NEW YORK INDEPENDENT SYSTEM OPERATOR

10 Krey Boulevard ♦ Rensselaer, NY 12144

May 9, 2013

Honorable Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Re: ***New York Independent System Operator, Inc.*, Docket No. ER13-909-001; Response to Request for Further Information, Proposed Tariff Amendments to Revise Ancillary Service Price Calculations During Periods of Scarcity and Request for Commission Action no Later than July 1, 2013**

Dear Secretary Bose:

In accordance with the Commission's April 9, 2013 Letter in this proceeding[1] requesting further information the New York Independent System Operator, Inc. ("NYISO") respectfully submits this response to the Commission's questions. The attached affidavit of Mr. Robert Pike, the NYISO's Director of Market Design, addresses Questions one through seven from the April 9 Letter. Answers to questions eight through ten are provided herein in Section II.

In addition, in accordance with Rule 35.17(b)[2] this filing includes proposed tariff amendments that are supplements to the proposed revisions the NYISO submitted in its initial filing in this docket.[3] In addition to the amendments proposed in its Feb. 8 Filing, the proposed amendments included herein revise Sections 4.4.2.7, 15.3.5.1, 15.3.5.2, 15.4.6.2, 15.4.6.2.1, and 15.4.6.2.2 of the Market Administration and Control Area Services Tariff ("Services Tariff"). All of these proposed revisions are set forth in Attachments II and III and described in Section III of this letter.

As noted in Section III, and as Mr. Pike indicates in his affidavit,[4] the need for several of the proposed amendments became evident when the NYISO analyzed the questions in the April 9 Letter. The NYISO had indicated in its Answer to Protest that the methodology for pricing Operating Reserves during periods of statewide scarcity under the currently applicable tariff would be appropriate.[5] This methodology would also resolve the inconsistency that the

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1 *See: New York Independent System Operator, Inc.* ER13-909-000, Commission Letter dated April 9, 2013 ("April 9 Letter").

2 18 C.F.R. §35.17(b) (2013).

3 *New York Independent System Operator, Inc., Proposed Tariff Amendments to Revise Energy Price Calculations During Periods of Scarcity,* ER13-909-000, February 8, 2013 ("Feb. 8 Filing").

4 *New York Independent System Operator, Inc., Affidavit of Mr. Robert Pike*, ER13-909-000, May 9, 2013.

5 *New York Independent System Operator, Inc., Request for Leave to Answer and Answer to Protest, of The New York Independent System Operator, Inc.*, ER13-909-000, March 20, 2013 ("Answer to Protest") pp2.3.

Commission points out in its April 9 Letter.[6] As explained more fully herein, the NYISO has also determined to revise the trigger for applying scarcity pricing to Operating Reserves and Regulation Service on the advice of Dr. David Patton of the NYISO's MMU, Potomac Economics. The proposed amendments provided herein include those proposals thereby resolving certain pricing inconsistencies and avoiding inefficient outcomes that could appear in the real-time market if the NYISO were to implement the design for pricing Operating Reserves and Regulation Service during periods of scarcity as proposed in its Feb. 8 Filing.

The NYISO also recognizes that pricing and scheduling consistency is best achieved through use of the real-time optimization engine and that the practice of applying prices administratively after schedules have been established by the real-time dispatch ("RTD") will never duplicate the RTD's pricing and scheduling efficiency. However, the proposal set forth herein can be accomplished in the short-term, addresses the recommendation from the Independent Market Monitor to "set efficient prices when demand response resources are needed to satisfy reliability needs…"[7] and reduces the scheduling / pricing inefficiencies that the NYISO's initial proposal did not while retaining the uniform market price/MW principle that is fundamental to the NYISO Markets.

Under the NYISO's amended proposal, presented herein, Operating Reserves and Regulation Service will not be priced at scarcity levels unless a scarcity event is triggered in the pricing region applicable to these products. Thus, all providers of Eastern Operating Reserves, for instance, would be paid a scarcity–determined Eastern Operating Reserves price, or none would. Nonetheless, schedules and prices under these revisions will, on occasion, still continue to be inconsistent. But this inconsistency will arise less often and be of a smaller impact than under the NYISO's proposal in its Feb. 8 Filing.

The need for enhanced scarcity pricing for LBMPs, Operating Reserves and Regulation Service outweighs the few remaining real-time market inefficiencies that may exist under the NYISO's proposed administrative application of scarcity pricing. Scarcity-priced LBMPs are necessary to ensure continued reliable service by signaling shortages in the capacity available from generation currently on the system to provide Operating Reserves. Scarcity pricing of energy and these ancillary service products indicates additional supply of these products would be valuable. Scarcity pricing assists in maintaining long-term reliability by signaling the need for new investment in transmission, generator resources and additional demand reduction in the areas where the existing energy is in short supply. These benefits far outweigh short-term market inefficiencies.

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[6] April 9 Letter at p.3.

[7] *See: 2012 State of the Market Report for the New York ISO Markets*, David B. Patton, Ph.D., Pallas LeeVanSchaick, Ph.D., Jie Chen, Ph.D., April 2013, page 85 at:

http://www.nyiso.com/public/webdocs/markets_operations/documents/Studies_and_Reports/Reports/Market_Monitoring_Unit_Reports/2012/NYISO2012StateofMarketReport.pdf.

The proposed tariff amendments included herein were shared for comment with the NYISO's stakeholder members of the Management Committee on May 1, 2013 and were discussed at the May 3, 2013 meeting of the Market Issues Working Group. In addition the NYISO has reached out to several stakeholders with particular questions about these amendments.

Finally, the NYISO wishes to inform the Commission that, in response to requests raised by concerned stakeholders during the consideration and approval of the tariff amendments that were submitted in the Feb. 8 Filing, the NYISO committed to provide a comprehensive evaluation and proposal regarding shortage pricing by the 2nd quarter of 2014. The NYISO has further discussed this commitment and can now say that it will include an evaluation, stakeholder review, assessment and prioritization 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.

The NYISO will also solicit stakeholder feedback on additional items to consider in this comprehensive evaluation. These efforts will include stakeholder evaluation of the cost/benefits of achieving the enhancement requested by the New York Transmission Owners ("NYTOs") in the Protest submitted in this docket to establish zonal reserve market clearing prices during scarcity events.[8] The NYISO will complete the evaluation of zonal reserve market clearing prices during scarcity events before the end of the first quarter of 2014.

The NYISO's stakeholder review may lead to the development of additional enhancements to the NYISO's implementation of its shortage and scarcity pricing rules. If it does, the NYISO would expect to make one or more separate tariff filings under Section 205 of the Federal Power Act to address those issues in the future. The possibility that additional enhancements may be proposed at a later time should not, however, delay the Commission action in this proceeding.

[8] *New York Independent System Operator, Inc., New York Independent System Operator, Inc., Motion To Intervene and Protest of the New York Transmission Owners,* March 1, 2013 ("Protest").

I. Documents Submitted

1. This filing letter;

2. The Affidavit of Mr. Robert Pike, the NYISO's Director of Market Design (Attachment I);

3. A clean version of the proposed revisions to the NYISO's Services Tariff ("Attachment II"); and

3. A blacklined version of the proposed revisions to the NYISO's Services Tariff ("Attachment III").

II. Answers to Questions Numbers 8, 9, and 10 from OMER.

Question 8. In NYISO's Answer, it offered to put back in place all of the existing tariff provisions currently identified as Scarcity Pricing Rule "A" (MST section 15.4.6.2.1) in order to eliminate an inconsistency between the language used for the revisions to scarcity pricing for Operating Reserves the ISO submitted in its February 8 Filing and the language NYISO uses to calculate Operating Reserves prices in non-scarcity periods. Please explain how the proposed revisions are inconsistent.

Answer 8. The revisions proposed by the NYISO in its Feb. 8 filing to Sections 15.4.6.2.1 and 15.4.6.2.2 described scarcity pricing by looking to the pricing methodology of Section 15.4.6.1, the methodology that is used during non-scarcity periods. As a result, the NYISO proposed to reset the shadow price "of each Operating Reserve product" to the highest Lost Opportunity Cost of any Operating Reserves provider of that product or the shadow price established by RTD if higher. As the NYTOs correctly pointed out, there are no shadow prices "for Operating Reserve products."[9] The Shadow Price of each relevant Operating Reserves "constraint" is used in Section 15.4.6.1 to establish clearing prices during non-scarcity periods. These Shadow Prices are not susceptible to revision during scarcity or otherwise.

The NYISO realized, as it explained in its March 20, 2013 Answer to Protest, that its administratively-applied scarcity pricing needed to revise market prices not shadow prices. As a result, in its March 20, 2013 Answer to Protest, the NYISO proposed to return to the methodology of Pricing Rule "A," found in Section 15.4.6.2 and currently effective, which resets the prices otherwise established by Section 15.4.6.1 during scarcity.

The NYISO's current proposal also adds back the pricing methodology detailed in Section 15.4.6.2.2 for pricing Operating Reserves during scarcity East of Central East that is in effect currently, with minor administrative revisions. The amendments being proposed for

[9] *New York Independent System Operator, Inc., Request for Leave to Answer and Answer to Protest, of The New York Independent System Operator, Inc.*, ER13-909-000, March 20, 2013.

scarcity pricing of Operating Reserves in this May 9, 2013 filing also revise the trigger for determining when to use this methodology as provided in Section 15.4.6.2.

Question 9. Please explain why Scarcity Pricing Rule "A" would remain appropriate under the proposed revisions NYISO filed in this docket.

Answer 9. Scarcity Pricing Rule "A" in the tariff before the NYISO's Feb 8 filing described how scarcity prices for Operating Reserves were set when Available Reserves statewide were insufficient, but-for the load reductions requested from SCR/EDRP Resources, to maintain the 30-minute reserves requirement (the "trigger"). Although the NYISO is proposing to revise the trigger, as is explained in Section III of this letter, the formula in Section 15.4.6.2.1, for establishing market clearing prices when Available Reserves statewide are insufficient, remains relevant and appropriate for pricing Operating Reserves under the proposed trigger identifying statewide scarcity. This pricing formula uses the highest lost opportunity cost of specified suppliers, scheduled by RTD, to set the price of specified Operating Reserves products in a manner that complies with the rule defining cascading of operating reserve prices in Section 15.4.4.3. This pricing approach also enforces the rule that is embedded in the calculation of Operating Reserves prices during non-scarcity intervals (pursuant to Section 15.4.6.1) that Western reserves prices will never exceed Eastern reserves prices for the equivalent product.

As is more fully explained in Section III of this letter, the NYISO is proposing to return the rule previously identified as Scarcity Pricing Rule "B" in Section 15.4.6.2.2 to the Services Tariff as the methodology to use when Available Reserves are sufficient statewide but insufficient East of Central East. The NYISO proposes to rename this methodology, however, to drop the reference to rule "B."

Question 10. Please be specific as to which existing tariff provisions currently identified as Scarcity Pricing Rule "A" would be reinstated, and how they would integrate with the proposed revisions to MST section 15.4.6.2.1.

Answer 10. The NYISO is submitting in Attachments II and III redlined and clean versions of the proposed amendments to Services Tariff Sections 15.4.6.2.1 and 15.4.6.2.2. These Sections describe the methodology for setting scarcity prices for Operating Reserves when the trigger, described in Section 15.4.6.2, indicates that scarcity pricing for Operating Reserves is necessary, either statewide (using the methodology in Section 15.4.6.2.1) or East of Central East (using the methodology in Section 15.4.6.2.2). But for minor editorial changes, the NYISO is now retaining the methodologies as they appeared in these Sections before the Feb. 8 Filing.

III. Description of and Justification for Revisions Proposed Herein

A. Amendments to Sections 15.4.6.2, 15.4.6.2.1, 15.4.6.2.2, 15.3.5.1, and 15.3.5.2

The NYISO proposes ministerial changes to Section 15.4.6.2 to drop the title. The NYISO is also deleting the scarcity pricing methodology included in this section by the amendments included in the Feb. 8 Filing. The NYISO proposes to add a revised trigger to determine when Operating Reserves should be priced. The NYISO further proposes the situations under which the scarcity pricing formulas found in the also-amended Sections 15.4.6.2.1 and 15.4.6.2.2 would be used. The formulas previously in these sections and deleted by the Feb 8 amendments in this docket are herein proposed to be returned to Sections 15.4.6.2.1 and 15.3.5.2. As explained below, these methodologies are appropriate for scarcity-pricing Operating Reserves using the NYISO's proposed triggers.

In its Feb. 8 Filing, the NYISO proposed to apply scarcity prices to Operating Reserves products whenever it applied scarcity pricing to LBMPs. This created the outcome that whenever SCR / EDRP Resources were activated for a set of Load Zones (the "reliability region") that did not align with the area within which Operating Reserve products were procured ("reserve regions"), suppliers not receiving scarcity-set LBMPs would receive scarcity-set reserves prices. As Mr. Robert Pike indicates in his affidavit,[10] based on the recommendation of the NYISO's Market Monitoring Unit, specifically Dr. David Patton of Potomac Economics, the NYISO is proposing to use a second trigger, described in Section 15.4.6.2 to determine whether it should scarcity-price Operating Reserves and Regulation Service products. The second trigger will perform a similar but-for evaluation of Available Reserves, [11] but will specifically perform that test for the Operating Reserve regions. The NYISO would employ the second trigger whenever it prices LBMPs using the Section 17.1.2.2 scarcity pricing methodology.

Specifically, as described in Section 15.4.6.2, the NYISO proposes to trigger scarcity pricing for Operating Reserves products when, but-for the requested Load Reduction from SCR / EDRP Resources, Available Reserves would be insufficient to ensure that the reliability issues, which required the use of SCR / EDRP Resources, can be resolved. That is, when Available Reserves statewide are fewer than the requested Load Reduction from SCR / EDRP Resources, and the NYISO has set LBMPs using scarcity principles, all Operating Reserves and Regulation Service will be set using the scarcity pricing rules of Section 15.4.6.2.1 and 15.3.5.2, respectively.

As the NYISO also proposes in amendments to Section 15.4.6.2, if scarcity pricing under Section 15.4.6.2.1 has not been triggered because Available Reserves statewide are not less than the Load Reduction requested from the called SCR / EDRP Resources, and the Load Zones where LBMPs are being priced at scarcity are located in the area East of Central East, the NYISO will apply the trigger again by looking at the sufficiency of Available Reserves East of Central East. If Available Reserves East of Central East are less than the requested Load Reduction from SCR / EDRP Resources, and the NYISO has set LBMPs using scarcity principles, it will use the methodology in the current Section 15.4.6.2.2 to set scarcity prices for

[10] *New York Independent System Operator, Inc., Affidavit of Mr. Robert Pike*, ER13-909-000, May 9, 2013.

[11] The NYISO continues its proposal to amend the definition of Available Reserves to be the 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.

Eastern Spinning Reserves, Eastern 10-minute Non-Synchronized Reserves and Eastern 30-minute Reserves ("Eastern reserves products").

These triggers, which compare the MW of Available Reserves to the MW of requested Load Reduction from the SCR / EDRP call, are the same as the trigger the NYISO proposed in its Feb. 8 Filing to determine whether LBMPs should be set using scarcity pricing with the exception of the region over which the adequacy of Available Reserves is measured. Use of the same trigger, while varying the region over which Available Reserves are measured, allows the NYISO to apply scarcity pricing in a manner that is more consistent across energy, reserves and regulation.

Using this proposed approach, the NYISO will narrowly 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. If the reliability need was in Eastern New York, such that the Available Reserves East of Central-East would have been insufficient to maintain reliability, without the SCR/EDRP call, then Eastern reserves products will also be priced using scarcity pricing methodologies. If the reliability need was more extensive, such that Available Reserves statewide would have been insufficient to maintain reliability, without the SCR / EDRP call, then Operating Reserves and Regulation Service will also be priced using scarcity pricing methodologies.

It is appropriate to use the scarcity pricing rules of Sections 15.4.6.2.1 and 15.4.6.2.2 that are applicable currently, when scarcity pricing is triggered under the NYISO's amended proposal. Section 15.4.6.2.1 contains specific, separate calculations of the six Operating Reserves products the NYISO prices in each interval while maintaining the Section 15.4.4.3 rule against cascading and also ensuring that no Western reserves price is set higher than the comparable Eastern price.[12] The calculations exclude any Lost Opportunity Cost of reserves suppliers on Long Island to ensure that the scarcity-set prices comply with Section 15.4.4.2.

The NYISO proposes to retain the methodology in Section 15.3.5.2 for resetting Regulation Service prices under scarcity conditions when the NYISO has established statewide reserves prices using the scarcity pricing rules of Section 15.4.5.2.1. The NYISO is also proposing amendments to Section 15.3.5.1, the section that describes pricing Regulation Service in real-time (during non-scarcity intervals) to ensure Regulation Service is priced using a scarcity-based price only pursuant to the pricing rules of Section 15.4.6.2.1 and not otherwise.

Since Regulation Service providers and statewide reserves suppliers provide these valuable ancillary services from their location anywhere in the state, it is appropriate that statewide scarcity in Available Reserves would trigger scarcity pricing for both. Applying a scarcity price to these ancillary services will signal the reliability value that suppliers of these products bring to the market. Pricing reserves products East of Central East under similar,

[12] Since these Eastern products include a locational eligibility requirement, they are a more valuable reserves product and should not be priced lower than a comparable product of lesser value.

appropriate, scarcity conditions will additionally indicate the locational value of reserves Suppliers in this region.

B. Amendments to Section 4.4.2.7

The NYISO proposes a minor amendment to this section in addition to the revisions it proposed to this section in its Feb. 8 Filing. This Section currently describes the use of SCR/EDRP Resources "in order to avoid reserves shortages." As the NYISO indicated in its Feb. 8 Filing and again herein, the NYISO proposes to trigger scarcity pricing when SCR / EDRP Resources are need to resolve reliability issues in identified Load Zones and the amendment proposed herein will make that adjustment.

VI. Communications and Correspondence

All communications and service in this proceeding should be directed to:

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VII. Effective Date

The NYISO understands that this filing constitutes an amendment to the NYISO filing and that a new effective date will be established. The NYISO had originally requested an effective date no later than June 26, 2013. The NYISO is on track to install the software to implement the scarcity pricing revisions proposed in its Feb. 8 Filing and in this letter by June 12, 2013. The NYISO will install the software in the "off" position. However, the NYISO would be able to implement provisions accepted by a FERC order in this docket as of a date one week from the date of the order.

Therefore, the NYISO respectfully requests that the Commission issue an order as soon as practicable but in no event later than July 1, 2013 with an effective date sixty days from the date of this filing or July 8, 2013. Such an effective date will allow the NYISO to implement these revisions during the major portion of the summer months while also allowing a one-week notice to be issued to its Market Participants indicating the date for which the new rules will be introduced.

VIII. Conclusion

Wherefore, for the foregoing reasons, the New York Independent System Operator, Inc. respectfully requests that the Commission issue an order accepting the proposed Tariff amendments included in the NYISO's Feb. 8 Filing and the proposed amendments included herein and making them effective no later than sixty days from the date of this filing or July 8, 2013.

Respectfully submitted,

/s/Mollie Lampi

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CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding in accordance with the requirements of Rule 2010 of the Rules of Practice and Procedure, 18 C.F.R. §385.2010.

Dated at Rensselaer, NY this 9th day of May, 2013.

/s/ Joy A. Zimberlin

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