

UNITED STATES OF AMERICA 106 FERC ¶ 61,111
FEDERAL ENERGY REGULATORY COMMISSION

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

New York Independent System Operator, Inc. Docket Nos. ER04-230-000
ER04-230-001

ORDER ACCEPTING TARIFF FILING
SUBJECT TO MODIFICATION

(Issued February 11, 2004)

1. In this order, we accept for filing, subject to modification, revised tariff sheets submitted by the New York Independent System Operator, Inc. (NYISO) to implement new real-time scheduling (RTS) software and a number of complementary new market rules. Implementing RTS will replace the NYISO's existing real-time market systems with state of the art software that will strengthen the integration of the NYISO's Day-Ahead and Real-Time markets. NYISO states that RTS is designed to improve the NYISO administered markets by: (1) incorporating lost opportunity costs into the real-time ancillary services market-clearing prices for the first time; (2) enabling the NYISO to commit and dispatch resources more efficiently; (3) lessening the need for out-of-merit resource calls; (4) increasing pricing consistency across time periods; (5) reducing uplift charges; and (6) integrating efficient scarcity pricing into the markets. RTS will incorporate many of the market features that were included in the Commission's Notice of Proposed Rulemaking regarding standard market design (SMD NOPR).¹ The NYISO requests that its tariff filing become effective on a date to be determined by NYISO in the future, upon completion of final testing and adjustments of the new software. This action will benefit customers by enabling the real-time market systems to operate more efficiently.

¹ Remediating Undue Discrimination Through Open Access Transmission Service and Standard Electricity Market Design, IV FERC Stats. and Regs., Proposed Regulations, ¶ 32,563 (2002).

I. Tariff Filing

2. On November 26, 2003, as amended on December 1, 2003, pursuant to Section 205 of the Federal Power Act, NYISO submitted revisions to its Open Access Transmission Tariff (OATT) and Market Administration and Control Area Services Tariff (Services Tariff) to implement new RTS software and related new market rules. The new RTS software and the related market rule changes approved herein, as modified, will: (1) permit the adoption of co-optimized two-settlement markets for regulation service and operating reserves; (2) support greater market participation by demand side resources; (3) facilitate the resolution of seams; and (4) serve as the foundation for future improvements. With this RTS proposal, the NYISO also includes enhancements to its market power mitigation measures and related software to strengthen its ability to prevent market power abuses while not suppressing legitimate competitive bidding behavior.

3. NYISO states that the RTS market enhancements and the corresponding tariff revisions it proposes were developed in close consultation with all stakeholders, including state regulators during 2002 and 2003. NYISO states that the stakeholders were given the opportunity to comment on all of the proposed tariff revisions at eight meetings of the NYISO's Market Structures Working Group and two meetings of its Automated Mitigation Task Force. NYISO claims that the comments from the stakeholder sectors are included in the final tariff revisions proposed herein. In addition, stakeholder endorsements were obtained before initiating work on the RTS software.

4. NYISO states that the extensive collaboration between NYISO and its stakeholders lead to a broad consensus in favor of RTS. NYISO claims that its filing was unanimously endorsed by NYISO's Business Issues Committee and Operating Committee and by its Management Committee.² NYISO claims that while individual stakeholders may dislike narrow aspects of its proposal, there is essentially universal stakeholder support for RTS as a whole.

5. NYISO states that it is not requesting a specific effective date for the proposed tariff changes because at the time of its filing it was uncertain as to exactly when the software would be ready for implementation. NYISO states that it must have sufficient time to finalize and test the new software, ensure that systems are properly integrated, conduct market trials in conjunction with its stakeholders, and make final pre-implementation adjustments. NYISO therefore proposes to establish an effective date based on its assessment of the software's readiness and its expected impact on the market and stakeholders at the relevant time (including the potential risks of implementing a major change during the summer.) NYISO requests the ability to implement the filing

² NYISO notes that there were some abstentions.

after the following have occurred: 1) a Commission order has been issued authorizing the tariff changes; 2) NYISO has given the Commission and the stakeholders at least two weeks notice that the revisions are ready for implementation; and 3) notice of the effective date has been posted on the NYISO's website at least forty eight hours before the scheduled effective date. Based on information posted on NYISO's website, implementation of the entire filing is not anticipated until September 2004, at the earliest. However, it appears that NYISO may implement portions of the filing, as they become ready.

6. NYISO explains that its proposal is necessary because of a variety of problems attributable to differences between NYISO's existing Day-Ahead and Real-Time Market software. While the problems have not prevented the markets from functioning well, they have created scheduling and pricing divergences, unrelated to underlying economic conditions, that have reduced the markets' efficiency. NYISO explains that the fundamental problem is that its Security Constrained Dispatch (SCD) software is a decades-old legacy system that used different algorithms, whereas its Security Constrained Unit Commitment (SCUC) software and its Balancing Market Evaluation (BME) software were both developed in the 1990's. The new system will address these differences and correct them in a systematic way.

7. NYISO states that its filing would implement a number of additional enhancements beyond improved software integration. These include a specialized real-time corrective action mode that allows NYISO to address unexpected system shocks without price distortions, two-settlement ancillary services markets, ancillary services demand curves, and market power mitigation improvements.

II. Notice, Interventions, and Protests

8. Public notices of NYISO's filing and amendment were issued on December 2, 2003 and December 12, 2003, respectively, and published in the Federal Register³ with interventions and protests due December 22, 2003. NRG Companies, Edison Mission Energy, Inc. and Edison Mission Marketing & Trading, Inc., (jointly) (Edison) filed protests and comments. Comments were filed by: Multiple Intervenors; Dynegy Power Marketing, Inc. (Dynegy); PSEG Companies (PSEG); AES Eastern Energy, L.P. (AES); Reliant Resources, Inc. (Reliant); Independent Power Producers of New York, Inc. (IPPNY); Coral Power, L.L.C.; Sithe Energy Marketing LP and Indeck Energy Services, Inc. (jointly) (Sithe); and Municipal Electric Utilities Association of New York State. The protestors and commenters raise numerous issues with regard to NYISO's filing, as discussed below. NYISO filed an answer to the protests and comments.

³ 68 Fed. Reg. 68, 889 (2003) and 68 Fed. Reg. 71, 102 (2003), respectively.

III. Discussion

A. Procedural Matters

9. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2003), all unopposed timely filed motions to intervene and any motions to intervene out-of-time filed before the issuance date of this order are granted. In addition, while Rule 213 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213 (2003), prohibits answers to protests unless ordered by the decisional authority, we will allow NYISO's answer, as it has provided information that has aided us in better understanding the matters at issue in this proceeding.

B. Commission Analysis

10. We will accept for filing, as modified, the NYISO's proposed RTS Software improvements. Based on our initial review, and subject to the modifications discussed below, we find that the NYISO's proposed market rule revisions appear to be just and reasonable, and have not been shown to be unjust, unreasonable, unduly discriminatory or preferential, or otherwise unlawful. As stated, NYISO's website indicates that NYISO does not anticipate that all of the proposed changes will be ready for implementation until September 2004, at the earliest, but that certain proposed changes may be ready for implementation prior to September. We will allow NYISO to implement parts of the filing prior to September 2004, as such parts become ready for implementation, provided that NYISO adheres to the three steps identified above in Paragraph 5 of this order.

C. RTS Software

11. The NYISO states that the primary goal of the new RTS software is to remove the differences between the Day-Ahead Market software and Real-Time Market software. Currently, the NYISO uses the Security Constrained Unit Commitment (SCUC) software, which handles day-ahead commitments, scheduling and market functions for energy and ancillary services. The NYISO's Balancing Market Evaluation (BME) software produces hour-ahead advisory prices, adjusts interchange schedules, and decides whether to commit generators that can respond to commitment instructions in thirty minutes. BME and the SCUC run on the same platform and use the same pricing and scheduling algorithms.

12. Currently, the NYISO uses its Security Constrained Dispatch (SCD) software, which optimizes the energy dispatch but not the scheduling of ancillary services every five minutes. This system is a decades old legacy system that uses different algorithms than those used by SCUC and BME. Because of this, day-ahead and real-time prices inefficiently diverge and thus increase uplift costs.

13. With this filing, the NYISO introduces its new Real-Time Commitment (RTC) and Real-Time Dispatch (RTD) software. RTC would conduct every fifteen minutes an automated multi-period intra-day security constrained unit commitment that would solve simultaneously for Load, Operating Reserves and Regulation Service on a co-optimized, least as-bid production cost basis. RTC will outperform BME by bringing resources online closer to when they are needed and minimizing delays in shutting down uneconomic resources. RTD is an automated multi-period security constrained dispatch program that co-optimizes to solve simultaneously for Load, Operating Reserves, and Regulation Service on a least-as-bid production cost basis over a 50, 55 or 60-minute period.⁴ RTD is an improvement over SCD because SCD is an Energy only dispatch that solves for a single 5-minute time step, whereas RTD co-optimizes Energy, Operating Reserves and Regulation Service.⁵

14. The NYISO states that RTC and RTD will be fully compatible with each other, and the SCUC. RTC and RTD will lead to prices that more accurately reflect actual market and system conditions, while increasing pricing consistency from day-ahead to real-time, resulting in more efficient commitment and dispatch decisions. Thus, the likely results from the implementation of RTS will be fewer out-of-merit generation calls, reduced uplift, expanded demand side participation, and more effective market power mitigation.

15. For the reasons stated above, we agree with the NYISO that RTS will bring numerous benefits to the customers of New York. RTS received unanimous support from the NYISO's stakeholders, with only a few stakeholders questioning certain narrow aspects of the proposal, which are discussed below.

D. Market Power Mitigation Enhancements

1. NYISO's Proposals

16. The NYISO proposes several incremental improvements which it claims will facilitate and enhance the application of market power mitigation to the RTS markets.

17. First, the NYISO is bringing the In-City Day-Ahead Market into its conduct and impact mitigation scheme, which was previously accepted by the Commission. NYISO states that this action will ensure that mitigation will address market power concerns,

⁴ NYISO Filing Letter at P. 10.

⁵ NYISO Filing Letter at P. 11.

rather than being triggered simply by the existence of transmission congestion, as sometimes occurs under NYISO's current mitigation measures.⁶ The NYISO also notes that this change will bring temporal selectivity to the automated mitigation procedures (AMP) that apply to the Day-Ahead Market in New York City by applying mitigation to the specific hour that warranted such action.⁷

18. Second, the NYISO is proposing to apply AMP in the Real-Time Market (RT-AMP). In order to ensure that suppliers are not over-mitigated in areas that are constrained relatively infrequently, however, the NYISO is not planning to immediately activate this capability outside of New York City. NYISO states that RT-AMP would only be applied to an individual generator that submits a bid that violates both the conduct and impact test and cannot justify that bid to the NYISO and the independent Market Advisor. Such generators may then be subject to RT-AMP measures for no longer than six months.

19. Third, the NYISO is proposing to expand the scope of its automated mitigation procedures to encompass guarantee payments associated with Minimum Generation Bids and Start-Up Bids. NYISO notes that economic withholding can also be a device for achieving artificially high guarantee payments, not just higher locational based marginal prices (LBMPs). Extending AMP to guarantee payments can be achieved through the RTS software, and will close the loophole in the mitigation of Minimum Generation Bids and Start-Up Bids.

20. Fourth, the NYISO is proposing to expressly clarify that "making an unjustifiable change to one or more operating parameters of a Generator that reduces its ability to provide Energy or Ancillary Services" can constitute physical withholding that is subject to after-the-fact-penalties. The NYISO states that it decided to more clearly express this principle in order to guard against attempts to use bidding mode changes, or other bid parameter modifications allowed under RTS, to engage in withholding.

⁶ NYISO's current mitigation measures were developed by the Consolidated Edison Company of New York, Inc. (ConEd) for the New York City's Day-Ahead Market. The ConEd mitigation threshold is triggered when the locational based marginal price (LBMP) at any of the In-City generating units during any hour of the following day would be greater than 107% of the LBMP at the Indian Point Unit 2.

⁷ NYISO Filing Letter at P. 30: The ConEd measures are not temporally selective because once they trigger they automatically apply to an entire Day-Ahead Market, even if only one hour actually warranted mitigation.

2. Protests and Comments

21. IPPNY comments that the levels for the conduct and impact thresholds proposed by the NYISO for the Day-Ahead Market in NYC may lead to improper mitigation. IPPNY is concerned that the NYISO's adoption of the conduct and impact test using the existing in-City threshold methodology is likely to still result in unjustified mitigation of bids. IPPNY believes the Commission should direct the NYISO to report on problems occasioned by the exceedingly tight 2% level that was included in the methodology that was used to develop the existing conduct and impact thresholds, and determine whether this aspect of the formula for calculating the thresholds should be revised.

22. Several stakeholders protest the use of RT-AMP in unconstrained areas within New York State, because it cannot be justified and is contrary to Commission policy.⁸ Edison and Dynegy cite Commission language that specifically states that the Commission will approve only mitigation measures that address well-defined structural problems in the market. Edison points to an ISO New England, Inc. (ISO-NE) proposal in which the Commission rejected an ISO-NE attempt to permit mitigation in unconstrained areas where ISO-NE failed to identify alleged pivotal suppliers or the number of hours the supplier was pivotal or to explain how mitigation would target this problem.⁹ Therefore, given the NYISO's failure to identify structural problems, constraints or pivotal suppliers in the area outside of New York City, and consistent with these precedents, the protesters request that the Commission similarly deny the request to expand AMP to the Real-Time Markets outside New York City until the NYISO can support its request for RT-AMP in unconstrained areas with a fully developed factual record.

23. Edison further states that if the Commission does approve RT-AMP, that the NYISO be directed to explain, at a minimum, how the automated software will work in real time. According to Edison, nowhere in the RTS filing does NYISO address basic questions about the software mechanism. Specifically, Edison states that NYISO must develop the capability to run necessary sensitivity analyses, and explain what is included in the analysis. Edison also is concerned that the NYISO has not explained how RT-AMP would work if it were to apply to multiple generators simultaneously. Edison further questions how the mitigation software will interact with the manual mitigation procedures and what happens when more than one generator is on six months of RT-AMP. For example, if a generator is subject to manual mitigation, will generators on RT-AMP be mitigated if they violate only the conduct test? If one generator subject to

⁸ New England Power Pool, 100 FERC ¶ 61,287 (2002).

⁹ New England Power Pool, 101 FERC ¶ 61,344 (2002).

RT-AMP violates both the conduct and impact thresholds, will other generators that violate only the conduct threshold, but are subject to RT-AMP, also be mitigated. Edison further argues that NYISO's proposal to penalize individual generators that violate conduct and impact thresholds and subject them to a RT-AMP for up to 6 months is unduly punitive and arbitrary.

24. IPPNY would like the Commission to direct the NYISO to develop a detailed methodology that ensures that a generator's minimum run and minimum down times will be reflected in its start-up cost bids. IPPNY is concerned that with the implementation of automated start-up cost mitigation, generators will have their start-up bids improperly mitigated, thereby eroding the improvements that were intended with this market rule revision. According to IPPNY, the Commission should direct the NYISO to make sure that reference prices include the loss of Bid Production Cost Guarantee payments from running past midnight so that no generator is mitigated for attempting to include appropriate costs in its start-up bid.

25. Dynegy requests clarification of a new provision in Attachment H of the Services Tariff, at Section 2.4(1), which states that making "an unjustifiable change to one or more operating parameters of a Generator that reduces its ability to provide Energy or Ancillary Services" when it is the economic interest, absent market power, of the withholding entity to do so will be deemed physical withholding. Section 4.3.2 in Attachment H indicates that a generator making such a change will be subject to financial penalties. According to Dynegy, the Commission should direct the NYISO to explain more precisely what constitutes an "unjustifiable change" and whether there is some sort of objective standard to determine what is not justified.

26. As mentioned above, the NYISO plans to extend AMP to the Real-Time Market in New York City as well as to individual generators outside NYC that submit bids that violate both the conduct and impact test and cannot justify that bid to the NYISO and the independent Market Advisor. In its answer, the NYISO addresses protester concerns about the extension of AMP to individual generators outside New York City. The NYISO states that they are not proposing new mitigation standards for markets outside New York City. Instead, according to the NYISO, "bid-based conduct and impact mitigation has been applicable through manual implementation to the Real-Time Market, and through both manual and automated mitigation to the Day-Ahead Market, outside of New York City for almost four years. The Commission has repeatedly endorsed the NYISO's mitigation standards, and held that bid-based conduct and impact mitigation does not harm markets, while providing effective limits on the misuse of market power."¹⁰ The NYISO goes on to say that the sole change under RTS would be that

¹⁰ See Request for Leave to Answer and Answer of the NYISO at P. 9.

software would be put in place so that real-time bids that are measured manually outside of New York City could be applied on an automated basis to a generator, if that generator violates both the conduct and impact tests. The NYISO further states that it will follow its tariff and apply RT-AMP on a unit-by-unit basis, because this will guard against inefficient over-mitigation and ensure that generators that appear to be engaging in market power abuses have ample opportunity to justify their conduct.

27. In response to protests over the validity of extending AMP to the Real-Time Market outside New York City, the NYISO states that the mitigation tests act as a screen that prevents mitigation from occurring unless a significant structural market power problem exists. “Both the conduct and impact thresholds were designed so that they would not trigger absent the exercise of significant market power. As long as markets are functioning competitively, the conduct and impact thresholds will not be met, and the mitigation measures will have no effect.”¹¹ In support, the NYISO points to the fact that AMP was not used in the Day-Ahead Market outside New York City throughout all of 2003.

3. Commission Response

28. We find that the RTS filing does not propose any changes to the already accepted mitigation measures for New York City. Thus, we will reject the requests of protestors to revise the mitigation measures that apply to New York City. However, we agree with protestors that NYISO has not justified the use of automated mitigation procedures for generators located in non-constrained areas. We will deny NYISO’s proposal to automate the mitigation procedures for these non-constrained areas.

29. Regarding the mitigation measures for New York City, in the NYISO’s Comprehensive Mitigation Measures filing in 2002,¹² the Commission accepted various changes to NYISO’s Market Mitigation Measures (MMM). Among the measures accepted was the eventual replacement of the legacy measures for New York City’s Day-Ahead Market mitigation and the formula for setting lower conduct and impact thresholds for mitigation of market power because of the concentration of the In-City market. Since these measures were already accepted by the Commission, we reject IPPNY’s protest concerning the already accepted Commission thresholds, as being a collateral attack on prior Commission orders.

¹¹ See Request for Leave to Answer and Answer of the NYISO at P. 11.

¹² See New York Independent System Operator, Inc., 97 FERC ¶ 61,242 (2001); order on compliance filings, 99 FERC ¶ 61,246 (2002); order on reh’g, 103 FERC ¶ 61,291 (2003).

30. We find that the NYISO has not justified the extension of AMP into the Real-Time Market outside New York City. The Commission will approve only mitigation measures that address well-defined structural problems in the market.¹³ Although the NYISO does not initially intend to apply AMP outside of New York City, it implies that it will eventually. Therefore, we reject this proposal without prejudice to a filing that explains the underlying structural problem outside of New York City, that the NYISO feels justifies the use of AMP in the Real-Time Market outside of New York City.

31. We will not require NYISO to develop a new methodology regarding how a unit's minimum run and minimum down times will be reflected in its start-up cost bids. The NYISO already provides tariff provisions that allow generators, on a case-by-case basis, to consult with the NYISO if they believe that there is a need to adjust their reference prices to reflect a unit's costs. The protestors have not shown that the current provisions cannot address this problem. Absent such a showing, we will not require the NYISO to make changes regarding this matter.

32. We agree with Dynegy that the term "unjustifiable change" is vague and should be more clearly defined. Thus, we will require the NYISO to clarify its change to the definition of physical withholding to include a more objective standard regarding what constitutes an "unjustifiable change" to one or more operating parameters of a generator. We will require the NYISO to address this issue in its Compliance Filing.

E. Fuel Price Volatility

1. Comments

33. IPPNY and Dynegy raise concerns about the current tariff provisions concerning how fuel price variations are reflected in a generator's mitigated price reference level. They request that the Commission direct the NYISO to establish procedures to enable reference prices to reflect variations in fuel prices in a timelier manner. Such adjustments to the reference levels are critical to ensure adequate compensation for the output of gas-fired units during periods of rising gas prices. IPPNY goes on to say that the automatic nature of AMP in the Real-Time Markets makes it impossible for the NYISO to provide market participants with a meaningful opportunity to justify their conduct to the NYISO's Market Monitoring Unit. IPPNY wants a structure that ensures that mitigation is imposed due to bidding behavior inconsistent with a competitive market, not fuel prices swings.

¹³ See *New England Power Pool et al.*, 100 FERC ¶ 61,287 (2002) and order on rehearing and accepting compliance filings, 101 FERC ¶ 61,344.

34. In its answer, the NYISO states that the NYISO's conduct and impact mitigation measures have provided for the adjustment for reference prices to account for changes in fuel costs. The NYISO points out that the concerns raised do not address any tariff provision included in the RTS Filing, nor do they offer suggestions on how to better incorporate fuel price volatility in reference levels. The NYISO will continue to maintain dialogue through the stakeholder process with generators on fuel prices.

2. Commission Response

35. The current tariff provisions already account for fuel price changes, by incorporating fuel price changes in all the current methods used in calculating reference levels.¹⁴ The RTS filing does not make any changes to this specific tariff language, and the stakeholders offer no specific suggestions on how the tariff provisions could better incorporate fuel price volatility in reference levels. Therefore, we will not require changes to these existing tariff provisions.

F. Off-Dispatch Units and Price Chasing

1. Protests

36. A number of protesters argue that the NYISO should ensure that off dispatch generating units retain their current ability to receive payments for uninstructed over-generation. Sithe states that the RTS tariff language¹⁵ would eliminate the ability of off-dispatch units to be compensated for generating above their schedule output levels by replacing the ability of off-dispatch units to economically alter their output levels to more closely align with real-time market conditions. Such economic readjustment of output levels is commonly referred to as permitting facilities to "chase price." The NYISO's current proposal purports to replace the ability to "chase price" with a self-scheduling option. Sithe states that the Commission has recognized that allowing off-dispatch units to respond to price changes has benefits for both the market and for individual units.

37. Sithe further states that the current self-scheduling option will not provide the same capability as the current provisions. Because the self-scheduling option requires generators to submit schedules seventy-five minutes ahead of real-time, the generating unit will essentially have to guess about expected system conditions and prices as it develops its schedule. Specifically, of concern to Sithe, is the ability of combined cycle

¹⁴ See NYISO's Services Tariff at Attachment H, §3.1.4(a).

¹⁵ See proposed Services Tariff §2.23a.

units to be able to chase price, because their cost of generating at any given output level can be dependent upon exactly those portions of the unit that are operating and the level of their operation.

38. Sithe urges the Commission to require the NYISO to: 1) reinstate the ability to chase price; or 2) replace the ability to chase price with the ability to self-schedule up to 30 minutes before the RTC; or 3) allow some units to have their generation schedules set on a 15-minute basis rather than on a 5-minute basis.

39. According to the NYISO, it has discussed this issue extensively during the stakeholder process and faced limited stakeholder objections. The NYISO addressed those objections by agreeing to investigate the schedule and priority of a future market enhancement that would allow generators to request 15-minute schedules, through the RTC, if they are unable to take advantage of the 5-minute schedules that will be calculated by the RTD. This enhancement, according to the NYISO, will allow generators that desire to respond to price but are incapable of following 5-minute dispatch signals, to follow a 15-minute dispatch, which should ensure that they will be moving in response to price.

2. Commission Response

40. We agree with the concerns raised by protesters. We think that one of the three options supported by Sithe could be a reasonable resolution of this issue; therefore, we direct the NYISO to incorporate one of the three options suggested by Sithe, by November 1, 2004.

G. Demand Curves for Ancillary Services

1. NYISO's Proposal

41. With this RTS Software proposal, the NYISO will incorporate demand curves into the tariff provisions governing the NYISO's Regulation Service and Operating Reserves markets. These non-vertical demand curves will establish the maximum price that the NYISO will pay for various amounts of particular ancillary services. The NYISO states that the demand curves will ensure that the value of foregone ancillary services is appropriately reflected in energy prices during shortage periods. Further, according to the NYISO, they will also ensure that the price of each ancillary services product does not exceed its economic value, particularly during periods of scarcity or when the product is unavailable.

2. Protests and Comments

42. IPPNY states that the Commission should require the NYISO to set the levels of the demand curves for ancillary services to reflect how the system is secured. IPPNY fully supports the use of demand curves for operating reserves and regulation service markets, but is concerned that the NYISO's proposal gives the NYISO discretion to determine whether or not to formally revise the demand curves in the event operators take actions that deviate from the applicable demand curves to maintain system reliability. According to IPPNY, the NYISO should be required to automatically raise the demand curves if and when the system operator is required to make out of merit purchases to maintain system reliability.

43. In its answer, the NYISO states that they anticipate adjusting the relevant demand curve when it is warranted in the future, but say that it would be short-sighted to mandate this outcome in the tariff. The NYISO wants to avoid adjusting the demand curve for an unforeseen type of contingency that created system stresses but was deemed extremely unlikely to happen again. The NYISO states a strong preference for acquiring ancillary services through the demand curve mechanism, rather than through operator intervention. The NYISO will not arbitrarily refuse to increase a demand curve that has been shown to have been set too low.

3. Commission Response

44. We find that the NYISO's proposed demand curves for Operating Reserves and Regulation Service will lead to efficient price signals for these ancillary services. Based on overwhelming support from the market participants on the demand curves, we see no reason to disapprove this proposed market rule change.

45. In general, we believe that NYISO should adjust the demand curves if it is required to acquire reserves at higher prices through out of market purchases. There may be occasions when such higher prices are not representative of market conditions due to extraordinary circumstances. However, if the prices that result from the demand curves are not sufficient to obtain sufficient reserves, it would generally indicate that the demand curves need to be adjusted. Therefore, while we will not require the NYISO to automatically adjust the demand curves, we intend to closely monitor the situation to determine if changes are needed. We will require the NYISO to submit a report to the Commission, each time they make out of merit purchases that deviate from the applicable demand curves no later than 15 days after such an occurrence. If NYISO does not adjust the demand curves it must fully explain why an adjustment is not appropriate.

H. Constrained Hours Definition

1. NYISO's Proposal

46. The number of Constrained Hours is used in the calculation for the market conduct threshold for generators in constrained areas. The NYISO is proposing a revision to the definition of Constrained Hours. The first sentence in Section 3.1.2.b)(1) of Attachment H of NYISO's Services Tariff reads:

Constrained Hours = the total number of hours over the prior 12 months in which the real-time Shadow Price has been greater than zero in any interval on *all* Interfaces or facilities leading into the Constrained Area in which the Generator is located. (Emphasis added)

In the RTS filing, NYISO proposes to revise this sentence by changing *all* to *any*.

2. Protest

47. NRG claims that the NYISO has proposed an unsupported and unwarranted change in the definition of Constrained Hours, which impacts the calculation of the threshold used to determine economic withholding.

48. NRG states that by counting an area as constrained for purposes of the definition of Constrained Hours when only one interface or facility has a positive shadow price and other interfaces do not, the NYISO will be treating the area as just as constrained for purposes of mitigating the potential exercise of market power when it is only slightly constrained as when it is fully constrained. This minor change in the definition of Constrained Hours will lower the threshold the NYISO uses to identify economic withholding and mitigation of a generator.

49. The NYISO states in its answer that the current language uses an "all interfaces or facilities" trigger because its decades-old Security Constrained Dispatch software is only capable of testing load pockets for market power on this all or nothing basis. The new RTS and SCUC software however, is capable of more refined interface and facility specific examinations, and will lead to more, not less, efficient mitigation decisions. Additionally, the NYISO states that given the limited number and capacity of the interfaces into New York City (the only area in New York designated as a constrained area), and the fact that market power may arise in New York City when fewer than all of the interfaces are constrained, this change is appropriate. The NYISO adds that the thresholds used in New York City are under constant scrutiny by the Market Monitor and the Market Advisor, neither of which would hesitate to propose revisions to the formula if the New York City market is being subjected to unduly strict mitigation.

3. Commission Response

50. We will accept the change in the Constrained Hours definition proposed by the NYISO. While we understand that more hours may be deemed to be “constrained hours” under the proposed revision, the Commission agrees with the NYISO that market power may arise when fewer than all of the interfaces into New York City are constrained, and therefore this change is appropriate. The interfaces into New York City are part of an interconnected network. When additional energy is imported into New York City, every interface in the interconnected network bears a portion of the additional energy; transmission operators have little or no ability to redirect the flow paths of energy transmitted between a generator and a load. Thus, a constraint on any one interface restricts any further imports. The additional imports could not be fully redirected to the unconstrained interfaces; and the constrained interface lacks the capacity to reliably accommodate its portion of the additional imported energy that would flow on it. We note that even though more hours may be deemed constrained, generators will not face mitigation unless they violate both the conduct and impact thresholds. Moreover, we agree with the NYISO that since the RTS software is capable of more refined interface and unit specific examinations, more efficient mitigation decisions are likely. However, we will require the NYISO’s Market Monitoring and Performance Unit and the Market Advisor to seek any changes they deem necessary if the current thresholds are producing unduly strict mitigation.

I. Default Availability Bid

1. NYISO’s Proposal

51. Under RTS, suppliers that submit energy bids will automatically participate in the Operating Reserves markets. Rate Schedule 4, Section 2.1 of the Service Tariff indicates that if a supplier offers resources in the Day-Ahead Energy Market that are capable of providing Operating Reserves, but does not submit an Availability Bid, it will be assigned a Day-Ahead Availability Bid of \$0/MWh up to the quantity of Capacity that it makes available to the NYISO in its Day-Ahead Bid. The NYISO proposes to assign a \$0/MWh default Availability Bid to all Operating Reserves Suppliers in real-time because generators available for dispatch in real-time incur no additional costs by making themselves available for Operating Reserves over the same dispatch range as they are available for Energy.

2. Protest

52. Dynegy protests the default availability bid of zero for operating reserves as a prohibited free call on generation. Dynegy insists that these reserves do have a cost. According to Dynegy, this proposed provision constitutes a must offer requirement on the

seller's operating reserves. Dynegy notes that the Commission recognized in a similar proceeding that generators should not be required to bid into the day-ahead market unless they are ICAP units.¹⁶ Therefore, Dynegy urges the Commission to reject the NYISO's proposed imposition of a \$0/MWh Availability Bid as a prohibited must offer obligation, or alternatively direct the NYISO to notify suppliers that their uncommitted reserves are subject to a \$0/MWh Availability Bid and give them an opportunity to revise the assigned \$0/MWh bid upwards.

53. NYISO states in its answer that if any supplier does not wish to have a zero Availability Bid it is free to specify a different value. Further, the NYISO asserts that its proposal is different from the Midwest ISO case cited by Dynegy because under RTS, a \$0/MWh Availability Bid can only be assigned to the extent that a supplier voluntarily offers capacity into the Day-Ahead Market. The NYISO goes on to say that a generator selected as a reserves supplier in the Day-Ahead Market, regardless of whether it submitted a bid or was assigned the default \$0/MWh bid, is in at least the same financial position as it would have been in had it not been selected as a reserves supplier, since reserves suppliers are paid the opportunity costs of providing reserves (the value of energy sales foregone to provide reserves) and the clearing price for availability payments.

3. Commission Response

54. We will conditionally accept the NYISO's proposed default availability bid of zero as a reasonable amount for suppliers that submit energy bids in the Day-Ahead Market, subject to NYISO filing revised tariff sheets indicating that the default availability bid applies only to Installed Capacity (ICAP) suppliers. By definition, ICAP suppliers must bid into the Day-Ahead Market, and therefore, they have the opportunity to submit a non-zero Availability Bid. Since these generators are receiving a payment to be available to the market in New York, it is reasonable to require that these units also submit a bid for Operating Reserves. However, a generator that is not an ICAP supplier does not have to bid into the Day-Ahead Market. Under NYISO's proposal, if that generator bid into the energy market it would also be required to bid into the market for Operating Reserves. Since the generator has not received a payment to make itself available to NYISO, we see no basis for imposing this type of must offer requirement on a non-ICAP generator.

¹⁶ Midwest Independent System Operator, Inc. 102 FERC ¶ 61,280 (2003)

J. Bidding Flexibility

1. NYISO's Proposal

55. The NYISO proposes to allow Generators to include up to eleven increasing cost steps in their Incremental Energy Bids, instead of the more limited six-point piece-wise linear cost curves that are permitted today. According to the NYISO, this will allow bids to more accurately reflect Generators' cost characteristics and economic priorities.

2. Comments

56. IPPNY asserts that the NYISO's proposed change eliminates the current ability of a generator to bid a polynomial curve to represent the generating unit's costs. IPPNY is concerned that with block bidding there will be a tendency for the dispatch software to move the generator to either the top or bottom in response to relatively small price changes. IPPNY is concerned that eleven blocks may not be sufficient to accurately represent the generator's costs and to avoid the generator being ramped up and down excessively. Both IPPNY and PSEG request that the Commission direct the NYISO to review the operation of the models over the first six months of RTS operation to determine whether additional bidding flexibility can be provided for generators. IPPNY also urges the Commission to require the NYISO to submit a report to the Commission addressing the feasibility of enhanced generating unit bidding flexibility after the completion of the first six months of using the new software.

3. Commission Response

57. The NYISO states in its answer that allowing generators to submit bids in eleven stepped bids is a clear improvement over the current method of submitting bids based on piece-wise linear bid curves. However, the NYISO does not adequately explain why this new blocked bidding methodology gives more flexibility to market participants than the current linear bid curves. Therefore we require the NYISO to: 1) work with its market participants and review the operation of the models over the six months after RTS is implemented to determine whether the new blocked bidding methodology is actually providing greater flexibility and whether it is possible to give the generating units more bidding flexibility; and 2) submit a report to the Commission addressing the feasibility of enhanced generating unit bidding flexibility within 45 days after the initial six months of operation of the RTS.

K. Seams Issues

1. NYISO's Comments

58. The NYISO states in its transmittal letter that it consulted with both ISO-NE and PJM in the development of the new RTS Software to avoid the creation of new seams.¹⁷ Neither entity raised any objections as both entities' markets are evolving in the same direction as the NYISO's

59. The NYISO notes that the RTS software will ultimately be able to support 15-minute schedule changes for External Transactions rather than the hourly changes that will be allowed initially. The NYISO will work with the ISO-NE and PJM to develop the protocols needed to implement 15-minute scheduling.

2. Comments

60. Several protests ask that the NYISO be ordered to stop work on a "Virtual Regional Dispatch" ("VRD") system with ISO New England Inc. ("ISO-NE") and instead focus on incorporating 15-minute scheduling of external transactions into the RTS framework. IPPNY and Corel Power believe that 15-minute scheduling for external transactions is a superior, market-based alternative to Virtual Regional Dispatch (VRD), an artificial process intended to force convergence between prices in the New York and New England Control Areas. IPPNY contends that 15-minute scheduling for external transactions should be implemented as soon as possible as it will allow suppliers to react to price signals and market conditions in a timely and efficient manner and will aid in ensuring that prices between neighboring systems converge. IPPNY asserts that instead of pursuing VRD, the NYISO should focus on market-based solutions to this problem such as RTS and New England's Standard Market Design ("SMD"). IPPNY further contends that the NYISO should be required to work collaboratively with its own stakeholders and with neighboring regions to develop 15-minute scheduling for external transactions in a manner consistent with the RTS.

61. The NYISO asserts that these protests should be rejected because they are premature and beyond the scope of this proceeding. According to the NYISO, VRD is not a part of the RTS proposal and the RTS Filing will do nothing to advance or accelerate its implementation. The NYISO states that VRD is still at a preliminary stage of definition, and that the NYISO would need to file proposed tariff revisions with the Commission, and await Commission action, before VRD could take effect. According to

¹⁷ See Transmittal Letter at P. 32.

the NYISO, this would afford interested stakeholders with ample opportunity to comment on an actual VRD proposal

3. Commission Response

62. The Commission finds that the VRD is outside the scope of the instant NYISO's RTS filing. We agree with the NYISO that because VRD is only in the preliminary stage of development and because there should be ample opportunity for stakeholders to participate in decisions regarding its development, it is not necessary for the Commission to set priorities at this time.

L. Demand Response

1. RTS and Demand Response

63. The NYISO RTS software was originally designed to support greater demand side participation in energy and ancillary services markets. However, as the NYISO stated in its filing, "during the stakeholder process, it became clear that Demand Side Resource (DSR) owners had concerns about how these new bidding options would be implemented that would effectively preclude their use."¹⁸ As a result, NYISO proposes to postpone the new bidding options until key market design and software issues are addressed.

2. Comments

64. In its comments, Multiple Intervenors provides more information on their concerns about the ability of demand response resources to participate in the proposed RTS system. The primary concern of Multiple Intervenors is that the RTS Tariff allows only a single bid for the Energy, Operating Reserves and Regulation Services markets. Multiple Intervenors asserts that an interested DSR could not bid into the ancillary services market only, without exposing itself to the risk that its bid could be taken in the real-time energy market. Furthermore, "unlike generators, DSRs are not in the business of generating energy and are not positioned to, for example, shut down and start up operations in order to participate in the real-time energy market."¹⁹ Multiple Intervenors suggests that DSRs could be allowed to bid separately as ancillary services only. Multiple Intervenors also recommends that the Commission should (a) reemphasize the importance of providing eligible DSR the opportunity to participate in ancillary service markets, (b) authorize the NYISO to adapt the RTS filing as needed to include DSRs, (c) encourage the NYISO to expedite the stakeholder process aimed at resolving these issues,

¹⁸ NYISO Filing Letter at page 33.

¹⁹ Multiple Intervenors December 22, 2003 Comments at page 8.

and (d) promote the ability of DSRs to provide synchronous reserves or regulation services.

65. NYISO responded to Multiple Intervenors' comments in its Answer. Fundamentally, NYISO stated its neutrality on the issue, and is committed to "work with its stakeholders to find a way to allow demand side resources to participate in the market that is both attractive to them and acceptable to other NYISO stakeholders."²⁰ NYISO does seek guidance from the Commission on whether it is appropriate for demand side resources to be treated differently from other kinds of suppliers with respect to co-optimization, particularly the "dual ancillary services bid process" suggested by Multiple Intervenors.

3. Commission Response

66. The Commission supports the ability of DSR to participate in the RTS system. The Commission ultimately envisions the participation of DSR in all day-ahead and real-time markets. The inclusion of DSR in the RTS moves the New York market in this direction and will provide DSRs the opportunity to participate in ancillary service markets. While the Commission recognizes the need to treat DSRs consistently with other resources, the Commission is also sympathetic to the special nature of DSRs. Fundamentally, the provision of DSRs is based on changes in customer demand. While some customers have the capability to actively participate and bid into energy, operating reserve, and regulation service markets, as the Multiple Intervenors have argued, many customers are not interested in or are not capable of actively participating in the energy market. Consequently, we direct the NYISO to continue the stakeholder discussions on the incorporation of DSRs into the RTS. The ultimate goal of this stakeholder process should be to accommodate the special aspects of DSR without violating the fundamental design principles of the RTS. The delay in the implementation of RTS provides additional time for these stakeholder discussions, but the filing of any tariff revisions associated with the inclusion of DSR in the RTS should occur no later than 120 days after the commencement of RTS. The Commission also directs the NYISO in its subsequent filing on DSR to address the desirability and implementation issues associated with the inclusion of DSRs in synchronous reserve markets.

²⁰ NYISO Answer at page 19.

M. Future RTS Enhancements

1. NYISO's Proposals

67. The NYISO plans to implement a number of future RTS enhancements, which include: 1) increasing Demand Side Participation (discussed above); 2) various Schedule Changes²¹; and 3) pushing the deadline for submitting Real-Time bids into RTC from seventy-five to sixty minutes before real-time.

2. Comments

68. Edison comments that the NYISO's proposed future enhancements have indefinite timetables for deployment. Edison asks that the Commission urge the NYISO to expedite the development and implementation of these enhancements as quickly as possible.

69. The NYISO states in its answer that it needs to work with all of its stakeholders to determine the relative priority that ought to be placed on each proposed enhancement, and their implementation schedules. The NYISO urges the Commission not to preempt this process by establishing deadlines that do not account for the complexity of certain enhancements or the competing demands on the NYISO's resources.

3. Commission Response

70. The Commission believes that the future market enhancements described in the RTS Filing are desirable, and we encourage NYISO to proceed with such enhancements expeditiously.

The Commission orders:

(A) NYISO's proposed RTS Software revisions are hereby accepted for filing, as modified, without suspension or hearing, to become effective, as requested.

²¹ The NYISO plans to support the eventual introduction of 15-minute scheduling for both internal and external transactions. The NYISO is also looking into the possibility of a feature that would allow generators to be committed and dispatched by RTC on a 15-minute basis. Those schedules would then be passed to RTD and would not be subject to further adjustments by it.

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(B) NYISO is hereby directed to make a compliance filing within 30 days of the date of this order, as discussed in the body of this order.

By the Commission.

(S E A L)

Linda Mitry,
Acting Secretary.