

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;  
Nora Mead Brownell, Joseph T. Kelliher,  
and Suedeem G. Kelly.

New York Independent System Operator, Inc.

Docket No. ER05-428-000

ORDER ACCEPTING AND SUSPENDING PROPOSED TARIFF REVISIONS TO  
IMPLEMENT REVISED INSTALLED CAPACITY DEMAND CURVES AND  
ESTABLISHING STAFF TECHNICAL CONFERENCE

(Issued March 2, 2005)

1. In 2003, the New York Independent System Operator, Inc. (NYISO) obtained approval to implement a demand curve for the pricing of installed capacity, to promote better price signals to investors for the construction of new generation.<sup>1</sup> The Demand Curve Order phased in the costs of new entry gradually, such that the first-year costs were intentionally set below the cost of entry and then would pivot up to gradually reach the full costs of entry by year three.<sup>2</sup> Moreover, the third-year costs were not established in the Demand Curve Order. Pursuant to that order, the costs for the third-year and for the subsequent two years were to be defined by the results of an independent review.
2. Following the completion of the independent review process, we have before us in this proceeding NYISO's proposed tariff revisions to its Market Administration and Control Area Services Tariff (Services Tariff) to define the Installed Capacity (ICAP) Demand Curves for Capability Years 2005/2006, 2006/2007, and 2007/2008.<sup>3</sup>
3. Consistent with the independent review process outlined above, NYISO's filing here proposes the parameters of the ICAP Demand Curves for the 2005/2006, 2006/2007, and 2007/2008 Capability Years and continues the use of separate Demand Curves for New York City, Long Island, and the rest of New York State. NYISO requests an effective date for its proposed tariff revisions that would allow the proposed 2005/2006

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<sup>1</sup> *New York Independent System Operator, Inc.*, 103 FERC ¶ 61,201 (Demand Curve Order), *reh'g denied*, 105 FERC ¶ 61,108 (2003).

<sup>2</sup> 103 FERC ¶ 61,201 at P 6 and n.4.

<sup>3</sup> The Capability Years all start on May 1.

Demand Curves to be in place sixty days from the date of filing (*i.e.*, March 8, 2005) so that they would be in place prior to March 31, 2005, the scheduled date for the 2005 Summer Capability Period ICAP Auction.

4. In this order, we accept NYISO's proposed tariff revisions for filing, and suspend them for a nominal period, to be effective March 9, 2005, subject to refund and further Commission order. We also direct Staff to convene an on-the-record technical conference, with the participation of all interested parties, to provide the Commission with a fuller record on which to determine the proper parameters for calculation of the Demand Curves.

5. This order benefits customers by providing the Commission with the information needed for the Commission to decide issues on a properly informed basis. It is important that we establish Demand Curves for the next three years that will give proper price signals to existing and potential new market entrants for participation in the New York wholesale electric power market.

### **Background**

6. On March 21, 2003, NYISO filed a request with the Commission seeking approval of its ICAP Demand Curve proposal.<sup>4</sup> The proposed ICAP Demand Curves would establish an ICAP requirement based on monthly Demand Curves.

7. Demand Curves serve to define the amount of ICAP that each load serving entity (LSE) would have to obtain for the following month. They were intended to improve system and resource reliability by valuing the ICAP resources available above the system's required levels, and providing more effective economic signals for new investment. Demand Curves would be used in monthly ICAP spot market auctions, which would replace current LSE bids in deficiency procurement auctions. The proposal sought to phase-in the Demand Curves to the NYISO system over a period of three years. The minimum ICAP requirement and coinciding specific prices were established for New York City, Long Island, and the balance of New York.<sup>5</sup> The Commission approved NYISO's proposal in the *Demand Curve Order*.

8. On January 7, 2005, NYISO filed proposed tariff revisions to its Services Tariff to define the ICAP Demand Curves for Capability Years 2005/2006, 2006/2007, and 2007/2008.

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<sup>4</sup> *Demand Curve Order*, 103 FERC ¶ 61,201 at P 2.

<sup>5</sup> The ICAP Demand Curve was established in New York City at \$127.89/kW-yr and \$151.14/kW-yr for years one and two of phase-in, respectively.

### **Notice of Filing and Pleadings**

9. Notice of NYISO's filing was published in the *Federal Register*, 70 Fed. Reg. 3697 (2005), with protests and interventions due on or before January 28, 2005.

10. The New York Public Service Commission (NYPSC) filed a notice of intervention and comments. Timely motions to intervene were filed by: Con Edison of New York, Inc., and Orange and Rockland Utilities, Inc.; TransCanada Power Marketing Ltd.; Reliant Energy Inc.; PSEG Companies; Constellation Energy Commodities Group, Inc.; Long Island Power Authority; Niagara Mohawk Corporation; Central Hudson Gas & Electric Corp.; and the New York Power Authority.

11. Timely motions to intervene and protests were filed by: Keyspan-Ravenswood (Ravenswood) (with comments); AES Eastern Energy, LP (AES Eastern) (with comments); New York State Electric & Gas Corporation (NYSEG), Rochester Gas and Electric Company, MEUA and Multiple Intervenors; NRG Companies (NRG); the Villages of Bergen, Freeport, and Rockville Centre, Cities of Jamestown and Sherrill, Town of Massena, and Steuben Rural Electric Cooperative; Dynegy Power Marketing, Inc. (Dynegy); and the City of New York. Timely motions to intervene, supporting comments, and limited protests were filed by Mirant Companies (Mirant) and by the Independent Power Producers of New York Inc. (IPPNY). FPL Energy LLC filed a motion to intervene out of time.

### **Discussion**

12. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2004), the timely, unopposed motions to intervene and notice of intervention serve to make the entities that filed them parties to this proceeding. Furthermore, we will grant FPL Energy LLC's motion to intervene out of time, given its interest in the proceeding, the early stage of the proceeding, and the absence of any undue prejudice or delay.

### **NYISO's Proposal**

13. NYISO states that the ICAP Demand Curves are determined by the parameters specified in section 5.14.1(b) of the Services Tariff. Accordingly, the tariff revisions submitted with this filing add tables with the relevant monthly values for the New York City, Long Island and rest-of-state areas for the 2005/2006, 2006/2007 and 2007/2008 Capability Years, along with certain conforming language changes in light of the passage of the initial implementation period. In addition, the annual values currently reflected in the tariff as "Year 2" are converted into monthly values and included in the proposed table of values for the Capability Year of May 1, 2004 through April 30, 2005.

14. NYISO states that the Services Tariff and NYISO's ICAP Manual specify that the ICAP Demand Curves are to be phased in over a three-year period, with the parameters establishing the Demand Curves for the third year of the phase-in period (the upcoming 2005/2006 Capability Year) and the subsequent two Capability Years to be subject to an independent review and a stakeholder comment process.

15. NYISO explains that it retained Levitan & Associates, Inc. (Levitan) to conduct the independent review. NYISO states that, on August 16, 2004, Levitan presented the results of its analysis of the Demand Curves to the ICAP Working Group of NYISO stakeholders. Levitan issued an adjustment to its original study results on September 1, 2004. It further states that the Levitan study was considered at several meetings of the ICAP Working Group, and many stakeholders provided written comments on the study.

16. NYISO states that, after considering stakeholder feedback and input, on September 22, 2004, NYISO, in consultation with Dr. David B. Patton, its independent Market Advisor, issued proposed ICAP Demand Curves for the 2005/2006, 2006/2007, and 2007/2008 Capability Years for review by the NYISO Stakeholders and, ultimately, for review by the NYISO Board of Directors (the September 22 proposal). The September 22 proposal was subject to oral arguments, whose points were summarized by NYISO staff. NYISO states that on December 21, 2004, the Market Performance Committee recommended to the Board that it approve the Demand Curves set forth in the September 22 proposal.

17. NYISO explains that the NYISO Board of Directors also met on December 21, 2004 to consider the recommendation of the Market Performance Committee, as well as the other information before it relating to the proposed ICAP Demand Curves. It states that this information included the Market Performance Committee's assessment of the September 22 proposal, the positions set forth in the oral argument, and the analysis and recommendations of Dr. Patton, as well as certain background and other information requested from the NYISO staff.

18. After consideration of all of the foregoing, NYISO explains that the Board unanimously voted to approve the ICAP Demand Curves set forth in the September 22 proposal, as proposed by the NYISO staff, and directed that they be issued as final and filed for approval by the Commission. The Board also stated its intention to evaluate the performance of the New York capacity markets with the revised ICAP Demand Curves in connection with its annual review of the markets administered by NYISO, and directed the NYISO staff to continue developing, refining, and gathering information for suitable metrics to assess the performance of the ICAP Demand Curves against the objectives for which the curves were established.

19. NYISO explains that the Demand Curves are derived from: (a) a point defined by the minimum ICAP requirement (118 percent of load) as set by the New York State Reliability Council, and the cost of new peaking generation (the “Annual Reference Value”); and (b) a point at which the ICAP requirement declines to zero (“Zero Crossing Point”) that reflects the declining value of capacity reserves and an appropriate slope for the Demand Curve.<sup>6</sup> The Annual Reference Value is determined by an estimate of the annual capital and fixed operation and maintenance costs, including a return on investment, to construct a typical new peaking unit (*i.e.*, a simple cycle gas turbine plant), less an offset for projected energy and ancillary services revenues, net of fuel expense, that a new peaking unit could expect to earn in the New York markets. Levitan performed a detailed analysis of the costs and revenues that are the basis of the Annual Reference Value, including an electric market simulation analysis using MarketSym, an advanced chronological dispatch simulation model.

20. Based on the discussions and other input in the review process, and the objectives of the Demand Curves, NYISO states that it took into account that the revenue offset adjustments are intended to compensate for other uncertainties in estimating the parameters for the new Demand Curves including: capital cost uncertainty (particularly the New York Control Area (NYCA) gas turbine capital cost), the relative size of the winter versus summer markets, and the addition of new resources and imports. NYISO states that it also considered the relative costs and benefits of total capacity market supplies being just above or just below the minimum NYCA ICAP requirement, concluding that it would be preferable to be, if at all, on the side of being slightly above, in order to preserve reliability. It asserts that this preference favors a lower estimate of the assumed shortage hours for setting the scarcity component of the net revenue offset, and that the scarcity component was set at the same value for all three localities since the marginal units in periods of significant scarcity would be largely similar in each. NYISO states that it further concluded that the revenue offset should be set at a fixed amount, in order to provide a measure of certainty that would encourage investment decisions. It adds that a fixed offset rather than an amount adjusted to equal actual energy and ancillary services revenues also allows the actual revenues earned by generators to rise toward the long- term equilibrium if the market moves up the Demand Curves and energy price spikes increase.

21. NYISO states that the NYCA revenue offset also includes an adjustment for recent experience with the differences in available capacity between the summer and winter seasons. It states that, since their inception, the ICAP Demand Curves have incorporated an adjustment to account for the greater potential supply of capacity in the winter (and

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<sup>6</sup> The Demand Curves also continue upward to the left until they reach a value of 1.5 times the fixed costs of a new peaking unit, thus establishing the maximum deficiency charge for LSE that are below the minimum ICAP requirement. This feature is not changed by the proposed Demand Curve revisions.

thus lower prices) than in the summer that results from generators being capable of higher output in the winter, primarily because of the lower ambient temperatures. It states that the Demand Curves are adjusted upward so that the resulting summer and winter capacity prices will, on average, equal the Annual Reference Value. As initially implemented, however, this adjustment recognized only changes in the capability of internal generation, and did not consider any seasonal effects related to imports or exports of capacity. The revised Demand Curves submitted here for the NYCA include an increment to the revenue offset of \$5 per kW/year to reflect a decrease (and hence upward price pressure) in capacity imports during the winter, particularly from Canada.

22. NYISO further explains that Levitan also analyzed the costs and benefits of adjusting the slopes of the Demand Curves, which are determined from the Annual Reference Value and the Zero Crossing Point. NYISO states that Levitan did not “advocate any alteration in the zero-crossing points used to define the demand curves.” NYISO also states that the original Zero Crossing Points were established through stakeholder negotiations to balance concerns over price volatility, market power and the relative sizes of marginal generators and owner portfolios as compared to locality size. After considering the Levitan analysis and recommendations and the views of the stakeholders and Dr. Patton, NYISO states that it reached the same conclusion as the Levitan study.

### **Positions of the Intervenors**

23. Multiple comments and protests were filed concerning the NYISO Demand Curve filing. All of the comments focused on the parameters that define the ICAP Demand Curves, *i.e.*, the Annual Reference Value and the Zero Crossing Point, and did not address the use of the ICAP Demand Curve. Most of the comments and protests addressed the methodology and the assumptions used by NYISO to set the Annual Reference Value.

24. Parties representing generators, such as IPPNY, Ravenswood, AES Eastern, Dynegy, and NRG, argue that the Annual Reference Value selected by NYISO is too low. Fundamentally, they object to the size of the revenue offsets that are used to reflect revenues that a new peaker could receive in the energy and ancillary services markets, and to the “arbitrary” manner that NYISO applied the adjustments. Specific objections with the NYCA Demand Curve are that the historic data used to support the revenue offsets are outdated, and that the assumed winter-summer difference that was used to adjust the Annual Reference Value for the NYCA curve does not exist. Specific objections to the New York City Demand Curve include: (a) the load shape used in the modeling by Levitan was not based on an average year; (b) the assumptions about the operating characteristics of the new combustion turbines and the ability to participate in

ancillary service markets were too optimistic; (c) the assumptions about capital costs were inaccurate; and (d) the specific values used in the modeling, such as property taxes and gas transportation, were inaccurate.

25. Parties representing load (such as the City of New York) object to the proposed Demand Curves as being too high. The City of New York argues that the methodology used to adjust capacity prices for the winter-summer differential is faulty, and that NYISO erred by not considering alternative Zero Crossing Points. NYSEG argues that the parameters of the NYCA Demand Curve are inaccurate because they rely on unsupported estimates in lieu of data. NYSEG expresses particular concern that NYISO: (a) overstated the cost of a new combustion turbine; (b) assumed and modeled energy and ancillary services revenues that are too low; and (c) set a Zero Crossing Point that is too high. NYSEG also raises the potential for “seams” issues based on differences between NYISO’s proposal and those being considered by PJM Interconnection LLC (PJM) and ISO New England Inc. (ISO-NE). Finally, NYSEG argues that, if the Commission decides not to reject the filing, the Commission should set for hearing the important factual issues underlying the proposal.

26. Finally, NYPSC filed comments in support of NYISO’s proposed Demand Curves. NYPSC believes that the NYCA Annual Reference Value is reasonable when compared to NYPSC’s own estimate of capital costs.

### **Commission Conclusion**

27. NYISO’s stakeholder process has allowed all industry segments to raise their concerns and to have input into NYISO’s proposal and NYISO’s proposed tariff revisions reflect this input and concerns. Nevertheless, NYISO’s proposed Demand Curves for Capability Years 2005/2006, 2006/2007, and 2007/2008 have engendered significant comment and protest.

28. NYISO’s proposal raises issues of material fact concerning the parameters to be used in calculating the ICAP Demand Curves that cannot be resolved based on the record before us, and that compel us to obtain additional on-the-record information before we can decide the issues presented and determine whether the proposed Demand Curves are just and reasonable. Thus, as discussed further below, we are directing Staff to convene a transcribed on-the-record technical conference with the participation of all interested parties to provide the Commission with a fuller record on which to resolve the matters before it.

29. The technical conference should address the appropriateness of the specific parameters to be used in calculating the Demand Curves for Capability Years 2005/2006, 2006/2007, and 2007/2008, and whether these Demand Curves more accurately elicit the entry of new generation in the market under the parameters proposed by NYISO, or

under the suggested revisions of the intervenors. Moreover, the parties should be prepared to discuss and provide, among other matters, specific information concerning: (a) the appropriateness of using a 2002 load shape in the Levitan analysis instead of a load shape representing normal weather patterns; (b) whether the impact of recent new capacity additions in NYCA were reflected in the net revenue offset estimates; (c) the operating characteristics of the assumed peaking units (the 7FA and LM6000), and their ability to participate in ancillary services and day-ahead markets, particularly given their environmental permits; (d) the appropriate capital cost and financing periods for the peaking units; (e) assumptions with regard to the scarcity component; and (f) the assumptions concerning local siting, such as fixed gas transportation costs and local property taxes.<sup>7</sup> The Commission is particularly interested in understanding how different assumptions for these issues will affect the Annual Reference Value, and potential interdependencies between different assumptions. The Commission directs Staff to issue a notice providing additional details on the schedule and arrangements for the conference, and to hold a technical conference within 30 days of the date of issuance of this order. The Commission will take further action following its review of the transcript of the technical conference and materials submitted before the conference.

30. Our preliminary analysis indicates that NYISO's proposed Demand Curves have not been shown to be just and reasonable, and may be unjust, unreasonable, unduly discriminatory or preferential or otherwise unlawful. Therefore, we will accept NYISO's proposed tariff revisions for filing, suspend them for a nominal period, and make them effective on March 9, 2005, subject to refund and further Commission order.<sup>8</sup>

The Commission orders:

(A) NYISO's proposed revisions to its Services Tariff are hereby accepted for filing, suspended for a nominal period, effective March 9, 2005, subject to refund and further Commission order, as discussed in the body of this order.

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<sup>7</sup> In addressing these issues, the parties should consider the countervailing factors and the interdependencies of each of the factors on the Annual Reference Value.

<sup>8</sup> See *Central Hudson Gas & Electric Corp.*, 60 FERC ¶ 61,106 at 61,338, *reh'g denied*, 61 FERC ¶ 61,089 (1992). The 60-day notice period required by our regulations starts to run on the first day after the date of filing. Thus, the earliest date that a filing may become effective, absent waiver of the notice requirements, is the day after the 60-day notice period has expired or, in this case, March 9, 2005. See, e.g., *Utah Power & Light Company*, 30 FERC ¶ 61,015 at 61,024 n.9 (1985).



(B) The Commission Staff is hereby directed to convene a technical conference, to be held within 30 days of the date of issuance of this order, as discussed in the body of this order.

By the Commission.

( S E A L )

Linda Mitry,  
Deputy Secretary.