York that determine the price for each level of ICAP requirement – requires some measure of judgment, since there has been no experience with this new mechanism. It will be important to evaluate and monitor the appropriateness of these parameters after some experience is gained. Therefore, we direct the NYISO to file a detailed evaluation of the Demand Curve and its implementation by December 1, 2003, and annually for two years thereafter.

## **Standard of Review**

### **1. Comments**

18. Several parties take the position that the NYISO's Demand Curve proposal is inconsistent with case law.<sup>9</sup> Energy East contends that the filing fails to satisfy existing methods of determining that rates are just and reasonable (cost-based analysis such as cost of service studies on the one hand<sup>10</sup> or market-based analyses of market power and competitive forces on the other), and thus would allow suppliers to recover charges that have not been justified. Multi-Sector Protestors<sup>11</sup> repeat this charge and aver that the proposal will allow some generators to recover more than competitive or cost-based prices.

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<sup>9</sup>See Electricity Consumers Resource Council (ELCON) at 4-6, Retail Suppliers Alliance at 14-16, and Energy East at 15-18.

<sup>10</sup>See also Strategic Energy at 6-7.

<sup>11</sup>Comprised of the Association for Energy Affordability, Amerada Hess Corporation, Agway Energy Services, Builders Realty Institute, City of New York, Consolidated Edison of New York, Consumer Power Advocates, Council of New York Co-ops and Condominiums, ECONergy Energy Company, Energetix, The Energy Cooperative, Mirabito Gas & Electric, Multiple Intervenors, NEPOOL Industrial Customer Coalition, New York Energy Buyers Forum, New York State Electric & Gas, NYSEG Solutions, Orange and Rockland Utilities, PJM Industrial Customer Coalition, Rochester Gas and Electric, Select Energy, Strategic Energy, and Strategic Power Management.

19. Energy East cites several First Circuit cases regarding NEPOOL's ICAP market<sup>12</sup> for the proposition that generators are not entitled to receive rates based on another participant's cost of entry while continuing to receive energy rates. Similarly, ELCON points to these cases for support that excessive ICAP charges cannot be sustained, and that ICAP charges are appropriately treated as incentive rates. According to ELCON, cases involving incentive rates require a showing that a proposed increase in rates is needed and that the incentive is effective and is no more than needed to achieve the desired outcome. ELCON also compares the proposal to the Commission's 1992 Policy Statement on Incentive Regulation<sup>13</sup> and the pending Standard Market Design rulemaking. Retail Suppliers Alliance cites a different line of cases which it purports holds that, in justifying an incremental rate increase on the basis of a supply benefit, evidence must demonstrate a connection between the costs of the program and the increased supply which it will produce.<sup>14</sup>

20. In their answers, NYPSC and NYISO respond that the proposal is legally supportable. NYISO states that the FPA does not require that rates be based on the actual cost of providing service and that the Commission is not held to a single pricing formula. NYPSC comments that the curve could be viewed as either a cost-of-service or a market-based approach, since it has aspects of both,<sup>15</sup> but that it satisfies both standards. Both comment that protesters misread the New England cases and, in particular, that Sithe does not establish that ICAP is an incentive rate and must meet the standards of incentive ratemaking. The NYPSC states that the proposed Demand Curve is "not an incentive ratemaking tool but rather an approach to ensure resource availability."<sup>16</sup> Both contend that, even if incentive ratemaking standards apply, the proposal is consistent with the principles in those cases.

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<sup>12</sup>Central Maine Power Company v. FERC, 252 F.3d 34 (Central Maine); Sithe New England Holdings, LLC v. FERC, 308 F.3d 71 (1st Cir. 2002) (Sithe).

<sup>13</sup>Incentive Ratemaking for Interstate Natural Gas Pipelines, Oil Pipelines, and Electric Utilities, 61 FERC ¶ 61,168 (1992).

<sup>14</sup>Retail Suppliers Alliance at 15, citing Public Service Commission of the State of New York v. FERC, 589 F.2d 542 (D.C. Cir. 1978).

<sup>15</sup>The Demand Curve is based on the cost of new entry and sets the prices that buyers will pay, but allows the market to determine the amount of capacity that is available at those prices.

<sup>16</sup>NYPSC Answer at 6.

## 2. Commission Response

21. We disagree with the protesters that the cases involving incentive ratemaking for oil and gas pipelines, and the Commission's 1992 Policy Statement, are controlling. Those cases involved incremental rate increases levied upon all customers. ICAP charges are not automatically applied to every sale of power, and they can be avoided by self-supplying or procuring adequate capacity through bilateral contracts. The incentive rates envisioned in the Policy Statement were alternatives to traditional cost-of-service regulation for firms with market power, a situation not analogous to the proposal here. Further, we disagree with protesters' understanding of Sithe; that case does not hold that ICAP is an incentive rate subject to incentive ratemaking standards. The court never used the term "incentive ratemaking," nor did it reference any of the cases cited by protesters.

22. The Commission finds that the ICAP Demand Curve is a just and reasonable proposal and that it will benefit customers by encouraging the construction of new generation and thus enhancing reliability. The Commission need not find that the proposed cure for the flaws in the ICAP market is the best measure available. Even if some alternative proposal could be deemed reasonable, that would not detract from the reasonableness of this filing.<sup>17</sup>

23. In addition, the ICAP Demand Curve was the result of a lengthy stakeholder process and appears to be the method of curing the ICAP market's flaws that generated the greatest amount of backing among NYISO participants.

24. Thus, we conclude that the ICAP Demand Curve is an appropriate and reasonable approach to resolving the problems under the current methodology, thereby ensuring adequate capacity and just and reasonable wholesale power prices.

### Need for the Proposal

#### 1. Comments

25. Several commenters support the assertions of NYISO that the current market is significantly flawed. Dynegy, Mirant, New York Power Authority (NYPA), NYPSC, PSEG and Independent Power Producers of New York (IPPNY) argue that the New York market is flawed and does not provide efficient and effective economic signals for

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<sup>17</sup>See, e.g., Vermont Electric Power Co., et al., 49 FERC ¶ 61,225 (1989), and cases cited therein.

investment in generation resources. They also support NYISO's position that the vertical demand curve has resulted in near zero prices in capacity auctions when the amount of available capacity exceeds the 118 percent minimum ICAP requirement by only small amounts. IPPNY and Reliant agree with NYISO that signals for new generation do not occur in the current market until deficiency occurs, but when additional capacity enters the market capacity prices collapse. NYPSC is concerned that consumers are suffering harm due to the flaws in the existing market design.

26. Mirant and Reliant also support NYISO's claims that New York is fast approaching deficiency conditions. Reliant adds that the rate of capacity additions in New York City is inadequate and unlikely to improve without some action to make that market more attractive to potential investors. Reliant also supports NYISO's proposal because market signals in the rest of the state are likely to result in the shut down of generation in excess of the minimum reliability requirement.

27. NYPA adds that without proper price signals for new investment, New York may be faced with significant capacity shortages in the near future and over the longer term. NYPA also argues that a "market which repeatedly requires the installation of significant amounts of new capacity in response to reliability crises is not likely to achieve long-term economic efficiency in the NYISO markets."<sup>18</sup> Such expansion tied to just meeting capacity requirements will likely result in a less economically efficient expansion of generation resources over the long term.

28. Several commenters have questioned the need for the proposal, and have argued that there is no deficiency of capacity in New York. The New York City Council Committee on Environmental Protection (NYC) and Energy East argue that the market is not in a state of emergency, and that intervention is not required. The Joint Answer of Con Edison, Orange and Rockland, and Energy East reaffirms this position and states that new data from Dr. Patton's recent state of the New York market reports<sup>19</sup> undermines NYISO's position on capacity deficiency. They further argue that no market design change will alter the near-term schedule for bringing new generation into service in New York, and that the current New York market provides adequate market incentives. The City of New York notes that NYISO has forecasted that sufficient capacity is available this summer, and that additional capacity is being built in the state. PJM argues that there is no factual basis in the filing to support the claim that New York

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<sup>18</sup>NYPA at 3.

<sup>19</sup>Dr. Patton's Executive Summary of the 2002 New York Electricity Markets State of the Market Report, April 15, 2003 was attached to the Joint Answers.

is approaching a serious deficiency in capacity. Select Energy adds that NYISO and New York State Reliability Council publications do not support NYISO characterization of capacity shortage.

29. Energy East disagrees with NYISO about ICAP market prices, and maintains that market clearing prices have cleared at well above zero, which indicates a functional ICAP market. Energy East argues that the current bilateral market prices when combined with available forward market energy and ancillary service revenues already approach the revenues required under the proponents' proposal. Similarly, Con Edison, Energy East, and the Multi-Sector Intervenors assert that NYISO policies and procedures under development or currently in place (allowing demand response programs to set prices, scarcity pricing, lifting the cap on 10-minute non-synchronous reserve prices, increased convergence between the Hour-Ahead Market and the Real-Time Market, and computer modeling of Con Edison's 138 kV system) already provide increased revenues for generators, which is the same type of relief that the Demand Curve seeks to provide.

30. In its answer to protests, NYISO reiterates its finding that New York is already in serious deficiency in capacity. Moreover, according to NYISO, "the ICAP Demand Curve will increase the stability of Installed Capacity prices, sending more appropriate signals to potential investors for construction of new generation, enhancing reliability, encouraging long-term bilateral transactions, and, ultimately, benefitting New York State consumers."<sup>20</sup>

## 2. Commission Response

31. We agree with the commenters supporting the filing that the proposal is an improvement to the current ICAP mechanism in New York. The current mechanism promotes price volatility in the market. The prices that an LSE is willing to pay depend on the likelihood of the deficiency charges. Currently, the amount paid as deficiency charges moves from near \$0 to over \$200 per kW-year<sup>21</sup> depending on whether a fixed ICAP requirement level is met. Even if the market does not clear at zero, the extreme volatility does not provide the right incentives. The ICAP Demand Curve will help stabilize these prices and send better price signals to encourage the construction of generation before a shortage occurs, by reducing the volatility in deficiency charges. Since the ICAP revenue stream will be more stable and predictable under the proposal,

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<sup>20</sup>NYISO Answer at 3.

<sup>21</sup>This figure is based on state-wide parameters.

the risk to generation investors – and the cost of financing new investment – should be reduced. We expect that customers would share in this cost reduction. The argument about whether a capacity shortage already exists is not determinative, since better price signals that will result should help prevent future shortages.

## **Supporting Analyses and Cost-Benefit Assessment**

### **1. Comments**

32. Several commenters argue that detailed supporting analyses or a cost-benefit study are necessary in order to support a finding that the Demand Curve is just and reasonable. These intervenors question the assumptions used by NYISO and Dr. Patton in the analyses, believe that the level of support provided by the NYISO was inadequate, and assert that the benefits of the Demand Curve have not been justified in relation to the costs that it causes consumers and LSEs to pay. Energy East states that NYISO has not provided any meaningful analysis showing that total market revenues are currently inadequate. The Multi-Sector Intervenors point to only one study (the Summer 2002 Review of the New York Electricity Markets) conducted by NYISO that concluded that current market revenues were insufficient. PJM argues that the NYISO filing does not provide any information on how the proposed Demand Curve would be expected to address capacity deficiency, and there is no support in the filing for the need to implement the proposal prior to this summer.

33. Con Edison and Energy East state that a large group of NYISO market participants proposed an alternative that built on the work of the multi-ISO RAM WG, but that proposal was ignored by the NYISO. Furthermore, Multi-Sector Intervenors and Paul D. Tonko (Chairman, New York State Assembly Standing Committee on Energy) maintain that these analyses should have been fully vetted in the appropriate NYISO committees and to the public.

34. In its answer, NYISO characterizes the objections concerning lack of support or inadequate process as delay tactics. According to NYISO, the stakeholder process that resulted in the demand curve began over two years ago and was as thorough as for any proposal that has been considered at the NYISO. After the ICAP Demand Curve concept was introduced by the NYPSC in May 2002, eighteen meetings were held during which a group of stakeholders, including the NYPSC worked with NYISO to refine the proposal. The proposal was passed in February by both the Business Issues Committee and the Management Committee, and subsequently approved by the NYISO Board. According to the NYISO, the process that led to the ICAP Demand Curve is an

example of the sort of collaboration among the State regulators, the NYISO, and the stakeholders that the Commission has sought to encourage.

## **2. Commission Response**

35. Based on our analysis, we conclude that the proposal has been adequately supported and that there is a reasonable expectation that it will achieve the goal of improving reliability in New York, as well as promoting greater stability in the ICAP and energy markets. The proposed Demand Curve rests on a more rational economic basis than the current demand curve, as it more realistically reflects the economic value of capacity reserves. As the likelihood of inadequate capacity decreases with increased reserves, the value of additional reserve capacity decreases. The proposed downward sloping demand curve reflects the decreasing but still positive value of additional reserves (while the existing vertical demand curve does not) and is a substantial improvement over the existing demand curve.

36. The NYISO has presented information indicating that the proposed Demand Curve will yield the price signals to suppliers and their investors to build more capacity in constrained areas. Although the potential costs and benefits cannot be known with certainty, we conclude that the NYISO's analyses adequately demonstrate that the proposal will benefit customers because it will encourage the construction of new generation, will encourage the formation of long-term bilateral transactions, and, as modified below, will reduce incentives to withhold capacity. As discussed earlier, the Commission concludes that the current system does not provide the necessary long-term signals, and that the Demand Curve proposal has significant advantages over the current Deficiency Procurement Auction.

### **Merits of the ICAP Demand Curve**

#### **A. Increased Rates**

##### **1. Comments**

37. A number of intervenors argue that the ICAP Demand Curve will significantly increase the costs of ICAP in New York and thus will increase end-use consumers' total electricity costs without providing additional benefits. These intervenors point to the affidavit of New York's Independent Market Advisor, Dr. David Patton, submitted as part of NYISO's proposal, which estimates first year increased capacity costs of \$154 million (approximately \$70 million in New York City and \$84 million in the rest of the state). Further, many of these intervenors refer to "A Review of the Economic Analysis

of the Demand Curve Proposal," authored by Dr. Carl Pechman and presented to the NYISO Business Issues Committee in February of 2003.<sup>22</sup> Therein, Dr. Pechman indicates that the costs of the ICAP Demand Curve proposal could exceed \$700 million over the three year phase-in period and rise to levels as high as \$1 billion over the same period. Strategic Energy asserts that the cost of the ICAP Demand Curve proposal to be in excess of \$1 billion per year. In addition, Strategic Energy states that merchant generators have not directed revenues collected under the current ICAP program toward the construction of new generation and that there is no guarantee that those revenues will be devoted to investment in new generating facilities.

38. IPPNY takes issue with Dr. Pechman's costs estimates. Generally IPPNY asserts that the analysis therein is flawed and that when those flaws are carried forward, they are compounded. Additionally, IPPNY states that Dr. Pechman's report does not show how he arrived a cost estimates for the second and third year (which total \$550 million). The final result of this report, according to IPPNY is that the potential price impacts are grossly overstated.

39. Several intervenors argue, in supporting comments, that the long-term benefits of the proposed ICAP Demand Curve will outweigh any short-term price impacts. These intervenors argue that cost estimates forwarded by some parties are based on capacity prices that have been below appropriate levels. Moreover, these intervenors assert that implementation costs of the proposal are transitional. In its answer, NYISO cites to Dr. Patton's affidavit and the 13 sets of comments in support of the March 21 Filing as providing exhaustive explanation of the significant benefits to consumers under the proposed ICAP Demand Curve. NYPSC submits that, certain parties along with NYISO and NYPSC staff, have estimated the added payments to generators in 2003-2004 would equate to total electric bill increase of 1-1.5 percent from that of the previous year.

40. Proponents assert that, insofar as the ICAP Demand Curve proposal provides incentives for the construction of new generation, it will provide the added benefit of reduced volatility in the energy market.<sup>23</sup> NYPSC and others argue that the proposal offers a number of benefits to the market as a whole: (1) a reduction in capacity price volatility; (2) a reduction of incentives to exercise market power; and (3) recognition

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<sup>22</sup>A copy of that report was submitted by Multi-ISO Consumers as part of its Motion to Intervene and Protest.

<sup>23</sup>Dr. David Patton identifies the savings from a one percent increase in capacity would yield annual savings of \$100 million.

that capacity above 118 percent provides value. These intervenors argue that other benefits will accrue as a result of the proposal's implementation: the facilitation and stabilization of long-term bilateral contracts, fewer energy spikes in the energy markets, and greater overall reliability. Supporting intervenors also argue that, over the long-term, once the projected new generation entry has begun, the ICAP Demand Curve proposal would create savings during periods of capacity shortages.

41. Attached to Con Edison's protest is the affidavit of William H. Hieronymus, which among other things argues that the savings from the addition of new capacity are incorrect. Hieronymus states that the spike-reduction benefit decays quickly as additional generation is added. He also asserts that had Dr. Patton reported annual savings from a 2 percent to 3 percent increase in capacity the results would be less than 200 to 300 million dollars per year. Dr. Hieronymus asserts that a linear function is unlikely to be a reasonable approximation of this benefit.

42. NYISO responds to Dr. Hieronymus's claim that long-term benefits decay by noting that Dr. Patton's analysis of consumer benefits implicitly examined this issue. Dr. Patton's analysis repeated the benefit calculation for Capacity Margins ranging from three percentage points lower and three percentage points higher than the current Capacity margin. The \$100 million benefit is an average of the results. NYISO also responds to NYC and Con Edison arguments that the benefit calculations are overestimates because they ignore bilateral contracts. NYISO notes that in the long term, bilateral transactions will expire or be renegotiated with pricing provisions that are based on price expectations from the ICAP Spot Market.

## 2. Commission Response

43. The Commission cannot predict the level or range of those savings but finds that, relative to the current ICAP mechanism, where the deficiency price is three times the estimates of the localized peaker, this proposal would provide savings.<sup>24</sup>

44. The ICAP Demand Curve proposal was crafted to elicit, among other things, additional generation. By signaling that reserves above the 118 percent level have value, the proposal should help develop adequate generation supply and thus provide

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<sup>24</sup>The Commission notes that Dr. David Patton has indicated that New York City may clear at the deficiency price in the short-term. If so, the proposed ICAP demand curve would provide savings in the form of reduced auction prices LSEs faced in making up the shortfall. Dr. Patton estimates that the potential savings are between \$57 and \$212 million for New York City.

long term benefits to NYISO markets and customers. The Commission finds it reasonable to assume that increased stability in ICAP revenues will contribute to, but not exclusively influence, the construction of new generation, which over time should provide for savings and benefits that are difficult to quantify at the present time. Further, the Commission finds it reasonable to assume that the sloped Demand Curve, which will be phased in over three years, will reduce incentives to withhold capacity, thus providing savings and benefits, relative to the current ICAP regime, over the long term.

## **B. Administratively Determined Demand Curve**

### **1. Comments**

45. Numerous intervenors<sup>25</sup> assert that the proposed ICAP Demand Curve replaces a competitive bid-based system with an administratively determined Demand Curve. These intervenors argue that the ICAP Demand Curve proposal represents an administrative intrusion into the marketplace and thus participants cannot rely on the economic principles of the competitive marketplace. Moreover, intervenors argue that not only does the proposal subject participants to regulatory risk – from which there is no protection – but also sends inaccurate price signals. Energy East argues that setting prices for capacity is fundamentally different from setting a capacity reserve level in that setting a reserve margin requires a single judgment about the degree of reliability desired (e.g., one day in 10 years); the rest is engineering analysis. However, Energy East and other intervenors argue that in seeking to administratively determine fair prices, NYISO must answer a number of questions – such as but not limited to, which resource should set the price of new entry, when will that resource run, and what are expected electricity prices. According to protesters, these parameters move too rapidly to be accurately determined administratively – correct answers can only be achieved by permitting the market to work.<sup>26</sup> These intervenors submit that the ICAP Demand Curve is no substitute for competition and will almost certainly produce incorrect

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<sup>25</sup>Including Bank of Nova Scotia, Energy East, Morgan Stanley Capital Group, Association for Energy Affordability, Inc., et al. (Multi-Sector Protestors), and Strategic Energy.

<sup>26</sup>As further evidence of the difficulty of setting these parameters, Con Edison, Energy East, and Orange and Rockland filed a Joint Answer that indicates that Dr. Patton had revised his estimates in his April 2003 State of the Markets report. The Joint Answer argues that the new estimates invalidate and call into question the parameters used to design the Demand Curve.

results. Energy East argues that the ICAP Demand Curve proposal contains a number of flaws that would erroneously over-charge customers and over-compensate suppliers.<sup>27</sup> Strategic Energy asserts that the ICAP Demand Curve will remove a significant portion of the New York wholesale market away from market-based rates and that the Commission should require NYISO to perform a cost-of-service study before it can impose non-market-based rates on consumers.

46. Con Edison argues that the ICAP Demand Curve itself is actually not a demand curve. The affidavit of Dr. William H. Hieronymous states: "The core difficulty with these Demand Curves is that they are not demand curves. There is no customer, or set of customers, seeking capacity at these prices."<sup>28</sup> Normally, a demand curve would reflect the behaviors of buyers. Under the NYISO's formulation, a demand curve no longer reflects the behavior of buyers; rather, it causes the behavior of buyers.

47. A number of intervenors, notably, the Retail Suppliers Alliance, assert that the ICAP Demand Curve proposal creates a price floor for all ICAP transactions, including bilaterals. According to these intervenors, sellers of ICAP in the bilateral market will not accept ICAP prices below what is determined by the Demand Curve in the spot markets.

48. On the other hand, IPPNY and Mirant argue that the ICAP Demand Curve proposal will send accurate price signals regarding the true value of additional capacity, recognizing that there is an incremental value of and reliability benefit from capacity beyond the minimum requirement. AES asserts that the current capacity market fails to send the proper price signals needed to retain existing facilities. KeySpan offers, in support, that parties describing the proposal as administrative price setting miss several fundamental points: (1) ICAP is currently an administrative product; and (2) several parts of NYISO's markets (including capacity) are already subject to administratively-determined price caps that inure mostly only to the benefit of resource purchasers.

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<sup>27</sup>As examples, Energy East offers that the ICAP Demand Curve: (1) relies on erroneous estimates of capital costs (including the current list price of turbines); (2) fails to recognize any value in generators after a 15 year life; (3) fails to adequately reflect energy and ancillary service market revenues; and (4) requires assumptions on the most cost-effective technology.

<sup>28</sup>Hieronymous Affidavit at 7.

## 2. Commission Response

49. Although this proposal includes administrative setting of the demand for ICAP, both the current proposal and the existing ICAP proposals use ICAP demand levels and deficiency prices that are administratively determined.. Hence, there is no reason to reject the proposal based strictly on whether it is set administratively. The issue is whether the proposed administrative approach (like the existing administrative approach) is just and reasonable. For the reasons stated herein, we find that it is.

50. In regard to Energy East's (and others') assertions, the Commission acknowledges that the current demand curve is predicated on more than merely the 118 percent minimum capacity requirement. It is also defined by the current deficiency price. The current deficiency price "has been established at three time the annual cost of installing a new gas turbine, including return on investment."<sup>29</sup> That annual cost figure, as is return on investment, is established administratively via NYISO estimates: Dr. Patton's affidavit at paragraph 36 states that "[t]he price assumed when the market is deficient is \$255 per kw-year (three times the estimated cost of building a new gas turbine in the state of \$85 per kw-year)."

51. The Commission agrees with KeySpan when it argues that there are a number of administrative constructs in many different parts of the marketplace and notes that some of these administrative constructs serve to protect many of the protesting parties. Here the Demand Curve has been determined by the NYISO, along with the NYPSC and stakeholders, to be necessary to achieve the increased capacity reserves and the other aforementioned benefits. Ultimately, the Commission agrees with the supporting comments and finds that the administratively determined parameters of the proposed ICAP Demand Curve are reasonable.

52. Regarding the assertion that this is actually a price floor, the Commission notes that the price of capacity will fluctuate between \$0 (at 132 percent of forecast load) and a maximum of about two times the localized cost of a new simple gas turbine. Thus, we reject the notion that the proposal operates as a price floor.

53. Although the points on the curve cannot be known with precision, the NYISO, in collaboration with the NYPSC and market participants have chosen a curve that they believe is reasonable. Because New York has required at least 118 percent capacity reserves, NYISO has set a price at that level equal to the cost of constructing new capacity. This is reasonable. If capacity were not available, it would have to be

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<sup>29</sup>NYISO Submittal letter at 4.

constructed. No party has argued that it is inappropriate to use the cost of a peaker as one of the points on the proposed demand curve. At levels below 118 percent, the value of capacity rises until it approaches the deficiency charge of 200 percent of the cost of a peaking unit. The proposed deficiency payment is an administratively determined amount that the NYISO, in collaboration with the NYPSC and stakeholders determined to be necessary to provide sufficient economic incentive to ensure that LSE's would obtain the required capacity reserve levels.

### **C. Market Uncertainty**

#### **1. Comments**

54. Numerous intervenors argue that the ICAP Demand Curve proposal will introduce uncertainty to the New York ICAP market.<sup>30</sup> This uncertainty results from a number of sources: the potential for shifting monthly required ICAP requirements, adjustments to the price/quantity combinations that comprise the ICAP Demand Curve itself, and regulatory uncertainty.

55. Retail Suppliers Alliance, Energy East, Con Edison and PJM argue that the ICAP Demand Curve proposal exacerbates uncertainty in that the quantity of ICAP an LSE is required to purchase can fluctuate from month to month. The intervenors state that LSEs have no idea of their obligations until after the monthly ICAP auction establishes those obligations. Intervenors argue that unlike the current system, LSEs have no way to hedge against the uncertainty associated with the monthly required quantity. PJM argues that the creation of uncertainty in New York would significantly impact PJM's capacity markets, driving up PJM's capacity prices and reducing the levels of capacity therein.<sup>31</sup> NY Municipals protest the mandatory features of the proposal that require LSEs to purchase ICAP in excess of the 18 percent Installed Reserve Margin determined by the New York State Reliability Council in that it would require LSEs to purchase additional capacity unneeded for reliability reasons.

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<sup>30</sup>See, e.g., Retail Suppliers Alliance, Energy East, Con Edison, and PJM.

<sup>31</sup>Joint Protestors note that the proposal may be affecting the PJM region: to date, the Joint Protestors have learned, 1,300 MWs of capacity in PJM has been scheduled to sell into the NYISO market during 2003. This is the maximum amount allowed based on the capacity ties between the NYISO and PJM and represents a "significant increase" from the historical level of interregional capacity sales of around 300 MW. Joint Protestors argue that this amount of capacity flowing out of PJM can have only a harmful effect on reliability and competition in the PJM region.

56. Con Edison argues that the ICAP Demand Curve replaces ICAP price volatility with quantity volatility, for which there is no hedging mechanism. Con Edison argues that this creates an active disincentive to contract for capacity in advance, preventing LSEs from "locking-up" capacity obligations and creating a severe strain on their business operations while causing all capacity transactions to flow through the monthly Demand Curve Spot Market Auction. Con Edison states that the lowest risk strategy available for LSEs would be to purchase all their requirements in the Spot Market Auction, avoiding the strip auctions and bilateral contracts.

57. Con Edison and Morgan Stanley Capital Group argue that the process of adjusting the ICAP Demand Curve every three years will be subject to negotiations and fraught with uncertainty, which compromises the reliability of revenue streams and thus is unlikely to compel investors to commit funds over the long term.<sup>32</sup> Morgan Stanley Capital Group also argues this uncertainty practically eliminates long-term liquidity in the markets. Similarly, Multi-Sector Intervenors indicate that the provision which allows NYISO to withdraw or revise the ICAP Demand Curve at any time, pursuant to the governing procedures, introduces regulatory uncertainty and thus does not reassure nervous investors.

58. In its answer, NYISO argues that the ICAP Demand Curve proposal will stabilize ICAP market prices by replacing the uncertain ICAP prices in the current system. NYISO argues that this will support bilateral transactions because the purchasers and sellers of ICAP will have a understanding of the expected price of capacity.

59. In response to protests that the ICAP Demand Curve proposal introduces uncertainty about the level of ICAP required which will make it difficult to hedge, Dr. Patton in his supplemental affidavit notes that "LSEs will have the opportunity to purchase any quantity of capacity they desire in the forward market and the spot market provides a means to sell back any excess capacity purchased forward."<sup>33</sup>

## 2. Commission Response

60. With regard to the potential for the quantity requirement to fluctuate from month to month, the Commission expects that over time, as parties gain more experience with

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<sup>32</sup>The proposed Section 5.14.1(b) of NYISO Services Tariff outlines the process by which the ICAP Demand Curve will be adjusted.

<sup>33</sup>Patton Supp. Aff. ¶ 17.

the ICAP Demand Curve, those fluctuations will decrease. The Commission finds the potential for variation with regard to quantity required is less damaging than the potential for variation in price under the current ICAP mechanism, where an event affecting an incremental amount of capacity may tip the region into capacity deficiency and subject parties to the deficiency charge. On the subject of PJM's capacity price, the Commission agrees with Dr. Patton's supplemental affidavit, at paragraph 25, where he states that any capacity exports from PJM to NYISO would be consistent with energy market dynamics.

61. Concerning the adjustment of the Demand Curve, the Commission finds this provision to be just and reasonable. The language of this particular piece of the proposal, contained in Section 5.14.1(b), states that the independent review will "include stakeholder input in accordance with the ISO Procedures." The Commission finds that if parties, such as the Multi-Sector Protestors, have issues to raise in reference to the parameters of the Demand Curve, Section 5.14.1(b) provides an avenue to address those issues. Moreover, the Commission finds it reasonable to expect that the parameters may need adjustment over time. NYISO itself identifies the localized costs of gas turbines as an example of a potential adjustment.<sup>34</sup> As to the amount of uncertainty caused by any potential adjustment, the Commission finds that employing a demand curve based on irrelevant or outdated parameters would likely be more damaging to the ICAP market than any potential adjustment that reflected stakeholder input and independence.

#### **D. Withholding and Gaming**

##### **1. Comments**

62. Commenters argue that the Demand Curve does not entirely remove the capacity withholding problem that the proposal was intended to correct, and creates additional opportunities for capacity withholding or gaming.

63. Con Edison and PJM argue that the Demand Curve creates a tariff-based incentive for generators to economically withhold supply from the market, and game the market. The concern is associated with the use of the Supplemental Supply fee when LSE's do not acquire sufficient capacity to meet their minimum reserve requirements and when the spot market auction does not clear sufficient capacity to meet the 118

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<sup>34</sup>Section 5.14.1(b) states: "Among other criteria, the review will determine the current localized levelized embedded cost of gas turbines in each NYCA Locality and the Rest of the State and associated Energy and Ancillary Services revenues."

percent minimum requirement. Con Edison argues that there is a "clear incentive for suppliers to withhold capacity in the ICAP Spot Market Auction, drive the market deficient, and re-offer at much higher maximum Supplemental Supply Fee rate."<sup>35</sup> Of particular concern to Con Edison is that LSEs have little or no opportunity to hedge against potential deficiency. PJM adds that a modification to the proposal to apply the fee only to new capacity would not solve the problem if new capacity would otherwise be available to sell in the auction. PJM is concerned that the lack of specified ex ante market power mitigation mechanisms in NYISO will raise capacity costs, which could impact PJM capacity markets.

64. In addition to the ability to conduct capacity withholding during capacity deficiency, Con Edison and Strategic Energy argue that the design of the Demand Curve gives a broader incentive for large individual generators to withhold capacity and drive up prices by moving the spot market bid curve up the Demand Curve. Strategic Energy notes that no provision has been included in the proposal to prohibit suppliers from withholding ICAP from the market.

65. IPPNY does not believe that capacity withholding will materialize because the proposed modifications to the Services Tariff and the design of the Demand Curve proposal impose adequate safeguards to discourage suppliers from attempting to withhold capacity from the ICAP market. In particular, IPPNY believes that the oversight from the NYISO Market Monitoring Group, the ability for generation and/or demand-side suppliers who did not participate in the spot auction to choose to participate after the ICAP market becomes deficient, and the relatively gradual slope of the Demand Curve will discourage ICAP suppliers from attempting to withhold capacity.

66. NYISO responds to Con Edison's and PJM's claims that generators could withhold capacity under the ICAP Demand Curve proposal by (1) pointing out that incentives to withhold are lower under the ICAP Demand Curve than in the current system, and (2) that the ability for "In-City" resources within New York City to withhold are mitigated by mandatory offers and capped prices, which will be in place after implementation of the ICAP Demand Curve. Similarly, NYISO argues that the impact of capacity withholding on neighboring regions will be lower under the proposed Demand Curve. The larger incentive to withhold in the current system will produce a greater demand on capacity resources from neighboring regions.

## 2. Commission Response

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<sup>35</sup>Hieronimus Affidavit at ¶ 61.

67. Reduction of the incentive to withhold capacity under the current system is one of the key benefits that NYISO has cited about the Demand Curve proposal. The Commission agrees that the removal of the "boom-bust" nature of the ICAP market will significantly reduce the incentive to withhold when ICAP supply and demand are relatively close, which is a key reason for our acceptance of the proposal. However, the Commission agrees with Con Edison and Strategic Energy that the Supplemental Supply Fee may create the potential for capacity withholding when the system does not clear to meet the 118 percent minimum. Consequently, the Commission rejects the Supplemental Supply Fee aspect of the proposal. Removing the Supplemental Supply Fee will reduce the incentive for generators to withhold capacity from the ICAP auction, and thus, will encourage a greater amount of capacity to be bid into the spot market auction. Similarly, in Docket No. ER01-1440-000, the Commission accepted PJM's revised methodology for allocating revenues resulting from payment of deficiency charges, which removed an incentive for owners of excess capacity to withhold that capacity from PJM's Capacity Credit market.<sup>36</sup> This will increase the likelihood that individual LSEs will be able to procure any capacity deficiencies below the traditional ICAP requirement (i.e., 118 percent of peak load) through the spot market, as well as increasing the possibility that capacity above the traditional 118 percent will be available at a reasonable price. NYISO has indicated that a refinement that addresses the incentive for withholding is under consideration by the NYISO Board of Directors. We will entertain any new proposal that addresses our concerns about withholding.<sup>37</sup>

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<sup>36</sup>PJM Interconnection, L.L.C., 95 FERC ¶ 61,175, reh'g denied 95 FERC ¶ 61,477 (2001), aff'd, PPL Electric Utilities Corp., et al., v. FERC, Nos. 01-1369 and 01-1370 (D.C. Cir. Nov. 26, 2002).

<sup>37</sup>We understand that part of the rationale for establishing the Supplemental Supply Fee at a higher level than the auction price (i.e., at 1.5 times the auction price) is to provide an additional incentive for LSEs to ensure that they procure at least the traditional 118 percent requirement. If the NYISO concludes, after some experience with the ICAP Demand Curve mechanism, that a higher ICAP price is needed when the auction clears at an ICAP level less than 118 percent, it is free to propose a Demand Curve that includes higher prices for ICAP levels less than 118 percent. However, suppliers accepted in the auction (other than those subject to bid or price limitations due to market power mitigation) must be paid the same price as that paid by LSEs in the auction. Our concern with the Supplemental Supply Fee is that sellers accepted in the auction would receive a lower amount than the Supplemental Supply Fee, and thus, suppliers would have an incentive to stay out of the auction in order to receive a higher price after the auction.

68. Con Edison argues that the potential and incentives for large generation owners to game the system could occur under the proposal. In response, we conclude that the incentive to game will be significantly reduced from the existing system under the new Demand Curve because the impact of changes in capacity will not produce sizable changes in the price of ICAP in the spot markets. Furthermore, ICAP offers are under the scrutiny of Attachment H to the Services Tariff. The Commission directs NYISO's Market Monitoring Unit to monitor ICAP markets and the behavior of ICAP suppliers, particularly owners of large amounts of capacity, and to file a report detailing any withholding behavior by December 1, 2003 and each year thereafter.

## **E. Incentives to Build Smaller Plants**

### **1. Comments**

69. Con Edison and Assemblyman Tonko argue that the ICAP Demand Curve would create a bias toward quick-fix additions. They assert that the only likely generation to be built during the short term, where there is critical need, is small, natural gas-fired combustion turbine (CT) units. Con Edison argues that these resources have two advantages: they are typified by low capital investment requirements and will have minor price impacts. Assemblyman Tonko argues that these plants do not add much capacity individually and would not greatly affect capacity market payments to generators. However, Assemblyman Tonko asserts that they are more costly to operate and thus could inflate costs in the energy markets. Con Edison argues that it is unlikely a developer would be able to finance a large base-load unit that would drive prices down the Demand Curve in the monthly Demand Curve Spot Market Auction.

### **2. Commission Response**

70. The Commission finds that, given the boom-bust nature of the current ICAP mechanism, the inclination for the region to respond to capacity problems with small, incremental solutions is greater than would be under the proposed ICAP Demand Curve. Under the proposed ICAP Demand Curve, generation added after the 18 percent reserve margin has been satisfied will be recognized as adding value to the energy markets. The Commission believes that the incentive to add generation beyond 118 percent is greater under the proposed ICAP Demand Curve – under which this additional generation would receive ICAP revenues – than under the current mechanism, under which that potential supplier does not know if it will receive ICAP revenues.

71. We see no reason why the proposal would create greater incentives to invest in small combustion turbines (and away from other generation technologies) compared to the existing ICAP mechanism. Con Edison's argument – that a developer would be

unable to finance a large base-load unit from ICAP Demand Curve revenues – is not persuasive. The level of ICAP revenues under either the current mechanism or the proposed ICAP Demand Curve is not likely to support the full fixed cost of a large base-load generator. A base-load unit would expect to receive substantial revenues from the sale of energy and ancillary services. But a stable source of ICAP revenue could encourage additional investment in base-load generation in cases where energy and ancillary service revenues, by themselves, would not support the investment, and the ICAP revenues under the proposal are likely to be more stable than under the current ICAP mechanism.

## **F. Alternative Proposals**

### **1. Comments**

72. Several intervenors assert that NYISO failed to consider alternative ICAP mechanisms. Con Edison and Assemblyman Tonko assert that NYISO has not considered all possible alternatives to promote generation. Strategic Energy submits that more effective resource adequacy proposals are available to New York, namely long-term contracts and demand response. Con Edison states that NYISO ignored the proposal of a large group of NYISO market participants that was designed to enhance the capacity market so as to provide incentives for new generation.<sup>38</sup> Moreover, Con Edison asserts that, if NYISO intends to promote generation, it could consider: (1) entering into contracts with new generators and paying the difference between the state-wide uplift and the market price; or (2) paying some form of an incremental payment for new generation built in the state. Nevertheless, Con Edison argues that NYISO should undertake an independent quantitative analysis of the potential impacts of the Demand Curve and other policy alternatives and examine how changes could affect NYISO's interactions with bordering markets.

73. NYC argues that less intrusive alternatives can achieve the same objective as the proposed ICAP Demand Curve without subjecting consumers to the increased costs of the ICAP Demand Curve. NYC highlights an RFP issued by Con Edison for 500 MW of in-City capacity to be made available for a period of ten years, and to be operational

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<sup>38</sup>This alternative proposal focused on: (1), lengthening the procurement process, to six months and then to one year; (2) moving to a summer-only rating and enabling seasonal reserves to be used in portfolios in order to meet supply requirements; (3) accommodating retail load shifting; (4) changing the deficiency price to a price that better reflects the cost of new entry; and (5) addressing the gap in market monitoring for the capacity market.

by the second quarter of 2006. NYC states that an RFP is limited to new facilities and is accomplished through a bilateral contract, which would attract financing. NYC submits that the costs of an agreement such as that to be reached as a result of the RFP would be lower than those under the statewide ICAP Demand Curve. The aforementioned affidavit of Dr. Pechman asserts that, based on experience with the Article X process,<sup>39</sup> the average lag from price signal to significant new generation is four years. However, Dr. Pechman argues, the Con Edison RFP suggests that the process involving a creditworthy buyer and long-term contract is in excess of three years.

74. Supporting comments from Mirant and IPPNY state that with the ICAP Demand Curve in place, there will be a set of known payments, from which the market-clearing price can be more accurately forecasted. These parties argue that this provides far greater price transparency and price predictability than the current mechanism, which will allow investors and developers to better measure risks and incorporate future ICAP payments as a reliable source of revenue through long-term bilateral contracts.

## **2. Commission Response**

75. Generally, we agree with the supporting comments of Mirant and IPPNY. The Commission does not regard the ICAP Demand Curve proposal as a measure that would preclude parties from entering into bilateral contracts or increasing demand responsiveness. The Commission considers it reasonable to expect that more reliable and stable ICAP prices over the long-term could provide participants with the appropriate baseline upon which to base long-term bilateral contracts.

## **G. Connection Between ICAP Demand Curve and New Generation**

### **1. Protests**

76. A number of intervenors contend that the ICAP Demand Curve proposal will not provide incentives for new entry as is postulated in NYISO's proposal. These intervenors argue that the contentions of NYISO are merely speculative, for which there is little to no supporting evidence. They also argue that the proponents have failed to demonstrate the link between higher prices in the ICAP market and investment in new

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<sup>39</sup>The Article X process was New York State's generation siting law, which expired on December 31, 2002.

capacity. Several intervenors<sup>40</sup> argue that the reluctance to build in New York is not solely or even primarily due to the composition of the ICAP market. Energy East and others argue that new investment and entry is dependent on the willingness of lenders to extend capital for the construction of new generation projects. Energy East indicates that it questioned NYISO on the ISO's efforts to consult lending institutions as to the capability of the ICAP Demand Curve to foster confidence in revenue streams and on two separate occasions was told that NYISO had not confirmed this. Many intervenors refer to comments made earlier in the year by lenders' representatives which indicated that long-term contracts and a consistent regulatory environment are vital to attracting financing.<sup>41</sup> Energy East argues that the ICAP Demand Curve proposal does little to provide sufficient long-term contracts. Energy East provides an affidavit (John R. Tighe III) that argues, three things are critical to engendering lender confidence and thus new entry: (1) long-term contracts with creditworthy counterparties; (2) a stable regulatory environment; and (3) a stable and streamlined siting process. NYC and others assert that the revenues received from the ICAP markets are an incremental factor at best in inducing generation construction.

77. NYC and Morgan Stanley Capital Group argue that the ICAP Demand Curve proposal is too blunt an instrument, which may confer a windfall on generators who are not at risk of retirement. They further argue that, while intended to promote new generation, the proposal offers an "indiscriminate subsidy" to all manner of generation regardless of their ability to address reliability needs. NYC argues the ICAP Demand Curve proposal's benefits may well flow largely to existing generation sources rather than to new market entrants while many generators are already adequately compensated under the current program.

78. Strategic Energy argues that increasing ICAP payments will not solve the resource adequacy problems of New York. Strategic Energy submits that there are problems to be addressed having to do with siting, scarcity pricing, out-of-merit dispatch and bilateral markets.

79. In its response to protests, NYISO argues that the ICAP Demand Curve will stabilize prices in the ICAP market. These stabilized prices will give investors more accurate and reliable market signals for deciding whether to build or retire resources.

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<sup>40</sup>NYC, Multi-Sector Protestors, Select Energy, Energy East, and Con Edison.

<sup>41</sup>Intervenors refer to comments made at the Commission's Capital Availability for Energy Markets Technical Conference on January 16, 2003.

## 2. Commission Response

80. As stated above, the Commission does not expect that ICAP revenues received under the proposed Demand Curve will alone result in more financing. However, the Commission does expect that more reliable and predictable ICAP revenues would contribute to a more reliable overall revenue structure for an ICAP supplier and thus play some role in improving that supplier's prospects for financing. By design, the Demand Curve will produce ICAP prices greater than zero above the minimum ICAP requirement, and thus the Commission believes that the proposal will provide greater incentive for investment than the current system. With an expectation of more stable and positive ICAP prices, new generation and demand response resources will have additional incentive to enter the New York market because of a more stable revenue stream. While the Commission notes that generation will not suddenly appear in New York and instead will take time to develop, we conclude that implementing the Demand Curve now will provide greater support for adding generation.

81. With regard to NYC and Morgan Stanley's contention that the proposed ICAP Demand Curve is a blunt instrument that fails to distinguish between old and new generation, the Commission finds that all capacity suppliers, regardless of the age of their resources, are entitled to the same treatment in the ICAP market. While the Commission understands that certain generators may realize greater profits than others, that is simply a fact of the marketplace. The Commission does not see how such generators could receive ICAP revenues that were fundamentally different from those paid to other generators. Moreover, those are the types of market signals the Commission would expect to encourage new generation additions.

### Ongoing Multi-ISO Capacity Adequacy Efforts

#### 1. Comments

82. Potential conflicts with ongoing multi-ISO capacity adequacy efforts were raised by numerous commenters. Energy East argues that the Demand Curve proposal represents a huge departure from the broader regional approach being developed in the multi-ISO Resource Adequacy Markets Working Group (RAM WG), particularly the development of a Centralized Capacity Market (CCM). Energy East believes that the CCM approach will provide a better forward market signal to create a stable environment than the Demand Curve proposal. PJM notes that the Demand Curve approach was reviewed within RAM WG, but it did not achieve consensus or even majority support. Multi-Sector Intervenors, Delaware Municipal Electric Corp., *et al.* (Joint Protesters), and Retail Suppliers Alliance assert that approval of the Demand Curve proposal would create uncertainty in the RAM WG process. Select Energy

believes that the Demand Curve could prove inconsistent with the RAM WG's ultimate recommendations, and could dissuade lenders from investing because the Demand Curve may be changed later. They assert that Commission approval could undermine and "short-circuit" efforts for a common regional ICAP solution. Multi-Sector Intervenors adds that it would be "imprudent" to impose the Demand Curve in advance of the RAM WG's recommendations, and that acceptance of this proposal may face reversal when the RAM WG completes its deliberations. Joint Protesters believe that approval of the Demand Curve proposal by NYISO would cause conflicts with the broader solution that may come from the RAM WG process. Retail Suppliers Alliance argues that a transition from the Demand Curve to another model would require additional costs and implementation risks. PJM argues that the need for the "temporary" approach outside of the RAM process has not been justified. Multi-Sector Intervenors argues that a better approach would be less radical modifications while the RAM WG process plays out. Ultimately, the commenters recommend that the Commission wait until RAM WG finishes its work and delivers a comprehensive proposal.

83. Commenters also contend that approval will raise seams issues if the Demand Curve proposal is implemented, particularly if an alternative approach results from the RAM WG process. Both PJM and Select Energy are concerned that the Demand Curve approach could create seams with the existing ICAP markets in ISO-NE and PJM, and with any policy eventually adopted by the RAM WG. Joint Protesters note the recent increase in capacity scheduled to be sold out of PJM and into NYISO as evidence of potential seams.

84. Other commenters disagree and believe that there are no conflicts between the Demand Curve and long-term solutions that may be developed by the RAM WG. KeySpan reports that the Demand Curve was reviewed in RAM WG meetings and it is considered to be a market design that can be adopted in some markets and not in others without causing a conflict. The Demand Curve will only change a limited part of the NYISO's capacity markets - the monthly deficiency auction - it will not be in conflict with proposals that address other aspects of the capacity adequacy market. KeySpan argues that if the NYISO must move to a new capacity market design either because of regional collaboration or because of the Commission's Standard Market Design, the NYISO will have sufficient time to change to any new mechanism if necessary.

85. NYISO responds to the protests on the potential for conflict with the RAM WG process by noting the RAM WG is reviewing the Demand Curve approach, and has not rejected it. NYISO points out that NYISO, PJM and ISO-New England all filed joint comments to the Commission which stated that they were examining alternatives including the Demand Curve. Furthermore, the RAM WG issued a Request for Proposal to examine alternative market design options, including the Demand Curve.

NYISO also argues that waiting for the conclusion of the RAM process is a "prescription for inaction" for the next three to four years<sup>42</sup> Finally, the NYISO reiterates that it is NYISO's intention to transition to the RAM WG's ultimate market design, as appropriate. The NYPSC is also concerned about the potential for delay. In its answer, NYPSC states that it "is unclear how long it will take before the RAM Group presents a proposal to the Commission."<sup>43</sup> The NYPSC recommends that "the Commission not delay remedying the ICAP market in New York pending the outcome of such a potentially lengthy process."<sup>44</sup>

## 2. Commission Response

86. The Demand Curve proposal does not prevent implementation of any future actions recommended by the RAM WG. The Demand Curve only replaces the Deficiency Procurement Auction of the current ICAP markets and will allow longer-term solutions to operate. The Demand Curve has not been rejected by the RAM WG, and is still under review. We support the objectives of a common resource adequacy market design and encourage stakeholders to continue to develop a multi-regional proposal. The Commission is also encouraged by the stated flexibility of the NYISO to adjust the Demand Curve as necessary to accommodate the results of the RAM WG process.

87. The Commission is not convinced that the implementation of the ICAP Demand Curve will create seams with neighboring regions. The potential sale of ICAP into New York is a market response, is not an example of a seam, and is something that is made possible or is allowed by the tariffs in PJM and ISO-NE. If the sale of ICAP into New York will cause a capacity deficiency in PJM or ISO-NE, we would encourage the ISOs to explore and file proposed market solutions to retain capacity. Ultimately, the development of a common approach by the RAM WG will ensure that the markets for ICAP are similar throughout the multi-ISO region.

88. Nevertheless, the Commission is concerned about the speed of this process and the potential for developing a solution acceptable to all parties. While the Demand Curve proposal will benefit New York, we would like to see a multi-regional approach implemented. Since the RAM WG is intending to file a proposal by 2004, the

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<sup>42</sup>NYISO Answer at 19.

<sup>43</sup>NYPSC Answer at 11.

<sup>44</sup>NYPSC Answer at 12.

Commission directs the NYISO to file a compliance report by February 28, 2004 that describes the status of the RAM WG process.

## **Voting Process**

### **1. Comments**

89. Protesters raise concerns about voting irregularities and claim that the proposal only achieved the necessary vote in the stakeholder process because three voters were disenfranchised.<sup>45</sup> They allege that the Management Committee chair abused his discretion by disallowing votes of members who joined the ISO after the date that notice of the meeting was posted and that the proposal should be treated as a section 206 filing.

### **2. Commission Response**

90. Protesters do not allege that NYISO violated any Tariff provisions in the process of determining the appropriate voting requirements. In fact, they state that no Tariff provision controls those decisions. The allegations are more along the line that NYISO officials abused their discretion. The Commission will not revisit that decision-making process. Governance requirements for Independent System Operators have been set out in Order Nos. 888 and 2000, and the NYISO's Tariff and bylaws comply with those requirements. If any of NYISO's actions were alleged to violate those specifications, then the Commission would entertain complaints about the stakeholder and internal decision-making processes.

## **NYISO Authority**

### **1. Comments**

91. NYSEG argues that NYISO does not have authority under its Agreement with the New York State Reliability Council (Reliability Council) to require LSEs to purchase capacity not needed to maintain reliability. NYSEG contends that this proposal would lead NYISO to usurp the Reliability Council's reliability authority as defined in the NYISO/Reliability Council Agreement.

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<sup>45</sup>Con Edison at 23-27, Retail Suppliers Alliance at 20, and Agway Energy Services, Inc., et al.

## 2. Response

92. The Commission notes that neither the Reliability Council nor the NYPSC have raised this issue. Ultimately, absent objection by the Reliability Council, we decline to second-guess the NYISO's authority to propose a ratemaking mechanism intended to enhance reliability, stabilize prices, and reduce withholding.

### The Commission orders:

(A) NYISO's filing is hereby conditionally accepted to become effective on May 21, 2003, subject to Ordering Paragraphs (B), (C), (D) and (E), as discussed in the body of this order.

(B) The NYISO is hereby ordered to make a compliance filing within 30 days of the date of issuance of this order including tariff changes required to remove the Supplemental Supply Fee and to revise the description of the auction process, as discussed in the body of this order.

(C) The NYISO is hereby ordered to make an annual filing by December 1, 2003 and annually for two years thereafter that reports on the implementation of the ICAP Demand Curve, as discussed in the body of this order.

(D) The NYISO is hereby ordered to make an annual filing by December 1, 2003 and each year thereafter that evaluates any withholding behavior that may have occurred, as discussed in the body of this order.

(E) The NYISO is hereby ordered to make a compliance filing by February 28, 2004 describing the status of the RAM WG process, as discussed in the body of this order.

By the Commission.

( S E A L )

Magalie R. Salas,  
Secretary.

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## Appendix A

Agway Energy Services, Inc., ECONnergy Energy Company, Inc., and Mirabito Gas & Electric, Inc.  
 AES Eastern Energy, L.P.  
 Amerada Hess Corporation  
 Calpine Eastern Corporation  
 Central Hudson Gas & Electric Corporation  
 City of New York  
 Consolidated Edison Company of New York, Inc. and Orange & Rockland Utilities, Inc.  
 Consumer Power Advocates  
 Coral Power, L.L.C.  
 Delaware Municipal Electric Corporation, Inc., Allegheny Electric Cooperative, Inc., and Old Dominion Electric Cooperative, Inc. (Joint Protesters)  
 Dynegy Power Marketing, Inc. and Dynegy Northeast Generation, Inc.  
 Electricity Consumers Resources Council  
 Electric Power Supply Association  
 The Energy Cooperative  
 Independent Power Producers of New York, Inc.  
 KeySpan-Ravenswood, LLC  
 Long Island Power Authority and LIPA  
 Mirant Americas Energy Marketing, L.P. and Mirant New York, Inc.  
 Morgan Stanley Capital Group Inc.  
 Multiple Intervenors  
 NEPOOL Industrial Customer Coalition  
 New York City Council Committee on Environmental Protection  
 New York Energy Buyers Forum  
 New York Municipals<sup>46</sup>  
 New York Power Authority  
 New York State Electric & Gas Corporation and Rochester Gas & Electric Corporation  
 New York State Public Service Commission  
 New York State Reliability Council  
 Niagara Mohawk Power Corporation  
 NRG Companies  
 Paul D. Tonko (Chairman, New York State Assembly Standing Committee on Energy)

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<sup>46</sup>New York Municipals include: Village of Bergen, Village of Freeport, Jamestown Board of Public Utilities, Village of Rockville Centre, and Salamanca Board of Public Utilities.

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PJM Interconnection, L.L.C.  
PJM Industrial Customer Coalition  
PSEG Power LLC  
Reliant Resources, Inc.  
Retail Suppliers Alliance<sup>47</sup>  
Select Energy, Inc  
Sithe Energy Marketing, L.P.  
Strategic Energy, L.L.C.  
Strategic Power Management, Inc

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<sup>47</sup>Retail Suppliers Alliance includes: Energetix Inc., Empire Natural Gas Corporation, Leveraged Energy Purchasing Corporation, and NYSEG Solutions Inc.