

144 FERC ¶ 61,013
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellenhoff, Chairman;
Philip D. Moeller, John R. Norris,
Cheryl A. LaFleur, and Tony Clark.

New York Independent System Operator, Inc.

Docket Nos. ER13-909-000
ER13-909-001

ORDER ON TARIFF FILING

(Issued July 8, 2013)

1. On February 8, 2013, as amended on May 9, 2013, the New York Independent System Operator, Inc. (NYISO) submitted proposed revisions to its Market Administration and Control Area Services Tariff (Services Tariff) to modify the calculation of Locational Based Marginal Pricing (LBMPs) during periods of scarcity when NYISO has called upon market participants that have provided Special Case Resources (SCR) and those enrolled in the Emergency Demand Response Program (EDRP) to reduce their load to manage reliability issues. As discussed below, we accept NYISO's proposed tariff revisions effective July 8, 2013.

Background

2. NYISO states that section 17.1.2 of the Services Tariff currently requires that LBMPs reflect the cost of SCR and EDRP Resources (known as "scarcity pricing") when such resources are called upon to resolve reliability issues and, but for their load reduction, NYISO would have experienced a regional or statewide shortage in certain Operating reserves products. The current Services Tariff provides that scarcity pricing is used to calculate LBMPs for all buses and Load Zones East of Central-East¹ if SCR/EDRP resources were called only in the area East of Central-East and, but for their load reduction "Available Reserves"² East of Central-East would have been insufficient

¹ The term "East of Central-East" is defined as "[a]n electrical area comprised of load zones F, G, H, I, J, and K, as identified in the ISO Procedures." Services Tariff § 2.1.

² "Available Reserves" is currently defined as: [T]he capability of all Suppliers

to meet the Eastern 10-minute Operating Reserves requirement. Currently, if SCR/EDRP are called in other load zones, or if called state-wide, scarcity pricing is used state-wide if Available Reserves are insufficient to meet the total 30-minute Operating Reserve requirement. The Services Tariff requires LBMPs to reflect either the offer price of SCR/EDRP resources that are called or \$500/MWh if NYISO determines that it would have experienced a regional or statewide shortage in certain Operating Reserves products. Scarcity pricing is currently not triggered for reliability situations requiring localized load reductions as long as available reserves either East of Central-East or statewide are sufficient to maintain specified Operating Reserves requirements. Thus, NYISO states that, under the current tariff, only a shortage in available reserves as measured across a broad region will allow the bid-cost of reliability-necessary SCR resources to be reflected in LBMPs.

3. On February 8, 2013, NYISO submitted proposed revisions to its Services Tariff to ensure that scarcity pricing is invoked when localized as well as broader security conditions occur. On April 9, 2013, the Commission notified NYISO that its February 8, 2013 filing was deficient and directed NYISO to provide additional information (Deficiency Letter). On May 9, 2013, NYISO submitted its response to the Deficiency Letter and included further proposed revisions to the Services Tariff, including retraction of certain changes proposed in its February 8, 2013 filing. NYISO requests an effective date of July 8, 2013, to allow it to implement these revisions during the major portion of the summer months but also requests Commission action by July 1, 2013, to provide market participants a one-week notice of the new rules.

NYISO's Proposal, as Modified

4. In its February 8, 2013 filing, NYISO states that the current tariff rules are insufficient insofar as available reserves over a broad region may mask a more localized scarcity where, but for the SCR/EDRP resources, available reserves would have been insufficient. As specified in more detail below, NYISO proposes revisions to the real-time LBMP calculation procedures of section 17.1.2 of the Services Tariff to apply scarcity priced LBMPs only in load zones where a reliability need required the assistance of SCR and EDRP resources and available reserves in those load zones would have been insufficient to resolve the reliability need without them. NYISO also proposes, as discussed below, to modify the definition of available reserves to better align the definition with NYISO's pricing and scheduling systems.³ NYISO states that the net

that submit Incremental Energy Bids to provide Spinning Reserves, Non-Synchronized 10-Minute Reserves, and 30-Minute Reserves in that interval and in the relevant location, and the quantity of recallable External ICAP Energy sales in that interval. Services Tariff § 2.1. NYISO proposes certain revisions to this definition. *See infra* note 4.

³ NYISO proposes to define Available Reserves as “[f]or purposes of determining the Real-Time Locational Based Marginal Price in any Real-Time Dispatch interval: the

effect of these changes is to reflect scarcity in energy prices when SCR and EDRP resources are activated for reliability reasons. Additionally, as discussed below, NYISO proposes to continue to use a single region-wide price for each operating reserves and regulation product and to reflect scarcity in the calculation of the opportunity costs of reserves if Available Reserves throughout the reserves region would be insufficient to maintain reliability without calling SCR/EDRPs.

5. Additionally, as discussed below, NYISO proposes a separate trigger for such scarcity pricing of Operating Reserves and Regulation Service products.⁴ Specifically, as provided in proposed section 15.4.6.2, NYISO has proposed to retain the existing Service Tariff's separate scarcity pricing rules for Operating Reserves during intervals of statewide scarcity versus only East of Central-East scarcity. It proposes to revise the existing Operating Reserves scarcity pricing provisions so that the statewide Operating Reserves scarcity pricing (proposed section 15.4.6.2.1) will trigger when SCR/EDRP resources have been called in response to a reliability need in any load zone in the NYCA, NYISO uses the LBMP scarcity pricing rule of proposed section 17.1.2.2, and the aggregate of Available reserves (as newly defined) in the NYCA are less than the number of SCR/EDRP MW called for that event. When SCR/EDRP resources have been called on only in a load zone or zones of East of Central-East, the Eastern Operating Reserves scarcity pricing rule of section 15.4.6.2.2 will be applied. NYISO also proposes changes to the Regulation Service pricing provisions, sections 15.3.5.1 and 15.3.5.2, to track the proposed changes to the LBMP and Operating Reserves scarcity pricing provisions for SCR/EDRP activations during intervals of statewide scarcity.

6. NYISO contends that uniform scarcity pricing of LBMPs is necessary to ensure continued reliable service by signaling shortages in the capacity available from generation currently on the system to provide Operating Reserves. NYISO states that Potomac Economics, the Market Monitoring Unit for NYISO (MMU), cited a July 21, 2011 incident during which NYISO activated emergency demand response in Zones G through K to maintain transmission security to Southeast New York.⁵ ~~An average of~~ capability of all Suppliers to provide Operating Reserves in that interval and in the relevant location, minus the quantity of scheduled Operating Reserves in that interval." NYISO February 8, 2013 Filing at 4.

⁴ In its February 8, 2013 filing, NYISO initially proposed a single scarcity pricing calculation for Operating Reserves, but amended this aspect of its proposal in its May 9, 2013 filing to retain the two-part pricing procedure of the existing tariff.

⁵ February 8, 2013 Filing Transmittal at 2 (citing *2011 State of the Market Report for the New York ISO Markets* (April 2012) (2011 State of the Market Report) *available at* http://www.nyiso.com/public/webdocs/markets_operations/documents/Studies_and_Reports/Reports/Market_Monitoring_Unit_Reports/2011/SOM_Report-Final_41812.pdf).

680 MW responded, but scarcity pricing rules were not activated because the amount of reserves available in that region exceeded the amount of demand response that was activated. As a result, according to the MMU, real-time prices were “far below” what would have appropriately reflected the costs of activating demand response resources.⁶ NYISO states that the MMU recommended that NYISO work with its stakeholders to develop new pricing provisions that would enable SCR and EDRP resources to set LBMPs under a wider range of circumstances.⁷ NYISO states that the MMU has indicated that prices that occur under shortage conditions are an important contributor to efficient long-term price signals and provide suppliers and demand response resources with incentives to respond during real-time shortages.⁸

7. NYISO also proposes to amend the definition of “Available Reserves” for purposes of scarcity pricing to no longer account for recallable energy sales to external Control Areas. NYISO states that recallable energy sales are not factored into the scheduling and pricing of market-based products, including Operating Reserves, and that the new definition will include only those resources that are available for meeting Operating Reserves requirements. NYISO also proposes to remove from the definition of Available Reserves capacity that has already been scheduled for Operating Reserves.

8. Among other changes to its Services Tariff to recognize the proposed revisions to its scarcity pricing, NYISO proposes to amend section 17.1.2 to indicate it will apply scarcity LBMP pricing for any interval:

in which the EDRP/SCR Resources have been called in one or more load zones due to a reliability need and the aggregate of Available Reserves in the load zone(s) due to a reliability need and the aggregate of Available Reserves in the load zone(s) in which the reliability need was identified are less than the number of EDRP/SCR MWs called for that event.

9. NYISO also proposes conforming revisions to the calculation of real-time market clearing prices for Operating Reserves during EDRP/SCR activations to set a scarcity price for reserves and Regulation Service. Under its proposed tariff revisions, scarcity pricing for these ancillary services would trigger when Available Reserves in the region from which supplies of reserves and regulation can be obtained are insufficient but for the load reduction expected from SCR/EDRP resources. NYISO states that re-priced reserves and regulation products would apply to all suppliers of the product without regard to their location within the applicable reserve or regulation region.⁹

⁶ *Id.* (citing 2011 State of the Market Report at 49–50).

⁷ *Id.* (citing 2011 State of the Market Report at 50-51).

⁸ *Id.* (citing 2011 State of the Market Report at 47).

10. Finally, NYISO proposes ministerial tariff-language changes, including the removal of the reference to Scarcity Pricing Rules A and B.

Notices and Responsive Pleadings

11. Notice of NYISO's February 8, 2013 filing was published in the *Federal Register*, 78 Fed. Reg. 11,634 (2013), with protests and interventions due on or before March 1, 2013. Notice of NYISO's May 9, 2013 filing was published in the *Federal Register*, 78 Fed. Reg. 29,128 (2013), with protests and interventions due on or before May 30, 2013.

12. Multiple Intervenors filed a motion to intervene. NRG Companies, Independent Power Producers of New York, Inc. (IPPNY), and the MMU each filed a motion to intervene and comments. The New York Transmission Owners (NYTOs) filed a motion to intervene and protest.

13. On March 20, 2013, NYISO filed an answer to the NYTOs' protest. On April 2, 2013, the NYTOs filed an answer to NYISO's answer and on May 30, 2013, the NYTOs filed comments in response to NYISO's May 9, 2013 filing. On June 12, 2013, NYISO filed an answer to the NYTOs' answer.

The NYTOs' Protest

14. The NYTOs protest that under NYISO's proposal to continue to use a single region-wide price for Operating Reserves, energy and regulation prices will not be consistent and will not be market-clearing.¹⁰ The NYTOs explain that NYISO's real-time dispatch program (RTD) has no ability to account for scarcity pricing, since scarcity pricing for energy is applied after the fact. They assert that although energy prices would reflect scarcity levels in the load zones where scarcity exists, operating reserve prices in the scarcity zone would not reflect actual lost opportunity costs because RTD cannot go back and re-determine ancillary service schedules to reflect the opportunity cost that each provider actually incurs. The NYTOs assert that the assumptions made by NYISO's RTD that justify the use of a single region-wide price during non-scarcity situations does not apply in scarcity situations, and as a result, RTD will not choose the lowest-cost set of resources to provide ancillary services. Instead, some higher energy-cost resources (within the scarcity zone) would provide reserves because they were chosen by RTD in the belief that their opportunity costs were relatively low, when in fact they increased

⁹ NYISO May 9, 2013 Answer, Attachment 2 at 14.

¹⁰ When prices "clear the market" no party is left in the market after all transactions occur that wanted to transact at the stated prices but was unable to do so. That is, at the stated prices, every seller who wants to sell has found a buyer, and every buyer who wants to buy has found a seller.

due to the after-the-fact application of scarcity pricing for energy. Thus the Operating Reserves market would not clear because resources in the scarcity zones would want to provide more energy than is actually dispatched to provide energy. The NYTOs also argue that NYISO's single region-wide pricing of reserves would cause unnecessary windfalls and large losses whenever scarcity prices are applied to energy in the scarcity zone, and reserves are priced at either scarcity or non-scarcity levels due to the balancing obligations incurred by generators that are scheduled to provide more or less Operating Reserves in the real-time market than in the day-ahead market. The NYTOs offer a revision where proposed scarcity pricing provisions are only used to set Operating Reserves and regulation prices at locations within the load zones to which scarcity pricing for energy will be applied.¹¹

15. The NYTOs request that if the Commission approves NYISO's proposed tariff revisions, that these revisions be treated only as a temporary solution. The NYTOs further request that the Commission order NYISO to file a report with the Commission by January 2014 to discuss the results of the shortage pricing review that NYISO has committed to undertake and, in addition, to have a permanent solution in place by summer 2014.¹²

Answers

16. NYISO responds that paying uniform Operating Reserves and Regulation Service prices to all suppliers is just and reasonable regardless of whether they are located in or out of the scarcity region.¹³ NYISO adds that setting ancillary services prices based on the costs of the marginal resource and paying the same price to all suppliers of the same product is an efficient outcome that is consistent with a sound market design and does not result in "windfall revenues."¹⁴

17. NYISO asserts that the NYTOs have no basis for the claim that New York load will be required to fund real-time ancillary service procurement. NYISO states that their expectation that loads will be obligated to fund these real-time purchase obligations rests on their flawed assumption that NYISO will convert reserves and regulation supplies to energy to resolve threatened energy shortages once scarcity pricing is activated. NYISO responds that, to the contrary, the need to find additional energy supply in the scarcity region is actually reduced once scarcity is called since load reductions available from SCR and EDRP resources reduce the need to schedule additional energy providers to

¹¹ NYTOs March 1, 2013 Protest at 7-10 and May 30, 2013 Comments at 3.

¹² NYTOs May 30, 2013 Answer at 1.

¹³ NYISO March 20, 2013 Answer at 3.

¹⁴ *Id.* at 6.

serve load in the scarcity region.¹⁵ NYISO states that, most fundamentally, however, real-time reserves or regulation supply is paid for by balancing generators, not loads. NYISO contends that the proposal put forth by the NYTOs to pay a non-scarcity priced real-time ancillary service price for all real-time products procured outside the scarcity zone would create windfall revenues from ancillary service providers' balancing obligations that would be payable to loads.¹⁶

18. NYISO states that, by establishing a load-zone-based rather than a regionally-based trigger for pricing LBMPs using scarcity pricing methodologies, NYISO can better determine where these resources are marginal when called.¹⁷ These resources will be marginal, and will set scarcity prices, when Available Reserves in any load zone for which their load reduction was needed to resolve a reliability need are less than the MW of load reduction they were called upon to provide. NYISO adds that its enhancements to the triggering events pursuant to which Operating Reserves would be priced using scarcity pricing has been endorsed by the MMU.¹⁸

19. Finally, NYISO argues that reflecting scarcity in ancillary service prices only in zones where scarcity is also reflected in LBMPs as the NYTOs request would require significant and time-consuming software revisions, the cost of which would be significant. NYISO states that the pricing algorithms used during scarcity, as well as the price-posting and settlement software, would need to be revised. NYISO adds that pursuit of such a project would require reassigning resources, redirecting existing project-related costs, and extending the timeframes of existing projects, including broader regional market initiatives such as Market-to-Market and Coordinated Transaction Scheduling with PJM.¹⁹

Comments in Support of NYISO's Proposal

20. NRG, IPPNY, and the MMU each filed comments in support of the NYISO's amended proposed tariff revisions. NRG states that the tariff revisions will enhance reliability during periods of scarcity through improved scarcity pricing signals. NRG emphasizes that this is a "much-needed" remedy for summer 2013 and urges the Commission not to delay the improvements in the interest of finding a "perfect" solution.

¹⁵ NYISO March 20, 2013 Answer at 7.

¹⁶ *Id.* at 9-10.

¹⁷ NYISO June 12, 2013 Answer at 3.

¹⁸ *Id.* at 4.

¹⁹ NYISO March 20, 2013 Answer at 10-11.

21. IPPNY cites the July 21, 2011 scarcity event where LBMPs did not reflect the MWs of demand response resources that were required to maintain reliability. IPPNY adds that the 2012 State of the Market Report again explained that, on average, the amount of available capacity exceeded the amount of demand response by a significant margin during the hours when demand response was deployed and this again resulted in the costs of demand response resources not being reflected in the real-time LBMPs under most circumstances due in part to the limited scope of the Scarcity Pricing Rules. IPPNY asserts that the amended proposed tariff revisions address the shortcoming in LBMP calculations and the concerns of the NYTOs that Operating Reserves are priced fairly and scarcity pricing is applied only in the load zones where the reliability need exists.

22. The MMU states that it believes that the proposal is appropriate because it assures that scarcity pricing will only be reflected in areas where NYISO is truly short. It states that it believes the changes proposed by NYISO are extremely valuable and reasonable because they will ensure that local reliability needs that prompt NYISO to call SCRs and EDRP will be better reflected in NYISO's real-time energy prices. The MMU adds that NYISO has mitigated the risks of inappropriately high scarcity prices when SCRs and EDRP were called but, in retrospect, not needed to address a reliability need. The MMU additionally states that it may be appropriate for the NYISO to consider changes to its locational reserve requirement.

Commission Determination

Procedural Matters

23. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2012), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

24. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2012) prohibits an answer to a protest or answer unless otherwise ordered by the decisional authority. We will accept the answers filed in this proceeding because they have provided information that assisted us in our decision-making process.

Substantive Matters

25. We accept NYISO's proposal as modified. We agree with NYISO that, in a load zone where SCRs and EDRP resources are activated to address a reliability need, it is reasonable to establish energy prices in the load zone that reflect the costs of activating these resources. We agree with NYISO that such energy prices will send a more accurate signal regarding the cost of providing energy to loads in the load zones where SCRs and EDRP resources are activated. Additionally, we agree with the MMU that NYISO's proposed changes are reasonable because they will ensure that local reliability needs that

prompt NYISO to call SCRs and EDRP will be better reflected in NYISO's real-time energy prices.

26. We also find the proposed amendment to the definition of "Available Reserves" to remove the inclusion of recallable energy sales to external Control Areas to be reasonable. We agree with NYISO that such recallable energy sales are not reserves and may not be available to provide energy within the NYISO footprint within the time frames required of Operating Reserves.

27. However, we note that the NYTOs are concerned that, although prices would reflect scarcity levels where scarcity exists under NYISO's proposal, the dispatch of resources may not always minimize the joint costs of providing energy and Operating Reserves. NYISO has committed in its May 9, 2013 filing to provide a comprehensive evaluation and proposal, along with a stakeholder review of the following issues: (i) the locations for which reserves are procured; (ii) the reserves (type and amount) procured for those locations; (iii) the reserve demand curve MW and value set points; and (iv) the implementation and triggering of scarcity pricing.²⁰ We recognize that extensive system changes may be required to optimize the scarcity pricing mechanism, and agree with NYISO that stakeholders should have an opportunity to consider whether such an effort is warranted.

28. While we accept NYISO's revised proposal as an improvement over its existing market rules, we will require NYISO to submit an informational report by October 31, 2013, containing: (1) a comprehensive evaluation of both how well the revised scarcity pricing mechanism achieved its objectives, including that of providing locational price signals that indicate the existence of scarcity conditions, and the existence of any undesirable effects on market outcomes during the summer of 2013; and (ii) a description of the steps that would need to be taken, and the resources required, to implement a real-time scarcity pricing optimization engine, including a real-time dispatch that minimizes the joint social costs of providing energy and Operating Reserves, allows prices for energy and Operating Reserves to clear the market, and establishes operating locational reserve requirements that are sufficiently granular to recognize important transmission constraints.

29. For the foregoing reasons, the Commission accepts NYISO's proposed revisions, as modified, to the Services Tariff, to be effective as proposed.

The Commission orders:

(A) NYISO's proposed tariff revisions are hereby accepted, to be effective July 8, 2013.

²⁰ May 9, 2013 Filing at 3.

(B) NYISO is hereby directed to submit an informational report by October 31, 2013.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.