UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

New York Independent System Operator, Inc.)	Docket No. ER13-909-000
)	

REQUEST FOR LEAVE TO ANSWER AND ANSWER TO PROTEST, OF THE NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

Pursuant to Rules 212 and 213 of the Commission's Rules of Practice and Procedure,¹ the New York Independent System Operator, Inc. ("NYISO") respectfully requests leave to answer and answers the protest filed March 1, 2013 by the New York Transmission Owners ("NYTOs") in the above-captioned proceeding.² The protest addresses the NYISO's February 8, 2013 filing³ of proposed revisions to existing market rules for setting LBMPs⁴ and certain Ancillary Service prices during periods of scarcity ("scarcity pricing").⁵ The NYISO explains below why the NYTOs' proposal to revise the NYISO's proposal so that Ancillary Services would reflect scarcity costs only in Load Zones in which LBMPs also reflect scarcity costs (the "scarcity region") is without merit and should be rejected.

On the other hand, the NYISO believes that there is merit to the NYTOs' concerns regarding language inconsistencies between the proposed Operating Reserves pricing revisions and the manner in which the Tariff explains the current NYISO pricing for Operating Reserves.

¹ 18 C.F.R. §§385.212, 385.213 (2011).

² New York Independent System Operator, Inc. Docket ER13-909-000, Motion to Intervene and Protest of the New York Transmission Owners ("NYTOs' Protest").

³ New York Independent System Operator, Inc. Docket ER13-909-000, Letter to Secretary Bose, January 29, 2013, ("NYISO Filing").

⁴ Locational Based Marginal Prices establish energy prices paid to Generators and charged to Loads.

⁵ Terms with initial capitalization that are not otherwise defined herein shall have the meaning set forth in the NYISO Market Administration and Control Area Services Tariff ("Services Tariff"), and if not defined therein, in the NYISO Open Access Transmission Tariff ("OATT").

After considering these issues, which as the NYTOs' note [at 5] were not identified until after the February 8 filing was made, it appears that the better course would be to revise the proposed amendments to Section 15.4.6.2.1 to reinstate the existing Operating Reserves scarcity pricing methodology ("Scarcity Pricing Rule "A") without substantive revision. The NYISO would submit such a revision as a compliance filing, should the Commission agree that returning to the existing language is appropriate.

I REQUEST FOR LEAVE TO ANSWER

The NYISO is authorized to answer the NYTOs as a matter of right to the extent that their pleading constitutes "comments." The Commission also has discretion to accept answers to protests when they help to clarify complex issues, provide additional information, are otherwise helpful in the development of the record in a proceeding or assist in the decision-making process. The NYISO's answer satisfies those standards and should be accepted. It addresses inaccurate or incomplete statements that the NYTOs have made with respect to their request that Ancillary Services reflect scarcity costs only in Load Zones in which LBMPs also reflect scarcity costs. The NYISO's answer also clarifies that it recognizes the merit of the NYTOs' observations regarding inconsistent language describing how Operating Reserves are priced. 8

⁶ See 18 C.F.R. 385.213(a)(3) (2011).

⁷ See, e.g., Southern California Edison Co., 135 FERC ¶ 61,093 at P 16 (2011) (accepting answers to protests "because those answers provided information that assisted [the Commission] in [its] decision-making process"); New York Independent System Operator, Inc., 134 FERC ¶ 61,058 at P 24 (2011) (accepting the answers to protests and answers because they provided information that aided the Commission in better understanding the matters at issue in the proceeding); New York Independent System Operator, Inc. 140 FERC ¶ 61,160 at P 13 (2012) and PJM Interconnection, LLC, 132 FERC ¶ 61,217 at P 9 (2010) (accepting answers to answers and protests because they assisted in the Commission's decision-making process).

⁸ The NYISO also requests the Commission accept this answer notwithstanding that it is being filed two days beyond the due date for filing permitted answers.

II. ANSWER

A. Applying Uniform Prices to Providers of Real-Time Reserves and Regulation Products Inside or Outside Scarcity Regions is a Just and Reasonable Pricing Practice that does not Provide Windfall Revenues.

The NYTOs complain that the NYISO's proposed revisions to its Operating Reserves and Regulation Service scarcity pricing methodology can result in certain Generators receiving unjust and unreasonable "windfall" revenues. The NYTOs describe a "windfall" as a payment to a Generator for an Ancillary Service (which the NYISO will use in this Answer solely to refer to Operating Reserves and Regulation Service) that is priced at scarcity prices when the Generator's own LBMP is not. A scarcity-priced Ancillary Service product reflects the highest lost margin or opportunity cost experienced by a supplier capable of providing that product.9 When this lost margin exceeds the lost margin any individual Generator would suffer when backed down and scheduled to provide the Ancillary Service, 10 the NYTOs label the payment an unnecessary "windfall." If no scarcity-priced LBMP is payable, the NYTOs argue, no scarcity-priced Ancillary Service should be payable.

The NYISO pays all suppliers of an Ancillary Service product a uniform price/MW for each product scheduled.¹² The NYTOs propose overturning this long-standing pricing principle in favor of pricing the same Ancillary Service product differently depending on whether the

⁹ Ancillary Services, as a general matter, are priced using the costs of scheduling the marginal resource which costs can include the lost margin the marginal resource may suffer if it has to be backed down to supply the Ancillary Service. Under scarcity pricing, the highest Lost Opportunity Cost from a supplier capable of providing the product being priced is used as a proxy for the marginal resource.

¹⁰ A Generator's lost margin or lost energy sale is priced at the LBMP that would have been paid less the Bid for providing the product. If the Generator is outside the scarcity pricing region, its LBMP will not be priced using the NYISO's proposed LBMP scarcity pricing methodology.

¹¹ NYTOs Protest at p. 8.

 $^{^{\}rm 12}$ Market Administration and Control Area Services Tariff ("Services Tariff") Sections 15.3.4.1 and 15.4.5.1.

supplier is located inside a scarcity region or not.¹³ Their only justification offered for this differentiation is the assertion that a Generator outside the scarcity region does not "need" to have its Ancillary Service product reflect a lost margin that is any higher than the lost margin the Generator itself would be expected to incur from such a schedule:

[I]t is not necessary to increase the price paid to providers of 10-Minute Spinning Reserves in those Load Zones [outside the scarcity region] to reflect the scarcity-based profits on energy sales that those resources gave up in order to provide 10-Minute Spinning Reserves, as they gave up no such profits, because they are not located in Zone J [the scarcity region].¹⁴

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. Paying the same price to all suppliers of the same product is the backbone of Ancillary Service pricing in the NYISO's Tariff and has been so since the NYISO was created. Merely declaring this core market design principle to be suddenly "unnecessary" in a NYTO-defined situation does not transform it into an unjust or unreasonable pricing rule. Nor does it transform payments made under the established Ancillary Services pricing system into revenue "windfalls." If it is unreasonable to price Ancillary Service products using higher lost opportunity costs than some suppliers of the product would experience when scheduled to provide the product, then the entire Ancillary Services pricing framework in the NYISO would be called into question.

¹³ NYTOs' Protest p. 10.

¹⁴ NYTOs' Protest p. 8.

¹⁵ See: Central Hudson Gas & Electric et al. Docket No. ER97-1523-000 at p. 49 (86 FERC 61,062 (1999)) where the Commission accepted the NYISO proposal to price ancillary services:

Unlike the price of energy, there are no locational prices for capacity to supply ancillary services (except for spinning reserves, discussed below). Instead, a single price is paid to all suppliers of a given ancillary service in an hour.

1. It is Common for an Ancillary Service Price to Reflect a Lost Opportunity Cost that is Higher than the Lost Opportunity Cost of any Single Generator-Supplier of that Ancillary Service

The NYISO pays a uniform marginal clearing price to all suppliers of the same product and reflects in that clearing price the Bid cost (including any lost margins) of scheduling the marginal resource. The Regulation Service price paid to all suppliers of the product regardless of their location reflects the Real-Time Regulation Service Bid of the marginal resource, plus any margins on the sale of Energy or Operating Reserves that resource would forego if scheduling it to provide additional Regulation Service would lead to it being scheduled to provide less Energy or Operating Reserves.¹⁶

Similarly, the uniform clearing price paid to Operating Reserves suppliers for any one of the nine reserves products that a single supplier may supply¹⁷ reflects the bid of the marginal resource (which is set to zero in real-time¹⁸) plus any margins on the sale of Energy or Regulation Service that resource would forego if scheduling it to provide additional Operating Reserves would lead to it being scheduled to provide less Energy or Regulation Service.¹⁹

¹⁶ Services Tariff Section 15.3.5.1. Upon Commission approval the NYISO will be implementing a revised pricing methodology that will price for both Regulation Capacity and Regulation Movement although both will still be priced at the cost of marginal resource. *See: New York Independent System Operator, Inc.* 141 FERC 61,105 (2012).

¹⁷ The NYISO procures and prices nine Operating Reserves products to meet NYISO reliability obligations to procure 10-minute Spin, 10 minute total and 30 Minute reserves in three regions: the NYCA, in the Eastern Load Zones F, G, H. I, J, and K and in Long Island. Long Island prices are capped at the Eastern price for the product provided. *See* Section 15.4.6.1 for non-scarcity pricing and 15.4.4.2 for pricing during scarcity periods for these products (during scarcity the NYISO does not price Long Island products). The NYISO does not calculate separate scarcity prices for the Long Island Load Zone (K). *See also*: Attachment I for description of the Operating Reserves products the NYISO procures.

¹⁸ Services Tariff Section 4.4.2.2.1.

¹⁹ Services Tariff Section 15.4.6.1. When the NYISO is short of either Regulation Service or Reserves, it may replace the submitted bid in this calculation with the appropriate price from the demand curve developed for that product. Services Tariff Sections 15.4.5.1 and 15.4.6.1. The NYISO also uses these principles during scarcity conditions under the existing provisions of the Tariff and under its revised scarcity pricing proposal. To set a clearing price during scarcity, the NYISO uses as a proxy for the lost margin of the marginal resource the highest

As such, it is not atypical in today's Energy market to find that Generators are paid an Ancillary Service price/MW that reflects a lost opportunity cost higher than would be necessary to make that specific Generator whole for any lost margins that it would suffer by being backed down off its Energy schedule to provide that product. This difference between the lost margin reflected in the Ancillary Service price and the Generator's own lost margin appears every day in that the Generator supplying the Ancillary Service often has a smaller lost margin than did the marginal supplier of the Ancillary Service. The appearance of transmission constraints between the marginal supplier of Ancillary Services and the backed-down Generator accentuates the disparity between the two lost margins. The NYISO believes that setting Ancillary Service 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. It does not result in "windfall revenues" that the Commission should seek to prevent. The application of the proposed scarcity pricing revisions may result in this outcome more frequently but that does not make the outcome inappropriate.

The NYTOs have not argued that uniform pricing itself is unjust or unreasonable - they have argued only that using it when scarcity pricing is applicable is unjust and unreasonable. They have not presented a viable justification for applying a different rule to the two situations and the Commission should therefore reject their proposal.

lost opportunity cost of a supplier of the relevant product on the system. The NYISO pays the higher of this scarcity price or the non-scarcity RTD price to each product supplier.

B. There is no Basis for the NYTOs Claim That New York Load will be Required to Fund Real-Time Ancillary Service Procurement.

The NYTOs complain that it is unjust and unreasonable to require Loads to fund realtime reserves and regulation revenues paid to Generators under the NYISO's scarcity pricing proposal.²⁰ Their expectation that Loads will be obligated to fund these real-time purchase obligations rests completely on their assumptions that:

[A]dditional generating capacity outside the scarcity pricing region will be scheduled to provide Operating Reserves and Regulation Service, to replace the capacity inside the scarcity pricing region that was scheduled to provide Operating Reserves and Regulation Service in the Day-Ahead market but which was dispatched to provide energy in the real-time market. It will cost relatively little for those generators to buy their way out of their day-ahead energy positions, so the cost of paying those generators high prices for Operating Reserves and Regulation provided outside the scarcity pricing region will be largely borne by load. P. 9

The assumptions made by the NYTOs in this paragraph are seriously flawed. As is explained below, it is less likely that the NYISO will need to convert reserves and regulation suppliers to Energy to resolve threatened Energy shortages once scarcity pricing is activated because of the ameliorative impact Load reductions have on the need for additional Energy supply. As well, the NYTOs can influence the extent of any real-time conversion to Energy through adequate Day-Ahead purchases. Finally, even when such conversions are required, the cost of buying real-time reserves and regulation is borne by Generators not Loads. Thus, the conclusions the NYTOs draw from these assumptions are without merit and should be ignored.

First, 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 serve Load in the scarcity region. As a result, reserves or regulation-scheduled Generators in the scarcity region that have not yet been

²⁰ NYTOs' Protest p. 10.

converted to Energy schedules are less likely to be converted to Energy than they were before SCR / EDRP resources were activated. Calling SCR / EDRP resources should avoid the need to convert Day-Ahead scheduled reserves and regulation suppliers to Energy, and reduce the repurchase of real-time reserves and regulation from outside the regions. The NYTOs assumption to the contrary is mistaken.

Moreover, the NYTOs can limit the need to convert Day-Ahead Regulation and/or Operating Reserves to Energy in real-time by buying enough Energy Day-Ahead to cover the expected real-time demand of their customers, Load Zone by Load Zone. Since the NYISO's conversion of existing reserves or regulation supply to Energy occurs when real-time Load exceeds the Load Bids submitted Day-Ahead, the more accurately these Day-Ahead purchases reflect real-time load, the less likely the NYISO will have to perform these real-time conversions.²¹

Most fundamentally, however, real-time reserves or regulation supply is paid for by balancing Generators, not Loads. The NYISO proposal simply does not create a revenue obligation for Loads and there is thus no possibility of their having to pay for "windfall" payments to anyone. ²²

The NYISO ensures that sufficient reserves and regulation are purchased to satisfy its obligations in the Day-Ahead Market and it passes these costs onto Load.²³ When a Day-Ahead

²¹ While the availability of transmission capacity in real-time also influences the sufficiency of Day-Ahead purchases to satisfy real-time Load, the NYTOs, as owners of the transmission system, also influence the availability of transmission capacity in real-time.

²² The NYTOs' obligations under the Day-Ahead Margin Assurance Program, exists whether or not there is scarcity pricing. For instance, a DAMAP would be payable when the NYISO converts a reserves or regulation supplier outside the scarcity zone to energy - but not, as a general matter, when an energy supplier outside the scarcity zone is converted to reserves or regulation.

²³ Services Tariff Sections 15.3.2 and 15.4.4.1 and OATT Sections 6.3.1 and 6.5.1.

resource cannot fulfill its Day-Ahead obligation the NYISO will schedule replacement Ancillary services on an eligible real-time supplier. The non-performing Generator will buy-out or balance its Day-Ahead obligation at real-time prices, thus funding the real-time purchase obligation that its non-performance made necessary.²⁴ These balancing obligations also apply when the NYISO converts Day-Ahead reserves or regulation-scheduled Generators to Energy.

The NYTOs present no evidence to indicate that balancing obligations priced at a realtime Ancillary Service price will raise fewer dollars than it will cost to purchase replacement service at the same price. Thus they have failed to support the notion that the NYISO proposal would leave Loads with any funding obligation. In point of fact, as discussed below, limiting the application of scarcity-priced Ancillary Services to only those providers in scarcity regions would provide a windfall revenue stream for Loads.

Balancing obligations imposed on Day-Ahead-scheduled Ancillary Service suppliers reflect the cost of the real-time marginal supplier of the Ancillary Service product being converted. During periods of scarcity, these balancing obligations will reflect the highest lost opportunity cost of real-time scheduled supplier capable of providing the Ancillary Service being converted. The NYISO returns to the Loads any excess collected that is not used to buy realtime Ancillary Services from other suppliers.

If the NYISO were required to use the NYTOs' approach and pay a non-scarcity priced real-time Ancillary Service price for all real-time products procured outside the scarcity zone while imposing real-time balancing obligations reflecting scarcity-set LBMPs on Ancillary Service providers inside a scarcity zone, the fund created by the balancing obligation would far

²⁴ See for instance, Services Tariff Section 15.4.6.3 for the discussion of balancing Day-Ahead reserves schedules.

exceed the NYISO's real-time Ancillary Service purchase obligations and these excess funds would be distributed to Loads. As was noted above, the NYTOs have failed to demonstrate that there will be any windfall revenues to Generators and have failed to prove they would be responsible for paying for it.²⁵ Thus, utilizing the revised pricing approach advocated by the NYTOs would create a windfall revenue stream payable to the Loads.

C. 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.

Should the Commission agree with the NYTOs and require the NYISO to limit the payment of scarcity-determined Ancillary Services only to those Generators eligible for scarcitydetermined LBMPs, the NYISO would be required to undertake significantly more effort than a mere tariff change.²⁶ Setting Ancillary Service prices in this manner during scarcity conditions, but continuing to apply uniform marginal clearing prices during non-scarcity events, would

require time-consuming software revisions not currently proposed, or even contemplated in the NYISO's project or budget plan. Being required to set Ancillary Service prices in this manner all the time would be an even more extensive undertaking.

Under either scenario, not only would the pricing algorithms used during scarcity need to be revised, but the price-posting and settlement software would also need to be revised to

²⁵ The NYTOs also assert that the opportunity for Generators to receive these hypothetical revenue windfalls will provide an incentive for some to modify their Day-Ahead offers to enhance their opportunity for receiving such windfalls -- thereby causing the NYISO to operate the market less efficiently. Of course, these Generators would have to successfully guess on what day and in what hours a scarcity event would occur in order to alter their Day-Ahead bidding practice only when 'necessary.' As the NYISO has shown, there is little logic to the expectation of significant revenue windfalls and the NYISO does not expect Day-Ahead bidding to change as a result of the filing it has made in this docket.

²⁶ NYTOs' Protest at p. 12.

properly post all zonal Regulation Service and Operating Reserves prices being paid during each five-minute interval in which scarcity pricing is being applied. Moreover, to pursue such an effort would require that resources be reassigned and existing project-related costs be redirected. Existing project timeframes would need to be extended, including broader regional market initiatives such as Market-to-Market and Coordinated Transaction Scheduling with PJM slated for significant effort in 2013. Additionally, significant changes to this design will place projects which share the same deployment schedule, such as FERC Order No. 755 compliance, at risk.

Because the effort to comply would be so significant in time and resources, the Commission should avoid imposing such an outcome on the NYISO before the NYISO stakeholders have an opportunity to consider whether such an effort is warranted. As the NYTOs admit, the issue of redesigning either the regulation or the reserves' pricing mechanisms in the tariff and the software so that they apply differently depending on which Load Zones are impacted by scarcity LBMPs, was never raised in the committee process.²⁷ Indeed, the presentations the NYISO used to explain its scarcity pricing proposals all indicated that Ancillary Service prices during scarcity would be set using the same calculations the NYISO uses today.²⁸ The Commission should not require such a radical change or impose such substantial commitments absent a thorough and explicit vetting of this issue in the stakeholder process.

²⁷ See NYTOs Protest at p. 1 referencing the discovery of this issue in the NYTOs post-filing review of the NYISO's proposed tariff language.

²⁸ See slide 11 at http://www.nyiso.com/public/webdocs/markets_operations/committees/bic/meeting_materials/2012-12-05/agenda_09_Enhanced_Scarcity_Pricing_-BIC_20121205.pdf.

III. The NYISO Agrees with the NYTOs that the Language Used in Its Revised Operating Reserves Pricing Methodology during Scarcity is Inconsistent with Existing Methodology.

After reviewing the information presented for the first time in the NYTOs' protest, the NYISO has determined that the language used for the revisions to scarcity pricing for Operating Reserves it submitted in its February 8, 2013 filing are inconsistent with the language the NYISO uses to calculate Operating Reserves prices in non-scarcity periods. This inconsistency would be eliminated, however, by amending the NYISO's revisions to Services Tariff Section 15.4.6.2.1 to put back in place all of the existing tariff provisions currently identified as Scarcity Pricing Rule "A." The NYISO has concluded that the existing provisions for pricing Operating Reserves during periods of scarcity, when scarcity is tested and paid regionally, remain appropriate under the revisions the NYISO has filed in this docket to price and test for scarcity more locally and, should the Commission agree, the NYISO will file appropriate Tariff revisions to return to the use of this methodology.

IV. Conclusion

WHEREFORE, for the reasons set forth above, the NYISO respectfully requests that the Commission reject the NYTOs' arguments challenging the NYISO's proposed revisions to its scarcity pricing proposal and that the Commission require a compliance filing in this docket as described herein.

Respectfully submitted;

/s/ Mollie Lampi

Mollie Lampi
Assistant General Counsel
New York Independent System Operator, Inc.
10 Krey Blvd.
Rensselaer, New York 12144
(518) 356-7530
mlampi@nyiso.com

March 20, 2013

cc: Travis Allen
Michael A. Bardee
Gregory Berson
Anna Cochrane
Jignasa Gadani
Morris Margolis
Michael McLaughlin
Joseph McClelland
Daniel Nowak

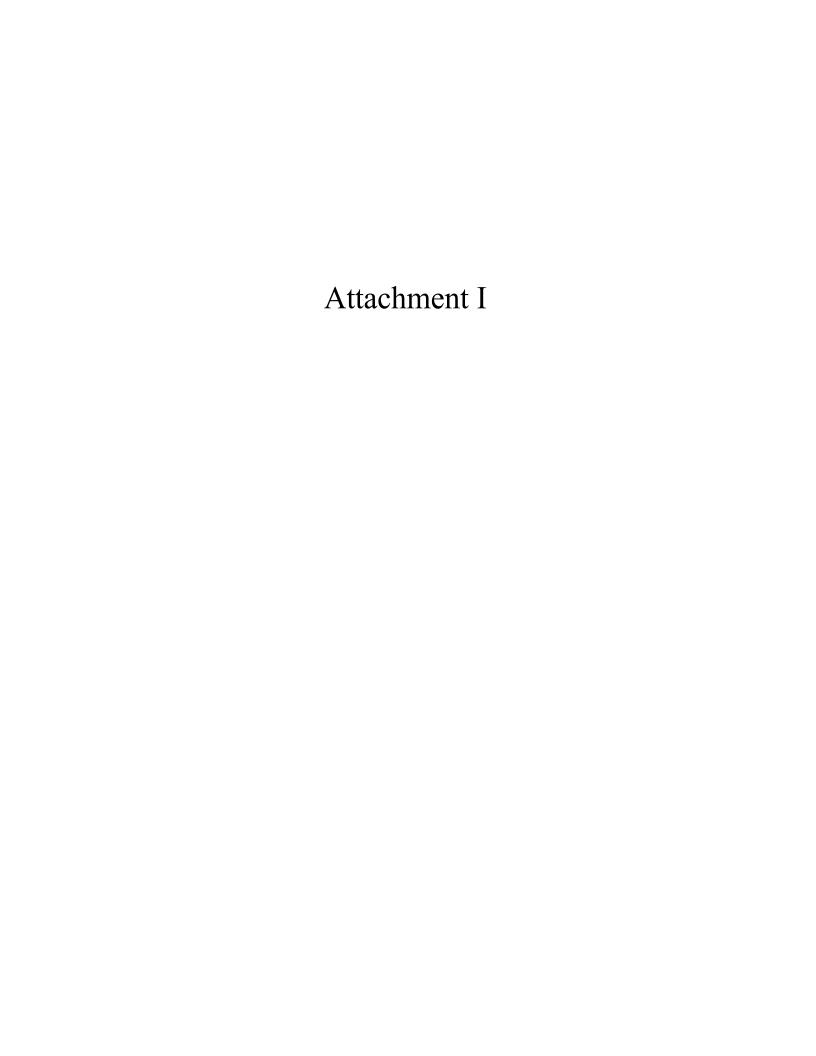
CERTIFICATE OF SERVICE

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 20th day of March, 2013.

/s/ Joy A. Zimberlin

Joy A. Zimberlin New York Independent System Operator, Inc. 10 Krey Blvd. Rensselaer, NY 12144 (518) 356-6207



NYISO Locational Reserve Requirements

The NYISO shall define requirements for Spinning Reserve, which may be met only by Suppliers that are eligible to provide Spinning Reserve; 10-Minute Reserve, which may be met by Suppliers that are eligible to provide either Spinning Reserve or 10-Minute Non-Synchronized Reserve; and 30-Minute Reserve, which may be met by Suppliers that are eligible to provide any Operating Reserve product. The NYISO shall also define locational requirements for Spinning Reserve, 10-Minute Reserve, and 30-Minute Reserve located East of Central East and on Long Island as shown in the following table:

	NYCA	Eastern NY	Long Island
A=most severe NYCA			
Operating Capability	Zone A-K	Zone F-K	Zone K
Loss (1310 MWs)			
10 Minute Spinning	½ A = 655 MWs	¼ A = 330 MWs	0 MWs
Reserve	(1)	(IV)	(VII)
10 Minute Total	A = 1310 MWs	1200 MWs	1/10 V = 120 MWs
Reserve	(II)	(V)	(VIII)
30 Minute	1½ A = 1965 MWs	1200 MWs	270-540 MWs
Reserve	(III)	(VI)	(1)

- I NYCA 10-minute spinning reserve is equal to at least one-half of the 10-minute total reserve. [NYS RC D-R3]
- II NYCA 10-minute total reserve is equal to the operating capability loss caused by the most severe contingency under normal transfer conditions. [NYS RC D-R2]
- III NYCA 30-minute total reserve is equal to one and one-half the 10-minute reserve necessary to replace the operating capability loss caused by the most severe contingency under normal transfer conditions. [NYS RC D-R2]
- IV ENY 10-minute spinning reserve is based on the NERC requirement to plan to meet energy reserve requirements, including the deliverability/capability for any single Contingency and the NPCC requirement that reserves be distributed to ensure that they can be used without exceeding individual element ratings or transfer limitations. [NERC TOP-002, NPCC A-06]
- V ENY 10-minute total reserve is based on Reliability Rules that require immediate measures (activation of ENY 10-minute reserves) be applied to bring loadings on an internal NY transfer interface to within limits in 15 minutes. [NYS RC F-R6]
- VI ENY 30-minute total reserve is based on the NERC requirement to plan to meet energy reserve requirements, including the deliverability/capability for any single Contingency and the NPCC requirement that reserves be distributed to ensure that they can be used without exceeding individual element ratings or transfer limitations. [NERC TOP-002, NPCC A-06]
- VII LI 10-minute spinning reserve is based on the NERC requirement to plan to meet energy reserve requirements, including the deliverability/capability for any single Contingency and the NPCC requirement that reserves be distributed to ensure that they can be used without exceeding individual element ratings or transfer limitations. [NERC TOP-002, NPCC A-06]
- VIII LI 10-minute total reserve is based on the NERC requirement to plan to meet energy reserve requirements, including the deliverability/capability for any single Contingency and the NPCC requirement that reserves be distributed to ensure that they can be used without exceeding individual element ratings or transfer limitations. [NERC TOP-002, NPCC A-06]
- IX LI 30-minute total reserve is based on Reliability Rules that require the ability to restore a transmission circuit loading to Normal Operating Criteria within 30 minutes of the contingency. The LI 30-minute reserve requirement will vary from 270MW for off-peak hours to 540MW for on-peak hours. [NYS RC F-R1]