UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Frequency Regulation Compensation	**}**	
In the Organized Wholesale Power	**}**	**Docket Nos. RM11-7-000 and**
Markets	**}**	**AD10-11-000**
	}	

COMMENTS OF NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

The New York Independent System Operator, Inc. ("NYISO") appreciates the opportunity to submit comments in response to the Federal Energy Regulatory Commission's ("Commission") February 17, 2011 Notice of Proposed Rulemaking regarding compensation for Frequency Regulation Service in wholesale electric markets[1] ("NOPR").[2] As a member of the ISO/RTO Council ("IRC") and a signatory to the joint IRC comments filed in this proceeding, the NYISO supports the IRC recommendation that regulation compensation mechanisms provide an incentive to follow ISO operational instructions rather than simply reward Area Control Error ("ACE") correction efforts. The IRC correctly argues that any final rule should permit flexibility in developing compensation mechanisms to enable ISOs and RTOs to develop cost-effective frequency response solutions that reflect their varying assets, market structures and size, and the mix of regulation resource types that are necessary to achieve reliability standard compliance in their regions.[3]

The NYISO also agrees with the IRC recommendation that the Commission's final rule permit ISOs/RTOs to recognize the importance to reliability of an integrated set of regulation

[1] *Frequency Regulation Compensation in the Organized Wholesale Power Markets*, Proposed Rulemaking, 134 FERC ¶ 61,124 (2011) ("NOPR").
[2] The NYISO respectfully requests that the Commission exercise its discretion and accept these comments one day out of time. These comments may prove useful to the Commission and no party will be prejudiced if they are accepted at this early stage in a rulemaking proceeding.
[3] *See*: "Comments of ISO/RTO Council" filed May 2, 2011 in this docket ("IRC Comments"), pp. 6 - 8.

resources reflecting varying characteristics that include duration as well as rapidness of response in developing responsive compensation mechanisms. Finally, the NYISO agrees with the IRC that compensation for regulating capacity provided be based on a uniform Market-Clearing Price ("MCP") which includes the ISO/RTO-calculated opportunity cost of the marginal resource.

The NYISO has two additional comments. First, the NYISO strongly supports the Commission's explicit acknowledgement of the importance of performance-based compensation to regulation market compensation reform.[4] Performance accuracy is significantly important to regulation markets to incentivize appropriate behavior and maintain market efficiency. As the IRC indicates, however, performance should reflect accuracy in responding to control signals.

Second, the NYISO reiterates and emphasizes the IRC recommendation that any final rule provide ISOs/RTOs the flexibility necessary to develop their own cost-effective frequency response solutions reflecting their varying assets, market structures and Balancing Authority Area ("BAA") size. The NYISO is concerned that without an opportunity to develop solutions in a manner best suited to its region and mix of suppliers, ISO/RTOs could be required to institute compensation mechanisms that would increase costs to consumers without demonstrating that such mechanisms actually provide additional reliability benefits of equal or greater value.

I. The NYISO Regulation Service Market

The NYISO facilitates a Regulation Service market in which about 70 Generators and two Limited Energy Storage Resources ("LESRs") participate. In addition, Demand Side Resources are eligible to participate in the Regulation Service markets provided that they have appropriate metering and communication systems in place. Using Day-Ahead and real-time

[4] NOPR PP 35 – 36 and 39.

energy bids, regulation ramp rates and regulation capacity offers (expressed in MW/minute), the NYISO schedules Regulation Service providers in the Day-Ahead and Real-Time Markets and pays a uniform MCP for each megawatt of Regulation Service awarded.[5] The NYISO's MCP for Regulation Service incorporates the lost opportunity costs that the marginal resource experiences as a result of its Regulation Service award.[6] In addition, the NYISO measures the real-time performance of its Regulation Service suppliers and uses it as a factor in their compensation although it measures performance as how accurately the resource responded to the NYISO dispatch signal, not how much ACE correction it provided.[7] Thus, a unit with a 6 MW Regulation Service award may be paid only for 3 MWs in any hour in which its performance factor in responding to the NYISO dispatch signal was measured at 0.5. The NYISO notes that its fleet of Regulation Service providers has a significantly high performance factor, hovering around 91%.

The NYISO provides six-second schedules (Automatic Generation Control ("AGC") basepoints) to its regulating units in response to imbalances between internal generation and load.[8] Before the introduction of LESRs to its system in October 2010, the NYISO prorated the signal necessary to correct these imbalances across all its regulating units in proportion to their Regulation Service award. At the request of one of its LESRs, the NYISO began distributing its regulation signal first to its LESRs (reflecting their maximum response available at the time) with the balance (if any) of the regulation signal prorated to the remaining regulation providers.

[5] NYISO Market Administration and Control Area Services Tariff ("Services Tariff"), Section 15.3
[6] Services Tariff Sections 15.3.4.1, 15.3.5. For New York's small storage resources which cannot sustain output for long periods of time, the use of inter-temporal opportunity costs would not be appropriate as their need to recharge is a real-time activity, not susceptible to re-scheduling to lower cost hours. *See* discussion at NOPR P. 36.
[7] Services Tariff Section 15.3.3
[8] In dispatching to balance load and generation, the NYISO does not dispatch its regulating units to solve for frequency imbalances.

Both before and after the introduction of the NYISO's LESRs, the NYISO's Control Performance as measured by CPS 1 and CPS 2 has been high. Annual Control Performance is charted and presented to the Management Committee monthly.[9] As these charts indicate, the NYISO's historical average control performance is well above criteria, both before and after the introduction of LESRs. Moreover, the NYISO's Day-Ahead MCPs for regulation service have dropped from an average of $43/MW of regulation service capacity in 2010 to an average of $11/MW in January 2011 with the recent addition of new supply. The average response rate has also risen. On April 22, 2006 it was 4.69 MW/minute; on April 22, 2011, it was 7.63/MW minute.[10] The NYISO believes that its regulation market is competitive, produces an efficient price, incentivizes the addition of new, efficient resources and provides a product that enhances reliability. Nonetheless, the NYISO stands ready to explore additional compensation approaches depending on the Commission's final rule.

II. The Final Rule Should Permit ISOs/RTOs to Develop Regulation Compensation Mechanisms That Reflect the Contribution and Accuracy of their Regulation Resources in Responding to ISO Control Signals

The NYISO strongly supports the IRC recommendation that the Commission's proposed Section 35.28(g)(3) be revised to include a payment for performance that reflects "the correlation between a frequency regulating resource's response and the control signals of the pertinent independent system operator" rather than link performance to contributions to correcting ACE.[11] The purpose of regulation is to manage the deviations incurred by short-term mismatches between supply and demand, to improve system frequency, and to comply with NERC control

[9] *See*: March 2010 to March 2011 Control Performance as presented to the April Management Committee at http://www.nyiso.com/public/webdocs/committees/mc/meeting_materials/2011-04-27/Operations_Report_201103_v1.pdf

[10] These response rates do not include LESRs.

[11] IRC Comments p. 7.

performance standards. A compliance mechanism designed solely to move ACE to zero is too narrow and could be counterproductive during certain circumstances.

III. The Commission Should Allow ISOs/RTOs the Flexibility to Develop Regulation Response Compensation Mechanisms That Reflect the Needs and Characteristics of Individual BAAs

The NYISO also strongly supports the IRC recommendation that the Commission's final rule permit ISOs/RTOs the flexibility to develop regulation compensation rules that are appropriate for each region, in light of the mix of regulation resource types that are necessary to achieve reliability standard compliance in their region. Flexible compliance opportunities should also offer ISOs/RTOs the opportunity to recognize the importance to reliability of an integrated set of regulation resources reflecting varying characteristics that include duration as well as rapidness of response in developing responsive compensation mechanisms. As the IRC noted, just as fast response can provide valuable service, sustainability of response is also an important contribution to reliable service. Traditional regulation response providers are capable of sustaining their response as long as the ISO directs them to, in response to a system event, for instance. BAAs need to ensure that their compensation solutions retain traditional generation among their fleet of regulation response providers in order to maintain reliable service.

In addition, ISO/RTOs should be permitted the flexibility to ensure that their compensation mechanisms do not dissuade the participation of Demand Side Resources not capable of fast-response in the regulation market. Individual ISOs/RTOs are best positioned to craft regulation compensation mechanisms to avoid treating other new entrants in a discriminatory manner or presenting barriers to the entry of other types of nontraditional suppliers such as Demand Side Resources.

Moreover, to the extent that frequent up and down movement is a function an ISO's AGC protocol, the ISO/RTO should be permitted the flexibility to look at changing its regulation deployment protocol. As mentioned earlier, the NYISO moved from a regulation deployment that prorated the control signal to all its regulating units based on the regulation award of each supplier, to one that deployed LESRs first. Pursuant to a prorated regulation deployment, resources that sold the same ramping capacity into the regulation market would be sent the same deployment signal and would be expected to provide the same amount of "up and down" regulation service per interval. As such, the appearance that more "up and down" movement was being requested of a set of resources would end.

For all these reasons, the Commission should permit each ISO/RTO the flexibility to develop compensation mechanisms that incorporate a uniform clearing price including the marginal resource's opportunity costs and reflects performance as it relates to accuracy of following control signals in a manner that best reflects the needs of its BAA. To the extent that the Commission issues a rule requiring a mileage payment,[12] ISOs/RTOs should be provided the flexibility to develop one that best suits their existing optimization and /or settlement processes. For instance, an ISO/RTO may be able to maintain an existing bidding and scheduling structure while bifurcating the settlement into a capacity and a mileage component thereby reducing the potential for needlessly difficult, expensive or complex changes.

[12] NOPR PP. 37-38.

IV. Conclusion

The Commission should allow each ISO/RTO the flexibility to incorporate MCPs and performance-based compensation reforms that best suit the reliability needs of their Balancing Authority Areas and the characteristics of their existing and emerging resources.

Respectfully submitted,

/s/ Mollie Lampi
Mollie Lampi
Assistant General Counsel
NYISO
10 Krey Blvd.
Rensselear, New York 12144
(518) 356 7530
mlampi@nyiso.com

May 3, 2011